THE ROLE OF FEDERAL TAX POLICY IN STIMULATING CAPITAL FORMATION AND ECONOMIC GROWTH

HEARINGS

BEFORE THE

SUBCOMMITTEE ON ECONOMIC GROWTH AND STABILIZATION

OF THE

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THE ROLE OF FEDERAL TAX POLICY IN STIMULATING CAPITAL FORMATION AND ECONOMIC GROWTH

TUESDAY, JULY 12, 1977

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON ECONOMIC GROWTH
AND STABILIZATION
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:05 a.m., in room 1202, Dirksen Senate Office Building, Hon. Lloyd Bentsen (cochairman of the subcommittee) presiding.

Present: Senator Bentsen.

Also present: William A. Cox, Thomas F. Dernburg, Kent H. Hughes and Katie MacArthur, professional staff members; Mark Borchelt, administrative assistant; and Charles H. Bradford, M. Catherine Miller, and Mark R. Policinski, minority professional staff members.

OPENING STATEMENT OF SENATOR BENTSEN, COCHAIRMAN

Senator BENTSEN. This hearing will come to order.

This morning the Joint Economic Committee's Subcommittee on Economic Growth and Stabilization begins a series of hearings on the role of Federal tax policy in stimulating capital formation and economic growth.

We will be looking for ways to reform our tax laws in order to encourage greater savings and investment in our economy. For some time now we have actually seen a penalty on savings in this country.

We have seen a situation where our language has changed over the years and, now, we are seeing words used that sometimes I feel are put in for political objectives. One classification we call earned income and another one for a long time was called unearned income.

That referred to things like investment income, interest on savings accounts. But the term "unearned" seems to have a connotation as though it is something not deserved, as though it is a windfall, as though it is soiled.

That is the kind of attitude I think we have to change in this country if we are going to have capital formation, if we are going to encourage prudence and frugality in order that we may have capital for the future out of savings accounts.

At the same time, we will attempt to design our reforms in ways that simplify our Tax Code and that make it more equitable.

During the next year and a half, both the administration and Congress will be undertaking the difficult task of formulating a major tax reform bill. To be successful, this will require considerable cooperation between the executive and legislative branches. In addition, it will require a great amount of input from a broad spectrum of experts at hearings such as these.

Previous tax reform has often been of a piecemeal nature. The goal of the 95th Congress should be to avoid piecemeal reform and to enact a comprehensive bill. In particular, the interactions between the various provisions should be carefully studied and appraised, before the overall package is adopted.

One of the primary objectives of tax reform must be to stimulate economic growth. In particular, we must attempt to create an environment in which an individual with an innovative idea can obtain the financing to start a new venture, and not be obstructed by a set of tax laws that discriminate against new businesses. Tax law should foster, not obstruct, the formation of the "new IBM" or the "new Xerox," since this is vital to the promotion of innovation, competition, and economic growth.

Our present tax laws are clearly deficient in this respect. Today a rock or country singer can make millions of dollars a year and be required to pay only a 50-percent tax rate.

In contrast, an entrepreneur who starts a new business may be faced with a 70-percent tax rate on his investment income, together with strict limitations on the amount of interest he can deduct.

Many complaints are heard that it is becoming more difficult to succeed today in America because of increasing amounts of federally required paperwork and proliferating regulation.

If the entrepreneur succeeds despite the administrative obstacles thrown up by the Federal Government, he may still fall prey to a system of taxation that is often a deterrent to entrepreneurship and initiative.

A major objective of tax reform must be tax simplification. Our Tax Code totals 1,100 pages. Related tax regulations account for many thousands of additional words and the Federal Tax Reporter runs to 14 volumes. Nearly one-half of all taxpayers now obtain outside assistance to complete their tax returns.

Substantial numbers of the short-form 1040–A tax returns contain errors in the computation of the standard deduction and the general $35 tax credit.

Significant steps toward simplifying the individuals income tax return were made in the 1977 Tax Reduction and Simplification Act. The new law provides for a new set of tax tables from which 96 percent of taxpayers will be able to look up their tax.

The personal exemption, general tax credit, and the standard deduction will be built into these tax tables, so that only 4 percent of taxpayers will have to make these computations. In addition, the revisions in the standard deduction will increase the number of persons who use the standard deduction from 69 percent of all taxpayers to 75 percent.

More must be done. High taxes already impose a severe burden on the average American family. The burden of hiring an outside tax return preparer should be removed for the average taxpayer.

In addition, our tax laws and tax forms must be substantially simplified for smaller enterprises. Small businesses, especially "mom and pop" operations, must fill out numerous reports which can amount to as many as 52 tax forms in a single year.

This kind of Federal forms pollution must be eliminated. Furthermore, small businessmen lack the money to hire sophisticated tax lawyers and accountants and are simply unable to take full advantage of many existing tax provisions. We must enable smaller firms to utilize existing tax incentives to the same extent as larger firms.

A third major objective of tax reform is to insure that all high income taxpayers pay their fair share of taxes. Our tax collection system—which is the envy of most other nations—is one of voluntary self-assesment.

The continued success of our tax system depends upon public confidence that our tax laws are fair. It is essential that the public perceives that our tax laws are fair if we are to continue to maintain our highly successful tax collection system.

For example, advertisements are currently running in periodicals promoting investments in a rock record as a tax shelter for the individual investor. The existence of real tax abuses damages public confidence in our tax laws.

The task of balancing the competing objectives of capital formation, tax simplification and tax equity is a very difficult one. But, that is the task to which this hearing is addressed.

This morning we are very fortunate to have three of the Nation's most knowledgeable tax experts to be our leadoff witnesses at this series of hearings.

I welcome former IRS Commissioners Donald Alexander, Mortimer Caplin, and Sheldon Cohen.

Commissioner, we will start with the "A's."

STATEMENT OF DONALD C. ALEXANDER, FORMER COMMISSIONER, INTERNAL REVENUE SERVICE

Mr. ALEXANDER. Thank you, Mr. Chairman. I have a prepared statement which I won't read but I would request that they insert it in the record.

Senator BENTSEN. Without objection, it will be placed in the record.

Mr. ALEXANDER. Mr. Chairman, you asked us to discuss tax equity, tax simplification, and capital formation. As the most recently departed Commissioner, I would like to state that I think efforts to achieve perfect equity have resulted in much inequity in our law through vastly increasing the complexity of a law which, as you pointed out, comprises more than 1,100 pages.

For reasons of equity, we have chosen to try to draw fine distinctions and to create grandfathers, to limit these distinctions and these grandfathers and to make exceptions to these limitations. We have a legislative hodge-podge that apparently is going to be made more of one by proposals such as a $300 credit for electric vehicles other than snowmobiles and golf carts.

I hope that things like this won't be added to the code. Instead, if it is desirable and in the national interest to give $300 to each purchaser of an electric vehicle other than a snowmobile and a golf cart, it should be given to him directly by the agency in charge of the energy program. Then that agency can report to Congress in this area as well as others about how much it has given and for what purpose so that Congress can evaluate whether the benefit to be served by these electric cars, for example, is worth the cost to the public of the $300 payments.

The tendency to clutter the code has created problems in the past, and we must check and reverse this course in the future.

You mentioned errors on tax returns. Returns for the tax year 1975 were processed in 1976. Individual tax returns in error increased by about 3 million, and of the aggregate 7 million returns in error, corrected at the IRS service centers, about 4 million, more than half the total, involved errors against the taxpayer.

These errors were created by the introduction into the individual tax returns of some complicated concepts designed, I am sure, to do equity and designed, I am sure, to draw careful distinctions between those considered deserving and those considered not.

But the result was a greatly increase burden on an already burdened system. Many of these problems have been corrected, as you pointed out, in the Tax Reduction and Simplification Act of 1977. It is necessary to examine our tax law to see whether these fine distinctions and efforts to work perfect equity are worth the cost and to see whether our tax system should be used as the means of attaining any social and economic goals perceived to be worthwhile at the time.

Our tax system contains too much in the way of verbiage already inserted in the code for such purposes. I hope there will be a basic simplification of the code and restraints on the type of thing that has caused problems in the past including such retroactive increases in the tax liability of large numbers of people as were contained in the 1976 act.

Two examples of retroactive tax increases in 1976 are sick pay and the foreign income exclusion. Both were reversed in 1977. This should be avoided.

Turning to capital formation, Mr. Chairman, the disappointing record of our country in recent years with regard to economic growth and investment in productive equipment needs no repeating here.

The Congressional Budget Office has made an excellent study of these problems, and other witnesses have discussed and will discuss the issues with you. Recognizing the problems, how can they be corrected in a way that simplifies rather than complicates the code, corrected in a way that is equitable to the broad classes of taxpayers involved, and corrected in a way that is basically neutral?

In my prepared statement, I discussed several methods of correction. First would be relieving unearned income of the stigma to which you referred, Mr. Chairman, and I am delighted to see that Secretary Blumenthal apparently feels about this as you do.

Then the search for tax shelters like the one you described, the search which I find to my great disappointment highly prevalent in New York, will no longer be as profitable to the promoters of these unwise and unsound investments.

Senator BENTSEN. I think the most effective thing we can do to cut out tax shelters, is to see that investment income is taxed at the same maximum rate as earned income. There are so many people that make stupid economic deals because they say if the deal doesn't work out, the Government is going to pay 70 percent of it.

Mr. ALEXANDER. That is quite true. Much of my time since leaving the Internal Revenue Service has been spent in analyzing some miserably bad tax shelters and turning them down. Efforts are being constantly made in New York and elsewhere to get around the rules Congress enacted last year.

Many bad investments are being foisted on the public. The pitch is that if you lose, the Government pays 70 cents on the dollar. You have a chance of winning, and, furthermore, in the meantime, you can save quite a bit of money that otherwise would go to Uncle Sam.

Lowering the 70 percent rate would be a major improvement. Perhaps it would be wise to accompany this with some further tightening up on shelters.

As to capital formation, involved are both the double taxation of dividends issue which has been discussed and debated much recently and the fact that our income tax system doesn't work very well if we have continuing inflation.

Capital recovery of productive plants and equipment is based on historical costs and the concept of useful lives. Adjustments to the investment credit and accelerated capital cost allowances, particularly for Government-mandated nonproductive plant additions like pollution control facilities, would be a sound course to meet part of the problem of capital formation created by the awkward workings of our tax laws in an inflationary economy.

A reduction in the corporate rate, say from 48 percent to 45 percent, should also be considered.

The problem of the disparity between the tax treatment of the rent that a corporation pays people who lend it money and the rent the corporation pays people who supply equity capital should be considered. In my prepared statement, I suggest that Congress consider the adoption of a method of grossing up dividends for part of the corporate tax assumed to be paid with respect to those dividends, a flat percentage like many of our training partners have at this time and then giving the stockholders a credit for this tax.

I think this would be preferable to allowing a corporate deduction for dividends paid, particularly if, as has been suggested, a partial tradeoff would be the treatment of capital gains as ordinary income. Without some offsetting benefit of a major tax effect, treating capital gains as ordinary income could have a very serious impact upon an already damaged capital market.

What about capital losses? If they are allowed against other income in full, perhaps the revenue loss may be too great, but surely the present limitations of $2,000, $3,000 next year, are too low.

If capital losses are to be limited, then you need to have a definition of capital assets in the code. Perhaps this can be a very narrow definition with all the artificial capital assets removed. But if capital gains are to be taxed as ordinary income, then inflation comes into play.

If someone bought a share of stock for $100, 20 years ago, and sells it for $200 today, there is no gain at all measured in terms of the true value of money.

What about indexing cost for this purpose alone, the purpose of determining gains? This was suggested in the Treasury's January 17, "Blueprints for Basic Tax Reforms."

I think it would be a sound idea to consider including cost if capital gains must be taxed as ordinary income.

That completes my statement, Mr. Chairman.

[The prepared statement of Mr. Alexander follows:]

PREPARED STATEMENT OF DONALD C. ALEXANDER

My name is Donald C. Alexander and I am a partner in the New York and Washington law firm of Olwine, Connelly, Chase, O'Donnell & Weyher. I am appearing at the invitation to the subcommittee to discuss tax reform proposals relating to capital formation and the basic issue of tax simplification. I am here solely in my personal capacity, not on behalf of any client or my former government agency.

I. SIMPLIFICATION

As the most recently reparted Commissioner of Internal Revenue, I am deeply concerned about the continuing success of a tax system based largely upon the willingness of millions of taxpayers to comply with it. Voluntary compliance calls for a belief on the part of taxpayers that the tax law is reasonably fair and reasonably comprehensible and that tax administration is impartial and reasonably effective. As Secretary Blumenthal aptly put it in his speech to the Financial Analysts Federation on June 29: "The inability to understand what the tax laws are, and the belief that there is money to be made through tax planning and gamesmanship, undermine the confidence and trust that we require for a system based primarily on voluntary compliance."

Our Internal Revenue Code has become too complicated to serve as a sound vehicle for the imposition of a broadbased income tax. Not only is it more than 1,000 pages long, but the pages contain words of such a type and structured in such a way as to defy the understanding of all but the most skilled, dedicated and experienced tax practitioners. This should not be the case, and it need not be the case.

It need not be the case if we at least recognize two principles. First, making our system simple and understandable is more important than trying to attain every social and economic objective perceived at the time to be worthwhile. Next, the law should provide general rules but should not attempt to prescribe detailed precepts for all possible situations, or draw fine distinctions to try to achieve perfect equity in all conceivable circumstances.

Complexity introduced in an effort to produce economic equity is itself an equity. A facet of the latter problem is the habit of legislative compromise resulting in the creation of complicated grandfather clauses, exceptions to the general rule, limitations on the exceptions, further exceptions to the limitations and further limitations upon the further exceptions. The fact that we live in a complicated society is a patently insufficient excuse for such a complicated tax law. The same complicated society does not require us to use a thousand pages to express the antitrust laws.

Therefore, let's at last make simplification a primary objective. This was done to some extent in the Tax Reduction and Simplification Act of 1977. Some of the complexities on the 1976 Form 1040, which caused me to apologize to the American public for the difficulty of the return, have been eliminated from the individual tax returns by reason of sound changes made in this Act. But some of the energy tax proposals now before Congress step in precisely the wrong direction. Examples are the proposed new credits for solar energy, wind energy and home insulation. Perhaps even worse is the proposed credit for new personal electric vehicles. If it is socially and economically desirable for the taxpayers of the United States to award a $300 grant to easy of their number willing to buy an electric vehicle, why not do it directly rather than through the tax system? If there is a direct subsidy, Congress and the public can measure the outlays and benefits and decide whether one is worth the other. The proposed garden tool credit, contained for a time in the 1976 Tax Reform Bill, carried this concept to a ludicrous extreme, and I hope that Congress will deal with the proposed energy tax credits in the same way that it dealt with the garden tool credit.

II. CAPITAL FORMATION

Since this hearing is dealing primarily with the problem of capital formation, the remainder of my statement will briefly summarize my views on this complex issue.

It is surely not necessary to repeat our disappointing record in recent years in economic growth, productivity, savings and capital formation. The issue is what to do about the problem and how to do it in a way that simplifies the tax system. Part of the difficulty is the way our tax system operates to penalize equity capital, but of probably greater magnitude is the fact that our present tax system does not work very well in periods of continuing high inflation. A third issue involves our top tax rates: are they too high?

It has been proposed in many quarters that the top individual tax rate of 70 percent be reduced to 50 percent. I think this is a very sound and overdue step and that it would go far toward reducing the continuing wasteful drive to find tax shelters. Very often these shelters are poor investments from the standpoint of both the investor and the economy, and they tend to divert capital and energy into unsound and undeserving schemes.

Our present tax system uses historical cost to determine depreciation and similar allowances and gain or loss on sales. It is dependent on the supposition that plant and equipment decline in value and wear out, but the dollar—the measuring unit—remains stable. As we all know, however, the dollar has lost much of its purchasing power, and control of inflation is not in sight. A system of depreciation allowances based on cost will not provide a sufficient accumulation of capital to replace plant and equipment at the end of its useful life in an inflationary economy. To meet his problem fully, one might index depreciation deductions or allow deductions based on replacement value. Simpler but less exact methods include increases in the investment credit and, more important, decreases in asset lives for depreciation purposes. Government-mandated non-productive expenditures, such as pollution control facilities, should be expensed. If the period for the recovery of cost is shortened, adverse inflationary effects are reduced and the credits and allowances plus residual values may roughly compensate for inflationary increases in costs of replacement and renewal.

Another sound proposal is a reduction in the top corporate tax rate. This step, plus those described above should provide for somewhat greater accumulation of capital in the corporations which produce most of our goods and services.

A further issue is the question of double taxation of corporate dividends. Our tax system allows a deduction to the corporation paying its investors for borrowed capital but does not allow a deduction to the corporation paying its investors for equity capital. Two parties are involved: the corporation which produces goods or services and the investors who supply the capital necessary to such production. A number of corrective proposals are under consideration and a number of technical and other problems arise with respect to each.

Allowing a deduction for dividends would reduce the corporate tax and therefore benefit the corporation directly and its investors indirectly. Providing for partial integration of the corporate tax through treating a portion of the corporate tax attributable to dividends as a withholding tax would give a direct benefit to the investors and, therefore, make capital formation through equity holdings more desirable and more competitive with debt capital. Particularly if, as predicted by many, the present favorable treatment of capital gains may be eliminated as a partial trade-off, it would seem advisable to provide a direct benefit to the investors who would lose by such proposal. Without some direct offsetting benefit to investors, the capital markets, weak as they now are, would be severely buffeted by taxing capital gains as ordinary income.

The credit for corporate taxes might be a fixed percentage smaller than the corporate rate and allowable without regard to the net U.S. tax rate paid by the particular corporation. Among other problems, tying the stockholder credit to the rate actually paid would be greatly disruptive of present relationships between corporations having special tax treatment, such as stock life insurance companies, and others. Moreover, the actual tax rate paid by a corporation may well be in doubt until the conclusion of the corporation's audit, long after the stockholders have filed their returns and claimed their credits.

If capital gains must be treated as ordinary income, what happens to capital losses? The logical course of giving taxpayers the right to deduct capital losses in full would, I believe, result in large revenue losses. In the absence of some limitations on capital losses, each taxpayer unlucky enough to invest in a so-called blue

chip in the last bull market might find himself with his own tax shelter. Yet it seems clear that the current statutory restrictions upon the allowance of capital losses against ordinary income are much too small—the limit is $2,000 in 1977 and $3,000 after 1977. Perhaps excess capital losses should be deductible at least to the extent of $10,000 yearly. If there is to be a limitation on the deduction of capital losses against other income, it would be advisable, of course, to obtain and compare data at various levels to predict the extent of anticipated revenue loss.

If capital losses are not to be deductible without limitation, then the Code must continue to contain a definition of what are capital assets. Therefore, I don't fully understand the suggestion that taxing capital gains as ordinary income will permit elimination of all the provisions of the Code relating to capital assets. I hope, however, that the definition of capital assets for the purpose of limitations on capital losses will be a narrow one and that the many types of artificial or constructive capital assets will no longer be treated as such. Since the shoe would be on the other foot, the incentive from the part of lobbyists to push for capital asset treatment would no longer be present.

Because of inflation, the treatment of capital gains as ordinary income may simply be the imposition of a capital levy unless something is done to take into account the decline in the value of the dollar. If, as suggested, limitations on capital losses would require the Code to continue to have a definition of capital assets, little additional complexity and considerable equity would be provided if the Code contained a simple method of indexing cost to determine taxable gain. Allowing the taxpayer to index his cost for the purpose of determining gain, if any, on the sale would, I suggest, be a sound way to temper the otherwise serious adverse effect on capital formation of taxing capital gains as ordinary income. An analogy may be found in Section 3(c)(1) of H.R. 6715, The Technical Corrections Bill of 1977.

Senator BENTSEN. Thank you very much, Mr. Alexander.
Mr. Caplin.

STATEMENT OF MORTIMER CAPLIN, FORMER COMMISSIONER, INTERNAL REVENUE SERVICE

Mr. CAPLIN. Mr. Chairman, it is a privilege to be here with you today. I would like to submit my prepared statement for the record and, then, cover the highlights.

Senator BENTSEN. All right, fine.

Mr. CAPLIN. First, I will say I am pleased to join with my two fellow ex-commissioners to participate in these hearings. The life of a commissioner of Internal Revenue, it is said, is not a happy lot. There are some bonuses, however. One is a development of a special sensitivity on how our tax system works, and also on knowing where its strength and weaknesses lie.

With this in mind, I would first like to commend President Carter for embarking on the tax reform program. He has appointed an extraordinarily competent team in the Treasury and the IRS, and he has bottomed his tax reform program on the praiseworthy principle of fairness, simplicity and efficiency.

Of course, as we have found out over the years, these concepts often conflict with each other. While it is a truism that there is nothing new in taxation, it is important to the country that the ground be replowed again to meet current conditions and demands.

At the same time, frequent change in the tax laws has its price; from the standpoint of compounding the taxpayers' burden of compliance and the businessman's task of adjusting to new tax ground rules. I think we have to be concerned about new revenue laws, year after year, with sharp changes.

There should be some reasonable time lag between one major revenue bill, say in 1976, and the next major revenue bill. Change adds to complexity and it should not be undertaken unless it is meaningful and only after the new proposals have been fully aired by all interested groups.

I recognize that political pressures often evoke a desire for rapid legislative action within tight time constraints. Congressmen are elected for 2 years, Senators, 6 years, Presidents for 4 years, and there is always a desire to complete a full project within a given timespan.

Significant tax changes, however, should not be made in such a setting. A major proposal should be unveiled with as much leadtime as possible. Telegraph the tax program, let the public know, let them fully understand the issues, let them participate in congressional hearings, let them identify problem areas, and suggest possible solutions.

Too frequently, those of us who have served in the ivory towers of Government have not appreciated the true impact on the businessman or the individual taxpayer until we have aired these problems. Let the public consider its impact and point out to us a lot of the pitfalls that may be encountered.

Also, when sharp changes are made in existing tax rules, Congress should provide liberal transitional mechanisms before the new provisions become effective. Often these tax rules have been a part of our system for many years and in some cases people have made current commitments or have changed their position in reliance on these existing rules.

In other cases, the rules have become so embedded in our economic and social structure that they have consequences far beyond their immediate tax effect: In pricing, marketing, general modes of operation, financing of education, and other eleemosynary institutions, and the like.

In that setting, it may be unwise to impose a legislative change that is to be made fully effective immediately or retroactively.

I should say the 1976 Tax Reform Act contained sharp examples of retroactive legislation which I felt were not wise from the standpoint of relationship to the public, relationship to the business community, and from the standpoint of sound tax policy.

Transitional rules, deferred effective dates, and other means of gradual implementation are usually preferable. There could be occasions when Congress regards a particular act as constituting such an extreme tax abuse that it seeks to curb it immediately, or even earlier during the year of enactment.

One example of that was the contribution of public papers to charities that Congress was concerned about in 1969. It made the effective date July 25 when it first announced it was dealing with the problem.

This should be regarded as the exceptional rule, adopted only after deliberate consideration and timely notice to the public.

You have asked us to comment on simplification. Obviously it is one of the guiding principles in any tax reform program. To the extent possible, tax laws should be understandable, simple to comply with, simple to administer.

The public continuously demands simpler tax returns. But as we know, these returns merely mirror the tax laws. Unless we have basic

changes in the tax laws themselves, we just cannot have a simple tax return.

If you require four adjustments to make a medical deduction computation, you have got to put at least four lines, if not five, on the tax return to carry out the words of the statute.

The reasons for the present complexity are plain. One is the growing complexity of our society.

Second, there is the variation in the forms of doing business.

Third, there is the tendency of legislatures to become overly engrossed in developing fine points of equity and in blocking every conceivable avenue of avoidance. Then there is the addition year after year of new tax provisions.

When controversial tax matters are at issue, simplicity is an almost inevitable casualty of the legislative process. Powerful contending interests make compromise essential and compromise adds to complexity.

As an example, I refer to that simple section—and I say that in quotes, "simple"—section 274, which was added to the code in 1962 to take care of travel and entertainment deductions. When it got through the legislative mill, with all of the elaborate testimony, it emerged as one of the most complex sections in the code. I am interested that the new administration is going to make a second attempt to deal with what we call the travel and entertainment problem.

Another cause of complexity is that we use our tax system more and more to resolve social and economic problems. These new provisions inevitably find their way into our tax forms and add to the difficulties of the taxpayer and, I might say, the Internal Revenue Service.

I think the taxpayer has an interest in the Internal Revenue Service. As an aside and as a former tax administrator, when I hear about a proposed insulation credit, I just shudder.

I see the proliferation of attic playrooms throughout this country in the name of insulation. I can just imagine IRS agents climbing up the attic stairs to see whether or not there is truly insulation or whether there is some nice woodwork installed on the wall.

I think this ought to be taken into account as Congress considers the energy bill.

Congress should be mindful that we are administering a mass tax system that raises revenue in the range of $300 billion year after year and that figure will probably rise, and that everything possible should be done to ease the burden of tax compliance.

As a practical matter, we should lean more on general averages and accept some tax leakage as part of a workable tax system. Tax laws that are easily understandable by the public and easily administered by the IRS are essential to maintaining our tax system which has been called a system of taxation by confession.

We really rely on a strong tax system of this kind to meet our continuing revenue needs.

Let me talk about the minimium tax one moment, Senator. It is an unbelievably complex provision. Perhaps it had an interim purpose, but I hope that any program of tax reform will now involve its repeal.

First, it is a misnomer. It is not a minimum tax at all. Rather, it is an add on or penalty tax applied to certain taxpayers. I might say a

much larger group of taxpayers—perhaps more than was intended—is included under the new bill passed in 1976.

We have no true minimum tax. It is still possible today for many Americans with large economic income and wealth to pay no tax at all. There are still many of our citizens who are able to place themselves in this category despite the recent series of tax reform acts.

Now, let me next note that many of our statistical studies continue to suffer because of the use of a wrong starting point. We have tended to measure tax preference and tax avoidance by focusing on the concept of adjusted gross income.

Look at all the studies in the past that talk about adjusted gross income. The tax reform studies of 1969, for example, resulted in publicizing that there were individuals with over $200,000 a year of adjusted gross income who paid no income tax, 155 taxpayers, said the Secretary, and the headlines around the country screamed.

The truth is that thousands of people with real income in excess of that pay no tax at all. Many wealthy individuals with large earnings year after year show up with very low adjusted gross incomes, they don't even get into the statistics. They are ignored.

They escape the statistical net on which tax reform has been based. This is so because, despite economic income of highly significant amounts, substantial preference income and deductions and credits are already employed by them in the very computation of adjusted gross income.

They take these deductions and credit as an adjustment to gross income to get adjusted gross income. Consequently, they may show up as zero adjusted gross income or in a minus category showing the loss, and not be picked up in the statistics.

As a part of my prepared statement, I have attached a recent article of mine, "Federal Income Tax Reform—1976 Style," which elaborates on this.

If we are going to continue our attack on tax preferences, let us do it directly by cutting back in whole or in part the advantages derived from a particular tax pattern; not through the back door by a so-called minimum tax but directly.

Also, if we are going to have a minimum tax, the lowest tax that a person must pay as a price for citizenship in this country, let's do it by having a true alternative tax.

In other words: (1) you compute your tax the regular way; (2) then, you also compute your tax by a percentage of your real economic income as defined by Congress; and (3) you pay the higher of the two figures.

In other words, in the regular way, a person might be a zero taxpayer, but if you count back some of these preferences and determine true economic income that Congress defines, you would then apply a tax rate against that expanded income. It might not be the full tax rate but some reduced rate.

Finally, if it is the individual with a large economic income who concerns us, let us recognize that it is quite simple to incorporate a wide variety of income producing activities.

We sometimes think of the corporate giants, but there are many people out in the boondocks who incorporate their activities. And we should not be giving free passage to arrangements merely because they are in the corporate form.

Now we did that during the 1976 Revenue Act in the minimum tax. Hence, many people today with the help of advisers throughout the country are shifting into the corporate form, and you can do this in the tax-free way under the code. So you have these astute tax planners recommending that many proprietorships and partnerships incorporate to avoid the minimum tax. I just hope this will be taken into account when the final legislation on the new bill is adopted.

It is a privilege for me to participate and I would be happy to answer any questions.

[The prepared statement, with an attachment, of Mr. Caplin follows:]

PREPARED STATEMENT OF MORTIMER CAPLIN

I am pleased to join with two of my fellow ex-IRS Commissioners to participate in these hearings. The life of a Commissioner of Internal Revenue, it is said, is not a happy lot. One compensatory bonus is the development of a special sensitivity to how our tax system works and where its strengths and weaknesses lie.

With this in mind, I would like to commend President Carter for embarking on a program to reform and strengthen our tax laws. He has appointed an extraordinarily competent team in the Treasury and the IRS, and has bottomed his tax reform program on the praiseworthy principles of fairness, simplicity and efficiency.

PRICE PAID FOR CHANGE

While it is a truism that "Nothing's new in taxation," it is important to the country that the ground be replowed again and again to meet current conditions and demands. The process is a familiar and continuing one, calling for patience and endurance and the creative use of tax principles.

Frequent change in the tax laws has its price—from the standpoint of compounding the taxpayer's burden of compliance and the businessman's task of adjusting to new tax ground rules. Change in itself adds to complexity and change should not be undertaken unless it is meaningful and only after the new proposals have been fully aired by all interested groups.

Political pressures often evoke a desire for rapid legislative action within tight time constraints. Significant tax change, however, should not be made in such a setting. Major tax proposals should be unveiled with as much lead time as possible—premitting the public to fully understand the issues, to participate in congressional hearings, to identify problem areas and to suggest possible solutions.

TRANSITIONAL RULES

When sharp changes are made in existing tax rules, Congress should provide liberal transitional mechanisms before the new provisions become effective. Often these tax rules have been a part of our revenue system for many years. In some cases, people have made current commitments or changed their positions in reliance upon them. In others, the rules have become so embedded in our economic and social structure that they have consequences far beyond their immediate tax effects—in pricing, marketing, general modes of operation, financing of educational and other eleemosynary institutions, etc.

In that setting, it may be unwise to impose legislative changes that are to be made fully effective immediately or retroactively. Transitional rules, deferred effective dates, and other means of gradual implementation are usually preferable. There could be occasions when Congress regards a particular act as constituting such an extreme tax abuse that it seeks to curb it immediately—or even earlier in the year of enactment.[1] This, however, should be regarded as the exceptional rule, to be adopted only after deliberate consideration and timely notice to the public.

SIMPLIFICATION

Despite the difficulties involved, one of the guiding principles of any tax reform program should be simplification.[2] To the extent possible, tax laws should

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[1] See 1969 Revenue Act amendment to Code (§ 170(e), effective for contributions made after July 25, 1969 (concerning certain letters, memoranda or similar property).

[2] Roberts, et al., *A Report on Complexity and the Income Tax*, 27 Tax L. Rev. 327 (1972); Woodworth, Tax Simplification and the Tax Reform Act of 1969, 34 Law & Contemp. Prob. 711 (1969).

be understandable, simple to comply with, and simple to administer. The public continuously demands simpler tax returns; but, as we know, these returns merely mirror the tax laws, and basic simplification of returns requires basic changes in our tax laws.

The reasons for the present complexity are plain: the growing complexity of our society; the variations in forms of busines enterprise; the tendency of legislators to become overly engrossed in developing fine points of equity and in blocking every avenue of avoidance; and the addition, year after year, of new tax provisions.

When controversial tax matters are at issue, simplicity is an almost inevitable casualty of the legislative process. Powerful contending interests make compromise essential, and compromise adds to complexity. Also, as we use our tax system more and more to resolve specific social and economic problems, these new provisions inevitably find their way into our tax forms and add to the difficulties of the taxpayer.

Congress should be mindful that we are administering a mass income tax system that raises revenue in the range of $300 billion year after year, and that everything possible should be done to ease the burdens of tax compliance. As a practical matter, we should lean more on general averages and accept some tax leakage as the price of a workable tax system. Tax laws that are understandable to the public and easily administerable by the IRS are essential to maintaining a strong self-assessment tax procedure.

As Justice Robert Jackson once noted:[3] "That a people so numerous, scattered and individualistic annually assesses itself with a tax liability, often in highly burdensome amounts, is a reassuring sign of the stability and vitality of our system of self-government." This system of "taxation by confession" depends greatly on the good will and voluntary cooperation of taxpayers. Their confidence in the fairness and uniform application of our tax laws is crucial. Unfairness, complexity, and abuse erode that confidence; and Congress must take this into account as it considers new legislation.

MINIMUM TAX

With the foregoing in mind, I would hope that any new tax program will involve the repeal of the "minimum tax" as we now know it.

First, it is a misnomer. It is not a minimum tax at all. Rather, it is an add-on or penalty tax applied to certain taxpayers. In fact, we have no true minimum tax; and it is still possible today for many Americans with large economic income and wealth to pay no tax at all. There are still many of our citizens who are able to place themselves in this category despite the recent series of tax reform acts.

Let me next note that many of our statistical studies continue to suffer because of a wrong starting point. We have tended to measure tax preferences and tax avoidance by focusing on "adjusted gross income"—the 1969 tax reform studies, for example, publicized that there were 155 individuals with over $200,000 of adjusted gross income who paid no tax. Yet many more wealthy individuals and large earners, year after year, show up with very low adjusted gross income, thereby escaping the statistical net on which tax reform has been based. This is so because, despite economic income of highly significant amounts, substantial preference items are already employed by them in the very computation of their adjusted gross income. (As a part of this statement I am attaching my article, Federal Income Tax Reform—1976 Style, which elaborates on this point.)

To illustrate, the computation of adjusted gross income is made on Form 1040 "above the line" by adding in, among other things, the net income or loss from Schedules C, D, E and F: (1) profit or loss from a trade or profession (Schedule C); (2) gain or loss on the sale or exchange of property (Schedule D); (3) profit or loss from the rental of real or personal property, the leasing of mineral property, and the operations of partnerships or Subchapter S corporations (Schedule E); and (4) profit or loss from farming (Schedule F).

Losses which reduce adjusted gross income to little or nothing above the line can thus be produced by first netting out the tax preference items on the various schedules. For example, deductions for percentage depletion, intangible drilling costs and depreciaton on buildings will be done on Schedules C or E. Similarly, farm losses will be deducted on Schedule F; and one half of long-term capital gains will be deducted on Schedule D. Of course, tax-exempt interest is not reported at all.

[3] *United States* v. *Kahriger,* 345 U.S. 22, 36 (1953).

DIRECT APPROACH

If we are going to continue our attack on tax preferences, let us do it directly by cutting back in whole or in part the advantages derived from a particular tax pattern. Also, if we are going to have a minimum tax—the lowest tax that a person must pay as the price of citizenship in this country—let us do it by having a true alternative tax. This would require payment of the higher of the income tax computed in the normal way or some percentage of an individual's real economic income as defined by Congress.

Finally, if it is the individual with large economic income who concerns us, let us recognize that it is quite simple to incorporate a wide variety of income-producing activities; and no free passage should be given—as it was in certain respects in the 1976 act—merely because these activities are conducted in corporate form. Astute tax planners today frequently recommend the incorporation of partnerships and proprietorships in order to use the tax advantages given to corporations.

It is a privilege for me to appear before this Subcommittee, and I will be glad to answer any questions that the Chairman and members may have.

Attachment.

FEDERAL INCOME TAX REFORM—1976 STYLE[1]

(By Mortimer Caplin)

About 200 years ago, Edmund Burke said: "To tax and to please, no more than to love and be wise, is not given to men." In this same spirit, some view a good tax as one paid by someone else, and tax reform as the easing of their tax burden while adding to that of others. I say this not to be cynical, but to emphasize the varying attitudes among us on what is meant by "loophole closing" and "tax reform."

SCOPE OF TAX REFORM PROPOSALS

How would this audience vote if we took a poll on such items as: (1) taxing capital gain as ordinary income; (2) taxing municipal bond interest; (3) using the same graduated rate structure for married and single individuals; (4) ending the $100 exclusion for dividends received by individuals; (5) eliminating the sick-pay exclusion and deductions for child care expenses; (6) ending medical and casualty loss deductions; (7) disallowing current deductions for intangible drilling costs and what remains of percentage depletion for small oil operators; (8) repealing the special tax accounting rules for farmers; (9) taxing as income any appreciation in the value of assets at the time of gift or death; (10) taxing individuals on contributions to qualified employee and self-employed pension plans and individual retirement accounts; (11) denying charitable deductions entirely, or limiting them to the cost rather than appreciated value of donated assets; (12) disallowing accelerated depreciation deductions for real estate investments and equipment lease arrangements; (13) limiting business and investment deductions to amounts "at risk" by disregarding nonrecourse borrowings in computing cost; (14) denying deductions for mortgage interest payments and for state and local taxes?

What if by doing these things the government would maintain total income tax collections at present levels, but you would cut your tax rates in half, eliminate most recordkeeping and file a tax return of only two or three pages? What if, under such a comprehensive tax program, your particular tax bill would be about the same? What if it were increased slightly?

Not that I recommend that all these things take place at once, although there are those that do. Rather, I point to them to illustrate the scope and variety of current tax reform proposals, and to raise the practical political implications of trying to get support for all or even some. Whether we are for or against a given item depends so much upon our own circumstances, economic and social—whether we have inherited wealth; whether we earn income as employees, executives or professionals; whether our income comes from investments; whether we own a business and, if so, the kind; whether we are working mothers, aged, sick, disabled, or the beneficiary of one of the many other preferences provided for in the Internal Revenue Code. So much depends, too, upon our philosophy of government, our view of the American free enterprise system, and our overall value structure.

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[1] Based on author's text for the Emanuel Saxe Distinguished Lectures, the Bernard M. Baruch College, City University of New York, April 26, 1976.

DEFINITION OF TAX REFORM

To many, tax reform and loophole closing suggest correcting the Internal Revenue Code so as to eliminate errors, ambiguities and omissions which permit wealthy people to avoid paying taxes. Yet, while some provisions of this type do exist, they are comparatively few in number and short-lived. For whether it be by the courts through judicial interpretations, or by the Congress through direct legislative action, this handful of "unintended benefits" is normally corrected over time. This is not the real stuff that tax reform is made of.

What concerns the tax reformer today is not the unintended, but the intended preferential Code provisions—the special tax rates, credits, deductions, exemptions, exclusions from income, deferrals of tax liability—the special benefits or preferences which deviate from the generally accepted norm for our income tax. Critics describe them in a variety of ways: "benefits," "preferences," "subsidies," "tax expenditures," "backdoor spending," or simply "loopholes." Their supporters, however, justify them on much higher grounds: "incentive," "stimulant," "relief," "fairness" and "equity." A popular slogan for tax reform today is "capital accumulation."

In the legislative arena, Congress is first faced with deciphering the rhetoric of the various competing viewpoints. It then must weigh the testimony and data before it in light of studies and recommendations of the Treasury Department and the incumbent administration. And, inevitably, it makes a choice—or, as more frequently happens, a compromise—in enacting specific tax legislation which it concludes is best suited to the times.

BASIC TAX TENETS

Before examining current tax reform proposals I would like to list certain principles that Congress is cautioned to keep in mind as it drafts tax legislation. Some have been eroded by exceptions and refinements; some at times conflict with others. Nevertheless, they are familiar guideposts and do provide a good starting point for further discussion.

Tax neutrality: Revenue should be raised in such a fashion that the imposition of the tax will not in itself cause the taxpayer to change his economic behavior, that is, to invest in one type of business activity rather than another or to conduct his affairs in a particular form solely because of the tax.

Fairness and equity: All taxpayers should pay their fair share of taxes. To this end all forms of economic income should be treated alike, without favoring one form of realization of income over another. Equal taxes should be imposed on taxpayers at similar income levels (horizontal equity); and reasonable rate differentials should be imposed on classes of taxpayers at different income levels (vertical equity).

Fiscal goals: The principal goal of our tax laws should be raising revenue and, in the process, promoting economic growth and stability. We should be highly selective before using our tax system to regulate conduct or to achieve specific social and economic objectives; excessive use for nonrevenue ends has led to complexity, higher rates, and charges of discrimination and unfairness.

Simplicity: Tax laws should be drafted so that, to the extent possible, they are understandable to taxpayers and reasonably predictable in application. They should be simple enough to permit both accurate compliance by taxpayers and efficient and evenhanded administration by the Internal Revenue Service.

Self-assessment aspects: Our "do-it-yourself" or self-assessment tax system is the most efficient in the world, and Congress must make every effort to strengthen taxpayer confidence in its operation. This system of "taxation by confession"—which through compliance alone accounts for some 97 percent of our tax collections—depends largely on the good will and voluntary cooperation of taxpayers. Unfairness, discrimination and abuse erode this confidence; and they must even be rooted out and eliminated as new tax legislation is considered.

Almost as an annual rite, at the commencement of each Congressional tax reform hearing, invited tax experts testify on these tenets of taxation. It is like the visiting dignitary's pitch of the first ball on the opening day of the baseball season: after the ceremonies, the players take their positions and the real game begins. There are the usual betting odds on the probable outcome; but, under our democratic political system, the results are far from predicable. They depend in large part upon the efforts and influence of the various protagonists and also upon the recorded reactions of hometown voters.

TAX REFORM ACT OF 1969

Our last wave of tax reform actually dates back to 1968, when Congress reluctantly enacted an extra 10 percent income tax surcharge on American taxpayers and, in the same breath, directed President Johnson to present a reform package by year end. While the Treasury Department embarked on comprehensive studies, Lyndon Johnson was not persuaded that it was proper for the Congress to direct the President to submit tax legislation; consequently, no tax reform bill was sent to Congress. Instead, by letter to the Speaker of the House of Representatives dated December 31, 1968, the President formally advised the Congress of the existence of the Treasury proposals but said that he would make no recommendations as he was leaving office on January 20. In other words, he had decided to give his successor a free hand on tax reform.

Early in January 1969, however, outgoing Secretary of the Treasury Joseph W. Barr roused public opinion by releasing some disturbing statistics and predicting a "taxpayer revolt" unless tax reform was soon forthcoming. He pointed to 155 individual tax returns with adjusted gross incomes of over $200,000 a year and 21 returns with adjusted gross incomes of over $1,000,000 on which not one cent in federal income taxes was paid. Barr's statement seized the newspaper headlines nationwide and Congress found itself besieged with demands for corrective action.

With this public outcry echoing continuously throughout the Capitol, a sweeping law was enacted on December 30, 1969. Affected was almost every individual and industry in the country—including private foundations, cooperatives and financial institutions. The legislation was unbelievably complex; some 27 groups of tax reform and a multitude of policy decisions were reflected in 255 pages of new tax law and thousands of pages of committee reports and hearings. Nevertheless, two dominant goals are discernible in the legislation: (1) to make sure that everyone pays "some" tax (in order to take care of Barr's 155 high-income non-taxpaying individuals); and (2) to narrow the gap between the tax on capital gains and the tax on ordinary income.

Congress sought to achieve these two goals in a variety of ways. For one thing, it made a partial head-on attack on a number of the highly-publicized tax shelters—real estate depreciation, percentage depletion, capital gain livestock, farming, citrus groves, unlimited charitable deductions and private foundations. Not that the alleged abuses were eliminated completely, but through a host of precise albeit limited changes it made each a little less attractive, a little less profitable.

Beyond this, Congress took two additional steps:

First, it offered two carrots to discourage shelter-shopping: one, more liberal rules for averaging income (including capital gains) over a five-year period; the other, the imposition of a maximum tax of 50 percent on earned income. It was thought that with only half of the earned income going to the government and half retained by the individual, taxpayers would regard this as a fair tradeoff and would find it less attractive to engage in tax avoidance and tax minimization plans.

Second, it wielded two sticks—to prevent total escape from the other tax-catching sections and to penalize those who made excessive use of the tax preference provisions: one, a 10 percent minimum tax on tax preference items; the other, a limitation on the deductibility of "excess investment interest."

The 10 percent minimum tax was one of the most highly publicized provisions of the 1969 Reform Act. Barr's 155 individuals would now come a cropper. No longer would any American escape the IRS tax net. But, alas, as later history and studies were to prove, it did not work.

Part of the problem was that Barr and the Treasury staff looked at the wrong tax returns in making the analyses and judgments which led to the 1969 reforms. They focused on individual returns with over $100,000 of "adjusted gross income"—despite the fact that "adjusted gross income" is not an adequate starting point for determining the relative importance of tax preferences. This is so because substantial preference items may have already been employed in the very computation of adjusted gross income; and it is a truism that many taxpayers with extremely modest adjusted gross income have economic income of highly significant amounts. (I had the opportunity to elaborate on this in the Indiana Legal Forum, Fall 1970.[2])

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[2] Caplin, Minimum Tax for Tax Preferences and Related Reforms Affecting High Income Individuals, 4 Indiana Legal Forum 71 (1970).

To illustrate, the computation of adjusted gross income is made on Form 1040 "above the line" by adding in, among other things, the net income or loss from Schedules C, D, E and F: (1) profit or loss from a trade or profession (Schedule C); (2) gain or loss on the sale or exchange of property (Schedule D); (3) profit or loss from the rental of real or personal property, the leasing of mineral property, and the operations of partnerships or Subchapter S corporations (Schedule E); and (4) profit or loss from farming (Schedule F).

Losses which reduce adjusted gross income to little or nothing above the line can thus be produced by first netting out the tax preference items on the various schedules. For example, deductions for percentage depletion, intangible drilling costs and accelerated depreciation on buildings will be done on Schedules C or E. Similarly, farm losses will be deducted on Schedule F; and one half of long-term capital gains will be deducted on Schedule D. Of course, tax-exempt interest is not reported at all.

Beyond this initial error, only nine tax preference items were finally identified. Brisk lobbying efforts resulted in the elimination of four additional items that had been originally considered: (1) Tax-exempt interest on state and local bonds; (2) Appreciated portion of property contributed to charity; (3) Farm losses resulting from special accounting methods; and (4) Intangible drilling and development costs.

Finally, further softening of the minimum tax impact resulted from the adoption of three limiting factors: a flat 10 percent rate; a $30,000 exemption; and a deduction for regular income taxes shown on the face of tax returns, with a seven-year carryover for taxes not used to shield tax preference income.

1973 TAX REFORM HEARINGS

Certainly by 1973, it was widely recognized that the minimum tax on tax preference items was not achieving its goal. Treasury Secretary Shultz acknowledged in his testimony before the House Ways and Means Committee on April 30, 1973, that "significant" numbers of taxpayers with large incomes were paying little or no tax. Congressman Reuss (Wisconsin) said it was "like a sieve" and only a "love tap" tax. He further characterized it as "a small admission fee" for using tax loopholes, and no more than a "cosmetic solution" to fundamental tax inequity.

More recently, Congressman Vanik (Ohio) and the staff of the Joint Committee on Internal Revenue Taxation published statistics illustrating the ineffectiveness of the 1969 changes. Based on an analysis of 1973 federal income tax returns, the figures demonstrated the following expansion of Barr's original examples of 155 nontaxpaying high-income individuals:

Number of individuals	*Adjusted gross income*
622	Over $100,000.
292	Between $200,000-$500,000.
54	Between $500,000-$1 million.
24	Over $1 million.
7	Average $2.5 million.

In releasing this information, Congressman Vanik stated: "This is only the tip of the iceberg. . . . The Congress must devise a more equitable tax system to insure that all Americans bear some proper support of their nation's activities."

The heart of the problem, according to Secretary Shultz in his 1973 testimony, was "tax shelters": "A common characteristic of a tax shelter investment is that it produces deductions and exclusions—particularly in the early years—which may be used against other income of the taxpayer. The result may be an outright reduction in taxes, an indefinite deferral of tax, or a conversion of ordinary income into capital gain." While he recognized that the tax rules inherent in tax shelters were intended as incentives, he noted that they were having "a dangerously demoralizing effect on the operation of our revenue system." This is so, he said, because "it appears to most taxpayers simply to provide a means by which the wealthy avoid the payment of income taxes."

The Treasury's suggested cure was to (a) limit the items excluded from income, (b) prevent distortions that result from the timing of deductions, and (c) bar the sheltering of other income. To achieve this, the following steps were recommended: (1) repeal the minimum tax for individuals and Subchapter S corporations; and (2) substitute two new provisions: (a) minimum taxable income

(MTI) ; to deal with those tax items that are outright exclusions from income and (b) limitation on artificial accounting losses (LAL) : to deal with those tax rules that provide deferrals.

As these recommendations are the cornerstone of pending proposals now before Congress, let us briefly examine these two new concepts in the form they were recommended by the Treasury Department.

MINIMUM TAXABLE INCOME (MTI)

MTI is a true alternative tax, not a penalty or added tax; for the taxpayer is called upon to pay the higher of two taxes, not both. It will prevent the combination of exclusions and itemized deductions from offsetting more than one-half of a taxpayer's real economic income. In turn, every individual will be required to pay on at least the balance.

This is accomplished in the following manners:

1. Four current income exclusions are added to "adjusted gross income": (a) one-half of long-term capital gains; (b) bargain element of qualified stock options at the time of exercise; (c) percentage deletion in excess of adjusted basis; and (d) income earned abroad which is now excluded under Code section 911. (Two obvious omissions are tax exempt interest on state and local bonds and the appreciated portion of property gifts to charities.)
2. The resulting sum is called "expanded adjusted gross income" (EAGI).
3. To get the "MTI Base," deduct from EAGI the following: (a) $10,000 floor; (b) personal exemptions; (c) casualty loss deductions exceeding 10 percent of EAGI; and (e) investment interest and investment expenses (deductible under Code section 212) to the extent of investment income.
4. Divide the MTI Base by two to get "minimum taxable income" (MTI).
5. Apply the regular income tax rate structure against the greater of (a) normal taxable income, computed as at present; or (b) MTI.

To repeat, the purpose of MTI is to tax at least 50 percent of an individual's real economic income at regular income tax rates. And to achieve this, only 50 percent of his real economic income may be offset by exclusions and itemized deductions.

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In the reform bill passed by the House in December, 1975 (H.R. 10612), MTI was rejected; the 1969 minimum tax was retained and the Treasury's LAL proposal was adopted, both in strengthened form. Before the Senate Finance Committee, however, Chairman Russell B. Long (Louisiana) indicated strong support for the MTI approach, although it is doubtful that it will survive the Senate's 1976 mark-up of the bill.

LIMITATION ON ARTIFICIAL ACCOUNTING LOSSES (LAL)

As noted above, the Treasury's LAL principle is contained in H.R. 10612, and is under consideration by the Senate Finance Committee. Its aim is to require a matching of deductions with related income, and thereby prevent the sheltering of other income through earlier "artificial" deductions.

1. LAL achieves its goal by deferring any deduction which is "clearly associated" with income to be received in future years. Among the Treasury's examples of deferment are the following: (a) intangible drilling and development costs for oil and gas wells; (b) prepaid feed in cattle-feeding syndications; (c) accelerated over straight-line depreciation for buildings; (d) accelerated over straight-line depreciation for personal property under net leases; and (e) pre-opening costs during the construction of realty, including interest, taxes, fees and expenses.
2. None of these LAL deductions will be allowed until the property produces income. In other words, deductions are matched with the same class of income to which they relate; and they are allowed as offsetting deductions only when the income is earned.
3. No offset against other income—no sheltering—is permitted.
4. However, deferred LAL deductions are not abandoned. Rather, they are placed in a "deferred loss account" and held in suspense for use in succeeding taxable years.
5. They later become deductible against the first "net related income" realized from the property; or on the sale or other disposition of the property to which the deferred loss is attributable.

LAL is a complex accounting concept and there are many refinements and details that need to be analyzed to fully understand its operations. The House has elaborated on the concept significantly, and in many instances has toughened its application. Needless to say, if LAL is finally enacted, it will put an abrupt end to the practice of large year-end write offs, currently enhanced by limited partnership syndications and non-recourse leveraging arrangements.

THE TAX REFORM ACT OF 1975 (H.R. 10612)

After almost three years of deliberation and hearings, the House on December 4, 1975 passed the Tax Reform Act of 1975 (H.R. 10612). Some 700 pages in length, the legislation vies with the 1969 reform act in its breadth and scope. To tax reformers, the bill's sharp attack on tax shelters is its most important aspect.

The House approach is twofold: (a) to expand upon the Treasury's LAL proposal and (b) to broaden the existing minimum tax.

LAL: In fine detail, the bill applies LAL to six types of operations: (1) real estate; (2) farm operations (including breeding and feeding of livestock); (3) natural resources (oil and gas); (4) movie shelters (including film purchase and production company arrangement); (5) equipment leasing; and (6) sports teams (players' contracts and franchises).

Beyond this, the bill places severe limitations on other types of shelter techniques: deductibility of prepaid interest and nonbusiness interest, nonrecourse financing, recapture rules, and use of syndicated limited partnership arrangements.

As a whole, the LAL and related changes would seriously undermine the attractiveness of most tax shelter investments.

Amendments to Minimum Tax: As a final touch, H.R. 10612 retains the minimum tax on tax preference items but significantly strengthens its impact. This is done by the following changes:

1. Rate: The penalty tax rate is increased to 14 percent (in lieu of 10 percent).
2. Exemption: The exemption is reduced to $20,000 (in lieu of $30,000); and, in addition, the exemption is phased out dollar-for-dollar as the preference income exceeds $20,000—so that at $40,000 of tax preference items there is no exemption.
3. Income Tax deduction: The bill eliminates the present deduction for income taxes as well as the tax carryover provisions.
4. Tax preference items: New preference items are added—(a) intangible drilling costs for development wells; (b) itemized deductions in excess of 70 percent of adjusted gross income; (c) accelerated over straight-line depreciation/amortization on all leased equipment; (d) interest and taxes during construction of realty; and (e) certain depreciation on players' contracts.

These changes alone are estimated to raise additional revenue of almost $1 billion a year. If adopted in conjunction with the LAL provisions, the promises of the 1969 Revenue Act will more likely be fulfilled: i.e., that every citizen with real economic income will pay income taxes; and that the gap between the taxation of earned income and capital gain will be sharply narrowed.

SENATE FINANCE COMMITTEE HEARING

The Senate Finance Committee is nearing the end of its hearings on H.R. 10612. The bill's final form is difficult to predict, particularly because of Chairman Long's strong opposition to LAL and expressed interest in MTI. Further complications arise because this is a Presidential election year and because, by June 30, 1976, Congress must act if it is to extend the 1975 tax reduction provisions that expire on that date.

Senator Long was believed to be committed to drafting tax reform legislation by June 30, 1976. Recently he stated that this is not now possible; and he added: "I am committed to passing a tax overall bill by the end of this Congress . . . I am not wedding myself to a specific date." Before the Senate Budget Committee, he also expressed doubt that the goal of $2 billion from tax reform legislation is attainable.

Almost every affected industry has testified before the Senate Finance Committee on the dire economic consequences that would follow enactment of LAL and the amended minimum tax—as contained in H.R. 10612. Senator Long has expressed his sympathy for the industry arguments and, in fact, has urged them to mobilize their lobbying efforts in the Senate. As he put it: "When the fur starts

flying on the Senate floor, some of your members had better come back to town and talk to some people."

In contrast, Senator Edward M. Kennedy (Massachusetts) takes a much more aggressive view on tax reform: he fully supports LAL and has an overall program which he estimates will raise $7 billion a year. Backed by at least 18 fellow Senators, he promises to make an aggressive fight when H.R. 10612 is discussed in the Senate. As Senators Long and Kennedy each said to the other in a recent interchange: "See you on the floor, Senator."

As the Senate Finance Committee enters its final legislative mark-up period, some outline of the Senate 1976 tax reform legislation is beginning to suggest itself:

1. It is too late for tax reform legislation to be adopted by June 30, 1976; hence, it will be necessary to extend the cutoff date of the 1975 tax reduction provisions so as to leave time for final enactment of the reform bill.

2. Although MTI and LAL have a neat logic to them—treating exclusions from income separately under MTI, and timing of "artificial" deductions separately under LAL—they are unduly complex as a package and raise serious business questions during a particularly uncertain stage in our economy.

3. A revised version of the 1969 minimum tax, blending portions of both MTI and LAL, seems to be a more acceptable solution. A penalty tax rate of 15 percent and a lower exemption have been suggested. Also, it is probable that more items will be added to the tax preference list, including some that were originally classified under LAL.

4. To cover the more egregious cases of leveraging through nonrecourse financing—widely publicized in tax shelter literature—a new "at risk" principle may be adopted. In brief, a taxpayer's deductions and losses from a venture may be limited to the amount of his actual investment that is "at risk"—including recourse loans and other adequate security. As nonrecourse loans would not be taken into account for these purposes, loud outcries may be anticipated from the investment community, particularly from real estate syndicators.

We now await final word from the Senate and ultimately from the Conference Committee and the House. But whatever the choice in 1976, it must be recognized that it will be only a compromise solution to a tax reform problem that has long troubled Congress.

STILL ANOTHER ALTERNATIVE

For some years, Congress has been concerned over taxpayers with high economic income who pay federal income taxes at effective rates far below those indicated by the statute—often lower than the effective rates of others having substantially less income. The Joint Committee Staff reported in 1969 that increasingly "taxpayers with substantial incomes have found ways of gaining tax advantages from the provisions that were placed in the Code primarily to aid limited segments of the economy." In many cases, they have found ways to "pile one advantage on top of another" and, as both the House and Senate agree, this is an "intolerable situation." Secretary Shultz, you will recall, said that it "has a dangerously demoralizing effect on the operation of our revenue system."

One obvious way of correcting this is to repeal all these special provisions and, in their place, to adopt a broadly based income tax with a lower rate structure than at present, coupling it with a liberal averaging rule—to take account of peaks and valleys of income and losses over a period of years and the bunching of capital gains and other forms of income. This approach has long been championed by many tax reformers. Yet, because of apparent overwhelming political obstacles facing such a proposal, Congress has not given it serious consideration.

Recently, however, Treasury Secretary Simon brought the plan back to life when he proposed a broad based income tax that would permit rates of 10–12 percent at the low end and 35–40 percent at the top. To achieve this, he would "wipe the slate clean of personal tax preferences, special deductions and credits, exclusions from income, and the like, imposing instead a single, progressive tax on all individuals."

Simon has been led in this direction because of the increasing complexity in the law, widespread feeling that the system favors the rich, and a drop in the rate of taxpayers compliance. Repeating the warnings of former Treasury Secretary Barr, he again cautions: "We are faced . . . with an incipient taxpayer revolt." "What has caused more bewilderment and distrust among taxpayers," he says, "than the myriad of so-called lopholes which not litter our tax code?" This would be corrected, he believes, by the new plan's "simple elegance and its

basic equity toward all taxpayers." It would give us "a tax system that rests upon the twin pillars of fairness and simplicity."

In 1963 and 1964, Senator Russell Long offered a comparable proposal of an optional simplified income tax system—permitting taxpayers to elect to pay a lower tax rate upon agreeing to forego the benefit of many of the special exclusions, benefits and deductions of the present law. In a Reader's Digest article in 1969, I supported a Simon-type plan, not on an optional basis, but as a fixed requirement for all taxpayers. Liberal averaging rules and a lower rate structure would have to be essential parts of such a comprehensive tax base approach.

But is the Simon-type reform politically feasible at this stage of our national development? Consider all the hard choices that we would have to make—in removing tax incentives which individuals, business, charities, and state and local governments have relied upon for decades. Consider the investments already made and the enterprises already begun on the basis of existing tax assumptions. Consider the line-drawing that would have to be made between business deductions—between deductions from gross receipts and gross income and deductions from adjusted gross income. Consider the need for liberal transitional rules over a period of years to provide fairness and equity and to relieve hardship cases. Could all of these considerations be provided for in a single tax reform bill? Or would the goal be more attainable in a series of bills, adopted over a given period of time, following a comprehensive study by a prestigious commission?

The doubters among us have noted: "Our taxes reflect a continuing struggle among contending interests for the privilege of paying the least." True though that may be, it is essential to the welfare of this nation that we continue our quest—with the backing of political leaders, scholars, tax experts, and the public at large—for a sound and strengthened tax system. For, as President Kennedy noted in his first tax message to Congress, such a system is necessary if we are to maintain our national defense and "render the public services for enriching the lives of our people and furthering the growth of our economy.

Senator BENTSEN. Thank you, Mr. Caplin. I think we will let all three witneses testify first and then ask the questions.

Mr. Cohen.

STATEMENT OF SHELDON S. COHEN, FORMER COMMISSIONER, INTERNAL REVENUE SERVICE

Mr. COHEN. I likewise have a short statement I will submit and I will skip lightly through it.

In talking about simplification of our tax laws, a family story is appropriate. My father-in-law was in the monument business. We had a joke in the family: What was the difference between death and taxes? The answer was that death doesn't get worse each time Congress meets.

My comments today are my own and don't necessarily reflect the views of any of my clients or of my law firm.

We are talking about the three goals, equity, simplicity, and the promotion of economic growth. These are the goals of the President, the goals of the Secretary of the Treasury, and the goals of both liberals and conservatives alike.

The problems we will have are definitional problems. We each define those terms somewhat differently and as the two other gentlemen stated, there will be conflicts between those interpretations.

The real problem we face is the resolution of a clash between simplicity and equity. I prefer to put the emphasis on the simplicity angle, and Congress heretofore has preferred to put the emphasis on the equity angle.

I will try to discuss that with you for a few moments. For the majority of our citizens, simplicity is equity. They can only comply with the

law that they understand. It is futile to say that most complicated provisions of the code would only apply to a few citizens and not the average taxpayer.

The problem, of course, is that the Internal Revenue Service must reflect every provision on the forms and instructions. Therefore each taxpayer feels compelled to read them to see if they apply to him. Thus, he gets a general set of instructions that cover most unusual situations and he has to try to understand them.

We have a very mobile population. People have said, why don't you give a simple form to the taxpayer who has simple types of income and a more complex form for the people with more complex economic situations.

The difficulty with that is we have a mobile population in terms of movements around the country and in terms of types of income they might have from time to time. There would be nothing more frustrating to the taxpayer than to give him the form he received last year that fits the type of income that he had last year, only to have him complete it and find out he has some different kinds of income this year. Then he has to now go to yet another form because the package he received does not have the right form.

That would, indeed, I think bring a cry of wrath upon the head of the Internal Revenue Service. It would be very difficult for the taxpayer. We have to design a form which is fairly general purpose in use.

There can be a few special purpose forms, but they have to be integrated into that one general purpose form or otherwise we will get this fragmentation.

You also will find, I think, if you send a taxpayer with a complex income a simple form, he will cram his income on to it. The income won't fit but he will try to make it fit and, therefore, the Service will be in the position of rejecting the form, sending it back and requiring him to do it over again. Again causing frustration.

So I would agree with Mr. Caplin and Mr. Alexander in that respect, you must simplify the tax laws so the Service can simplify the forms for everyone.

What you must, as Members of the Congress, resist is the urge to cure inequity and seek perfection in every provision. That is what my friends here have said. You have to resist from the beginning and you have to resist it later on.

If you can do it in what ends up being the 1977 or the 1978 Revenue Act, the pressure will be on the next year for the first exception to the first exemption for the first hardship case that will show up. The difficulty will be to resist that urge to grant those provisions that will take some of the sting from the provisions of the law.

Each exemption or exception requires precise definition and that is what complication is all about. I would recommend a recent study on simplification by the New York State Bar Association. It should be required reading for all numbers of the tax writing committees.

The problem is, simplicity will lead to arbitrary, straight lines. This is where you have to resist the urge to relieve that arbitrariness. We are not going to be able to cure every ill of our society with a tax cure. There are other methods and you have to go to find those.

You don't have to encourage investment through the revenue code. It may be the best way but we have never really explored other techniques.

Each problem should be put to that hard test of, is this the best, the most efficient, the most effective way to handle the problem or is there some other technique that could be employed.

One of the things that concerns me as it concerns these gentlemen, and I am sure it concerns Mr. Kurtz even more today, is that we are placing more and more different types of responsibilities on the Internal Revenue Service.

It is a good effective administrative agency. That is, perhaps, why we do it. The people on the Hill and the people in the administration recognize the effectiveness of the agency and, perhaps, find it more effective than some other government agencies and therefore tend to throw more responsibility there.

But the service cannot be responsible for conducting every program of the Government: Pollution control, alieviation of poverty, aiding capital formation, you name it.

There is a well-known principle of management that if you put too many responsibilities of any kind on an agency, it will cause it to break down. One of the concerns that anyone who sits in the office that Mr. Kurtz now occupies is where is that point. At what point does one more responsibility cause you to lose the effectiveness of the general thrust of your operations.

The tax system, as we all know, is too important for us to take that kind of chance. So we must begin to now take more cognizance of this problem.

I am not an economist. As I sit and look at the data, the general savings rate in this country over the last 10 or 15 years has remained fairly constant. With the ups and downs, it averages out fairly close to the same.

What has happened is we have engaged in various kinds of tax devices which have been in the name of capital formation but which really skew investment, sometimes for good and sometimes for ill.

If we put investment credit on certain materials, we will get more investment for those materials which will probably be at the cost investment in other things. The dollars in the savings stream remain about the same.

So we must be careful when we start that skewing process. We all say we would like to have the free market. But many of these investment incentives are tax shelters that we now talk about. They end up being tax shelters even if they weren't designed to start off that way.

What we are doing is directing people to make investments. What we are really talking about when we talk about capital formation is another price on making certain types of investments. There has been a constant cry for more incentives, first for accelerated appreciation in 1954, then we went to additional first year depreciation, then to investment credit, then ADR's.

Some people are saying that if we would only reduce taxes, we would relieve the capital shortage. All of these techniques are merely ways of reducing the effective rate of tax. We have done most of these things. We still have a capital shortage. What I am saying is much of this tinkering is not going to change the real rate of savings. It is going to require a long-range change in the habits for people of the United States.

Maybe it is an attitude. If we can change the climate a little bit, it might have more effect than the actual physical change of the law.

Believe me, if we did each of those things or if we reduced rates dramatically this year, 3 or 4 or 5 years down the road, you would be back where the rates would seem high.

We once had 91-percent rates and people said, if we could only get to 75 that would be marvelous. So we went to 75-percent rate and in a year or two, they seemed terribly oppressive, so we went to 70-percent rates.

Now we say, if we only go to 50. I agree I would like to see 50 percent, but I will venture to say that someone sitting in this seat before the Joint Economic Committee or before the Finance Committee 5 to 8 years down the road will be saying if we could only go to 45 or 40 percent, we would relieve the capital shortage and stop those tax shelters.

Believe me, sir, if people can defer taxes for 10 years and their rate of return is sufficient so they will more than double their money, they will do it. Even at the rate of 50 percent, they will do it. It makes it harder, I will grant you, but some will continue to do it.

Tax shelters will be with us at 50-percent rates. Anyone of the three of us is a good enough technician and there are thousands of others around the country who can do it. You just cut out some of the marginal investments by changing the rates.

I am not saying that tax reduction is a bad objective. But the best way to handle the tax shelter problem is attacking the problem directly not by rate changes. I agree with Mr. Chaplin, it is a complex society so we are not going to have a completely simple tax law.

If we could make it for 75 or 85 percent of our people, we could do a very good job. I would like to comment on several things which have been previously discussed this morning.

It will be kind of skipping around without much coherence.

On capital gains, we now have a situation where capital gains are taxed at anywhere from 40 to 50 percent by the time you include the minimum tax and if there is earned income the loss of the maxitax benefits, the rate is 39 and a fraction, 49 and a fraction.

I don't think that if we can reduce the rates significantly, 50 percent or less, that the change in rate will be that dramatic that it would have a very adverse effect. So the lower rate structure would have a beneficial effect on capital formation. The increase in capital gains tax would have a slightly negative effect. But it would help if you look at the tax structure in terms of getting rid of this terrible overload of definitional problems, it would be great.

The business community is running from integration. It is a curious thing. If we all go back to our basic economics, we know that money seeks its level. It goes where the best return is. The business community is concerned about a tradeoff of existing benefits for integration. Integration will work best for a rapidly growing dynamic business, a stable business will have to pay more for its money. When you keep your money you don't have to worry about what its cost is. If you are retaining 50 to 60 percent of your earnings, you have the use of that capital.

If there is greater pressure on you to pay out that retained earnings as dividends, you then have to attract it back.

In a pure economic sense, that is probably healthier for our economy because that money will go to the dynamic growth business where there

is more opportunity. It should, if our laws of economics are correct. That will be a cost to other business.

So you will have a terrible dichotomy in thinking about integration. That is occurring already and they are already worrying about the tradeoffs, what deductions or benefits do they have to give up since you cannot throw this into the system without some compensating balance since we don't have surplus revenues today.

One of the things that I shudder at is some of the well meaning conversation about mixing of deductions and credits. We ought to have a system which has all deductions or all credits.

When we start to mix them we increase the opportunity for error. The problem with the credits is every credit requires two computations instead of one. While the credits are fairer to middle- or low-income taxpayers, and I would endorse that, they usually require two computations unless you design them as such that you can pick it up off the chart.

Every time you have two opportunities for a computation you will have two opportunities for error and it will increase the error rate that Commissioner Alexander mentioned.

Without getting into too many of the other things, the one thing that was not commented on by anyone and I hope deserves no comment, therefore, is the value added tax. I will try to give it a quick comment and say goodby to it.

The VAT is the last thing in the world the United States needs. It was introduced everywhere else in the world to replace a cascading sales tax. It, therefore, was simpler than a cascading sales tax.

It is nothing but a sales tax. However you design it, it is nothing but a sales tax. It is a new system which requires new administrative machinery, which will be a complication for the taxpayer and the Internal Revenue Service and it would not replace anything. It would be an additional system.

I can see nothing in our society that would bless the value of the value added tax.

Thank you.

[The prepared statement of Mr. Cohen follows:]

PREPARED STATEMENT OF SHELDON S. COHEN

Mr. Chairman, I am pleased to appear before the Committee this morning at your invitation to discuss "Tax Policy for Economic Growth". You have asked me to discuss various tax reform proposals particularly as they relate to capital formation. And further to explore how the current wave of tax reform ideas might effect simplication of our tax laws.

I preface my remarks this morning by stating that while I am a partner of the firm of Cohen and Uretz, the views I express here are my own and do not necessarily reflect the views of my firm or any of its clients.

The three major goals of any tax reform concept are: equity, simplicity and promotion of economic growth. These are the goals of President Carter and Secretary Blumenthal and they are the goals of liberals and conservatives alike. Thus on each proposal one must define the terms more precisely before we can see if we agree or disagree on specifics.

I have stated before other Congressional Committees that the biggest problem with our tax laws is the reconciliation of simplicity and equity. I prefer to put the emphasis on simplicity rather than equity. The Congress has in most instances preferred equity—at least in the proponent's eyes.

Let's discuss this for a few moments. For the majority of our citizens, simplicity is equity. They can only comply with a law which they can understand. It is futile to say that most of the complicated provisions of the law do not apply

to the average citizen. However, the Internal Revenue Service must reflect every provision of the law on the forms and instructions. Therefore, each taxpayer feels compelled to read the provision just to see if it applies to him. Thus, each taxpayer receives a set of general instructions which cover the most usual provisions—whether they will apply to him or not. Since we have a very mobile population—in the sense that the nature and the variety of income they receive from time to time changes—we provide each taxpayer with a general use tax return. It might be more difficult for him if we give him a form for simple taxpayer situations only to find out after he completes it that last year he had a capital gain or some other unusual transaction. Thus, he will be required to read and try to understand a great variety of complex provisions—unless we can simplify them for everyone. The best way to simplify the form is to simplify the laws.

You and the other members of Congress must resist the urge to cure every inequity and seek perfection in every provision. This is hard for all of us to do—but it is the only route to simplifying the Code—and keeping it that way. You must resist at the beginning and later when you hear about one or two deserving cases. It will be difficult to resist the urge to engraft one little provision which will take an undue sting from a particular law. Remember each clause and subclause, each exception or exemption, requires precise definition and that is what complication is all about. The recent study of simplification by the New York State Bar should be required reading for all members of the Finance and Ways and Means Committees.

Simplicity will sometimes lead to arbitrary straight lines. You must try to resist the urge to relieve the arbitrariness in some instances. I know that what I am saying sounds hard. But I am for a fair, equitable and simple law, just as all of you are. What I am saying, and perhaps I over emphasize it, is that simplicity must dominate on many occasions over equity when to do equity causes undue complication.

We must resist the urge to cure every ill in our society or economy with a tax cure. There are other direct methods of handling those problems and we must be willing to face them directly. Must we subsidize low cost housing through the tax laws? Do we have to encourage new investment through the tax code? We can ask that question about each and every tax code provision or tax expenditure. Is the tax code the most efficient, effective place to handle the problem? Most often it is not. If not, we must have the strength to face the problem directly. That after all is simpler.

One of my concerns in this regard is that we are placing more and more different types of responsibility on the Internal Revenue Service. It is a great and effective administrative agency. However, it cannot be responsible for directing or administering every program of Government—pollution control, alleviation of poverty, aiding capital formation, encouraging charity, to—you name it. After all it is a well known principle of management that if you pile too many different types of responsibility on an effective administrative agency, you will cause it to break down.

The tax system is too important to us to take that kind of chance. We must stop overloading the IRS with great varieties of responsibilities for which it is not equipped.

You asked me to comment on capital formation. As I understand that concept it is really a question for an economist. Capital formation is a product of savings. I understand our savings rates have been fairly consistent at about 15 percent of GNP for many years. We are not going to change that very drastically over the short run. I understand the economists to say that a fully employed economy will generate more savings. So I believe we ought to concentrate on full production and full employment. I believe a lower tax rate will also encourage capital formation, in that a reasonable percentage will be saved.

It seems to me that over the last 25 years which I have been practicing law, we have heard the constant cry of some taxpayers that if we only increased depreciation to accelerated depreciation, gave additional first year depreciation, gave an investment credit, allowed ADA and reduced rates, we would alleviate the so called capital shortage. We have done each of those things several times over the last 25 years, and still I hear the cries for more. That is really the same as the desire of all taxpayers. Each wishes to have his taxes reduced and it cure his particular problem—maybe it will and maybe it won't—but still he will feel better. It seems to me that all we have done with these provisions is move investments toward one area or the other—sometimes to good effect, more often to bad

economic effect. Then we have a tax cure, such as recapture of the minimum tax, to cure the previous cure.

Since man's economic wants are insatiable—this will be consistent. I believe we ought to strive to reduce the top individual rate to 50 percent (and a corresponding reduction of the bottom rate to 10 percent), and the corporate rate to 45 percent. This will require many deductions to disappear. However, as soon as these tax rates have been effective for a few years, they will seem high and you will again be faced with the same argument. I am certain that the argument will be worded a little differently, but I am as sure as I can be that it will come. It has every other time. After all, we heard the same arguments when we reduced the top individual rate from 91 percent to 70 percent.

The members of Congress must do the right thing as you see it now with sufficient strength or guts to try to keep it relatively simple. We can try to use the standard deduction and similar techniques to keep the laws relatively simple for the average taxpayer. At the same time we must remember that we live in a complex society—so the tax laws cannot be simple for everyone.

Thank you Mr. Chairman for the opportunity to share my views with you. I will be pleased to answer any questions you may have.

Senator BENTSEN. My understanding is that one of the proposals is for the value added tax to replace social security taxes. That is one of them.

I would agree with you that there is no reason why you should tax earned income at a different rate from investment income, and that there should be tax reductions for lower brackets also.

I listened to the three of you speak from your vantage point as former commissioners concerned with the simplification of the tax return. I heard one of you refer to the fact that with an insulation tax credit you could just see some IRS man climbing into the attic to check the insulation.

Again you are looking at it from your viewpoint. When we talk about subsidy, be it through the tax system or by another Government agency, somebody will climb to the attic.

Mr. COHEN. Why don't we just reduce the cost of the insulation itself. Wouldn't you encourage people to insulate?

Mr. CAPLIN. Or you could increase the price of energy.

Senator BENTSEN. The question is, Do you have a tax incentive or do you turn it over to a Government agency and say we will give a direct subsidy?

Mr. CAPLIN. Senator, that is the very point. We talk about simplification and yet we have loaded our tax law as the easy mechanism for taking care of all these social and economic problems.

Senator BENTSEN. As compared to having some other Government agency having their staff carry it out.

Mr. CAPLIN. Yet the tax return is sent to almost every American, and you give him a lengthy statement in regard to an item on insulation. If you go to a direct subsidy, then at least only those who ask for the subsidy will have the burden of filling out a piece of paper. But, by using the tax return, you make every American look at that piece of paper and add another complexity. If we are serious about simplicity, we will cut back stringently on all of these special credits.

Now you remember we even had a garden tool credit proposed last year and, fortunately, the Senate eliminated it from the House bill. But, again, home garden tools qualifying for a tax credit on tax returns, insulation qualifying for a credit, various types of equipment qualifying for a credit, and on and on and on.

Senator BENTSEN. Your argument is we should not use the tax system for social objectives for our country to try to make some of the private decisions in the public interest——

Mr. CAPLIN. That is essentially correct. Mr. Cohen touched upon it. Unless you feel that the tax law is the most efficient and the best way and perhaps the only way of accomplishing your goals, you really should examine the available alternatives.

I don't know whether, so far as insulation is concerned, an alternative system has been thought of. It is so nice and easy to say, why don't we put it in the tax return. At the same time, that same proponent is going to say, why don't we simplify the tax forms.

Senator BENTSEN. One of the problems we run into is trying to pass a regulation that goes out to the entire country and we cannot anticipate all the varying conditions around the country, and, frankly, it is easier sometimes to put it as an incentive in the tax system.

There is no question that it complicates it. But if you think of the other side of the equation and what it means in the way of growth in some other Government agency and giving the determination to someone in that agency deciding whether this subsidy is paid out and this cash payment is paid out, that is not and easy one either.

Mr. CAPLIN. One of the problems of burdening the Internal Revenue Service with these extra jobs is that it does not permit them to examine all the tax returns they ought to examine to improve compliance.

They are only examining about 2½ percent of the tax returns, and I would say that is only half of the number of returns that ought to be examined. When you put these additional jobs on the IRS, requiring them to police sometimes very small returns, I think you really are running counterproductive to what we call an improved self-assessment system.

Mr. ALEXANDER. As to this issue, Mr. Chairman, as mentioned in my statement, I spent a good deal of time last year trying to prevent that garden tool credit from being enacted.

What the Internal Revenue Service would have done would be simply allow taxpayers the $7, the maximum garden tool credit that could be claimed, rather than make any meaningful effort to try to administer such a credit.

Senator BENTSEN. Mr. Cohen, you were talking about businessmen deserting the idea of eliminating double taxation of dividends.

President Carter compaigned on that issue to do something about the double taxation on corporate dividends. For many years that has been a proposal of business people.

It is my personal belief that whichever one of the approaches that is taken there are going to be a lot of businessmen who are not going to like it who originally thought they would.

Now you have several approaches. One of them is that you give a credit to the individual on his tax return for the percentage of tax the corporation paid on the dividend they gave him. If you had a 30-percent rate, you get a 30-percent credit on this dividend.

You have another approach that says, if we pay you dividends, we get a deduction as though we were paying out interest. We have another extreme one that says the corporation pays no tax and the whole amount is attributable to the individual.

I am sure there are other variations. Would one of you like to cite some of the impact that this would have on various types of corporations? For example, it seems to me that you are going to see a variance in stock prices. The size of the shareholder credit depends somewhat on the tax rate that corporation is paying.

Mr. COHEN. One of the unstable results of any type of integration is just one of the points you have just made, it will be a bonanza to anyone who owns stock. It will be a bonanza to the stock market, an immediate shot in the arm.

I am talking about for people who own stock today, all of a sudden stockownership becomes more valuable.

Senator BENTSEN. Say a fellow owned a utility stock and the utility is not paying any taxes and a lot of utilities today don't pay any income taxes.

Mr. COHEN. The first technique you mentioned, you could write a book on each of the techniques, I am afraid.

The first technique you mentioned is the credit for actual tax rate of a corporation for that particular year is the most administratively complex because you don't know until after the year is over what rate it will pay.

Even then you may not know for 2 or 3 years because it is subject to audit and there may be substantial adjustments. You will get everywhere from zero up to the full 48 percent as a credit which would, of course, allow a variation. It would be a very difficult, complex system both for the corporations and for the Government to manage.

Mr. CAPLIN. You might have to make some sort of assumed rate.

Mr. COHEN. And if you do make an assumed rate you would be hurting some and helping others.

You would have that terrible conflict between the full ratepayer, a 48-percent ratepayer, and the people on down below the scale, whatever the rate you predict, whether it is 25 or 15 percent.

Senator BENTSEN. You are saying an assumed rate for all corporations?

Mr. CAPLIN. For a given corporation, you might take the preceding year, or an average of several preceding years and say that will be it.

Mr. ALEXANDER. Some of the countries that have adopted this have used, as I understand it, an arbitrary rate, a rate which in Germany is the full tax on the corporate level on distributed earnings, and in Japan, Canada, United Kingdom, and France it is a much smaller rate. It is about half the rate in the United Kingdom and France; in Canada, it is about one-third, and in Japan it is an assumed credit of 10 percent.

So, it is an arbitrary fixed rate.

Mr. COHEN. The deduction by the corporation is a horrible revenue loser. It is not going to be made up. There is no offset at all.

In any of the other systems there may be an offset. All of these are basically tax relief for the rich. You have to understand that, Senator, which may be deserved at some point. One would have to balance it, in a political world with offsetting tax relief for the middle and low incomes.

Probably 10 percent of the population own 70 or 80 percent of the stock. You get down to 2 or 3 percent who probably own 50 or 60 percent of the stock. So, it is a tremendous boon to the upper end of

the income scale and I would hope that would be offset by other kinds of benefits along the lower end of the scale.

The other one, the tax to the individual, is probably theoretically the best one.

Senator BENTSEN. Which one?

Mr. COHEN. Everything taxed to the individual, treating all corporations as if they were partnerships, in effect.

That is, again, very complex. In our present tax system I suppose if we got rid of lots of deductions and credits it might be somewhat easier, but it would still be rather complex.

Mr. CAPLIN. You would have to make all the basis adjustments each year.

Mr. COHEN. When you buy stock, and what is your basis in assets and when you buy stock is that reflective of the appreciation in the capital assets; there is a whole variety of complex things.

Mr. CAPLIN. Of the three basic plans there is a great charm to the corporate deduction of the dividends, but it is a big revenue loser. It would give great relief on the corporate side, but would put pressure on them to pay dividends.

Senator BENTSEN. That also urges capital accumulation on that except it defers the purchase of stocks.

Mr. CAPLIN. The present system detracts from financing through sound corporate structures. There is some criticism of the ratio of debt to equity today, and I think from that standpoint we have more equity financing if the dividends were deductible like the interest on bonds or debentures are deductible.

At the same time we all recognize this tremendous revenue.

Mr. ALEXANDER. It has other problems, too, Mr. Chairman. We tried something like this back in the late thirties, a so-called undistributed profits tax. I think they eliminated it in 1938.

One of the problems with this big revenue loser is that by granting a corporation a deduction for dividends, the deduction is granted for dividends paid to foreign owners and tax exempt owners.

That increases the revenue loss, and one might question whether it is in the national good to grant a deduction for dividends paid to someone who has no U.S. tax obligation.

Senator BENTSEN. Mr. Caplin, you were talking about how we figure cash flow and adjusted gross income, and as I understood you, you were talking about the above-the-line items that they had already got to these others out in a partnership—why shouldn't they?

Mr. CAPLIN. I am not objecting to that one bit. I am merely saying that. I say all that is entirely proper. I am saying when you are looking to curb tax abuses and you are looking to large adjusted gross income and you are saying where is the greatest revenue loss, you are not taking into account the revenue users so far.

There has been an overemphasis on the nonbusiness itemized deductions.

People with big adjusted gross income ask how they can wipe out their tax: and the only things left are the below-the-line deductions. We are ignoring, for example, the enormous amounts of depreciation on real property or on leased property that is taken above the line.

There are . any people who don't know what a Federal income tax is like. They have so much depreciation allowable from this real estate

that the only way to use it is for them to sell part of their real estate to generate capital gain.

Today, if they do that they will at least have to pay a minimum tax on the capital gain, but they sometimes move away from that, too.

People in some instances "mortgage out." They don't have any personal liability through nonrecourse borrowing, perhaps financed by an insurance company. For a large office building, the insurance company may lend on the rent rolls. You may have $20-some-odd million advanced without personal liability; and you would still be entitled to depreciation on $20 million.

You have not $1 at risk, not $1 of equity invested under those facts, and yet you are taking depreciation. You put up another building the next year, and you will have more depreciation.

You are totally sheltered. Sometimes a comparison is made with intangible drilling costs. At least for intangibles the equity money has to be invested up front. No bank will lend on a nonrecourse basis for intangibles. The investors have to put up hard dollars.

My point is that in the studies made in 1969—a rather basic sweeping study—there was a tendency to overemphasize adjusted gross income and what happened thereafter, rather than to see what took place before.

What happened above the line? Part of the difficulty is that the Treasury did not have good statistics. This is a real problem and I hope in the new legislation a more careful analysis is made of the above-the-line deductions, credits and the like.

Senator BENTSEN. I agree with you on the point about the minimum tax being an add-on. That is what it is.

Anyone who has a substantial cash flow and lives off of it such as you cite ought to be paying some taxes in this country.

You can never explain that to the folks making $20,000 a year and paying substantial taxes percentagewise.

Mr. COHEN. One of the problems with any alternative tax system is it requires double computations. In order to know which tax is appropriate, you have to compute it both ways.

Mr. CAPLIN. We are talking about a very special group of people.

Mr. COHEN. When we are talking about computations, it may be such a narrow band that there is no problem and we can insure in some way the general run of population does not have to read through that.

Senator BENTSEN. You are talking about a small percentage of the people.

Mr. CAPLIN. I might also mention when we are talking about zero taxpayers. Another example is the owner of tax exempt bonds.

There are people who can have enormous economic income from tax exempt bonds who pay no taxes. The House actually passed a bill where they had an alternative proposal made available to the municipalities and the State. The Federal Government would pay a subsidy to the States and to the municipalities to compensate them for the higher interest rates that they would have to pay in issuing taxable bonds. This is cheaper to the Federal Government; and from the standpoint of equity, it is obviously much more equitable to the public-at-large to have this body of people who own these bonds paying taxes in the future.

Senator BENTSEN. Can't you also make an argument that if you have that subsidy on interest that was proposed that you open up the market for municipal bonds to this vast growth in pension funds that won't buy them today?

Why should a pension fund buy a tax-free municipal bond, and wouldn't they like to be buying taxable municipal bonds?

Mr. CAPLIN. Right.

That is a counterargument, absolutely. But now that we have revenue sharing, which semes to be becoming a permanent part of our structure, I think we have a unique opportunity to face up to this problem, by having built in to the revenue sharing formula compensation for marketing taxable bonds.

I think we will help solve a major tax problem.

Mr. COHEN. I think, Senator, you find in a reasonable period of time, if you put the option on the nontaxable bonds would dry up.

Senator BENTSEN. But you give them the option?

Mr. COHEN. Politically, you would have to offer them an option. I would prefer not to.

Senator BENTSEN. I understand, recognizing the realities. Now, there have been proposals to do away in effect with capital gains and reduce the top bracket to 50 percent on all income. What do you think about liberalizing capital losses?

Mr. CAPLIN. I think you have to be very liberal and I think much more liberal than some of the proposals that have been made.

Mr. COHEN. Senator Kennedy has proposed $9,000.

You have to have some lid.

Senator BENTSEN. If you don't have a lid on capital gains, why do you have to have a lid on a capital loss?

Mr. CAPLIN. It is a revenue loser, Senator. It is a fear of the administration that people will tend to sell their loss securities, wipe any gains out, and take the excess as deductions.

Senator BENTSEN. They do that every time they take a capital gain.

Mr. CAPLIN. They are going beyond the gain. Also, they may not take the gain; they will take the losses and keep on taking the income from their appreciated securities.

From the standpoint of fairness and consistency, the losses should be fully deductible. The only reason why you would reconsider that would be the potential revenue loss.

Mr. ALEXANDER. The revenue loss might be pretty great because of the reason we have been talking about, the taxpayer lucky enough to have invested in a blue chip in a bull market finds he has enough loss around to provide his own tax shelter.

He defers the gains and takes the loss. The resulting revenue loss might be very great. I think it was predicted that the 1976 increase, the small increase of $1,000 to $2,000 and then to $3,000, in the allowance of the capital losses against ordinary income would cost $273 million in taxes by 1981.

You can take a pencil to that and rather easily multiply the loss by three. But that is hardly a sound way of arriving at revenue loss estimates, for a number of reasons, which I am sure economists can explain better than I can.

In any event the revenue loss would be great, but the equity, the simplicity of allowing full deduction of losses would also be great.

Mr. COHEN. Basically, Senator, I agree with both of them. It is because it is an elective act. Take a person with $300,000, $400,000, $500,000 of ordinary income, earned income, any kind, dividends, whatever you will, and he searches out his loss each year and disposes of those.

He keeps the capital gains all for the future, so he can elect to minimize his tax that way.

As a matter of simplicity; yes. But we tried to once back in the thirties and it didn't work and we had to stop.

I suspect the same thing would happen if we tried it again today.

Senator BENTSEN. Which one of these deductions do you think we could eliminate?

The House, I noticed, Ways and Means, took action on eliminating the gasoline tax deduction, the itemized one.

Mr. CAPLIN. I think that could be eliminated, easily.

Mr. ALEXANDER. I think it could be eliminated and should be eliminated.

Mr. COHEN. It is a user charge, that is all.

Mr. ALEXANDER. We are talking about quite a bit of money, but about a fairly small amount per taxpayer. We are talking about a deduction that is almost automatic by reason of the tables issued by the Internal Revenue Service for each State. If it is in the national interest to conserve energy, it might be in the national interest not to allow a deduction for this particular item. Instead general tax reductions could give everyone a break.

Mr. CAPLIN. Seventy-five percent of the people use the standard deduction. Only a limited group of people would be affected by this change.

Senator BENTSEN. What recommendations do you have to stimulate capital formation?

Mr. CAPLIN. As a student of taxes, I would agree with the idea of eliminating any differential between capital gain and ordinary income, with the understanding that a liberal averaging rule would be adopted, much more liberal than we have today, particularly for assets that have been held 10 or 20 years.

At the same time as someone representing business and investors, I do have concern on what the impact is going to be on our business community and on the stock market.

I don't know the answer to that.

Senator BENTSEN. Do you have concern if the capital gains were to go to 50 percent?

Mr. CAPLIN. We have seen the stock market in the doldrums and I just wonder whether some of the lack of confidence in the market results from the changes that we have made in the tax law on capital gains.

As has been pointed out, there are patterns where the tax on capital gains reaches 49.25 percent. This applies to a large earner of income through the interplay of the regular tax rates which would be effectively 35 percent—half of the regular rate—plus the minimum tax plus the impact on the maximum tax. As tax advisers we frequently will raise the question: Why do you want to take the risk in that venture where you are going to pay 49.25 percent effective tax on any

capital gain, when you can just roll over, not take any risk at all and just pay a 50 percent tax on your earned income?

I would like to have a lot of help from my fellow economists and have some studies in depth, rather than just accepting a theoretical broad-based approach to our tax system.

Senator BENTSEN. I was listening to Mr. Cohen talking about how regardless of what the rate is people are going to be complaining that it is too high a few years from now.

I agree with that and I understand that. But, to say that people go into some extraordinary mechanics to defer the payment with inflation the way it is today, some of them I think are going to be fooling themselves in a lot of those situations if they come back and have to pay a 50 percent capital gains tax later and have the long-term exposure.

Mr. COHEN. If you take a 50-percent rate, Senator, and take a more moderate inflation rate than we have had, 4 or 5 percent, if I can defer my tax for 10 years I am paying back in 50 percent dollars or less. Then even if I didn't have any return on my money, I could take the sax savings and put it in a tax exempt bond fund right now at 6 percent. I have got to make money.

Senator BENTSEN. But what you get paid back is also in 50 percent dollars.

Mr. COHEN. Yes; but I can play that game and I can make money every time, sir, at 50-percent rates.

It makes it harder but I can do it and any skillful tax accountant or lawyer can do it.

Senator BENTSEN. It is a business judgment situation you are getting into, too.

Mr. COHEN. Businessmen find that the rate of return on their capital is more than 5 or 6 percent.

It gets up to 10 or 15 percent.

Mr. CAPLIN. A lot of people have been playing this game for many years and there are a lot of sad people, too, because their investments have not appreciated the way they thought they would. You find people today who lost 100 cents on the dollar and who say if I paid the regular tax I would at least have 50 cents. I have seen a lot of shelter programs where the ultimate answer has been zero.

Deductions are all right. They are fine today but what do you get down the line? At least you keep 50 cents if you have a 50-cent rate.

Mr. ALEXANDER. I am more optimistic. I think the effect of reducing the 70-percent rate on drying up to some extent the tax shelter market, I think it will have a major impact both real and apparent.

There will be less interest in going into an investment that no one would possibly make viewing it as an investment if this step was taken.

Senator BENTSEN. Gentlemen, we have covered quite a broad spectrum.

I appreciate this and I think it will help us in our deliberations.

Thank you very much.

[Whereupon, at 11:32 a.m., the subcommittee recessed, to reconvene at 10 a.m., Wednesday, July 13, 1977.]

[The following information was subsequently supplied for the record:]

OLWINE, CONNELLY, CHASE, O'DONNELL & WEYHER,
New York, N.Y., July 15, 1977.

HON. LLOYD BENTSEN,
Cochairman, Subcommittee on Economic Growth and Stabilization, Congress of the United States, Joint Economic Committee, Washington, D.C.

DEAR SENATOR BENTSEN: At the conclusion of the hearing on Tuesday, July 12, we discussed what other countries were doing in an effort to solve the problem of double taxation of dividends. You asked me to submit a brief description of the actions taken by some of our principal trading partners. This letter is in response to such request.

Our principal trading partners have taken steps to solve the double taxation problem along the lines of those recommended on pages 6–7 of my prepared statement: the stockholder receiving a dividend is allowed a credit for corporate tax deemed paid with respect to such dividend. The Joint Committee on Taxation described the West German, French, United Kingdom and Japanese system as follows in its April 1977 memorandum entitled "Tax Policy and Capital Formation":

"2. West Germany is the major country which has eliminated all of the double taxation of dividends. It uses a combination of the split-rate approach and the withholding approach. The corporate tax rate on income distributed as dividends is 36 percent, compared to a 56-percent rate on retained earnings. Shareholders are given a credit against individual income tax liability for the 36-percent corporate tax on dividends and must gross up their dividends by that amount.

"3. France, Japan and the United Kingdom eliminate a part of double taxation. France and the United Kingdom use the withholding approach. Japan uses a split corporate rate of 30 percent on dividends and 40 percent on retained earnings, and it allows shareholders a tax credit equal to 10 percent of their dividend income (with no gross up). The shareholder credit is 5 percent at higher income levels." (p. 17)

The United Kingdom corporate tax rate is 52 percent, and the United Kingdom credit is currently 35/65ths of the dividend, about one-half the corporate tax rate. The corporate tax rate in France is 50 percent and the credit is one-half the dividend, or one-half the corporate rate.

Canada uses a similar system, with a tax credit of about one-third of the 46 percent corporate rate.

Except for Japan, each of the countries described above uses a system in which the stockholder receiving the dividend must first gross up the dividend for tax reporting by adding the amount of the tax credit (slightly more in Canada) to the dividend and then reducing tax liability by the amount of the credit.

The fact that our tradnig partners already use the gross-up and credit as the means of alleviating double taxation is another reason for the adoption of a similar system in the United States to resolve the problem of double taxation.

I hope that the above is responsive. If there are any further questions or if I can be of further help, please do not hesitate to write or call.

With best wishes.

Sincerely,

DONALD C. ALEXANDER.

THE ROLE OF FEDERAL TAX POLICY IN STIMULATING CAPITAL FORMATION AND ECONOMIC GROWTH

WEDNESDAY, JULY 13, 1977

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON ECONOMIC GROWTH
AND STABILIZATION
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10:10 a.m., in room 318, Russell Senate Office Building, Hon. Lloyd Bentsen (cochairman of the subcommittee) presiding.

Present: Senator Bentsen.

Also present: Louis C. Krauthoff II, assistant director; William A. Cox and Kent H. Hughes, professional staff members; Mark Borchelt, administrative assistant; and Charles H. Bradford, George D. Krumbhaar, Jr., M. Catherine Miller, and Mark R. Policinski, minority professional staff members.

OPENING STATEMENT OF SENATOR BENTSEN, COCHAIRMAN

Senator BENTSEN. This hearing will come to order.

This morning the subcommittee continues its hearings on tax policy and capital formation.

Perhaps it is not perceived as exciting by the general public as the subject of laetrile or saccharin but it has a lot more to do with the health of this country than either of those subjects.

It has a lot more to do with whether this country continues to grow, whether we have jobs. President Carter has talked about balancing the budget in 1981, about getting unemployment below 5 percent, about curbing inflation.

None of those things can be done unless we have substantial capital investment in this country between now and 1981.

Of all the major industrial nations in the world, between 1965 and 1976, the United States put the smallest percentage of GNP back into manufacturing capacity of any nation, and the nation next to us was England.

We can see the kind of problems they are having. Business has not yet taken those projects off the back shelf for increased manufacturing capacity.

They have not yet evidenced the kind of competence in the future of the country that would continue to bring about the growth that is necessary. We have to look to some incentives to try to encourage that.

As I look at the situation today, and the increase in the utilization of the manufacturing capacity that is available where we now have it

up to about 88 percent, I am reminded of the situation in the fall of 1973 and what happened in 1974.

That part of the capacity that is not being used is the least efficient; generally, is the most costly, and as they bring it onstream, runs the unit cost up that much more and then you begin to develop shortages in critical materials and critical industries.

I am deeply concerned that we are going to see a repetition of that unless business makes that kind of an investment.

Once you develop those shortages and the price goes up in that particular industry, it leapfrogs across to the rest of them and then inflation gets out of control again.

So, the subject that we are dealing with is of critical importance to this country of ours. Our tax laws and how they are handled really decide whether the free enterprise system works or doesn't work.

We had people who debated yesterday and witnesses who testified that they did not want to see the tax system used to achieve social objectives for the country because that made the tax formula more complicated, and that is true. That is part of the price we pay.

The other alternative is to let a Government agency pay out a subsidy, decide who gets it, and make the allocation.

The private enterprise system, I believe, works better where there is an incentive for them to compete. A lot of that comes from venture capital.

Yet, today new issues are almost dead. As far as a new business starting up and trying to sell a new issue in the equity markets, it is almost impossible. Yet unless we have that we are not going to have the Xerox and the Polaroids and the IBM's of tomorrow, except as captives of one of the current big parent companies.

This morning we are fortunate to have several witnesses with particular expertise in the problems of start-up business.

I would like, first, to welcome the prominent and qualified tax attorney who has looked at the tax returns and the tax problems and at how the real world works for these people trying to start out in business, Mr. Vester Hughes of Dallas.

Mr. Hughes, will you present your testimony.

STATEMENT OF VESTER T. HUGHES, JR., TAX ATTORNEY, DALLAS, TEX.

Mr. HUGHES. Mr. Chairman, my name is Vester T. Hughes, Jr. I have practiced law with particular emphasis on Federal income, estate and gift taxation in Dallas, Tex., for 22 years. I appreciate this opportunity to appear before your committee today.

I would first like to ask that the text of my remarks be incorporated into the record so that I may be a little more informal and summarize to save the time of the group.

Senator BENTSEN. That will be done.

Mr. HUGHES. In recent years, Congress has focused much of its attention on a favored few who, by one means or another, have managed to avoid any significant tax on their substantial income.

At the outset, let me say that I heartily agree that every person should bear his or her fair share of the tax burden in accordance with the ability to pay. However, it seems to me that Congress, in its attempt to close the loophole for the favored few, seems to have lost sight of

the millions of other taxpayers, businessmen and women, who are paying a significant tax on their income. This fact is borne out by the Office of Tax Analysis figures that were released on March 3, 1977, indicating that substantial tax is paid by high income individuals. The objective of Congress should be to have a tax imposed and administered on a fair, even-handed basis, and yet have it more readily understandable by the public.

I certainly agree with the former Commissioners of Internal Revenue who spoke yesterday, that the tax law has to be understandable, but with a view not so much to insuring that someone doesn't slip through a loophole but rather creating a situation where everybody can and will comply with the tax law in a productive fashion. One result of our complex system of taxation is that business decisions are becoming less and less predicated upon current business conditions. Instead we see business decisions being made more with an eye toward what their anticipated tax impact will be on the taxpayer, rather than as a positive response to changing economic currents. Of course tax planning is a crucial factor in any large business decision but it should not be the overriding consideration in daily business operations.

Again, fairness has to be a very important objective. But another important objective is capital formation; the formation of capital by allowing an entrepreneur who does not have capital to express his ability to engage in business. This takes the cooperation of someone who does have capital. In essence, this is the American dream. It is my position that realization of the American dream should not be discouraged by the American tax system. I submit that some of the legislation and in particular the tax legislation beginning with the Tax Reform Act of 1969, the Tax Reduction Act of 1975, and the Tax Reform Act of 1976, has been unnecessarily at cross-purposes with this objective. Accordingly, Congress should reconsider some of the measures it has enacted in the past for the stated purpose of correcting abuses or loopholes.

It seems to me that perhaps such loopholes should not be plugged on an ad hoc basis that responds to what has offended someone at the moment, but rather on a more thoughtful basis in terms of the total impact, particularly the impact on capital formation. It has been suggested, for example, that as developers have to file environmental impact statements, perhaps Congress should require that "economic impact statements" be filed with respect to new proposals to aid in determining if proponents have thought through what the impact will be.

One example that comes to mind in this regard is what started out in 1969 as a limitation on investment interest.

Senator BENTSEN. Mr. Hughes, I remember a former President who was quoted as saying to members of his staff when they went up to testify, "If you tell Congress what this is going to cost, you are fired."

Mr. HUGHES. I can understand the reluctance to tell Congress what it is going to cost, but I think if the staff would tell Congress privately what it is going to cost, it might be helpful in terms of letting Congress achieve its objectives.

Senator BENTSEN. I think we are seeing more and more the attitude on the part of Congress that they want those kinds of solid numbers to the extent they can get them.

We don't always try to get it but more are trying to get it.

Mr. HUGHES. I notice that on July 25 one of the subcommittees of the Senate Finance Committee is having hearings on the impact of the carryover basis. The carryover basis has had some support for a long time. Similarly, imposition of a capital gains tax at death on the difference between the basis and the fair market value of assets has had a good deal of support. But most of the theoreticians supporting either one of these views don't seem to focus on the enormous problem raised because ordinarily the person who has known where to find the factual information to implement either carryover basis or capital gains at death is the one who died. If all of a person's individual assets were cataloged and kept like a business keeps its depreciable property, it would be possible to administer a carryover basis (or capital gains at death) very simply, without great administrative costs to the Government or the taxpayers. But we do not have a nation of bookkeepers. The farmer or rancher in Texas and the computer industry person who starts out on his own, some of whom we will hear from a little later in the morning, certainly do not keep records in any extensive form. It is not a natural thing to do. So the administrative burden is of an order of magnitude that any theoretical soundness of either capital gains or carryover basis at death does not justify a rule other than basis equal to fair market value at date of death. A present or inherent (resulting from carryover basis) tax is not justified in addition to the estate tax in any event—death should not give rise to a double capital levy if capital formation is an objective.

An example of what can happen to capital formation when tax legislation is enacted without careful consideration of total effects can be seen in the investment interest disincentive. The $25,000 limitation originally enacted in 1969 and then more recently the lower $10,000 limit at which point interest may be nondeductible, though carried over, prevents the entrepreneur from borrowing money against stock, if that is the vehicle that is used, in any significant amount. Even the exception that relates to a 50-percent interest owned by the entrepreneur's family ordinarily does not help in any significant measure.

Senator BENTSEN. Why is that? Tell me why it doesn't help when 50 percent of it is owned, because that was put in in 1976.

Mr. HUGHES. It helps, except it is an unrealistic limit. The thrust of my comments is not that the idea of giving an additional advantage in that situation is not a good idea; to the contrary, it is a very good idea, but ordinarily the man with no money doesn't wind up with 50 percent. If he can find someone that supports him, and he gets a third or a fourth, he may be very fortunate. Now, he may have options that will later allow him to increase his holdings.

Senator BENSTSEN. Those options don't mean much any more.

Mr. HUGHES. They don't mean much any more, but the man who puts his money up wants to know that the enterprise has worked before the entreprenuer becomes a full participant. He wants to reward results not promises.

Back to the interest question. Assume that it takes $2 million in equity to begin a business and that it is to be financed 50 percent by the entrepreneur borrowing $1 million against the guaranty of the monied partners and the monied partners are furnishing $1 million for his 50 percent of the stock. Now, if the entrepreneur cannot deduct the interest that it is going to cost him to borrow that money, $80,000 or

$90,000 or even $100,000 a year even with the higher limit, there is no way he can go into the situation. Because of the 50 percent ownership, less than one third of the interest is currently deductible. It may well take that much initial capital for any business venture of any size to get underway in the first place; so even with 50 percent ownership the entrepreneur would not be able to deduct sufficient interest against his salary to participate.

In 1969 there was an overcorrection resulting in a double penalty. On the one hand the deduction for investment interest was limited. On the other hand, the capital gains rate was increased so it can go as high as a 49.2 percent of the effective rate through the minimum tax and effects of the maximum tax on earned income. There is a disincentive both to the entrepreneur and to his investor. The fledgling entrepreneur's problems cannot be considered apart from the investor's problem because the venture will not get underway unless the investor has some opportunity to make a gain.

If the gain to be realized is the same, whether it is a high risk or a low-risk investment, then it is only a dunce who will undertake the high-risk investment in preference to the low-risk investment. The opportunity for gain when it was taxed at 25 percent versus the top 91-percent rate which once existed, was a great incentive to try to achieve the 25-percent capital gain rate. The differential between 25 and 70 percent was still a substantial incentive, and indeed up until 1969 the results of that incentive were evident.

If one looks at the figures that you were mentioning at the introduction of the session this morning, from 1950 to 1965 you find the growth in the United States at a very different rate, vis-a-vis the rest of the industrial world, as compared with 1965 to 1975. I am not suggesting for a moment that all of this can be blamed on the tax system. I am suggesting that a large part of it has to do with the risk that one is willing to undertake when the investment calls for what has been termed "patient money." Patient money is a concept that I think is valid and should be explored in terms of money that someone is willing to expend and leave at risk, because the effect is to increase capital.

If you have only debt, it will float to the largest and quickest return. We have seen this particularly with regard to Arab oil money. If you change interest just a quarter of a percent, money will move. What difference does this make? One thing that happened is that in 1960 there was 24-percent debt and 76-percent equity in the U.S. business, in 1975 it was 43-percent debt, 57-percent equity. Secretary Blumenthal, in his comments——

Senator BENTSEN. Do you have those numbers in your testimony?

Mr. HUGHES. Yes; Mr. Chairman.

Secretary Blumenthal deplored this tendency in his March 3 speech. He said, "Moreover, our tax system encourages the financing of investment through debt instruments. Over the longer run, this is not the ideal arrangement." He went on to note that this resulted in business becoming increasingly vulnerable to cyclical fluctuations.

This is what happened in 1970, when many highly leveraged businesses went bankrupt and many more were on the verge of bankruptcy. He noted that a debt based economy limits the venturesomeness of investment. Certainly, that is true. It inhibits economic growth because

growth depends very much on the willingness to risk investment in new products and new processes. Secretary Blumenthal said this:

> Raises particular problems for smaller enterprises which often lack the track record necessary to attract adequate amounts of financing from lenders and must, therefore, fight for access to pools of equity financing.

This would be a good observation if it went one step further. If one looks at the equity market, those pools of equity investment have not been available. In my prepared statement I stated that in 1969 there were 1,298 new stock issues of companies that had not theretofore been public. In 1976 there were 46 new issues. That is an incredible change, less than 5 percent in 1976 of the number in 1969. Again, the same thing is true of companies already public. There were 50-percent fewer new issues between 1969 and 1976.

It is a well-known statistic that the American public is rapidly going out of the equity business. We have gone from 31 million to less than 25 million individual stockholders and the numbers are continuing to dwindle. On the other hand, it is the young and innovative companies that are the biggest challenge to and give the most competition to the big corporations. If that challenge is not forthcoming, growth, innovation, new products, and the like will be unlikely if we must wait for an already large company to go into a new business.

I think that would be very unfortunate. It is unfortunate in many ways. One of the hallmarks of the new companies has been that they employ proportionately a large number of people. These new companies not only increase the competition facing the larger companies, but also enhance the employment rates and the ability of persons who want to be a part of a new, innovative, and creative enterprise—to have, as the vernacular puts it, "a piece of the action," to be associated with something that is growing.

This is not to say that it is not desirable to have our stable institutions; they make a great contribution, but they need to be challenged.

When Congress passed laws which inhibited pension funds from investing in small businesses another pool of investment capital dried up. Congress reaction to the poor management practices of some pension funds gave rise to the "prudent man" rule of investment criteria for pension fund managers. I submit, though, that the prudent-man standard of investment has resulted in pension advisers adhering to an overly rigid view and should be loosened somewhat to allow the investment by pension funds in new and innovative businesses. Of course, this has to be done very carefully but certainly it should be possible to come up with some standards that permit it. One helpful approach has been the plans that have encouraged ownership by the employee and at the same time allowed capital formation through the tax system.

Back to the overcorrection. One approach would be to go back to the pre-1969 rules on all interest being deducted. If interest is truly a cost, why shouldn't it be deducted? The rationale given for the change was that some individuals deducted their interest on items that eventually yielded a capital gains tax. I wonder if that rationale shouldn't be reexamined. Reexamination could cause a backtracking, at least allowing a 100-percent investment interest deduction on new investment in business.

One approach would be an investment interest deduction for a new or small business. Another approach would be an investment interest deduction for any new investment in business, be it a new issue by a corporation that is already publicly held or be it an original issue by a company not then publicly held.

The same sort of reexamination, it seems to me, could be encouraged with respect to capital gains tax. The 49.2 percent possible tax rate on a long-term capital gain, a result of the interplay of the maximum tax and the minimum tax, is certainly a discouragement to risktaking.

Much has been said about the possibility of simplifying the tax laws by removing the concept of capital gains altogether. I submit that this is not wise. I think it is very appropriate for there to be a differential between what is realized from investment which typically is over a long period, and what is realized on a current basis. Again this gets back to the concept of "patient money" as a stabilizing force in the capital formation process. It might very well be that the holding period should be changed or that a longer holding period should cause a decline in the capital gains rate over a period of time. In any event, it seems to me that the differential is very important unless we are going to the level where all American business is totally debt supported. This morning's Washington Post, on page 14, reported that the Business Roundtable is wary of integrating corporate and shareholder tax even though it would supposedly end the double taxation of dividends. Yesterday's discussion indicated that three former Commissioners of Internal Revenue thought there were many difficulties inherent in the integration of the corporate and individual income tax. The elimination of the capital gains tax is frequently linked with the integration of corporate and individual income taxes. If integration is not a prospect then certainly lower capital gains tax rates should not be eliminated.

The German approach to integration of the individual and corporate tax would be workable but the German system appears to give more benefits to taxpayers than U.S. proponents of integration have felt Congress would be ready to give.

One of the questions that should be considered very carefully, it seems to me, is what happens on the loss side of transactions. Assuming the elimination of capital gains tax, it is said that we cannot stand the revenue impact of allowing losses to be ordinary losses, even though all gains are ordinary gains. It is true that we have had experience with this. In the 1930's it was tried and the revenue losses were too large and that meant that the capital gains system had to be reinstated.

Aside from the argument of fairness, if we have to have definitions in the Internal Revenue Code to decide what is a capital loss then there is not simplification by having rid the system of the concept—it still must exist.

If the additional price tag is that we do not encourage capital formation, we do not encourage people to leave their money at risk. Any small benefits of eliminating the capital gains concept are greatly outweighed by the costs to our society.

A desirable change in the present system would be to allow a section 1244-type ordinary loss for all new business. It does not make a lot of sense to have to go through a little magic formula on the formation of a corporation in order to receive the benefits of the ordinary loss.

Furthermore, the ordinary loss that can be incurred and taken in a year is limited.

In 1976 Congress removed the deduction for a loss incurred by an individual guarantor on a loan to an individual to be used in his business. I don't know exactly what statistics were furnished to Congress to encourage the elimination of that provision, but I would encourage a reexamination. Certainly, this change that does not encourage the guarantees to be made for an entrepreneur going into business for the first time. The deduction for payment on such a guaranty should be restored and expanded to provide a deduction for losses incurred by guarantors of loans to small or new business corporations, as well as for losses on direct loans to individuals and corporations.

Money that is available for investment has been taxed at some point along the line. It is hard to save money. A wise person knows that new businesses are risky. Almost as many businesses fail every year as are formed every year.

Unless there is some reason to take the risk, unless there is a reward and incentive to take the risk on equity investments, why take the risk?

Of course, there will be exceptions to that statement. Someone on occasion, believes in a dream enough to take the chance even though his loss is not deductible, even though the interest on his loan is not deductible. But that is not the type of person who will make the equity investments on the large scale that is required if capital formation is going to proceed at a rate where the tax base increases to the point that is going to be required to raise the money that is necessary for expanded programs, local, State, and Federal.

Perhaps a large part of the problem is that it may be incredibly simple. I am convinced that many economists and many other so-called tax experts don't know a lot about motivation incentive, what it takes to cause a person to put their money out where it might be lost.

Capital formation deals with money and alternatives for the use of money. Investors fear loss. If they are wise, they will always fear loss. So, money seems to be attracted to the place where there is the largest chance of a reward or gain. If the reward is the same, whether it is invested for a long period of time or a short period of time, whether it is invested in high risk or low risk, I submit that the ownership of common stock will deteriorate even further, there will be an increasing interest in debt ownership only. Even riskier matters such as oil and gas exploration, certain mining exploration, steam projects for oil production and shale oil production, will not have the financial support from any part of the American investing public.

It is true the big companies may proceed. They can afford the risk—but not the American investor. It seems to me that in view of the suggestions that perhaps there should be a divestiture of certain operations of integrated oil companies and in view of the questions raised as to whether oil companies should be allowed to go into coal mining, the impact of the tax laws on the average investor should be a very real consideration in examining the merits of past and proposed changes in the tax laws.

A brief comment is needed on the matter of the 1976 law and whether or not the more rapid taxation of estates is going to have a positive or a negative influence on capital formation. In my opinion the more rapid taxation of estates will have a negative influence on capital formation because family businesses owned by such estates will have

to be sold or taken public if that is possible to raise the money to pay the tax. Capital formation and capital preservation must be considered together, because, to the extent that capital is not preserved that non-preservation effect must be made up by new capital being formed, or we don't even stay even.

It has been said that a civilization that eats its seed corn starves the next winter. I think that if we have capital consumption by overly rapid taxation for current Government expenditure, that has the effect of our civilization eating its seed corn.

If the society decides that capital formation must be a governmental function, so be it. But, I think it ought to be a conscious decision and not one inadvertently stumbled into by reform that does more damage than good.

One other recommendation I think that could be very useful for the Congress to consider is whether many of the problems such as those since 1969 with capital formation might not be obviated if there were a moratorium of 2 to 3 years after enactment of tax laws before the effective date.

In the event of a war or depression there would need to be quicker action, but if the written form of the legislation could be studied and reviewed over a period of time by the staff of Congress, the Treasury, the Internal Revenue Service, tax advisers, and academicians, then I believe we would know whether it is likely that the impact will be as anticipated.

That is a hard discipline. It may not be a possible discipline. I suggest that it is one well worthy of the careful attention of the Congress.

I think it would give rise to legislation that also would be clearer. We are living with some of the effects of laws written under tremendous time pressures and deadlines. Constant change and threat of change make risk-taking by investors more difficult, and also make it more difficult for the entrepreneur to decide that he is going to lay his life's work on the line.

Big business can weather virtually any kind of change.

I would hope that changes in big business will result from the challenges created by small, American entrepreneurs who want to make it big, rather than from further Government control.

Certainty in the tax law and predictability do not guarantee fairness, but there is no way in my opinion there can ever be fairness without a degree of certainty and ability to anticipate what the result will be.

I submit that the expected result should be that a person who is willing to risk his money on the American system on some new project, on some new product, on some new idea, is entitled to a reward for that risk that is appropriately recognized by the tax system.

I think that has been true in the past, and I think it is only by undue focus on certain problems without attention to the overall effects of proposed changes that there are provisions, holding back economic growth and capital formation today.

[The prepared statement of Mr. Hughes follows:]

PREPARED STATEMENT OF VESTER T. HUGHES, JR.

Mr. Chairman, my name is Vester T. Hughes, Jr. I have practiced law with particular emphasis on Federal income, estate and gift taxation in Dallas, Texas for twenty-two years. I appreciate this opportunity to appear before your Committee today.

In recent years Congress has focused much of its attention on a favored few who by one means or another have managed to avoid any significant tax on their substantial income. I heartily agree that every person should bear his or her fair share of the tax burden in accordance with ability to pay. However, in its efforts to tax a favored few, Congress seems to have lost sight of the millions of other taxpayers—particularly business men and women—who are paying their fair share of the tax burden and who are equally bound, affected, and hurt by the morass of tax laws and regulations aimed at the low tax burdens of the few. The objective should be to have taxes imposed and administered on a fair, workable, and understandable basis for all of society rather than to make certain that no one individual pays less than his "full" tax liability under whatever standards are applied.

While fairness is indeed an objective which should be sought by Congress, this must be placed within the framework of other objectives. One of these objectives should be capital formation within a framework which permits an aggressive entrepreneur without capital of his own to amass sufficient capital to enter the business scene and promote additional competition and free enterprise which forms the basis of the American economic system. Not only should the tax system not unduly inhibit this aspect of the American dream, it should encourage and foster such possibility. In this regard, I would submit that some of the legislation of recent times is unnecessarily at cross purposes with these objectives and indeed suggest to Congress the possibility of modification of its past actions to correct what I believe to have been unintended results of prior actions.

Accordingly, I believe it would be helpful for Congress to reconsider the effects of certain measures designed to correct what have sometimes been characterized as "abuses" or "loopholes." In this connection, I suggest as a general thesis that loopholes should not be plugged on an ad hoc or stopgap basis without also considering other basic and fundamental objectives such as encouragement of the ambitious entrepreneur and the effect on capital formation. For example, in the area of investment interest, denial of part of the deduction in excess of $25,000 plus investment income, initially and, more recently all of the deduction in excess of $10,000 plus investment income was advocated on the basis of preventing the deduction against ordinary income of interest payments when such interest payments were incurred in connection with the purchase of an asset which when sold would produce a gain taxed as a long-term capital gain. Yet, at the same time, the long-term capital gain rate was being increased both directly and potentially indirectly through the minimum and maximum taxes so that what for many years had been a 25 percent maximum rate has become a potential 49.2 percent maximum rate. So in a measure the abuses sought to be corrected were overcorrected by the double imposition of penalties. This in and of itself might not be considered bad except when one considers the tax policy objectives defeated by such measures. If a person has no investment income, then the effect of the measures may well be to prevent his entering into a new business because of the inability to deduct "investment interest." This is particularly true of an individual entrepreneur who has no funds but can borrow money against a new issue of stock (typically with the guaranty of his monied investor co-owners); the use of a corporation and hence the necessity of the entrepreneur's purchasing stock is frequently a prerequisite to having any assistance from non-operator investors due to the potential of personal liability in other arrangements. In this type fact situation, it does not seem likely that Congress intended to preclude the entry into the business arena of persons without prior accumulations of capital. But the denial of a deduction for investment interest may have precisely the effect of such preclusion; if Congress intended to make it difficult or impossible for a person without prior capital accumulations to enter business, this is certainly a new objective and is not consistent with many of its other programs.

Unless the tax problems of the fledging entrepreneur's investors are also solved, the venture will not be begun. Simply stated, why should an investor risk money on a new venture unless the fruits of success, discounted by the likelihood thereof, are greater than those available in lower-risk investments. The simple answer is that up until 1969 an important incentive to take potentially productive investment risks was furnished by the tax system. Again, if money to be put at risk is borrowed, the interest must be deductible if the tax system is not to produce a disincentive to risk taking. The investment interest provisions have, in recent years, caused grave financial difficulties to many investors in the market with respect to prior investments and, indeed, have eliminated them from the ranks of those who can make a contribution to capital formation in the future.

Further, there should be some incentive with regard to the taxation of the gain to be realized—if the gain to be realized is to be taxed the same as any other gain under present capital gains rates or as ordinary income, then the tax system gives no incentive to risk investment in a new business as contrasted with investments more likely to result in a profit and less likely to result in a loss. Since 1969, the trend has been for investors to put money more and more in savings and loan associations, in bank CD's, and in short-term securities, and less and less in long-term debt—more and more in AAA, AA and A companies and less and less in debt offered by BBB, BB, B, or unrated companies of all kinds. The difficulty is not merely within the types of debt—i.e., funds being available to strong borrowers but not to the unproved. The corporate debt/equity ratio has increased from 24 percent debt/76 percent equity in 1960 to 43 debt/57 percent equity in 1975. As Treasury Secretary Blumenthal noted in his remarks on "The Government's Role in the Capital Formation Process" on March 3, 1977, "Moreover, our tax system encourages the financing of investment through debt instruments. Over the longer-run, this is not the ideal arrangement. . . ." He went on to note that this resulted in business being increasingly vulnerable to cyclical fluctuation in income, "limits the venturesomeness of investment," "inhibits economic growth because growth depends very much on willingness to risk investment in new products and new processes," and "raises particular problems for smaller and newer enterprises, which often lack the track record necessary to attract adequate amounts of financing from lenders, and must therefore fight for access to pools of equity financing." But modifications of the capital gains tax have contributed both to the difficulties of small and medium-sized growing businesses in raising money through the public markets and to the far greater difficulty of raising money in the private markets.

The Tax Reform Act of 1969 became law on December 30, 1969. The following schedule shows the dramatic decline since 1969 in the number of common stock issues:

	New common stock issues of companies going public for the 1st time	New common stock issues by companies already publicly held	Total
1969	1,298	494	1,792
1970	566	212	778
1971	446	682	1,128
1972	646	739	1,385
1973	177	234	411
1974	55	99	154
1975	24	208	232
1976	46	233	279

As one sees from these statistics, although the decline for companies already publicly held is far less marked than for companies going public for the first time, it amounts to a decline to less than 50 percent of the former level—from 494 in 1969 to 233 in 1976.

A host of well-known statistics exist to support the claim that the American public is going out of the equity business. The total number of individual stockholders has declined from 31 million to less than 25 million and is continuing to decline with each passing month. As a percentage of total population, the decline is even more marked. There is no better way to curb the effectiveness of our independent economic system than to make it difficult for people to go into business. Removing the ability to raise money and freezing the incentive to invest are certain to affect negatively the American business system.

It is young and innovative companies which give the most competition to the big corporation of the United States and, yet, it is the young and innovative companies which are not able to raise as much money as they need and deserve. Over the next several decades the result could be disastrous for American industry. Competition may—and probably will—decline simply because it will be impossible for small and medium-sized companies to raise as much money as they need to fund their growth potential. Many of these companies provide much more employment for each dollar of capital than do the capital-intensive companies. Those companies that are supported by purchases by individual stockholders of their securities are the very companies that are most needed by the American social system to provide more employment opportunities. These companies are

the major competition for the Fortune 500 companies, and these innovative and energetic new companies are also the ones offering a variety of goods and services across the board.

Congress has passed laws which inhibit pension funds from investing in equities of smaller companies like those with less than $25 million in tangible net worth. Indeed many pension fund advisors have interpreted the law to exclude companies with less than $100 million of market value securities. I am referring to the ERISA "prudent man" standard of investment. Thus, another source of capital has dried up for small and medium-sized companies. Steps should be taken to make some part of these funds once again available for investment in smaller businesses.

How should such Congressional "over correction" beginning with the Tax Reform Act of 1969 be set right? One approach, of course, is for Congress to look at the measures which have been passed and see if in achieving the indicated aims they are preventing the fulfillment of other equally or more important objectives. For example, in connection with investment interest one might eliminate the ceilings on deductible investment interest and return to the prior interest paid rules. If it is thought that this backtracks too much, then a possibility would be for all interest on new business investments to be 100 percent deductible. Similarly, to encourage new investment, a further change could eliminate the effect of a gain on the sale of original stock of small or new business from computation of either the minimum or maximum tax. Encouragement given to capital formation by benefits given to new issues of stock would indeed help solve some of the problems of all levels of business in raising funds for capital expansion requirements. In view of the recent trend to debt issues rather than to stock issues, perhaps the answer is to return to the pre-1969 method of taxing capital gains. Similarly, there is an urgent need for investment to meet today's major social and other national problems such as unemployment, inflation and energy. Why not consider a tax ceiling on income from invested capital similar to the maximum tax on earned income?

Contrasted with the potential 49.2 percent tax on long-term capital gains if a venture is successful, the tax treatment of the great American dream is especially dismal if the venture is unsuccessful. All losses on business investment ought to be deductible against all income except for a 50 percent limitation in the case of certain long-term investment capital losses. Losses on all direct stock investments in small businesses should be granted an automatic Section 1244 ordinary-loss treatment. By a series of measures designed to encourage the formation of new businesses and the infusion of capital into existing businesses, the plight of the individual trying to begin or sustain a new enterprise might be improved. Removal in 1976 of the provision allowing ordinary loss treatment for guaranties of loans made to individuals who used the loan proceeds in business further handicapped the individual trying to start a new business. This provision should be restored and broadened to include loans to or guaranties on behalf of small corporate business. Similarly, Subchapter S should be broadened and made easier to use by removing the limitations on types of income and liberalizing the rules on number of shareholders. Another approach which should be explored further is the tax-free rollover—to permit the tax-free reinvestment of gains arising from original investments in small or new businesses.

The problems incident to raising new capital for a new business and for a going business are not dissimilar. Capital formation, in this sense, should certainly be encouraged in every way possible since it is only by growth of the income producing potential that the entire economy can grow. Indeed it is this very growth that forms the base from which the tax required for the many activities of governments federal, state and local can be raised.

Sometimes the palliative of the elimination of the capital gains tax is given as the answer to many of the problems both of complexity and unequal treatment. The argument goes that taxing all income at the same rate has the consequent effect of eliminating any temptation to transform the character of income from that taxed at ordinary income rates to that taxed at capital gains rates. I suggest that it is not at all in the public interest to eliminate such disparity and indeed would urge the return to a wider differentiation between types of income by lowering the effective capital gains rate. A return to the pre-1969 approach to taxing capital gains with perhaps some lengthening of the holding period requirements existing at that time would be highly desirable. The income that people earn from services is distinctly different from income that people earn over a longer period from investment. Money which is available for investment has already been heavily taxed. Those people who are capable of saving

such funds after such heavy taxes are entitled to a favored treatment to encourage them to continue to make their money available in equity risk situations. Without such incentive such funds have not been and will not be forthcoming in the amount needed. These same people have the alternative of putting their money into safe, near risk-free havens.

A new or small business is anything but a safe, near risk-free haven. Many small businesses have a very difficult time surviving. Almost as many small businesses go bankrupt as are formed each year. One of the reasons that, prior to the changes in the 1969 and 1976 Acts, there was a successful coupling of the effort of the new entrepreneur and the capital of others required for his attempt was the difference in the reward if the venture turned out to be profitable. If the tax treatment of all rewards is to be the same, there is less incentive for the high risk incident to the formation of new business. Again, the same is true with respect to investment in going business. The trend mentioned above toward debt investment rather than equity investment has been the result. But a movement toward a stronger balance in favor of equity investment seems clearly to allow capital formation at a level of stability far more desirable and indeed one which will produce over the long time a healthier business economy.

Perhaps a large part of the problem with capital formation in the private sector is that although it is incredibly simple, many economists and other tax "experts" know very little about capital formation decisions by the individual investor in terms of motivation, incentive, and actually putting money out where as an investment it might be lost. Capital formation deals with money and alternatives that people have concerning what they do with their money. If money is not handled carefully it will disappear. Investors fear losses. Therefore, the use of their money where it involves the possibility of the greatest loss in the least attractive course unless it also involves the greatest potential gain. Successful capital formation deals with making it attractive enough for people who have undergone the strain and pain to save money to invest it in the riskiest type of investment situation; namely, (1) ownership of common stock, or equity; (2) ownership of debt of lower-rated companies, either privately held or publicly held.

The same sort of debilitating effect on the formation of capital will probably result from the estate tax revisions in the 1976 Act. Because of the increased tax burden and the more rapid taxation of accumulated assets as a result of the carry-over basis provisions and the generation skipping trust provisions, the availability of asset accumulations for business will be lessened. Of course it is too soon after the Act to know the exact impact. Did Congress really want to make it necessary for more and more family businesses to be engulfed into the larger American business scene and thus become a part of big business rather than continue many separate healthy smaller businesses? The Committee reports indicate that Congress intended exactly the opposite. Or did Congress want to make capital formation more difficult because of the necessity of withdrawing capital for such additional tax payments? To say that the Congress wanted to force an intensification of the debt versus equity ratio seems highly unlikely no matter how appealing some of the reasons given for the changes may have been. A review of these changes with the probable impact on the economy should certainly be made, and the hearings scheduled by the Senate Finance Subcommittee on Taxation and Debt Management for July 25th may well produce helpful information on the subject.

Of course capital formation and capital preservation are not unrelated. To the extent that capital has to be formed because prior capital has not been preserved, then the burden of formation becomes even greater since it must cover both new and replacement capital. It has often been said that "the civilization which eats its seed corn starves the next winter." And a tax system which puts into the ordinary governmental income stream for current consumption past capital accumulations has the effect of "eating the seed corn." So capital formation and capital preservation must clearly be considered side by side in order for the true requirements for capital formation to be considered. Our economy should not consume capital through taxation for current expenditure and consumption.

Perhaps the most difficult aspects of the Tax Acts of 1969, 1975, and 1976 with respect to capital formation might have been avoided or at least lessened had more time been devoted to consideration of the proposals in the first instance and had the provisions had a delayed effective date instead of a retroactive effective date as most of them did. Possibly the most useful immediate action Congress could take would be to impose a delay of two or three years in the effective date of most tax legislation, particularly legislation which represents a significant departure from prior Congressional tax policy. (The delayed effective date pro-

vision could be waived during periods of war, depression, or national emergency or for corrective technical changes.) In connection with current proposals relating to the integration of the corporate and personal income tax, the inherent complexities are of such a magnitude that a post enactment moratorium seems highly desirable. Such a delay period would give both Treasury and Internal Revenue personnel an opportunity to review the legislation for technical as well as substantive problems and at the same time provide a similar opportunity for the Congressional staffs, affected taxpayers, outside practitioners and academicians.

Constant change and threat of changes necessarily have a detrimental effect on any planning for capital formation or indeed the beginning of a new business except for the beginning of a new division by the largest of businesses whose stability is such that there is a high probability that they can weather any type of change. Making certain that capital formation is encouraged be it in the form of new businesses or existing businesses is certainly a worthwhile objective. In this regard we should examine the enacted provisions to see whether or not they truly fulfill the goals that were set forth. Perhaps more importantly we must balance the economic benefits of these goals against their price tag.

Such examination of past provisions and future provisions takes time. The single most important thrust of these remarks is a plea for deliberation. Tax laws—necessarily imposing a tax on income—are antithetical to capital formation. Nevertheless, with deliberation and careful scrutiny and thought, including scrutiny and thought by those affected and their advisors, the tax laws need not discourage new businesses and the investment in new business enterprises. Indeed such laws could form the basis of a system that comprehends both certainty and fairness. The presence of certainty is no guarantee of fairness, but fairness is impossible without some degree of certainty and predictability. And if added to this, the present tilt of the tax system, which since 1969 has discouraged investment and capital formation, can be corrected so that the ambitious and energetic entrepreneur can be encouraged to try, and the investor be encouraged to take a risk with him, the productivity of the economy can be increased so that all segments of the society benefit.

Senator BENTSEN. Thank you very much, Mr. Hughes.

In line with your testimony, it is of concern to me the thoughts that the administration may propose some additional limitations on the deductibility of interest.

In 1976 I think we passed a $10,000 corridor where you had to match investment income against interest chargeoff plus a $10,000 corridor.

That does not really bother the rich man who has substantial investment income. Who it hits is the fellow trying to bootstrap his way up. I think that is a serious mistake.

I noticed, for example, they were talking about possible additional limitations on money borrowed against homes. It looks like that is pretty cosmetic to me.

Again, that does not bother the rich man. He just pays it off and sells off some investment. The mony he takes that he borrows against a home he doesn't put it under his pillow, he invests it.

Suppose he has a return on it—certainly he expects better return on it than the interest he pays or he would not make that kind of deal.

So, it does not make economic sense to me other than a cosmetic appearance to the public. It seems to me that it cuts down options on investment.

It does much to freeze the mobility of capital, so I think we are going to have a very spirited and interested debate when we see the final proposals.

You have made a contribution and I am appreciative of it and I appreciate very much your appearing here before us, Mr. Hughes.

Mr. HUGHES. Thank you, Mr. Chairman.

Senator BENTSEN. The committee is privileged to have before it the distinguished group of members of the Computer and Communications Industry Association. Mr. Ryal R. Poppa, who is the president of Pertec Computer Corp.; Mr. Erwin Tomash, chairman of the board of the Dataproducts Corp.; and Mr. A. G. W. Biddle, president of the Computer & Communications Industry Association. And would you identify yourself, please?

Mr. CHAPMAN. John Chapman, counsel for the Computer & Communications Industry Association.

Senator BENTSEN. Gentlemen, if you will, please proceed.

STATEMENT OF A. G. W. BIDDLE, PRESIDENT, COMPUTER & COMMUNICATIONS INDUSTRY ASSOCIATION, ACCOMPANIED BY JOHN CHAPMAN, COUNSEL

Mr. BIDDLE. Mr. Chairman, we sincerely appreciate this opportunity to appear before your committee today. The CCIA was formed over 5 years ago and now represents some 40 member companies with combined revenues in excess of $2 billion annually and employing more than 60,000 persons.

I might note the vast majority of those 60,000 persons have obtained employment in our industry in less than the last 10 years.

The member firms range in size from under $1 million in annual sales to over $300 million. Our members manufacture products which cover the full spectrum of goods and services associated with computers, data processing, and communications.

The CCIA, in working intimately with its member companies, is well aware that capital has become a scarce resource in the computer and communications industries. Venture capital has been essential in the development of these industries and the return on investment has been phenomenal. We have all been witness to the unprecedented economic growth resulting from advances in computer and communications technology. Such growth has yielded more and better jobs, increased tax revenues, and improved industrial productivity, and a large contribution to the country's balance of trade.

I must, though, impress upon you that the availability of capital, or the lack thereof, will affect the extent of which these vital industries will continue to develop. For example, the capital requirements over the next 5 years for the minicomputer companies have been estimated to be $500 million and for central computer companies over $1 billion, excluding IBM's needs.

In addition, an emerging new industry, the microcomputer industry, has been spawned from earlier risk investments in the semiconductor industry.

This new industry requires $400 million in outside capital for sustained growth.

Last year, Vinton Cerf of Stanford University and Alex Curran of Bell Northern Research assessed the maximum realizable impact of data communications during the next decade in a study entitled, "The Future of Computer Communications." They estimated that the capital requirements for new data applications, such as electronic funds transfer systems, EFTS, point of sale, POS systems, and electronic

mail, would be $40 billion by 1986. The authors concluded that the high capital requirements could become a major constraint on innovation, and cautioned: It seems that the realities of implementation have drastically curtailed the dreams of the innovator." I have included a copy of their study with my prepared statement.

Staggering capital projections are not unique to the industries which the CCIA directly represents. In general, business investment and external financing needs are expected to increase substantially over the next decade. While capital funding may be provided from internal cash flow, borrowings, and equity financing, the role of new equity capital is central to the formation of new businesses, to modernization and diversification within existing businesses, and to the provision of a healthy balance against borrowed capital.

Outside capital has always been necessary to meet investment needs. Over the past 10 years, primarily debt financing has been relied upon to serve the outside capital requirements. In fact, the role of debt capital has become overly dominant in the investment equation. For manufacturing companies alone, liabilities rose from 64 percent of net worth at the end of 1965 to 86 percent at the end of 1975. For manufacturing companies with assets of less than $50 million, liabilities increased from 76 to 100 percent of net worth over the same period.

A reduced emphasis on debt as a source of capital is desirable and will require a corresponding increase in external equity financing if overall investment needs are to be met.

The capital necessary to meet future investment needs must be formed. To be sure, there will be some who will say that capital formation will take place as a natural result of free market forces. Such voices were expressed in 1975 in the form of a study by the Brookings Institution, entitled "Capital Needs in the Seventies." I am certain that you gentlemen will hear this study mentioned again in the course of your hearings. Before describing the study to you, I should point out that Brookings publications are not statements of the institution's position, but opinions solely of the three authors, one of whom is the new appointee to the Council on Wage and Price Stability, Barry Bosworth.

The authors examined the probable supply of, and demand for, capital in the remainder of the 1970's. In order to estimate capital needs, they made several fundamental assumptions upon which their conclusion depends. The authors in fact concluded that enough money should be available in the aggregate for the public and private investment demand projected through to 1980, if employment is high, if the Federal budget surplus is large enough, and if monetary policy is not too restrictive. A relatively easy monetary policy is recognized by the authors as essential to enable financial intermediaries to absorb the projected increases in long-term private debt.

Even if the Federal Reserve Board agreed with the author's desire to keep monetary policy loose, the banks, as I pointed out, are no longer enamored with long-term financing. Financial intermediaries are more interested in short-term financing because of fears of inflation, narrowing returns, and continued corporate instability in industrial markets. The first two assumptions, we all note, have been proven false. Unemployment nationwide is still an unacceptable 7.1 percent, as measured in June. Furthermore, the administration has just re-

ported that the Federal budget deficit is scheduled to widen to about $61.5 billion in the fiscal year beginning October 1, 1977, with the hope of a balanced budget in 1980.

I submit that we cannot treat capital formation with wishful thinking. The future growth of our economy depends upon the vitality of the capital markets today. Bosworth, and others, speculated that we as a country may squeeze by, but only if our fondest hopes of low levels of unemployment and budget surpluses are here now. To the contrary, time has proven that high unemployment and unsettling budget deficits have unbalanced the natural forces of capital formation.

In addition to recognizing that public and private requirements for capital may not be provided toward the end of this decade, it must be recognized that small and medium-sized businesses are suffering from a capital drought now. In 1972, there were 418 underwritings for companies with a net worth of less than $5 million. In 1975, there were four such underwritings. The 1972 offerings raised $918 million. The 1975 offerings brought in $16 million.

Over that same period of time, smaller offerings under the SEC's regulation A fell from $256 million to $49 million, and many of those were unsuccessful. Moreover, equity financing is no longer available from the financial institutions, such as mutual funds, insurance companies, and pension funds, that concentrate their investments almost exclusively in the very large, heavily capitalized companies which dominate their particular industries.

Small and medium-sized businesses have been foreclosed from the equity capital markets and been forced to turn for assistance to lending institutions for debt financing. Not only has this movement led to dangerously high ratios of debt to equity for these companies, but these companies have been subjected to high costs of borrowed capital which have eroded retained earnings as a traditional source of internal financing.

Consider, too, that others have recognized the plight of small businesses and are taking full advantage of the situation. Business Week reported on June 20, 1977, that Equitable Life Assurance Society is expanding its small loan offices to finance small business which have had equity markets closed tight to them. "Small-business lending represents not only a broad new market for big insurance companies such as Equitable, but also a lucrative one." Small businesses pay premium rates because they have no other place to go. For example, Equitable generally charges such small borrowers a rate 50 basis points higher than the one it charges bigger borrowers in the home office.

Small and medium-sized businesses have been stalled and shut off from funds badly needed for productive growth, and entrepreneurs have been discouraged from fulfilling their promise. Investment and tax reforms must be fashioned to revitalize the smaller businesses of the American economy so that they may realize their potential and contribute their full share.

After all, the activities of small and medium-sized businesses account for a majority share of the gross national product. Small businesses alone comprise 97 percent of all businesses, unincorporated and incorporated, in the United States. More than half of all business receipts are generated by their operations. Perhaps more important,

these businesses employ more than half of the U.S. business work force.

The report of the "SBA Task Force on Venture and Equity Capital for Small Business," dated January 1977, provides some statistics from a recent study by MIT's development foundation which highlight the importance of new companies and new technologies to property and jobs in America. The data shows that not only are the young and innovative companies growing faster than the mature companies, but that they create more new jobs and tax revenues than the giants of American industry. I have attached a copy of the SBA report to my prepared statement.

We are grateful that the Committee on Finance and the Select Committee on Small Business are working on the enactment of S. 285, which should broaden institutional investment to include small and medium businesses. That is a good first step. More, however, must be done to balance the investment bias in favor of large business and the biases of the tax laws since 1969, which have discouraged investment in general.

We must insure the health of the U.S. economy by restoring an economic climate that will enable business organizations to finance with a mix of debt to equity providing stability for both the organizations and the economy.

The CCIA does have specific proposals in mind which should provide a beneficial investment climate for capital formation. We believe that a return to lower taxation of capital gains would provide a necessary incentive both for existing and new investors of capital. Also, dividends should be treated as a deductible expense, as is interest on borrowings, to make equity capital more competitive with debt equity.

In addition, we are in favor of a graduated corporate income tax which would provide smaller businesses with higher retained earnings for the internal financing of current operations and future growth. Mr. Poppa and Mr. Tomash will address these issues in some detail. Thank you.

[The prepared statement, with attachments, of Mr. Biddle follows:]

Prepared Statement of A. G. W. Biddle

Mr. Chairman and members of the Committee, my name is Jack Biddle, and I appear before you today as president of the Computer & Communications Industry Association. I am accompanied by Mr. Erwin Tomash, Chairman of the Board, Dataproducts Corp., Mr. Ryal R. Poppa, President and Chief Executive Officer, Pertec Computer Corp., and Mr. John Chapman, CCIA Counsel. The CCIA, formed over five years ago, represents forty member companies with combined revenues in excess of two billion dollars annually and employing more than sixty thousand persons. The member firms range in size from under a million dollars in annual sales to over three hundred million dollars. Our members manufacture products which cover the full spectrum of goods and services associated with computers, data processing, and communications.

The CCIA, is working intimately with its member companies, is well aware that capital has become a scarce resource in the computer and communications industries. Venture capital has been essential in the development of these industries and the return on investment has been phenomenal. We have all been witness to the unprecedented economic growth resulting from advances in computer and communications technology. Such growth has yielded more and better jobs, increased tax revenues, and improved industrial productivity.

I must, though, impress upon you that the availability of capital, or the lack thereof, will affect the extent to which these vital industries will continue to develop. For example, the capital requirements over the next five years for the

minicomputer companies have been estimated to be five hundred million dollars and for central computer companies over one billion dollars, excluding IBM's needs. In addition, an emerging new industry, the microcomputer industry, has been spawned from earlier risk investments in the semiconductor industry. This new industry requires four hundred million dollars in outside capital for sustained growth.

Last year, Vinton Cerf of Stanford University and Alex Curran of Bell Northern Research assessed the maximum realizable impact of data communications during the next decade in a study entitled "The Future of Computer Communications." They estimated that the capital requirements for new data applications, such as electronic funds transfer systems (EFTS), point of sale (POS) systems, and electronic mail, would be 40 billion dollars by 1986. The authors concluded that the high capital requirements could become a major constraint on innovation, and cautioned: "It seems that the realities of implementation have drastically curtailed the dreams of the innovator."

I have included a copy of their study following this statement.

Staggering capital projections are not unique to the industries which the CCIA directly represents. In general, business investment and external financing needs are expected to increase substantially over the next decade. While capital funding may be provided from internal cash flow, borrowing, and equity financing, the role of new equity capital is central to the formation of new businesses, to modernization and diversification within existing businesses, and to the provision of a healthy balance against borrowed capital.

In March of this year, it was reported[1] that, for the ten years ended in 1975, total fund requirements of non-financial corporations (for plant and equipment expenditures, other physical investment and acquisition of financial assets) averaged 108 billion dollars a year. Capital generated internally provided 60 percent of the total sources of funds, while outside financing provided 40 percent. Debt financing was seen to be the predominant form of outside financing, with net additions to debt averaging 41 billion dollars a year, or more than twice the 19 billion dollar average increase in equity capital. Equity capital, on average per year, was derived from retained earnings of 13 billion dollars and new equity financing of 6 billion dollars.

Over the next ten years a more substantial level of investment is required to meet economic and social goals and legislated mandates regarding environmental and safety standards. Just to maintain the standard of living enjoyed in the United States, which has been perceived to be under attack by inflation and substantially higher energy costs, would require more investment funds in the future. It has been estimated that the American economy over the next ten years needs an average of 274 billion dollars in total investment per year for the maintenance of general economic growth.

Outside capital has always been necessary to meet investment needs. Over the past ten years, primarily debt financing has been relied upon to serve the outside capital requirements. In fact, the role of debt capital has become overly dominant in the investment equation. For manufacturing companies alone, liabilities rose from 64 percent of net worth at the end of 1965 to 86 percent at the end of 1975. For manufacturing companies with assets of less than 50 million dollars, liabilities increased from 76 percent to 100 percent of net worth over the same period.

Such reliance has placed a high demand on loan funds resulting in higher interest charges which in turn have led to a deterioration in retained earnings. This phenomenon has reduced the availability and signficance of internal financing. Moreover, it is not certain that debt financing, to the extent encountered in recent years, will be available for new investment needs. The forces of economic uncertainty and almost certain inflation in the years ahead have induced corporations to strive for long-term financing, while the same factors are causing banks and other institutions to prefer placing funds on a short-term basis.

In any case, any undue reliance by business on debt financing leads to an increase in bankruptcies and, at the very least, to instability in industrial strength. A reduced emphasis on debt as a source of capital is desirable and will require a corresponding increase in external equity financing if over-all investment needs are to be met.

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[1] Walter S. McConnell and Steven D. Lelt, "Inflation, Stock Prices and Job Creation," Financial Analysis Journal, March–April 1977, page 27.

The capital necessary to meet future investment needs must be formed. To be sure, there will be some who will say that capital formation will take place as a natural result of free market forces. Such voices were expressed in 1975 in the form of a study by the Brookings Institution, entitled Capital Needs in the Seventies. I am certain that you gentlemen will hear this study mentioned again in the course of your hearings. Before describing the study to you, I should point out that Brookings publications are not statements of the Institution's position, but opinions solely of the three authors, one of whom is the new appointee to the Council on Wage & Price Stability, Barry Bosworth.

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In addition to recognizing that public and private requirements for capital may not be provided toward the end of this decade, it must be recognized that small- and medium-sized businesses are suffering from a capital drought now. In 1972, there were 418 underwritings for companies with a net worth of less than five million dollars. In 1975, there were four such underwritings. The 1972 offerings raised nine hundred and eighteen million dollars. The 1975 offerings brought in sixteen million dollars.

Over that same period of time, smaller offerings under the SEC's Regulation A fell from two hundred and fifty six million to forty-nine million dollars, and many of those were unsuccessful. Moreover, equity financing is no longer available from the financial institutions, such as mutual funds, insurance companies, and pension funds, that concentrate their investments almost exclusively in the very large, heavily-capitalized companies which dominate their particular industries.

Small- and medium-sized businesses have been foreclosed from the equity capital markets and been forced to turn for assistance to lending institutions for debt financing. Not only has this movement led to dangerously high ratios of debt to equity for these companies, but these companies have been subjected to high costs of borrowed capital which have eroded retained earnings as a traditional source of internal financing.

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For example, Equitable generally charges such small borrowers a rate fifty basis points higher than the one it charges bigger borrowers in the home office.

On June 28, 1977, John E. Jones, President of Cummins-Allison Corp., a $20 million company, testifying in support of S. 285, noted that his company is still a private corporation because the institutions he approached weren't even interested in talking with him. Foreclosed from the equity markets, Cummins is lim-

ited to debt financing to sustain a steady growth of between 10–15 percent per year. Funding through retained earnings was severely limited by the debt structure of the financing available to him. With a more favorable investment climate, with the availability of external equity capital, Cummins' growth rate could increase 25 to 35 percent over the next three to five years. He stated: "With heightened growth, my company could hire more employees and provide those employees with even greater benefits. I believe that prospective investors in Cummins would also benefit, as would the industries to be served by the increasing availability of our products, and we would add our modest contribution toward a positive U.S. balance in foreign trade."

Mr. Alfred A. King, Chairman of the Board of MRI Systems Corp. in Austin, Texas, testified on the same date: "I have taken considerable risk and have played a major part in the financing of MRI Systems Corp. and its product which I believe to be of some importance to this country. At least it has provided employment for more than one hundred and ninety people. In any event, I would not attempt to start such an enterprise in today's tax and investment climate."

Small- and medium-sized businesses have been stalled and shut off from funds badly needed for productive growth, and entrepreneurs have been discouraged from fulfilling their promise. Investment and tax reforms must be fashioned to revitalize the smaller businesses of the American economy so that they may realize their potential and contribute their full share. After all, the activities of small- and medium-sized businesses account for a majority share of the gross national product. Small businesses alone comprise 97 percent of all businesses, unincorporated and incorporated, in the United States. More than half of all business receipts are generated by their operations. Perhaps more important, these businesses employ more than half of the United States business work force.

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The proposals for reform which we have addressed today would provide immediate relief to broad sectors of our economy and satisfy capital requirements, and at the same time provide somewhat more of a benefit to small and medium businesses, which represent the growth potential of the U.S. economy.

I have asked a select group of national leaders to meet in Washington, D.C. later this summer to propose reforms which address the capital formation issue at large. We look to form a working coalition that will present Congress with a unified agenda designed to alleviate the capital shortages which threaten the growth of our economy.

Included among the attendees will be chief executives from small- and medium-sized corporations from a wide range of industries, key executives from leading investments banking firms, venture capital groups, small business investment companies, as well as knowledgeable economists and tax experts.

The proposals for review will include additional incentives for equity capital investments, such as (1) modify Section 1244 of the Internal Revenue Code so

that greater capital losses may be deducted against ordinary income and even enlarge the qualification requirements for corporate coverage under the code, (2) change the capitalization limitation for a small offering exemption under Regulation A from $500,000 to several million dollars, (3) clarify ERISA so that fund managers are encouraged to diversify assets to include investment in new ventures and in growing smaller companies, (4) consider the optimal use of investment tax credits, (5) accelerate depreciation of assets to reflect replacement costs to substitute for the present unrealistic historical cost basis of accounting for such assets, and (6) permit individual investors to deduct much greater net capital losses incurred from their other income than the $3,000 deduction allowed under present law.

The desirability of the proposals to be made will be determined from a set of criteria which we feel should be applied against all proposals suggested at these hearings. The first is that the overall growth and stability of the United States economy be enhanced. Secondly, new investors should be attracted to form a broadly based investment resource. Thirdly, the liquidity of the capital markets is to be increased. Fourthly, small- and medium-sized businesses should be allowed to reach their full potential for productive growth.

I would like very much to present you and other concerned Senate Committees with the unified agenda which results from the capital formation conference.

We are available to assist you in any way that we can in your deliberations on the capital formation issue. It is in working together that we will establish an economic environment in this country which will foster continued growth and new growth industries.

Attachments.

THE FUTURE OF COMPUTER COMMUNICATIONS

(By Vinton G. Cerf, Stanford University, Stanford, Calif., and Alex Curran, Bell Northern Research, Palo Alto, Calif.)

INTRODUCTION

The information processing industry has grown at a phenomenal rate. Much of the impetus for continued growth is emerging from the distribution of computing functions via telecommunications networks. The observable trends of cost decrease per unit of computation and per unit of storage suggest that the area of rapid growth will continue.

We have tried to quantify that growth. To do so we have estimated the maximum traffic which would result from the nationwide use of point of sale terminals, electronic fund transfer systems and electronic delivery of all first class mail. This process has allowed us to identify constraints to growth, to quantify the impact on telecommunications networks of the increased traffic, and to estimate the capital requirements for implementation.

These particular services were selected because they represent more than 90 percent of the total data traffic forecast by S.R.I. in a 1970 study of the demand for information transfer.[1] We have constrained our estimates to the next decade, for it is very difficult to make any form of quantifiable estimate thereafter. It is unlikely that our three services' choices will be universally available by 1986, hence shortfalls in size due to our exclusion of other services should be fully compensated by our assumption of near-universality of point of sale, electronic funds transfer and electronic mail by 1986.

The results of the quantification surprised us. Intuitively we had expected much larger traffic figures than emerged. In an attempt to understand the differences we examined qualitatively the recent history of some of the more imaginative service proposals. We found that the implementation of those suggestions has been much slower than had been forecast—it appears that some of the imaginative innovation has disappeared from the industry. It is our belief that more innovation should be encouraged to ensure that U.S. leadership in the information processing field is maintained. Encouragement can be given by careful relaxation of the regulatory climate.

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[1] R. W. Hough et al., "A Study of Trends in the Demand for Information Transfer," Stanford Research Institute Technical Report, 1970 (NTIS N-70-23427).

SIZE AND COST COMPARISONS

Although it is clearly possible that the data traffic may be carried all or partially on specialized networks, it is relevant to make size comparisons with the telephone network. That network is ubiquitous. Its characteristics are well known. Its capital and operating costs have been carefully documented. Thus it provides an accurate standard for comparison. The first comparisons are in relation to traffic. In 1975 the telephone network carried 250 billion calls within the United States. This utilization has been growing at an annual rate of 4 percent over the past two decades.[2] As a conservative estimate the average call duration is three minutes. In a digital network the equivalent bandwidth is 64K bps per channel. Through encoding that bandwidth could be reduced to, perhaps, 9.6K bps which is also a more reasonable estimate of the data carrying capacity of an analog voice channel. Table I below summarizes the relevant traffic statistics.

TABLE I.—TELEPHONE TRAFFIC PROJECTIONS

	1976	1981	1986
Calls per year (times 10^9)	260	316	385
64K bps per channel:			
Bits per year (times 10^{18})	5.99	7.28	8.87
Bits per second (average) (times 10^{11})	1.90	2.31	2.81
9.6K bps per channel:			
Bits per year (times 10^{17})	8.99	10.92	13.31
Bits per second (average) (times 10^{10})	2.85	3.46	4.21

The second dimension of the comparison is the magniture of capital investment. Since our intent has been merely to estimate total capital required, we have been content to use figures which are representative of the in place cost of telephone plant. For the major elements we have used the following:

Subscriber loop	$800.
Toll connecting trunk	$40 per channel mile.
Toll trunk	$20 per channel mile.
48K bps trunk	Equivalent to 12 voice channels.
Voice channel bank	$400 per channel end.
Modems:	
Low speed, part of terminal	$100.
Medium speed	$500.
High speed voice	$1,500.
48K bps	$10,000.
Low speed data multiplexor	$200.

Finally to estimate the annual revenues of the telecommunication portion of the distributed computing services we have used tariffs which approximate those which currently exist in the telephone networks.

ELECTRONIC FUNDS TRANSFER SYSTEMS (EFTS)

The basic purpose of EFTS is to reduce the high cost of paper handling in the billing and payments process. EFTS, of itself, only partially accomplishes that purpose for it will remain necessary to record sales on paper, to accept checks at the local banks and distribute them to the appropriate payment bank. The flow of paper will only be staunched when Point of Sales (POS) systems are married to EFTS.

Nevertheless EFTS will reduce some of the handling problems in the banking system. Further, since the banks form a cohesive business group, it is clear that EFTS will be implemented before a ubiquitous POS network emerges. We have chosen, therefore, in our view of the future to implement an EFTS network first then to augment it with a POS network.

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[2] J. R. Pierce, "Communication," *Scientific American*, Volume 227, No. 3, September 1972; pp. 31–41.

In our model, the nodes of an EFTS network comprise local banks, area clearing centres, the Federal Reserve Bank and a proposed Federal Switching Centre. In skeleton form the network would appear as Figure 1.

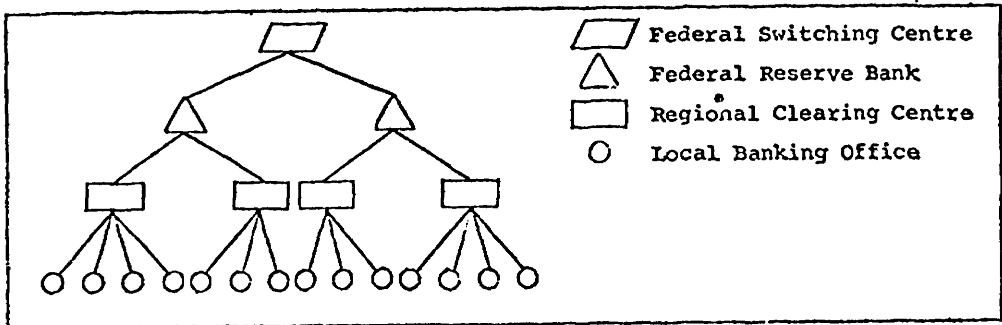

FIGURE 1.—Conceptual model—EFTS network.

The size of the completed network is determined by the following elements:

In 1974 there were 15,000 banks[3] including national banks, state commercial banks, trust companies, mutual and stock savings banks, private and industrial banks and special institutions treated as banks by Federal supervisory agencies. In some states the banks have branches. To account for these branches and for growth in the industry we have estimated that by 1986 there will be a grand total of 45,000 local banking offices, including branches.

These local offices perform their clearing functions through 100 area clearing centres.

Checks which must be cleared to different areas are processed through the 36 Federal Reserve Banks.

For conceptual convenience we have assumed that one of these Reserve Banks will serve as a final switching centre for transactions between the reserve banks. In practice high usage routes may be established directly between certain Reserve Banks (or at other levels of the hierarchical network). Such links will be implemented for operational economies when warranted. Their use will not drastically change the network costs.

The traffic flowing on this network results essentially from the check clearing function. In 1975 about 32 billion checks were processed. As shown in Appendix A we can expect that the number will increase to 34.2 billion in 1976, 48.2 billion in 1981 and 67.7 billion in 1986. Approximately 75 percent of these require bank clearance, each clearance generating a communication of about 1,000 bits. The current geographic distribution of checks suggests that the average transaction will involve 2.5 links in the network.

From these figures the total traffic flow on a complete EFTS network would be as follows:

TABLE II.—TRAFFIC PROJECTIONS, EFTS NETWORK

	1976	1981	1986
Checks processed (times 10^9)	34.2	48.2	67.7
Bits per year (times 10^{12})	64.1	90.4	127.0
Bits per second (times 10^6) average	17.9	25.1	35.3

In this table the reduction to average bits per second has been made on the assumption of four hours on each of 250 banking days each year for check clearance.

The average capacity of the network, even at 1986 traffic levels, equates to the distributed capacity of 23 T1 systems. Clearly the transmission requirements are modest in comparison to the voice telephone network.

But it isn't only traffic which determines network cost, one must also examine the size and capacity requirements of the network links. In our network model the elements are as follows:

[3] *The World Almanac*, Newspaper Enterprise Association, New York, 1975; p. 87.

In the local hierarchy there are 45,000 links. On average each will operate at approximately 300 bps. Even after allowing a factor of 8 for peak demand it is clear that nearly all banking offices can be served by one voice grade link. For most of the offices the link to the regional clearing centre will consist of only two local links. For perhaps 20 percent of the offices the link will contain also a toll connecting link averaging perhaps 50 miles. Thus the total capital required to implement this hierarchy of the EFTS communications network is about $\$135 \times 10^6$.

The capacity of the links to the Federal Reserve Bank is more difficult to calculate since it is so dependent upon the geographic distribution of check cashing. As a reasonable guess we can assume that 40 percent of all checks must be sent from the area clearing centres to the nearest Federal Reserve Bank, and that these banks perform clearing operations eight hours per working day. The required bandwidth is approximately 23K bps per link in 1976 growing to 47K bps in 1986. Thus at least until 1986 nothing more exotic than 48K bps circuits are required. The capital cost of these 100 links is about $\$15 \times 10^6$.

Finally about 10 percent of all checks must be cleared betwees Federal Reserve Banks. The bandwidth required for each of the 35 links grows from 16K bps in 1976 to 33K bps in 1986. For this portion of the network the communications capital requirement is about $10 million.

The total network facility capital cost is therefore about $175 million. It would generate approximately $12 million annually in local revenues and perhaps $30 million in intercity revenues, i.e., a tital of $42 million annually.

By comparison each banking outlet would require, on average, four or five teller terminals. Even in 1986 it is unlikely that the installed cost of these terminals will be less than $10,000 each. Thus for terminals alone the capital required is $450 million. The computing back up and software will increase the total computational capital to perhaps $600 million.

In summary, then, we can say that there are no major communication impediments to the installation of electronic funds transfer systems. Once the privacy and legal problems are resolved the networks can be installed rapidly with existing technology. The capital requirements, based on 1986 size and traffic forecasts would be:

$175 million for communications facilities, and

$600 million for terminals and computing facilities.

This network would not eliminate the flood of checks but would improve the handling efficiency in the banking system. To eliminate the check writing aspect completely it will be necessary to add a point of sale facility to the banking network.

POINT OF SALE SYSTEMS

Much of the need for check writing could be eliminated if the signature authorization for funds transfer were replaced by credit card readers, activated by consumer chosen passwords or numbers. A scheme of this sort is already used by some customers of Citibank who use the "magic middle" card to authorize transfers.

Again projecting our view to universality of service to measure ultimate impact, we would expect that the number of transactions on a POS-EFTS network would be eight times those on an EFTS network alone. At 1986 levels, therefore, the total traffic flow on the network would be the distributed equivalent of 184 T1 systems. While this is a substantial amount of traffic, it is certainly not overwhelming when compared to the traffic handled on the voice network.

The telecommunications access to the retail outlet is not a major problem. A large store might contain 50 POS terminals. During the busy hour each terminal will serve about 20 customers, with each transaction generating about 1,000 bits. For such a large store the peak capacity is only 300 bps. It is hard to imagine a need for more than 2,400 bps, even for very large stores, and even if more than one message per transaction is needed. This is certainly within our technological capability today.

The size and capital requirements of a combined POS and EFTS network will certainly be larger than what was previously calculated. The network elements are as follows:

In 1972 there were 5.5 million retail and service businesses in the USA.[4] Some of these businesses had hundreds, a few even thousands of locations. The vast majority, however, had one outlet only. With reasonable assurance we can assume that even in 1986 there will be no more than 10 million links needed. If

[4] *Information Please Almanac*, Golenpaul Assoc., 1976; p. 75.

we make the most pessimistic assumption of no network switching, then the local network capital need is $\$18 \times 10^9$.

The EFTS network will be of similar form to that described previously, however the traffic capacity must be increased to cater to the larger number of transactions. As a reasonable estimate the required capital will be $\$300 \times 10^6$.

The local network revenue, based on $30 per business loop per month, would amount of $\$7.2 \times 10^9$ annually for universal service. The EFTS network would generate perhaps $\$75 \times 10^6$ in annual telecommunications revenues.

Currently the installed cost of POS terminals is in excess of $3,500 each. Assuming a modest average of 2.2 terminals per retail outlet, the estimated capital cost for terminals only is $\$77 \times 10^9$, outweighing the communications cost by at least 4:1.

What we have postulated is a universal POS–EFTS network linking all banks and all retail outlets by 1986. To achieve this it would be necessary to invest nearly $20 billion in telecommunications facilities and $80 billion in terminals and computing systems. The investments would generate annual telecommunications revenue of $5 billion and annual computing revenue of perhaps $20 billion exclusive of the costs of computing hardware, software and systems maintenance.

But that is too much to expect. Overall the average cost of processing is 5 cents per transaction. That figure is highly traffic dependent, however, being very low for large retail outlets, much higher for small stores. Clearly then universality of POS service cannot be achieved by 1986 unless much less costly techniques are found to cater to the multitude of small shops. As a more realistic estimate we would visualize one-third of all outlets subscribing to the service (i.e., about 3 million outlets in 1986). At that more reasonable level the telecommunications revenue would amount to about 3 percent of the AT&T revenues expected in 1986.

ELECTRONIC MAIL

The third area in which computer communications could make a significant impact is in the transfer of first class mail at speeds greatly exceeding those achieved by the US Postal Service, and at service costs which by 1986 could be competitive with physical delivery. Our objectives in this section are to assess the potential impact of electronic mail on the demand for computer communications, and to explore the near term economic viability of electronic mail technology.

There are several technologies which can serve the electronic mail market. The most likely are facsimile, time shared message switching services and stand-alone word processing equipment. Of these facsimile is the most versatile since it permits the transmission of a wide range of information formats without substantial data processing requirements. Facsimile, however, offers none of the flexibilities of computer based systems with respect to such features as message composition and editing, storage, automated retrieval, multi addressing and retrieval at the convenience of the recipient. Since the purpose of this paper is to assess the maximum anticipated impact of computer communications, we have assumed that these advantages will prevail and that electronic mail will be computer based.

There are two classes of computer based systems. Stand-alone systems are based on the provision of sophisticated terminals which contain word processing, message editing and addressing capabilities. These terminals consume no bandwidth during message composition or reading time. By contrast time-shared systems make use of less sophisticated, less expensive terminals, relying on the system computer for message processing service. Obviously these systems do consume transmission bandwidth during message composition and reading.

Both types of systems will be required. Users who generate large volumes of traffic will find that the cost of the stand-alone terminals are fully justified by the savings in network costs. Those who generate smaller amounts of message traffic will prefer to pay higher usage charges to save the "initiation" charges associated with the more complex terminals.

It is interesting to note that the Arthur D. Little Corporation has recently developed a scenario[5] which describes a pitched battle between the U.S. Postal Service and competing electronic mail carriers. The intent of the scenario is to urge action now to resolve the jurisdictional boundaries between the Postal Serv-

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[5] M. G. Ernst et al., *Telecommunications and Society*, 1976–1991, report to OTP, Executive Office of the President, Arthur D. Little, Inc., under contract No. TP6AC–017, June 1976.

ice and its potential competitors. One of the rivals is very close, for about 30 percent of the first class mail is concerned with the billing and payment system which will be incorporated in EFTS as it develops. For the remaining first class mail the Arthur D. Little scenario suggests that electronic transfer will soon be economically attractive. Our study confirms that conclusion.

The analysis leading to that result is presented in Appendix B. It shows clearly that electronic mail is suitable only under very special circumstances today, however it would become economically and operationally attractive at least in a business environment if:

The rental charges for terminals with some text formating capability drops to $40 per month,

Timesharing charges decrease to $0.15 per CPU second, and $2.00 per hour of connect time,

Intracorporate word processing, text filing systems based on centralized processing and storage facilities become acceptable, and

Timesharing services offer similar word processing, text filing services to smaller commercial enterprises on a pay-as-you-use basis.

It is quite unlikely that all four of these events will occur by the early 1980's, so it is reasonable to assess the communications impact of an electronic equivalent of today's U.S. Postal Service.

It is not easy to predict the bandwidth requirements of electronic mail. For the purposes of this study we have chosen to ignore the legal issues which will be hard to solve and which clearly will affect the acceptability of electronic delivery. There remains an interesting array of factors, difficult to predict, but which will certainly affect the utilization of various telecommunications options.

A number of "near-mail" services exist today. ARPANET[6] offers a message exchange facility for its users. TYMNET also offers a message service. Bolt, Beranek and Newman has a public offering, via TELENET, of a message switching facility called HERMS. I. P. Sharp Associates offer a service called MAILBAG. Obviously it is a straight-forward matter to build a timesharing facility to exchange messages.

But the customers for all of these services are technically sophisticated timesharing users. The command structures for the systems are too complex for casual users, and there is no standardization to allow for message exchange between systems. Thus our experience with systems today is an inadequate base on which to base predictions for the busines community.

The business world is preparing to move into the word processing era, since it is the most promising technique for the improvement of productivity in the office environment. The interconnection of word processing systems will reduce the transfer delays for memoranda and other textual materials from days to seconds. The impact could produce a change as significant as the business speed-up caused by the widespread use of the telephone. If that happens, electronic mail could:

Replace a major part of the first class mail load,

Substitute for many of today's business telephone calls,

Compete with TELEX, TWX and Mailgram,

Replace some of the inter-office memoranda.

It will be some time before we can make meaningful estimates of the effect of such systems.

However there is some help. Panko[7] has estimated that by 1985 the business community within the US will exchange electronically between 10 and 30 billion messages per year. By making some crude assumptions about message length (99 percent of 5 lines, 0.8 percent of 50 lines and 0.2 percent of 100 lines of text), and by adopting the communication protocols of ARPANET we can calculate that the gross bandwidth required will be between 8 and 24 $\times$ 10^{12} bits during 1985. Assuming that this traffic will be carried only during the business hours, we conclude that the peak gross bandwidth requirement is of the order of 1.5 $\times$ 10^7 bps, roughly the capacity of ten TI systems. Again we conclude that the transmission requirements are very small in comparison to the needs of the telephone network.

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[6] ARPANET is the acronym for the US Defense Advanced Research Projects Agency (DARPA) packet-switched computer network, operated by the Defense Communications Agency. It has been described in many papers. A good overview is given in D. W. Davies and D. L. A. Barber, *Communications Networks for Computers*, published by John Wiley and Sons, 1973; pp. 300–309.

[7] Raymond R. Panko, "The Outlook for Computer Message Services: A Preliminary Assessment," draft report, Stanford Research Institute, Telecommunication Sciences Center, March 1976.

By 1986 electronic mail will be a reality only in the business market. By that time we would expect that today's 13 million businesses will have grown to about 16 million. Not more than one-third of these will subscribe to the service by 1986. The major telecommunications cost will be in the distribution system which would connect those businesses to the appropriate switching centers. For those 5 million businesses the telecommunications capital requirement for loops and modems is about $6.5 billion, generating a telecommunication revenue of about $2.1 billion annually.

By 1986 suitable programmable terminals should cost about $1,000 yielding a capital requirement of about $5 billion. These terminals must be supported by timesharing systems capable of serving 2–3 million active terminals. The current hardware cost per active user ranges from $1,000 to $3,000. Thus hardware and terminal capitalization could well total $10 billion. Maintenance costs will be about $1 billion annually. Software costs are much harder to predict but almost certainly will be of the same magnitude as the mainframe costs. Thus we can expect the total computing and terminal capital to be about $13 billion. The annual revenue requirement, including maintenance, would be about $6.5 billion.

Again one is led to the conclusion that in both capital and revenue requirements the terminal and computing needs significantly outweigh the communication needs.

OTHER SERVICES

The results so far in our atempt to quantify the communications revolution have been disappointing. The summation of bits per year flowing through the network as a result of EFTS, POS, and electronic mail will not exceed 7×10^{14} bits per year in 1986, a very small percent of the total traffic flux due to voice services. We have, therefore, examined briefly two additional service categories.

One of the more exciting possibilities is the availability of very high bandwidth digital transmission facilities developed over satellite channels accessed by low-cost, one-site ground terminals. By making use of the multi-megabit per second capability of these channels, systems designers can geographically distribute parts of a computer system. As one example mass storage facilities could be housed in several different localities in the U.S., accessible by customers as back-up, tertiary, storage in the memory hierarchy. Similarly other novel services are visualized by the Satellite Business Systems Corporation.

The key to this network is the reduction in cost of the ground stations. In the 4–6 GHz bands ground stations still cost in the order of $150,000. Some experimental stations have been built for operation in the 12–14 GHz band with a forecast cost of $10–$15,000. We understand that the Satellite Business Systems Corporation contemplate a ground station cost of $50,000.

It is our view that at that price level the ground station can be "on-site" only to large commercial, government or military users. For them the SBS system will provide a novel and powerful alternate to the inter-city offerings of other common carriers. We have seen, however, that the major costs of telecommunications are in the distribution facilities—and here for most users the bandwidth requirements are modest. We can only conclude, therefore, that satellite systems will provide additional choices for the inter-city haulage for large users of data communications. They will not, however, at least initially contribute to the widespread dissemination of distributed data services.

As for the revolution in home computing we can see little evidence of the rapid development of services. We suspect that terminal costs must drop to under $200 to spawn a large residential demand.

Two thrusts are operating in this direction. One is the TV game market. Here Magnavox's Odyssey and Atari's Pong games have exploited the TV receiver as a display unit. Some early examples of keyboards with some programming capability and with a small amount of storage have been built mainly by hobbyists. However there is no sign yet of an adequate terminal at a sufficiently low cost. When that does appear a gap will still exist in the development and marketing of interesting services.

The second thrust is the use of microprocessors as "do-it-yourself" computers. Costs of processors and peripherals are still much too high for a mass market, however dedicated hobbyists have taken up the challenge of writing interesting and novel programs which are strictly for fun rather than cost reduction. Their efforts may pioneer the entertainment value for home computing.

However in spite of these two thrusts we cannot visualize home computation services developing by 1986 a traffic flow rivalling that generated by business systems.

RECAPITULATION

We started this survey with the intent of quantifying the maximum realizable impact of data communications during the next decade. To do this we examined S.R.I.'s list of 400 information transfer services and identified those which would account for the largest penetration of service by 1986. On the assumption that EFTS, POS and electronic mail would become widespread at least in the business field, we then calculated traffic flows, network costs, terminal and computing costs and expected revenue. The results are summarized in Table III.

TABLE III.—MAXIMUM 1986 DATA COMMUNICATIONS LEVELS

Service	Maximum 1986 expectation levels					
	Communications network			Terminals and computing		
	Traffic (bits per year times 10^{14})	Capital (times 10^{9})	Annual revenue (times 10^{6})	Capital terminals	Other (times 10^{9})	Annual revenue (times 10^{6})
EFTS	1.27	$0.175	$42	0.45	$0.15	$210
POS	3.39	6.1	2,400	23.0	10	12,000
Mail	2.0	6.5	2,100	5.0	8	4,900
New data	6.7	12.7	4,500	28.5	18.2	17,000
Voice	13,310	177	64,000			

In arriving at these estimates we made very optimistic assumptions about the penetration of new data services. Even with this optimism some rather unexpected results emerged. In particular:

The impact of data traffic on the common carrier networks appears less than we expected. Even with our optimistic assumptions data transmission revenues will not exceed 7 percent of voice revenues ten years hence.

The vast majority of new construction for data links will be in the local access area. It is here primarily that innovation will yield benefits in cost reduction.

The capital requirements for terminals, computing hardware and service software are very high. The accumulation of this capital could become a major constraint on implementation.

OBSERVATIONS AND CONCLUSIONS

Because these results were less optimistic than we had expected, we then reviewed the literature to determine if we had omitted major imminent developments. The review disclosed a rather bleak picture.

In 1970 S.R.I. published a report on information transfer which listed 400 services and which forecast a rapid transition to electronic distribution of these services. In 1972 the International Conference on Computer Communications (I.C.C.C.) held its first meeting in Washington. The bright mood of the Conference was caught by Carl Hammer[8] who forecast that "during the 1970's the revenue from machines conversing will surpass that of people conversing." At that conference only August Ohlmer[9] painted a restrained picture. He was classed as a reactionary. The 1972 Proceedings contain 22 papers which define new, innovative computer based services.

Since October 1972 there has been a rapid closing of horizons as people have come face to face with the realities of implementing distributed computing services. By 1974 the number of ICCC papers defining new service concepts had decreased to 12, and by 1976 only 4 papers described new services. Throughout that period no new service ideas emerged—but many disappeared from view. It seems that the realities of implementation have drastically curtailed the dreams of the innovators.

During that same period a number of data oriented networks have been constructed providing users with new and improved methods of transmission and switching at much lower cost, at least in the inter-city links. In 1972 the major constraint on implementation appeared to be the lack of "good" data communi-

[8] Carl Hammer, "Computer Communications: The Future," Proceedings of the ICCC, October 1972, p. 31.

[9] August Ohlmer, "Summary of the Existing Data Communications Services in Western Europe and Tentative Forecast of New Services for the Next Decade," Proceedings of the ICCC, October 1972; pp. 260–263.

cation facilities. That constraint has clearly been eased, and yet new service ideas are becoming scarce.

For completeness, and to illustrate the trend, a summary view of the rapid disappearance of new service ideas is included as Appendix C.

In analyzing the results of the three ICCC's one is led to the following observations:

There has clearly been a very gross underestimation of the difficulty of creating and maintaining large data bases.

No significant progress has been made on the design and implementation of systems by which authors may offer and be paid a royalty for the use of information which they have prepared.

Computer assisted instruction is growing very slowly, again the start up problems were grossly underestimated.

Some progress has been made in automating library service systems, however the manipulative protocols are too complex for non-librarians, so, except in rare instances, the systems are internal to the library.

No home services have been developed. The costs are clearly too high, except for dedicated hobbyists.

As we applied these observations to forecast computer communications growth patterns we concluded that the technology is being applied only in the business sphere where the major uses are applied to reduce the cost of existing functions. That process will continue for it is fueled by cost reductions necessary to maintain business viability. The extension of low cost data networks will be instigated by that cost reduction activity. No other widespread service will emerge until that extension occurs.

Again this history of the ICCC tends to confirm our rather pessimistic forecast, and our reliance on EFTS, POS and mail services as the prime growth areas during the next decade.

FUNDAMENTAL ISSUES

Our analysis has shown that the major revenues which will be gained from new computer based services lie not in the pure transmission domain, but rather in the provision of new services. These new services depend both on computation and on remote access for their utility. It is this intermixing which has led to serious difficulties in defining the regulatory role of the F.C.C.

We consider it vital to protect and maintain the U.S. lead in information processing. It is a national resource which has been developed at great expense and which has already changed the ways in which we conduct our affairs. In searching for guidelines to encourage further development of this national resource we have identified four key issues.

The first key issue is that of who will be allowed to offer the new services.

There is no simple technical answer to that question. Computation is really the movement of data from one place to another. The comparatively recent freedom to move that data across state boundaries is technically merely an extension of prior abilities.

But practically that extension creates some major competitive problems. It is already clear that there is competitive interest in the EFT/POS and electronic mail service. Western Union's mailgram service uses telephone, postal service and digital message switching to achieve a synthesis of all three services. Bolt, Beranek and Newman offer an elaborate mail service, HERMES, via the facilities of TELENET. Control Data Corporation has announced its intent to offer EFTS service. Citibank, through Transaction Technology, Inc., already offers its customers a funds transfer authorization system.

Overall we have seen a major decrease in the number of new service offerings under consideration. It is encouraging to see competitive thrusts in the POS/EFTS/mail area. It is necessary to foster a climate which stimulates and encourages the innovation of other new services. In a companion paper Donald A. Dunn has described a model which can generate that innovative climate.

The second fundamental issue is the creation of consistent standards. The US had benefitted greatly by the de facto standards created, for example, by AT&T and IBM. Commonality of interfaces plays a very critical role in establishing a climate for innovative competition. As one example, there is a real danger that in the emerging electronic mail services we could repeat the early history of US telephone networks in which competing vendors could not or would not interconnect. As an alternate to regulation it may be feasible to protect consumers, while encouraging innovation, by enforcing standards which ensure interoperability.

The basic problem is who will create and enforce the standards. There is no simple answer, but we do consider the resolution to be of high priority, lest the computer based services we have discussed fail to develop in a rational way.

The third fundamental issue is that of reliability. US business and government has become so dependent on computer based information systems that in some cases manual back-up is no longer feasible. Certainly it is hard to imagine how banking, airline reservations, stock market transactions, social security, etc. would operate in the event of prolonged computational failure.

As we move toward similar dependence on distributed information processing services, the responsibility for very reliable facilities will be split between the common carriers and the suppliers of computing services. Each will be dependent upon the other. In the selection and implementation of its regulatory policies the FCC should be aware of the need to encourage both communities to strive for reliability. This need suggests a more open regulatory policy to encourage innovation and implementation of new system ideas by the traditional carriers as well as by the computing organizations.

Finally there is a fundamental issue concerning the acquisition of capital to implement the new services. In our analysis it became clear that the capital needs were high, and that the responsibility to raise that capital fell primarily on the computing organizations and terminal suppliers. To ease that constraint to growth the FCC might consider a more liberal role for the carriers to encourage them to apply their capital resources.

CONCLUSION

Our conclusion is very simply stated. While we are certain that major growth will occur in the exploitation of distributed computing systems, we were surprised at the modest amount of communications capacity required for the prime services. It was also somewhat surprising to observe that nearly 90 percent of the expenditures for data transmission capacity will be in the local distribution network. It is in those local links that the maximum return for cost control will be found.

It has been disappointing to review the trend in innovative excitement in the computer communications industry. Clearly much progress has been made in the provision of good quality data transmission networks—yet service ideas are scarcer today than they were when communications facilities were inadequate. We consider it essential to restore a climate which stimulates and encourages innovation.

The regulatory decisions reached by the FCC should contribute to establishing that climate. From technical considerations we cannot offer a solution to the definition of a boundary between communicating and computing—in fact technical considerations convince us that there is no natural boundary. Since we cannot offer a ready solution to that regulatory dilemma, we do urge that in making its decision the Commissioners:

Encourage the development of competitive services,

Ensure that a sufficient set of standards is created to ensure that interconnection of prime services is feasible,

Create a climate in which both computing and carrier interests profit from the installation of reliable facilities,

Broaden the base for the acquisition of capital so as to eliminate a potential constraint to growth.

APPENDIX A—ESTIMATION OF THE ANNUAL NUMBER OF CHECK TRANSACTIONS

We assume that in 1974 each household generated 200 checks per year. At that time there were 70 million households[1] in the USA, so the total number of checks was about 14 billion. That year the retail sales portion of the GNP was $540 billion. Perhaps half of that was paid by check yielding an average of about $20 per check transaction, a reasonable amount confirming that our estimate is not wildly inaccurate.

Also in 1974 the U.S. labor force totalled 93.2 million. Most of these people were paid by check twice monthly. Thus the number of pay checks totalled 2.4 billion.

During fiscal 1974 federal medical and hospital insurance accounted for $15 billion,[2] paid to 23 million persons. Medical insurance payments comprised 74.3

[1] *Information Please Almanac*, 1976 edition, Dan Golenpaul Assoc., pp. 75, 76.
[2] The World Almanac, Newspaper Enterprise Assoc., New York, 1976, pp. 63, 64.

million bills. Hospital accounts were perhaps, ⅓ as many. Therefore, the total number of checks for federal medical and hospital reimbursements was about 100 million.

Retirement benefits from social security totalled $62.5 billion in fiscal 1974. The average payment was $205 per month, so that the number of checks issued was 305 million.

Combining these individual estimates leads to a total of 16.6 billion checks processed in 1974. To this must be added an almost equal number for the settlement of business transactions. Thus the total number of checks processed during the year was about 30 billion.

Now the paper deluge has been increasing at a fairly consistent growth rate of 7 percent. Our expectation, then, is that the number of checks to be processed in each year of our analysis is:

	Billion
1976	34.2
1981	48.2
1986	67.7

We have made one further test of consistency. Our estimate of check clearing traffic flow in 1986 is 1.26×10^{14} bits. S.R.I.'s estimate for 1990 is 1.4×10^{14}. At least the estimates are comparable.

APPENDIX B—ANALYSIS OF THE COST OF ELECTRONIC MAIL

This Appendix contains an analysis of what the ARPANET electronic mail system would cost in a commercial environment. For that purpose we have made use of the message handling disciplines of ARPANET, combined with TELENET's current tariff of 60 cents per kilo-packet. Since ARPANET was not designed specifically for that purpose, nor has it been optimized as a carrier of electronic mail, the following calculations represent an upper bound on the achievable costs of electronic delivery today.

The typical ARPANET electronic mail user is either directly connected to a timesharing computer which offers interactive mail service, or he has dial access to an ARPANET TIP which serves as a front-end terminal support system, allowing the user to connect to any of the 100+ host computing systems on the network.

To make the analysis specific we have based it on a user who dials a nearby TIP to access a TENEX[1] system for the provision of electronic mail service. This user will compose messages interactively, and will read his incoming mail. The mail service manages the movement of messages across the network to the appropriate hosts. Thus, user need have only one "mailbox," although the system will also cater to those who desire more.

The total cost of the service comprises four elements:

Transmission across the network (pure packet cost).

Terminal rental, or maintenance and amortization.

Connect and CPU charges for the TENEX service.

Local telephone charges for dial-up access to the TIP.

Transmission costs per message vary with message length and with the number of copies sent. Table B–1 shows the packet costs per message for composition and transmission of 5, 20 and 100 line messages (50 characters per line) for several numbers of copies. Typical messages are a short five lines, though some exceed 300 lines. Note that "housekeeping" information such as sender's name, receiver's name, names of receivers of copies, date and subject are included as fixed overhead. The cost of those items is included in Table B–1, but this addressing overhead is not counted in the message length.

TABLE B-1.—MESSAGE TRANSMISSION COST

	Message length (in 50-character lines)		
	5	20	100
Copies sent:			
1	$0.10	$0.14	$0.38
5	.07	.08	.22
10	.05	.08	.19
100	.05	.08	.18

[1] TENEX is an operating system developed by Bolt, Beranek and Newman for the Digital Equipment Corporation's PDP–10 machine.

For very large users of the service the asymptotic cost per line is $0.0012.

The capital cost and maintenance, or rental charges, of terminal equipment has an important impact on the cost of electronic mail service. Retail computer terminal prices range from $650 for portable devices with LED displays to $5,000 for programmable CRT or hard copy devices with local memory. Rental charges for such terminals range from $40 to $200 per month. As a conservative estimate we shall assume $150 per month including maintenance.

The contribution of terminal cost to message cost is a complex function, confounded by such variances as message length, faster read-out than type-in and traffic volume. Panko [8] in a somewhat similar analysis, concluding that the typical message handling time was 5–6 minutes. Limiting the discussion to the eight hours per day, five days per week of the business environment, and assuming at least one hour per day of terminal interaction, we conclude that the per message cost of the terminal can range from 70 cents for 216 messages per month to 7 cents for 2,080 messages per month.

One of the authors (Cerf) uses a Texas Instruments Silent 700 (Model 725) which rents for $126 per month. The average traffic is about 30 messages per working day yielding a terminal contribution of 21 cents per message. Of course this cost is reduced if the terminal is also used for such other services as access to timesharing systems.

Commercial charges for CPU and terminal connect time vary widely from one supplier to another. In a lengthy report [9] on U.S. commercial timesharing services, Datapro Research Corporation listed over 100 commercial vendors serving about 4,000 customers. The systems range in size from one to over 100 serving computers.

A rough average of the Datapro figures yields a connect time charge of about $10 which usually includes an allowance for telecommunications charges. CPU time is measured in many different ways, but the charges seem to range from 10–75 cents per CPU second. Basically the 7:1 variation is a reflection of the machines processing capability. In the Datapro study the most common figure for PDP–10 machines was 30 cents per CPU second. Although high by the standards of ARPANET suppliers (0–$4 per hour connect time, 8–14 cents per CPU second) we have chosen to use the more conservative figures of $10 per hour of connect time and 30 cents per CPU second.

Table B–2 shows the charges for these two elements for the range of traffic previously selected.

TABLE B–2.—CONNECT AND CPU USAGE COSTS

	Message length (in 50-character lines)		
	5	20	100
Number of copies sent:			
1	$1.40	$2.90	$10.90
5	.52	.82	2.42
10	.41	.56	1.36
100	.31	.33	.41

The combination of all charges is shown in Table B–3. This is the addition of the transmission charges of Table B–1, the connect and CPU charges of Table B–2 and a per message terminal charge of $0.21 representing moderately heavy use of the terminal.

TABLE B–3.—TOTAL PER MESSAGE COST

	Message length (in 50-character lines)		
	5	20	100
Number of copies sent:			
1	$1.71	$3.25	$11.49
5	.80	1.11	2.85
10	.67	.85	1.76
100	.57	.62	.80

[8] Raymond R. Panko, "The Outlook for Computer Message Services: A Preliminary Assessment," Stanford Research Institute Draft Report, March 1976.

[9] "All About Timesharing and Remote Computing Services," Datapro Research Corporation, Delran, N.J., May 1976.

Clearly the controlling charges are the CPU and connect time fees and the amortization of the terminal. Transmission charges alone are a minor part of the electronic mail charges.

A programmable terminal used for message composition would reduce the connect and CPU charges at the expense of somewhat increased terminal charges. However the costs of terminals is decreasing significantly so it is reasonable to anticipate a monthly rental as low as $40 per month for a programmable soft copy machine in the early 1980's. This would reduce terminal charges to $0.07 per message.

With such a terminal all message composition and reading would be done off line. The connect and CPU times for message handling would then drop dramatically to about one CPU second per message and about one-thirtieth second connect time per character. We can also visualize reductions in computing charges because the cost per computational element is continuing to decrease, and because the access costs to timesharing services will drop as advantage is taken of the tariff reductions of public digital networks. We can, therefore, predict charges as low as $0.15 per CPU second and $2.00 per hour connect charges. Under these conditions the total message charges would range from $0.25 for short, 5 line messages to $0.36 for 100 line messages.

So far all that has been demonstrated is that electronic mail can be a rival for TWX, TELEX, first class mail and mailgram services. It remains to be seen if a strong incentive exists to make that transition attractive.

Two scenarios are possible. One line of development is that business offices will find that a large part of their interoffice mail can be managed by communicating word processors, coupled with central file storage facilities, provided either as in-house or as network based services. Alternately programmable terminals with local storage will become the workhorse of the message and text preparation system.

We believe that the centralized systems will prevail. The basic argument is that the operating and maintenance costs of terminal based systems tends to grow linearly with the number and complexity of terminals. The operational costs of centralized systems grow at a slower rate. Thus for large installations the centralized system gives more efficient resource sharing with lower maintenance and with higher reliability.

To a degree this is already a trend. Some internal corporate systems already operate in the centralized mode. The Xerox Corporation's Systems Development Division is investing heavily in the development of automated intra office systems which mix intelligent desk top terminal equipment, local networks, and local but centralized resources such as printers, data bases, bulk storage and computer facilities. The success of such systems will certainly make it attractive to divert corporate mail from the Postal Service to electronic facilities.

It is less clear if and when the next step leading to intercorporate exchange of electronic mail will be taken. Certainly it is intuitively attractive for timesharing companies to offer centralized, powerful text editing, word processing and file sharing systems to companies whose size does not warrant system ownership. By their very nature such shared systems have the capability of exchanging mail, between users, in an electronic form. Given the cost projections previously calculated we believe this to be a very likely development.

REPORT
of the
SBA TASK FORCE
on
VENTURE AND EQUITY CAPITAL
for
SMALL BUSINESS

U.S. Small Business Administration

January 1977

FOREWORD

In July 1976, Mitchell P. Kobelinski, Administrator of the U.S. Small Business Administration (SBA), appointed a Task Force on Venture and Equity Capital for Small Business to assess the financing problems facing the small businessman today and to recommend solutions. The Task Force was made up of 15 people actively involved in managing, financing or advising small businesses. It is grateful for assistance provided by officials from the SBA, the SEC, the Treasury and Labor Departments, and private financial institutions.

The Task Force met several times as a full group and more frequently in smaller subcommittees. Early in the discussions it became apparent that the scope of the study had to go beyond just the provision of venture capital to very small businesses, because of the interrelated nature of all forms of capital required by business.

The Task Force believes the implementation of the study's recommendations can make a vital contribution to America's free enterprise system. If the recommendations included in the Report are favorably acted upon by the Administration and the Congress, it is the opinion of the Task Force that critically needed new venture and equity capital will flow to the small business sector of our economy, which in turn will produce substantial increases in jobs, tax revenues and productivity.

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- - - Increase the corporate surtax exemption from the present level of $50,000 up to $100,000;
- - - Allow greater flexibility in depreciating the first $200,000 of assets;
- - - Permit investors in qualified small businesses to defer the tax on capital gains if the proceeds of the sale of a profitable small business investment are reinvested within a specified time in other qualified small business investments;
- - - Increase the deduction against ordinary income of capital losses in a small business investment made under Section 1244 of the Internal Revenue Code from $25,000 in annual deduction to $50,000, and increase the limit on an offering from $500,000 to $1,000,000 and on issuer size from $1,000,000 to $2,000,000 in equity capital;
- - - Permit underwriters of the securities of smaller businesses to deduct a loss reserve against the risks inherent in the underwriting and carrying of such securities;
- - - Revise methods by which revenue impact of tax changes are estimated to reflect revenue gains from the business use of tax savings and the stimulus to capital formation that tax incentives provide.

Small Business Administration (SBA)

- - - Provide that some portion of the guaranteed borrowing available to SBICs take the form of debt with the interest partially subsidized, if the funds are used to make equity investments;
- - - Permit SBICs a deduction from ordinary income for loss reserves on both the equity and debt portions of their portfolios;
- - - Immediately make a substantial increase in the size standards for SBIC investments and also provide for either an annual revision of these standards or index them according to broadly accepted price indicators;

- - - SBA should require and encourage commercial banks to assume a larger portion of the risk in SBA loans and change its guarantee fee from a one-time fee of 1% of the amount of the guaranteed debt to an annual fee which more nearly reflects the value and cost of SBA's guarantee;
- - - Substantially expand SBA's Secondary Market Program by creation of a "Certificate" system for the sale of SBA-guaranteed loans.

Institutional Investors/Employee Retirement Income Security Act (ERISA)

- - - Amend ERISA to declare a policy that pension funds may invest in a broad spectrum of American companies within the "prudent man" rule and that it applies to the total portfolio rather than any individual investment. Also create a "basket" of 5% of the assets of any plan within which investment managers can invest according to standards of prudence and liquidity appropriate to higher risk small business investments;
- - - The development of professionally managed pools of capital should be encouraged so that pension fund managers, otherwise constrained by time or expertise, may participate in the investment in new ventures and in growing smaller companies. These special funds should be specifically exempted from the provisions of the Investment Company Act of 1940;
- - - In cooperation with the SEC and other regulatory bodies, exempt the illiquid securities of small companies from "mark-to market" or " fair value" accounting treatment.

Securities Laws and Regulations (SEC)

- - - Increase the small offering exemption from $500,000 to $3,000,000;
- - - Enact the limited offering exemption as proposed in the American Law Institute project to codify the securities laws;
- - - Retain and simplify Rule 146;
- - - Amend Rule 144 to provide that the existing quantitative limits apply for only a three-month period rather than a six-month period. In addition, change those limits to one percent of outstanding shares or the average weekly volume, whichever is higher instead of whichever is lower;
- - - Develop procedures under which solicitation, with appropriate compensation to develop a market, may be undertaken if buyers are provided with copies of financial data and other disclosures regularly filed with the SEC along with a suplemental statement on mode of offering, identity of underwriters, price of securities offered, and information needed to update the data on file with the SEC.

INTRODUCTION

Small businesses comprise 97 percent of all unincorporated and incorporated businesses in the United States. More than half of all business receipts are generated by their operations. Perhaps more important, they employ more than half the U.S. business work force.

It is a matter of acute concern that, in the face of clearly emerging needs and the documented benefits to the United States economy, a set of impediments have developed that are preventing smaller businesses from attracting the capital without which they cannot perform their traditional function of infusing innovation and new competition into the economy. Unless these impediments are overcome, the ability of the economy to compete in the world and meet the needs of the American public will be seriously eroded.

It is alarming that venture and expansion capital for new and growing small businesses has become almost invisible in America today. In 1972 there were 418 underwritings for companies with a net worth of less than $5,000,000. In 1975 there were four such underwritings. The 1972 offerings raised $918 million. The 1975 offerings brought in $16 million. Over that same period of time, smaller offerings under the Securities and Exchange Commission's (SEC's) Regulation A fell from $256 million to $49 million and many of them were unsuccessful. While this catastrophic decline was occurring, new money raised for all corporations in the public security markets increased almost 50 percent from $28 billion to over $41 billion.

A public policy that discourages the public from investing approximately $1 billion a year of its savings in economic innovation, growth, and the creation of jobs while it encourages the public to risk $17 billion a year in Government-sponsored lotteries, requires close and serious reexamination.

Impediments to Small Business Growth

In this context, the Task Force sees in the American business and financial scene today the following characteristics:

1. A public policy that tilts sharply towards encouraging consumption and discouraging savings and investment.

2. An increasing and dangerously high ratio of debt to equity arising in part from artificial tax advantages extended to debt financing.

3. Distinct impediments to raising equity and other forms of risk capital.

4. Savings gravitating towards larger institutions that are discouraged from investing those savings in smaller and new businesses.

5. Well-intentioned efforts to protect investors which inadvertently place small businesses at a disadvantage in competing for available funds.

6. Attrition and concentration in the network of financial institutions and firms that has served our economic needs well by mobilizing capital.

A recent study by the Massachusetts Institute of Technology Development Foundation has arresting data on the importance of new companies and new technologies to property and jobs in America. It compares the performance of six mature companies, five innovative companies, and five young high-technology companies. From 1969 to 1974, the average annual contributions of these companies in jobs and revenues shaped up as follows:

Type of Companies	Sales Growth	Job Growth
Mature	11.4%	0.6%
Innovative	13.2%	4.3%
Young High Technology	42.5%	40.7%

Although these young companies are not only growing faster but actually creating more new jobs and tax revenues than the giants of American industry, we see increasing impediments to this same opportunity for other new companies.

Recent economic trends have caused all investors -- institutional, large nonfinancial companies, venture capitalists, individuals and local bankers -- to become more conservative in their investment policy. Recent legislation and regulation, however well intentioned, has added to that conservatism by cutting incentives to take risks. Savings and other financial resources, so desperately needed by small companies to finance their growth, have become concentrated in larger financial institutions. For example:

- - - Since 1962, deposits in the ten largest banks have increased from 20 to 33 percent of all deposits.

- - - Pension funds assets have tripled since 1962 and it is estimated that by 1985 more than half of all equity capital will be in the hands of pension fund managers.

- - - Mutual funds assets have doubled in the same time period.

- - - Institutions now account for 70 percent of the volume of trading on the New York Stock Exchange (NYSE).

As assets have concentrated, access to them has become more difficult, particularly for small businesses. In the past 5 years, the number of registered securities broker/dealer firms has declined 35 percent, and the number of registered representatives has declined as well. The Task Force has found that this shrinkage of the securities industry has compounded the problem of providing smaller companies with access to capital. Large institutional investors handling pension funds, wary of standards set forth in the 1974 Employee Retirement Income Security Act (ERISA), are concentrating their funds in larger companies with proven earnings records to avoid possible lawsuits and liabilities under ERISA.

Individual investors, once a vital source of funds for new businesses and liquidity for early investors, have been so hurt in recent bear markets that they are reluctant or unable to provide risk funds again. In addition, the incentive for individuals to risk capital in equities has been drastically reduced by a capital gains tax rate that today can run from 70 to 100 percent more than the maximum rate that prevailed as recently as 1970.

Compliance with Government regulations -- tax returns, registration statements, ERISA reporting requirements, and a great variety of reports and surveys -- constitutes a heavy burden for the small businessman. Although highly commendable efforts to lighten this load are under way, the small business today is in grave danger of smothering under the weight -- and cost -- of repetitive paperwork.

One of the more serious problems is the skyrocketing cost of entering the public market to seek new sources of financing. An analysis of six of the smaller offerings made in 1976 by companies having assets of less than $5 million shows the average cost of registration is $122,350, an automatic and, in some cases, insurmountable roadblock for companies interested in entering the public market.

The Life Cycle of Growing Businesses and Its Financing

The result of all these trends has been to make economic growth for smaller companies increasingly difficult. The chart on the next page illustrates the stages a company must go through to achieve maturity as a corporate entity.

The cycle of a business enterprise requires different types of capital at each stage of its life. The highly developed U.S. marketplace has spawned investors for each of these many stages. The result can be imagined as a financial pipeline along which successful companies move from start-up to maturity.

If this pipeline flows smoothly, all types of investment capital can function. If it clogs at any point, capital dries up all along the pipeline. Facilitating the turnover of initial investments to more conservative investors is critical to unblocking the flow of initial higher risk investments in smaller businesses. In fact, the Task Force believes that creating better prospects of liquidity for early investors will, in itself,

LIFE CYCLE OF A NEW ENTERPRISE
MODEL OF A GROWING AND SUCCESSFUL COMPANY
1975-1976 FINANCIAL MARKET CONDITIONS

Phase: Activity Level: Revenues in Millions	0 R&D -None-	1 Start-Up Up to $2.0	2 Early Growth $2 - 10	3 Accelerating Growth $10-25	4 Sustaining Growth $25-40	5 Maturity $40 and up

NET INCOME (Millions) $ 8 7 6 5 4 3 2 1 0 — LOSS 1 2 3 4 5 6

Annual Net Income (Loss)

Annual

Cumulative

Annual Break Even Point

Cumulative Break Even Point

Cumulative Net Income (Loss)

	0	1	2	3	4	5
I Company Characteristics: Capitalization	$5,000-1,000,000	$500,000-2,500,000	$2 million - 6 million	$6 million - 15,000	$15 million - 30 million	$30 million +
Length of Phase (Years)	1-5	1-3	2-3	3-4	2-5	-
Management and Organization	Founder; No Organization	Founder & Associates; Very loose organization	Founder or Professional Manager; Emerging Formal Organization	Founder or Professional Manager; Formal Organization	Professional Managers; Complex Organization	Multi-layered Complex Management Organization
"Equity" Financings Number Average Size (Nature)	2-3 $100,000 (private)	1-3 $750,000 (private)	2-3 $1,500,000 (private)	1 $7,000,000 (public or senior private)	1-2 $15,000,000 (Insurance Co. and other long-term capital).	Ongoing (Various)

II Applicable Govt. Regulations
- Tax Rate
- Depreciation Allowance
- Sub-Chapter "S"
- IRS: Rule 1244
- SEC: Rule 144
- SEC: Rule 146
- Regulation "A"
- SEC: 1933 Act

III Principal Financing Sources

Private
- Personal Investment
- Individual Investment
- Investment Firms (SBIC's etc.)
- Commercial Bank - Personal
- Commercial Bank - Corporate
- Insurance Companies

Public Financing

restore the flow of equity investment in the early stages of business life. Hence the Task Force focused on institutional investors and the public stock market, in addition to other sources of risk capital, internal financing and long-term debt financing.

Traditionally, businesses have used a mixture of internal and external financing for their needs. Small businesses cannot grow very fast if they have to finance themselves solely out of their earnings. In most cases external sources must provide the financing for significant growth.

As shown on the chart, however, a hypothetical company moving through the system must reach a revenue level of up to $10 million before public financing becomes even remotely possible. Moreover, it is not until a business reaches revenues of $25 to $40 million that all sources of public and private funding become, in some measure, available.

Though Government agencies provide a great deal of assistance to small businesses through agencies such as the Small Business Administration (SBA), there are legislative limitations on this agency's programs that prevent them from being completely responsive to the small businessman's needs for equity capital. Because private financial resources are at times unavailable, the small businessman is often faced either with stagnation or the sale of all or part of his company.

In addressing the financial needs of small businesses and the impediments to meeting them, it soon becomes apparent that the problem is different for:

a. the many small businesses that are local in character or so family owned and managed that they would be unlikely to have or want access to the public securities markets; and

b. those businesses that can develop so that they will need access to public financing.

There are different remedies called for with respect to these two broad categories of smaller businesses.

There is a cycle of financial events and opportunities into which new and growing businesses have to fit themselves to finance their growth and expansion. This cycle starts off with the ability to save and the will to

commit those savings in order to start a small business. Here, if public policy is to reflect the contribution new and small business can make to the national welfare, our tax system has to encourage necessary savings and the commitment of these savings to new and small businesses.

Then, after a new business is launched, the tax system should permit it to generate sufficient internal capital so that a growing equity and credit base will enable it to meet growth requirements. This can be done with some deferral of tax payments; allowing small businesses greater flexibility in charging off the assets needed to do its business; and an increase to reflect inflation in the amounts to which small business tax treatment now applies. This will provide greater revenues for the Government in the future as small businesses use this increase in internal financing to provide additional jobs and greater taxable wages and profits.

From among the new and small businesses that grow as a result of these tax revisions, a few will show a potential for generating jobs and profits that are sufficient to attract funds from private, public and institutional investors. These businesses should be able to compete for these funds on equal terms with older, larger and more established businesses. Savings will not be invested in these new and growing enterprises unless the investors can efficiently convert their investment to cash over time without undue penalty. The seed money needs of these innovative and growth-oriented businesses used to be met by knowledgeable investors found in towns and cities all over America. In the last fifteen years, a significant portion of this activity has become institutionalized and professionalized in enterprises having risk money together with experience and skill in identifying unusual business opportunities in technological developments and emerging needs.

Today however, surveys of the investing activity of leading professional venture capitalists, having total assets estimated at $1.7 billion and investing in excess of $100 million per year in venture capital situations, show an increasing proportion of their funds going to established companies. In 1975 only five percent of new investments went to start-ups of new ventures and two percent to first-round financings.

This represents a sharp reduction from previous years. Most venture capital firms have adopted a policy of staying away from start-ups and have put their available capital in safer and more liquid investments. The Task Force believes this steady shift towards a more conservative investment policy comes from perceived difficulty in recycling investment funds as restrictions on the access of small and growing business to the public securities markets has become more costly and difficult.

COMPANIES WITHOUT ACCESS TO PUBLIC SECURITIES MARKETS

The very small business, usually local in character, is likely to be launched on the personal savings of family and friends by an entrepreneur interested in full ownership and attracted to the prospects of financial reward.

His primary financial advisor will usually be his local banker, who provides advice, counsel and, more importantly, short-term credit for his generally undercapitalized enterprise. Local bankers are likely to go as far as conventional economic wisdom and prudent banking standards permit in granting loans on the basis of confidence and character. Certainly the banker cannot be adequately compensated for making this type of loan because of the risk and servicing involved. He, and the entrepreneur, are taking calculated risks, hoping for greater rewards -- increased deposits and profits -- in the future.

With these loans and private resources, the entrepreneur begins his business with a reasonable relationship between debt and equity capital. If the business prospers, he approaches his banker for funds to purchase additional inventory or to handle his multiplying accounts receivable. He continually borrows short term, being fully convinced that he will have funds to repay within the 30-day term of the loan. The banker, pleased with this progress, continues to advance funds, all in short-term notes renewed and rewritten at regular intervals. This satisfies the bank's need to adjust loan interest rates quickly and to show liquidity on its books.

As this small business grows, however, the availability of this type of financing fades away as its dangers emerge. Short-term indebtedness goes up and retained earnings are unable to grow as fast as the business. Paradoxically, the more profitable the business is, the worse its financial statement looks because of the high ratio of debt to equity.

As internal financing becomes increasingly difficult, the entrepreneur's external source of financing, his banker, may begin to run into loan limit problems. Moreover, as more and more local banks are absorbed by large banks, the entrepreneur may find himself faced with a more impersonal and cautious branch manager, who may not want these small business risks.

The entrepreneur begins to realize the value of long-term financing. He turns to the government for help, in most cases to the SBA. He finds that this agency's programs of direct and guaranteed loans, and equity financing through SBA-licensed Small Business Investment Companies (SBICs), may be able to provide necessary assistance. Yet this assistance, too, has its limits.

<u>Tax Revisions to Facilitate Internal Financing and Attract Capital</u>

The fact is that for those businesses not likely to require or want to raise money from the public, capital growth needs must come from a combination of internal cash flow and from borrowing. To make it possible for many thousands of small businesses to realize their potential in growth and jobs, reform in the tax structure is essential.

The most direct and effective step that can help small business is to bring the $50,000 of corporation earnings now taxed at a lower rate in line with inflation and the escalation of risks and higher costs in starting and carrying on business. Consequently, the Task Force recommends the corporate tax rates be modified so that the first $100,000 of corporate taxable income should be taxed at lower rates, as follows:

First $50,000	- 20 percent
Second $50,000	- 22 percent
Excess over $100,000	- 48 percent

Allowing these small businesses to use a larger portion of their first $100,000 of earnings to grow will produce additional revenue and jobs. The Government will benefit from additional taxes and a reduction in welfare and other unemployment costs in the future.

Allowing small businesses greater flexibility in writing off the first $200,000 of depreciable assets is another step that should be taken to increase the internal financing that is so critical to businesses in their early years.

The higher capital gains tax rate has altered the risk-reward relationship for investors. This is likely to have its greatest impact on equity investment in small businesses where capital is already scarce and the risk of loss is greatest. This was recognized by Congress in 1958 with the enactment of Section 1244 of the Internal Revenue Code that allows limited deduction of loss in a small business investment against ordinary income. To reflect inflation and increased capital costs in new businesses, the limitations surrounding this provision should be increased so that deduction of $50,000 instead of $25,000 is permitted a taxpayer in any one year. The limit on issuer equity capital and size of the financing necessary to qualify should be increased respectively from $1,000,000 to $2,000,000 and from $500,000 to $1,000,000.

The capital gains tax has become so high that it no longer serves as an incentive to provide long-term investment capital. Deferring that tax as long as these funds remain invested in small business can provide a major incentive to attract the individual investor back to investing in small companies. The Task Force recommends that investors in qualified small businesses should be permitted to defer the tax on capital gains if the proceeds of a profitable sale are reinvested in another qualified small business within a specified time period. There is ample precedent for this kind of deferral in home sales, condemnations and retirement plan distributions. Since small businesses are potentially the most rapidly growing part of the equity investment spectrum, the ultimate tax revenues can be significantly higher, more than offsetting the cost of deferring revenues.

These tax revisions will result in a reduction of some tax revenue and deferral of other revenue. The Task Force takes issue with the method currently used in the Treasury's forecasts of the revenue impact of tax legislation. These revenue estimates reflect only the reduction in tax collections from tax revisions without any offsetting allowance for income which will result from retaining and using the revenue reductions in business activity. Nor does it reflect the stimulus to capital formation and economic activity which greater incentives will provide. The Task Force believes that a more accurate and balanced method of evaluating the impact of proposed changes is essential to developing sounder tax policy. It recommends that, at the earliest possible date, the new Secretary of the Treasury review the methods now used to forecast the revenue loss from tax changes.

SBA Assistance in Long-Term Borrowing

The tax revisions discussed above will allow small companies to generate more substantial cash flows internally and, thus, attract greater financing from their banks. Beyond that, if small businesses are to be restored to their full role in contributing to national economic growth and generating jobs, the financing role of SBA should be strengthened. Therefore, the Task Force believes it important that SBA programs be put on a more self-sustaining and flexible basis.

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The SBA is to be commended for steadily shifting its emphasis from direct loans to the guarantee of bank financing. In this way SBA has increasingly utilized the more intimate knowledge of local businesses and local economic risks and opportunities and the greater ability to supervise loans which local banks almost invariably have. At the same time it has provided small businesses with long-term financing that local banks, subject as they are to the requirements of regulatory agencies to keep their assets liquid and maturities short, have not been able to provide.

The SBA is also to be commended for helping local banks to bring institutional funds into small business financing by instituting its Secondary Market Program. Under this program, banks making SBA-guaranteed loans can now sell them to other investors to improve the banks' liquidity and bring new funds into local financing by offering Government-guaranteed, good yield investments to institutional and other investors. Since the program's inception through September 1976, more than $406 million of these loans have been sold to investors who would find it difficult to lend directly to small businesses. This successful Secondary Markets Program should be substantially expanded. The SBA-proposed "Certificate" system would transform the guaranteed portions of SBA loans into freely transferable market securities. This would tap additional institutional investor sources of capital, remove bankers' reservations about liquidity and reduce bank examiners' concerns over long-term loans in banks' portfolios. In order to ensure full utilization of these new resources, a comprehensive public information program aimed at small businessmen should be instituted.

The Task Force believes that SBA can strengthen its ability to contribute to the financing needs of small business by placing its operations on a more business-like basis in two very important respects:

1. Requiring and encouraging commercial banks to assume a larger share of the risk in the long-term financing that SBA facilitates through its guarantee. For example, the SBA might require banks to retain 15% instead of 10% of the risk in these loans and use a sliding guarantee fee to induce banks to take an even larger portion of the risk.

2. In extending a seven-year guarantee for a one-time fee of one percent SBA is not being adequately compensated. Additionally, there is little or no incentive for either the borrower or the lender to do without the guarantee. A basic guarantee fee of one-half to one percent a year would still be a bargain to most small businesses. An increase in the fee would also place some limitation on the demand for SBA's guarantee and more adequately offset the losses SBA sustains in extending its guarantee.

The Task Force recognizes that these steps will increase the cost of SBA financing. However, the availability of financing is more important than such a modest increase in cost. These steps will bring SBA activities closer to a self-sustaining basis. This should encourage the Congress and the Office of Management and Budget to increase the SBA guaranty authority as small businesses and local banks show a readiness to share more of the risk and pay a more realistic price for SBA-assisted financing.

Strengthening the Small Business Investment Company (SBIC)

SBICs are an important source of long-term debt financing and equity and venture capital for small business.

Although SBICs provide a significant amount of pure equity financing, there has been a tendency for them to increase their holdings in loans and other debt instruments of small businesses. The major incentive for the creation and operation of SBICs is the availability of long-term Government-guaranteed loans that require very modest equity and provide attractive investment leverage to those supplying equity capital for an SBIC.

This leverage has from time to time been increased by law. To meet the interest cost of these increased borrowings, SBIC investments have tended heavily toward interest bearing debt securities, rather than common stock. This has a tendency to add to the debt burdens of the smaller business rather than providing the permanent capital that this size of business so badly needs.

To resolve this problem, the Task Force recommends that some portion of the Government loans providing SBIC leverage be available in the form of debt, on which interest is partially subsidized. This would relieve the pressure on SBICs cash flow and enable them to make more pure equity investments.

Another disincentive for SBICs to take risk is the tax treatment of loss reserves. Currently, SBICs may establish a loss reserve for only those investments which are in the form of debt securities. The Task Force recommends that SBICs be authorized to deduct loss reserves from ordinary income on both the equity and debt portions of their portfolios in order to encourage more equity investments.

SBA has partially adjusted for inflation by increasing its size standards for SBIC investments. However, these adjustments tend to lag behind the realities of the marketplace. Therefore, the Task Force recommends that SBA adjust its size standards for SBICs annually or that these standards be measured against broadly accepted price indexes.

COMPANIES SEEKING PUBLIC CAPITAL

Small businessmen whose enterprises survive and thrive may find it necessary to seek external financing from investors having more substantial and varied capital resources than commercial banks and the SBA. There is a new set of obstacles on this road to economic growth.

The access of small companies to public markets, particularly in the early 1950's, encouraged the formation of venture capital -- money that was available for innovation and small business growth in the hope that some of the funds invested could be recovered within two to five years.

Venture capitalists, however, like all investors, found that the years following 1969 were difficult ones. They were forced to cut back on investments in many new ventures, because without a lively secondary market for resale of these securities, underwritings do not take place. Without underwritings, there are no investments, and the economy suffers. The table below illustrates the precipitate decline in offerings and money raised for companies having net worth of $5 million or less.

Year	No. of Offerings	Total Dollar Amount (in millions)
1969	548	$1,457.7
1970	209	383.7
1971	224	551.5
1972	418	918.2
1973	69	137.5
1974	8	13.1
1975	4	16.2

The first stages of market recovery in 1975-1976 have not been strong enough to rebuild confidence, particularly that of individual investors, in the new issues market.

Making Institutional Funds More Available to Small Business

Institutionalization of the stock market has meant that the small businessman must appeal to a professional investor who has a large amount of money and limited time to analyze potential investments. Increasingly, a major source of capital in America is the money in pension and other employee trusts. Fiduciary standards created by ERISA, however, have isolated about $200 billion of money in these trusts from all investments other than large blue chip, and fixed income securities. Attorneys advising trust officers have interpreted ERISA regulations conservatively, although they do not differ significantly from commonly practiced standards of fiduciary responsibility. As a result, trustees are reluctant to invest in companies without strong earnings records. Most pension trustees find it neither economic or prudent to invest in companies without a capitalization large enough to give investors liquidity. It appears that the market value of a firm must be over one hundred million dollars to interest pension funds managers.

ERISA should be amended in two important respects:

1. To expressly declare a policy of allowing pension funds to invest in a broad spectrum of American companies by clarifying ERISA's "prudent man" standard so that it is clearly applicable to the total portfolio of pension fund investments rather than individual investments, and

2. To relieve pension fund managers of ERISA restrictions in investing up to five percent of pension fund assets in companies having less than $25 million in net worth and larger companies having limited marketability for their securities.

These modifications should be designed to encourage the development of professionally managed pools of capital to assume responsibility for segments of the portfolio that pension fund managers do not have the time or experience to effectively invest in new ventures and growing companies. The SEC should exempt these special funds from the time-consuming and cumbersome requirements of the Investment Company Act of 1940.

The current interpretation of Financial Accounting Standard Boards regulations has led to substantial short-term profit and loss impact on portfolios. These standards require portfolio managers to value these holdings of unregistered securities and report the resulting portfolio changes as profit or loss, even though no transactions take place. These

fluctuations in both valuation and profit and loss are arbitrary and time consuming. Requiring "fair value" accounting creates the onerous task of frequently evaluating the current fair value of investments in small company securities. Most institutions avoid this by simply staying with only large, marketable equity securities or high quality debt securities. It would be consistent with the principle of materiality to waive the requirement for fair value accounting for investments made within the five percent "basket" provision we have recommended.

Small Business Access to the Public Securities Markets

The small businessman will find more and more securities firms disappearing with changes that have taken place in brokerage economics. Fixed commission rates have been eliminated and rates are governed by competitive and free market forces. Principal beneficiaries of this change have been institutional investors, not individual investors.

All these forces have substantially dried up access to the securities markets for small businesses. There are fewer regional securities firms, fewer registered representatives, fewer trading desks and research facilities.

Today, most underwriting is by the "majors", and these "majors" will not generally underwrite companies with annual earnings of less than $2 million. The few remaining strong regional brokers are working almost exclusively with firms whose earnings are between $1 million and $2 million.

To keep small firms with growth potential from being shut out of the public securities market the SEC created Regulation A (based on the small offering exemption in the Securities Act of 1933). This facilitates securities offerings of $500,000 and less by exempting them from the costly and time-consuming undertaking of full registration. This is not much capital for a growing company in the light of today's needs and the value of today's dollar. The Task Force commends SEC Chairman Roderick Hills for recommending that the Regulation A exemption be extended to offerings up to $2 million. However, it is impressed by the need for the underwriting of most Regulation A

offerings as shown by the SEC's finding that, during the period 1972 to 1974, in 546 Regulation A filings only 35% of the shares offered were actually sold. Since few firms in the contracted securities industry will underwrite an issue of less than $3,000,0000 today and firms which do handle small issues are anxious to take advantage of the savings in time and cost which Regulation A makes available, the Task Force believes the limit should be increased to $3 million.

Congress also provided a private offering exemption in enacting the Securities Act of 1933. Administrative and court interpretations have so narrowed the scope of this exemption that investors in very small financings have been able to change their minds and get their money back simply because the offering had not been registered. The buyer of stock who is defrauded has been provided with an effective remedy by the SEC through its development of Rule 10b(5). Requiring a small business to register a limited financing under pain of having to return the proceeds in the absence of any fraud was never intended and Congress should take legislative action to restore the private offering exemption.

The SEC developed Rule 146 to provide a safe harbor for private offerings that claim the private offering exemption and do not register. The SEC is to be commended for an imaginative effort to clear up the difficulties created by the attrition of the statutory private offering exemption. However, this Rule will necessarily be cumbersome, complicated and burdensome until Congress acts to restore the original intent of the private offering exemption. Meanwhile, there are modifications in Rule 146 which can be helpful and the Task Force recommends Rule 146 be modified in two respects:

1. In the "information to be provided" provision insert the words "if material" to modify the information required in the offering circular; and

2. Add a provision, along the lines of that provided in Rule 240, that failure to furnish information or an inability to sustain the burden of proof with respect to other offerees will not permit a buyer who has been properly informed to demand recision.

The limitations that the SEC has developed on the secondary sale of securities are probably more damaging to small business financing in the public securities markets than the high cost of registration and the near disappearance of the private offering exemption. If the kind of risk money that goes into new and growing businesses cannot be readily recycled it is usually not invested. It is the inability to readily convert some of the profits on successful investments back into cash that has driven professional venture capitalists away from start-ups towards companies with proven earning records. Furthermore, this leads to the liquidation of investments through large corporate takeovers instead of by sales in the public securities markets.

Congress, in enacting the Securities Act of 1933, required registration of securities only of issuers, underwriters and dealers. Anyone else was to be free to sell without registration. Until the late sixties, it was generally considered that holding a security for two years established that it had not been purchased for resale as an underwriter and could be sold without registration. During the late sixties and early seventies, considerable uncertainty developed about restrictions on resale of securities and in 1972, the SEC issued Rule 144.

Rule 144 has been successful in bringing clarity and certainty to the requirements for the resale of securities purchased without registration. However, it has, in the view of the Task Force, created unnecessary and unjustified restrictions on the private resale of unregistered shares which contribute substantially to clogging the flow of capital to smaller businesses.

Where Rule 144 is harmful is in its effort to protect the market from selling pressure through quantitative limitations on the shares which may be sold in any six-month period. This quantitative limitation has a whole series of consequences that impede venture investing, are counterproductive to investor protection and promote concentration. The limitations on moving out of a risk investment cause venture capitalists to go in for smaller percentages and in lesser amounts. The restricted pace at which they are able to liquidate their investment contributes substantially to the trend to stay away from young companies and to restrict venture capital to companies which have matured or seem to be on the verge of maturing. When they do have a successful investment, the difficulty of recycling their investment through private sales gives an edge to the large company that can take over the smaller company in one bite. This, in turn, reduces competition and promotes concentration.

Moreover, as long as there are restrictions on compensation and other selling efforts, it is difficult to see why any quantitative limitation is required. The seller's interest in not driving down the price of the shares he wants to sell can be relied on to limit the shares he offers. Certainly there is no evidence to justify a limitation which extends for six months and there is ample evidence that the present maximum is usually absorbed in a matter of weeks or days, when there is any real, market at all.

The Task Force therefore recommends that as a first step Rule 144 be amended so that existing quantitative limitations apply for only a three-month period instead of six months and that the limit be set at one percent of outstanding shares or the average weekly volume over a four-week period, whichever is higher instead of whichever is lower.

The Task Force is pleased to learn that SEC Chairman Hills has initiated an economic analysis to reevaluate the need and justification for a quantitative limit on resales of securities that have not been registered. It hopes that the quantitative limit will be eliminated or enlarged further if economic analysis shows that there is little or no justification for it.

The Task Force also recognizes that many small businesses do not enjoy an active market for their shares. Rule 144's prohibition against solicitation requires that there be a reasonably active market in a security if substantial amounts are to be sold. Thus, reduction or removal of the limit on shares offered will be only marginally beneficial to investors in many small businesses because of the limitations on solicitation coupled with a relatively thin market.

The Task Force therefore hopes that the SEC, and the experienced and knowledgeable Disclosure Committee it has designated under the chairmanship of A. A. Sommers, develop procedures under which solicitation and compensation required to develop a market will be permitted. The Task Force believes that active selling should be permitted when buyers are provided with copies of the financial data and other disclosures regularly filed with the Commission and a supplemental statement on the mode of offering, the identity of any brokers involved, the prices at which the securities are to be offered and any information necessary to update the data on file with the Commission.

Acquisitions and Concentration

The Federal Trade Commission's 1976 report on mergers and acquisitions states:

> "As in the previous three years, acquired firms that fell into the smallest asset size class accounted for the highest proportion of recorded acquisitions. Acquisitions of firms in the under $1.0 million and unknown asset size class represented 935, or 76.1 percent of the total number of recorded completed and pending acquisitions. For many of the acquired companies in this category, asset figures were unavailable -- most likely because the acquired company was quite small. The $1.0 - $9.9 million asset size class had the second highest proportion of acquired companies (11.5 percent)."

As we have already developed, limitations on the ability of private investors in successful small businesses to sell their shares to other investors have resulted in large companies being able to entirely buy out successful small companies at a discounted price because the business and its individual owners have little alternative in meeting their financing and liquidity needs. This is, we believe, the major force increasing concentration and big corporation bureaucracy and diminishing competition in the American economy today.

We recognize that mergers are a legitimate means of developing liquidity. Frequently, a growing business needs the capital and management expertise of a larger partner for continued growth. On the other hand, many mergers in the past five years have been "shotgun weddings" because of an environment that offered the small businessman no alternative methods of acquiring capital and liquidity.

Recently, larger companies have begun selling and restructuring peripheral portions of their operations as smaller, free-standing businesses. Freer availability of risk capital to encourage divestitures of this kind can revitalize these smaller operations and provide new, challenging opportunities for both technological and personal advancement. It can also inject new forces of competition which will benefit all who participate in our economy as consumers, producers and investors.

RECOMMENDATIONS FOR FUTURE ACTION

The recommendations of this Task Force offer only partial solutions to the problems of equity and venture capital for small businesses. No solutions remain adequate for very long. Problems multiply as society becomes more complex. There is a need to deal with small businesses problems on an ongoing basis. But there are no marble palaces in Washington for small business nor are there many champions whose voices are heeded. A Task Force such as this can only provide a snapshot of the conditions which its individual members experience and observe. It should submit its report, make its recommendations, and then go out of existence. Small businesses, however, need strong ongoing advocacy aimed at creating the optimum environment for their growth. It is the considered view of the Task Force that this role should be lodged in the Office of the Administrator of the SBA.

The SBA is a small, independent Federal agency, and SBA Administrators until very recently did not sit as a member of the various advisory bodies Presidents have used in coordinating economic policies. Yet this agency could be the principal voice of half of the nation's business community. The Task Force believes the SBA Administrator should be charged with an active role on behalf of small business in a number of areas:

- The SBA should expand its role as a catalyst and advocate within the government for changes reflecting the concerns of small businesses. These concerns are fragmented among many agencies and action on them often appears at random, too little or too late. The SBA should not only act to coordinate the Federal Government's activities relating to small business, but also to serve as an intermediary between various government units and private groups representing small businesses and their sources of financing.

- The planning and research activities of the SBA should be strengthened and its area of interest extended beyond its SBIC and 7(a) Bank Loan Guaranty program to include the general health of the public and venture capital market as well. These studies should be directed to such specific matters as the competitive impact of option trading on market trading in shares of smaller companies and its effect -- if any -- on the new issue market in these shares.

As a final note, the Task Force believes the government can play a vital role in stimulating the creation of new products that can be produced and marketed by small business. Too often an invention developed with government support has become the government's invention and not the inventors. Also too often, worthwhile technology developed by the government for special purposes such as defense or space has not been commercially developed. SBA's interest in this area could stimulate the economy, and result in increased jobs and tax revenues.

If small businesses are to continue as a vital force in today's economy, their interest and requirements must be considered and advocated vigorously. The Task Force believes that the steps outlined here can significantly increase the contributions which these enterprises can make to the U.S. economy.

SBA TASK FORCE ON VENTURE AND EQUITY CAPITAL

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Mr. John L. Werner
Director of the Office of Investment
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Senator BENTSEN. Thank you, Mr. Biddle.
Mr. Poppa.

STATEMENT OF RYAL R. POPPA, PRESIDENT AND CHIEF EXECUTIVE OFFICER, PERTEC COMPUTER CORP., MARINA DEL RAY, CALIF.

Mr. POPPA. Mr. Chairman, I have a prepared statement which I will submit for the record.

I prefer to highlight it on an informal basis.

Senator BENTSEN. Please proceed in your own manner.

Mr. POPPA. Pertec is a public corporation and one of the computer industry's leading manufacturers of data entry systems. We manufactured principally tape drivers, disc drives, cathode-ray tubes, peripheral devices for the computer industry; and we make small systems for data handling. We did $95 million last year in revenue with profits of $4.7 million, and we have 2,300 employees as of this date.

Most of our plants are in southern California, though we have one in Albuquerque, also, and we sell to all the industrialized countries of the world and have overseas sales offices, though no plants overseas.

On balance, the computer industry is very healthy and PCC is very healthy, but our financial structure at PCC is not optimum nor is it even desirable, because we have debt of $35 million, equity of $12 million, and retained earnings of $16 million, which gives us a very high utilization of debt in our financial structure and an underutilization of equity.

This is solely because the equity markets are not available to companies like PCC. Even though we are a strong company, profitable, we cannot sell shares at a price that makes it economic for us.

It is cheaper and makes better economic sense to borrow. I will not dwell on that subject at some length because Mr. Tomash will cover it in greater detail.

I will cover another alternative and this is the application of the graduated income tax concept or philosophy to corporations. In my prepared statement I have submitted a suggestion tax schedule where we begin the suggested schedule of taxing profits for small corporations, say, making $50,000 a year, at 20 percent rather than the current 48 percent.

It runs up in graduated steps to a 70-percent tax if you are making more than $500 million. This provides the retained earnings to a small corporation so they can gain stability earlier in their life and also provides a kind of logical stopping off of the super large corporation because as they get enormously large the tax rates would become somewhat to their detriment and would tend to limit their growth. The smaller business would have a greater opportunity.

Another program I wish to support is the DISC, Domestic International Sales Corporation. This has been condemned very widely here in Washington as a giveaway to the giant corporations, and, in fact, in looking at some of the statistics I am sure there has been overuse of the available funds on that basis.

But what is overlooked is the benefit to the smaller corporations like PCC. To use PCC as a specific example, we estimate we have kept 200—

up to 250 jobs in the United States in the last 4 years because each year we have analyzed should we put a plant into Europe, which is one of our principal user markets.

But we have come to the conclusion for two reasons, one is the economy of scale and the other the availability of DISC, that it has not made good economic sense to go overseas at this point. Perhaps some day; but right now DISC is the principal reason we are keeping our plants in the States, which creates more jobs.

Another reason that I wish the committee would consider in depth in terms of the impact of the new tax legislation on the small- and medium-sized businesses is the rate of job creation of the smaller businesses.

The House Small Business Committee recently found that the largest businesses in the United States, the top 50, were growing essentially not at all, they were growing at the rate of 0.07 percent in terms of head count—employed personnel—where the smaller businesses were growing at an average of 4 percent. But again, to use PCC as a specific example, we are a 10-year-old corporation, we started with 3 people in 1967 and have 2,300 people today, a compound growth rate of something in excess of 27 percent. That is the type of business we need to create jobs in the States.

Those are the key items I wish to highlight. I will be available, of course, during the question and answer session of the hearing and also volunteer to assist in any way possible to provide data and facts from either our company or industry to offset some of the errors we are so often hearing about in the computer industry or the industries in general. Thank you.

[The prepared statement of Mr. Poppa follows:]

PREPARED STATEMENT OF RYAL R. POPPA

Mr. Chairman and members of the Committee, my name is Ryal Poppa, President and Chief Executive Officer of Pertec Computer Corporation, headquartered in Marina del Ray, California. Pertec is a public corporation and one of the computer industry's leading manufacturers of data entry systems and peripheral equipment for use in small computer systems. Pertec's products include digital magnetic tape transports, key data entry systems, digital disk drives, flexible disk drives, key-disk data processing systems, cathoderay tube terminals and computer output microfilm systems.

Pertec markets its products throughout the world to original equipment manufacturers and private-label purchasers who buy the company's products for resale under their own name to their own customers, who typically are the end-users of the products. In 1976, we acquired Computer Machinery Corporation, which has given us the capability to market directly to end-users and strengthen service and customer support for our products.

In our estimation, without this acquisition, it would have taken approximately $15–20 million in cash and future profits to develop these capabilities on our own. This figure should give you some idea of the value of capital necessary for effective penetration of end-user markets if one is to become a competitive entity in the computer industry. This is an industry where start-up costs are heavy and early profits are often elusive, yet critical to a company's ultimate success.

We are approaching the future in a cautious manner. While this year our revenues approach $90 million with earnings of $4.7 million, we recognize we have a significant challenge ahead of us. We are optimistic about the future of the data processing industry, believing it to be one of the most dynamic and fastest growing areas of business today. To keep pace, we are continuing to spend extensively on product development, and will continue to do so in the future. For the challenges ahead, we believe we are well equipped with the products,

marketing, service, management and financial strengths to capitalize on the growth potential of our industry.

But our financial structure is not composed of the proper mix of equity, debt, and retained earnings. Pertec's capital structure is approximately as follows: $33 million in debt financing, $12 million from the sale of securities, and $12 million from earnings or profit retained after taxes. This represents an over-dependence on debt and an under-utilization of equity because equity markets are not available to us. The equity capital markets must be made more liquid and available for industrial and economic growth. Since our public offering of stock in mid-1971, I have witnessed the deterioration in the viability of the U.S. stock market. I trust that proper incentives will be provided to restore the health of this vital financial resource. Pertec would very much like to have the support of healthy equity markets in the years ahead to finance its continued growth with a good mix of equity and debt financing.

Retained earnings is a key ingredient in the mix of the three basic sources of capital. After over 10 years of corporate existence, we are fortunate to have developed our current level of retained earnings. Such funds are an important form of internal financing of our current operations, including our on-going product development programs. Plainly speaking, a company the size of ours should permitted, even encouraged, to develop internally a higher percentage of capital funds after taxes. This results in greater early stability and more assured growth, resulting in more jobs and a more reliable future earnings stream which will mean more tax revenues.

The corporate tax rate of 48 percent hits the small- and medium-sized corporate taxpayers and the giant corporate taxpayers alike. I believe the same principle of fairness and equity expressed in progressive personal tax rates should be carried over into corporate taxation.

At the top tier of corporate size, as an example, IBM enjoys current revenues totaling some $16 billion, adding retained earnings of approximately $2 billion each year on total retained earnings in 1976 of over $9 billion. On the other hand, a company in its early growth years faces heavy start-up costs and elusive profits. If smaller companies were taxed at a lower corporate rate, retained earnings in the earlier years would be healthier and more stable, thus forming a more reliable source of internal financing to insure its early growth period.

A progressive tax rate schedule should be implemented with a graduation in accordance with the corporation's ability to pay. An example of such a schedule is set forth as follows:

Corporate pre-tax income:	Corporate tax rate, percent
$0 to $50,000	20
$50,000 to $100,000	21
$100,000 to $150,000	22
$150,000 to $200,000	23
$200,000 to $250,000	24
$250,000 to $300,000	25
$300,000 to $350,000	26
$350,000 to $400,000	27
$400,000 to $450,000	28
$450,000 to $500,000	29
$500,000 to $1 million	30–35
$1 million to $25 million	35–40
$25 million to $50 million	40–50
$50 million to $100 million	50–60
$100 million to $500 million	60–70
Over $500 milion	70

Another way in which small- and medium-sized businesses may be assisted is to retain the Domestic International Sales Corporation (DISC) for their use in international trade. DISC, as you all know, is a special category of corporation created by the 1971 Revenue Act as an inducement to increase exports from the United States to offset a deteriorating trade balance. A manufacturer benefits from export operations through a DISC subsidiary corporation in the form of certain tax deferrals which provide internal financing for the manufacturer's export operation.

I am raising this issue today because there has been some Congressional opposition toward maintaining the DISC program. Much of this opposition is

based upon a recognition that DISC may serve as a windfall to the very large corporations which have the capability to finance export operations of their own. Large, multinational U.S. based corporations are able to finance foreign subsidiaries, resulting in the export of U.S. capital and jobs overseas.[1] On July 1, Senator Kennedy condemned DISC as "a $1 billion annual giveaway to upper levels of the Fortune '500', as a supposed incentive to conduct the export operations they would have undertaken in any event."

Smaller U.S. businesses, however, need DISC to maintain their export operations. Moreover, DISC has fulfilled its Congressional purpose. Exports, since the passage of the 1971 Revenue Act, have increased; and, along with increased exports, badly needed capital and new jobs are created in the U.S. export industries. At the same time, our domestic corporations have become more competitive overseas and contributed heavily to international cash flows in favor of the United States. In the case of Pertec Computer Corp., we have consciously deferred setting up manufacturing operations overseas, in part because of the benefits of DISC.

In addition to these benefits of DISC, increased tax revenues have been returned to the U.S. Treasury in excess of a pay-back of the original tax advantage granted. For example, the approximately $7–9 billion increase in DISC exports for 1975 produced approximately $1.6–2.1 billion in increased Federal tax revenue. Of that amount, $1.3 billion was temporarily deferred, resulting in a net increase in Treasury revenues of $300–800 million.

Small businesses are creating jobs faster than the very large corporations. As reported in The Washington Post on July 9, 1977, the top 50 corporations only increased employment 0.07 percent between 1969–1974. In fact, 21 of the top 50 companies reduced the number of available jobs. In contrast, small businesses are creating new jobs at an annual rate of at least 4 percent. Pertec, in its 10 years of existence, has grown from 3 people to 2,300. Such growth in jobs should be encouraged by tax law along the lines I am suggesting.

For all these reasons, let's hold on to DISC for small and medium businesses. It is a significant source of capital for the marketing of U.S.-manufactured products in the world markets. Jobs are kept at home; and, as the smaller businesses grow, more jobs are created in the labor-productive sector of the U.S. economy.

The alleged misuses of DISC can be insured against either by limiting DISC to small- and medium-sized corporations (those with capital accounts under $200 million), or permitting deferral up to a stated maximum, or limiting the deferral permitted a given corporation in accordance with its capital account.

Senator BENTSEN. Thank you very much.

Mr. Tomash.

STATEMENT OF ERWIN TOMASH, CHAIRMAN OF THE BOARD, DATAPRODUCTS CORP., WOODLAND HILLS, CALIF.

Mr. TOMASH. Mr. Chairman, I, too, would like to request my prepared statement be made a part of the record.

Senator BENTSEN. It will be done.

Mr. TOMASH. I am Erwin Tomash, chairman and founder of Dataproducts Corp.

Dataproducts is a supplier to the computer industry of computer output printers, machines that take information from a computer and print it out in a form that is readable by human beings. Today, we are the largest independent printer company in the industry. Since the formation of our company in 1962—we just had our 15th birthday a few weeks ago—our annual revenue has grown to over $115 million. Our earnings were $12 million last year on which, by the way, we paid full corporate tax.

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[1] Earnings generated outside the United States from multinational operations are usually not returned to the United States for productive use since they are trapped in the countries of foreign operations by restrictive export controls imposed by the respective foreign governments.

Fifteen years ago we started with eight employees, and today there are approximately 4,000 Dataproducts employees all over the world.

We introduce a new product line about every 3 or 4 years. As a result of our R. & D. effort, we have been able to cut the price of our products about 40 percent each time cycle. Thus a printer which we sold for $20,000 in 1966 cost $12,000 in 1970, and sells for about $4,000 today. We have been able to do that despite living in the same inflationary atmosphere every other company has to contend with.

We cannot truly be said to have a capital problem today. We are a successful, established growth company with a good, solid financial base. As a result, we are attractive to lenders. Funds are available to us from the banks and from institutions such as the insurance companies. I am not here to plead for any special treatment of any kind for our company or companies like us.

I would like, however, to review our financial history and contrast it with that of newer younger companies, many of whom are our customers. These companies aren't quite as fortunate as we are. In particular I would like to discuss the situation of companies that have tried to get started in the period since 1970. You will notice I said "try" because very few have succeeded in getting started in the period since 1970.

In order for us to fund our growth, which has averaged about 30 percent per year compounded, we have required substantial sources of capital. For example, last year we spent about $8 million on research and development. If we are going to supply computer manufacturers all over the world with high technology products (the leadership position of the American computer industry is based on technical superiority) we have got to make that kind of an investment on a continuing basis.

Like any other company, we have three sources of capital: equity, debt, and retained earnings. Over the years we have sold about $20 million worth of securities to build our equity base. The company started in 1962 with $1 million obtained from three venture capital firms. From time to time we have sold additional equity and then each time we were able to follow that with additional debt. First, we would build up the equity base and then we get some more debt financing.

Retained earnings were miniscule in the initial period.

We simply didn't have any retained earnings to speak of. We were investing all our fiscal resources in the building of the company. It is only recently that retained earnings have become a substantial part of our capital base.

Newer companies, companies started only 8 or 10 years ago, and those that have been trying to start since 1970, simply are not as fortunate as we were. They simply have not been able to follow the cycle I have just described in building up their fiscal resources.

Since 1969, it has been virtually impossible for newer companies to build up their equity base. I won't repeat the reasons for this that you have heard this morning. The changes in the tax law from 1969 onward have made it most difficult to raise equity capital the tax law has discouraged investment because of the eliminating of special capital gains treatment. I will mention in passing that the 1976 revisions completed the action. They have eliminated any reasonable capital

gains reward for the private investor and have totally discouraged investment.

Instead of acting to provide incentives, we learn from the newspapers that the President is considering recommending elimination of all special treatment of capital gains. This action would have immediate counterproductive results. Favorable capital gains treatment would provide a necessary incentive for investors to risk their capital. When they invest in industry and try to share in its growth, they help to develop more companies like ours and others that are struggling to grow as we did.

It is true that the President also has suggested the elimination of double taxation on dividends and this indeed may provide some relief. I would point out that this will only benefit the larger companies who do pay dividends. Smaller companies must reinvest their capital and they can't pay dividends.

We, ourselves, have highlighted our 15th year by the initiation of a tiny dividend, the first reward to our investors for their patient faith in the company.

In any case, we cannot trade capital gains tax reform for the elimination of double taxation on dividends. The medicine will not work because the disease is different. If we eliminate double taxation of dividends, and at the same time increase taxes on capital gains, we are going to isolate the small- and medium-sized company further from the capital markets. They are already isolated today and this action will simply assure the lock that the large companies have on the capital markets.

In talking about taxation of capital gains and devising a suitable plan with incentives, I think it is most important that we recognize the capital gains tax rates should be dependent upon the length of time the investment is held.

We should provide an incentive for true investment which is characterized by long-term commitment. I am not here to talk about rewards for short-term speculation.

Such a capital gains tax approach might incorporate a decreasing schedule over something like a decade. In my written testimony I have provided such a schedule. It starts at a 50-percent tax rate for capital gains made in the first year and reduces by steps over a decade to a 20 percent tax rate for capital gains made on an investment held for 10 years.

A roll-over provision, something like that given with housing should be provided. This would permit tax-free reinvestment, if made within 3 months and would be a great encouragement to investors. People would tend to free up locked-in capital gains. If they have been so fortunate as to have a large capital gain, they would free that up and reinvest the money in newer American businesses.

This proposal is the sort of thing that would fuel our economic development. It would particularly aid our growth industries, where new jobs are being created, and provide a reward for the risk that is assumed by the investor.

Treasury Secretary Blumenthal has recently pointed out the great complexity of the Internal Revenue Code that has resulted from the special treatment of capital gains. A quotation from his recent speech is contained in my prepared statement. It certainly sounds to me as if

Mr. Blumenthal is throwing the baby out with the bath water. If the tax law is too complicated relative to capital gains, let's simplify the law with legislation; let's not simplify the law by taking away the benefit of incentives for investing in American business.

Senator Kennedy in his tax reform proposal made the following statement:

A dollar of capital gains income is equivalent in a practical sense to a dollar of wage income. They look the same, they spend the same, and they should be taxed the same.

I respectfully submit that we all know that things that look the same are often not the same. A dollar spent for a bottle of French perfume is not the same as a dollar saved by someone and then invested in machine tools for American industry.

The flaw in Senator Kennedy's argument is that he fails to give credit, fails to recognize, that capital gains comes about only after a risk investment of someone's money. I may add that investment money is a scarce resource worldwide. Americans should be encouraged to save and invest directly and broadly in our industries.

Over the past 15 years Dataproducts has done business with computer manufacturers all over the world, in North and South America, Western and Eastern Europe, and in Japan.

I have personally visited many of these customers, and I have had an opportunity to study the workings of the computer industry worldwide, in detail, and at firsthand.

The two things that emerge clearly are: (1) The industry is dominated by the United States, and (2) nowhere but in the United States has a host of significant smaller companies been spawned.

This is the case because in the past we in the United States had managed to develop an environment capable of growing and nurturing small high technology companies. We in the United States do not have a patent on entrepreneurial talent. Other people in other lands have dreamed of being their own boss and of starting their own business, but in other countries it has remained only a dream. Only in the United States has this dream become a reality, and now this precious dream is rapidly becoming an American illusion.

The statistics speak for themselves. The rate of new company formation has dropped alarmingly. Today, starting a high technology company is a rarity in the United States as well as abroad.

I am here today because I firmly believe we must ask each other: Where are our new industries going to come from in the future? Where are the corporate seedlings that will provide us with new products? Blaze new trails? Open new markets? Create new jobs?

The investment climate has been unfavorable in this country since 1970, and since then we have had a dearth of corporate seedlings and a withering of the industrial growth process.

Senator Kennedy in his tax reform proposal also said:

The aim of tax reform is not to plow up the whole garden, but to get rid of the weeds so that we can let the flowers grow. But, gentlemen, to grow flowers we must first plant the seeds.

Thank you very much.

[The prepared statement of Mr. Tomash follows:]

PREPARED STATEMENT OF ERWIN TOMASH

Mr. Chairman and members of the Committee, I am Erwin Tomash, Chairman of the Board of Dataproducts Corp., which is headquartered in Woodland Hills, California, a suburb of Los Angeles. Dataproducts specializes in making computer printers, machines which accept output of data from a computer and print it in a form that can be read by human beings. Today, we are the largest independent line printer company in the industry. We supply our products to computer manufacturers all over the world who in turn incorporate them into their products and systems. We also have a 23 percent ownership in Data Card Corporation, a company we helped start in Minneapolis, Minn. Data Card is the world's number one manufacturer of embossing and coding machines for credit cards and other types of plactic identification cards.

Since the formation of Dataproducts in 1962, our revenues have grown to well over $100 million, with earnings of more than $12 million last year. Fifteen years ago we started with eight employees. Today, approximately 4,000 Dataproducts people serve our customers worldwide. We are constantly at work to improve our existing products and to develop new ones. Both endeavors require the latest technology plus knowledge of the marketplace and, especially, of the needs and opportunities of our customers. We introduce a new product line about every three to four years and as a result of our R. & D. efforts have succeeded in cutting the price of our products by about 40 percent each time. Thus, despite inflation, our printers which sold for $12,000 in 1970 sell for $4,000 today.

Dataproducts cannot truly be said to have a capital problem, today. As an established, successful, growth company with a solid financial base, we are attractive to lenders. Funds are available to us, both short- and long-term from the banks and institutions such as insurance companies. I am not here to plead for special treatment of any kind for us or companies like us. However, I would like to take a moment to review our financial history and to contrast it with the situation faced by many of our customers who are newer and younger than we are, as well as the situation that prevails for new companies which have been trying to get started these past five to seven years. I said trying to get started because, as will emerge from my remarks, very few have been able to start at all since 1970.

In order to fund our growth, which has averaged over 30 percent per year compounded, a company of our type has required substantial sources of capital. For example, our investment in research and development was about $8 million last year. If we are to supply computer manufacturers all over the world, many of whom have substantially greater resources than we do, such sizeable investments are required on a continuing basis. If we are to help our customers prosper in the competitive computer business, we must stay in the forefront of our specialty.

Dataproducts has three basic sources of capital for funding its commitment to its customers. Our basic source of capital, the foundation on which we have built, is equity realized from the sale of securities. Over the years this has totaled approximately $20 million. It was $1,000,000 of equity capital, raised from a syndicate of venture capital firms, which enabled us to get started in 1962. Our equity was increased from time to time and this, in turn, enabled us to borrow money from banks and, as we matured, from the longer term lenders. Debt financing, then, both short-term and long-term, has followed each of our equity financing steps. At one time a few years ago our debt totaled $38 million.

Retained earnings, miniscule in the first decade of our existence, is our other basic source of capital. Currently, as I said earlier, our equity, retained earnings and debt capacity are more than sufficient to support our growth. Newer companies, not quite as mature as Dataproducts, are not so fortunate.

Until the late 1960's or early 1970's, qualified business organizations were able to obtain financing in a mix of debt and equity which provided stability, both for the organization and the economy. Also at that time, because businessmen had the alternative of turning to equity markets for financing, borrowed capital was obtainable at a reasonable interest cost.

Since 1969, however, changes in the tax laws have methodically eroded traditional incentives for investment in marketable securities. In 1969, the Tax Reform Law abruptly upset the balance between personal private investment and consumer spending by increasing capital gains taxes from 25 percent to a 35 percent maximum. At the same time, the 1969 Tax Law increased the risk of any investment by 100 percent by permitting only a 50 percent write-off of capital losses. The Tax Reform Act of 1976, with its minimum tax and tax preference provisions relative to capital gains, has all but eliminated reasonable after-tax

rewards for the private investor. There is no question but that taxation has adversely altered the traditional risk-reward balance discouraging investment in our private industries and our future economic growth.

The President is seriously considering elimination of all special capital gains treatment instead of acting to provide incentives for continued and new investments in our Nation's industries. This action would have immediate and counterproductive results. On the other hand, favorable capital gains treatment would provide a necessary incentive for all investors of capital to contribute toward and share in the growth potential of the U.S. economy. The President is also considering the elimination of the double taxation of dividends, and this may indeed provide some relief; however, such tax reform would tend to benefit only the larger companies that are able to pay dividends. Certainly, if dividends were treated as a deductible expense, as is interest on borrowings, equity capital would be more competitive with debt equity.

But in any case, we certainly cannot trade capital gains reform for the elimination of double taxation of dividends, as was reported to be President Carter's intention in a July 6, Wall Street Journal article. Growth companies cannot afford to pay out substantial dividends, if indeed they can pay them out at all, since the earnings before any declaration of dividends must be used to finance growth. The elimination of favorable treatment of capital gains would further isolate the small- and medium-sized companies from the capital markets, and with dividend deductions available to the larger companies, the capital drawing power of the large corporations over the financial markets would be assured.

In devising a suitable plan for treating capital gains, one should first recognize that the capital gains rate should be dependent upon the length of time the investment is held, since an incentive should only be provided for true investments which are characterized by a long-term commitment. The advantage of encouraging investment funds placed for the long term is that the equity markets are provided an increased degree of stability, with no reward for short-term speculation.

Furthermore, in view of the dearth of capital funds available to small- and medium-sized businesses, a measure of incentive should be provided so that existing concentrated investments in large corporations would be distributed enabling smaller corporations to have equity funding available to them.

Such a capital gains taxation measure could be implemented in accordance with the following schedule:

Length of investment holding:	*Investment gains maximum tax rate, percent*
0 to 1 year	50
1 to 2 years	47
2 to 3 years	44
3 to 4 years	41
4 to 5 years	38
5 to 6 years	35
6 to 7 years	32
7 to 8 years	29
8 to 9 years	26
9 to 10 years	23
Over 10 years	20

A "rollover" provision should also be included in any such legislation which would allow investfent funds from the sale of corporate securities to be transferred on a tax-free basis, provided that such funds are reinvested within a 3-month period in smaller companies. Upon a sale of securities where the rollover provision is not satisfied, the investment gains would be taxed in accordance with the rate established for the length of the investment holding, tacking together all prior investment periods which continuously met the tax-free conditions.

This proposal is representative of the type of capital gains tax reform essential for refinancing our capital markets, which in turn will fuel continued economic development, particularly that of our growth industries. I believe that my proposal provides the balance of risk and reward which does, in fact, exist over time. A tax-free exchange of assets, under the rollover provision is a reasonable reward in view of the continuing risk assumed by the investor in committing his appreciated funds.

The rollover provision works in tandem with the tax schedule, as I have already described. The reason for this is two-fold. First, it must be recognized

that a minimum tax be paid on investment gains at some time. Second, there must be reasonable exit terms from an investment for an investor to commit his funds in the first place. An investment tax rate based on long-term holdings provides the investor with a glimmer of light at the end of the investment tunnel.

Treasury Secretary Michael Blumenthal defended President Carter's intention to eliminate the existing treatment of capital gains with the following argument:

"Forty-one sections and fifty-one subsections of the tax code are devoted to capital-gains taxation. And efforts to convert ordinary income into capital gains are probably the largest area of tax planning leading to many activities of little or no social value but productive of ample private gain."

It sounds to me as if Mr. Blumenthal is throwing the baby out with the bath water.

If the tax laws are too complex relative to capital gains, and perhaps they are with the multiple forms of tax on capital gains implemented by the Tax Reform Act of 1976, then legislation should simplify those laws in accordance with the framework I have suggested to you today. In this context, we should begin to speak of an investment tax, rather than the broader term, "capital gains tax."

In addition to what I have already said in support of favorable capital gains treatment, I would also like to offer the following for your consideration. Mr. Norman B. Ture, an economic consultant in Washington, D.C., reported in the Wall Street Journal on June 21, 1977, that labor receives two-thirds to three-fourths of the additional income generated by additional capital. The benefit to labor comes not only in the form of increased wages and benefits, but also in the form of increased jobs in the private sector which would go a long way to reducing the nation's current high level of unemployment.

Senator Edward Kennedy, in presenting his tax reform package on July 1, 1977, argued that there was no justification for special treatment of capital gains in current law. He stated:

"A dollar of capital gains income is equivalent in a practical sense to a dollar of wage income. They look the same, they spend the same, and they should be taxed the same."

I respectfully submit that things that look the same are often not the same. The flaw in Senator Kennedy's argument is that he fails to recognize that capital gains comes about only after a risk investment of someone's money. And I need hardly add that investment money is a scarce resource. Americans should be encouraged to invest directly and broadly in America's industries. Expressed in terms an economist might use, money has a utility value in accordance with its use, which transcends the depreciating value of the dollar.

I urge that Congress act to strongly encourage the flow of monetary funds away from consumption toward investment in our future. Do any of us really believe that we should predicate national policy on the basis of a day-to-day, hand-to-mouth existence? We must face the fact that the flow of investment dollars has slowed to a trickle, and will disappear, if incentives are not offered to balance the risks associated with investments.

Over the past fifteen years, Dataproducts has done business with computer manufacturers in North and South America, Western and Eastern Europe, and Japan. In visiting our customers, I have had an opportunity to study the workings of the worldwide computer industry in detail and at first hand. Two simple facts emerge clearly:

1. The U.S. dominates the field of electronic computing worldwide.
2. Nowhere but in the U.S. has the industry spawned a host of significant smaller companies.

This is the case because the United States had managed to develop an environment capable of growing and nurturing the smaller, high technology companies. We do not have a patent on entrepreneurial talent. Other people in other lands have dreamed of being their own bosses and of starting their own businesses. Only in the United States has this dream been a reality, but now this precious dream is becoming only an American illusion.

The statistics speak for themselves. The rate of new company formation has dropped alarmingly. Today, starting a high technology company is a rarity in the United States as well as abroad. I am here today because I firmly believe that someone must ask from where our nation's new industries will spring in the future. Where are the corporate seedlings which will provide the new products, blaze the new trails, open the new markets, and create the new jobs?

The investment climate in this country has been unfavorable since 1970. Since then we have had a dearth of corporate seedlings and a withering of the industrial growth process. Senator Kennedy has also said, "The aim of tax reform is not to plow up the whole garden, but to get rid of the weeds so that we can let the flowers grow." But, Gentlemen, to grow flowers, we must first plant the seeds.

Senator BENTSEN. Thank you very much, Mr. Tomash, Mr. Poppa, and Mr. Biddle.

You have obviously given a lot of thought to your testimony. I think you have made some very valid points.

One of the problems you run into in the drafting of tax legislation is you don't have any risk-takers down there helping you draft it. You don't have many people of the entrepreneurial nature down there drafting.

It is not the nature of the person. That is a difficult thing for them to understand. Risk ventures and the fear of people losing their capital, unless they see a commensurate reward possibility that if they succeed they get to keep the significant part of it, they are not going to do it.

They are going to put their money in tax-free bonds, high-interest rate securities. It is difficult to get that point across to them.

But we have officers and entrepreneurs who are in front of us who have won and who have been very successful.

You fellows are the ones that make the headlines and make the stories. I am always reminded of the winner of the daily double on the sports page, when they get a big payoff, they really build that up, but I can't help but think of what the floor looks like out at the racetrack with all the torn-up ticket stubs, those fellows that never got to the payoff window.

That is certainly true in small business.

Mr. Poppa, you were talking about DISC corporations, and I think DISC corporations will be under serious attack in whatever is proposed.

One of the problems is trying to really decide how much incentive is there and how much result is there from the incentive.

I have had people from the multinational corporations come in and testify to me about how much their jobs were thrown back in the United States while they went overseas and used the DISC corporations.

I always questioned those figures. Those companies were generally the more aggressive and some of the ablest in management and I wondered how much result they would have had if they had not had DISC.

You get into a subjective judgment there.

You have proposed that possibly we have some kind of criterion where it applies to smaller corporations where it encourages them to go into the overseas business and exporting, and that intrigues me. We might be able to approach it on, say, the first half million of profit on overseas business, some such thing, and apply it to all companies be they large, small, middle sized.

But, that would help provide the seed corn to encourage the small company to sell overseas and get started, and obviously that must be expensive, getting started in your sales overseas.

Mr. BIDDLE. Senator Bentsen, part of our concern there was expressed by one of our member chief executives in Dallas a couple of weeks ago. He said that he "had been reading in the papers that it

looks like Congress will throw DISC out and we have started looking into building a plant in Ireland."

"We have held off, we wanted to keep our people employed in Texas, but we have no choice." The dominant company in our industry manufactures overseas what it sells overseas, our member companies manufacture here what they sell overseas.

The solution is to get people working and paying taxes, people in this country, not in France and Germany.

Mr. POPPA. We are constantly reexamining the need to go overseas ourselves and this past year, when it appeared this would be killed entirely, we sent a task force to Ireland (also toured England and Belgium) looking for a plantsite. When it appeared that it would be saved for the time being, though it was diminished in its effect, we held off again.

But, if we lose the DISC altogether, we will in effect be economically forced to service our European markets by moving into Europe.

That is inevitably a loss of jobs, even though we may not lose jobs here in the United States as we grow, it means we will not create jobs in the United States. We will create them overseas. I know that is a subjective problem.

I have tried to analyze it myself, how important was it to us that we had DISC. It was one of a number of elements but it is clearly one of the elements, it was not something we used as frosting on the cake. It was a key ingredient of that decision.

Senator BENTSEN. Gentlemen, how do you dramatize that? How do you get it across?

Mr. BIDDLE. Senator, one of the things I am hoping and we are proposing a conference in the fall and we hope to bring together selected leaders from industry, labor, academia, in fact, we have sent an invitation to you to keynote it, if you would, to tell a broad cross-section of national leadership, that one, your peer group on the Hill does not understand these problems to the extent they should, and, two, we as businessmen have a job to help labor leaders understand that we are in this boat together.

If we don't solve the capital formation problem, it is their problem as well as ours. Business and labor must work together to create American jobs, to get American people working, productive, and saving, because frankly the more we see of the future of the social security system everybody had better start taking care of themselves and that is only through long-range investment.

Senator BENTSEN. One way or another we will take care of the social security system. But, I think your point about it being business and labor's mutual problem is a very valid point. There are a lot of folks, however, in labor that think you have some kind of rip-off going, and they just don't believe you.

I think it requires more communication. It means that you are going to have to reach out and try to establish some kind of communication and develop a confidence and understanding of your problem.

That is not going to be easy. It will take a lot of effort on your part. As a practical matter, if you get business and labor together on one of these issues, you will win. If not, it is going to be swimming upstream. Thank you very much, gentlemen.

Mr. Morgenthaler, will you come forward?

We are very pleased to have you here today.

STATEMENT OF DAVID T. MORGENTHALER, PRESIDENT, NATIONAL VENTURE CAPITAL ASSOCIATION, WASHINGTON, D.C.

Mr. MORGENTHALER. Senator Bentsen, it is a pleasure to appear before you.

Senator BENTSEN. It is good to see you again.

Mr. MORGENTHALER. My name is David T. Morgenthaler, and I am the current president of the National Venture Capital Association.

Our approximately 70 members include most of the venture capital firms in the United States and a number of the small business investment companies. Members of our association provide capital for the majority of emerging innovative companies in the United States.

When we are fortunate they turn out to be like the two companies that have been represented before us this morning, and at those times the public is happy to buy their stock and share in their future.

When things don't go so well, our member firms struggle to have our companies and to find financing to give them the time and the resources necessary to work out their problems.

Ultimately, if things go very badly, we eat our losses alone.

One of the characteristics of appearing as a late witness is that many of the good things that you are going to say have been said by the witnesses before you, which is very encouraging to me in that hopefully if we are all believing these things they are more likely to be right.

Senator BENTSEN. I was reminded when you were talking about eating your losses alone, it reminds me of the same problems shared by the fellow who runs for public office. He runs a campaign, he has a deficit, if he wins they have a big dinner and they pay it off. If he loses, he eats it alone.

Mr. MORGENTHALER. Beginning a campaign, Mr. Chairman, must be very much of a venture capital activity.

Our association has a number of specific tax revision proposals which we will submit as a part of the record, and I won't take the time of this committee by detailing them here. I would like to make a few brief remarks, however.

If every small business in the United States could afford to hire one additional employee, the unemployment problem would be solved. The Bureau of the Census tells us that there are approximately 4.1 million businesses reporting 1 or more employees for social security purposes, not including Federal workers, self-employed, or agricultural employees. According to these statistics, there are less than 3,000 business establishments employing 1,500 people or more.

These smaller businesses employ more than one-half of all workers, and produce almost half of the business output of our country. Yet, when most people think of business as a category, it is the several thousand large businesses that are thought of, not the 4 million smaller businesses, or the millions more that are self-employed.

Everyone is instinctively in favor of smaller business. It is a very American kind of activity. Our country was built up by people being able to go into farming or business for themselves, and going as far as their energy, their dreams, and their luck would take them. Small business would seem to have no natural enemies beyond normal business risks.

Yet, today there are strong forces in our society acting to place more obstacles in the path of smaller businesses than anyone intended. Our more complex society requires more capital today to start a business, because more of everything is needed.

Inflation makes everything cost more. Higher interest rates make money cost much more, when it is available at all. Complying with government regulations both costs more and demands time and energy badly needed for the day-to-day problems of smaller businesses. Higher management skills are required to compete against larger businesses with their economies of scale, lower cost of capital, and more diversified product lines and markets.

And we are burdening our smaller business just when we need them most. Larger businesses can raise the capital to automate to meet increasing demands for their products, where smaller businesses are more likely to hire additional people. This is detailed in the MIT Development Foundation study included in the National Venture Capital Association paper entitled, "Emerging Innovative Companies—An Endangered Species."

A case is cited in which six of America's largest companies increased their sales by $16 billion over a 5-year period, while increasing their employment by only 25,000 workers, while five companies whose combined total revenues were approximately one-fortieth of the larger companies increased their employment by 34,000 people in the same time period.

Smaller businesses must be more responsive to price competition, helping to fight inflation. And they must be more innovative to meet the wider range of competition they face from other companies, both large and small. This point is illustrated by an interesting experience which we have had at one of our companies which we financed from a two-man startup in 1969, and which is today the most successful company in its field. I recall well the problem in raising the capital to start the company, the desperate problems in getting additional capital for it in the dark days of 1970 when the recession was on, when the stock market had fallen and venture capitalists everywhere were trying to save the companies.

Today that company has become very successful and the leader in its field. We had to compete against the giants when we began. Today it is rather funny because it is the giant of its field, and the companies that we are most concerned about are the new companies who are innovative in our business. They compete with new technology and new ways of doing things, while our company is now married to much of its software and the techniques that it has built up in the last few years.

In other words, the threat to it today is not from the giant companies but from the new, smaller companies that will do exactly the things that we did 8 years ago.

The National Venture Capital Association offers a program of tax revision to encourage the formation and growth of new, small businesses:

1. Defer capital gains tax liability arising from the sale of a qualified small business investment to the extent that the proceeds are reinvested in one or more other qualified small business investments within 24 months. The principle is the same as the tax deferral on the proceeds from the sale of a residence if invested in another home within a limited period.

2. A sliding scale for capital gains tax rate for longer term qualified small business investments. We are aware of much thinking toward a uniform tax rate, and we are certainly sympathetic to any simplification of the tax system.

However, if we are to attract the capital to create the additional jobs our society needs, the strongest possible incentive should be given to investors to put their money in smaller businesses and leave it there to finance growth, rather than demanding dividends, interest, or a sale as soon as possible.

3. Provide a permanent tax credit of $2,100 per employee for each net new employee hired by a small business with no limitation on the amount of the credit.

I have seen questions about this proposal from larger businesses. But what is more important in America today than to put to work the several million Americans who are unemployed—those above and beyond the number we normally regard as fractional unemployment? I can't think of anything more important, and I can't think of any better place for these people to work than in the smaller businesses where they are closer to the managers of the business, closer to the owners of the business, and are much more apt to get the attention that many of the people who are difficult to employ need.

Senator BENTSEN. I introduced, I believe, the first one of those pieces of legislation in the Senate and was pleased to see it brought to fruition, but it is very vigorously opposed by Treasury.

Treasury doesn't think it accomplishes its objectives and would not be the incentive. They are going to very vigorously monitor it and try to prove it was wrong.

I have also advised them that I don't want to see them take the same approach they took on the dollar checkoff on public financing of the Presidential campaign.

That one, when they put out the income tax return, you had to write in for a special form to fill out to check off your dollar.

We finally took action here in the Congress to force it to be put on the first page in a little block where you check it off.

I hope the small business associations and the venture capital associations will really publicize this idea and get it across to their membership. I promise you if they don't, and if we can't show it is effective, we will lose it.

Now, we have made some strides in putting it into effect, but we didn't get all that you wanted in that regard, but we will lose what we have unless we can prove that it is effective.

I could not agree more that I would like to see these unemployed people put in the private enterprise system and hopefully permanent jobs and jobs that pay reasonably well; and that is a lot better than seeing them put in some leaf-raking job or some public service job or some dead-end job; but let's get the message across to the venture capitalists and the small businesses across this country.

Mr. MORGENTHALER. We are delighted to hear that, Mr. Chairman, and we will certainly disseminate it to our members.

Our fourth proposal would be to amend the tax code to allow a key employee of a small business who is the recipient of an incentive stock option to defer payment of tax from the exercise date of the option to the earlier of the year of sale of the underlying stock or 10 years after the grant of the option.

The first revision will serve to make more capital available to be invested in smaller businesses; the second will induce investors to leave capital in the businesses as needed to support growth, and then make it easier to sell and recycle the capital. The third will strongly encourage small businesses to hire new workers and help provide capital to finance jobs for them. And the fourth will help attract the managers without which small businesses cannot survive and grow.

Our proposals are detailed in the attached document.

I appreciate the opportunity to testify before you, and I would be delighted to try to answer your questions.

[The attachment to Mr. Morgenthaler's statement follows:]

A Program of Tax Revision Proposals To Enhance Capital Formation for Small Business[1]

The broad objective of the following program of Federal income tax revision proposals is to encourage the formation and growth of new small businesses in order to encourage innovation, to develop technology and to stimulate employment.

This program is presented by the National Venture Capital Association as an addendum to its position paper "Emerging Innovative Companies—An Endangered Species." As discussed in the position paper, these small to medium-sized companies, which make a disproportionately large contribution to job creation and production of federal tax revenues, are denied access to traditional sources of capital at reasonable cost and are either constrained in their growth or penalized for it. The proposals set forth below would increase the availability of external investment capital for such companies, allow additional internal financing of growth through some increased cash flow and allow these companies to attract and motivate key personnel. The impact of this program on federal tax revenues would be more than offset by the benefits of an increase in private sector employment and the future tax revenues generated by increased economic growth.

Capital investment is the most powerful job creator in a free enterprise system, with each dollar of investment contributing several times its value to economic activity and employment. The most meaningful incentive to capital investment is a substantial differential between the rate of tax paid on realized capital gains and that paid on ordinary income. With the sizable differential, corporations are encouraged to retain and reinvest their earnings in new plant and equipment rather than paying earnings out in the form of dividends because shareholders then prefer such reinvestment and the resulting increased value of their stock as opposed to dividend income. During the 1950's and 1960's when capital gains were taxed at 25 percent and dividends and interest were taxed at rates as high as 91 percent the United States became the most powerful industrialized country in the world. In recent years the differential between capital gains and ordinary tax rates has been decreasing (capital gains rates are now as high as 50 percent for individuals and ordinary income rates are at a maximum of 70 percent) and, logically, we have seen an erosion of capital investment.

Certain of the proposals in the program set forth in this paper seek to restore a substantial differential between capital gains and ordinary tax rates for investments in small businesses with the obective of stimulating investment by shareholders in smaller, growing companies and, in turn, stimulating these companies to expand rapidly and create new employment opportunities. It is only through such a constructive program of tax incentives that the future of our free enterprise economy, and the place of smaller more aggressive companies in it, can be assured.

I. Qualified Small Business Investment Capital Gains Tax Deferral

Proposed Legislation: Amend the tax code to provide for a deferral of capital gains tax liability arising from the sale of a qualified small business investment to the extent that the proceeds of the sale are reinvested in one or more other Qualified Small Business Investments within the 24 months after the sale. A Qualified Small Business Investment is defined as a security or securities pur-

[1] Prepared by the National Venture Capital Association, May 23, 1977.

chased directly from a Small Business. A Small Business is defined as any corporation, partnership or proprietorship having less than 1,500 employees.

Existing Legislation: Capital gains arising from the sale of securities are taxed in the fiscal year of sale.

Commentary: There is presently a shortage of capital for Small Businesses which is heightened by the current tax law that provides a disincentive to investors to roll over their portfolios by taking away a portion of the proceeds when a sale is made. A Qualified Small Business Investment capital gains tax deferral would provide proper incentives to investors in Small Businesses to roll over their portfolios more often and to reinvest the proceeds of a sale in other Small Businesses. The federal government would not lose tax revenue under this proposal; it would merely defer receipt of the revenue as long as the funds were being put to a productive and socially desirable purpose.

The enactment of this proposal would also reduce the Internal Revenue Code's inducement to owners of independent businesses to sell out (when they wish to sell out) to large corporations, whose shares are actively traded, in tax-free reorganizations so that they can postpone the capital gains tax on the sale. Under the proposal urged here owners of independent businesses whose investment was made while the business had less than 1,500 employees could sell the business to any buyer or group of buyers for cash and postpone the capital gains tax by reinvesting the cash in another business or businesses that had less than 1,500 employees within the two years following the sale.

II. SLIDING SCALE FOR CAPITAL GAINS TAX RATE FOR LONGER TERM QUALIFIED SMALL BUSINESS INVESTMENTS

Proposed Legislation: Limit the total tax on capital gains realized by any taxpayer on sales of Qualified Small Business Investments (as defined in proposal I. above) to a rate of 30 percent if the investment is held for less than five years, 25 percent if it is held for 5 years or more but less than 10 years and 12½ percent if it is held for 10 years or longer.

Existing Legislation: Currently capital gains are taxed at 30 percent for corporations and at rates up to 50 percent for individuals with no differentiation in holding period other than that required to qualify as a capital asset.

Commentary: It requires a considerable number of years and substantial risk to start a business and bring it to a level of sustained financial independence. Adjusting holding periods and capital gains rates with respect to Qualified Small Business Investments would encourage investors to invest in Small Businesses and to retain their investments in Small Businesses for longer periods and thus reward the financing and continued support of new businesses. These investors would be more interested in capital gains than current income and hence would encourage the businesses to plow back their earnings to achieve greater growth rather than disbursing their earnings to pay greater dividends. The plowing back of earnings by young businesses is an important source of capital investment in this country. The increased capital investment that would result from this proposal would help create thousands of jobs and build the country's tax-base to the point that would more than compensate for the capital gains tax revenues lost. Furthermore, the disincentive to sell a qualified Small Business Investment after the investment had been held for a lengthy period of time would be substantially reduced.

III. SMALL BUSINESS JOB CREATION TAX CREDIT

Proposed Legislation: Provide a permanent tax credit of $2,100 per employee for each net new employee hired by a Small Business (as defined in proposal I. above) with no limitation on the amount of the credit and with a carryover from year to year for amounts of the credit earned but not yet used to offset tax liability. Net new employment would be defined as the increase in the average number of full-time employees from one fiscal year to the next. Average employees would be computed by averaging the number of full-time employees at each payroll period during the fiscal year.

Existing Legislation: President Carter has just signed into law a tax bill containing a temporary (for the years 1977 and 1978 only) tax credit for employers of $2,100 per employee for each additional employee hired after the employer's payroll has grown 2 percent from the previous year. The employer's normal deduction for wages must be reduced by the amount of the

employment tax credit, and there is a limit of $100,000 upon the amount of employment tax credit claimable in either year.

Commentary: An increase in private sector employment is the only permanent, productive way to solve our country's unemployment problem. A stronger job creation tax credit for Small Businesses would both provide an incentive to young companies to hire additional workers and increase their cash flow (through reduction of tax) to fund business growth. Loss of federal tax revenue should be more than offset by the increased transformation of unemployed workers supported by public assistance into productive, tax-paying private sector employees. There is no reason to put a maximum limit on the amount of the proposed credit that can be claimed in any one year. A $100,000 limit restricts the number of new employees for whom the benefit can be claimed to approximately 50. There is no need to adopt this limit for Small Businesses, which should be encouraged to grow as fast as their businesses permit and which in any event no longer qualify for the proposed credit after they have reached 1,500 employees.

IV. SMALL BUSINESS INCENTIVE STOCK OPTIONS

Proposed Legislation: Amend the tax code to allow a key employee of a Small Business (as defined in proposal I. above) who is the recipient of an Incentive Stock Option, and who does not elect to be taxed in the year of grant on the then value of the option, to defer payment of tax from the exercise date of the option to the earlier of the year of sale of the underlying stock or ten years after the grant of the option. Only key employees of Small Businesses would be eligible to receive Incentive Stock Options. If the option were exercised while the issuing company had less than 1,500 employees, the stock so purchased would be a Qualified Small Business Investment eligible for the benefits of proposals I. and II. above. The taxation of ordinary stock options would not be affected.

Existing Legislation: The Tax Reform Act of 1976 eliminated the Qualified Stock Option. Under current law an employee who elects not to be taxed in the year of grant at ordinary income rates on the then value of a stock option and who subsequently exercises the stock option is taxed in the year of exercise at ordinary tax rates on the difference between the exercise price and the market value at the date of exercise.

Commentary: Smaller companies depend upon stock incentives to attract and retain key employees as they cannot afford the high salaries paid by larger companies. The current law unduly penalizes key employees of small companies who often must sell optional stock at the time of option exercise in order to pay the required tax, yet are unable to sell the stock obtained from exercising the option due to the limited or illiquid market for the stock. NVCA's proposal does not suggest a reduction in tax (other than as provided by proposals I. and II.) but merely a deferral of the tax until the employee is able to sell his stock to generate cash to pay the tax.

Senator BENTSEN. I appreciate your testimony very much.

Of the various forms of consolidation or integration of business income dividends, there are several proposals. They can have a dramatic difference in their impact.

I understand that a lot of large business has suddenly decided they are not sure they would like it.

I believe one of the witnesses was saying this morning, perhaps it was Mr. Hughes, that business, that the Conference Board came out with a statement against it.

Mr. HUGHES. The Business Roundtable is composed of a group of the Nation's largest companies.

Senator BENTSEN. The Business Roundtable has questioned the effectiveness of it. For many years a part of the business rhetoric has always been the problem of double taxation. All of a sudden we are getting a great diversity of opinion from business.

One of the approaches that was recommended was that you have the deduction of dividends as you do on interest.

Another proposal is that you give credit to the recipient of the dividends for the tax the corporation is paid.

Have you given any thought to this as to which you think is the better of the proposals, and why?

Mr. MORGENTHALER. Senator Bentsen, our group has deliberately not taken a position on the elimination of the taxation on dividends because, first of all, we feel that our expertise lies in the newer, smaller businesses, which in general are not in a position to pay dividends.

They are growing rapidly enough that they need to retain all of their income as a principal source of capital to finance their growth, if they are to be able to maintain the 25- or 30-percent compounded growth that you have heard of this morning and which most of our enterprises try to accomplish.

Many of these companies are simply not in a position to pay dividends for years to come. If the double taxation of dividends were eliminated, it would probably make the securities of larger businesses relatively more attractive to investors and put the smaller businesses in a somewhat more difficult position to compete for the capital.

However, I simply could not bring myself to talk against the elimination of taxation on dividends.

We have all believed for so long that investors need more incentive to put their money into business in one form or another, rather than putting money into some current consumption which basically does not provide enduring jobs so that I simply have to support the elimination of double taxation of dividends.

I don't think we have studied the subject sufficiently to choose among the alternatives that you listed, and have confidence in our choice.

Senator BENTSEN. I understand the problem of a young corporation not paying dividends. Another fellow and I started a company about 20 years ago and I haven't had a dividend yet. It is growing just great, doing fine.

I appreciate very much your testimony and it has been helpful to us and we will have a couple of more days of hearings in developing some additional points.

Thank you very much.

That will conclude our hearing this morning.

[Whereupon, at 11:50 a.m., the subcommittee recessed, to reconvene at 10 a.m., Thursday, July 14, 1977.]

22-686—78——9

THE ROLE OF FEDERAL TAX POLICY IN STIMULATING CAPITAL FORMATION AND ECONOMIC GROWTH

THURSDAY, JULY 14, 1977

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON ECONOMIC GROWTH
AND STABILIZATION
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10:13 a.m., in room 1202, Dirksen Senate Office Building, Hon. Lloyd Bentsen (cochairman of the subcommittee) presiding.

Present: Senator Bentsen.

Also present: John R. Stark, executive director; Louis C. Krauthoff II, assistant director; Richard Boltuck, Thomas F. Dernburg, William A. Cox, Kent H. Hughes, and Katie MacArthur, professional staff members; Mark Borchelt, administrative assistant; and Charles H. Bradford, Stephen J. Entin, M. Catherine Miller, and Mark R. Policinski, minority professional staff members.

OPENING STATEMENT OF SENATOR BENTSEN, COCHAIRMAN

Senator BENTSEN. The hearing will come to order.

The administration's economic targets for 1981 call for a reduction of the unemployment rate to 4¾ percent, a reduction in the rate of inflation to 4.3, a balance of the Federal budget with a Federal expenditure equal to 21 percent of GNP.

Those are some tough targets. They are going to be difficult to reconcile and achieve, but I am sure there is agreement we should be moving in the directions indicated by the targets.

Chairman Schultze of the Council of Economic Advisers has conceded that the attainment of the targets will require extraordinary strength in the private sector of our economy and in particular nonresidential fixer investments must grow at the rate of 10 percent in real terms and for 5 successive years if the targets are to be achieved.

In the next year and a half, Congress and the administration will be undertaking the difficult task of formulating and enacting major tax reform legislation. One of the objectives of that legislation will be to overcome the lagging performance of capital spending, to raise investments up to levels required to achieve our employment and budgetary targets.

The stimulation of capital formation is one major aim, objective of the tax reform. Another objective that we consider important is tax

simplification. Still a third is to make our tax system more equitable, and sometimes those objectives are in conflict.

In the last two days we have heard from former I.R.S. commissioners and from private individuals with experience in raising venture capital, and today it is the turn of the economists to present their views.

I am very pleased to welcome to this hearing five distinguished economists, all of them experts in the problems of taxation and capital formation.

Our witnesses are Professor Martin Bailey, University of Maryland; Professor O. H. Brownlee of the University of Minnesota; Professor Robert Eisner of Northwestern University; Professor Martin Feldstein of Harvard University; and Professor David Meiselman of Virginia Polytechnic Institute.

Mr. Bailey, we will start with you.

STATEMENT OF MARTIN J. BAILEY, PROFESSOR OF ECONOMICS, UNIVERSITY OF MARYLAND

Mr. BAILEY. Thank you, Senator.

The taxation of the income from capital by the present tax structure in the United States has two notable effects: It reduces the rate of capital accumulation, and it misallocates the capital that we have. The first of these two effects has the further effect of lowering the rate of economic growth, and the second reduces the current real national product. Our best estimates of the sizes of the two effects suggest that they are comparatively small at any one time, but that their cumulative effect over a generation or more is substantial.

After a summary statement on the second effect, that concerning resource allocation, I will concentrate primarily on the first, because of its larger cumulative effect. The resource allocation effect arises because of what students of public finance call "horizontal inequity," the unequal treatment of equal incomes from different sources. The most significant cases result from special treatment in the income tax laws of incomes from real estate, from farming, and from long-term capital gains.

Whereas in the eyes of the reforming tax lawyer these special provisions are inequitable loopholes, in the eyes of efficiency-oriented economists they are inducements to waste. High-income taxpayers crowd their investments into the activities favored by these provisions, driving down the relative prices of the affected goods and services, such as beef, orchard crops, and housing. These taxpayers seeking tax shelters get very little net benefit for their efforts, but instead find the apparent benefits eaten away by competition. This competition cheapens some goods and services while making the rest relatively expensive, and through this distortion reduces overall economic efficiency.

In its overall impact this set of special provisions also reduces the true progressivity of the tax system below that announced in the nominal rate schedule of the personal income tax. In so doing it moderates the second impact of the system relating to capital accumulation and

economic growth.[1] All the special provisions or "loopholes," including those relating to farming, real estate, and capital gains, have this combination of effects, so that the immediate harm that they do can be said to be partly offset by a longer run benefit. However, it would be possible to have the benefit without the harm, by using general, broadly neutral provisions to encourage capital accumulation without encouraging misuse of the capital we have.

The owners of capital pay a wide variety of taxes on their income and their spending; of these taxes the largest single item is the corporation income tax. My estimate, based on unpublished U.S. Treasury data, is that the combined weight of all taxes takes about 45 percent of the income from capital. The bulk of capital is owned by persons in the high-income tax brackets; hence, it is evident that the moderating effect of special provisions in the tax law, relative to the nominal progressivity of the personal income tax schedule, is substantial.[2]

Nevertheless, despite this moderating effect, the tax impact is large, and it has an appreciable impact on growth. In estimating the share of the income from capital taken in tax, I disregard possible shifting of these taxes to income from labor and land, and hence do not try to address the question of ultimate incidence. It is entirely appropriate in this context to consider only the initial impact and not eventual incidence, because shifting comes about only insofar as taxes retard capital accumulation. If none of the taxes were shifted, there would be no effect on capital accumulation; if they were all completely shifted to labor and land, it would be through a large effect on accumulation proportional to the initial impact. In order to estimate the effect of taxes on capital accumulation, we need the initial impact, not eventual incidence.

Another way to state the tax impact on capital is in terms of rates of return. Before taxes, the average rate of return to all capital in the United States is between 10 and 15 percent per year; after all taxes, this rate of return is between 6 and 8 percent per year.[3] Taxes reduce the rate of return by almost half. The inducement to save is therefore considerably reduced.

In my classes I present calculations showing the retirement annuities a young couple could look forward to if they could receive and keep, net of tax, a rate of return of 10- or 13-percent compounded, compared to what they can have at 5 or 6 percent. The difference is spectacular, and it implies an enormous difference in the inducement to start and maintain a long-term savings program. Therefore, I find it hard to understand those economists who claim, without benefit of evidence, that this inducement has little effect on saving and capital accumulation in the United States.

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[1] For a full technical discussion of these effects, see my article, "Progressivity and Investment Yields Under U.S. Income Taxation," Journal of Political Economy, vol. 82 (1974), p. 1157.

[2] See Joseph A. Pechman and Benjamin A. Okner, "Who Bears the Tax Burden?" (Washington, D.C.: The Brookings Institution, 1974).

[3] See Arnold C. Harberger, "On Measuring the Social Opportunity Cost of Public Proceedings of the Committee on Water Resources and Economic Development of the West: The Discount Rate in Public Investment Evaluation (Western Agricultural Economics Research Council, Denver, 1968). I use a higher after-tax rate of return than Harbergers, based on the Treasury data. See also Martin Feldstein, "National Saving in the United States," Discussion Paper No. 506 (October 1976), Harvard Institute of Economic Research.

In fact, there are several careful econometric studies aimed at measuring the "substitution effect" between present and future consumption, which is the pertinent elasticity concept for estimating the impact of taxes on capital accumulation. Although these studies differ in their methods and to some extent in their estimates, they broadly agree that this effect is statistically significant and works in the direction that I have indicated.[1]

The elasticity of national saving with respect to the interest rate coming from these studies is at least 0.2 or 0.3 and perhaps higher: in 1977 these elasticities, combined with the interest rates mentioned earlier and the current level of saving, imply that removing the tax burden on new saving would increase personal saving by at least $12 to $24 billion. At a time of full employment we can expect that the total private saving will come to 8 or 9 percent of net national product, under the present tax system; this year, still a recession year, the figure will be only about 6½ percent. Removing the tax burden on new saving, so that the saver could get the pretax rate of return on investment, would increase these percentages by 1 or 1½ percentage points, to 7½ or 8 percent this year, and to 9½ or 10 percent in a year of full employment. These effects look small, but over a period of several decades they would mount up.

Suppose that the effect on saving would be to increase it by 1½ percent of net national product, and that the social real rate of return to the consequent investment would be 0.1 or 10 percent. Then the annual growth rate of real net national product would increase from its past average of about 3½ percent per year by 0.15 percent, to 3.65 percent per year. Then after 30 years the level of net national product would be 4.6 percent higher than it otherwise would have been, because of this extra growth. After two generations the level of net national product would be 10 percent higher.

These estimates are based on the assumption that only personal saving, and not total private savings, responds to the increased incentive to save. The economic estimates by Wright and Weber, on which I base these figures, applied only to personal saving. If business saving has the same elasticity as does personal saving, these estimates of the long-run growth effects of changing the tax system would be nearly doubled, assuming a fully employed economy most of the time.

Boskin's recent estimates, just cited, include business saving, and suggest an even larger effect. His estimates are controversial, so that the jury is still out; if they are correct, they imply that removing the tax burden on new saving would increase growth by 5 percent per decade.

What tax program would produce this added incentive to save? The main thing it must do is equalize the rate of return to saving—investment—after tax to the rate of return before tax. A first, absolutely essential step in such a change is to integrate the corporation and personal income taxes, a step that I am happy to learn is receiving serious consideration. Assuming no change in the rate structure of the personal income tax, the overall tax burden on the income from capital

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[1] Colin Wright, "Saving and the Rate of Interest," in The Taxation of Income from Capital, Arnold C. Harberger and Martin J. Bailey (eds.) (Washington, D.C.: The Brookings Institution, 1969). Warren E. Weber, "The Effect of Interest Rates on Aggregate Consumption," American Economic Review, vol. LX (1970), p. 591. Boslin, Michael J., "Taxation, Saving, and the Rate of Interest, Journal of Political Economy, vol. 85 (1977).

would fall by roughly $15 billion plus or minus a few billion depending on the details of the integration procedure. However, in addition, the appropriate tax program would remove the tax effect of the personal income tax on the return to saving.

At present we have several provisions in the law that moderate the tax effect of the personal income tax on the return to saving. Besides the special provisions or loopholes mentioned earlier, we have tax exemption for pension funds and pension plans, the investment credit, and accelerated depreciation. Ideally, we should unify all these provisions into something general, neutral, and complete.

My own preference for fundamental tax reform would be to replace the present personal income tax, and corporation income tax, with a gross income tax like that now used for a State income tax in Pennsylvania, Illinois, and a few other States. It would have no exemptions or deductions, except either (*a*) personal saving or (*b*) each taxpayer's pro rata share of business investment by the corporations and proprietary businesses of which he owns a share. That is, we would have either a consumption expenditure tax or a gross income tax combined with instant 100 percent depreciation for all investment; both variants equalize the before-tax and after-tax rates of return to saving-investment.

Short of these heroic measures to rationalize the tax system, a reasonable second-best is to move as far and as fast as we can in that direction. We can liberalize the present tax exemption for pensions to include other forms of saving, we can liberalize depreciation toward instant writeoff, as has been done in Canada and Britain, and we can get the most out of integration of corporation and individual income taxes by passing through to shareholders the benefit of liberalized depreciation. Such patchwork reforms are not always beneficial, but in the cases mentioned they are more likely to reduce the harm done by the present tangle of special provisions than to make it worse.

In view of the long-range benefits of reform, I believe it is well worth the effort to work for reform. Moreover, if we don't press for improvements, things would well get worse: On balance, tax changes in the past 10 years have tended to increase the overall burden of taxes on the income from capital, mainly through the increases in the capital gains tax. The threat of what could be is worse than the damage done by what we have now; and the way to counter that threat is to move for constructive reform.

Senator BENTSEN. Gentlemen, I think we will have you testify before we open this up to questions.

If you would, go ahead, Professor Brownlee.

STATEMENT OF OSWALD H. BROWNLEE, PROFESSOR OF ECONOMICS, UNIVERSITY OF MINNESOTA

Mr. BROWNLEE. Thank you, Senator Bentsen.

Nearly every student of fiscal policy believes that a high rate of taxation of capital income reduces the attractiveness of capital investment and that taxing the return from saving diminishes the amount of saving that will take place at any level of income. The latter proposition may not hold for all persons—some may save more at lower rates

of return than at higher ones—but it describes the behavior of the U.S. population as a whole.

The U.S. tax system is characterized by both high rates of taxation on capital income and by a higher rate of taxation of saving than of consumption. There are particular sources of capital income that are taxed at lower rates than others, and some kinds of savings that are taxed no higher than consumption.

However, taxing some sources of capital income at lower rates than others serves largely to divert investment into the areas where the tax rates are lower and affects total investments only insofar as it reduces the overall rate of taxation and increases the relative return from saving. For example, investment tax credits, depletion allowances, and the exemption of interest paid on State and local bonds from the Federal income tax base serve largely to increase investment in plant and equipment at the expense of investment in inventories and other forms of capital not eligible for the credit, to attract too many resources to "depleting" activities and to encourage State and local governments to spend too much. These special tax treatments of some kinds of capital income are evidence that the Congress is aware that taxes affect investment activity, and some persons who believe that we are not investing enough are willing to accept these partial tax reductions in spite of the distortions that they produce in the overall investment pattern. However, the special treatment not only makes for a less efficient overall capital stock, it also provides ammunition to those who claim that capital already is receiving favored tax treatment and that more fundamental reform of the tax system is not needed.

Similarly, on the savings side, the tax law provides for some forms of saving, some contributions to pensions, for example, to be exempt from the personal income tax base. Such contributions and the income that they produce are taxed when they are received by the pensioner or his designated heirs. However, a given amount of future income can be obtained at a lower cost through investing in such a pension account than from deposits in a savings account or purchases of common stock.

For the latter methods of saving, the income tax is levied on the portion of income saved as well as on the income earned by that saving when this income is realized. This point has been made forcefully by Norman Ture in the Wall Street Journal of June 21, 1977 as well as in other published pieces.

Because of inflation, the current tax structure, and particularly the taxation of capital gains, can be confiscatory, that is, not only is all of the income from capital taxed away, but some of the capital itself is taken by the Treasury. One hopes that the inflation is a shortrun phenomenon, although few prophets foresee an annual rate of inflation of less than 5 percent before the end of the current decade.

The shortrun effects of not adjusting the tax system for the impact of inflation are very important. Adjustment of the system, by indexing the tax brackets and adjusting the capital base for purposes of determining capital gains, would be a relatively simple matter and ought to be undertaken even though other urgently needed but more complicated changes in the system are not made.

That the tax structure is biased against capital formation is not a major concern of those who are opposed to economic growth. It also is ignored by those who favor Government playing a large role in

trying to achieve greater equality in the distribution of income. This latter group might well be more concerned with the amount of capital accumulated in the United States and with its allocation, since real wages are directly related to the capital labor ratio.

With a response of saving to its rate of return such that a 10-percent increase in the rate of return increases saving by 3 or 4 percent and the waste usually associated with administering any redistribution, a cut in taxes on capital income could make workers better off in the long run, although they might be somewhat worse off in the short run, if there were a reduction in payments made to them or services provided for them by government.

The directly observed link between the rate of saving and the potential increase in an economy's income is not a very strong one. For example, Argentina is reputed to have about the same rate of saving as prevailed in the United States and Canada, yet it probably has had very little growth. Neither saving nor income are very easy to measure, and I suspect that saving has been overestimated in Argentina and underestimated in the United States. A host of factors other than the savings ratio affects income, and it usually is not easy to allocate to each factor its appropriate contribution.

The indirect evidence is somewhat stronger and almost certainly indicates that a higher rate of saving would increase per capita income in the United States—if the saving is not wasted on unproductive projects. If we are serious about increasing income through increased saving some of the implied reforms in the fiscal system are fairly obvious.

First of all, there should be a reduction in overall income tax rates, not only in the taxes on capital income but those on labor income as well. For a worker with a moderate income, social security taxes, Federal income taxes and State and local income taxes can easily add up to a combined rate such that for each dollar of outlay imposed by him on his employer he receives only 60 cents. Such tax rates cannot be reduced without further inflation unless the growth in government expenditures is checked.

I already have urged correcting the tax structure for inflation as a means for checking some of the growth in effective tax rates. I might add that the inflation has given impetus to additional government expenditure because the tax structure has produced so much revenue. This is true not only on the Federal level but on the State level as well. A further reason for indexing taxes to correct for inflation is that it may help to check the growth of government.

I indorse the abolition of the corporation income tax on income distributed as dividends or the integration of the individual and corporation income taxes through granting credit to individuals for taxes paid on their behalf by corporations. Abolition of the investment tax credit can more easily be accomplished if taxation of corporation income is effectively eliminated.

The tax treatment accorded to contributions to private pensions should be extended to other forms of saving, that is, additions to savings account balances, stock accounts and net purchases of other earning assets should not be a part of the income tax base. Net withdrawals from savings and stock accounts and proceeds from the sale of earn-

ing assets would be taxed as are the withdrawals from pension accounts under current tax law.

The extension to other forms of saving of the tax treatment now accorded to contributions to private pensions would make the tax essentially one based on expenditude. A variant of an expenditure tax is one of the alternative forms of taxation described by the Department of Treasury in its Blueprints for Basic Tax Reform published in January 1977.

This is not the occasion during which to raise and try to solve the technical problems of expenditure taxation. However, converting the tax system to one in which the base is expenditure on consumption. the Treasury variant, would strongly favor saving, if we compare the incentives of such a system with those of the present one. In fact, if consumption were zero, the tax would be zero regardless of the size of income. The justice of an expenditure tax is not obvious to everyone, even though in practice expenditure and income are strongly correlated. An expenditure-based tax makes the tax depend upon how one disposes of his income rather than upon how he obtains it.

Although administering such a tax would raise many problems, some of which have not yet been visualized, it would eliminate many of those encountered in our present system. Taxation of capital gains and foreign source income and the treatment of income fluctuating widely over time would no longer be problems. Whether married persons should be treated differently than single ones would still be an issue as would "proper" depreciation.

Assuming that patching up the present personal income tax will be the path chosen as tax reform, a major problem undoubtedly will be the tax treatment of capital appreciation. Some of those favoring effective elimination of the corporation income tax in one of the ways I briefly described would tax capital gains at the same rate as taxable income. I already have stated that the definition of capital gains ought to be altered so that the tax rate is not more than 100 percent as is now possible, but I have not yet committed myself as to how capital gains should be taxed if such a revision were made.

I bring this up because many people who are urging reform of the corporation income tax or abolition, are arguing that we ought to therefore tax capital gains as we do personal income.

I don't think we will get very much mileage out of that. Reform of the corporation income tax combined with taxing capital gains as regular income may turn out to be a great disappointment.

I must confess that I don't know how to handle capital gains taxation. I am aware that if we continue to have a personal income tax and don't have capital gains taxes it is possible to convert income into capital gains and therefore to escape taxation completely.

This is one of the reasons that I strongly favor an expenditure based tax.

I hope that my colleagues have a solution to the capital gains tax problem if we are going to maintain the same reliance on the income tax as we do at the present time.

I might add if we are going to merely patch up the present tax system, you can't do very much about saving unless we lower the proportions of income taken by government and that applies to government at all levels, not just the Federal Government but State and local government as well.

The growth in expenditure of State and local governments is getting even more alarming than that at the Federal level.

Thank you.

[The prepared statement of Mr. Brownlee follows:]

PREPARED STATEMENT OF OSWALD H. BROWNLEE

TAX POLICY FOR ECONOMIC GROWTH AND STABILIZATION

Nearly every student of fiscal policy believes that a high rate of taxation of capital income reduces the attractiveness of capital investment and that taxing the return from saving diminishes the amount of saving that will take place at any level of income. The latter proposition may not hold for all persons—some may save more at lower rates of return than at higher ones—but it describes the behavior of the U.S. population as a whole.

The U.S. tax system is characterized by both high rates of taxation on capital income and by a higher rate of taxation of saving than of consumption. There are particular sources of capital income that are taxed at lower rates than others, and some kinds of saving that are taxed no higher than consumption. However, taxing some sources of capital income at lower rates than others serves largely to divert investment into the areas where the tax rates are lower and affects total investment only insofar as it reduces the overall rate of taxation and increases the relative return from saving. For example, investment tax credits, depletion allowances and the exemption of interest paid on state and local bonds from the federal income tax base serve largely to increase investment in plant and equipment at the expense of investment in inventories and other forms of capital not eligible for the credit, to attract too many resources to "depleting" activities and to encourage state and local governments to spend too much.

These special tax treatments of some kinds of capital income are evidence that the Congress is aware that taxes affect investment activity, and some persons who believe that we are not investing enough are willing to accept these partial tax reductions in spite of the distortions that they produce in the overall investment pattern. However, the special treatment not only makes for a less efficient overall capital stock, it also provides ammunition to those who claim that capital already is receiving favored tax treatment and that more fundamental reform of the tax system is not needed.

Similarly, on the savings side, the tax law provides for some forms of saving—some contributions to pensions, for example—to be exempt from the personal income tax base. Such contributions and the income that they produce are taxed when they are received by the pensioner or his designated heirs. However, a given amount of future income can be obtained at a lower cost through investing in such a pension account than from deposits in a savings account or purchases of common stock. For the latter methods of saving, the income tax is levied on the portion of income saved as well as on the income earned by that saving when this income is realized. This point has been made forcefully by Norman Ture in The Wall Street Journal of June 21, 1977 as well as in other published pieces.

Because of inflation, the current tax structure—particularly the taxation of capital gain—can be confiscatory, i.e. not only is all of the income from capital taxed away, but some of the capital itself is taken by the Treasury. One hopes that the inflation is a short-run phenomenon, although few prophets foresee an annual rate of inflation of less than 5 percent before the end of the current decade. The short-run effects of not adjusting the tax system for the impact of inflation are very important. Adjustment of the system—by indexing the tax brackets and adjusting the capital base for purposes of determining capital gains—would be a relatively simple matter and ought to be undertaken even though other urgently needed but more complicated changes in the system are not made.

That the tax structure is biased against capital formation is not a major concern of those who are opposed to economic growth. It also is ignored by those who favor government playing a large role in trying to achieve greater equality in the distribution of income. This latter group might well be more concerned with the amount of capital accumulated in the U.S. and with its allocation, since real wages are directly related to the capital: labor ratio. With a response of saving to its rate of return such that a 10 percent increase in the rate of return increases saving by 3 or 4 percent and the waste usually associated with adminis-

tering any redistribution, a cut in taxes on capital income could make workers better off in the long-run, although they might be somewhat worse off in the short-run, if there were a reduction in payments made to them or services provided for them by government.

The directly observed link between the rate of saving and the potential increase in an economy's income is not a very strong one. For example, Argentina is reputed to have about the same rate of saving as prevailed in the U.S. and Canada, yet it probably has had very little growth. Neither saving nor income are very easy to measure, and I suspect that saving has been overestimated in Argentina and underestimated in the U.S. A host of fatcors other than the savings ratio affects income, and it usually is not easy to allocate to each factor its appropriate contribution.

The indirect evidence is somewhat stronger and almost certainly indicates that a higher rate of saving would increase per capital income in the U.S.—if the saving is not wasted on unproductive projects. If we are serious about increasing income through increased saving some of the implied reforms in the fiscal system are fairly obvious.

First of all, there should be a reduction in overall income tax rates—not only in the taxes on capital income but those on labor income as well. For a worker with a moderate income, social security taxes, federal income taxes and state and local income taxes can easily add up to a combined rate such that for each dollar of outlay imposed by him on his employer, he receives only 60 cents. Such tax rates cannot be reduced without further inflation unless the growth in government expenditures is checked.

I already have urged correcting the tax structure for inflation as a means for checking some of the growth in effective tax rates. I might add that the inflation has given impetus to additional government expenditure because the tax structure has produced so much revenue. A further reason for indexing taxes to correct for inflation is that it may help to check the growth of government.

I endorse the abolition of the corporation income tax on income distributed as dividends or the integration of the individual and corporation income taxes through granting credit to individuals for taxes paid on their behalf by corporations. Abolition of the investment tax credit can more easily be accomplished if taxation of corporation income is effectively eliminated.

The tax treatment accorded to contributions to private pensions should be extended to other forms of saving, i.e. additions to savings account balances, stock accounts and net purchases of other earning assets should not be a part of the income tax base. Net withdrawals from savings and stock accounts and proceeds from the sale of earning assets would be taxed as are the withdrawals from pension accounts under current tax law. The extension to other forms of saving of the tax treatment now accorded to contributions to private pensions would make the tax essentially one based on expenditure. A variant of an expenditure tax is one of the alternative forms of taxation described by the Department of the Treasury in its Blueprints for Basic Tax Reform published in January 1977.

This is not the occasion during which to raise and try to solve the technical problems of expenditure taxation. However, converting the tax system to one in which the base is expenditure on consumption—the Treasury variant—would strongly favor saving, if we compare the incentives of such a system with those of the present one. In fact, if consumption were zero, the tax would be zero regardless of the size of income. The "justice" of an expenditure tax is not obvious to everyone, even though in practice expenditure and income are strongly correlated. An expenditure-based tax makes the tax depend upon how one disposes of his income rather than upon how he obtains it. Although administering such a tax would raise many problems, some of which have not yet been visualized, it would eliminate many of those encountered in our present system. Taxation of capital gains and foreign source income and the treatment of income fluctuating widely over time would no longer be problems. Whether married persons should be treated differently than single ones would still be an issue as would "proper" depreciation.

Assuming that patching up the present personal income tax will be the path chosen as tax reform, a major problem undoubtedly will be the tax treatment of capital appreciation. Some of those favoring effective elimination of the corporation income tax in one of the ways I briefly described would tax capital gains at the same rate as taxable income. I already have stated that the definition of capital gains ought to be altered so that the tax rate is not more than 100 percent as is now possible, but I have not yet committed myself as to how capital gains should be taxed if such a revision were made.

It should be clear that capital—a stock—and capital income—a flow generated by that stock—are not the same thing. Perhaps capital appreciation should be subject to tax, but it makes a little sense to add the appreciation in one's capital stock to one's income for purposes of determining the amount of his tax liability. The result is approximately double taxation, since the income giving rise to capital appreciation and the capital appreciation are both taxed.

However, I cannot argue that capital gains should not be subject to tax in a tax system in which income is the base. Income can be converted into capital gains, and the consumption which I would prefer to tax could occur (and would be encouraged) without any tax being paid. Widespread conversion of income into capital gains would occur if capital gains were not subject to tax and occurs currently when the capital gains rate is lower than that on other income.

I mentioned previously that an expenditure tax would solve the problem of capital gains, since the source of income is irrelevant for such a tax. I consider this to be a major virtue of an expenditure tax. I see no consistent way of taxing capital gains as a part of an income tax and must leave the solution of this problem—if a solution exists—to my colleagues.

Senator BENTSEN. Thank you very much, Professor Brownlee. Professor Eisner, please proceed.

STATEMENT OF ROBERT EISNER, WILLIAM R. KENAN PROFESSOR OF ECONOMICS, NORTHWESTERN UNIVERSITY

Mr. EISNER. I would like to submit my prepared statement for the record, if I may.

Senator BENTSEN. Certainly, it will be included in the printed record at the appropriate place.

Mr. EISNER. First, I would like to suggest as we consider investment we should recognize that what we normally address ourselves to and what my colleagues seem to be largely addressing themselves to, business, plant and equipment, expenditure, is only a small part of capital accumulation.

What most of us are concerned with is the extent to which we currently are accumulating capital or productive capacity which can be used for output in the future.

If we look at it that way we recognize that business accumulation of plant, equipment, and inventories is really a very small minor fraction of the total.

The total would include, of course, government accumulation of plant, equipment, and inventories; household accumulation of plant, equipment, and inventories; nonprofit accumulation of plant, equipment and inventories: and much more than that, the huge accumulation of what we usually call human capital and nonphysical capital in the form of everything from learning by doing on the job, education, the acquisition of skills, research, and development.

We have a limited amount of resources as we talk about any kind of tax measures which encourage business spending on plant and equipment.

We have to ask ourselves whether that spending will come at the expense of other kinds of capital formation which may in fact be more productive of growth in future output.

I would argue there are some persistent reasons, usually overlooked, for expecting bias against investment in many forms of human capital and they are related essentially to the fact that it does not pay in a competitive free enterprise economy for businesses to invest an optimal amount in their employees' education, skills, knowledge, for the

simple fact that if you take a kid, for example, with no experience, no training, it is a question of whether you want to dare hire him.

If you do hire him is it worthwhile to give him the experience, to train him with the knowledge if he is a failure it is a loss——

Senator BENTSEN. And somebody else will hire him if he is successful.

Mr. EISNER. That is exactly the rest of my sentence. If he is a success, somebody else will hire him.

So, I very much welcome, by the way, the chairman's interest in recent years in encouraging employment using the tax system; much as I am generally opposed to any kind of special tax provisions, I think there is a strong argument for using the tax system, in this one instance, for the investment in human capital.

Now, beyond the question of focusing on investment capital accumulation generally, I should say that there is a major role for government in providing a climate of full employment, of prosperity, of full utilization and capacity.

From the beginning of 1974 to the third quarter of 1975 while unemployment rose from 5.2 percent to between 8½ and 9 percent, real nonresidential business fixed investment fell 17½ percent and you can find similar drops in investment, however you measure it, which went with this major recession.

There are many people who seem to ask curiously, wonderingly why busines investment has not recovered very much.

I think the answer is very simple. Our business investment has recovered some, and I happen personally to be optimistic on further recovery of business investment now, but I think the recovery of business investment depends on the recovery of the economy.

As long as the total output remains, as it still does, considerably below the normal growth rate we could have projected from 1973 or so, the capital stock will remain below what it would have been for that normal growth rate and the desired result will not be forthcoming.

I would say the Congress has a legitimate concern with seeing to it that Government does not impede capital formation.

The major way in which Government has impeded capital formation in the form of business investment has not been the particular tax structures that my colleagues seem to be focusing on.

I will try to come to that briefly but Government has impeded capital formation rather by not providing a kind of overall fiscal climate which gives us full employment.

That is what has caused business investment to take such a licking, and I must say the business community, unfortunately, is not its own best doctor.

It has all kinds of prescriptions for its own recovery and I think they are about as much good as many patients may have in the way of prescriptions for their recovery from disease.

They don't understand. Business investment will recover if the economy recovers and it will not recover by emphasizing a balanced budget.

I might add by saying I was interested in the chairman's mention of the broad objectives of the administration, including a budget balanced at 21 percent of GNP in 1981, and I would suggest that—I would not say it is a laudable objective.

I say it is a deplorable objective to be held fixed because what any economist should be able to tell you is we have no way of knowing at this point whether a balanced budget at 21 percent of GNP is going to be compatible with full employment in 1981 and it seems clear to me the administration and the Congress should not lock itself into a position where it says we are going to aim to balance the budget in 1981, regardless of whether that is compatible with full employment or not.

We may find it is necessary to have a budget deficit to have full employment and if that is so we certainly then should have one.

Now, in terms of the arguments that my colleagues are addressing, and I think you will hear more from my colleagues still to speak, I have long objected and will object again to the notion that the tax law as it currently stands is biased against capital accumulation.

This depends upon a number of particular assumptions which I consider dubious and it depends as well upon ignoring the major effects at the margin of all of the loopholes which have been referred to but the full weight of which I think has not been recognized.

On the matter first of taxation of income being a special tax on saving, which discourages saving, as I think my colleagues do all recognize, there are two effects, to be technical, of charges on the rates of return to saving,

One is a substitution effect, as we call it, which makes it more attractive not to save, but the other is an income effect.

That quite simply says that if you are saving, for example, for your retirement, and the bulk of saving is for retirement, it becomes quite questionable whether we will, in fact, save less if we are told there will be less of an aftertax return on our saving.

Suppose I decide that I want to retire at an income that will enable me to spend $20,000 a year in my retirement. I might go to any insurance company or to a pension fund manager or to a broker and say, "How much do I have to put aside each month in order to have $20.000 a year on which to live in my retirement."

That will clearly depend on the rate of return and the rate of interest, and the curious thing is that the higher the tax on the return to saving and hence the lower the rate of return after taxes, the more I will have to put aside, the more I will have to take out of current consumption, which means the more I will have to save in order to accumulate the desired amount of assets for the desired amount of consumption.

So, it is not clear in theory that a higher rate of tax on the return to saving will, in fact, reduce saving.

Now, beyond that, the fact that the tax law is so full of special provisions for saving, I really find it very hard to know how anybody can come to the conclusion that, in fact, saving in general, and certainly business capital accumulation, is currently discouraged.

I go into this because the main argument, as we can see, and appropriately so, for having government intervention now to encourage more business capital formation, is that if we believe in a free economy we would not do it, except that we already have government intervention against capital formation and therefore we have somehow to counteract it.

But the fact is that people can save by contributing to pension funds. I do, and I have to confess that I think I have saved much too much over my career because at every decision time I think of the huge tax I will have to pay on my income, if I don't put it in the college retirement equities fund, as compared to the tax if I do put it in. Such saving is excluded to a large extent from taxation now, still up to a substantial limit, and once more the income which is earned in that retirement fund is not taxed until at some point eventually when we retire.

So there is a distinct tax advantage to saving as against consuming Another way in which I have been induced personally, and I imagine other people, particularly wealthy people have been induced by the tax laws to save, is to accumulate assets in the form of capital gains.

I know many of us, and I in particular, have had a tough time in the stock market in recent years, but on balance, I can offer a record of positive capital gains I have noted in a major long paper on capital gains over the period from 1946 to 1975.

On balance, after adjustment for price changes, there has been a very substantial amount of capital accumulation in the form of capital gains, an amount that quite matches in magnitude the amount of personal saving, and I would be confident that over future years as we recover from recession, that long trend will resume.

If you save in the form of capital gains, it does not mean that you only pay a partial tax on realization, the fact is you pay no tax until realization and indeed a great amount of tax on savings in capital gains is not paid.

People can live off their capital gains in effect either by foregoing other saving and consuming, by borrowing against the accumulated capital, by selling off only a part of the capital, which means they pay, in fact, a very small tax on only the capital gains on the part that they have sold even though they have "realized" all that they have sold.

Now, in addition, as far as business capital accumulation goes, a great deal of it is financed not only by the accumulation of earnings, which are then untaxed to the stockholder because they tend to simply increase the value of capital, but much of it is financed by borrowing, and we have interest deductibility.

In addition, we have the investment tax credit, we have accelerated depreciation, as has been mentioned.

I might add one point of agreement I think I probably have with all of my colleagues but not entirely for the same reasons: The corporate income tax is really a lousy tax.

It should be integrated with the individual income tax not because it is going to encourage capital formation but because this would I hope permit us to have a more equitable tax structure without many of the distortions we have now in terms of misallocation of business resources that we get now with the corporate income tax.

I should add that I am really quite puzzled by the notion that one should consider the corporate income tax a tax on capital, God only knows what it is a tax on, which is why I object to it.

I think it is clear in the long run that it essentially raises prices since the great bulk of business activity is carried on by corporations and it is hard to see to what other sector activity is shifted except maybe to people doing their own gardening and working in the household.

Now, I should add quickly that, in fact, if you look at the total tax structure we have substantial taxes on labor in the form of social security taxes, our taxes for unemployment benefits; indeed, we have a tax structure that we could argue has very heavy taxes discouraging the employment of labor and by the very nature of the system, it probably is a particular penalty on the young who enter into the labor force.

I hope I do not unfairly anticipate what may be some remarks of Professor Feldstein, but he has an important argument he may raise again on the effect of the social security system on capital formation and on saving.

Here I would suggest that I find it doubtful that social insurance or social security in fact discourages capital formation or saving.

It is a complicated matter, but the argument essentially is that with the existence of social security people have no need to save because the Government is going to take care of them.

In fact, I would argue before social security the poor did not save; with social security, the poor don't save much. Before social security, the poor probably figured they would not live through to retirement or that their children would take care of them.

With social security, it seems quite likely people anticipate they will be able to live in retirement and instead of saving less they say, "Gee, it pays to contemplate an early retirement, to contribute to a private pension fund, to try to save more."

I would consider dubious the argument that social security reduces saving.

I might finally say, then, before we think of tampering with the economic system to try to encourage saving, particularly in the form of business plant and equipment, we have to ask ourselves why. Why in a free economy should we decide to have more tomorrow rather than today, which is what we accomplish by saving?

One argument is that somehow we know better than the business community in terms of its own operations, we know that somehow this saving will be more productive in the future than they seem to realize, because if it were more productive, they would undertake it.

I would suggest that we don't really know, and that the tax structure is not really making saving less productive than it would be without government and taxes. If the business is not investing as much as we think it should, it is for one of two reasons:

One is that we have a depressed economy, and that we should correct. And the other reason is that given the amount people want to set aside for the future, given the profitability of what a machine would add to the productivity, it just does not pay.

We should not second-guess them. I don't think we are in a society where someone at the top says, "Jam tomorrow and jam the next day, but never jam today."

Senator BENTSEN. Run that by once more—what?

Mr. EISNER. Jam tomorrow, jam the next day, and never jam today, which is to say that we should always be saving, saving for the future so we have more output then but never enjoy life now.

I have no desire to see my great-grandchildren live much better than I can expect them to live given the normal functioning of the economy.

[The prepared statement, with attachments, of Mr. Eisner follows:]

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PREPARED STATEMENT OF ROBERT EISNER

There is nothing that cripples business investment like a recession. From the beginning of 1974 to the third quarter of 1975, while unemployment rose from 5.2 percent to between 8½ and 9 percent, real non-residential business fixed investments fell 17.5 percent. While gross national product in constant dollars declined 6.6 percent from the fourth quarter of 1973 to the first quarter of 1975, the total of fixed investment, including residential as well as nonresidential structures, dropped 23.6 percent from the first quarter of 1973 to the second quarter of 1975.

These facts should be an unforgettable reminder to all concerned with obtaining both a substantial and an optimal rate of business investment. The one major government responsibility in this area should be to provide a general climate of prosperity. Beyond that, I shall argue, government should leave investment decisions to the competitive processes of the free enterprise system, unless cogent reasons exist for doing otherwise. There should be no general presumption that government should encourage—or discourage—business investment.

It has been argued that government already discourages saving and investment, with business and individual income taxation and with our social insurance system. Hence, it is claimed, government should take special measures to encourage investment to compensate for this discouragement.

With regard to the tax system, it is not clear that on balance business investment is discouraged. It can be argued that those who earn income that is fully taxable and then again receive fully taxable income on the saving out of the original income are being "taxed twice." In fact, income of those who accumulate fixed capital and of those who make the decisions to accumulate fixed capital is frequently less heavily taxed than othe income. This is due to the combination of failure to tax accrued capital gains, partial exclusion of realized capital gains from taxation, tax deductibility of interest costs, the acceleration of depreciation for tax purposes over more than two decades, and the equipment tax credit which has now risen to as much as 11½ percent on eligible investment.

The argument that social insurance, and particularly the guarantee by government of retirement benefits, reduces the supply of saving depends upon a number of special assumptions the applicability of which becomes ultimately an empirical question. In particular, to the extent that social security is merely a substitute for anticipated private support from family and children, for much of the population there may be little or no quantitative effect; they did not save before social security and they do not save now. For the more affluent, the marginal effects may be small and further complicated by interaction with variables such as the age of retirement and the age distribution of the population.

Government may contribute optimally to business investment by removing impediments to competitive behavior, whether the consequences of undue concentration and combination by individual enterprises themselves, the regulatory processes of government, or frequently a combination of the two. Government may further find it desirable to subsidize or encourage investment where there are positive externalities and to discourage it where there are negative externalities. The very existence of capital, it should be recognized however, entails social costs, if only of its protection, which should generally be met by taxation.

Major needs for government intervention on behalf of investment lie in the areas of human capital and the acquisition of knowledge. In a free society there are likely to be major positive externalities in these areas.

Essentially, it may not pay firms to invest in the critical training and supply of job experience to potential workers, partly because of the cost of acquiring information as to expected returns and the risk of being wrong and, very largely, because of the inability, in a non-slave society, for firms to guarantee to themselves a return on the capital which they have financed. Similarly, information costs, risks and the consequent limitations of our capital markets are such that individuals are generally unable to finance optimal investment in themselves. Government programs to arrange for or subsidize such investment should have a top priority. The loss in human capital and future product in the experience of much of a generation of youths who do not find their way into productive participation in the labor force exceed by far any imagined loss in business capital because of government tax policies.

Government programs aimed at improving financial markets, and particularly freeing banks and other financial institutions to pay market rates of interest on all deposits and investments are highly desirable. Integration of corporate and individual income taxes may be expected to have significant benefits in add-

ing all of corporate earnings to the supply of capital funds available for optimal allocation. But as far as business investment in the aggregate is concerned, it is affected most disastrously by general recession and unemployment. It can be and should be most encouraged by a rapid return to a full employment path of general prosperity.

There is probably little that government can do currently to stimulate business investment by offering direct tax advantages. Business investment has been recovering and will, I have predicted, continue to recover as the overall economy recovers. The essential difficulty is that, because of the sharpness, length and depth of our recent recession, business output remains well below the growth path that would have justified an early full recovery of business investment. There is much evidence that, in the aggregate, capital stcoks have been ample and more than ample for production to meet existing demand.

Tax gimmicks such as special tax depreciation or the investment credit and proposed further increases in that credit thus constitute efforts to induce business to acquire more fixed capital than they would otherwise consider optimal. In a generally booming economy, such efforts might show some "success" in inducing firms to stock more capital, and perhaps invite subsequent overcapacity and declines in rates of return. To some extent, we may be suffering currently the long run consequences of such government-induced distortion of the productive system over more than a decade.

In the present situation, until business is convinced that full and expanding utilization of current capacity warrant a major further increase in business investment, tax concessions to stimulate such investment are more likely to provide windfall gains to some taxpayers (and consequent losses to others) than to accomplish their ostensible goal.

One innovative measure in the new tax code, the employment tax credit, offers the opening for a small breakthrough in the much larger problem of capital accumulation than that normally associated with business fixed investment. By offering large marginal incentives to encourage increases in employment it would meet some of the short run problems of recession. For the long run, by fostering the acquisition of job experience by new workers, it would be encouraging the investment in human capital out of which future production will flow.

It is important that adequate information of this employment credit be circulated to masses of the small businesses to which its major value has (unfortunately, in my view) been restricted. For it is vital that, over the two years during which it is now to be effective, firms recognize the advantage of hiring additional employees. They should recognize this advantage in time to implement hiring decisions, not merely after the taxable year when their accountants inform them, in some cases, that they are due a tax credit.

A short run gain for business investment and a long run gain for the efficiency of capital markets and the general allocation of resources could be obtained by combining a commitment now to eliminate the investment tax credit along with general reductions in corporate income tax rates of comparable magnitude or complete elimination of the corporate tax as part of full-scale integration of corporate and individual income taxes. The commitment to the elimination of the investment credit over the next year or two would induce firms to acquire more machinery now while the credit was still available. Similarly, relatively higher current corporate tax rates would induce more investment now when start-up costs and initial depreciation expenses would represent higher-valued tax deductions. The general reduction or elimination of business taxes would then have salutory effects over the long run.

POLICY PROPOSALS

ROBERT EISNER

Men and Machines and Taxes

Four billion dollars a year! That is what the U.S. Treasury can expect to lose in presumably needed tax revenues as a result of the investment tax credit. This provision, designed ostensibly to encourage capital expenditures, reduces business taxes by up to 7 percent of the amount of purchases of new machinery or equipment. By contrast business taxes are generally increased by 5.85 percent of all wages, the employer contribution of the payroll tax.

Why should business get a special tax break when it buys new machinery and equipment? Some say that such purchases contribute to economic growth. But if they do, that is, if a $100 machine will, with proper discounting for the future, produce more than $100 in extra output or cost savings, any profit-seeking firm should be expected to install the new equipment without special government encouragement. And if the $100 piece of machinery will only return $95, it does not contribute to economic growth to have the U.S. Treasury pay out an extra $7 to make the investment profitable.

While in a free enterprise system businesses should be expected to acquire on their own an optimal amount of plant and equipment, economic growth might well be stimulated by government encouragement of other forms of investment that businesses cannot handle on their own. These include, in particular, investment in human capital, training, know-how, and basic job skills, many of which can come only from experience.

There are currently some million and a half persons from sixteen to twenty-one years of age listed as unemployed, over 12 percent of the 12 million persons in the civilian labor force. There are another 10 million not in the labor force, many of them because they have given up looking for jobs, which seem to be unavailable. And there are another half million youths listed as working part-time who are looking for full-time employment. Making jobs available for young people is one of the greatest investments we can make, for the investment is not only in them but in the economy and the nation.

Despite repeated insistence by President Nixon and his administration that there will be no increase in taxes, Herbert Stein, Chairman of the President's Council of Economic Advisers, now suggests that higher taxes might prove desirable to combat inflation. He adds that one particularly appropriate increase might be a suspension of the investment tax credit. By suspending the credit, we might encourage businesses to postpone expenditures for new equipment, thus reducing the boom in business investment which has contributed substantially to the high demand we associate with inflation. Yet to the extent that this suspension were successful, it would keep output of business equipment below what it would otherwise be and thus reduce employment in the capital goods industries—this with 5

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percent of the total labor force and 12 percent of youths still unemployed.

Ironically, when the investment tax credit was reincarnated in 1971, it was dubbed in best Madison Avenue fashion, a "job development credit." Many of us were skeptical then, but it is true that tax increases, or other tight fiscal and monetary measures aimed at reducing inflation, run the *serious risk of raising unemployment*. Yet there is a change we can effect in the tax structure or tax mix that would reduce the rates of inflation *and* unemployment and contribute to economic growth.

I propose a tax package that would include suspension of the investment tax credit along with suspension (if not permanent repeal) of part of the payroll or employment tax on all workers up to the age of twenty-one. This will reduce inflation while keeping to the targets of full employment and economic growth.

The proposal has much to commend it in terms of equity. The total payroll tax now amounts to 11.7 percent of employee incomes up to $10,800. According to President Nixon's budget, it will account for 29 cents of every dollar of federal tax revenues, second only to the personal income tax in the aggregate and far in excess of the 14 percent of tax revenues now accounted for by corporations. Yet it is a highly regressive tax with no deductions or exemptions and with smaller proportions of income taken the more income exceeds the $10,800 limit. Thus for an individual with an income of $100,000 the maximum payroll tax of $1,263.60 is only 1.25 percent rather than the 11.7 percent for those with incomes up to $10,800. To redress the balance, withdrawal of the investment tax credit by cutting corporate after-tax earnings would reduce the boon of lightly taxed capital gains enjoyed most by the rich.

Suspension of the investment tax credit could be expected to cause some cooling of the economy by reducing demand for capital equipment. But the effects would be slow, and since much equipment is *produced in oligopolistic industries* where prices are notoriously rigid in a downward direction, we might well fear more unemployment than reduction in prices. This could be counterbalanced by elimination of the employer portion of the payroll tax for employees up to twenty-one years of age. As far as that applies to the 6 million currently working full-time, it would mean a reduction of over 5 percent in labor costs. That in turn should reduce prices. But what is more, employers would have an incentive to hire additional teen-agers and those twenty and twenty-one years of age and to give full-time jobs to many now working only part-time. The gains from such increased employment of youth are likely to be lasting. Employers are frequently understandably reluctant to hire young people without experience and training. Risks are considerable and if new employees work out there is no guarantee that they will remain long with the employers who invest in their first job. Yet that first job, before the frustration of idleness has wreaked its toll, may be critical to establishment of lifelong skills and the work ethic.

In terms of magnitudes, this switch in taxes is entirely feasible. We may estimate the investment tax credit as approaching $4 billion in 1973. If we assume that 6 million full-time and 4 million part-time employees sixteen to twenty-one years of age are earning $50 billion per year in covered employment, the employer portion of the payroll tax amounts to $3 billion.

It may be objected that a special incentive to hire youths will result in less employment for adults. This is hardly likely. While there might be some "substitution effect" in the economists' jargon, the expansion effect of added employment should considerably outweigh it. A more serious objection might be that the 5.85 percent reduction in labor costs (more precisely, 5.85 divided by 105.85, or 5.53 percent) would not be enough either to induce significant additional hiring of young workers or to have much effect on prices. The answer to this might be to offer employers still further incentives to hire youths, such as crediting them with the 5.85 percent that they contribute for employees. In the interest of increasing employment generally and lowering prices, one might extend the reduction or elimination of taxes beyond those under twenty-two years of age, for example, by applying to the payroll tax the $750 personal exemption in the individual income tax.

But whatever the limitations of my proposal, eliminating the employer payroll tax for youths as we suspend the investment tax credit would clearly be a step in the right direction. It would help to reduce unemployment and the rate of inflation. And it would halt unjustified government intervention to encourage investment in machines while reducing government discouragement of investment in man.

"While in a free enterprise system businesses should be expected to acquire on their own an optimal amount of plant and equipment, economic growth might well be stimulated by government encouragement of other forms of investment that businesses cannot handle on their own."

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ROBERT EISNER

Bonanzas for Business Investment

Our subsidies to investment are inefficient and unfair, and they don't help stabilize the economy. The author proposes an alternative.

One of our more expensive myths is that government policy should be directed toward encouraging business investment. Twenty-five billion dollars a year would not be a bad estimate of what this attitude costs the taxpayers directly. The opportunity costs to society—what we lose in the misallocation of resources—are yet to be counted.

Billions in government plants and equipment have been turned over to private enterprise at charges that are frequently nominal. Billions more in capital additions have been cheerfully purchased by business under cost-plus contracts. But, government spending aside, there is enough to talk about in the way of taxes.

The capital gains loophole

There is perhaps no better place to begin than with the greatest loophole of them all—the capital gains tax. Or rather, the lack of one. For the exclusion of half of the realized capital gain from adjusted gross income is a great boon to the lucky taxpayer who makes his money on investments. Even better, for the fortunate few, are those provisions that permit accumulated value passed on in estates and some kinds of gifts to escape the

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capital gains tax entirely. In all, the liberal treatment of capital gains costs the U.S. Treasury some $10 billion to $12 billion a year in lost revenue.

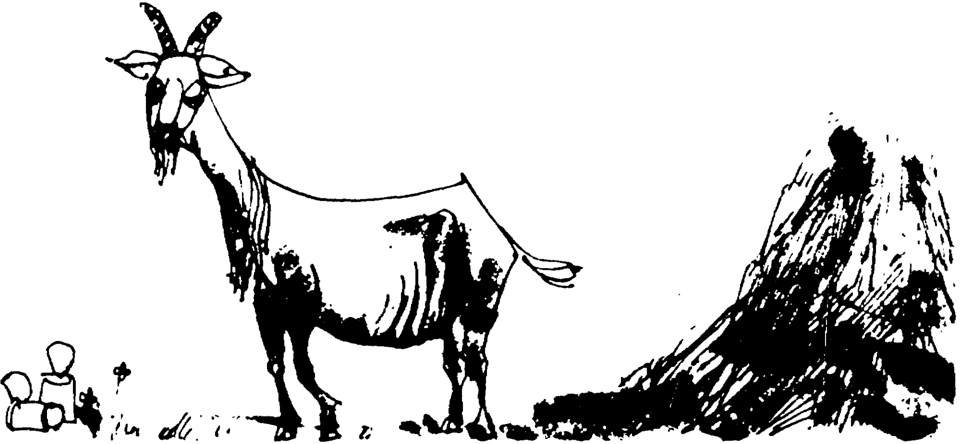
The distribution of advantages on realized capital gains is an eye-opener. Calculations from the Internal Revenue Service's *Statistics of Income* for 1970 show that for the great bulk of taxpayers capital gains were trivial, resulting in average tax savings on the order of 0.2 percent for those with incomes under $25,000. For those in the top income brackets, however, the story was vastly different. In the $1 million and over category, for example, some 63 percent of total income came from net capital gains, and tax savings ran to about 20 percent of total income.

Realized capital gains are, indeed, only the tip of the iceberg. By most meaningful economic definitions, income amounts to consumption plus saving. And, to an individual, saving is the increase in his net worth, regardless of the source. Accrued capital gains over the last quarter-century have significantly exceeded the total amount of "personal saving," traditionally measured as the difference between disposable personal income and consumption. And such gains are taxed (at half rates) only when realized, which is frequently many years later.

Time is money. A dollar of taxes to be paid at some time in the future has a present or discounted cost that is much less than a dollar of taxes that has to be paid next April 15. According to one carefully constructed estimate, the effective rate of taxation on accrued capital gains, taking gift and bequest exclusions into account, amounts to about 8 percent. This is far removed from the 50 to 70 percent income tax brackets in which the major recipients of capital gains are found.

The economic effect of the capital gains loophole is to encourage investment in assets on which capital gains can be expected—land, buildings, equipment, and the businesses which have title to them. Individuals are discouraged from investing in less tangible—and less marketable—capital such as education and health, which may actually produce more income.

Since the largest proportions of capital gains are to be found in corporate assets, this tilting of the tax structure serves to stimulate investment in corporations. These, responsive to tax-induced investor preferences, will be inclined to retain earnings and embody them in legally permissible stores of value, particularly plant and equipment. Investors receive income (and save) in the form of appreciation of corporate stock attributable to



retained earnings. In contrast to highly taxed dividends, there is little or no tax to the individual on stock appreciation. The result is a basic bias in the tax structure which offers a major incentive to business acquisition of plant and equipment.

Fast depreciation and tax credits

Despite that bias, various business spokesmen have long argued for further tax preferences allegedly designed to encourage business investment. During World War II and the Korean war there were special "Certificates of Necessity" permitting five-year amortization of capital additions whose economic value was presumed not to long outlast the hostilities. In 1954 a major (but little understood) revision of the tax code generalized such liberal treatment in the form of "double-declining balance" and "sum-of-the-years-digits" methods of depreciation.

These methods were widely advertised as offering no more than rapid "recovery" of capital investment. In fact, rapid depreciation for tax purposes might be viewed as an interest-free loan on each single capital acquisition or on all plant and equipment expenditures in a single year. But since business firms go on acquiring plant and equipment year after year, these "loans" are pyramided one on top of the other. Even for stationary firms which merely replace used-up plant and equipment at constant prices, the interest-free loans become permanent gifts. For growing firms in which the *money* value of gross capital formation tends to grow, such gifts are repeated year after year, for as long as the depreciation regulations remain in force. A rough estimate is that the added depreciation charges resulting from the 1954 "liberalization" run some $12 billion a year. This is close to $6 billion in reduced corporate income taxes.

The Kennedy Administration came into power, in 1961, committed to getting the economy "moving again." There were political obstacles to such measures as a significant increase in public expenditures or a general cut in taxes. But business clamored for further reductions of its taxes through the mechanism of still higher depreciation write-offs. New "guidelines" were adopted in 1962 which shortened the old "Bulletin F" useful-life formula for much business equipment and speeded up depreciation. A "reserve ratio test" was designed to ensure that each firm's depreciation claims were in line with its actual replacement experience. But the "test" was never enforced and was eventually abandoned by the Nixon Administration in 1971. And during this entire time, reports now show, the period of depreciation kept shortening. The cost to noncorporate taxpayers was another $5 or $6 billion per year.

The Nixon Administration came up with its own innovation: the "Asset Depreciation Range" system. This involved a curious permission to depreciate properties at rates up to 20 percent faster or slower than those indicated in the guidelines. The notion of a "range" was perhaps a public relations gesture, for business had every motivation for faster depreciation, which reduced tax liabilities, and essentially none for slower write-offs. Full blown, the Asset Depreciation Range system should save business taxpayers —and cost the U.S. Treasury and the general public—another $2 billion annually.

In addition to faster depreciation, the Kennedy Administration also instituted what came to be called the "investment tax credit." This was actually a reduction in taxes of up to 7 percent of the value of new purchases of business equipment. This equipment credit was modified and repealed and restored several times as aggregate economic policy swung from stimulus to restraint and back again. Most recently it was resurrected by President Nixon as the "Job Development Credit," and currently adds another $4 billion to business tax deductions.

Table 1

Estimated Tax Subsidies, 1973*

Provision	Billions of dollars
Accelerated depreciation	11
Equipment tax credit	4
Exclusions of realized capital gains	11
	26

*Includes corporations, unincorporated businesses and individuals.

One measure of the impact of accelerated depreciation and the equipment tax credit may be seen in the effective corporate tax rate. As noted in Table 2, 1972 corporate profits taxes of

Table 2

Effects of Accelerated Depreciation and Equipment Tax Credit on Corporate Profits, 1972

	Actual	Without accelerated depreciation and equipment tax credit
Corporate profits before taxes	$93 3 billion	$109 8 billion
Corporate profits tax	$40 8 billion	$ 51.7 billion
Tax as percent of profits	43 7 %	47 1%

Actual tax as percent of profits without accelerated depreciation $40 8 billion/$109 8 billion = 37 2%

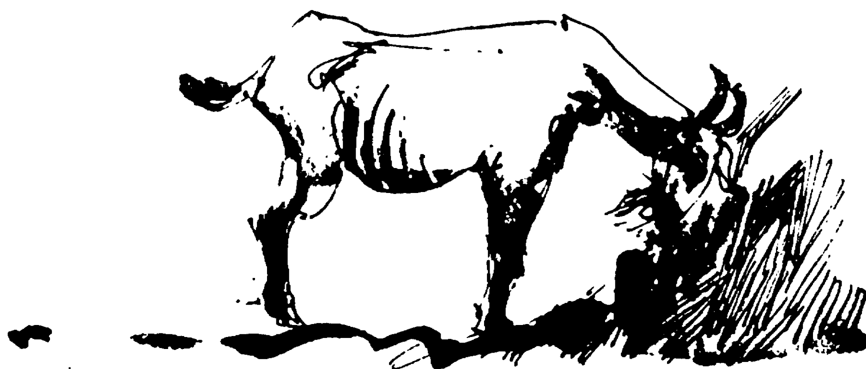
$40.8 billion were 43.7 percent of *reported* profits before taxes of $93.3 billion. But accelerated depreciation and the equipment credit meant an increased charge against corporate gross income of some $16.5 billion. Profits without this added depreciation deduction would have been correctly counted at $109.8 billion. Then, without the tax savings attributable to fast depreciation and the equipment credit, corporations would have paid taxes of $51.7 billion, some 47.1 percent of profits or just about the nominal 48 percent tax rate. But the actual tax of $40.8 billion, thanks to the subsidies, was only 37.2 percent of the undisguised $109.8 billion of profits. A proposal to cut the corporate tax rate openly by ten percentage points would, at the least, provoke one lively controversy. Yet just that has been accomplished —in a much less efficient way—without the general public's having any notion of what happened!

The cry for growth

Why all this largesse at the expense of the general taxpayer? The standard argument is that it will "accelerate economic growth." The tax concessions are *assumed* to increase business investment. And more business investment is *assumed* to bring on more economic growth. And more economic growth is *assumed* to be desirable.

Let's tackle the last proposition first. Until recently, it was considered self-evident. And, in many situations, economic growth does seem clearly desirable. But that hardly warrants the conclusion that *more* growth than is presently occurring is desirable.

Growth means more in the future than in the present. And there can be no reasonable objection to this if it can be achieved with no current sacrifice—by better allocation of resources, by putting the unemployed to work, by improving institutional arrangements to increase voluntary labor-



force participation, by securing the comparative advantage available in free international trade, by combating inefficiencies due to monopoly, by eliminating "negative externalities" such as polluters' escaping payment of the full social costs of their actions.

But if having more tomorrow compared with today means having less today, there is a real question. In a full-employment economy, the acquisition of more plant and equipment means less of other types of investment, or less consumption. In the latter case, it is not at all clear that the government should influence the decision. Who in Washington knows better than you and I that we, or our children, or our grandchildren need more cars, or more books, or more music, or more education in the future at the cost of less now?

Even if more growth were clearly desirable, it is not at all clear that our tax subsidies to business investment are the way to get it. For one thing, these subsidies apply only to *business* investment, and are unequal in their effects even there. None of them helps investment in physical capital by nonprofit institutions or by governments, or by households. Nor do they apply to intangible investment—that is, investment in research and development or other forms of "human capital," which is increasingly recognized as perhaps the decisive contributor to economic growth.

With unemployment still admittedly too high, it may well be argued that policy should be directed toward stimulating the economy in a way that will put more people back to work and will train those lacking skills necessary for employment. An appropriate program would call for investment in public goods, in housing, in education, in health, in the environment, and in the human capital necessary to real job development.

Lowest on the priority list would be policies to stimulate business investment. Government subsidies in that area involve encouragement in the one place where we might expect the free market to prove adequate. Where new investment would raise productivity and profits, we should expect that firms would be undertaking it already. And if $100 of new equipment will return only $95, it is not particularly good economics to give the firm a $10 subsidy to incur, in real terms, what amounts to a loss of $5.

Does it all work?

Then, too, there is a question as to how the tax concessions actually work. It is hard, for example, to make much sense out of the popular cash-flow argument, which asserts that by lowering taxes through accelerated depreciation or investment credits we give business more investable funds. This would seem to make a mockery of our capitalist system. For firms are supposed to invest not when they have profits, but when they expect to make sufficient additional profits from investing. It would be a sad indictment of our capital markets to suggest that funds are not available for profitable investment opportunities.

Theoretically more plausible is the argument that tax subsidies increase business investment by lowering the after-tax cost of capital goods relative to other factors of production. Firms deciding upon production processes will respond to the lower cost by trying to use more capital and less labor or land. Yet it is far from clear, even at the level of the individual firm or the industry, how much production functions—the technically necessary combinations of land, labor and capital for maximum output—permit this kind of substitution. Where adequately elastic production functions are assumed, econometricians claim substantial results from the subsidies. Where the data are allowed to speak for themselves, econometricians have found that subsidies have a much less stimulatory effect on business investment decisions. Business respondents in the McGraw-Hill capital expenditure surveys have themselves made only surprisingly small claims for the influence of accelerated depreciation or equipment tax credits on their decisions.

Uncertainty at the individual level suggests even more caution in looking for substantial effects in the aggregate. For total investment cannot increase without an increase in total saving. And while saving does indeed show a substantial short-run fluctuation, from the time of Keynes's *General Theory* there has been considerable skepticism as to the response of saving to changes in the rate of return. If tax subsidies to business will not somehow induce households to save more, the room for increases in business investment is sharply curtailed or comes at the expense

of other forms of investment. Specifically, if the supply of saving is fairly unresponsive to demand, increases in the demand for plant and equipment will largely spend themselves in raising interest rates and the overall cost of capital. If business investment does increase under these circumstances, it is likely to be at the expense of investment in housing, investment by nonprofit institutions or government, investment in research and development, and investment in human capital generally.

At the wrong time

The one meritorious argument for business investment subsidies is that, in a period of high unemployment, something is better than nothing. It may be better to stimulate production of public goods or human capital. But if for political reasons that path is closed, an argument can be made for putting our idle men to work producing more equipment.

In fact, however, tax preferences as now constituted tend to encourage business investment most when the economy is booming and least when there is substantial unemployment. A tax credit which is a fixed percent of equipment purchases will reduce taxes most when such purchases are high and reduce taxes least when they are low. And this is precisely the opposite of a proper countercyclical fiscal policy, which should aim at cutting taxes during a recession and raising them during a boom.

Accelerated depreciation operates in a similar fashion, though the process is not quite as clear. The faster the allowable depreciation, the more closely are current depreciation write-offs related to current capital expenditures. Hence, allowing faster write-offs will reduce taxes most in time of boom, when capital expenditures have been high. And, of course, the converse is also true: faster depreciation will reduce taxes least during recession.

The capital gains tax treatment is also likely to have its greatest impact during booms, when capital values are rising, and to be of little or no benefit during recessions, when capital gains are harder to come by.

Something that will work

As a general proposition, it is questionable

whether business investment in plant and equipment should be subsidized. Countercyclical policy may, however, be made more effective through a tool that permits direct influence on a significantly volatile and postponable expenditure. A constant proportional tax credit, whether at 7 percent or any other positive figure, tends to aggravate cyclical fluctuations, in addition to being a generous gift to business for the purchase of equipment that would have been acquired anyway. But the use of a *variable* credit has considerable potential for countercyclical purposes.

Such a credit should have marginal rates much higher than those in the current law, but should be concentrated on the encouragement of investment that would not have taken place without it. It should vary widely in amount, with all concerned recognizing that any rate is temporary. When it becomes necessary to discourage expenditures in order to cool the economy, the credit should be negative, thus becoming an additional tax.

In optimal form, there should be a very large subsidy—say 35 percent or 50 percent of the purchase price—for *all increases* in equipment purchases. This would apply not only to businesses but also to nonprofit institutions, such as universities, hospitals, and private schools, and to state and local governments. The subsidy should be direct rather than in the form of tax abatement. It would then also benefit small, unprofitable, and new firms that have little income against which to apply tax savings. "Increases" in investment could be measured as the excess of dollar expenditures over depreciation or over the average amount of expenditures in, say, the previous three years.

In a year such as the current one, if adequate growth were anticipated, the rate of subsidy might be zero. In a period of full employment and excessive inflation, the subsidy might be converted into a tax of 7 percent, or 35 percent, or 50 percent, in order to discourage increases in the dollar amount of business investment. Some special provision might be made for rapidly growing new firms to prevent them from being stifled by the equipment tax in inflationary periods.

Much is made currently of the need to live within a tight federal budget. This, then, would seem to be a particularly appropriate time to look again at the tens of billions of dollars in tax subsidies and incentives allegedly designed to encourage business investment. All of them—the capital gains exclusions, tax depreciation in excess of economic depreciation, and the equipment tax credit—may appropriately be viewed as unwarranted loopholes in the income-tax structure. In the face of scarce tax dollars and serious public needs, they divert Treasury revenues to where they are not needed. In our free-enterprise economy, business firms should be expected to invest an optimal amount without subsidies from the government. Elimination of tax subsidies of business investment would be a significant move in the direction of economic efficiency, stabilization, and equity.

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CAPITAL SHORTAGE: MYTH AND REALITY

By ROBERT EISNER

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CAPITAL FORMATION: WHERE, WHY, AND HOW MUCH?

Capital Shortage: Myth and Reality

By ROBERT EISNER*

A couple of years ago a New York Stock Exchange study (1974) pointed to a "capital shortage" of some $650 billion by 1985. Treasury Secretary William E. Simon, comparing his estimates of capital requirements in current dollars over the next decade with capital expenditures in current dollars over the last decade, came out with a gap of over 2-1/2 trillion dollars without noting the noncomparability of prices (p. 3871).

We have indeed a host of estimates from a number of econometric models, government bodies and private institutions, from Barry Bosworth, James Duesenberry and Andrew Carron and many others. A major Bureau of Economic Analysis study under the direction of Vaccara projected a total of $986.6 billion, in 1972 prices, for business fixed investment from 1975 to 1980, or 12.0 percent of cumulative gross national product, "in order to insure a 1980 capital stock sufficient to meet the needs of a full employment economy, and the requirements for pollution abatement and for decreasing dependence on foreign sources of petroleum" (p. 7).

Scarcities are sometimes seen in terms of sources of financing. Benjamin Friedman wrote in 1975, "To an unusually great extent, financial considerations may act during this period [1977-81] as effective constraints on the amount of fixed investment which the economy in aggregate is able to do" (1975, p. 52). In May 1976, however, Allen Sinai declared, "There are no financial shortages of any consequence" (p. 2).

But with the plethora of articles, studies, claims and warnings, what meaning can we attach to the notion of a capital "shortage"? In what sense can there be a shortage in a free economy where markets are cleared by the impetus of price movements? In an uncontrolled, competitive system, the rate of investment is not imposed as a prior constraint. Business investment, in particular, is the resultant of the utility-maximizing saving propensities of households and the profit or wealth-maximizing production decisions of business. These are subject to the constraints of the general economic atmosphere determined by the monetary and fiscal authorities of government, particular tax and monetary influences, and general currents of the world.

Any argument that there is a capital shortage must either imply a literal failure of market clearing or some standard external to the economic system. A failure of markets to clear in an equilibrium sense implies fixed or sticky prices. If government were to control prices and set those for capital goods too low, the quantity of capital goods demanded could exceed the quantity of capital goods supplied. Perhaps more to the point, government regulatory agencies might hold prices of certain products, such as electric power, so low that, while the quantity of electric power demanded might be very high, firms anticipating continued low prices would not find it profitable to invest in the capacity to meet future needs.

Similarly, there may be price fixing in financial markets. If the monetary authority and/or inflation force up interest rates while regulatory

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agencies offer restrictions on what interest may be paid, various kinds of shortages may develop. In some instances regulatory requirements of earnings coverage on debt issues may make impossible further corporate borrowing. At the same time, investor expectation of future returns may be such as to make the cost seem prohibitive for raising funds through sale of additional equity. Restrictions on interest rates paid by various banking and nonbank lending institutions may also have the effect of drying up the supply of funds for certain kinds of investment, particularly for residential construction which traditionally looks to such regulated institutions for financing.

Curiously, most discussions of alleged capital shortages do not focus sharply on these particular interferences with the free functioning of product or capital markets. Neither do they point rigorously to positive externalities of private saving and investment or negative externalities of current consumption, private or public, which might warrant government intervention in these markets in support of capital formation. Rather they relate to imagined disparities between the amount of capital or the rate of investment which some individual or group asserts we *should* have and what appears to be forthcoming. On the real side, projections are made of future rates and composition of production, levels of employment and the amount of capital "required" at some specified future date to match the given employment and output. Some judgment is then made as to whether the rate of saving over the intervening period will be such as to accumulate a sufficient amount of capital or what governmental policies might be appropriate to bring about such saving and investment.

As probably the most meticulous, thorough and detailed estimate of business fixed investment "requirements," the Vaccara-*BEA* study permits us to view clearly the basic inherent deficiencies of use of such projections to document a capital "shortage." First, the Vaccara-*BEA* work uses an extraneous Bureau of Labor Statistics estimate of 1980 "full employment" *GNP* and a sectoral composition of that *GNP* which predetermines the proportions of gross national product devoted to more and less capital-intensive final demand vectors. Second, capital-output ratios are determined from historical figures, sometimes with projections of trends in these ratios. No adjustment is made for the effects of possibly changing interest rates, prices, availabilities or costs of obtaining capital. Third, "summary" assumptions are made about discards or retirements and consequent need for replacement. No adjustment is made for the possibility that, faced with "shortages," firms might discard existing plant and equipment less rapidly. Fourth, requirements for pollution abatement capital are taken from *BEA* and McGraw-Hill projections and "a large dose of judgmental adjustment." Fifth and finally, needs for energy-related investment are taken from "Project Independence" programs.

Out of all that came the estimate of $986.6 billion as additional capital needed from 1975 through 1980 to meet the projected expansion needs for the specified final product mix in 1980 with also specified capital-output ratios and discards or retirements. To relate this to a projected flow of saving, real or financial, and infer a capital shortage would be to put economic processes in a strait jacket. If the indicated saving were not forthcoming at existing rates of return, would not the return to saving and the cost of obtaining it rise? Would not discards and retirements slow in the face of more costly capital? Would not industry shift to less capital-intensive or less durable means of production, thus reducing capital-output ratios? Would not demand and the final product mix, under the pressure of changes in relative prices, shift toward less capital-intensive industries? And might not the market output to be produced by a full employment economy be reduced in response to the shifts in allocation to the nonmarket output of pollution abatement or to more costly domestic energy production?

While much business attention is directed to presumed shortages in the financing of business investment, it is hard to believe or to find in the

data evidence that our financial system is unable to complete the nexus between savers and the accumulaters of real capital. As we have suggested, imperfections in our financial markets, frequently created by government restrictions, may well distort the allocation of saving. Certain restrictions, such as those on interest payments on deposits may to some extent discourage saving, but even here conclusions depend upon the doubtful elasticity of saving with respect to its rate of return, including both income and substitution effects.

Individual firms at times believe themselves pinched by financial shortages in the face of what appear to them to be attractive investment opportunities. But in any economy where resources are not free, there are opportunity costs to investment. Costs to an individual firm, financial and nonfinancial, reflect market valuation of alternative uses of desired resources. If an individual firm finds that it cannot obtain funds at a sufficiently low cost to warrant their use in investment, this in principle implies that there are other uses of those funds which are deemed more valuable.

Where, in the aggregate, firms feel that they cannot profitably finance as much investment as they wish, households, nonprofit institutions and governments and government enterprises apparently have exercised superior claims to the additional resources which business might elect to have for more investment. This, ultimately, is not a financial constraint but a real constraint imposed by the limitation of resources on the one hand and society's preferences, expressed both individually and socially, on the other.

The decisive constraint on capital formation may well lie in the supply of saving, although not in the manner sometimes affirmed. "Gross saving" in our national income and product accounts comprises personal saving, undistributed corporate profits, business capital consumption allowances, the government surplus and net capital grants received by the United States. This is identically equal to gross investment, which includes gross private domestic investment and net foreign investment. The identity is a powerful and sharp but potentially misleading tool, where one is tempted to apply carelessly *ceteris paribus* assumptions. One might, for example, assert that, given gross saving which equals gross investment, reducing net foreign investment would raise gross private domestic investment. But can one properly assume that reducing net foreign investment, with likely consequential reductions in the domestic employment and income associated with the production of goods and services sold abroad, would leave gross saving unaffected?

A most common complaint is that the federal government budget deficit, calculated at $74.6 billion in the 1975 National Income and Product Accounts, is "crowding out" private investment. We should, at least in this context and indeed more generally, dismiss the monetarists' argument that funds used to buy federal debt are not available to buy business debt. For this quite confuses stocks and flows of funds and fails to recognize that the money used to buy federal securities is in turn, roughly to the extent of the deficit, respent and hence again available for further lending. All this may create some pressure on interest rates if the monetary authority is not accommodating but even apart from that "if," there is no reason to anticipate major interest effects on investment.[1]

In terms of the saving-investment identity, what of the argument that of the $262.8 billion of gross private saving in 1975, $64.8 billion was dissipated in the government deficit (negative surplus, with a $9.8 billion state and local surplus partially offsetting the federal deficit)? It can be stated that only $195.4 billion was left for gross investment. Would not gross investment have been more if the government deficit offset to gross private saving were less?

Again such reasoning involves invalid *ceteris paribus* assumptions. Suppose the federal budget deficit were reduced by eliminating revenue-sharing grants to state and local governments. Would that not reduce the state and local governments surplus? Or suppose social

[1]A paper by Patric H. Hendershott (1976) points out that a deficit-creating tax cut accompanied by increased short-term Treasury financing may well *lower* the long-term interest rates most relevant to investment.

security benefits were reduced or personal income taxes increased. Would this not reduce personal saving? Or suppose corporate profits tax rates were raised. Would this not reduce undistributed corporate profits?

Even merely within the accounting framework, one quickly sees that reducing the federal budget deficit in an effort to make more private saving available for business investment may merely reduce other components of gross saving, leaving no more for investment. The full economic consequences may indeed be perverse. It should be clear to most that in a year which witnessed the depth of the sharpest and most severe recession since the Great Depression of the 1930's, action to reduce the government deficit, either by increasing taxes or reducing government spending, could only have been expected to further reduce aggregate demand, income, output and private saving. That recession saw the total of fixed investment drop 25 percent from the first quarter of 1973 to the second quarter of 1975. Any further government contributions to lowering actual demand by attempted budget balancing could only have depressed the economy and saving and investment all the more.

If some future capital "shortage" is foreseen, the surest and most substantial spur to current capital formation is a rapid return to relatively full production and employment. There need be no fear of lower taxes stimulating consumption or increased government spending depriving capital goods industries of resources when unemployment and excess capacity are rampant.

Once we contemplate full employment, the rules are quite changed. With resources fixed in the short run, in any economic world we know there are scarcities everywhere. Households would like to consume more. Those concerned with the provision of public goods—or whatever else comes from government—would like more of them. And those responsible for the acquisition or production of capital to meet future needs would like to have more of that. Who is to say that there is to be a greater allocation of resources to one of these categories—the accumulation of capital—and less to the others? "Shortage" becomes merely the somewhat pejorative expression of the universal characteristic of scarce resources.

One argument for the existence of a "capital shortage" is that government policy, particularly tax discrimination, has biased capital accumulation downward. With regard to business investment, where most of the heat has been generated, such an argument is not easily substantiated. Rather, the combination of capital gains exclusions, tax depreciation in excess of economic depreciation, tax deduction of interest costs, and equipment tax credits, particularly in a climate of expected inflation of capital goods prices, offer a considerable distortion in the direction of more business investment than would be undertaken in a free market. This is probably accentuated by complementary restrictions of investment in housing, government, nonprofit enterprises and human capital.

It is indeed in these latter categories that we may find greatest evidence of true capital shortage. Anticompetitive forces in the area of building trades and residential construction, along with restrictive covenants and imperfect mortgage markets, may well be accountable for depressed investment and excess capacity in the home building industry. Government military expenditures receive vast support, but a systematic effort to decide on public investment in terms of cost-benefit analyses, which would correspond to entrepreneurial profit calculus, might give different results from those stemming from the current electoral-legislative-logrolling complex. Neither nonprofit enterprises nor state and local government, we should be reminded, enjoy any benefits from equipment tax credits or accelerated depreciation.

But most important is the great bulk of capital accumulation which takes place in intangible or human form. Here there are basic a priori reasons to expect underinvestment. Where a company constructs or buys plant and equipment it can retain it and its benefits for itself. Where it invests in research, development, know-how and training, since knowledge and skills are generally freely disseminated in a free

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society, differences may be substantial between marginal return to the investor and marginal social return. Most particularly, since we are not a slave society, it does not pay individual private enterprise to invest in human beings for more than the expectation of returns from their uncertain and usually short-run employment.

Yet the serious imperfection in human capital markets, along with understandable individual risk aversion, makes it very difficult for people to invest adequately in themselves. Information and transaction costs curtail drastically the supply of finance for human capital. What youth with aspirations for business leadership or service as an engineer, political leader or economist can go to the bank and say, "Invest in me! My expected life-time earnings are high. I would be happy to give you a promisory note or sell you equity rights in my human capital"?

As Benjamin Friedman has suggested (1976), the issue of capital shortage may perhaps better be raised as: Shortage for whom? The sometimes heated discussion may have more to do with distribution of income and particularly wealth than with their aggregates. Tax concessions to business allegedly to encourage investment essentially convey ownership of additional capital to current equity holders. General cuts in taxes to stimulate demand and indirectly encourage investment give increased capital ownership to all those who save more out of increased after-tax incomes. Expenditures for education and training increase the wealth primarily of those whose only capital is human.

Finally, it is argued that government transfer payments and taxes create a capital shortage in the sense of encouraging consumption and discouraging saving. In part this argument depends upon notions, appropriately questioned in Milton Friedman's permanent income and Franco Modigliani's life cycle consumption functions, that the marginal propensity to consume of the poor is greater than that of the rich, so that redistribution from the rich to the poor will raise consumption. Indeed, the dominant component of taxes on the working young to finance transfer payments to the elderly retired may suggest quite the opposite. The propensity of Americans to leave estates may be such that, despite the need of many elderly to consume all of their social security benefits, our social insurance system may add more to private saving than it subtracts.

Concerns that the social commitment to retirement benefits vitiates the need for and hence reduces the quantity of private saving may be countered on two counts. First, they ignore the effects of alternative private commitments, chiefly from one's children. Second, they raise some question as to the appropriate arguments of a social welfare function. If people prefer to avoid risk and uncertainty as to their retirement and to avoid having to save to meet that risk, why should government not permit them to obtain this superior position?

It is also asserted that a capital shortage is created by income taxation which reduces the after-tax return on saving. But here we must keep in mind both income and substitution effects. If saving is motivated by expected future consumption needs, a lower rate of return on accumulated wealth may induce us to save more in order to reach or come close to our originally preferred consumption path. The same argument of course applies to the effects of taxation on productive or remunerative work itself. As taxes rise we have to work more to attain any given level of after-tax benefits.

Finally, we are told that, for some reasons of state or religion, we must accumulate capital more rapidly in order to grow faster. It is argued that alleviating capital "shortage" would contribute to growth and hence to future output. But this would be at the expense of current availability of private and public goods and services. Is it necessarily desirable that we have more in the future than in the present? It is not axiomatic that we should sacrifice more when we are young in order to live better when we are older, or that our generation should sacrifice in the prospect that our great-grandchildren would live better. Our golden rule need not be, "Jam tomorrow and jam the next day, but never jam today!"

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BUSINESS INVESTMENT PREFERENCES

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Business Investment Preferences

ROBERT EISNER*

Tax incentives for business investment are neither equitable nor economically efficient. They contribute to the misallocation of resources and a consequent reduction of economic output and growth. They also contribute to a redistribution of income from working people to property owners and, generally, from moderate income Americans to the relatively rich. By unduly reducing the burden for some, they must in the long run, if not immediately, raise the burden for others.

I have estimated the current cost of several major business investment tax incentives to the Treasury, and hence to taxpayers in general, as $26 billion per year.[1] With continued growth and continued inflation that annual amount will tend to rise. What are these "business investment preferences?" What is their purpose and rationale? How effective are they in achieving their stated purpose? And how, in terms of basic principles of economics and justice, are we generally to evaluate them and possible alternatives in our tax structure?

The Substance of the Major Preferences

Major provisions of the Internal Revenue Code of 1954 affecting business investment relate to depreciation deductions, the investment credit, and the treatment of capital gains. Supporters have sought to justify them as increasing business capital expenditures. The extent

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* Professor of Economics, Northwestern University, and research associate of the National Bureau of Economic Research. Neither institution, of course, nor the National Science Foundation, which has contributed generous financial support to my research on the investment function, is responsible for the contents of this paper.

1. Eisner, *Bonanzas for Business Investment*, 16 CHALLENGE, Nov.-Dec. 1973, tables 1 & 2, at 40-41.

to which each does increase investment, singly or in combination with each other and with additional tax provisions, has been disputed. I shall discuss that dispute below, and shall also come back to what is properly a primary question, whether the overall purpose is appropriate.

Depreciation Deductions

The basic federal income tax provisions for depreciation provide that "[t]here shall be allowed as a depreciation deduction a reasonable allowance for the exhaustion, wear and tear (including a reasonable allowance for obsolescence) of property used in the trade or business . . . ."[2] There has been considerable disagreement as to what constitutes "a reasonable allowance." Furthermore, there has been considerable agitation, with much success, to increase these allowances, whether "reasonable" or not.[3]

In World War II, presumably to encourage acquisition of facilities of limited, war-time use, firms were allowed under "certificates of necessity" to write off many capital additions in five years for tax purposes, regardless of normal expected lives. Similar five-year amortization was permitted for Korean War-related facilities. The major revision of the tax code in 1954 introduced on a permanent basis "liberalized" or more rapid depreciation in the form of the "double-rate declining balance" and "sum of the years digits" methods. While these new methods were widely advertised as offering merely more rapid "recovery" of capital investment,[4] they actually constituted both initial and continuing reductions in tax liabilities for firms making capital expenditures. And the more capital-intensive the firm, the greater the tax advantages.

The gain to the taxpayer and loss to the Treasury resulting from accelerated depreciation is not always fully understood. Since total depreciation charges on individual units of plant and equipment or on all the capital additions of a single year are unaffected by acceleration, but are merely moved forward in time, it is sometimes incorrectly inferred that accelerated depreciation merely decreases total tax payments in early years but increases them correspondingly in

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2. INT. REV. CODE OF 1954, § 167.
3. *See* Terborgh, *Tax Depreciation*, in 2 TAX REVISION COMPENDIUM 857 (1959); *Hearings on General Revenue Revision Before the House Comm. on Ways and Means*, 83d Cong., 1st Sess., pt. 2, at 743-75 (1953). *See also* TERBORGH, REALISTIC DEPRECIATION POLICY (1954); Barlow, *The Tax Law Bias Against Investment in Production Facilities*, 26 NAT'L TAX J. 415 (1973); Domar, *The Case For Accelerated Depreciation*, 67 Q.J. ECON. 493 (1953).
4. *See, e.g.*, Barlow, *The Tax Law Bias Against Investment in Production Facilities*, *supra* note 3, at 428-29.

later years.[5] This incorrect inference is not to be confused with the correct statement that more rapid depreciation for tax purposes may be viewed as interest-free loans in the amount of the tax deferrals.[6] Such interest-free loans are enormously valuable, even when rates are below the 10 percent prime figure of the late summer and early fall of 1973. At a 10 percent rate, the cost of a dollar of tax payments next year is only 91 cents today; a dollar ten years from today has a present value of less than 39 cents.

But if rapid depreciation for tax purposes is viewed as an interest-free loan on a single piece of plant and equipment or all the capital expenditures for a single year, it must be recognized that business firms go on acquiring plant and equipment year after year. To the interest-free "loans" of the first year are superimposed additional interest-free loans in each of the years in the future. For stationary firms, which merely replace plant and equipment at constant prices, the initial interest-free loans become permanent, hence outright gifts. In growing firms, for which the money value of gross capital expenditures generally grows year after year, that is, for almost all large United States corporations, the gifts and lower taxes are repeated year after year, indefinitely, for as long as the tax and depreciation regulations remain in effect. Thus, the annual excess of depreciation charges stemming from the 1954 "liberalization" or acceleration of depreciation is now running in the neighborhood of $12 billion, or some $6 billion in reduced taxes.[7]

By the early 1960's, the clamor for further reductions in business taxes via still higher tax depreciation charges was again loud. In response, the 1962 "guidelines"[8] generally speeded depreciation by

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5. A particularly egregious example may be found in a statement by President Nixon announcing the Asset Depreciation Range System. "A liberalization of depreciation allowances is essentially a change in the *timing* of a tax liability. The policy permits business firms to reduce tax payments now, when additional purchasing power is needed, and to make up these payments in later years." Office of the Pres., Press Release (Jan. 11, 1971). An accompanying statement by then Treasury Secretary David M. Kennedy declared, "It should be kept in mind that a liberalization of depreciation allowances primarily involves a postponement of the tax payment, and that this payment will eventually be added to government revenues." TREASURY DEP'T. NEWS RELEASE, 717 CCH 1971 FED. TAX. REP. ¶ 6366. This author responded to such statements in *Panel Discussion on General Tax Reform Before the House Comm. on Ways and Means*, 93d Cong., 1st Sess., pt. 3, at 380 (1973):

> These statements are false. At the worst they represent a conscious effort on the part of some to deceive the public. At best they represent a confusion between the consequences of the "liberalization" in depreciation for a single asset or assets of a single year or even a limited number of years and the permanent "liberalization" envisaged in the proposed system.

For supporting analyses, *see id.* at 380-90; Eisner, *Depreciation and the New Tax Law*, 33 HARV. BUS. REV. 66 (1955); Eisner, *Conventional Depreciation Allowances vs. Replacement Cost*, 21 THE CONTROLLER 513 (1953); Eisner, *Depreciation Allowances, Replacement Requirements and Growth*, 42 AM. ECON. REV. 820 (1952); Eisner, *Accelerated Amortization, Growth and Net Profits*, 66 Q.J. ECON. 533 (1952).

6. *See, e.g.*, TURE, ACCELERATED DEPRECIATION IN THE UNITED STATES, 1954-60, at 14 (1967).

7. Projected from data of the Bureau of Economic Analysis, largely published in SURVEY OF CURRENT BUS., Aug. 1968, Aug. 1971, Jan. 1972, and Jan. 1973.

8. Rev. Proc. 62-21, 1962-2 CUM. BULL. 418.

lowering the old "Bulletin F"[9] lives which were to have been considered in setting depreciation formulae. Along with the liberal guidelines came the "reserve ratio test," which was intended to keep each firm's actual depreciation charges consistent with its replacement experience.[10] The test was never really enforced.

The reserve ratio test was abandoned when the Treasury[11] instituted the new "Asset Depreciation Range System" (ADR). Congress formally enacted ADR into law after considerable protest and the initiation of litigation against the Treasury's action.[12] Its central element was the permission to depreciate properties at rates up to 20 percent faster (or slower!) than those indicated in the guidelines. Evidence has developed that ADR is not being utilized as widely as envisaged because many firms, in the long secular move toward more "liberal" depreciation, had already taken to writing off capital considerably more rapidly than indicated in the guidelines. Picking my way through a variety of figures, involving all of the "liberalizations"—the double-rate declining balance and sum of years digits speedups, the 1962 guidelines, the shortening of tax lives, and the ADR system—I have been able to estimate total reductions in 1973 taxes stemming from accelerated depreciation as amounting to $11 billion.[13]

The Investment Tax Credit

Proponents of business investment preferences are rarely satisfied with accelerated depreciation. In 1962 the so-called investment tax credit was introduced.[14] It entailed a reduction in taxes of up to 7 percent of the amount of business purchases of eligible new equipment. This measure has had a varied and checkered career, with changing interrelations with depreciation: suspension and reinstitution in 1966-67, abandonment in 1969, and reinstitution again in 1971.

9. *See, e.g.*, Barlow, *The Tax Law Bias Against Investment in Production Facilities, supra* note 3, at 415 n.3: "Bulletin F was first published in 1921 without any schedule of standardized depreciable lives. Schedules of suggested standardized lives were added in 1931 and revised in 1934 and subsequent years." *Id.*

10. The reserve ratio test was intended to provide objective standards for determining whether taxpayers were justified in claiming depreciation based on the useful lives suggested by Rev. Proc. 62-21 for guidelines classes. Reserve ratios were computed for each guideline class by dividing the actual cost of class property still in use into the total amount of claimed depreciation. The actual ratio was then compared with a range of test ratios furnished in Rev. Proc. 62-21. To the extent that the firm's class ratio fell outside the parameters of the test range, adjustments in useful life were recommended unless the taxpayer could otherwise justify his treatment.

11. TREASURY DEP'T NEWS RELEASE, ASSET DEPRECIATION RANGE (ADR) SYSTEM, 717 CCH 1971 FED. TAX REP. ¶ 6736.

12. INT. REV. CODE OF 1954, § 167(m)(1).

13. Eisner, *Bonanzas for Business Investment, supra* note 1, at 40.

14. INT. REV. CODE OF 1954, § 38.

Recent high-level proposals, particularly from Arthur F. Burns, Chairman of the Federal Reserve Board,[15] to have the credit vary with counter-cyclical considerations, seem to have been scuttled by the Nixon Administration. In its current form the equipment tax credit is saving business taxpayers and costing the Treasury some $4 billion per year.[16]

The Capital Gains Exclusions

Investment or saving is capital accumulation. But for many, if not most individuals, and many businesses, the bulk of capital accumulation takes place not through what is ordinarily accounted as investment or saving but rather by means of capital gains. Yet, income or saving through capital gains has some very special tax treatment. Half of realized capital gains on assets held six months or more are excluded from adjusted gross income for tax purposes.[17] All of capital gains generally escape income taxation when they are passed as testamentary gifts.[18] These exclusions amount to $10 to $12 billion per year in tax savings to the lucky taxpayers and in lost revenues to the Treasury.[19]

It is enlightening to note the distribution of advantages on realized capital gains, even leaving aside the gift and bequest exclusions. Calculations from *Statistics of Income* for 1970 reveal that the realized capital gains exclusions resulted in average tax savings in the order of only 0.2 percent for those with incomes under $2,000. By contrast, in the $1,000,000-and-over category for adjusted gross income, some 63 percent of total income, including capital gains and losses, came from net capital gains, and the tax savings ran to about 20 percent of total income.[20]

Realized capital gains, however, are literally only the tip of the iceberg. It may matter for tax purposes whether an asset is sold and repurchased or whether another asset is purchased in its place.[21] But

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15. *See, e.g.*, Statement by Arthur Burns, *Hearings on the President's Economic Report Before the Joint Economic Comm.*, 93d Cong., 1st Sess. (1973); Address by Arthur Burns, *Some Problems of Control Banking*, Internat'l Monetary Conf., June 6, 1973.

16. It is estimated that the tax credit "lowered corporate taxes by $3 billion in 1972." *The U.S. Economy in 1972*, 53 SURVEY OF CURRENT BUSINESS 12, 27 (1973). The substantial increase in dollars spent on investment in machinery and equipment since 1972 and the additional tax savings to non-corporate business are clearly sufficient to warrant the $4 billion figure.

17. INT. REV. CODE OF 1954, § 1202.

18. *Id.*, § 1014.

19. Total net long term capital gains in 1970 amounted to $20.2 billion. *See* TEASURY DEP'T, PUB. NO. 198 (2-72), PRELIMINARY 1970 STATISTICS OF INCOME, INDIVIDUAL INCOME TAX RETURNS (1972). Of these, well over half were reported on tax returns with adjusted gross incomes of over $30,000. Taxes on the excluded portions of these gains would certainly have averaged close to 50%, indicating tax savings then of at least $5 billion. The general secular growth in all forms of income would make a current estimate of $7 billion appropriate, aside from short run stock market fluctuations. Estimates of $4 billion for tax savings on capital gains untaxed in bequests brings the total into the $10 billion range.

20. Calculated from tabulations contained in TREASURY DEP'T, STATISTICS OF INCOME, INDIVIDUAL TAX RETURNS, 1970.

21. INT. REV. CODE OF 1954, § 1231.

in the case of marketable goods, value or the accrual of value exists equally whether the good is actually sold or not. A meaningful economic definition of income is that which can be consumed while maintaining wealth or net worth intact. On the assumption that savings could be consumed, income is the total of consumption and saving. For saving then is the increase in net worth or wealth, which is identical in amount whether it occurs from the growth in value of existing assets, sold or unsold, or the use of salary or income to buy other new assets.

Accrued capital gains in most of the last quarter century have significantly exceeded the total amount of traditionally measured personal saving (the difference between disposable personal income, which does not include capital gains, and consumption.)[22] But the accrued capital gains are not taxed unless and until they are "realized,"[23] frequently many years after accrual. As pointed out above, time is money and a dollar of taxes to be paid years in the future has a present or discounted cost much less than a dollar. This factor, compounded by the gift and bequest exclusions, results in an effective rate of taxation on accrued capital gains, according to at least one carefully constructed estimate,[24] of about 8 percent, far below the 50 to 70 percent rates associated with the total incomes of the major recipients of the capital gains benefit. The tax loss to the Treasury from these "interest-free loans" that delay even the half taxation on capital gains until "realization," is yet to be measured.

Effectiveness of the Tax Preferences

These various tax advantages are presumed by many of their backers to increase business investment. The rationale is varied, but in some cases clearly illustrative of the fallacy of composition: What may be true for individual firms cannot be true for the entire economy.

A major argument is that tax concessions give would-be investors necessary funds. It is suggested that there is a shortage of capital and that individuals and businesses would increase investment by the amount of their tax savings. But if more resources are to be devoted to capital accumulation, given an economy at full employment, resources must somehow be taken from use in providing for consumption or government purchases.

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22. *See* McElroy, *Capital Gains and the Concept and Measurement of Purchasing Power*, in 1970 PROC. OF THE BUS. AND ECON. STAT. SEC., AMER. STATISTICAL ASSOC. 132.
23. INT. REV. CODE OF 1954, § 1001.
24. *See* Bailey, *Capital Gains and Income Taxation* in THE TAXATION OF INCOME FROM CAPITAL 26 (Harberger & Bailey eds. 1969).

Recognizing this, probably the single greatest feasible stimulus to investment would be drastic cuts in the defense budget, although this solution is rarely offered by proponents of business investment. Comparison of the post-World War II records of the United States and Japan is suggestive on this point. Japan has shown a tremendous rate of growth and a much higher ratio of business investment to GNP than has the United States. But the difference can be accounted for largely by the much larger proportion of United States GNP which goes to defense.

If consumption and government expenditures for defense or elsewhere are not cut, reduction of business tax liabilities frees no resources for business investment. Each firm or individual might have more funds to invest with lower tax liabilities if all other parameters were unchanged, which would imply that all other taxes, demand, prices, and costs were unchanged.

But this, in the economy as a whole, is not possible. Given the needs of a sound fiscal policy, lower taxes relating to business investment preferences must be matched by higher taxes elsewhere. A firm may believe that higher depreciation allowances or the equipment tax credit gives it more funds. This assumption will not generally be true if these tax reductions are matched by higher corporate or individual income taxes that reduce the funds coming in through purchases of the firm's products or securities. If a sound fiscal policy gives way to an inflationary one, the flow of funds for investment may still be restricted by the need for greater expenditures to purchase higher priced goods and services, as well as by the high interest rates likely to be engendered. Of course, if investment tax preferences are introduced in a depressed economy requiring stimulative action, more investment along with more spending in other directions is likely to result. This, however, would be generally true for stimulative fiscal policy, with or without special incentives for investment.

The more likely effect of business investment preferences may be explored initially in a model of determination of business investment which involves maximization of expected profits or the present value of the enterprise. This model can be used to note effects on business investment demand functions. In the economy as a whole, however, business investment demand must be related to competing demands for capital and to the supply of saving. Viewed this way, the various tax advantages must effect their consequences by means of one or more of the following:

1. Lowering the price of capital relative to other factors of production, or of more durable or substantial capital relative to less durable capital, so as to bring about more capital-intensive methods of production;

2. Causing a substitution of certain kinds of favored capital, such as equipment or plant and equipment, for other forms of capital;

3. Bringing about a substitution of business investment for

investment by government, non-profit institutions, and households;

4. Increasing the total supply of saving and hence total investment.

There have been a number of econometric analyses focusing on at least some of these issues.[25] Results have been varied. Where investigators have assumed particular forms and parameters of functions that imply large quantitative impacts of changes in the cost of capital such as might be brought about by tax incentives, substantial effects on business investment have been claimed. More generally, however, where such assumptions have not been made, the effects, particularly of accelerated depreciation and the equipment tax credit, appear to be severely limited. In general, estimates of added investment have been significantly less than the sacrifices in tax revenues used to promote them.

This conclusion is reinforced by analysis of individual firm responses in *McGraw Hill Capital Expenditure Surveys*.[26] Specific questions inquiring as to the amount of investment due to new and revised depreciation schedules, tax credits for new equipment, and reductions in corporate tax rates indicate generally minor increases. Questions were asked in successive years and anticipated effects were actually less after tax incentives were in operation long enough to prove more potent. Moreover, *ex post* reports of actual investment resulting from the tax measures were less than *ex ante* anticipations. The mean estimates of effects of investment incentives proved less in the surveys than all except the smallest of estimates from several econometric models considered, and these, as noted above, have not generally been high. When the variables were fitted into investment equations including other determinants of capital expenditures, evidence suggested, as in earlier work with quarterly SEC data for manufacturing,[27] that the independent effects of the incentives were, if anything, less.

But this is still essentially a partial equilibrium analysis. Suppose tax incentives for business investment do have some positive

25. *See generally*, TAX INCENTIVES AND CAPITAL SPENDING (Fromm, ed. 1971); Hall & Jorgenson, *Tax Policy and Investment Behavior*, 57 AM. ECON. REV. 391-414 (1967); Eisner, *Tax Policy and Investment Behavior: Comment*, 59 AM. ECON. REV. 379-88 (1969); Coen, *Tax Policy and Investment Behavior: Comment*, 59 AM. ECON. REV. 370-79 (1969); Hall & Jorgenson, *Tax Policy and Investment Behavior: Reply and Further Results*, 59 AM. ECON. REV. 388-401 (1969); Eisner, *Tax Policy and Investment Behavior: Further Comment*, 60 AM. ECON. REV. 746-52 (1970).

26. *See* EISNER & LAWLER, TAX POLICY AND INVESTMENT: AN ANALYSIS OF SURVEY RESPONSES (1973).

27. *See* Eisner, *Tax Policy and Investment Behavior: Comment*, 59 AM. ECON. REV. 379-88 (1969); Eisner, *Tax Policy and Investment Behavior: Further Comment*, 60 AM. ECON. REV. 746-52 (1970).

consequences for the particular forms of business capital expenditures favored. What does that do to total investment? Even within the business sector, the results must surely be mixed. Where the investment credit is limited to equipment, may there not be some substitutions of equipment for plant? The credit is limited to equipment with depreciable lives of at least three years.[28] Is purchase of equipment with a life of less than three years not then discouraged? Only one-third of investment in qualifying property is eligible for the credit where useful life is at least three years but less than five years, and two-thirds of the investment is eligible if the useful life is at least five years but less than seven years. Is there not therefore some encouragement for expenditures for durable equipment lasting at least seven years, at the expense of all less durable equipment?

But further, to anticipate an issue to which we shall return, what is the effect on more broadly defined business investment, which includes the output of all resources applied to the increase of future capacity or productivity? Will not investment in research and development, manpower training, and management know-how now be made relatively more expensive as compared to plant and equipment expenditures? By focusing only on forms of investment directly affected by tax preferences, we may forget the full interrelations of the economic process. One does not stimulate in one area without having consequences elsewhere.

Some of the consequences are felt outside of the business sector. Increased expenditures for business plant and equipment will put pressure on the supply of construction services for residential housing as well as buildings for non-profit institutions and government. Given the supply of saving and, particularly, the consequent desire of monetary authorities to curb inflation by limiting total spending, money is likely to become "tight" and interest rates rise. These consequences indeed impinge on the primary positive effects of business investment. Neither econometric estimates nor surveys focusing on business investment will catch this negative fallout if they assume that other factors such as interest costs and supply prices remain unaltered with tax preferences.

The consequences for non-business investment expenditures can be marked. Not only do they lack the favorable stimuli directed to profit enterprises, but they are frequently struck severely by stringencies of physical and monetary supply. The very tax deductibility of expenditures makes profitable enterprises ready to bid high for the equipment and construction services they need. But tight money becomes notoriously critical to investment in housing and in construction by school districts, states, and municipalities. And while the federal government can presume to raise all the money it wishes, infla-

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28. Revenue Act of 1971, Pub. L. No. 92-178, § 102, 85 Stat. 499. *See* TREASURY DEP'T PUB. No. 572 (10-72) *Tax Information on Investment Credit*, at 7 (1972).

tionary pressures fueled by heavier business capital expenditures surely increase the resistance to federal investment spending.

An overriding issue regarding total investment is the nature of the saving function, a matter surprisingly ignored on occasion. Early Keynesian analysis raised serious questions as to the elasticity or proportional response of saving to changes in the rate of interest or other measures of its rate of return. Contemporary analysis has, in fact, underscored these questions. Dominant views of economists regarding the determinants of savings tie them to the "permanent income" formulation of Friedman[29] and the basically analogous life cycle model of Modigliani.[30] While both envisage effects from the return on saving, they bring to the fore the more basic considerations of providing for a lifetime of consumption. Indeed, the mixture of income and substitution effects resulting from higher rates of return after taxes continues to leave ambiguous the very direction of response to changes in rates of return on saving. Put simply, we save out of income in the primary income-earning years of life in order to have wealth available for consumption during retirement or other future periods when current expenditures are likely to exceed current income. A higher rate of return makes us able to meet relatively fixed future needs with less current saving.

Paradoxically, business investment in plant and equipment as well as other capital accumulation might receive more stimulus from certain measures, at first thought far afield, that might have major impact on private saving. In particular, the motive for much saving is to provide for retirement. Our increasingly comprehensive Social Security system tends, desirable as it may be—and I do not want to be interpreted as opposing Social Security—to obviate some of the need for private saving. It is not necessary to put aside income now to provide for the future if retirement expenses will be taken care of by the government.

Of course, employer and employee contributions for social insurance deprive households of income which might otherwise be spent in consumption, but current Social Security payouts have compensated for this. Moreover, recent substantial increases in Social Security benefits and in associated medical assistance have tended to make traditionally defined consumption expenditures higher than they would otherwise be. In an economy operating close to full capacity, given existing institutional arrangements, increased consump-

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29. FRIEDMAN, A THEORY OF THE CONSUMPTION FUNCTION (1957).
30. Modigliani & Brumberg, *Utility Analysis and the Consumption Function: An Interpretation of Cross-Section Data*, in POST-KEYNESIAN ECONOMICS 388 (Kurihara ed. 1954).

tion must come from somewhere, and as we trace the involved interrelations in our complex economy we can expect to see some fallout on business investment. Hence, if we really want to stimulate investment, we might well consider sacking the Social Security system! By reserving less for comfortable years of retirement and less for medical services, more resources can be made available for machines and factories. And if American households cannot expect to be taken care of by their government, they can be expected to save more themselves for the rainy days in the future, entrusting their savings, directly or indirectly, to investment in profit-making enterprises.

Usefulness of the Tax Preferences

Suppose the investment tax preferences were more effective than I indicate, or suppose that they were made so massive that they would bring about substantial business investment in any event. What would the added business investment accomplish? If the economy were suffering from inadequate aggregate demand and large scale unemployment, the increase in investment would raise total demand, output, and employment. The same result could be accomplished by other fiscal and, perhaps, monetary measures that might do less to distort resource allocation, but this is not the issue currently posed. Rather, it is argued that we need more business investment to increase the rate of growth, presumably of productive capacity, which it is implicitly assumed will be utilized, and to modernize our productive facilities so as to improve our "competitiveness in the world market place."[31] Let us consider these arguments in turn.

Böhm-Bawerk argued persuasively for the greater productivity of more "roundabout" or capital-intensive methods of production. The pail is more productive than the hollow of a man's hand in collecting water from the spring. And the "runnel or rhone which brings a full head of water" to the man's cottage is more productive still.[32] But should the peasant be given a tax incentive to build large tanks, a reservoir, or a dam for his own use? Not so clear!

Surely not every capital addition is worthwhile. Not every new plant or new piece of machinery adds to future products more than its own cost. Yet, in making investment decisions apart from tax considerations, businesses must pick among all possible capital expenditures those that promise sufficient advantage. Why should they be persuaded by special tax preferences to incur capital expenditures that would not appear sufficiently advantageous without such preferences?

Indeed, the basic notion underlying Böhm-Bawerk's view of the in-

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31. *See, e.g.*, Madden, *Is Our Tax System Making Us Second-Rate*, 26 NAT'L TAX J., 403 (1973).
32. EUGEN VON BOHM-BAWERK, POSITIVE THEORY OF CAPITAL (1891), excerpted in READINGS IN ECONOMICS 30-32 (Samuelson 7th ed. 1973).

crease in productivity from using capital for more roundabout production is precisely that in a free market, decision-makers would be acquiring those additional units of capital that would pay for themselves in added production and pay enough more to justify the delay in current satisfaction while the investment is undertaken. If an additional unit of capital costing $100 returns in discounted future value $105 of additional output or cost savings, it will be profitable for the businessman and a benefit to the economy as a whole. In general, tax concessions for investment, if effective, induce business to sacrifice the economy's opportunities for current consumption to invest for future consumption at terms that consumers would *not* accept freely. At the extreme, if the marginal rate of time preference were zero—if we were indifferent as between additional units of future or present consumption—incentives for investment would be attempts to induce business to acquire units of capital which would pay back less than their own original costs: 100 units of final output now would be sacrificed to get 95 units later. This is a path of decay, not economic growth!

The arguments for subsidizing business investment to improve competitiveness in world markets are no better. For they generally ignore the basic principles of international trade and competition that go back to the law of comparative advantage enunciated early by the great classical economist, David Ricardo. Given free exchange rates, the poorest economy in the world, with the most obsolete plants, will find itself "competitive" in some products and unable to meet foreign competition in others. Even a nation less productive in all commodities than the rest of the world will find it profitable for itself and the rest of the world to produce and export those goods which it can produce at a lesser absolute disadvantage, or comparative advantage, and import those goods which it can produce at a greater absolute disadvantage. Making such a nation more productive by providing additional capital may increase trade to the extent it increases total output and income. It will not, however, provide the nation with a greater capacity to undercut the rest of the world. As productivity increases and costs come down, the foreign exchange rates will adjust. The nation will still find it more profitable to produce and export those commodities in which it has a comparative advantage and to import those in which it has a comparative disadvantage.

Of course, comparative advantages may shift from one industry to another. And this may be precisely the effect of business investment incentives on competitiveness with foreign producers. A direct subsidy to one industry or one set of industries may well enable it to sell more cheaply abroad. The increased foreign demand for the

product of the subsidized industry implies an increased foreign demand for dollars and a higher price of the dollar in terms of foreign currencies. This in turn will make all American products more expensive for foreigners, thereby injuring the "competitiveness" of products of unsubsidized industries. Tax incentives for business investment have precisely this kind of effect indirectly. They tend to decrease costs most for capital-intensive industries which benefit most from the tax subsidies. The products of these industries will then be more competitive in foreign trade, but only at the expense of the products of less capital-intensive and less subsidized industries which suffer more from the increased cost of the dollar to foreigners than they gain in decreased costs of production.

While business investment tax preferences do not make American goods generally "more competitive," they do make it easier for some (capital-intensive) goods and harder for other goods to compete. In so doing, they shift some production from goods in which, by free market criteria, we are more efficient, to goods in which we are relatively less efficient. They thus lower real income and the standard of living for the country as a whole. If, for example, American agriculture, and grain producers in particular, experience a huge, unmanipulated demand for their products, giving the United States an export balance that raises the value (cost to foreigners) of the United States dollar, thus making it more difficult for at least some American manufacturers to sell abroad, we should not subsidize those manufacturers. To do so is to divert resources from grain production, in which we are more efficient, to the use of less efficient manufacturers. These manufacturers, and their workers, may well prove gainers, but it is not only the grain producers but the nation as a whole, on balance, that will prove the losers.[33]

All this shades into the broader issue of when and where it is desirable to have government intervention, by controls or tax policy, in the workings of the economy. It is perhaps strange that many self-proclaimed business spokesmen, presumably wedded to the virtues of free enterprise, are quick to espouse government intervention in the form of tax preferences from which they believe they will gain. But free enterprise has more virtues than are apparently recognized by some of its supposed adherents. Most economists recognize the need for government action in the way of general fiscal and monetary policy to establish the conditions for full employment, hopefully with reasonable price stability. They further recognize the need for government action to preserve workable competition where that is possible, and to regulate quasi-monopolies where competition is unfeasible or prohibitively costly. They also recognize the need for government intervention to improve the flow of information essential to intelligent purchasing, whether of securities or cigarettes.

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33. Arguments relating to international considerations are discussed more fully in Eisner, *Investment, Obsolescence and Foreign Competition*, CONFERENCE BOARD RECORD, reprinted in VITAL SPEECHES 285-88 (Feb. 15, 1972).

And they recognize increasingly the need for government intervention in instances where capital markets are seriously imperfect or externalities are involved in production or consumption.

These last considerations suggest a major government role in assuring sufficient investment in human capital, in education and training, and in health. Since in a non-slave economy human capital cannot readily be sold, nor under our laws can its product be readily indentured, it does not pay private producers to invest in it to the extent that its productivity may warrant. The owners and prospective owners of human capital correspondingly may have insufficient access to funds, confidence in their prospects, and willingness to bear risk to lead them to invest sufficiently in themselves. Furthermore, investment in human capital frequently has external effects which benefit others than those who embody the investment. A more educated population may, for example, be less productive of crime.

Somewhat analogously, investment in research and development takes on much of the aspect of a public good. New ideas, new techniques, and know-how are not easily appropriated for long periods by their discoverers. Benefits to the economy may thus considerably outweigh those that can be retained by original investors. In this situation, also, society or government is called upon to subsidize private investment or to undertake it itself.

A hint as to the relative impact or significance of the "intangible" investment that does not usually profit from business investment preferences was given in a classic article by Robert Solow, who reported some years ago that only a small portion of growth and output in the United States economy could be accounted for by increases in the usually observed inputs of labor and capital.[34] The major share of growth was accounted for by a trend factor "T," which has been taken by some to stand for technical progress, but which may better be seen to encompass all of the many elements of investment, human and non-human, which do not get the benefit of tax preferences.

Government intervention may well be justified to encourage much non-business investment. In addition to child-rearing, education and training, job mobility, health, and research and development, it may be desirable to encourage public investment or subsidize private investment in our natural resources, in our environment, and in all of the large-risk but vital overhead capital which makes the functioning of a modern economy possible. And we may further see

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34. *See* Solow, *Technical Change and the Aggregate Production Function*, 39 Rev. of Econ. & Statistics, 312 (1957). *See also* Denison, *The Sources of Economic Growth in the United States and the Alternatives Before Us*, Supp. Paper No. 13, Comm. for Econ. Development (1962).

value in subsidizing individuals to own certain forms of physical capital, such as housing and home or personal tools and appliances that permit more efficient, personalized production of goods and services than can be expected to flow through the market.

But what about business investment in plant and equipment? This has been a major recipient of tax preferences. Such investment is properly the last candidate for public support. Where it is worthwhile for the economy it should appear worthwhile for the profit and wealth maximizing firm, and should hence be undertaken without government support. If it does not appear worthwhile to the business firm without such support it may be safely assumed that it should not be undertaken.

It is time to turn away from the entire program of business investment preferences along with other "tax expenditures" whose justification is ultimately to be found in private self-interest rather than economic principles relating to the public good. Tax depreciation more rapid than true or economic depreciation, equipment tax credits, exclusion of capital gains from taxable income, and the deductibility of interest expense should all be eliminated in a comprehensive revamping of the tax structure. As far as possible, business should be taxed for the services it receives from government: police and defense, education, and general government, as well as roads and postal services. It should quickly be conceded that business income taxes, including the corporate profits tax, are very poor methods of payment for government services rendered. They penalize the more profitable and productive companies and encourage the incurring of current costs, whether for labor or other services or capital, and thus promote inefficiency. Ideally, where taxes cannot be related directly to the government services received, they might better be based on a reasonable proxy measure of those services, that is, the size of the enterprise. And perhaps the best single measure of size would be the total amount of invested capital.

The direction in which to move is then not that of increasing or maintaining business investment preferences. Rather, the whole set of these preferences, along with business income taxes and the corporate profits tax to which they are tied, should be removed. Taxes on business should be related, as far as possible, to the services received by business, and where particular taxes for services received are not feasible it may be preferable to impose a general tax not on earnings but on capital. This would help establish a correct market price for capital so that in a competitive society we can properly economize its use along with that of all other scarce resources. Government would best move to promote free enterprise and away from the use of the public purse for private profits![35]

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35. Further discussion by the author of issues raised in this paper may be found in *Panel Discussion on General Tax Reform Before the House Comm. on Ways and Means*, 93d Cong., 1st Sess., pt. 3 at 370-90 (1973); *Tax Incentives for Investment*, 26 NAT'L TAX J. 397 (1973); *Men and Machines and Taxes*, 4 SOCIAL POLICY 44 (1973).

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TAX INCENTIVES FOR INVESTMENT

ROBERT EISNER*

1. *Preface*

RUSSELL B. LONG, Chairman of the Senate Finance Committee, has recently been credited with a little doggerel describing "Most people['s] . . . philosophy about taxes":

Don't tax you,
Don't tax me,
Tax that fellow behind the tree.[1]

As this audience certainly knows well, economic policy in the United States in recent years has included a number of tax measures ostensibly designed, at least in part, to affect the level of business investment. These have included accelerated rates of tax depreciation on capital goods, tax "credits" for the purchase of equipment, alterations in business income tax rates and, probably most important and of longest standing, the major exclusions of capital gains from taxable income. Twenty-five billion dollars per year would not be a bad estimate of current cost of these measures to "that fellow behind the tree."[2]

2. *Capital Gains Exclusions*

Exclusion of half of "realized" capital gains from adjusted gross income and exclusion of all of capital gains in estates or in gifts amounts to some ten to twelve billion dollars per year in lost revenues to the United States Treasury. And this is not a broadly distributed boon. Leaving aside the gift and bequest exclusions, clearly benefit only to the rich, calculations from *Statistics of Income* for 1970 show that capital gains were trivial for the great bulk of taxpayers, resulting in average tax saving in order of 0.2 per cent for those with incomes under $25,000. In the 1,000,000-and-over category for adjusted gross income, by contrast, some 63 per cent of total income including capital gains and losses came from net capital gains; the tax savings in this group ran to about 20 per cent of total income.

Realized capital gains are only the tip of the iceberg. Income amounts to consumption plus saving, and saving is the increase in net worth, whether it occurs from the growth in value of existing assets, sold or unsold, or the use of salary or other income to buy new assets. Accrued capital gains exceed significantly total "personal saving," defined as the difference between disposable personal income and consumption. But they are taxed, even at half rates, only at realization, frequently many years after they accrue. With appropriate discounting of such delayed taxes and recognition of the gift and bequest exclusions, the effective rate of taxation on accrued capital gains has been estimated at about 8 per cent by one competent analyst,[3] far indeed from the 50 to 70 per cent tax brackets of their major recipients.

The special treatment of capital gains offers a basic bias in the tax system in favor of saving and investment in marketable capital assets and hence to a very considerable extent in corporate enterprise and, specifically, corporate equity. And since corporate enterprise finds plant and equipment a predominantly appropriate form of investment, the tax structure, with its special treatment of capital gains, offers an incentive to business expenditures for plant and equipment.

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[1]Reported in William B. Mead, "Congress Tackles the Income Tax," *Money,* July 1973, p. 55.

[2]See Eisner, "Bonanzas for Business Investment," *Challenge,* forthcoming.

[3]Martin J. Bailey in "Capital Gains and Income Taxation," in A. Harberger and M. Bailey (editors), *Taxation of Income from Capital,* Washington, D.C.: Brookings Institution, 1969, p. 26.

3. *"Liberalized" Depreciation and the Equipment Tax Credit*

Despite this major largess to investors, business spokesmen and other have fostered and secured significant subsidization by means of special equipment tax credits and depreciation allowances in excess of true economic depreciation. All of these measures, in their unwarranted interference with free market forces, contribute to a misallocation of resources and a consequent reduction of economic output and growth. And they contribute to a redistribution of income from working people to property owners and, generally, from moderate income Americans to the relatively rich. By unduly reducing the burden for some they must in the long run, if not immediately, raise the burden on others.

"Liberalization" or acceleration of depreciation has taken many forms: five year amortization on "certificates of necessity"; the switch to double rate declining balance and sum-of-the-year digits in 1954; varied but persistent reductions in tax depreciation lives throughout the post-war period; further, formalized reduction of lives in the 1962 "guidelines"; subsequent delay in enforcement and eventual abandonment of the reserve ratio test; and finally the asset depreciation range system and related measures in 1971 and 1972. This "liberalized" depreciation is widely proclaimed as offering merely more rapid "recovery" of capital investment, and some choose to view acceleration of depreciation for tax purposes simply as an interest-free loan.

Such a perception, while correct for each single piece of plant or equipment or all of the capital expenditures for a single year, is incomplete and readily subject to distortion. For since business firms go on acquiring plant and equipment year after year, to the interest-free loans of the first year are added interest-free loans in each of the years in the future. Hence, even stationary firms, which merely replace expiring plant and equipment at constant prices, find that their initial interest-free loans become permanent, thus mathematically indistinguishable from outright gifts. In growing firms, for which the *money* value of gross capital expenditures tends to grow, that is for almost all large United States corporations, the gifts in lower taxes are repeated, year after year, as long as the liberalized depreciation remain in effect. On the basis of projections from data of the Bureau of Economic Analysis, largely published in the *Survey of Current Business*,[4] I estimate the tax savings from added depreciation charges in 1973 alone as approximately $11 billion. And similar tax savings will be enjoyed throughout the future, indeed eventually growing in annual amount as the rate of capital expenditures continues to grow.

The so-called investment tax credit or even more misnamed "job development credit," amounts to a further tax subsidy of some $4 billion in 1973, and this subsidy too will be repeated in growing amounts as business equipment expenditures increase. But it may be well initially to clear up some semantics; what we have here is not a general tax credit for investment. First, the credit does not apply to plant, but only to equipment. Second, it applies only to investment by business. It therefore excludes the vast amounts of investment in physical capital by non-profit institutions and by state and local as well as federal government. Third, it does not apply to investment in durable goods by households. And fourth, it does not apply to any form of intangible investment, that is the investment in research and development and in human capital which modern economists recognize as the perhaps decisive to economic growth and prosperity.

4. *Investment Subsidies and the Free Market*

It is curious that conservatives claiming to believe in free enterprise and a minimum of government intervention in the economy should favor special tax advantages for business capital expenditures in general and special further advantages for equipment expenditures. It is frequently argued that such tax preferences or subsidies are necessary to make our industrial system more productive. But in a free market, where investment will raise productivity and prove profitable, we might expect that

[4]April 1968, August 1971, January 1972, and January 1973.

businessmen would be undertaking it already, in plant and equipment or in research, development, technology and knowledge. Government subsidies to capital expenditures encourage that one kind of investment — as opposed particularly to investment in human capital and public goods — where the market should prove adequate. If a $100 piece of equipment will raise productivity and add $110 to returns we can expect a profit-maximizing firm to acquire it. If the $100 in new equipment will add only $95 in returns, it is not generally good economics to give the firm a $15 subsidy to encourage it to incur what in real terms, aside from the government aid, will be a $5 loss.

The one argument that defenders of economic freedom may offer for such interference in the market is that the tax structure is somehow already rigged against business investment. While this idea is undoubtedly widely held and frequently expressed, it does not withstand rigorous analysis. It is of course true in a period of insufficient aggregate demand that any tax, by further diminishing demand, is likely to reduce investment. But the notion that business income taxes somehow bear specially on investment is not correct.

For one thing, a profit tax in the short run does nothing to affect the equilibrium level of profit-maximizing output and hence does nothing to affect total factor inputs. It also does not in itself affect the relative price of capital and other inputs and hence does not induce substitution of other factors for capital.

In the longer run, it is true that resources may move out of a taxed sector into a non-taxed sector. But then where do they move, if we are talking of business income taxes which affect the great bulk of conventionally measured productive activity? There may conceivably be some move into non-profit, government or non-market activity but it is hard to see that this can amount to very much and it is also not clear that this would reduce total investment; it might at most substitute investment in non-business activity for investment in the business sector.

But further, this argument quite ignores the tax deductibility of interest costs. Since firms have the option of borrowing to finance capital investment (or in some cases selling interest bearing securities which they hold) and since capital goods are quite preferred items on which to lend (generally better than human capital), the combination of business income taxes and right to charge interest costs against taxable income may well constitute a tax bias in favor of business physical investment. And further, as can be seen by applying the analysis of a recent article by Stiglitz,[5] within a tax structure that includes full taxation of ordinary income, the capital gains loopholes may offer a most substantial tax advantage to corporate investment. Accelerated tax depreciation and investment credits then only serve to aggravate an already major distortion.

The prime determinant of business investment is demand. Investment in plant and equipment falls off when the economy is sluggish and excess capacity makes additional plant and equipment unnecessary. In such a situation, moderate annual tax benefits to business would appear to have little effect, particulary in the short run. Well-run firms will not be led to invest by tax reductions which increase after-tax earnings but do not make *additional* equipment profitable in the face of existing idle capacity. Where demand is brisk, firms will invest without special subsidy. Theoretical analysis, empirical studies and the candid responses of businessmen supplemented by my own work with McGraw-Hill survey data all tend to confirm this view. Over a long run, given the level of employment, it may well be argued that it is people's propensity to save that determines total investment. Various governmental measures, including special treatment of capital gains, accelerated tax depreciation and equipment tax credits, may then essentially only alter the mix of investment — toward the corporate business sector and expenditures for plant and equipment.

[5]Joseph E. Stiglitz, "Taxation, Corporate Financial Policy, and the Cost of Capital," *Journal of Public Economics*, February 1973, especially pp. 24-32. See also Eisner, "An Appraisal of Proposals for Tax Differentials Affecting Investment," Chapter XII in Tax Institute, *Income Tax Differentials*, Princeton, N.J., 1958, especially pp. 167-168.

5. *A Variable Tax Credit or Subsidy*

The one meritorious argument for subsidizing business capital expenditures, and expenditures for equipment in particular, might be that in a period of unemployment, something is better than nothing. Even then, it would be better to stimulate production of the human capital and public goods which the absence of appropriate market incentive may have left at sub-optimal levels. But if our problem is that of unemployment, cyclical or secular, more appropriate policy tools may be proposed. For the major current subsidies to business capital spending all tend to be pro-cyclical rather than counter-cyclical. In times of boom, capital gains are likely to be greatest, as are current and recent capital expenditures. The equipment tax credit in a sense is also of larger benefit in time of boom than in time of recession. Similarly, accelerated depreciation ties depreciation charges more closely to current and recent capital expenditures and hence also increases tax benefits in booms as opposed to recessions.

A variable equipment tax might be introduced, however, for counter-cyclical purposes. Such a credit ideally would have marginal rates much higher than those in the current law but would be concentrated on the stimulus of purchase that would not have taken place without it. It should vary widely in amount, with all concerned recognizing that any rate is temporary and likely to vary not only between a large positive number and zero but to a negative number, thus becoming a tax rather than a credit, when it becomes necessary to discourage expenditures in order to cool off the economy. A variable tax credit would be much more potent than a permanent one, in that its effects would rest upon inter-temporal substitution rather than inter-factor substitution which may be limited, particularly in the short run.

One simple device for concentrating the credit or tax on marginal investment would be to relate it to only the *excess* of capital expenditures over depreciation charges. Some rough notion of the orders of magnitude involved may be gleaned from figures for 1969, which indicate business expenditures for new plant and equipment totalling about $76 billion,[6] with business tax depreciation at about $63 billion.[7] Coverage is not identical in these two series. Further, some firms have depreciation charges in excess of capital expenditures so that the sum of positive differences between capital expenditures and depreciation charges must be larger than the aggregate difference. We may estimate roughly that the total excesses of plant and equipment expenditures over depreciation charges in 1969 would nevertheless have been no more than $20 billion. A tax credit of 21 per cent on this amount would cost less than 7 per cent on the $76 billion total.

Not too dissimilar results might be seen if we confined the credit to the two-thirds of capital expenditures which went to equipment. And of course a variable marginal credit of this kind could well be considerably higher than 21 per cent in periods where increased expenditures were desired. It would still cost the Treasury and the general taxpayer relatively little on the average, or nothing at all if adequately balanced by added taxes (or "negative credits") in periods when business investment were to be discouraged. Ideally, the program would relate not only to business but to non-profit institutions such as universities, hospitals and private schools, and to state and local governments. It should hence probably generally take the form of a direct subsidy rather than of a tax credit and be arranged to benefit small, unprofitable and new firms which may have little in the way of income on which to enjoy tax savings.

6. *A Real Job Development Credit and Investment in Human Capital*

In addition to and aggravating the cyclical problem is that of structural unemployment. This is significantly identified with new entrants into the labor force and especially the young. A real job development credit would be one that encourages the hiring of labor and particularly of

[6] *Economic Report of the President*, 1973, p. 240.

[7] U.S. Treasury Department, Internal Revenue Service, *Statistics of Income: Business Income Tax Returns 1968-1969*, 1972, p. 3.

youth, where the incidence of unemployment is highest.

There are currently some million and a half persons from 16 to 21 years of age listed as unemployed, over 12 per cent of the 12 million youths in the civilian labor force. There are another 10 million not in the labor force, many of them because they have given up looking for jobs which seem to be unavailable. And there are another half million youths listed as working part-time who are looking for full time employment. Jobs for young people is one of our greatest potential investments, not only in their own human capital as individuals but in the capital of the economy and the nation.

If, as has been suggested by Herbert Stein, Chairman of the Council of Economic Advisers and Arthur Burns, Chairman of the Federal Reserve Board, we were to suspend or temporarily reduce the investment tax credit, we might encourage businesses to postpone expenditures for new equipment, thus reducing the boom in business investment which has contributed substantially to the high demand we associate with inflation. Yet, to the extent this suspension were successful, it would keep the output of business equipment below what it would otherwise be and thus reduce employment in the capital goods industries. As a general rule, tax increases, or other fiscal or monetary measures aimed at reducing inflation, run the serious risk of raising unemployment. But there is a change in the tax structure or tax mix which might reduce the rates of inflation *and* unemployment and contribute to economic growth. In a forthcoming article,[8] I have proposed such a tax package, which would combine suspension of the investment tax credit with suspension (if not permanent repeal) of part (or all) of the payroll or employment tax on workers under the age of 22.

Suspension of the investment tax credit could be expected to cause some cooling of the economy by reducing demand for capital equipment. But the effects would be slow. And since much equipment is produced in oligopolistic industries where prices are notoriously rigid in a downward direction, we might well fear more unemployment than reduction in prices. Suspension of the equipment tax credit, could be counter-balanced, however, by elimination of the employer portion of the payroll tax for employees up to 21 years of age. This would mean a reduction of over 5 per cent in labor costs for youths currently employed. But what is more, employers would have an incentive to hire additional young people and to give full-time jobs to many now working only part-time.

The gains from such increased employment of youth are likely to be lasting. Employers are frequently understandably reluctant to hire young people without experience and training. If new employees work out well there is no guarantee that they will remain long with the employers who invest in their first job. Yet that first job, before the frustration of idleness has wreaked its toll, may be critical to establishment of life-long skills and the "work ethic."

In terms of magnitudes, the six million full-time and four million part-time employees 16 to 21 years of age are earning in the neighborhood of $50 billion per year in covered employment, so that the employer portion of the payroll tax amounts to some three billion dollars, somewhat less than reasonable estimates of investment tax credit costs in 1973. And if further incentives are necessary for hiring youths one might consider crediting employers with the 5.85 percent that they contribute for employees.

Reducing the supply price of a portion of labor, thus cutting current costs, would operate both to curb the rate of inflation and to reduce unemployment. As I have written in my forthcoming paper, "It would halt unjustified government intervention to encourage investment in machines while reducing government discouragement of investment in man." And in addition to stimulating investment in vital human capital, by increasing employment, output and income, it would almost certainly increase traditionally measured saving and investment.

[8] "Men and Machines and Taxes," *Social Policy*, September 1973.

Senator BENTSEN. Thank you very much.
Professor Feldstein.

STATEMENT OF MARTIN FELDSTEIN, PROFESSOR OF ECONOMICS, HARVARD UNIVERSITY

Mr. FELDSTEIN. Thank you, Senator.

I have no prepared statement, which makes it all the more tempting for me to use some of my 10 minutes to comment on some of the things that have been said before.

I will try to restrain myself, even in the case of Bob Eisner's remarks, because I assume we will get a chance after David Meiselman has spoken, to speak more generally.

In your opening remarks, you emphasized the impact of investment on the economic recovery. I think there is no doubt that policies to stimulate investment like the investment tax credit or more rapid acceleration of investment or extension of the investment tax credit to inventories or structures would have the favorable impact of stimulating investment in the short run. But I think the major tax changes that the first two speakers discussed and that your hearings, I think, focus on, would have much more long-term effects. Very little of their impact would be felt during the period of cyclical recovery. We ought to think about their impact in terms of the question that Bob Eisner raised, whether we really do want to accumulate more capital in the long run.

I read your letter of invitation to indicate that you started from the presumption that we should have more capital accumulation in the long run. I think that is the correct presumption, even though Bob Eisner doesn't.

Right now, as you probably know, we have a very low net rate of saving in the U.S. economy. That has been characteristic of the entire postwar period. We have had a saving rate of between 7 and 8 percent of national income, one of the lowest of all the developed countries in the world.

The long-run elect of that is simply that we will have less capital stock, our workers will be less productive, and we will have a lower income than we otherwise would.

As I look at the European economies and see what happens to a country like England that discovers itself being rapidly bypassed by other countries with higher savings rates, I see a foreshadowing of the kind of future we may have here in which we find ourselves becoming a poorer and poorer country relative to the other countries in the world. I think that has a tremendous psychological effect, a morale effect which can't be quantified but which can be seen in other countries like England where the whole process of economic growth has deteriorated.

There is another way of seeing why I think you are right in your presumption that we ought to have more capital accumulation: additional capital investment in the United States earns a rate of return for the Nation of about 12 percent. Now 12 percent is a high rate of return. At 12 percent I am prepared to give up jam today for jam tomorrow. I think that is a perspective many people would share.

Not all of that return accrues to the individual savers. Much of it, indeed, as Martin Bailey indicated, about half of it, accrues in the

form of taxes and is therefore shared collectively by everyone in the economy.

The economy does not respond to that 12 percent because the after-tax rates of return are much lower. Although Bob Eisner has given us a list of various mitigating factors in the tax law, the truth remains that the tax on capital income does collect a very substantial amount of revenue and that they do reduce the net return by a great deal.

Since the hearings focus on tax policy today, I think it is important to avoid losing sight of the fact that the Government can increase savings in ways which would have nothing to do with the tax laws. I think it will put the discussion of tax incentives in a better perspective if we look first at these alternative options for increasing aggregate savings.

Let me discuss very briefly three major ways the Government influences savings and could increase the national savings rate without changing the tax laws and then go on to talk about the tax laws themselves.

First is the size of the Government deficit. Everyone is familiar with the vast magnitudes of the deficit in the last couple of years. Over the entire past decade there has been a deficit in 9 out of 10 years. That deficit has averaged 20 percent of national savings.

In other words, the Federal Government has issued debt which has absorbed 20 percent of the savings that is done by the rest of the economy. That use of the resources that individuals put aside from current consumtion to finance Government spending simply reduces the amount of capital stock.

We could increase national savings if as we move into the next decade we will move closer to a balanced budget.

The second thing is the financing of social security. Social security has become the major form of saving for almost all Americans. It is not a question of the poor, it is a question of 90 or 95 percent of the American public who regard social security as the primary way of financing retirement. To that extent it replaces the savings that they would otherwise do, either directly or through their pension programs.

I am sure you know the tax law currently specifically recognizes the option of replacing private pension saving with social security integrating those two.

You also know that social security operates on a pay-as-you-go basis so that there is no accumulation of capital in the social security system. That is not a uniquely American feature, but neither is it a common feature of all countries in the world. Canada currently accumulates substantial resources in its social security fund. Sweden, which has a very high savings rate, achieves that in part by accumulating resources through its social security funds. The Japanese do the same thing.

The financial problems ahead for the social security system are not going to be solved by the kind of indexing that is adopted. There are longrun problems which come from the change in demographic structure which have to be dealt with. One important option for dealing with those longrun financing problems is to accumulate a social security fund as Sweden, Canada, Japan, and other countries have done; that is, to raise taxes more over the next decade than is needed

to pay the current benefits and to use this surplus to buy back outstanding Government debts for the social security system.

This would not only secure future benefits and allay a lot of fears, but it would add directly to the national savings rate.

The third thing, somewhat related but really rather different, is to correct the social security benefit formula. There has been a lot of discussion about the indexing error that was made years ago. I think everyone recognizes the need for new legislation now. The question is, what form should that take?

The advisory panel to the Senate Finance Committee made one suggestion which is quite different from the administration's suggestion. The administration's proposal means that benefits will grow much more rapidly. That encourages more reliance on social security and less reliance on individual saving and private pensions.

So, if one goes the administration route rather than the Senate finance advisory panel route, we will discourage private saving more in the future and have less capital accumulation. But, if Congress, instead, adopts something closer to the advisory panel's recommendations, we will have a higher rate of savings in the future.

The basic point I want to make is that national savings can be increased by Government policies which are quite separate from tax incentives.

This in turn leads to the key question which brings us back to taxes: if we try to increase savings in this way, will the extra funds really be invested, or will we find that aggregate demands have fallen and that we are in a recession?

I think in the very short run any sudden increase in savings, any sudden reduction in the Government deficit, would probably be deflationary.

The real question, however, is the longer run. Can we in the long run increase our rate of saving and feel confident that saving will be invested?

I tend to be an optimist about this. I believe without new tax policies the capital markets have the viability to absorb additional new savings in the form of real capital accumulation. If individuals and the Government save more, those savings will get translated into productive capacity. I don't think there is a longrun problem of deflation. The process of additional capital accumulation would reduce rates of return but only slightly. I believe that households would still choose to invest in stocks and bonds and this in turn would lead to investment by firms.

That is an optimistic view. There are some who would not share it, although I would say it almost certainly is the most common view in the economics profession.

The caveat that ought to be borne in mind is that the net return to investors is now quite low because of our taxes, taxes taking about half of the 12-percent gross return that I mentioned. Inflation, given our tax system, is lowering the net return even more. Probably at least as important, given our tax system, inflation is creating tremendous uncertainty about future rates of return. So there is a danger that at the current rate of return, and especially at the lower rates of return would accompany more capital investment, investors just won't want to hold more stocks and bonds, and therefore if the Government does increase savings, it will simply lead to a recession.

I don't think that is a major danger, but I think it is possible. That really brings us back to taxes and the role that taxes can play as a complement to increase in savings brought about by the kinds of things that I have been talking about.

Tax incentives that raise the rates of return can assure us that the extra savings will be invested, that individuals will want to direct that extra saving into stocks and bonds, and that the fall in the before-tax rate of return that would accompany an increase in the size of the capital stock wouldn't discourage additional investment.

Let me say it in different words: tax incentives alone may not raise saving very much. They may; they may not. We have heard discussions about that. I think on balance they would probably raise a bit.

Pure savings policies—things like changing the Government deficit, social security benefits, social security finance—can raise savings substantially, but they run the risk of being deflationary.

Taxes can eliminate that risk. Tax policies which raise the rates of return to savers and investors cannot only stimulate savings but can also make sure that any additional saving that comes about because of changes in Government deficits or social security financing will be absorbed in the form of real capital accumulation.

Since I have already spoken much more than 10 minutes, let me simply mention and hope we will have time to get back later to what I regard as the three major sources of tax change that I think can increase the rate of return, thereby providing a stimulus to additional saving and guaranteeing that whatever saving is produced by these other methods will be absorbed.

First, to raise the rate of return on corporate investment, we ought to discuss the relative merits of corporate tax reduction on the one hand and changes in depreciation, including the investment tax credit, on the other.

Integration, I think, as a number of people have said, is desirable in its own regard, but what effect it will have on the return on corporate investment depends very much on the form in which it is adopted. We have heard about as many different forms as we have heard advocacy of integration. I think until we have a better sense of which form we are talking about it is very hard to know whether on balance it will be favorable to the rate of return on corporate investment.

The second, and I think this is terribly important, is indexing the tax laws for inflation. I think the current situation in which our tax laws look at nominal depreciation, nominal capital gains, and nominal interest income, is not only unfair but creates tremendous uncertainty about what future rates of return will be. It has the further effect of lowering the rates of return on existing investment.

Senator BENTSEN. Do I understand you to mean you support indexing?

Mr. FELDSTEIN. I support indexing. I think indexing, meaning not merely bracket changing, but more fundamentally, changing the measurement of capital income so that we deal with capital gains in terms of real values. In the last 20 years the stock market has doubled but only in nominal terms because consumer prices have doubled as well.

Somebody who invested in the stocks in the Standard and Poor's Index 20 years ago would find if he sold out today he would have a

tax liability but that he could not buy any more with the money he received than with the money he invested.

I think we ought to change these things to reflect the fact that we live and are likely to continue to live in an inflationary economy.

Finally, I think we ought to strengthen the existing tax laws which now emphasize taxing consumption rather than saving. We now often allow individuals to postpone taxes until they are ready to consume. But such treatment is only available in certain circumstances and often turns out to be a reward for virtue rather than an incentive.

I think we should reform these pension rules. I would advocate the kind of expenditure tax that the Treasury and its staff developed last year. Finally, I think we should consider a value-added tax. All of our European competitors are currently relying to a greater and greater extent on a value-added tax and less on other forms of tax. If we adopt this VAT, we would be taking the burden off savings and putting it on consumption.

I have overstayed my 10 minutes by a wide margin. I hope that these comments will be helpful for the discussion when we get back to it later.

Thank you.

[The following was subsequently supplied for the record by Mr. Feldstein:]

[Martin Feldstein, "National Saving in the United States," in "Capital for Productivity and Jobs," Shapiro and White, Eds., © 1977, by The American Assembly, Columbia University. Reprinted by permission of Prentice-Hall, Inc., Englewood Cliffs, New Jersey.]

Martin S. Feldstein

5

National Saving in the United States[1]

A nation's rate of saving is probably its most important macroeconomic characteristic. In this paper I will examine different aspects of the U.S. saving behavior during the postwar period against the background of our saving experience during the previous 50 years. I will then turn to the question of whether the U.S. saving rate should be increased in the future.

The Postwar Savings Experience in Historic Perspective

Before turning to an analysis of the data themselves, it is useful to begin by summarizing the basic conclusions that emerge:

1. The long-term downtrend in the rate of real *net* capital accumulation which was observed before World War II has continued.
2. Although the *gross* national saving rate has been relatively constant, this overall constancy masks important changes in its composition.
3. Personal and corporate saving rates have risen in the postwar period, but growing government deficits have channeled these funds into the purchase of government securities instead of real capital formation.
4. Net investment in owner occupied housing has changed from a major source of personal saving to a significant reducer of personal saving.

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5. Social security benefits finance retirement consumption without the real capital accumulation that would accompany private saving. The annual increase in the value of households' "social security wealth" has been larger than all other saving and has been growing in importance.

LONG-TERM TRENDS IN CAPITAL FORMATION

Although the analysis of this section will concentrate on the postwar period, I think it is valuable to begin by looking at the historic trends in capital formation. Because of the special problems of the depression and the war, it is best to focus this historic review and comparison on the period before 1929 and after 1945. Simon Kuznets' (1961) monumental study provides information on gross and net capital formation in the period beginning with 1869. Lines 1 through 6 of Table 1 present decade averages of the gross and net national capital formation rates for the six decades from 1869 through 1928.

Gross national capital formation is equal to total spending on in-

TABLE 1.

		Gross National Capital Formation / Gross National Product (× 100)		*Net National Capital Formation / Net National Product (× 100)*	
Line	*Years*	*Current Dollars*	*Constant Dollars*	*Current Dollars*	*Constant Dollars*
1	1869-1878	19.0	21.8	12.5	14.6
2	1879-1888	19.2	21.3	12.1	13.5
3	1889-1898	21.7	24.5	13.2	15.1
4	1899-1908	21.2	22.4	12.9	13.5
5	1909-1918	19.6	20.5	10.4	10.7
6	1919-1928	19.7	19.5	10.1	9.6
7	1869-1928	20.1	21.7	11.9	12.8
8	1946-1955	16.4	—	8.9	—
9	1956-1965	15.8	—	7.3	—
10	1966-1975	15.2	—	6.8	—
11	1946-1975	15.8	—	7.7	—

Sources: Lines 1 through 7, Kuznets (1961). Capital formation follows Department of Commerce Definition and equals gross private investment including producers durables, construction, net inventory investment, and net foreign investment. Kuznets' constant dollar estimates are based on 1929 prices.

Lines 8 through 11, *Survey of Current Business*, January 1976. No constant dollar estimates for this period are available.

vestment in producers durables, construction (both residential and nonresidential), net inventory accumulation, and net foreign investment. There is no deduction for the depreciation or scrapping of old equipment. *Net* national capital formation is equal to *gross* national capital formation minus depreciation. The gross capital formation rate is the ratio of gross capital formation to gross national product (columns 1 and 2 of Table 1) while the net capital formation rate is the ratio of net capital formation to net national product (columns 3 and 4 of Table 1).

Kuznets' data show no trend in the *gross* capital formation rate through 1928 but a clearly perceptible decline in the rate of *net* capital formation. Stating the same conclusion in different words, the rate of real accumulation of capital declined while the greater depreciation of the larger stock of old capital kept total spending on capital unchanged. The sharp decline in net capital accumulation shows clearly in the comparison between the 12.7 percent average rate for 1869 to 1908 and the 10.2 percent average rate from 1909 to 1928. It is important to emphasize that the rate of capital formation declined long before the beginning of the depression.

The postwar net capital formation rates shown in lines 8 through 11 are based on the recently revised national income estimates prepared by the Department of Commerce. The average net capital formation rate for the thirty-year postwar period is a very low 7.7 percent. Although differences between Kuznets' study and the more recent data in the underlying price indices and in many of the detailed procedures should obviously caution against overinterpreting exact differences, the evidence of a major fall in the net saving rate is clearly striking. The decline within the postwar period will be discussed below when I consider the changing composition of net savings.

The gross capital formation rate has also been substantially lower in the postwar period than it was in the sixty years before the depression. Kuznets found a gross capital formation rate that remained steady at between 19 and 22 percent for individual decade periods from 1869 to 1928. In contrast, the gross capital formation rate for the postwar period has averaged only 15.8 percent. It is clear that essentially all of the 4 percentage point fall in this rate is due to the lower rate of net capital formation, with very little due to a lower rate of replacement investment.

Before leaving this subject, I should comment on the conflict between the change reported here and the evidence of a stable gross

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private saving cited originally by Denison (1958) and developed more fully by David and Scadding (1974). Note first that there is a difference in the concept of gross saving but one that is not enough to account for the difference between David-Scadding and Kuznets. David and Scadding's measure of gross private saving is equal to gross national capital accumulation plus the government deficit and minus the statistical discrepancy. The statistical discrepancy is never large enough to affect the comparison. The government deficit (including federal, state and local government) averaged 0.9 percent of GNP in the postwar period and was much smaller in earlier years. The David-Scadding and Kuznets-Commerce figures should therefore agree within one percentage point for the postwar period and be even closer for earlier years. This is not the case.

David and Scadding report that the ratio of gross private saving to gross national product has remained essentially unchanged during years of relatively full employment since the beginning of the century. More specifically, they calculate gross private saving rates of 17.7 percent for 1898 to 1916, 14.4 percent for 1921 to 1929, and 15.5 percent for 1949 to 1969. The final figure is consistent with the 15.8 percent gross saving rate reported in Table 1 for 1946 to 1975 but the figures for earlier years do not agree. Their 17.7 percent for 1898 to 1916 is nearly one-sixth smaller than the Kuznets estimates for 1899 to 1918. The Kuznets figures are also supported by a much longer period of previously high gross capital formation values. Moreover, the 14.4 percent rate reported by David and Scadding for 1921 to 1929 is well below the 19.7 percent rate calculated by Kuznets for 1919 to 1928. While I do not feel able to judge the conflicting estimates in detail, I am inclined to support the Kuznets estimates and to believe that there is something about the David-Scadding choice of subperiods that causes them to underestimate gross investment in the early years.

SOURCES OF NATIONAL SAVING

I turn now to examine the changing roles of the different sources of national saving during the postwar period. Table 2 shows that substantial changes in composition have accompanied the quite stable gross national saving rate. Three major changes can be seen. First, personal saving (including private pension saving) has increased sharply, from 26 percent of gross saving in the first postwar decade (1946 to 1955) to 33 percent in the most recent ten years (1966 to 1975). Second, corporate capital consumption allowances account for an increasing share of gross saving, up from 29 percent to 36 percent.

TABLE 2. SOURCES OF GROSS NATIONAL SAVING

Line		*1946-1955*	*1956-1965*	*1966-1975*	*1946-1975*
1	Gross national saving rate	15.8	15.6	15.2	15.5
	Percent of Gross National Saving				
2	Personal saving	26.2	26.1	32.7	28.3
3	Corporate saving	15.4	16.7	13.6	15.2
4	Noncorporate capital consumption allowance	24.4	25.6	23.7	24.6
5	Corporate capital consumption allowance	28.7	34.2	36.4	33.1
6	Federal government surplus	5.5	− 1.6	− 9.0	− 1.7
7	State and local government surplus	− 0.1	− 0.6	3.1	0.8
8	Private saving (lines 2 plus 3)	41.6	42.8	46.3	43.5
9	Capital consumption allowance (lines 4 plus 5)	53.1	59.8	60.1	57.7
10	Government surplus (lines 6 plus 7)	5.4	− 2.2	− 5.9	− 0.9

Source: National income and product accounts as published in *Survey of Current Business*, January 1976. Calculations based on current dollars. The Gross National Saving Rate is defined as Gross National Saving as a percentage of Gross National Product.

Finally, the federal government has changed from a significant contributor to gross saving, accounting for 5.5 percent in 1945 through 1955, to a substantial drain on gross saving by running deficits that averaged 9 percent of gross saving during the most recent decade. Although 1975 was an extreme year, there were deficits in eight of the nine other years in the decade and, for these years, the deficits absorbed 7 percent of gross saving. The shares in lines 8, 9 and 10 show the same results when the detailed components are combined

into gross private saving, capital consumption allowances, and the total government budget surplus.

The *net* national saving rate analysis presented in Table 3 shows the cross trends in an even more striking way. Note first that net national saving, i.e., saving net of capital consumption allowances, has fallen from 8.3 percent of net national product in the first postwar decade to only 6.5 percent in the most recent decade. This has occurred even though the personal saving rate (i.e., personal saving as a percentage of disposable personal income, shown in line 5) has increased significantly from 5.8 percent to 7.1 percent. The more comprehensive private saving rate (i.e., personal saving plus corporate retained earnings as a percentage of disposable personal income plus corporate retained earnings, line 6) also shows a steady increase.

The composition of net national saving indicated in lines 2, 3 and 4 resolves the apparent conflict among these trends. The share accounted for by personal saving has increased rapidly as the government has gone from making a small positive contribution to net saving

TABLE 3. SOURCES OF NET NATIONAL SAVING

Line		*1946-1955*	*1956-1965*	*1966-1975*	*1946-1975*
1	Net national saving rate	8.3	7.0	6.5	7.3
	Percent of Net National Saving				
2	Personal saving	60.0	67.4	87.0	71.4
3	Corporate saving	35.4	41.5	33.7	36.9
4	Government surplus	4.7	− 8.5	−21.1	− 8.3
5	Personal Saving Disposable personal income	5.8	5.9	7.1	6.3
6	Private saving Disposable personal income plus corporate saving	8.9	9.3	9.8	9.3

Source: National income and product accounts as published in *Survey of Current Business*, January 1976. Calculations based on current dollars. The Net National Saving Rate is defined as Net National Saving as a percentage of Net National Product.

to having a large negative impact. Corporate saving supplied a rising share of a falling rate for the first two decades; on balance, net corporate saving as a fraction of NNP actually remained constant, until the most recent decade when it fell sharply from its previous average of 2.9 percent of NNP to only 2.2 percent. The government deficits of the past decade have absorbed about one-fifth of net saving; even if the massive deficit of 1975 is excluded, government deficits in the preceding nine years absorbed about one-sixth of net saving. This represents a very sizeable effect on net capital accumulation and a very significant change from the policy of earlier years.

TWO FACTORS AFFECTING PRIVATE SAVING: OWNER OCCUPIED HOUSING AND SOCIAL SECURITY BENEFITS

In the current brief analysis of saving trends it is not possible to analyze why the rate of saving has evolved the way it did. The level and composition of the saving rate reflects a large number of important influences that have changed substantially in both the postwar period and the previous decades. It is instructive to consider a remark that Kuznets (1952) made in his paper on capital formation when he addressed the question of why the saving rate had not risen over time with the general increase in income as might have been expected on the basis of cross-section household data that indicated that the more affluent saved a higher fraction of their income. Kuznets wrote:

> The contrast between the cross-section association of income differences with proportions spent or saved and the association between secular movements in income levels and proportions devoted to expenditures or savings has been, quite unwarrantedly, treated as a puzzle. . . . The general answer to the question as to why savings-income ratios failed to rise with the secular rise in real income per capita is quite simple: because the whole pattern of economic and social life changed. The important task is to distinguish the major components of this change and to measure their relative weight in their impact on the consumption-savings pattern. (p. 522)

I will consider two factors that I believe have been major components of the changing economic and social life that influence the rate of personal saving in the postwar period: the changing growth rate of owner occupied housing and the expansion of social security. (A third factor that might have been singled out is the growth of corporate retained earnings. Inspired in large part by the substantial tax incentives, firms now retain about half of after-tax profits: retained

earnings were 48.2 percent of profits after IVA and CCA adjustment for 1966 to 1975. I shall not deal with this issue here because the major *change* in the ratio of dividends to retained earnings occurred before the postwar period: retained earnings were 48.3 percent of profits for 1946 to 1955 and 52.0 for 1956 to 1965. I have studied elsewhere the effect of retained earnings on personal saving and concluded that long-term increases in retained earnings are largely but not completely offset by decreases in personal saving, leaving private saving only slightly higher; see Feldstein, 1973.)

Housing—My interest here is in owner occupied housing as an influence on aggregate saving and not as a component of the use of capital. To indicate its potential importance, it might be noted that the 1975 value of the net stock of all residential capital was $1,313 billion, almost exactly equal to the $1,309 billion value of fixed nonresidential business capital (Musgrave, 1976). Owner occupied nonfarm housing represents $946 billion of the total 1975 residential capital stock. The annual increases in the net stock of such owner occupied housing averaged more than half of total personal saving during the postwar period.

The process of repaying a personal home mortgage may induce some individuals to save more than they otherwise would. Such individuals, unlike the "rational life cycle savers" who dominate textbook discussions of saving, may not have any savings plan but find that they are "forced" to save as they repay their mortgage. The fact that many people reach retirement with almost no net worth other than the equity in their home lends some support to this view but is hardly conclusive evidence. It should be stressed that this is currently only speculation and has not been the subject of systematic research.

Table 4 provides some preliminary evidence on the changing quantitative role of investment in owner occupied housing. The recently completed Department of Commerce estimate of constant dollar net stocks of owner occupied nonfarm housing (Musgrave, 1976) permits a comparison of investment in such housing to total personal saving. The results, shown in line 1, indicate a sharp fall in the relative importance in such investment; the real growth of net nonfarm housing capital has slowed substantially.

The contribution of residential capital accumulation to personal saving should be measured by the net stock accumulation of such housing (i.e., the change in the gross value of the housing stock) *less any increased mortgage debt*. This is shown in line 2 as a percentage

TABLE 4. CONTRIBUTION OF OWNER OCCUPIED HOUSING INVESTMENT TO NATIONAL SAVING

Line		*1946-1955*	*1956-1965*	*1966-1975*	*1946-1975*
1	Net stock accumulation of owner occupied nonfarm housing, percentage of personal saving	85.3	57.3	30.3	57.6
2	Net stock accumulation of owner occupied nonfarm housing less increased mortgage debt, percentage of net stock accumulation of all domestic capital.	11.4	1.7	−16.4	− 1.1
3	Personal net investment in nonfarm homes less increased mortgage debt, percentage of net national saving.	23.5	6.6	−12.0	6.0

Sources: Net stock accumulation of housing and other fixed capital are from Musgrave (1976). Personal net investment in nonfarm homes and the increase in mortgage debt are from *Federal Reserve System Flow of Funds Data.* Net national saving is based on national income data as published in the *Survey of Current Business,* January 1976.

of all net capital stock accumulation. Viewed in this way, residential housing has changed from a positive contributor to personal saving to a net drain on such saving. The same picture emerges in line 3 where the flow of funds financial measure of net investment is used in place of the Department of Commerce measure of net residential capital stock accumulation.

Social Security—For the great majority of Americans, the most important form of household "wealth" is the anticipated social security retirement benefits. The omission of such perceived social security wealth from conventional measures of household assets and of changes in social security wealth from all national income measures of saving tends to obscure the importance of social security in the overall saving process.

Social security wealth is the present actuarial value of social security benefits for which a worker and his dependent spouse become eligible

at age 65 (see Feldstein 1974, 1976e, for a description of the method of measuring this in practice). Social security saving in any year is defined as the increase in social security wealth during the year. In one sense, it is quite proper that households' social security wealth and social security saving be excluded from the national income accounts. Although households justifiably feel "richer" when their social security wealth rises, there is no real physical capital accumulation to correspond to this "saving." Social security saving is important not because it contributes to aggregate national saving (it does not) but because it induces individuals to reduce their own personal saving. Social security "saving" is like a government deficit; it provides an alternative to real capital accumulation as a way of providing for consumption in future retirement years. With a government deficit, the alternative asset is a government bond; with social security, the alternative asset is an implicit congressional promise to pay benefits in the future. The national income accounts obscure this by recording a saving flow that is used to purchase a government bond but not recording any measure of the saving that is replaced by social security. If the current implicit social security contracts were replaced by an explicit system in which the government sent "bonds" promising to pay future benefits to all covered workers, the national income accounts should record a corresponding increase in both private saving and the government deficit. National saving would remain unchanged but a more accurate picture would emerge. This is the spirit of the calculations presented in Table 5.

The vast size of social security wealth is shown in lines 1 and 2. By 1971, social security wealth was $2.2 billion at 1972 prices or nearly twice GNP. Social security wealth in constant dollars nearly tripled from 1955 to 1971, rising from 114 percent of GNP to 198 percent in 16 years. (The original study in which social security wealth was estimated [Feldstein, 1974] stopped with 1971; there has actually been a substantial rise in social security wealth relative to GNP since 1971 but a comparable estimate is not available.)

Social security "saving," i.e., the annual increment in real social security wealth, has been larger on average than total real private saving. Moreover, the ratio of social security saving to real private saving has grown from 73 percent in 1946-55 to 152 percent in 1966-71. As a percentage of net national product, social security saving has increased from 5.7 percent in 1946-55 to 12 percent in the most recent 1966-71 period. If the social security "saving" would otherwise have

TABLE 5. THE IMPORTANCE OF SOCIAL SECURITY SAVING

Line		*1946-1955*	*1956-1965*	*1966-1971*	*1946-1971*
1	Social security "wealth," end of period, billions of 1972 dollars.	744	1,507	2,188	2,188
2	Social security "wealth," end of period, percentage of GNP.	113.6	162.8	197.6	197.6
3	Annual social security "saving" as percent of private saving.	73.2	138.0	151.7	116.2
4	Annual social security "saving" as percent of net national product.	5.7	10.3	12.0	8.9

Source: Annual social security wealth estimates were derived by the author; see Feldstein (1974). The estimates are available only through 1971. Social security "saving" is the annual increase in social security wealth. Net national product, personal saving and private saving are based on national income and product accounts published in *Survey of Current Business,* January 1976.

been done as ordinary private saving, social security should be seen as a major government deficit that absorbed savings equivalent to 8.9 percent of NNP in the twenty-five year postwar period. Stated alternatively, this is equivalent to 55 percent reduction of the corresponding potential net saving rate of 16.2 percent. (Table 3 showed an average actual net saving rate of 7.3 percent of NNP. The 16.2 percent is the sum of this 7.3 percent and the average social security saving rate of 8.9 percent of NNP.)

The assumption that all of the social security saving would otherwise have been accumulated as private saving is obviously extreme. Some individuals would have saved little or nothing even in the absence of social security. Moreover, the observed private saving rate reflects not only the depressing effect of substituting social security wealth for ordinary wealth but also the positive effect on saving that results from the increase in planned retirement (and therefore retirement saving) that results from social security. It is important therefore that the empirical research that is beginning to accumulate does indicate that increases in social security wealth do substantially reduce private saving; see Feldstein (1976b) for a summary of this research. I shall return to some of the implications of this in the next section.

Does the United States Save Too Little?

There has recently been renewed widespread interest in the question of whether the United States should increase its rate of capital accumulation. Those who favor such an increase often note that the U.S. saving rate is lower than the rate in almost any other industrial nation.[2] While this in itself is neither good nor bad, it should arouse interest in the question of whether the U.S. saves too little.

Much of the recent discussion about the possibility of a "capital shortage" consists of the claims of conflicting authorities who point to alternative projections of "likely investment demand" and conclude that future saving will or will not be adequate for the projected investment. Those who foresee a capital shortage often bolster their case for particular government remedies by arguing that more capital is needed to prevent either unemployment, inflation, an adverse balance of trade, or some combination of these three. Frankly, I think that all such analyses fail to ask the right question about our national saving rate.

To know whether the U.S. does save too little we must ask: If we increase our rate of saving and therefore of capital accumulation, would the resulting higher level of consumption in the future more than compensate for the reduced consumption today? In other words, would the future reward justify the current sacrifice? The first part of this section shows how this question can be answered and why I believe the answer is "yes." I turn then to ask *why* the U.S. saves too little. Finally, I comment in more detail on the nature of the recent arguments about the possibility of a "capital shortage."

To avoid unnecessary confusion, let me hasten to distinguish my view that the future reward of greater consumption would justify the current sacrifice from the common but technically false assertion that an increase in the rate of saving is desirable because it causes an increase in the rate of growth of national income. Although a higher saving rate does cause a temporary increase in the rate of growth of income, it is better to regard this as a transition to a higher level of income. Eventually the rate of growth returns to its original value; a permanently higher saving rate does not buy a permanently higher rate

[2] For the 24 O.E.C.D. members other than the United States, gross fixed capital formation averaged 24 percent of gross domestic product in the period 1962 through 1973. Measured in this way, the U.S. rate of capital formation was only 17 percent. By contrast, the rate of Japan was 33 percent.

of growth. It is true that the transition takes a very long time so that the movement to a higher income level looks very much like a slightly higher rate of growth for a generation or more. But looking at the "growth" effect of a higher saving rate is bound to make a change in saving seem unimportant. For example, a one-fifth increase in the net saving rate—from 7.5 percent of net national product to 9 percent—would raise the equilibrium level of national income by about 10 percent. If this increase in income is completed in 40 years, it would add less than one quarter of one percentage point to the growth rate during this transition period and nothing thereafter (even though the saving rate continued at its new and higher level). Looked at in this way, there is little gained by the permanent 1.5 percentage point increase in the saving rate. But it should be clear from the fact that the saving rate has *no* permanent effect on the rate of growth that it is wrong to assess the importance of saving in terms of the rate of growth. The importance of saving must be seen in terms of the substantial effect of a higher saving rate on the level of income, i.e., in terms of the real return that the nation earns on that extra saving.

Since my subject is a very big one, let me be clear about some of its limits. I will consider only the accumulation of physical capital, excluding the issues of education and research. I am also not concerned with short-run considerations, neither the current state of the economy nor the general Keynesian concern about unemployment caused by an excess of desired saving over desired investment. I recognize that a large increase or decrease in saving would have unsettling short-run effects and that any major change in the saving rate should be accompanied by an appropriate mix of monetary and tax policy during the period of transition.

COMPARING THE REWARD WITH THE SACRIFICE

A higher saving rate would mean that we would consume less today but more in the future. For many, the fruit of a higher saving rate would be a higher standard of living in retirement. For others, the reward would come in preretirement years in the form of home ownership and other forms of consumption. To say that we now save too little is essentially equivalent to saying that it is worth foregoing some more consumption today to get this greater addition to future consumption.

In general, we economists assume that such decisions can be left to individuals to make for themselves. We do not ask whether people

spend too much on tables and not enough on chairs. Why then should we ask whether they spend too much on current consumption and not enough on future consumption? The answer that I will emphasize in this chapter is that the individual saving decisions are subject to the powerful distorting influences of public policy through tax rules and social security. It is necessary therefore to look beyond the individual decisions and compare explicitly the benefits and costs of additional saving.

The first step in answering our question is to estimate the rate of return that the *nation* would earn on additional saving, i.e., the rate that would be available as a reward for individual saving in the absence of taxation. Each of us can then decide whether at that rate of return he would want to save more than he currently does. If everyone would want to save more if that rate of return were available on additional saving, there would implicitly be unanimous agreement that the nation now saves too little. Even though the current tax rules require each of us to share the reward from saving so that no one can earn the pretax national rate of return on his own saving, it is in terms of that pretax rate of return that the desirability of an increase in saving must be assessed.

The National Rate of Return on Private Investment—In measuring the national (or social) rate of return on private investment we want to summarize the effect that foregoing a dollar's worth of consumption now would have on the income available for consumption in the future. We can regard this as the internal rate of return on today's marginal private investment; this rate is to be measured in real terms and before tax. Of course, we are interested not only in the return on additional saving today but also in the marginal internal rates of return that will prevail in future years. We want to know the size of the sustained increase in the national output that would result from a sustained increase in the capital stock.

We can only approximate this marginal internal rate of return concept by the available aggregate national income and capital account data. There would be problems with any aggregate even if it were constructed in exact conformity with the appropriate theory for a representative capital good. In practice, further problems arise because arbitrary accounting conventions are used to value depreciation and scrapping. Despite these limitations, I believe that the national income and capital account data can provide a useful estimate of the current rate of return and an assessment of any significant trends.

I will measure the available national rate of return on private investment by the ratio of the capital income to the value of the capital stock in the nonfinancial corporate sector. Capital income is defined to include the net interest paid by corporations. The capital stock includes inventories as well as fixed reproducible capital. Two alternative measures are developed. The net return, r_n, subtracts current depreciation in measuring capital income and measures the capital stock net of accumulated depreciation. The gross return, r_g, does not subtract depreciation in measuring capital income but measures the capital stock net of accumulated scrapping. Feldstein and Summers (1976) show that each measure is equivalent to the internal rate of return measured under a particular technological assumption.

We are fortunate to have new Department of Commerce data that reports capital income and the capital stock in constant dollars. The old tax accounting measures of depreciation at historic cost have been superseded by new measures of economic depreciation at replacement cost. Nominal inventory profits have been purged of the distorting effects of inflation. Table 6 presents the estimated net and gross rate of return for overlapping decades from 1950 through 1975.

The average net rate of return was 12.4 percent for the entire period 1946-75. The gross rate was very similar, 11.3 percent. Both rates are quite similar in each of the decade intervals as well.

The lower rate for the most recent decade suggests the possibility of a permanent decrease in the rate of return or even the beginning of a secular decline. In a widely cited paper, Nordhaus (1974) has pointed out the recent decline and suggested that it can be explained by the higher capital intensity that resulted when investors shifted funds into the corporate sector because their perception of the risk

TABLE 6. RATES OF RETURN ON CORPORATE CAPITAL, 1950-75

Period	*Net Return* (r_n)	*Gross Return* (r_g)
1946-55	0.135	0.118
1950-59	0.126	0.117
1956-65	0.124	0.116
1960-69	0.134	0.122
1966-75	0.112	0.104
1946-75	0.124	0.113

Source: Feldstein and Summers (1976). See text for definitions.

of such investment had declined. Alternatively, a permanent decrease might reflect the end of the "capital scarcity" that was due to low rates of capital formation during the depression and the war. I frankly doubt both such effects.

Such interpretation of the recent evidence ignores the cyclical nature of profit rates. Larry Summers and I have analyzed the annual values of r_n and r_g in the postwar period (Feldstein and Summers, 1976). We find that there is absolutely no evidence of a downward trend in the period through 1969. While the profit rate fell substantially in the following six years, we believe that this reflects the abnormal experience of an imported inflation, of price controls and of a sharp recession. Indeed, the adverse effect on profits of a low rate of capacity utilization that can be inferred from the experience before 1970 is sufficient to explain the seeming downward trend in profits for the period through 1975. Moreover, the rate of profit began to recover in 1975 and now looks as if it will be up substantially again in 1976.

It seems most appropriate to conclude that the national rate of return on private corporate investment is about 12 percent and shows no evidence of a permanent or secular decline. Such a rate of return implies that sacrificing $1.00 of consumption now would permit a $2.00 increase in consumption after only 6 years. If saving for retirement from age 45 to 64 is increased by $100 per year, retirement consumption from age 65 to 80 could rise by $750 per year. These numbers look to me like a high potential reward for increased saving.

Let me now look briefly behind the assumption of a single rate of return to be earned on all new investments. If markets function freely and properly, all rates of return are equalized (after adjustment for risk, a subject to which I will return below). In practice, there are several important distortions in our economy that cause unequal rates of return on different types of investment: the corporation income tax, the exclusion of state and local interest payments from taxable income, the local real property taxes, the special tax treatment of both owner occupied and rental housing, etc. The differences in *pretax* national rates of return arise because investors move capital among investments until the *after-tax* individual rates of return are equalized in all types of investments. With different tax rates for different types of investment, equal after-tax rates of return imply unequal pretax rates of return.

A closer look at the corporation income tax will illustrate the nature of this distortion. If the corporation income tax were the only

distortion and if corporations issued no debt, the national rates of return on corporate investment (r_{corp}) and noncorporate investment ($r_{noncorp}$) would have to satisfy $r_{noncorp} = (1 - t_{corp})r_{corp}$ where t_{corp} is the corporation income tax rate. In fact, the difference between r_{corp} and $r_{noncorp}$ is less than this indicates because investments are partially financed by debt; indeed, with 100 percent debt finance of *marginal* investments, the two rates would be equalized because interest payments on debt are deductible in the calculation of taxable corporate income. The differential is further reduced because the personal income tax is not levied until dividends are paid out, a feature that makes the corporate income tax into a tax shelter rather than an extra burden for high income shareholders.

What is the implication of these unequal national rates of return on different investments? Additional saving would expand capital in all of its uses, the actual allocation depending on differences in the rates at which incremental capital lowered rates of return. The national rate of return on the additional saving would be a weighted average of the individual rates of return, the weights being the shares of the new capital going to each use. While a proper calculation of this type remains to be done, it would most likely indicate a weighted average return below the 12 percent calculated above for the corporate sector but, I believe, not very far below. Moreover, since these differences in rates of return are largely a reflection of deliberate tax policies, they may to some extent reflect the government's perception that some apparently low yielding investments deserve subsidy because of social externalities. The most obvious case is the subsidy of state and local borrowing for the provision of public services. Housing may be subsidized vis-à-vis corporate investment because of presumed neighborhood externalities, etc. Dr. Pangloss would say that all social rates of return when properly measured to include externalities have been equalized by a wise tax policy.

While most economists who review the evidence will agree that the current return on corporate investment is approximately 12 percent, there are some who fear that any substantial increase in the capital-labor ratio might substantially reduce the marginal product of capital. Even a very large increase in capital would have little effect if its marginal product behaved as the commonly assumed Cobb-Douglas technology implies: a 10 percent increase in the ratio of capital to labor would decrease the return from 12 percent to 11.2 percent, while a 20 percent increase would lower the return to 10.6 percent. Although studies using time series data often suggest a much lower elasticity of

substitution and therefore a much greater sensitivity of the return to the capital-labor ratio, the weight of the evidence based on cross-section data and long time-series indicates that the Cobb-Douglas response is the preferable assumption. This is supported by the long-run constancy of factor shares. The time series analyses are biased by the effects of cyclical variation in capacity utilization, wage setting and profitability.

There is finally the problem that the rates of return available to savers involve an element of risk that makes the average rate discussed here greater than the corresponding "certainty equivalent" rates, i.e., the riskless rate that investors would regard as equal in value to the 12 percent average with its accompanying risks. I will not deal with the problem of assessing a certainty equivalent but will make only two comments. First, a large part of the national return on investment accrues to the government as tax receipts; this both pools a very large number of individual risks and spreads the remaining risk over the entire population. For this part of the national return, the mean can be treated as equal to its certainty equivalence. Second, the difference between the individuals' net of tax mean yield and the corresponding certainty equivalence must also be borne in mind in evaluating their rate of consumption time preference. It is to this general subject that I now turn.

Preference for Present and Future Consumption—At one level of analysis each of us can ask himself whether he would want to sacrifice more present consumption if he could obtain a 12 percent rate of return. I for one would answer "yes." But as economists we would also like to say something more general about the rate at which others would be prepared to substitute future consumption for present consumption. If the amount of future consumption that individuals require to forego a dollar's worth of present consumption is less than the rate at which investment produces future consumption from current capital investments, we should save more. Stating the same thing more succinctly, *the U.S. saves too little if the rate at which individuals discount future consumption is less than the national rate of return on private investment.*

If there were perfect capital markets and no taxes on capital income, it would be a simple matter to infer the rate at which everyone discounted future consumption. Even if individuals have very different tastes, everyone would borrow or lend until his own marginal rate of substitution between present and future consumption were equal to

$1 + i$ where i is the market rate of interest. Equivalently, everyone's rate of time discount (d) would equal the market rate of interest. With no taxes, this rate would also equal the marginal product of capital.

The existing personal and corporate income taxes put a wedge between the national return on capital and the net rate received by savers. As a first approximation, everyone equates his rate of time discount to the net of tax rate of return that he receives. The substantial tax "wedge" makes the consumption discount rate (d) substantially less than the pretax national rate of return on additional investment. The size of this discrepancy and the amount of capital accumulation that would be required to eliminate it are indicators of the extent to which the U.S. currently saves too little.

A simplified analysis of the corporate and personal income taxes will illustrate the size of this discrepancy; I abstract here from noncorporate investment. With no corporate debt finance a corporation tax at rate t_c and a personal income tax at rate t_p imply that $d = (1 - t_p)(1 - t_c)r$ where r is the national (pretax) rate of return. Understating the tax rates as $t_p = 0.3$ and $t_c = 0.4$ overstates d; still, a national rate of return of 0.12 corresponds to $d = 0.05$. Inflation tends to raise the effective tax on capital income even further and therefore to widen the gap between d and r. This occurs because the tax laws deal with nominal interest rates, nominal depreciation and nominal capital gains instead of the corresponding real magnitudes; see Feldstein, Green, and Sheshinski (1976). Because interest payments are a deductible expense in calculating taxable corporate income, the use of debt finance reduces the effective rate of corporate income tax. If $100b$ percent of investment is financed by issuing bonds, the rate of time preference will satisfy $d = (i - t_p)[(1 - t_c)r + t_c bi]$ where i is the interest rate paid by the corporation; with $B = 0.5$, with $i = 0.05$ (without inflation), $t_p = 0.3$ and $t_c = 0.4$, $d = 0.057$. The net return received by investors and therefore their rate of time discount of future consumption is less than half of the corresponding pretax national rate of return.

As I noted above, replacing the mean values that I have been discussing with corresponding "certainty equivalents" yields would lower both r and d. Using certainty equivalent yields would increase the relative difference because the current absolute difference between the means reflects the portion collected by the government which is pooled and spread and which therefore need not be reduced (or reduced very little) in going from a mean rate to a certainty equivalent rate.

A more realistic analysis would recognize that most individuals do not save by buying corporate stock but by accumulating pension reserves or savings account deposits. Although pension funds receive favorable tax treatment, their equity investments are still subject to the corporate income tax. The low rates of return imposed by Federal Reserve Regulations on bank depositors implies both that their rate of time discount is reduced and that the marginal return on the investments financed with these funds are below the national return on corporate investment. To the extent that individuals buy higher yielding assets and also accumulate bank deposits, the difference reflects both a liquidity premium and a willingness to sacrifice higher return to eliminate some types of risk.

I turn finally to the difference between the interest rate paid to savers and the rate charged to borrowers. It is occasionally argued that the rates of time discount discussed above are too low for at least those individuals who borrow at consumer credit interest rates that reach 18 percent or even higher. Of course, these are nominal rates and the corresponding real rates are now approximately 13 percent. Many individuals can and do borrow at lower interest rates on mortgages and car loans. For most people the consumer credit rates are so much higher than their time preference rate that they do not borrow at all. There is also a process of adverse selection at work, making default rates high among those who borrow at high rates. To the extent that this default risk is anticipated by the borrower, the contractual interest rate overstates the expected rate and therefore the rate of time preference. In short, I believe that, for the vast majority of individuals, the very high borrowing rates are irrelevant as indicators of the rates of individual time preference.

There is a quite different way to think about comparing and aggregating consumption at different dates, which may be of interest to some readers of this chapter. It can be found in Appendix 1.

Distributional Issues—Critics of increased saving often ask: "Why should we save more to benefit the next generation? They will be richer than we are." This line of argument is quite irrelevant. Although we *can* save more in order to *give* more wealth to the next generation, additional saving can also be purely selfish. We can save more in order to enjoy a higher standard of living in our own retirement or in later preretirement years. At that time we can *sell* the capital stock to the next generation and consume its value. If each generation chooses to

save more *for its own retirement years,* the capital stock will be *permanently* higher. This happens even though each individual saving decision is purely selfish.

The question of whether the United States should save more is really a question of whether government policies should be changed to foster more saving. The particular choice of policies would influence the distribution of the benefits and costs of increased saving. For example, if the government raised taxes now in order to reduce the outstanding public debt, the benefits of this method of achieving any particular change in current capital formation would accrue to future taxpayers who would no longer have to pay taxes to finance interest payments.

There is a basic distributional consequence of the increased capital stock that results from additional saving. A substantial increase in the aggregate capital stock would raise the marginal product of labor and lower the marginal product of capital. Workers would be made better off and capital owners would see a fall in their capital income unless they increased their own saving. The magnitude of such redistribution would not be terribly important, however. For example, a Cobb-Douglas technology implies that a 10 percent increase in the capital labor ratio would raise labor incomes by about 3 percent and would depress the rate of return by about 7 percent, e.g., from 6 percent after tax to 5.6 percent.

WHY DO WE SAVE TOO LITTLE?

We save too little as a nation for two quite different reasons. First, the personal and corporate income taxes greatly reduce the reward for saving. Second, social security provides an alternative to private saving as a means of providing for consumption after retirement.

I have already explained how the corporate and personal income taxes on capital income reduce the net reward that savers receive for postponing consumption. If the government financed the same public spending by a tax that exempted capital income, the net reward to savers would rise and the nation's rate of saving would increase. If a consumption tax were substituted for our current income tax in a way that keeps the present value of everyone's life-time tax burden unchanged, there would be a change in the timing of aggregate tax collections. National saving would increase by the amount of the rise in private saving only if the government adjusted its net surplus to keep real government consumption unchanged. A tax on "labor income"

(defined to include the receipt of gifts and bequests) has the same effect on personal consumption but a yet different timing of tax receipts; see Feldstein (1976a).

I have discussed elsewhere (Feldstein, 1976a) in some detail the sense in which the tax-induced reduction in saving entails a welfare loss and therefore the sense in which we can be said to do "too little saving" because of the tax on capital income. Reducing the tax on capital income would require an increase in the tax on labor income to keep total government receipts unchanged. The welfare gain that would result from removing the saving distortion would be partly offset by a welfare loss that would result from a greater distortion of labor supply. My previous calculations indicate that, with plausible but conservative parameter values, the welfare gain would outweigh the loss; using Boskin's (1976) estimate of the response of saving would increase the net welfare gain beyond the value that I obtained. We save "too little" because of taxes in the sense that both saving and economic welfare would increase if the taxes on capital income were reduced and replaced by a tax on consumption with equal yield and equal progressivity.

The effects of social security on saving and on welfare are more complex. As I have explained elsewhere (Feldstein, 1974, 1976b,c), social security affects saving in two countervailing ways. For someone with fixed retirement plans, the availability of social security benefits unambiguously reduces the amount of private saving; because social security operates on a pay-as-you-go basis, i.e., uses tax receipts to finance concurrent benefits, there is no extra public saving to offset the decline of private saving so national saving falls by an equal amount; in particular, if the combination of the social security tax and the benefits that it finances has no income effect, the social security program will reduce saving during the individual's working years by just enough to leave consumption during retirement unchanged. More generally, however, there is a second effect of social security that would in itself tend to increase personal saving. By providing transfer payments to older persons who retire, social security induces the aged to reduce their supply of labor. This reduction in working years and the resulting increase in the period of retirement induce additional saving. The net effect of social security on the saving of the nonaged (and therefore eventually on the aggregate net saving of the population) is theoretically indeterminate and depends on the relative strength of the traditional "saving replacement effect" and the new "induced retirement effect." The relative importance of these two effects depends

on a variety of factors: the extent of the change in retirement, the duration of retirement in the absence of social security, the distribution of lifetime consumption over the individual's life, etc. There is now a growing body of econometric studies using both aggregate data and household survey data that shows that social security does substantially reduce private saving. I have reviewed these studies in Feldstein (1976b) and report new household evidence in Feldstein and Pellechio (1976).

While many readers may find these empirical analyses of the effect of social security on private saving sufficient to confirm the primary conclusion, some readers may find the more theoretical exposition which is contained in Appendix 2 to be of additional assistance.

FOUR WRONG REASONS FOR SAVING MORE

I would now like to contrast the reason that I have emphasized for saving more—that the benefits greatly exceeded the cost—with the types of arguments that have been prominent in the recent debate about the "capital shortage." Most prominent is the notion of a "capital gap" between likely saving and investment. Then come arguments that a higher saving rate would reduce both unemployment and inflation and would improve our balance of trade. In general, these arguments are not valid. But their prominence in the public debate requires at least brief attention in the current paper.

The Capital Gap—The public's attention was drawn to the issue of a "capital shortage" by cries of alarm from the Secretary of the Treasury, the Chase Manhattan Bank, and several leading business publications. In May 1975, Treasury Secretary Simon testified to the Senate Finance Committee that "investment needs between 1974 and 1985 will range from $4 trillion to $4.5 trillion," estimates that are now a familiar part of the capital shortage litany. He then compared this with the $1.5 trillion capital investment during the period from 1962 through 1973 and concluded that "our capital investment needs in the coming years are approximately three times the level of the recent past."

The shortfall of $2.5 trillion implied by these figures is both alarming and misleading. The capital requirements of more than $4 trillion are projected in the prices of future years, based on a 5 percent rate of inflation. It makes no sense to compare future capital spending measured in these depreciated dollars with actual past capital spending when the price level was lower than it is now.

If we do the calculations with constant 1974 dollars instead, the Treasury's $4.2 trillion estimate implies $3.15 billion in 1975 prices. The $1.5 trillion of actual gross investment from 1962 through 1973 represented annual rates that were about 14 percent of GNP. If this rate continues, actual investment from 1974 through 1985 would, on the Treasury's assumption, total $2.94 trillion in 1974 prices. The net shortfall would be only $210 billion, a far cry from the common figure of $2.5 trillion. This gap could be closed by an increase in gross savings of less than one-tenth, i.e., less than 2 percent of GNP.

There is another sense in which all such projections of a capital "gap" are misleading. As an economist, I am puzzled that experts appear to be predicting that the demand for capital will continually exceed its supply. Usually when there is excess demand for some good, its price rises until demand and supply are equal. In the capital market, the interest rate and the cost of equity capital should increase until they are high enough to force firms to tailor their aggregate investment demands to the available supply. There will be no shortfall of investment funds because the demand for funds will shrink to the available supply. This has been pointed out explicitly in the Report of the Council of Economic Advisers (1976), and in Bosworth, Duesenberry and Carron (1975), Friedman (1975), Sinai and Brinner (1975), and other recent analyses. Sinai and Brinner define a shortage to exist if the future investment demand cannot be financed at a "reasonably stable" interest rate. It is not at all clear why the *current* rate of interest should be identified as a standard in this regard, however.

Full Employment—A quite different notion of a capital shortage is offered by those who believe that the capital stock is too small to provide full employment and that an increase in savings and investment would provide the capital equipment "necessary" to employ the unemployed. Such a view of unemployment is contrary to both the Keynesian analysis that unemployment can be eliminated by a higher level of aggregate demand and to the neoclassical view that the high "permanent" rate of unemployment in the United States reflects adverse incentives that result from government policies and labor market institutions. In the long run, which is the focus of this chapter, the size of the capital stock is irrelevant to the level of employment. In the long run, the capital intensity of production rises or falls as the availability of capital or labor increases or decreases relative to each other. Among developed countries, a higher ratio of capital to labor does not imply a lower long-run rate of unemployment.

At best, the notion that more capital can lower the unemployment rate could be rationalized in terms of a temporary situation in which there is no unused excess capacity and in which there is no opportunity to use existing capital in a more labor-intensive way. Under such short-run circumstances, an increase in available capital would be a prerequisite for more employment. Neither of the two conditions holds at present: there is substantial evidence of excess capacity and the capital stock can always be used in a more labor-intensive way by greater reliance on multiple-shift working.

Moreover, it is clear that any such argument for more capital to reduce unemployment confuses the occasional desirability of a *temporary increase* in the capital stock with the desirability of a *permanently higher* saving rate and correspondingly larger capital stock.

Price Stability—A similar confusion of temporary increases in investment with permanent increases in the capital stock underlies the price stability case for increased saving. Since some price increases occur when the demand for particular products exceeds capacity output, selective temporary increases in capacity could eliminate this potential source of inflation. But a permanently higher saving rate and a correspondingly higher capital stock would not reduce the frequency or severity of bottlenecks and excess demand. While the larger capital stock would permit a higher level of output, it would also raise the level of wages and capital income and therefore the demand for that output. There would in short be no change in the extent of excess capacity and no greater ease in preventing temporary inflationary shortages.

International Competitiveness—A larger capital stock would increase the productivity of U.S. workers. For any given level of real wages, greater productivity means lower prices. And with fixed exchange rates, lower prices mean more exports and fewer imports. This line of reasoning is used to argue that a higher saving rate will improve the long-run balance of trade and, by reducing imports and increasing exports, will "prevent the loss of American jobs to foreign workers."

It should be clear that the argument is faulty at several points. Higher productivity should increase real wages. The level of prices will depend on (among other things) the ratio of the money supply to the level of output and not on productivity or other such "real" variables. Exchange rates do not actually remain unchanged in the long run even when exchange rates are officially "fixed" and certainly vary quite rapidly under the current system of "managed floating"

exchange rates. The domestic price level can therefore change without affecting exports and imports. And, finally, if the domestic labor market functions efficiently and aggregate demand is maintained, there will be no relation between the level of net exports and the level of domestic employment.

If there is a relation between capital accumulation and export performance, it should be both temporary and weak. An increased rate of saving causes productivity to grow more rapidly during the transition to a new equilibrium capital intensity. With productivity rising more rapidly, it may *institutionally* be possible to have a lower rate of price inflation because the rate of nominal wage increase does not rise fully with the rate of productivity growth. In addition, exchange rates may not rise rapidly enough to eliminate export surpluses, in part because countries use reserves to delay such changes. And the resulting strong net exports are both a direct stimulus to domestic production and a factor that induces a reserve-conscious government to maintain a high level of aggregate demand. It is clear that this effect of a higher saving rate is at most temporary and is more appropriately viewed as only one among many ways of achieving temporarily both high demand and a favorable balance of payments.

Concluding Comments

The existence of this conference is ample evidence that economists and others are asking whether the United States now saves too little. In the first part of this paper I presented evidence that the rate of real net capital accumulation has fallen steadily throughout the past century and that it continued to fall during the postwar period. I later noted that the U.S. gross capital formation rate is one-third lower than the average of all other OECD countries. Although both types of statistics should motivate a concern about our saving rate, neither constitutes a reason for saving more.

I have explained in some detail that the real reason to increase our saving rate is that the reward for additional real saving that the nation as a whole would receive would be well worth the current sacrifice. The reason that our private saving rate is now too low is to be found in our method of taxation and in our social security program. During the past decade, the actual saving rate has been further depressed by an almost continuous government deficit. Finally, I have tried to distinguish my line of analysis from what I regard as spurious arguments about a capital "gap" and about the potential contribution of

a larger capital stock to full employment, price stability and the balance of trade.

There now seem to be four principal ways in which public policies can be used to achieve a higher national rate of saving: government surpluses, changes in tax rules, changes in the structure of social security benefits and financing, and reform of the regulation of financial institutions. I hope that future economic analysis will focus on defining the appropriate mix of these four options.

Appendix 1: Comparing Present and Future Consumption

This appendix presents a way to think about comparing and aggregating consumption at different dates which is quite different from that presented in the main body of the text.

The marginal rate of substitution between consumption at different dates is (in cardinalist language) the ratio of the corresponding marginal utilities of consumption. Ignore for the moment the fact that future consumption is less certain because of the probability of intervening death and psychologically less attractive because of what Pigou (1920) referred to as the "faulty telescopic faculty" that causes future pleasures to appear smaller than they are in reality. The marginal utility of consumption nevertheless falls through time because real consumption per capita rises. If, over the relevant horizon, consumption grows exponentially at rate g and the elasticity of marginal utility with respect to consumption is a constant of $-m$, the marginal utility will also fall exponentially at rate gm. The marginal rate of substitution therefore satisfies $MRS_{s, s+1} = e^{gm}$. Since this derivation ignores both the individual probability of death and the psychological myopia and idealizes the change in consumption as a constant exponential growth, the resulting marginal rate of substitution is best thought of as representing a "planner's time preference" that is appropriate if we wish to ignore the distribution of consumption among individuals including the distribution among individuals of different generations. To distinguish this from the individuals' time preference rate d, I will denote this by δ. Thus, viewed in this way, $MRS = (1+\delta) = e^{mg}$. As a quite accurate approximation for the relevant orders of magnitude, δ is mg. Note that δ will be less than d by the annual probability of death and by the discounting of future utility that individuals would later recognize as irrational.

A numerical example will help to fix these ideas. Since per capita consumption is growing at about $g = 0.02$, we find $\delta = 0.02m$. If a 10 percent increase in consumption causes its marginal utility to decrease by 20 percent, $m = 2$. The appropriate value of m is clearly a matter of introspective judgment; I think of m as between 0.5 and 1.5 and would find values of m much in excess of 2 to be quite implausible. Even with $m = 2$, $\delta = 0.04$. A reason-

able adjustment for the probability of death and for Pigovian myopia would still leave d at no more than 0.07.

Thus, this direct utilitarian approach, like the analysis of the prevailing net-of-tax asset yields, implies that the rate of time discount of future consumption is probably about half of the gross social return on additional private investment.

Appendix 2: Social Security and Private Saving

To illustrate the nature of the welfare loss that occurs when an increase in social security depresses private saving, I shall consider an increase that is small enough to leave unchanged the national rate of return and the rate of time preference. Samuelson's (1958) model of overlapping generations is a convenient framework for this analysis. To avoid additional cumbersome notation, I will assume that each generation lives for one "year" or, equivalently, that the rates of return and of time preference are "per generation." Samuelson shows that if the aggregate real income grows at rate n, social security "pays" an implicit rate of return of n, i.e., for each one dollar of social security taxes that individuals pay during their "working year" they will recetive $1+n$ dollars of benefits in retirement during the "next year." The substantially higher return that has been enjoyed by U.S. social security annuitants represents a transition phase that is rapidly coming to an end; see Feldstein (1976d). If the one dollar of taxes had instead been invested in real capital accumulation, the return would have been r dollars. The individual investor might receive less than r *directly* because of the taxes he pays but the remainder comes indirectly because of the greater taxes that the government collects. The individual thus loses $r-n$ dollars during the "retirement year" per dollar of tax paid (rather than invested) in the previous "working year." The discounted value of that loss at the time that the tax is paid is thus $(r-n)/(1+d)$, where d is the individual's rate of time discount.

Consider now a decision to increase social security taxes and benefits by S at time $t = 0$ and to raise this increment annually at rate n as national income grows. There is an immediate gain of S to the generation of retirees who receive the initial transfer without paying any extra tax and a net loss to the present generation of workers and to each future generation; for those who are working in future year t the value of the net loss is $[(r-n)/(1+d)] S(1+n)^t$. The immediate gain of the initial retirees can be compared to the current and future losses by discounting these losses at the time preference rate δ that is appropriate for intergenerational comparisons of consumption. The net loss is thus:

$$L = \frac{r-n}{1+d} \cdot S \sum_{t=0}^{\infty} \left(\frac{1+n}{1+\delta}\right)^t - S. \tag{1}$$

The future losses have a finite present value only if the discount rate (δ) exceeds the rate of growth of national income (n); I shall make this convergence assumption even though it is not necessarily satisfied: Recall that δ may be regarded as the rate of decline of the marginal utility of consumption *per capita* while n is the rate of growth of *aggregate* income. With a population growth rate of $\pi = .02$, a real *per capita* consumption growth rate of $g = .02$ and a marginal utility elasticity of $m = 2$, we have $\delta = .04$ and $n = g + \pi = .04$. In this case, the future losses have an infinitely large present value, limited in reality only by the eventual limit to population growth.

With the assumption of convergence, equation (1) implies that the present value loss per initial dollar of tax increase is:

$$\frac{L}{S} = \frac{r-n}{\delta-n} \cdot \frac{1+\delta}{1+d} - 1. \tag{2}$$

Since $r > n$ and $r > d \geqq \delta$, the loss is clearly positive.

Readers familiar with Samuelson's analysis may wonder why he reached the very different conclusion that social security would raise the welfare of every generation. Unlike the current analysis, Samuelson assumed that no capital goods exist so that real saving and investment is impossible. By extension, whenever r is less than n, the "loss" of each future generation is actually a gain and social security unambiguously raises welfare by reducing real investment (see David Cass and Menahem Yaari, 1967). But in the realistic case of $r > n$, the loss depends on the relative magnitudes of r, n, δ and d. For example, if $r = d = \delta$ there would be no present value loss in the case being considered although each generation of workers would lose $(r - n)/(1 + d)$. With no tax distortion ($r = d$) but with $d > \delta$, there would be a loss per dollar of initial tax increase of $(d - \delta)(1 + n)/(1 + d)(\delta - n) > 0$.

The issue of optimal social security benefits is of course more complex than this simple discussion implies. But the analysis is sufficient to illustrate the basic point: in reducing private saving, social security causes the substitution of a low-yielding implicit intergenerational contract for real capital investment with a higher social yield.

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Senator BENTSEN. Thank you very much.
Professor Meiselman.

STATEMENT OF DAVID I. MEISELMAN, PROFESSOR OF ECONOMICS, VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Mr. MEISELMAN. Thank you. My name is David Meiselman, and I am a professor of economics at Virginia Polytechnic Institute and State university where I am also director of its new Northern Virginia graduate program in economics located in Reston, Va.

In the past few years we have all seen many reports describing and analyzing the slow and faltering growth of the American economy over the past decade. After 2½ years of the current business cycle expansion, the performance of the American economy is still highly unsatisfactory, a record which cannot be explained or excused by reference to the temporary adversities of the business cycle or the weather, or even the serious and not so temporary adversity of the OPEC oil cartel. Inflation and unemployment are too high, productivity and growth are too low, and there are no compelling reasons to believe that time and patience alone will cure our problems or permit us to look forward to better times ahead. Since I believe that poor and ill-advised public policy, especially in the tax area, is the major factor causing our dismal performance, I am especially pleased that the Joint Economic Committee's Subcommittee on Economic Growth and Stabilization is holding these hearings to help examine the impact of tax policy on economic growth. I would fervently hope that these hearings and other discussions of tax reform would ultimately result in fundamental changes in the Federal tax code so that the tax structure imposes fewer barriers to economic growth and efficiency.

There are many mysteries about economic growth, but the lack of complete knowledge should not blind us to what we do know. We do know that in recent years, since at least 1960, that economic growth per capita in the United States has been the slowest of any of the western world's major industrial economies. Indeed, despite all her many serious problems, even Great Britain has experienced more per capital growth than the United States. Between 1960 and 1973, real output per employed person increased by an average of only 2.1 percent per year in the United States, while in the United Kingdom it increased by about 2.8 percent per year or about a third more. These differences in growth may appear small in any one year, but they accumulate over the years like compound interest so that during the 13-year period the overall increase in output per employed person was about 43 percent in the United Kingdom compared with about 31 percent in the United States. Since 1974, per capita output in both the United States and the United Kingdom have increased at an average of about 1 percent per year, partly reflecting sharp recessions in both countries, so the differential remains.

Of course, other countries grew still more rapidly and I will not detain you for a detailed examination of these international growth comparisons. However, I do believe that we should face the sad fact that the United States has experienced less growth in productivity than any other industrialized country in the western world. To be sure, other countries started lower or suffered great and reparable destruc-

tion during World War II, but the large gap between the United States and other Western countries in real income per capita has narrowed considerably even from pre-World War II levels. In some countries, real income per capita may now exceed that of the United States. As for the war arguments, Canada suffered no direct war damage, and Canada, too, has been growing faster than the United States.

What has the United States been doing so differently to result in such disappointing economic growth? One of the main reasons for our slowdown is that the American economy has been devoting too many of its resources to consumption and to Government and not enough of them to the capital formation which makes growth possible. In fact, of all the Western industrial countries, the United States has devoted the smallest fraction of its gross national product since 1960 to private capital formation. Between 1960 and 1973, total fixed investment, which includes housing, have been 17.5 percent of real output, compared with 22 percent in Canada, about 25 percent in France and Germany, and over 35 percent in Japan. Even the British have devoted a larger proportion of output to capital formation than we have. Furthermore, the differences between American and foreign capital formation would be even greater if we excluded housing from the comparisons and examined only investment in plant and equipment, inventories and the like.

It is not merely coincidental that the United States has been lowest in both capital formation and economic growth. Output can increase only when technology improves or, with a given level of technology, when either more capital or more labor is used. Technical progress itself depends on capital formation, because technological improvements do not occur automatically; instead, they are typically the consequence of deliberate and planned research and development, a form of capital investment. And for a given level of technology, if there is little additional fixed capital, output can increase only when there are more labor inputs—from more people working, or from people working longer hours. The only dependable way to increase labor productivity, output per man-hour, is to increase the amount of capital per worker. Alternatively, a decrease in the amount of capital per worker tends to decrease labor productivity. These regularities depend on the operation of perhaps the oldest and best established principle in all of economics, known either as the Law of Diminishing Returns or the Law of Variable Proportions. Economists of diverse persuasions from Karl Marx or Paul Samuelson or Milton Friedman to Friedrich von Hayek may differ on many matters, but all agree that labor productivity depends on the amount of capital per worker.

Thus, one factor making for slower growth per worker has been a sharp rise in the labor force in recent years unmatched by any speed-up in the rate of capital formation. In real dollars of 1958 purchasing power, from 1961–65 there was an increase of $55,000 in the gross stocks of business capital for each person entering the labor force. In 1966–70 it was $46,000. By the 1971–74 period it had fallen again, to only $41,000.

During the current business cycle expansion since early 1975, real gross nonresidential fixed capital formation has increased only slowly, and has actually declined as a fraction of gross national product. The attached table 5, from a recent Congressional Budget Office study

("Sustaining a Balanced Expansion," Aug. 3, 1976) shows that nonresidential fixed investment as a percent of gross national product has declined somewhat over the past decade. The same table also shows a sharper decline in the growth of what they term the "Private Effective Capital Stock," which includes nonresidential plant and equipment and excludes pollution equipment.

However, what is most striking about the table are the data on the growth of capital per worker. In the 1950–55 period it increased at the rate of 3.6 percent per year. The rate of increase slowed in the decade thereafter. From 1965 to 1970 capital per worker increased at the rate of 2.6 percent per year. In the 1970's there has been a sharp decline in the growth of capital per worker. The Congressional Budget Office estimates that it has increased at the rate of only about 1 percent per year since 1975. This is hardly the basis for the economic growth and the expansion of opportunity which the Nation can and should achieve.

It turns out that real wage rates, and also, to some extent, employment as well, depend on labor productivity—not because employers are guided by ethical reasons to reward workers for their productivity, but because market forces compel employers to do so. When, as the result of capital investment, employees become more productive, it will pay at least some employers to add to their work forces. As the demand for labor goes up, the result will be some combination of more employment and higher real wages as employers in general are forced to offer higher wages both to attract workers and to keep them from quitting. The maximum each employer is willing to pay is determined by the productivity of labor, and hence by the ratio of capital to labor. Competition among employers tends to drive wage rates to this point. Therefore, wages and employment opportunities will be held down if capital investment is slow.

If capital formation is so crucial for economic growth and rising real wage rates, why is the United States doing such a bad job of it? I contend that a number of public policy measures, by unduly penalizing saving and investment, have diverted resources individuals would prefer to devote to capital formation and future consumption toward present consumption by households and by governments. And one of the worst sets of policies, resulting in this wasteful distortion, is our Federal tax system.

The fundamental bias against capital formation in our tax system results from the multiple taxation of income which is saved and invested. Individuals must pay taxes on essentially all income they earn, whether they spend it immediately or invest it. The same holds true for corporations and their profits. This means that a dollar of current income is taxed only once when spent for consumer goods. However, the same dollar of current income devoted to saving is subject to multiple taxation because taxes must also be paid on the interest, dividends, capital gains, and the like that result from saving and investing. The use of income for saving is thereby taxed at substantially higher rates than the use of income for consumption. People naturally respond by saving and investing less. This distortion by multiple taxation is particularly great in the case of dividends, for the return on equity is also subject to an initial corporate profits tax of 48 percent. To be sure, so-called capital gains are taxed at lower

rates than ordinary income, but this only moderates the distortion; it does not eliminate it.

For full tax equality between saving and consumption, all private sector saving should be deductible from the income tax base, whether invested in a savings account, the purchase of machine tools, the education of one's children, or the building of a shopping center. Only current consumption would be taxed. This would mean that businesses could, in effect, write off 100 percent of the cost of production facilities in the year they acquire them, thereby eliminating depreciation and other recovery allowances. Canada and England already essentially have this system, and other countries generally permit substantially faster writeoffs of depreciating capital assets then the United States does.

To be sure, some savings, especially in pension funds, do receive a partial tax break partly because under some circumstances taxes can be deferred and partly because some or all of employer contributions may not be taxed at all. But this route has its own dangers and shortcomings because it further bureaucratizes yet another important feature of American life by separating people from control of their own assets. Instead, control is vested in the hands of faceless caretakers and institutions who are required to act "prudently," which means they tend to provide funds to safe, established, and large enterprises and activities. The system offers little to new, to risky, or to small enterprises, or to individuals and families who wish to start new businesses. This is yet another sad example of how government keeps people out and protects those who have already made it. Indeed, much of the tax system seems like an evil contrivance designed to keep people from becoming rich rather than striking at the rich themselves. The long-run economic and social implications of retarding entry, innovation, and mobility, and impairing individual initiative and self-reliance are serious, indeed, and are not sufficiently appreciated.

The damage wrought by our Federal tax system has been aggravated by inflation. Taxable profits have traditionally been calculated on the basis of historic rather than replacement costs. During inflation, therefore, recorded profits are overstated. When prices increase, the costs of replacing inventories also increase, and depreciation, based on historic costs, becomes insufficient to replace machines being used up in production. Inflation thereby levies a special and additional tax on business capital under our current tax laws. Shifting from FIFO to LIFO accounting for inventories moderates but does not eliminate these problems for the inventory component. Taken by itself, the extra inflation tax on business capital would result in a reduced rate of capital formation relative to periods such as the first half of the 1960's when there was little or no inflation. The inflation tax on business capital also means that capital formation will depend on anticipations of future inflation because post-tax rates of return depend crucially on inflation.

Thus, one important and needed reform would be to permit indexation of depreciation allowances to permit depreciation charges to cover current replacement costs rather than historic costs. Of course, with saving exempt from income taxation there would be full writeoffs of capital expenditures and no such adjustments would be necessary. However, if saving is not made deductible, indexation of deprecia-

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tion would help mitigate some of the bad effects of inflation. Indexation is also desirable because it avoids creating erroneous capital gains when capital gains are subject to tax, a topic I shall return to later. Under present arrangements, the combination of inflation and capital gains taxation essentially amounts to a capital levy. Similarly, indexation of the entire tax code, including personal and corporate tax rates, are also desirable second-best solutions because indexation avoids the problems caused when the inflation process effectively alters real tax rates by putting individuals into higher tax brackets even when their real incomes remain the same.

Permitting the raising of tax rates or the imposition of capital levies by inflation rather than by explicit debate and legislation are not among the Congress more forthright and honorable actions.

I may add that, even without inflation, that taxing capital gains suffers from the basic fault of the tax system as a whole, which is that it tends to cause multiple taxation of income which is saved and invested rather than consumed. When people save they add to their net assets, their wealth. Multiple taxation results when both income and the wealth generating the income are taxed. Because the capital gains tax is levied only when assets are sold and capital gains are realized, the capital gains tax is a peculiar kind of transactions tax, not even a systematic or uniform tax on increases in value. As such, the capital gains tax is yet another form of capital levy which not only reduces saving and investment, but seriously interferes with the efficiency of capital markets. Again, the capital gains tax is imposed on an increase in wealth, not on wealth itself.

I regret that some administration spokesmen seem to be suggesting a further blurring of the fundamental distinction between capital and income, including an increase in the capital gains tax. I find it hard to see how an increase in the multiple taxation of capital would help to achieve the administration's stated goal of spurring capital formation.

The combination of inflation, capital gains taxation and other features of the present tax code also bear heavily on saving as well as capital formation, because the pace of future inflation is uncertain and, in many respects, subject to the erratic twists and turns of public policies, especially Federal Reserve monetary policy, which are themselves highly uncertain and unpredictable. Also, because the effects of inflation are far from uniform, there is simply no effective way to hedge against inflation in any dependable or predictable manner or to protect one's income or one's assets from inflation. Under current inflationary circumstances, there is no effective way an ordinary family can attain or depend on future real income and real wealth by accumulating real assets for emergencies or for planned future needs such as retirement or sending children to college. Similarly, business and financial managers who wish to plan for the future also have less firm bases for making necessary judgments about future markets, future taxes and the like, another set of factors impairing growth and efficiency.

In addition, inflation increases the tax bias against saving because inflation causes still higher taxes on saving relative to consumption for several reasons. First, inflation-induced nominal capital gains are subject to tax, even if the assets lose real value because their normal values increase less than the inflation rate. The result is a capital levy.

Second, historic cost accounting for depreciation and various other business costs means that reported profits are overstated, effectively causing an increase in real tax rates, or viewed in another way, as resulting in still another capital levy. Third, because some payments, such as interest rates, reflect inflation, classifying them as income and subjecting them to taxation is yet another form of capital levy. The small saver who receives a 5¼-percent return at a savings and loan not only suffers a 1-percent to 2-percent loss in the real value of his deposit, but he must also pay a tax on his interest earnings, even though the real interest rate is negative. The same is true for large investors who hold Treasury bills. Indeed, the puzzle is why so many people continue to hold assets in these and similar forms when overall real rates of returns are negative. One answer may well be that large numbers of people are so fearful of alternative investments that they are effectively willing to pay something to be able to hold on to their existing assets. In view of poor business earnings, reflected in the poor performance of the stock market, and the lack of progress on the inflation front as well as the growing web of burdensome, irksome, and costly regulation, who is to say that they are wrong.

Indeed, I believe that the problem of trying to save and to accumulate or conserve real assets is one of the most pressing and pervasive economic and social problems in America today, seriously affecting all of our citizens as well as all of our private institutions. As an economist, the question I am most frequently asked is, "How can I save and protect myself from inflation?" I regret that I have no good answer under present circumstances even for myself or my family, and I doubt that my distinguished colleagues on this panel have any answer either. The tragedy is compounded by the fact that on the other side of the coin there is a growing shortfall of capital formation.

Where do we go from here? First, I believe that the longstanding bias in the Federal tax system against saving and investment should be corrected. For full tax equality between the consumption and saving uses of aftertax income, savings should be deductible from the income tax base so that only consumption remains in the tax base. Progressivity can be built into such a tax, and I would favor a mild degree of progressivity with appropriate deductions for human capital outlays such as health care and education. I would also favor an indexing arrangement to keep real tax rates intact. With the full deductibility of saving, taxes on corporate income and on capital gains can be eliminated. In addition, taxes such as estate and gift taxes that yield little revenue and create much mischief can be reduced or eliminated. The tax codes of many States replicate many features of the Federal tax code, and action by the Federal Government would be enhanced by States following the leader, the Federal Government.

A roughly equivalent alternative would be a value-added tax with appropriate deductions for capital outlays.

Second, as an inferior alternative to the full deductibility of saving, other steps can be taken to moderate the bias against saving and investment, including a partial deductibility of saving. Major elements of the tax code can and should be indexed. The corporate tax should be eliminated, with corporate income attributed to stockholders. Instead of increasing capital gains taxes, present rates should be reduced or preferably, capital gains and losses should not be included

in the tax base, especially since the corporation can no longer be used as a device for keeping earnings out of the personal income tax base.

For other desirable tax changes I would urge the Congress to review the record and follow the examples of the Kennedy administration and of the Congress during the early 1960's, actions which set the stage for a surge of economic growth as well as for the elimination of inflation. The distortions of the tax system were moderated by effectively reducing the tax biases against saving and investment by means of a combination of policies that included more rapid depreciation and the investment credit as well as the reduction in both corporate and personal tax rates. We would do well to learn from the success of these acts rather than continue the same dreary policies that have brought us to our present unsatisfactory situation. Moreover, the Kennedy tax cuts have been more than offset by inflation moving people and businesses into higher tax brackets. We need tax cuts to get us back to the Kennedy tax rates.

Third, it is essential to abandon the deliberate use of inflation as an instrument of public policy, even for short periods of time. To avoid an abrupt shock to the economy, the inflation should be slowed gradually and eliminated over a 3- to 5-year period. The maintenance of general price stability will require steady, noninflationary ally cf general price stability will require steady, noninflationary courses for monetary and for fiscal policies. For monetary policy, this means a long-term growth of money in the neighborhood of 1-percent per year for M_1 and 4 percent for M_2; for fiscal policy, relatively stable taxes and expenditures close to or at balanced budget. The staggering deficit of the Federal Government must be eliminated, primarily through expenditure control, partly to avoid having the deficit crowd out private capital formation. I see no need and much danger in setting out to achieve a budget surplus in order to facilitate capital formation, a negative crowding-out effect, as it were. Paying the additional taxes to provide the surpluses results in undesirable distortions, and I find it difficult to believe that any surplus, once achieved, can long be protected against the expenditure bias of governments and of special interests. There are better and more dependable ways to eliminate the bias against saving and investment, and to get the country moving again.

[The attached table referred to in Mr. Meiselman's statement follows:]

TABLE 5.—GROWTH OF THE PRIVATE CAPITAL STOCK, 1950–77

[In percentage points]

Time period [1]	Nonresidential fixed investment as a percent of GNP	Annual rate of growth private effective capital stock [2]	Capital per worker
1950–55	9.1	4.5	3.6
1955–60	9.1	3.1	2.1
1960–65	9.2	3.2	2.2
1965–70	10.4	4.2	2.6
1970–75	10.1	3.3	1.6
1975–77 [3]	9.5	2.5	1.0

[1] 4th quarter to 4th quarter.
[2] Effective private capital stock includes nonresidential plant and equipment and excludes pollution abatement investment.
[3] Forecast.

Source: Bureau of Economic Analysis; Data Resources, Inc.; and CBO forecasts.

Senator BENTSEN. I would say, Professor, you are a man of very strong views.

Mr. MEISELMAN. The important thing is whether my views are correct.

Senator BENTSEN. That is true of all of us, isn't it?

Gentlemen, several means of integrating corporate tax returns and individual tax returns have been suggested.

As one of you has stated, there are some profound differences in the impact on capital formation.

Which ones do you think would have a negative impact and which ones positive?

One suggestion is to give a tax credit to the extent the corporation pays the tax to the individual stockholder; the second is very similar, it would allow the corporation to take a tax credit for dividends paid.

A third suggestion and a much more dramatic one, is to abolish the corporate income tax.

I would like to hear you discuss the impact of these various suggestions on capital formation.

I notice that the Business Roundtable has had some second thoughts about integration. I notice also that professional managers of large corporations are getting quite concerned about it.

Would anyone like to comment on that?

Mr. BROWNLEE. I will start.

I can't claim to be an expert on this problem. I think large corporations or their managements are somewhat fearful of a proposal that dividends be exempt from taxation, but that retained earnings be subject to corporate tax income tax because it would induce the stockholders to require that more of earnings be distributed.

Senator BENTSEN. Let's follow that through, though.

If it requires the corporations to pay out more of their dividends, does that increase interest in the stock? Would it not make the firm's stock more attractive?

Mr. BROWNLEE. I think almost all of the ways of reducing effectively the corporation income tax are going to have some positive impact upon savings insofar as they reduce the wedge between what has to be earned on investment and what is received by it.

I also think that inducing corporations to pay out more in the form of dividends would be a good thing, that it would force the management of corporations in which I hold stock to bid against the corporation managers whose stock I do not hold for the earnings on my capital.

I think it would increase the degree of effective competition in the capital market.

Senator BENTSEN. We had testimony from small businessmen who said the last thing I do is pay out dividends, for at least 10 years, and I haven't paid any out, and we have plowed everything back into growth.

How do you argue against that?

Mr. BROWNLEE. I argue that to a certain extent they plowed this back in without asking me as a stockholder whether I thought this was a good thing.

I would prefer to be able to exercise the option of plowing it back into this corporation or investing it in some other form.

Senator BENTSEN. Don't you have the option now by selling that stock?

Mr. BROWNLEE. Yes; I have that option, but remember that because of capital gains tax I am to some extent encouraged to stick with the thing that I have rather than switch.

After all, there are transaction costs involved here.

Mr. EISNER. My view is that the effects of the capital formation do not differ tremendously, if at all, in terms of different methods of integration, but the discussion, I think, highlights what has lurked behind much of our discussion this morning, and that is that there are huge differences in tax incidence and huge differences in who finally owns wealth which are implicit in different tax measures.

If, for example, we have simply an offset of individual income taxes of the portions of taxes paid by corporations, or if we have a dividend exclusion from taxable returns, or, if we have dividend deductibility we are going to have huge one-shot effects on the capital values of the assets of people that own corporations, of stock values, for example, and at this point whatever the equity of the previous tax system it hardly seems equitable to make changes that will give great benefits to current holders of stock or current owners of corporations.

It does seem to me the one form of integration that makes sense in terms of equity and does not disturb things in that fashion would be simply to credit portions of corporate earnings to individuals which correspond to their ownership of stock and have them pay taxes at whatever rates they pay.

Senator BENTSEN. You mean the retained earnings that were not paid out?

Mr. EISNER. Yes; the individual stockholder would pay a tax on all of the earnings of the corporation per share depending on the number of shares he holds.

Senator BENTSEN. Don't you think that would have a dramatic impact on the value of that company's stock?

A lot of people of modest means might refuse to buy stock because they do not have high enough income to pay that kind of tax.

Mr. EISNER. There are two effects: The corporation will not pay a tax on the earnings, the individual will. There will be differential impact. I think any tax change will have impacts, and clearly for a stock that is paying out a lot of earnings already we would probably have to figure what the effect would be on that as compared to a corporation that is not paying out a lot of earnings.

Some stocks might go up some, some would go down some. They would also have a negative effect on people in the very high personal income tax brackets who are paying 70 percent. By contrast you have a beneficial effect on people in low income brackets paying 18, 20, 25 percent.

As far as capital formation as a whole goes, I would agree with Oz Brownlee here, that I think the main impact is going to be to improve capital markets.

There is no reason for some corporation to plow back earnings whether it is profitable or not. If the opportunities for capital formation are there and it has less to distribute in earnings, then the investors would be happy to return the earnings to them.

In fact, many corporations today now have situations, arrangements whereby they solicit their stockholders to reinvest, and I suspect if you had integration you would have much more of that. If you had corporations saying, "Here, you can take the $2 a share dividends or we can reinvest for you without a brokerage fee," then we make that decision.

If we think the profits are good and the stock looks good, we reinvest; otherwise, we take our dividends and invest it somewhere else.

Senator BENTSEN. Several of you talk about indexing taxes. Would you stop at indexing taxes, and could you stop at indexing taxes?

Mr. FELDSTEIN. Yes, yes. I would think you could. That is, individuals now free to enter into indexed agreements between themselves. We see labor union contracts which are indexed. We see purchase agreements which are indexed. The Government does not have to require that. It should not prohibit it either. But what individuals cannot do themselves now is to protect themselves against a tax system which isn't indexed.

I think there the Government has to take action, and I think it should for the reasons outlined by me before; our current system is very unfair, it is haphazard, and it creates unnecessary uncertainties about the future tax consequences of investment decisions.

Senator BENTSEN. On capital gains, for example, some of you referred to the fact that much of capital gains is lost to inflation. How would you index to prevent that?

Mr. FELDSTEIN. I think the crucial thing is to start with the assumption that whatever the tax rate that you want to levy on capital gains, be it the same as ordinary income or a lower rate, you want to levy it on the real value of capital gains; that is, you want to make it on increases in the amount of goods and services that individuals can buy because of the outcome of their investment.

I think it would be a rather straightforward administrative change. To take the simplest kind of cases, common stock sales, an individual who bought stock when the price level was half what it is now, can simply mark up the cost or basis of his stock when he sells it by a factor of two.

If I paid $100 for stock and it is now worth $250, and the price level has doubled——

Senator BENTSEN. What do you mean by price level?

Mr. FELDSTEIN. Consumer price level, the consumer price level has doubled. My stock has gone from $100 to $250. Instead of calculating a capital gain as the difference between $250 and $100, which is illusory, I should calculate it as the difference between $250 and $200.

In other words, I should convert my original $100 purchase price into dollars at the time I actually sell the asset, and then I pay a tax now on the difference between the $250 and $200.

Senator BENTSEN. And you would apply that to all assets?

Mr. FELDSTEIN. I would apply that to all assets.

Mr. EISNER. I think that question raises a problem on indexing with regard to capital gains.

I have to agree in principle that there should be full taxation of real capital gains, but the difficulty you have is——

Mr. FELDSTEIN. You said "full." I said whatever rate you wanted to tax it at, the base ought to be real.

Mr. EISNER. I recognize that. I was putting emphasis on the real capital gains that Marty referred to.

The difficulty we have is we are not taxing capital gains as they accrue, and you are creating quite an inequity. What happens to a person who buys a bond or has a savings account? He is getting his 5 or 6 or 7 percent per year, paying tax each year as that accrues, as against the guy who buys a stock which doesn't pay out the earnings and which accumulates in value, and I think there are some serious equity concerns.

I might add with all the talk about inflation, with all respect to Dave Meiselman, inflation is a two-way street. He never bothers, for example, to mention all of the gains from inflation and the encouragement to capital formation, because with inflation, an expected rate of inflation, Professor Meiselman knows well and emphasizes in his work, the nominal rate of interest rises. The amount of interest paid by business and homeowners is tax deductible, the capital gains are taxed at a lower rate and only at accrual. This then becomes a major incentive to borrow to pay deductible interest charges on the loan, and watch the value of net equity rise by considerably more than in proportion to the general rise in prices.

This is another issue that would have to be faced in terms of capital gains taxation.

Mr. FELDSTEIN. But other countries do face the problem of indexing interest payments as well, and it is not at all difficult to see how one could authorize corporations and banks to issue securities which provided for tax indexation.

So, I think it is true that as Bob said, one ought to look at the full range of indexing things and not select out a single one, debt depreciation and capital gains being the remainder aspects.

Senator BENTSEN. Professor Feldstein talked about inducing greater savings by making certain changes in the tax code.

Do the rest of you think those savings would actually be borrowed and invested by businessmen, by corporations?

Mr. BAILEY. Of course, it may depend in part on exactly how it is done, but if there were a simultaneous enactment of integration of corporation and personal income taxes and tax deductibility for savings, I think there would be a business boom.

The stock market would rise, and there would be a big rise in investment, with the recognition that taxation of income from investment is going to be much lower.

Senator BENTSEN. Let me change the subject for a moment.

On the question of municipal bonds, a proposal which surfaces from time to time and may surface again is to give cities the option of issuing taxable municipal bonds at interest rates which are subsidized by the Federal Government. The idea is to get away ultimately from the tax-free bonds, and politically that is about the only way you can accomplish it. The argument being made to municipal authorities is that this would open up a great new market in pension funds, since pension funds are growing at an incredible rate, and their tax-exempt status currently keeps them out of the municipal bond market.

Would you gentlemen like to comment on that?

Mr. BROWNLEE. I think the initial proposal was to both maintain a tax-free bond and to subsidize a taxable bond; that is, to give the municipality the option of offering either.

The subsidy rates were to be established in such a way so that both bonds would actually be issued. Now, much of this proposal was designed to take away a part of the rent, so to speak, from those people who are in high tax brackets and who are at the present time receiving in excess of what they need to receive in order to invest in municipal bonds.

I personally favor withdrawing the subsidy in any form from new issues primarily because I think that the subsidization induces the State and local governments to engage in activities which are uneconomic and which they would not engage in if they had to pay full competitive rates.

Senator BENTSEN. Professor, as I understand the proposal, it is that you give a subsidy that would make the taxable bond equate to the tax-free.

Mr. BROWNLEE. What I am saying is that if the bond carries a coupon rate of 8 percent and is subsidized at the rate of 50 percent, which means the local government is paying only 4 percent, the local government is going to treat that borrowing privilege quite differently than it would if it had to pay 8 percent.

It will build more sewers and schools and use more equipment than if it had to pay the same rates of interest as other users of capital.

The present arrangement, it seems to me, induces just a poor usage of capital on the part of State and local government.

Mr. EISNER. I think the proposal to subsidize taxable State and local government bonds is a good one and essentially because I agree with part of what Professor Brownlee said and disagree with the other part.

As we well recognize it is an effort to prevent the wealthy from enjoying a major tax loophole but it is an effort to do so at the same time without penalizing State and local governments and discouraging their investment expenditures as compared to what they are undertaking now.

Obviously, the conclusion depends on one's point of view if one thinks that municipal and State expenditures and construction of roads and schools and whatever they are spending on is undesirable as compared to private investment, one would take Professor Brownlee's position and say, "Let's abandon the subsidy and the tax deductibility altogether."

It depends on one's view of where one wants to encourage investment. That depends on more than we acknowledge on whom we want to help. Some feel that there is no reason to help the kind of people that get helped by municipal and government expenditures. They would rather leave everything to private investment and they somehow feel the Government only intervenes and gives help where it is undeserved and unneeded and discourages effort and so on.

If you believe the public investment is desirable, then you don't want to change the tax structure in such a way as to discourage it.

If you believe the Government is too big and want to discourage Government expenditures of all kinds, you go the other way.

Senator BENTSEN. Let's talk about that for a moment. Let's discuss for a minute whether or not the tax system should be used to achieve certain social objectives for the country.

We had a bunch of former IRS commissioners here opposing that, because they say it unduly complicated the tax system.

Mr. MEISELMAN. I think that I would generally agree with the commissioners. For most purposes the revenue system is not a good way to achieve what might otherwise be described as desirable social objectives.

I believe that you have to take the longer view that even though you might initially be getting the desired result by some tax or subsidy, after awhile those revenues get used for something else.

You build up all kinds of vested interest in the revenues or in the subsidies, and after several years people forget what the initial purpose was and we are into an entirely different ballgame.

At the same time, using the tax system in an important way to achieve particular social objectives creates all kinds of distortions and really opens up the treasury to everybody.

Senator BENTSEN. Professor Feldstein.

Mr. FELDSTEIN. The problem with that way of stating the answer is that it presumes that there is an alternative in which you don't interfere with the way the economy works.

Any tax interferes. When someone proposes a specific tax provision which will increase the construction of subways in communities with a population between 100,000 and 200,000 people, you know that is a very specific use of the tax code and everything David Meiselman said seems to me to apply.

The kinds of discussion we have had here about changing the tax law in ways which would increase capital accumulation are to a large extent just offsetting effects that are already present. The important question is: How do we structure a tax system which has the least adverse effects? There is no option to levy taxes that have no effects. Tax "simplicity," that is, taxing everything equally, including interest income, is not neutrality.

Simplicity can have very adverse effects on capital accumulation.

Senator BENTSEN. Professor Eisner, you were speaking about the employment tax credit. I supported the employment tax credit.

The Treasury is strongly against it. The Treasury is looking forward to disproving it. I am concerned that we will get the same reaction we got to the dollar checkoff in the Presidential campaign where you had to send in a special form until we mandated that it be put on the front page of the tax return.

Mr. EISNER. I am delighted to have you raise that subject.

I should bow to you for there have been few people who have been more enthusiastic for some form of employment tax credit and I am amazed at the reaction of the Treasury and some of my colleagues.

The matter of publicity is a very important one, particularly because it is restricted largely to small businesses that may not be that sophisticated about it.

I am sorry it has been so restricted. I do note that with the employer tax returns now there is a little slip that goes out to businesses indicating the substance of the new employment credit.

That strikes me as woefully inadequate and I imagine most small businesses turn that over to an accountant and don't think much about it.

The point is that you don't want this employment credit to be simply something that business learns about next April or so when it files its return. Then it will prove largely a windfall.

You want it to be someting they realize will be a benefit if they add to employment. I would urge that whatever you do in the senatorial capacity to stimulate the administration to get the information out would be well worth while; otherwise, in 2 years they will tell you that it didn't have much effect.

Senator BENTSEN. And they are looking forward to doing that if they can.

Mr. EISNER. I would be afraid they might be.

Senator BENTSEN. Professor Feldstein, you were talking about social security, the decoupling issue, and which approach we should take—whether we should take the administration approach that results in a substantially higher payout to the participant, or that of the advisory group to the Finance Committee. What do you think we ought to do?

Mr. FELDSTEIN. I think you ought to follow the advice of the advisory panel to the Senate Finance Committee.

I think that their advice allows for continuing growth of benefits in the future, continuing growth in real values in the future, but at a lower rate than the administration's proposal.

I think it would eliminate the need to raise taxes substantially which would otherwise be required if you follow the administration's advice, and it will have very favorable longrun effects on household savings and private pension savings.

Senator BENTSEN. Professor Meiselman and Professor Bailey, if I recall your statements, you were talking about giving full tax credit, for I think you said new savings and depreciation on all investments.

Wouldn't that have an incredible effect on Treasury revenue in the short term?

Mr. MEISELMAN. That would depend on the rates that would be levied on the rest of the taxpayers. I haven't done the arithmetic on this. I think Martin Bailey has, and he may be able to address what rates would be required.

Mr. BAILEY. Just to amplify on the wording of the question, Senator, I said either deduct new savings or depreciate all investment as alternative ways to get the same effect.

I would not propose doing both. I did suggest also using gross income as the tax base less savings or investment.

If we went that far, the tax rate would be lowered to about 13 percent on the average, which would yield what the personal income tax now takes, 11 or 12 percent of income.

I am proposing on balance that you increase the base so that the average rate can be lower and the whole rate structure be lower. That means changing a lot of other things at the same time.

Senator BENTSEN. Professor Eisner, I would like to ask you about the taxation of capital gains again. The capital gains tax now is up to a maximum of 49.2 percent.

There has been some discussion about eliminating the capital gains preference combined with reduction of the maximum rate on investment income to 50 percent. What do you think that does to risk capital in the country?

Mr. EISNER. You mean eliminating the distinction between capital gains and ordinary income?

Senator BENTSEN. Ordinary and investment income.

Mr. EISNER. I first would favor the package. As far as what it does to risk capital, for one thing, it should be understood, I think, that there would be a complete loss offset and probably——

Senator BENTSEN. Do you think there should be a complete capital loss offset?

Mr. EISNER. Yes. I haven't really worked on that in detail, but that would seem to me to be the only reasonable thing to do.

Senator BENTSEN. Treasury says that would result in an incredible loss of revenue, that people would keep their capital gains and would charge off their capital loss, and that complete loss offset was done back in the thirties and they ran into real problems with it.

Mr. EISNER. I can anticipate there would be problems because of timing, but the real difficulty, as I always see it on this, is that we are not taxing capital gains and charging off losses on an accrual basis.

I suppose that looks like a very far-reaching thing to attempt. It doesn't really seem to me in our days of computers and ability to attach estimates of values as we do to reach any estimates on income—I think accrual taxation would meet the problem, which I am aware of.

You suggest that if we have the offset on losses, it is said that people will choose to simply sell property—securities and properties in which they have losses and keep postponing their income.

I think you have to find some way, in all fairness and equity, and to avoid the discouragement of investment, to offset on losses if you are going to tax the capital gains fully.

We should also offer averaging, make sure the averaging possibilities are sufficient. The real difficulty in all this, I am convinced, is this matter of taxing only upon realization.

Senator BENTSEN. Let's say I own a farm, and I think it has gone up in value. How do we decide how much it has gone up in value?

I might have a fellow who comes out and says, "Would you take such and such," but that is not making me an offer.

Mr. EISNER. There are many things we do by rule of thumb in terms of our ordinary income tax, and we should be able to devise rules that are appropriate here.

On lists of securities there is no problem. On the farm, as you say, there is.

One thing I suggest, and, again, I am not a specialist in this field. is even to allow the farmer to put an estimate, put his own estimate on the value of the farm.

Then, if he sells it 2 or 3 or 5 years later at a greatly increased value, you can have some penalty in effect for having underestimated, as you have a penalty on your estimated tax, and you would have an interest payment that would have to be made, and you could even make this fairly generous.

I think anything would be better than what we have.

I would, even at worst, forgo that and let the farmer get away with misestimating the value of the farm for a number of years rather than have no tax.

Mr. BAILEY. Could I enlarge on that, Senator?

A logical extension of what Professor Eisner just said is that one could get all of the full advantage, if there is one, of taxing capital gains as ordinary income without requiring accrual taxation and without worrying too much about lost Treasury revenues if all deferrals are taxed with interest on account of the deferral.

If an interest rate is charged appropriately, there is simply no advantage to the taxpayer to the taxpayer to deduct losses this year and defer the gains until later, because when he pays those taxes on the later gains, it is going to be with interest.

Mr. FELDSTEIN. Let's go back to the more realistic proposal you outlined before.

I think that from the point of view of the individual who, because of a combination of things, is already paying almost 50 percent, there is obviously relatively little difference.

But what about a more normal case of the individual who, say, is currently in the 50-percent bracket and therefore capital gains is the 25-percent bracket and not affected by the minimum tax or by the maximum tax on earned income.

For him, eliminating that distortion leads to a very substantial increase in the tax on capital gains.

The irony of the proposal as you describe it is that it has no effect on the highest income taxpayers but substantially increases the tax on capital gains to the middle and lower income taxpayers and therefore substantially reduces the incentive for such individuals to invest in stocks and lowers the rate of return available.

I can't really see why one would want to consider a proposal which had the strange effect of raising the tax rate over the middle and lower end of the capital gains while leaving it unchanged for the upper end.

Mr. EISNER. I have a very quick answer.

I think the major points of the proposal as far as the upper range is not a matter of reducing the capital gains tax. It is the matter of reducing the tax on income, on investment income or nonearned income, from 70 percent down to 50 percent, and that strikes me as a desirable thing because all you do with having a tax that high is to cause people to look for loopholes.

You don't get much revenue anyway.

Mr. FELDSTEIN. What you have said is that you will, by that means, lower the total tax on capital income at the top and substantially raise it at the bottom.

Mr. EISNER. I would raise it to the extent it is in the form of capital gains income because that is distorting the way of earning income.

Senator BENTSEN. Gentlemen, it is after 12 o'clock and I think it is time to recess this hearing.

I am very appreciative of your testimony this morning. I think it has been helpful, and you have helped to complete our record for us.

Obviously, from what you have stated, it is an exceedingly difficult subject.

We appreciate very much your contribution. Thank you.

[Whereupon, at 12:10 p.m., the subcommittee recessed, to reconvene at 10 a.m., Tuesday, July 19, 1977.]

THE ROLE OF FEDERAL TAX POLICY IN STIMULATING CAPITAL FORMATION AND ECONOMIC GROWTH

TUESDAY, JULY 19, 1977

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON ECONOMIC GROWTH
AND STABILIZATION
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10:06 a.m., in room 1202, Dirksen Senate Office Building, Hon. Lloyd Bentsen (cochairman of the subcommittee) presiding.

Present: Senators Bentsen and Hatch.

Also present: John R. Stark, executive director; Louis C. Krauthoff II, assistant director; Jack Albertine and Thomas F. Dernburg, professional staff members; Mark Borchelt, administrative assistant; and Charles H. Bradford, Stephen J. Entin, and George D. Krumbhaar, Jr., minority professional staff members.

OPENING STATEMENT OF SENATOR BENTSEN, COCHAIRMAN

Senator BENTSEN. This hearing will come to order.

This morning the Subcommittee on Economic Growth and Stabilization continues hearings on the role of Federal tax policy in stimulating capital formation and economic growth. We are fortunate to have a panel of small businessmen as our leadoff witnesses.

Americans too often forget the indispensable role of small business in promoting healthy competition in our country's economy, creating jobs for a growing work force and developing innovative ideas and products. Small business in many ways is the essence of our country's promise.

The growth of small business has been good for the millions of individual Americans who have succeeded with their own business. It has been good for our economy and for the country at large. This great diversity of ownership has spurred competition and innovation. It has created employment and has brought forth a wide variety of goods and services, and helped bring strength and resilience to our free enterprise system.

However, the statistics show that from 1948 to 1972 the number of self-employed businessmen in this country declined from 10.7 to 7.1 million, even though the labor force grew from 60 to 86 million. In 1960 small- and medium-sized manufacturing corporations held 50 percent of this country's manufacturing assets and earned 41 percent

of the profits. But by 1972 this had declined to 30 percent of the assets and only 28 percent of the profits.

Our tax laws and tax forms must be substantially simplified for smaller enterprises. Small businesses, especially "mom and pop" operations, must fill out numerous reports which can amount to as many as 52 tax forms in a single year. Small businessmen lack the money to hire sophisticated tax lawyers and accountants and are simply unable to take full advantage of many exsting tax provisions. We must enable smaller firms to utilize existing tax incentives to the same extent as larger firms.

I was delayed in getting back here for these hearings because I was having breakfast with the President and was discussing this very subject with him. Every Secretary of the Treasury that comes along wants to reform the tax system and he wants to go down in history as the man who did it, to simplify it to bring equity, and this one is no exception. I believe you may see this time the most profound change in the tax laws, that we have seen in possibly 50 years or more.

All the proposals I have heard thus far seem to be geared to big business rather than the entrepreneurs, the small businesses starting out, and that is where we have to have a greater concentration of concern and interest if we are going to see that big business has the kind of competition that small business can provide.

Small business has been a great part of the strength of this country, but the numbers I have just cited indicate that there has been a substantial decline in their numbers. We ought to try to turn that around.

A good example of what is happening is the number of new offerings being issued by new firms. In 1969 there were 548 underwritings of new companies with a net worth of less than $5 million each. In 1976, the number of these smaller new companies offering their stock for public sale had fallen alarmingly to 38; that is from 548 to 38.

We first welcome the representatives of the National Association of Small Business Investment Companies and look forward to hearing their recommendations. Mr. Herbert Krasnow, president of the National Association of Small Business Investment Companies and Mr. Walter B. Stults, the executive vice president. Please come forward, gentlemen.

STATEMENT OF HERBERT KRASNOW, PRESIDENT, NATIONAL ASSOCIATION OF SMALL BUSINESS INVESTMENT COMPANIES, ACCOMPANIED BY WALTER B. STULTS, EXECUTIVE VICE PRESIDENT

Mr. KRASNOW. My name is Herbert Krasnow. I am president this year of the National Association of Small Business Investment Companies. By profession I am a combination of certified public accountant and professional investor in numbers of different ways.

I could not be more pleased with the Senator's introductory remarks because of the very profound concerns I have had and have more vis-a-vis the present state of small business, and more important, the future of small business. I have heard so much talk about simplification of income taxes; I read it in the professional publications. It is just wonderful when you see it coming day after day, week after week, and building up in certain very, very well defined directions. One of

those directions is the treatment of capital gains and ordinary income at the same tax rate.

There is no doubt that this will be a very substantial part of the President's program, and there are some very good arguments as to simplification in that direction. However, we are talking about small business today. I would like to paint a bit of a picture of the effect of this type of thinking and keyed with yet another area of function; namely, the tax-free exchange, as to how this process is destroying so many viable small businesses, that it is amazing to me that it is not one of the leading subjects for discussion.

We had a capital gains rate of 25 percent. We saw it moved to 35; we have various reference taxes added to that rate. We have seen State and city taxation add to the rate as well, and the average small businessman today, when he contemplates the sale of his business, he complains of receiving after taxes only 50-cent dollars. His accountants and his banker, if he has a good business, as he many times does after a culmination of a lifetime's work, say:

Mr. Jones, you know, ABC public company could give you its stock and you would come away with hundred-cent dollars. You could borrow against that stock, pass it through to your estate, break it up, do many, many things. You have simply got to consider doing it.

Mr. Jones says:

You know, I have had some people who have been with me 20 or 30 years. They are not ready to retire. I have some children and nephews in the business. I would like to see them continue my business. I owe something to this town I am in. They have helped me grow. They have been good to me. I don't want to have my company go to a big conglomerate. I want to maintain the independence of my company.

Then his accountant says:

That is fine. If you want to go that way, you have to know your employees. Well, they don't have too many dollars. You will have to take a small amount down, the rest over a period, and maybe they will be doing well. You may be risking your capital.

So he thinks. He twists and turns. He has obligations to himself, his wife, and his children, and in many cases, most of the cases, he opts for the tax-free exchange under section 368 and, boom, we have lost another independent small business, a good one.

Now, gentlemen, we are talking about business formation, small business formation. We are talking about how do you create new ones? We should also be talking about how do we keep the ones that have built up, that are successful, that are independent, that are in our small towns and villages?

You know we haven't done it and we haven't done it simply because of the overall bias that Senator Bentsen mentioned earlier, whereby big business is business, and the views of big business, which are the views of merger and conglomeration and the pickup of the brains and capital on the working people of small business, is very much the order of the day, day by day, week by week, month by month.

That is what we are confronted with. In my statement that I would like to introduce into the record, you will see some numbers that bear out what Senator Bentsen mentioned, namely, the increasing power which is being put into fewer and fewer hands, year after year in this

country. This is the very process that this meeting this morning is concerned about.

Now, it may sound a bit weird, but in reality the approach of deferring tax which is central to the tax-free exchange, section 368 of the code, has applicability within the area that we are talking about, and we have a proposal in our bill which says, in effect, that if a man sells his common stock, and he reinvests the money that he received in securities of other small businesses within a 2-year period, the tax on his capital gains will be deferred. We submit to you that if this provision is made into law, we will save countless small businesses from being engulfed in large business and being destroyed in the process. We will also see a very, very substantial increase in venture capital activity, since venture capitalists in an SBIC or a venture capitalist outside the SBIC frame, recycles his capital. He basically wants to reinvest his money which he earns when he sells his business investment to others and there will be more and more capital brought into this field whenever this occurs.

Third, we have seen, and Senator Bentsen has introduced legislation on this, which is designed to reinvigorate the over-the-counter market, the market for small companies, which has been seriously eroded by ERISA and many other problems by which fiduciaries have made the over-the-counter market today a shell of what it may have been.

Many, many wonderful small companies that are small businesses have no market. They, too, are part of the process whereby they are being engulfed by the bigger companies on the American Stock Exchange and New York Stock Exchange because their shares are trading at price/earnings ratios that are ridiculous.

Our introductory concept here of a deferred capital gain, where the man who sells his business and has the money, can invest in small companies that are trading over the counter, will reinvigorate this market. This would bring about a tremendous amount of saving of other small businesses that are already publicly traded, in theory, but in practice it doesn't happen because nobody is buying their shares. The public is out. Institutions won't buy.

Now, Senator Nelson has introduced a venture capital bill, and I have talked about this provision exclusively, but it actually has about 21 different provisions. To me this is central to what we are talking about today, even though the other areas within S. 1815 are also extremely important.

I have stressed this simply because I am seriously concerned that in the tax linking that evolves in the bill this year, capital gains and ordinary income will be treated the same, and if this happens, it will simply accelerate, the process of the destruction of good small businesses that are in business today.

I thank you very much, gentlemen.

[The prepared statement of Mr. Krasnow follows:]

PREPARED STATEMENT OF HERBERT KRASNOW

Mr. Chairman and members of the subcommittee: I am Herbert Krasnow, President of the National Association of Small Business Investment Companies

whose more than 300 members represent over two-thirds of all the licensed SBICs and minority enterprise SBICs (MESBICs) and about 90 percent of the assets committed to the industry. For the past 15 years, I have served as the founder and President of Intercoastal Capital Corporation, a medium-sized SBIC located in New York.

On behalf of the SBIC industry, I wish to thank this Subcommittee for undertaking the task of investigating the impact of tax policy on economic growth and I appreciate the opportunity to testify on the role small business can play in the competitive growth process. We in the venture capital field are firmly committed to strengthening the role of the smaller enterprise in the economy because the companies we fund are small in the financial sense and dedicated to innovation and growth.

In this testimony I would like first to address the impact of current taxes on small business in general, turning thereafter to the SBIC industry and the effect the current tax structure has on our investments in small businesses. I would also like to voice support for legislation we at NASBIC feel will do more to increase both internal and external capital flowing to small businesses and to increase the abilities of SBICs and other venture capitalists to provide the long-term debt and equity capital which smaller companies so desperately need. Those legislative needs are almost entirely embodied in S. 1815, the Small Business Venture Capital Act of 1977, introduced on June 30th by Senators Nelson, McIntyre and Weicker. NASBIC strongly supports S. 1815, and hopes Congress will act upon it in the near future.

In addition to voicing my support for S. 1815, I will also, while speaking directly to growth problems encountered by small firms and venture capital companies, highlight some of what we believe to be the more important and desperately needed tax changes.

THE SMALL BUSINESS CAPITAL GAP—INCREASED INTERNAL CAPITAL NEEDS

A small business relies on both internal and external funds for operating and expansion capital. Unfortunately, when scarce debt and equity capital is doled out via the traditional financial markets, small business is always at the bottom of the ladder. For that reason, small business has to rely more heavily upon internally generated funds for its financing. These internal funds come, of course, from after-tax earnings which are becoming more difficult to maintain due to the increasingly hard bite of corporate income, and other, taxes.

Because of that, we at NASBIC strongly recommend a six step graduation of the corporation income tax with the maximum 48 percent bracket being reached at $150,000 of taxable income rather than at the current $50,000. The following schedule is recommended:

Taxable income:	*Marginal rate percent*
$0 up to $30,000	8
$30,000 up to $60,000	16
$60,000 up to $90,000	24
$90,000 up to $120,000	32
$120,000 up to $150,000	40
above $150,000	48

Although this reduction would help all corporations, it would especially help smaller companies that do not have large taxable incomes and do rely heavily on every dollar they can retain for financial well-being and long-term growth.

An important concept guiding tax policy is ability to pay. The unintended result of present tax law is that those companies least able to pay (small companies) are assessed a greater percentage of their income in Federal taxes. The following excerpt from the 26th Annual Report of the Senate Small Business Committee portrays the problem in very explicit terms:

Initially, the committee analyzed the Federal Trade Commission Quarterly Financial Reports, which set forth before-tax and after-tax rates of return of

manufacturers of many different asset sizes. This yielded a comparison of "effective tax rates" which is set forth below:

COMPARISON OF EFFECTIVE TAX RATES OF MANUFACTURERS OF DIFFERENT ASSET SIZES[1]

[In percent]

Asset size	Profits before Federal taxes	Profits after taxes	Effective tax rate
All manufacturing corporations	16.5	9.675	41.36
Under $1,000,000	14.975	7.30	51.25
$1,000,000 to $5,000,000	17.375	8.575	50.64
$5,000,000 to $10,000,000	18.075	8.70	51.86
$10,000,000 to $25,000,000	16.325	7.95	51.30
$25,000,000 to $50,000,000	15.875	7.825	50.70
$50,000,000 to $100,000,000	16.075	8.225	48.83
$100,000,000 to $250,000,000	17.20	9.275	46.07
$250,000,000 to $1,000,000,000	17.675	9.85	44.27
$1,000,000,000 and over	16.00	10.375	35.15

[1] U.S. Congress, Senate, Select Committee on Small Business, 26th annual report, 94th Cong., 1st sess., 1975, p. 85.

Smaller companies are not asking for a handout, a giveaway or a loophole. Small business is willing to pay its fair share—but let's not ask for more than that.

Another item we at NASBIC are concerned about is the need for adoption of simplified and liberalized depreciation schedules which can be used by small companies that cannot afford to hire sophisticated tax lawyers and accountants to help them avoid taxes via the skillful use of existing depreciation schedules. Adam Smith, the father of economics, professed that a tax should be certain, convenient and economical. While it can be argued that the complicated depreciation schedules in use today meet none of those requirements, the third is the impediment to which I feel compelled to speak. It is simply not economical for a small company to keep the records and hire the staff and counsel necessary to utilize sophisticated techniques to depreciate capital investment. Also, it is not ultimately economical for the federal government to police and enforce these statutes. As we all know, the simpler the tax code is made, the easier it is for companies and individuals to comply and the easier and cheaper it is for the IRS to collect.

Our third tax policy recommendation would allow small businesses to offer qualified stock options in order to be able to successfully compete with the major corporations for top level management. Although this item was repealed for all corporations in the Tax Reform Act of 1976, we feel that it should be permitted for smaller companies which cannot compete in terms of salaries and fringe benefits. By allowing this attractive feature for small companies, talented management will have more of an incentive to go with the sector of the economy which employs 55 percent of the business work force and generates 43 percent of the Gross National Product.

THE SMALL BUSINESS CAPITAL GAP—LONG-TERM CAPITAL NEEDS

I'd like to now turn to an area in which SBIC managers have special expertise: long-term venture capital financing for small business. As I mentioned before, I am president of Intercoastal Capital Corporation, an SBIC located in New York, and I have been involved in the SBIC industry since its very early days. I am convinced that there is a shocking dearth of long-term capital financing for small business in this country. This problem is, without a doubt, one of the most serious in terms of the long-term vitality of our free-enterprise system. SBICs have in the past and hope in the future to play a significant role in providing "lifeblood" venture and equity capital financing for independent small business. That sector has fallen increasingly further behind as ever scarcer investment capital is parceled out in the markets. The capital shortfall to small business is directly translatable into a loss to the American consumer via reduced product innovation and price competition.

We at NASBIC have just finished a comprehensive review of our industry and have designed a program which will serve to significantly increase the flow of dollars going into venture capital in this country. I would like to request that the NASBIC Legislative/Regulatory Program for 1977 be included as part of the

record if it please the chair. Let me stress also that this will not be a mere shuffling of scarce dollars from one sector of the economy to another, but rather an injection of vitality into an area which will earn, in the long-run, a fiscal dividend. This is possible since investment in small, fast-growing businesses generates, ultimately, a greater amount of economic activity which in turn provides greater aggregate wealth for the economy and additional tax dollars for the treasury. For example:

A recent study by Massachusetts Institute of Technology Development Foundation has arresting data on the importance of new companies and new technologies to property and jobs in America. It compares the performance of six mature companies, five innovative companies, and five young high-technology companies. From 1969 to 1974, the average annual contributions of these companies in jobs and revenues shaped up as follows:[1]

[In percent]

Type of companies	Sales growth	Job growth
Mature	11.4	0.6
Innovative	13.2	4.3
Young high technology	42.5	40.7

Further, one government study sampled SBIC-financed small businesses and and found that those companies achieved annual growth rates of 25 percent for employment, 27 percent for revenues, 27 percent for profits and 35 percent for assets. It must be stressed that these companies are the innovative, high-growth type which have high potential for employment at a time when sustained, excessive unemployment remains one of our country's most severe economic problems.

The availability of financing for small and independent businesses is and should be a high priority for a sound national economic policy. Because of high risk and reduced reward (the latter coming from strict government regulation and oppressive tax policies), however, traditional sources of venture capital financing are drying up. This phenomenon prompted the comment by Thomas Murphy writing in the April 15, 1977 issue of Forbes magazine that: "If Adam Smith could return, I think he'd be upset to learn that in a world's biggest capitalistic country the government has become the biggest venture capitalist." He was referring to the fact that only the SBA loan guarantee program and the SBA-assisted SBIC program are making financing available to much-in-need small business. He goes on to further explain that:

Roughly half the American economy is small business. It happens to be the half that furnishes most of the jobs everybody says we need: entry-level jobs for youngsters, service jobs for women and something else that you cannot quantify—it finds places for the millions who don't fit the tidy mold at Xerox and the phone company.

To make matters worse, while venture funds are drying up small companies also cannot look to the public markets where they once received a great percentage of their funds. The following is a chart showing the number of new issues sold for firms with net worth of less than $5-million for the period from 1969 to 1975:

Year	Offerings	Total dollar amount (millions)
1969	548	$1,457.7
1970	209	383.7
1971	224	551.5
1972	418	918.2
1973	69	137.5
1974	8	13.1
1975	4	[1] 16.2

[1] Ibid., p. 13.

[1] U.S. Small Business Administration. "Report of the SBA Task Force on Venture and Equity Capital for Small Business," Washington, D.C., p. 2.

In addition to small businessmen and venture capitalists, high level business and government leaders have addressed the problem of inadequate internal and external capital financing availability. In May of 1976, Treasury Secretary William Simon appointed the Treasury Small Business Advisory Committee on Economic Policy which recommended, among other things, the implementation of ten specific tax proposals and further study and consideration in several other areas:

Recognizing that Federal taxation has the greatest adverse impact on capital formation for the bulk of all small independent business, the Committee ranked tax policy as its highest priority. In principal we support H.R. 13687, the COSIBA small business tax bill, but we have focused on several items which we recommend for adoption or study. The first three items constitute the principal recommendations of the Small Business Administration Venture and Equity Capital Task Force chaired by William Casey.

Specific Treasury Advisory Committee proposals included:

(1) Adjustment of depreciation schedules so that a taxpayer would be permitted to write off any amount up to and including 100 percent of an asset value in the year of acquisition (up to $200,000).

(2) Revision of the corporate rates to graduate the tax at four levels with the maximum rate of 48 percent being reached at a taxable income of $200,000.

(3) Deferral of capital gains tax if the proceeds from an investment in a qualified small business concern are reinvested in another small business concern.

In January the Report of the SBA Task Force on Venture and Equity Capital for Small Business was released. That blue ribbon group, chaired by former SEC Chairman Bill Casey, recommended a number of changes which would significantly help the capital-short small business sector. Their tax recommendations included the following:

Tax Laws and Regulations

Increase the corporate surtax exemption from the present level of $50,000 up to $100,000;

Allow greater flexibility in depreciating the first $200,000 of assets;

Permit investors in qualified small businesses to defer the tax on capital gains if the proceeds of the sale of a profitable small business investment are reinvested within a specified time in other qualified small business investments;

Increase the deduction against ordinary income of capital losses in a small business investment made under Section 1244 of the Internal Revenue Code from $25,000 in annual deduction to $50,000, and increase the limit on an offering from $500,000 to $1,000,000 and on issuer size from $1,000,000 to $2,000,000 in equity capital;

Permit underwriters of the securities of smaller businesses to deduct a loss reserve against the risks inherent in the underwriting and carrying of such securities;

Revise methods by which revenue impact of tax changes are estimated to reflect revenue gains from the business use of tax savings and the stimulus to capital formation that tax incentives provide.

Expounding upon the lack of external capital available for finance and expansion, the Casey Task Force reported:

It is alarming that venture and expansion capital for new and growing small businesses has become almost invisible in America today. In 1972 there were 418 underwritings for companies with a net worth of less than $5,000,000. In 1975 there were four such underwritings. The 1972 offerings raised $918-million. The 1975 offerings brought in $16-million. Over that same period of time, smaller offerings under the Securities and Exchange Commission's (SEC's) Regulation A fell from $256-million to $49-million and many of them were unsuccessful. While this catastrophic decline was occurring, new money raised for all corporations in the public security markets increased almost 50 percent from $28-billion to over $41-billion.

Prompted by the deteriorating small business climate and by the disconcerting lack of profitability in the SBIC industry NASBIC produced its 20-point Legislative/Regulatory Package for 1977. I would like to turn now to our industry and touch upon several specific changes we feel are necessary in order to improve the long-run health and viability of the SBIC industry—changes which, by strengthening SBICs, will ultimately benefit small businesses by fortifying one of their few remaining sources of long-term capital.

The SBIC Industry

SBICs are the product of a joint venture between the private and public sectors initiated by the Small Business Investment Act of 1958. SBICs link the efficiency of private enterprise with the financial resources of the Federal Government to provide venture and equity capital financing exclusively for small businesses. Private funds put up by investors are leveraged up to 4-to-1 with long-term money borrowed from the Federal Government at a rate ⅛ of 1 percent above the cost of money to the government. In that manner, funds are made available to small business investors and the federal government makes a profit in the deal to boot. I might add that all private funds are at risk before the government loses a nickel. This subordinization of private to government capital almost absolutely insures that the individual SBIC will pursue a prudent investment policy. Losses to the SBA have totaled only $29-million over the past 19 years. Over that time, almost $3-billion has been invested in approximately 40,000 small businesses in a total of 50,276 financings.

We are also glad to report that the owners of these companies were deeply grateful to the SBICs for financing their start-up or growth. An SBA survey revealed that more than 90 percent of all portfolio companies had benefited from SBIC help, most of them to a major degree. Naturally, tensions sometimes arise between an enterpreneur wholly involved in the life of his business and the lender or investor advancing funds to that firm, but the true partnership nature of the relationship between the businessman and the SBIC is supported by SBA's findings that 87 percent of the owners were satisfied with their SBIC dealings and 87 percent said they "would use SBIC assistance again under similar circumstances."

In order to attract the capital needed in the SBIC industry, however, we must increase our profitability. Although the SBIC industry is an active one, with assets near the $1-billion mark, there is much demand for venture and equity capital going unmet. At the NASBIC Annual Meeting in November 1976, SBA Administrator Kobelinski said: "We estimate that small business faces a shortfall in venture and working capital that will average from $7-billion to $8-billion a year over the next decade."

As we all know, capital will tend to flow to where the risk-adjusted rate of return is greatest. Since the venture capital industry is an industry with a good degree of inherent risk, it stands to reason that its return on capital should be higher than in safer investments. That is not the case however, and our SBIC profitability rates have been very modest. Our highest rate of return on invested capital, for example, was 9.5 percent in the year ending March 31, 1969. The second highest return, however, was only 6.0 percent in the year ending March 31, 1968. In short, although the SBIC industry is an active and exciting one, its profitability is just not high enough to attract sufficient investment capital.

We at NASBIC feel that the SBIC program is a success. But to fill the needs for venture and equity capital in the upcoming decade, we must expand our activities by making the industry more profitable. The net return to the government from the SBIC industry via taxes paid by the SBICs themselves, portfolio companies made stronger and more profitable by SBIC financial and management assistance, and by the employees of those companies, is highly positive. But in order to expend the industry to help fill the small business "capital gap" we we need to provide more incentives to attract additional private funds.

Mr. Chairman, in view of your Subcommittee's present focus on Federal tax policy, I wish to place emphasis especially upon three recommendations contained in our Association package. The first would provide an incentive for all investors, individuals or institutions, to invest in the securities of smaller companes. The other two refer specifically to SBIC tax issues which will allow our industry to operate more profitably and to attract more private capital.

1. Defer capital gains taxes when proceeds of the sale of stock issued by a small business are reinvested in an eligible small business concern. The greatest moment in the life of a venture capitalist comes when he is able to generate hard dollars through the sale of his longheld stock (usually about 10 years) of a successful portfolio company. That's the culmination of a promising investment opportunity, proper structuring and pricing, continuous counseling, and an imaginative exit technique on the part of the SBIC manager or other investor. Less exciting, though, is the heavy burden of Federal and State taxation which will take away about 50 percent of the capital gain so generated. There's a contradiction in this situation: the Federal Government has established and encouraged the SBIC

program as a matter of public policy to provide capital to small business, but the same Government decimates the flow of such funds through the imposition of onerous taxation.

Undoubtedly, one of the worst threats to the continuation of the free enterprise system is contained in the Internal Revenue Code. Our tax law permits tax-free reorganizations which provide an irresistible incentive for the owners of a successful small business concern to sell out to a major corporation, since there is no immediate tax consequence of such a merger, so long as they take the stock of the big business in return. This provision of the Code lessens competition and compromises the free market system.

To offset this serious danger, NASBIC strongly urges that the tax law be made at least neutral. We propose an amendment to the Code which would encourage further investment in other small businesses. Taxation of capital gains arising from the sale of stock in a business firm which was small when the security was acquired, would be deferred when the proceeds of that sale were reinvested in a small business concern within a two-year period. There is a clear precedent for this amendment, both in the current corporate reorganization section and in the deferral of taxes on the sale of a residence.

2. Allow all SBICs to pass through their earnings to their shareholders without the imposition of a corporate tax. It is our goal to attract different types of investors to the SBIC program. To those who are particularly interested in capital appreciation through the growth of the SBIC, the capital gains provision outlined above is especially attractive. Other investors, though, have the need or desire for current income, so they would be more likely to invest in SBICs which pay regular dividends. At the present time, publicly-owned SBICs which are registered under the Investment Company Act of 1940 may avoid corporate taxes on their earnings so long as they pass through at least 90 percent of their profits to their shareholders. This authority has proven to be most valuable to several of the public SBICs which have increased their private capitalizations regularly over the life of the program.

We believe that all SBICs should be given this authority whether or not they are publicly-owned. Although this position may appear at first blush to contradict our goal of bringing more capital to the program (since earnings will be distributed, not retained), we are certain that the payment of regular dividends will indeed attract many millions of dollars of new capital to those SBICs which are primarily income-oriented and, thus, able to pay such dividends to their shareholders. Present SBICs will get the new capital they need to grow and new SBICs will be formed, we are sure, if the pass-through provision is approved.

3. Provide a statutory loss reserve of 10 percent for SBICs based upon equities, as well as debt securities. No matter how we redesign the SBIC program, one constant will remain: the high level of risk involved in providing financial assistance to new and small businesses. Over the past 18 years SBICs have grown more skillful in screening out the doomed investments and in protecting themselves against losses, but every SBIC will inevitably have to swallow its share of complete or partial losses. At present, the Internal Revenue Code permits an SBIC to set up a reserve for bad debts based upon its experience, but this authorization is seriously deficient in two respects: first, for an SBIC, the past is no certain guide to the future. An SBIC may be fortunate enough to have minimal losses for 10 or 12 years and then it may have two or three deals go sour in a very short period. We believe it would make good business sense for the SBIC to set aside a reserve to take care of such unexpected losses. The second problem with the current law is that it allows for losses only on loans and not on investments, even though the latter are ordinarily far more risky. The NASBIC proposal then, would have the law permit any SBIC to establish a reserve against losses in an amount up to 10 percent of its total portfolio, both loans and investments. Here again, the change would encourage further equity investments.

These three specific recommendations would make a significant contribution to the profitability of SBICs and we are certain they would encourage millions of additional dollars to come into the SBIC program, both into existing licensees and into new ones. The major beneficiaries of these changes, however, would be: (1) new and growing small businesses; (2) the Federal Government which would reap greatly expanded taxes from the small businesses assisted by SBICs and from the new workers employed by those growing firms; and, (3) the economy which would receive new products and services at lower prices through increased competition.

In summation, NASBIC genuinely believes that there is a significant investment capital shortage for small and independent enterprises in the United States

today. We are proud of the role SBICs have played in the financing of small businesses for the past 18 years but feel that there is much more investment of that sort needed. Since purely private sources of venture capital have dried up significantly in recent years, government-assisted stimulation is necessary. We firmly believe that adoption of the NASBIC Legislative/Regulatory package and passage of S. 1815 will be a significant step in the right direction toward closing the equity and venture capital gap, and would encourage the Subcommittee's support in the specific tax areas we have focused upon.

Senator BENTSEN. Mr. Krasnow, one of the proposals which has been made is to tax only real capital gains. Do you believe that indexing would be of assistance?

Mr. KRASNOW. It must be of assistance, Senator, simply because we know the inflationary increase that has happened over the many years. However, I'm afraid that that only solves part of the problem. I think, myself, we need to redirect the funds that will be received by the sale of small business into yet other small businesses. We need to stop the concentration of assets in big businesses that are going on so much today.

Senator BENTSEN. We have had some testimony by three former tax commissioners, Internal Revenue commissioners, all three testifying that we should not use the tax system to achieve social objectives—and I'm generalizing—but that we ought to have direct Federal subsidies by Government agencies to do that. Would you agree with that or not?

Mr. KRASNOW. As a practicing C.P.A., there is so much of the Internal Revenue Code that has as its basis for existence noncollection aspects, that to eliminate all aspects of the code other than the collection of tax would be to reduce it to nothingness. I mean, almost every provision that we see has some other objective other than the raising of money.

We sat with Secretary of the Treasury Blumenthal, who spoke several weeks ago on the subject of tax simplification. He and Mr. Woodworth, or Mr. Woodworth alone, had been on the Hill and had been talking about the energy bill, or bills. Now, how people can talk about simplification at the same time that the energy bills are adding to the complexities like no one has ever seen, I just can't imagine.

I can't believe, as a practicing C.P.A., that we can have both simplification and equity. My feeling is that I would much rather have equity than simplification, and I would like for the mass of the taxpayers who have very, very simple problems, that they be viewed separately from the business community whose affairs are becoming more and more complex and where equity should predominate, not simplicity.

Senator BENTSEN. That seems to be one of the problems, of course, when we talk about simplification and achieving social objectives and not using the tax system for that. You just transfer the complexity to some other agency. There still has to be somebody who checks on it, sees that its done, but arrives at an arbitrary allocation based on judgment of that particular division, to be the grantor for the Government of that particular subsidy.

Mr. Krasnow, what are the causes or reasons for the higher effective tax rates that we see paid by small business, as compared to large business, as shown in your prepared statement?

Mr. KRASNOW. That's very interesting, Senator. The reason that truly big business pays a lower effective rate of taxation is their in-depth awareness of the benefits that lie within the Internal Revenue

Code and their ability to put these to great use, whether we apply it to the concept of the DISC, the concept of the investment tax credit, or the concept of other noncash deductions of a very serious amount.

It is the little businessman who really does not understand the implications and the intricacies of the tax bill, who ends up paying the biggest rate on his income dollar.

Senator BENTSEN. When you say "effective tax rates," why don't you further define the term "effective tax rates" for me?

Mr. KRASNOW. We start with a 48-percent rate and, theoretically, above the level, every company pays that rate. In practice, the introduction of tax credits such as the investment tax credit cuts that rate down to the point where, for instance, the President himself, though not a corporation but an individual taxpayer, had no tax at all because he had such a substantial tax credit which for that year, and possibly future years on carryover, eliminated the payment of tax.

Senator BENTSEN. We have seen the Business Roundtable recently question doing away with the double taxation of corporate profits, that is, the so-called integration of the personal and corporate income tax systems. They would prefer instead a reduction in the overall corporate rate. Does your association have a position on that?

Mr. KRASNOW. We have a very strong position on that, Senator Bentsen. Our position, basically, stems from the fact that the evolving small business has very, very few sources for capital for cash other than retention of earnings. Accordingly, the small business does not pay dividends because it needs that capital to be retained in the business to continue its growth.

It is clear to us, therefore, that if small business doesn't benefit from integration, and if there is to be a serious revenue loss through any of the types of integration which are being suggested, that those dollars being lost to the Treasury will make more difficult the benefits to small business in other areas that are so desperately needed. And, accordingly, small business has to say that integration is not a concept that will benefit small business.

Senator BENTSEN. There are several accelerated depreciation provisions in existing tax law such as ADR to encourage business investment. However, many small businessmen say they are unable to utilize these provisions because they are so complicated, they just can't hire the lawyers and accountants needed to take full advantage of the existing incentives.

What are your thoughts on the complexities of these laws and what can be done to make them more effective and more easily understood?

Mr. KRASNOW. Senator, you are addressing yourself to the root of the difference between small business and big business. Where complexity is introduced into the law, whether it is in depreciation regulations of law, or any other area, big business has the financial and manpower resources to understand them and to apply them. Small business does not have those financial and manpower resources, and therefore, complexity, by and of itself, deprives small business of equal benefits.

To that extent, there has to be serious thought in the future of all types of Government regulations, with a bifocal vision, with a vision as to its impact on big business and a view as to its impact on small business. It's very important.

Senator BENTSEN. Mr. Stults, do you want to speak to this?

Mr. STULTS. Mr. Chairman, speaking not only for NASBIC but for the Council of Small and Independent Business Associations—and I'm sorry some of the other representatives could not be here—one of the four points in the COSIBA tax bill for this year would be an establishment of three class lives, if you will: Two years for highway equipment, rolling stock and the like; 5 years for machinery, office furniture, fixtures; 10 years for depreciable real estate and real estate improvements. This, we feel, would be the most simple thing in the world. COSIBA presented this to key officials at Treasury, and found them, quite frankly, countering with, "Why don't you use ADR?" These are the same people who were saying they want to simplify the code.

We say we'll cut hundreds of pages out of that bloomin' code for you if you'll just do very simple class life depreciation; and they didn't want to simplify that. They wanted to simplify the code by getting rid of capital gains treatment, but they didn't want to do it for something like depreciation. We said that we would give up ADR, investment tax credit and the rest, and just put it down simply.

All the data indicate that smaller firms utilize a straight, probably 7-year life. That's what they use. It takes the least records, and obviously, they are not just utilizing the goodies that are in the code that will increase their cash flow and allow them to use those dollars for building their own businesses.

Senator BENTSEN. If you had two priorities to recommend in the tax bill that is coming up that you thought would be most helpful to small business, which of those two, of those things you have enumerated and discussed, what would be the top priority, No. 1 or No. 2?

Mr. KRASNOW. The deferral of capital gains taxation would be the first. The graduated corporate income tax rate would be the second. It would be the second because, as I indicated earlier, retention of earnings within small businesses is the most important area of growth, and in allowing small businesses to hold on to more of their earnings, such would occur.

Senator BENTSEN. Gentlemen, thank you very much.

Senator Hatch.

Senator HATCH. Gentlemen, I'm sorry I missed your statement. I was over on the floor making a speech but——

Senator BENTSEN. I'm sorry I missed your speech.

Senator HATCH. I appreciate that. I hate to miss yours also, but I have been greatly concerned about the small business problems of our society. This bill embraces four or five aspects of taxation, securities, antitrust, et cetera.

You have indicated, or at least I've heard that you think the No. 1 priority would be the deferral of capital gains taxation in helping small business. What about rollover? What about a rollover for people who receive capital gains returns but who invest them in small businesses?

Mr. STULTS. That's exactly what we have in mind.

Senator HATCH. I think that's a very creative way. That stimulates capital formation in small businesses. I commend you for coming up with that suggestion. We have been coming up with that on an unas-

signed basis. We would like to ask for a rollover on those capital gains to defer those taxes as long as they are invested in small businesses. It is hard to invest in small business with the security laws as they are, because in our securities laws—for instance, the regulations—we have at present a $500,000 regulation A offering limit, which we think should be increased to about $3 million. Just let me make this point and I'll get back to taxes. But even if we increase it to $3 million, regulation A offerings have dropped off from more than 500 in 1969 to 38 last year. These are small business offerings. The reasons for which they dropped off are varied, but one of the major reasons is the application of the 10(b) (5)-type litigation against the promoters, the attorneys, the accountants, and so forth, to the point where everybody is scared to offer small businesses which are high-risk-type offerings, as a result of this type of securities approach.

This is unrelated to taxes, except I wanted to tie it in with our rollover suggestion of capital gains. Would it not be advisable, since everybody knows that when they are investing in an inception company, or a small company, or when under the regulation they offer securities which are under the securities laws, wouldn't it be better to not have the 10(b) (5) type of unlimited liability for errors in the presentation prospectus and just limit it to common law fraud. Everybody knows this is high risk. That would stimulate investment and if you cover that with the rollover of capital gains, which would inevitably result, we hope, in stimulating investment in small companies, don't you think small businesses would grow in America and have a better chance to grow?

Mr. KRASNOW. I think it would be dynamic in that the message would go through the American financial community that investment in small business had taken a completely new turn, and that both from a social and financial and tax viewpoint, it could be very, very productive.

Senator HATCH. I'm going to advocate that in the Senate, and I think the people like Senator Bentsen and others who are dynamic and progressive people have to be interested in it because the problem of small business today is that it can't form capital. No. 2, it can't develop strength to compete with big business.

Along the same lines, let's assume that we make an exception in the antitrust laws, and we allow small business to combine together, acts which are presently disallowed under the antitrust laws, to compete with larger business, with the accompanying stimulation caused by rollover capital gains approach, wouldn't that be very helpful to small business also? That's a very revolutionary idea.

Mr. KRASNOW. I, basically, have not seen too many situations where antitrust for small businesses has been a major problem. I think we have a psychological approach here which is paramount. If the message goes out into the United States that small business basically will be fostered and that concrete acts are being taken to stimulate the small business community, we will have dynamic results over the next 5 to 10 years, because people today understand the problems of concentration of wealth and power and manpower in a way they have never understood them before. The timing couldn't be more right.

Senator HATCH. Let me ask you this. I missed your presentation so I don't know whether this was covered or not, but you probably did

cover it. Since you indicated it is important for small business to retain earnings in order to grow, in order to expand and accomplish the things it takes to increase solidity and stability in small business, would you not increase the accumulation-of-earnings provision?

Mr. KRASNOW. The amendments to section 531, the accumulated earnings is part of our program.

Senator HATCH. So you are recommending——

Mr. KRASNOW. Yes, sir. There are many points that are included and they come from different sources. They come from the NASBIC program; they come from the Small Business Administration task force that was headed up by Bill Casey; they come from the COSIBA program; numbers of them are included in my statement that I have made part of my presentation. And it is very interesting how different groups of people are focusing on the same problems and many have the same solutions.

Senator HATCH. Good. Corporation investment incentive has not been dimmed completely. On the more optimistic side of the picture, part of the adverse effect of the tax rate on investment has been offset by the substantial increases in investment allowances. For example, there have been more liberal depreciation methods since 1954; a tax credit for machinery and equipment has existed, more or less, since 1962; and from 1954 to 1975 the general corporation income tax rate was reduced 4 percentage points—from 52 to 48 percent. Gross corporate saving has roughly kept pace with economic growth. Overall, the evidence suggests that the supply of corporate funds has not been impaired by the corporate income tax. Would any of you care to comment on that?

Mr. KRASNOW. As a C.P.A., I think the one, overriding opinion I have in the field of taxation is that almost no effect within the code exists as to the problems of inflation. When one addresses one's self to real estate or fixed assets, and one in effect thinks of the recovery over a substantial period of the same dollars, when one realizes the replacement requirement expiring at the life of that asset, it is a mind-boggling problem; and it is this problem of indexing that the Senator related earlier, which is one of the first approaches within the Revenue Code to remedy this overall problem.

I don't know what our inflationary rate has been over the last 30 or 40 years, but it has gotten to be hundreds of percentage points.

Senator HATCH. So, you endorse indexing to help small business?

Mr. KRASNOW. There are numbers of approaches toward this solution, but it is very, very clear that the problem requires much greater attention, and that probably from a governmental viewpoint, since it aids in the collection of larger amounts of tax, makes it easier, there has been a reluctance by the Government to address itself to the problem.

Mr. STULTS. Senator Hatch, if I might comment——

Senator HATCH. Surely.

Mr. STULTS. Your figures are gross figures; there is no breakdown. In his opening statement, Senator Bentsen pointed out that new issues sold to the public by companies for the first time, companies with net worth under $5 million, dropped from about $1½ billion to $100 million, in the period between 1969 and 1976.

Senator HATCH. We're down to $16 million now, last year.

Mr. STULTS. Yes, $16 million in 1975; they went up slightly in 1976 to a bit over $100 million.

During that same period, overall security sales in the public markets by business increased by about 30 percent, so that if you wanted to say, "Is Wall Street doing the job for business?" and you look at all of the firms, yes. You have to break down, then, how much of it is stock, how much is equity, and how much is debenture sales.

Senator HATCH. How much is repetitive trading, too.

Mr. STULTS. We are talking about new issues, registered issues sold through underwriters. You would also, then, have to break down, obviously, between the small and the large, to see the differential.

Senator HATCH. What I was doing was breaking down to the small regulation, I was limiting it to the regulation A type offering, which is a real small business. A firm that can afford the long form offerings, the S series offerings, is going to have to pay something in the neighborhood of $100,000-plus for attorneys and accountants to start. In the small business area, you can't afford to do that. And also, as a result of the flagrant changes in the Securities laws which really have been established as a result of interpretation of rule 10(b)5, it is becoming almost impossible to find attorneys or anyone else willing to lay their lives on the line to start a small business offering. That's why I'm suggesting a common law fraud approach to litigate small business offerings, which people, I think are willing to take the risk in investing in a company that might be an IBM some day. They are willing to recognize that 80 percent of small business companies that start in America actually go bankrupt or go into default or insolvency. I think they are willing to take those kinds of risks, but the promoters, the attorneys, the accountants, and others who help to start those types of programs are unwilling to take the risks themselves as the result of the flagrant use of 10(b)5.

Mr. STULTS. I'm not certain—we could have a long discussion. I think some of those hot, new issues that were sold in a boiling market were probably not very sound investments for anyone except the promoter——

Senator HATCH. I agree.

Mr. STULTS [continuing]. And the reaction is that today, solid companies making $1 or $2 million can't go to the market because a bunch of real highbinders came in, in the late 1960's. I would hate to see the inevitability of hot, new issues boiling around, everybody getting "fleeced," and then for a period of 10 years, no one being able to go public. So, you see, I have some sympathy for what SEC is trying to do here.

As professional venture capitalists, we think we are good way-stations for the businesses that are just beginning, and season them until they are to the point where they are ready to go to market.

Senator HATCH. I have some sympathy for what SEC is trying to do also, except it is destroying small businesses with these types of rules.

I would suggest to you that for every one of the so-called "hot issues," it is pretty hard to get a regulation A offering into a favorable market situation. But for every one of those, there are literally thousands of small businesses that are stifled. The reason they can't is because they can't get anyone to help them to do it, and the reason

they can't is because SEC has come in with rules that are so broad that there is almost absolute liability on the part of anyone who tries to promote such an issue. This is the way the company was built.

I don't like to see highbinders and fraudulent people operate, but I would suggest that the fraud that occurs in small business offerings over the last 25 years would not make a dot in the universe compared to the frauds that occurred on the Big Board. I think it is time we think in terms of small businesses and giving them some incentives and help. I didn't mean to interrupt.

Mr. KRASNOW. There is a very interesting application, Senator Hatch, of your concept and the capital gains rollover approach.

Senator HATCH. Yes.

Mr. KRASNOW. We had three of the leading investment bankers on the Small Business Administration Task Force on venture capital. And the problems you spoke of, many of them are fully written up in the report and were very thoroughly discussed. One of the most serious problems, in addition to the ones you alluded to, is the lack of trading, the lack of capital in the over-the-counter market.

The institutional investor doesn't go into the OTC market, and the public, basically, has chosen to take its capital out as well. It is clear to me that if the capital gain rollover is effectuated into law, that one of the ways that moneys will be invested will be in existing small businesses being traded over the counter. Capital would be in cumulatively greater amounts as more and more businessmen recycle their money. This, in addition to the simplification which is very much part of the venture capital bill already introduced will create the depth of market so that those underwriters who are both responsible and understand the benefits of new issues in the over-the-counter market will have the understanding that capital is available to create the markets, to stimulate the trading that does not exist today. It is an extremely interesting, and I think, productive aspect of the existing problem.

Senator HATCH. That is very interesting to me.

Would you send me a copy of that study?

Mr. KRASNOW. It would be my pleasure.

Senator HATCH. One other question: What do you feel is the impact of paperwork caused by the IRS and other agencies upon small business today, on the average business today? Do you feel it is a significant problem and one causing tremendous difficulties?

Mr. STULTS. There is no question but that that's the case, Senator Hatch, and fortunately, we have the Paperwork Commission—Senator McIntyre and others are working hard on it. Understanding ERISA, they have come up with some kind of a coordination of reports between those submitted to IRS and Labor. I think this is a good first step.

COSIBA and NASBIC worked very hard earlier this year on the job tax credit bill added to the President's economic stimulation package. I think it is a great concept. There is no question but that it complicates further the Internal Revenue Code. Small businesses hiring additional workers will have to fill out another report to prove they have more than 105 percent of last year's payroll in order to get this tax credit. I just don't want to fall into the trap of the IRS Commissioner who testified before you last week and said, "Let's simplify every-

thing, tax everybody 50 percent, get rid of everything in the Code and then, everything will be Jim Dandy."

A small businessman, if the regulations are understandable and if the concept is sound, is willing to fill out one more, two more, or three more lines if he can get $10,000 more of retained earnings. It's probably a fairly good investment of his or his accountant's time.

I certainly have to agree with your initial statement about the impact of paperwork. I just didn't want, at some point, to get trapped into somebody's saying, "Well, things you are favoring, like rollover of capital gains involve a bit of paperwork—but it is so sound that it is worth doing."

Senator HATCH. Do you have any suggestions on how we might cut down on the IRS paperwork? Have you given any time to that, or have you any writings on that?

Mr. STULTS. Senator Hatch, there was a Small Business Advisory Committee to the IRS Commissioner, Don Alexander. Over a 2-year period, they came up with what seems to me to be a very fine report. We are hopeful this year that the Treasury Department and IRS will, jointly, have an advisory committee so that that work can continue.

Senator HATCH. I think it would be a really worthwhile thing for small business.

Mr. STULTS. Tremendously helpful.

Senator HATCH. Let me throw this out to you. I don't think we are going to make a dent or true inroad into paperwork until we place that burden upon the Federal Government; in other words, the burden of review and the cost thereof upon the Federal Government.

I would like to sit down with you gentlemen sometime in the future, not very long into the future, and just discuss some of the ideas that maybe I have in these crucial areas, and maybe we can come up with somethings that might help alleviate some of the problems of small business, especially from the tax standpoint, and might create a base for regular development of these companies that might become the IBM's of the future. I would surely like to have that opportunity, if you would give my office a call.

Mr. STULTS. Senator Nelson and Senator Weicker are going to contact your office and ask you to cosponsor S. 1815 which incorporates a number of the suggestions you have made.

Senator HATCH. I agree with what they have done, but they haven't gone far enough, or been as creative as they should have been, in small business. That's not meant as criticism; it's meant that I think we ought to do almost drastic things to encourage and create small business in America.

I particularly want to thank the chairman of this subcommittee, Senator Bentsen, for providing us with the opportunity of listening to men like yourselves, and of course, getting into this in more detail. But I would like to be able to sit down with you and chat about some ideas on it.

Senator BENTSEN. Thank you very much. You have shown a great depth of knowledge on the subject.

I would like to make a comment here to Mr. Krasnow and Mr. Stults, in closing. As you know, I introduced one of the very first job tax credit bills, in the Finance Committee. This concept was vigorously opposed by Treasury. It is terribly important that you publicize this job tax

credit to your membership so that they have a full knowledge of it. There are those in Treasury who would be delighted to find it not working, and if it doesn't work, we won't be able to extend it.

I don't want to see us get into the same kind of position that Congress got in on the dollar checkoff. We passed the dollar checkoff but Treasury required some special form before you could check off your dollars so it would not work. We finally had to mandate putting it on the front page of the tax return, and then it did work.

In turn, I'm reminded of some of the air treaties we have with foreign countries, where they have agreed that we have reciprocal flights, but their flight leaves at 5 in the afternoon, at the close of business, and they schedule ours to leave 1 in the morning. So I want to be sure that we see that small businessmen understand it, have an opportunity to make the decision as to whether to utilize it or not, so when we come back here a year from now, or 2 years from now, we can show it was effective, and it works and we have given business a credit for investing in people, not just in equipment, but in people. So, I'm depending on you to see that the message gets out there.

We are pushing Treasury to try to get it done, but you know, if I'm going to be operated on, I want the knife in the hands of a friendly surgeon. I think you fellows are proponents of small business, and I want you to get this message out, if you will.

Thank you very much.

We are privileged to have three very distinguished economists with us this morning. I would like to call them to the witness table now. They are Michael J. Boskin, professor of economics, Stanford University; Charles E. McLure, of the National Bureau of Economic Research; and Joseph A. Pechman, director of economic studies, the Brookings Institution.

Let's do it alphabetically. Mr. Boskin, who don't you tell us about it?

STATEMENT OF MICHAEL J. BOSKIN, PROFESSOR OF ECONOMICS, STANFORD UNIVERSITY

Mr. Boskin. I would like to first briefly summarize my testimony, and then expand on it a little, going into the problems and fallacies relating to capital income taxation.

First, I would like to state that in my opinion, the most important longrun, structural fault with the U.S. economy is that we undersave. We have not been accumulating enough capital. This leads to a lower ratio of capital available per worker, less future consumption, income and wages, a tremendous waste of resources, and a worsened U.S. competitive position abroad. This is due primarily to the heavy taxation of capital income and it is exacerbated by the failure of the tax system to account properly for inflation. In my opinion, if something is not done in the future, the already damaging consequences will worsen immeasurably in the years ahead because of the changing age structure of the U.S. population, a point on which I shall elaborate later. I believe the major obstacles that prevent reform of capital income taxation are based on a variety of fallacies and myths about capital, its nature, its ownership and its taxation.

I believe the solution is one that has long been advocated by most economists and is now favored by an increasing number of economists

and tax lawyers specializing in public finance, although the most astute and most important opponent of it sits to my left at the moment. That solution is to gradually replace all taxes on income, corporate and personal, with taxes on expenditures, that is, to remove saving and investment completely from the tax base.

Before proceeding to elaborate on these points, I want to make it very clear that I am talking about longrun, structural problems in the U.S. economy, problems that have been going on for years or decades, rather than problems of a few quarters, I would like to disassociate them with the shortrun problems of the current recession.

There is other testimony before this committee, and at least one of the other discussants this morning will address the shortrun problem of investment to stimulate the economy. In my own opinion, something can be done in the short run to induce a rearrangement of business investment to help mitigate the problems of the business cycle, but that in the long run, the crucial issue of the economy is saving, not investment, and that in the long run, capital accumulation is constrained by the supply of available funds from savings that can be used for investment.

With that brief summary in mind, let me turn to some of the myths about capital that pervade popular notions, whether in the press or in the Nation as a whole. The first such fallacy is that capital accumulation is important only to big business, that any tax incentive to capital accumulation is essentially a giveaway to business and really is not a benefit to the ordinary citizen.

I believe that is totally fallacious and stems from a misunderstanding of the fundamental notion of what capital consists. Capital is the vehicle in our economy for citizens to transfer resources—their incomes, if you will—from one point in their life to a later point in their life, and most importantly, from the time of their peak earning years, say their forties and fifties, when they are relatively well off, to the time of their retirement, when they are both relative to their own lifetime and relative to the entire population then in existence—very poor. So, that is the first fallacy.

It is exacerbated by the fact that increases in capital available to workers certainly increases wage rates because its increases productivity, so labor has a long-run stake in the accumulation of capital.

The second fallacy is that most capital is owned by people who inherit it, that it is not accumulated during the life cycle. I have been studying this for quite some time now, and while there are only indirect means of estimating these amounts, one, by looking at estate and gift tax returns trying to aggregate up to the total of bequests and gifts and the other, by looking at the aggregate growth of the capital stock, it is my best estimate that no more than 20 percent of the entire capital stock of the United States was inherited, that at least 80 percent, and probably more, is due to the natural lifetime savings and accumulation of our citizens.

The third fallacy I would like to point out is the fallacy that most people believe that most capital income accrues to the extremely wealthy. That is certainly fallacious. It is clear that it accrues disproportionately to the extremely wealthy, but there also happens to be a disproportionately small number of extremely wealthy people. It

is certainly clear, for example, using statistics of income data from the Treasury Department for 1972, that one-half of all dividends, interest, and rent accrue to households with adjusted gross income of $20,000 or less, over three-fourths of capital income accrues to families with an adjusted gross income of $50,000 or less. Adding capital gains to these numbers would make it look like capital was less equally distributed than this, but adding imputed income to housing and durables would narrow it.

It is thus clear, even if capital income taxes are borne exclusively by owners of capital—a point I shall debate later—heavy taxes on capital income will not be borne primarily by the extremely rich. They will be borne disproportionately by the rich, but only slightly so. The distribution of wages, plus fringe benefits, and capital income are less unevenly distributed than commonly supposed—the distributions are more closely overlapping than commonly supposed, and even more so if we take a lifetime rather than annual perspective.

The fourth fallacy is that heavy taxes on capital do not affect capital accumulation. A variety of people have pointed to the alleged constancy of the U.S. saving rate as an indication that taxes do not affect capital accumulation. A variety of things have been going on in the economy to suggest that that is not the case.

Probably, the most important are taxes on capital income such as corporate income tax, the portions of the personal income tax on capital income (like interest, dividends, and rents), and the capital gains tax. They reduce the real, afterinflation, aftertax rate of return on savings.

If private savings have a positive response to this, if people are responsive to how large the return to their savings is, our heavy taxation of capital income has led to a decrease in savings.

Further, this tax-induced decrease in savings decreases the available capital per workers in the economy. This, is turn, raises the rate of return on capital and lowers wage rates below what they otherwise would be.

I have, in a more technical work, estimated an interest elasticity of saving on the order of 0.4. For those unfamiliar with that technical term, this implies a 10-percent increase in the aftertax rate of return on saving, occasioned, for example, by a very slight decrease in capital income tax, would increase private saving 4 percent, holding other things constant. Given that income from capital is heavily taxed (estimated range from around 40 percent to 60 percent), such taxes have substantially impeded the accumulation of capital in the U.S. economy, the implied reduction in the capital-labor ratio, in my estimate, being around 30 percent.

I have elsewhere estimated that this tax-induced distortion of the choice of citizens between consumption and saving leads to an enormous inefficiency, on the order of $50 to $60 billion annually.

The fifth and second-to-last fallacy I wish to point out is that taxes on income from capital are borne exclusively by owners of capital. This view, apparently, lies behind the view that it is more equitable to raise the corporate tax rate and tax business in any form, than to tax earnings or income in general.

I believe this is incorrect. I believe that taxes on income from capital retard capital accumulation, that retardation of capital accumulation

makes labor less productive than otherwise it would have been, and that decreased future productivity leads to lower wage rates than otherwise it would obtain in the future.

Hence, taxes on capital income are, in the long run, partially shifted onto labor. My estimates indicate that about 40 to 50 percent of them, in the long run, get shifted onto labor.

The sixth, final, and most important fallacy concerns the issue of whether the United States is saving enough today. In my opinion, this is one of the least-well-understood issues discussed in contemporary economic and political affairs. Proponents and opponents of this view have employed at least three fallacies in their arguments on either side. The first is hidden in the use of the conventional measure of saving and its application to the comparison of the U.S. saving rate with that of other countries. We often hear that we save less than Japan and Western Europe, and that's why our economic growth rate lags behind these countries.

This ignores the fact that forms of saving differ among countries. Most important to me is the fact that a much higher fraction of our income goes to education, a form of investment in humans, and increased productivity of labor, than it does in most other countries.

The second fallacy is arguing that our saving rate is adequate because it is similar to our historical rate.

The comparison of the historical U.S. savings rate, it seems to me, is not a very wise thing to do. You cannot conclude that we're saving enough today merely because we had the same rate of saving in 1950 or 1960, unless we conclude that (1) what we did then was correct and (2) that nothing that has happened in the intervening period has caused the desirable saving rate to change.

Let me just point out that the single most important potential cause of the change regarding the desirable saving rate is due to the changing age structure in the U.S. population. As I said, most savings essentially are from savings over the life cycle, people putting funds aside from their working years to save for their retirement.

The post-World War II baby boom and the recent decline in birth rates have led to the inevitable fact that shortly after the turn of the century, the ratio of retirees, people depending on their prior savings from earlier life and/or social security to the working population, will rise enormously. The ratio will increase approximately from one retiree to every three and one quarter workers, to one retiree for every two workers. We, therefore, should hope and expect and observe a very large increase in the saving rate because of this, but it has not occurred.

In addition to that, for a variety of reasons, the life expectancy of the elderly has increased and the elderly are retiring earlier, so not only will we have more retirees, but a long retirement period per retiree to take care of in the future, and hence, we need to save more now so they will have more savings from which to live and which to consume during their subsequent retirement, but each of them, on the average, will have a substantially increased time from retirement to death, will retire earlier, die later, and they will need more social security or transfers from their family or continued earnings or savings.

The third fallacy about the U.S. savings rate is an exclusive focus on business capital formation, especially corporate capital formation, which ignores noncorporate capital formation and household capital formation.

Historically, there have been major shifts among these components, between direct personal saving and saving through corporations. As tax rates change, people have found it more advantageous to save by having earnings retained by corporations in which they have investments, electing to pay a capital gains tax later rather than a high income tax now.

Our basic problem is with the total saving rate, not with one of its components. If we conclude that we should save more, there is no reason to argue that the increased saving should be done exclusively, or even mainly, through the corporate sector.

Why are we not saving enough? We are not saving enough because when we compare the benefits with the cost, the benefits from that increased savings substantially exceed the cost, and they do so because of the enormous tax on income from capital.

The social benefits from increased savings it is generally agreed may be approximated by the social rate of return on private investment, the rate at which future consumption is produced by private investment. While this is not the easiest number to estimate, most economists would accept the figure of about 10 percent, after accounting for inflation.

Stated simply, if we put an extra $1,000 into private investment, it will produce an additional income flow of $100 per year. This extra income in the future will finance increased consumption, for example, during retirement.

For most goods and services, private markets automatically equate the incremental benefits and costs of supply and demand sides——

Senator BENTSON. I'm sorry, but I must ask you to summarize because I'm afraid we're going to to get called on a vote.

Mr. BOSKIN. OK. I'll be finished very briefly.

If we invest in the corporate sector at 10 percent, the corporation income tax will reduce your return by approximately 50 percent, or down to 5 percent. As you receive that 5 percent, you pay personal income taxes, Federal and State, on it, or you come down to maybe 3 percent. It is the divergence between the private return to the saver and the social return that leads us to save too little, that makes he benefits of increased saving exceed the costs.

How do we get out of the problem, what is the solution? It seems to me the implication is, we ought to remove savings from the tax base.

I have argued elsewhere that a consumption tax, viewed over an individual's lifetime, is a tax on that person's wealth—over your lifetime you consume your wealth, the present value of your earnings, and your capital. I, therefore propose a gradual abolition of all taxes on income and replacing them with taxes on expenditures.

As a practical matter, this involves two steps, again to be taken gradually: abolishing the corporate income tax and removing saving and investment from the personal income tax base. These two policies would leave us with a progressive tax on consumption—expenditures.

Such a tax, relative to our current heavy taxation of capital income, would increase the return to saving, and thus capital accumulation, future wages, and future income and consumption.

It seems to me, we must begin to deal with the undersaving problem soon, or see the already damaging consequences worsen in the years ahead, as the demographic changes in population patterns occur.

The best place to start is with the abolition of income taxation, corporate and personal, in favor of expenditure or consumption taxation.
[The prepared statement of Mr. Boskin follows:]

PREPARED STATEMENT OF MICHAEL J. BOSKIN

Is Heavy Taxation of Capital Socially Desirable?

1. *Introduction and Summary*

The life cycle theory of saving and consumption has occupied a central role in the scientific analysis of consumption at least since Friedman [1957] and Modigliani [1963] published their pioneering works, yet the implications of the theory, and supporting empirical evidence, have only slowly worked their way into an understanding of the central issues of tax policy. As a result, a variety of generally fallacious propositions continue to command attention, not only from the general public, but from policy-makers and even professional economists.

I shall bring together several pieces of information and analysis to help nudge one such proposition off center stage: that heavy taxation of capital relative to labor is enormously beneficial to the mass of the working population exclusively at the expense of the extremely wealthy. Such a view apparently often lies behind the justification for heavy, and demand for increased, corporate income, estate, and capital gains taxes. However accurate or inaccurate this view once may have been, it is now outmoded for several reasons: the changing ownership of the capital stock, the new view of the incidence of capital income taxes, and the rigorous analysis of the optimal life cycle pattern of taxation.

In my opinion, the most important long-run structural problem with the U.S. economy is that we undersave. We have not been accumulating enough capital over time, and our current saving rate is grossly inadequate. This is not a short-run problem tied to the serious recession/inflation we are now experiencing. It is a fundamental, pervasive problem which involves an enormous waste of resources and an enormous transfer of income which I will demonstrate in the following discussion of capital accumulation, incentives for saving, and government impacts on saving through tax policies. This will inevitably lead to a discussion of possible remedies for the problems. While several solutions are conceptually possible, my preferred solution involves a major change in our tax system: replacing taxes on income with taxes on spending; i.e., removing saving from the tax base.

This testimony shall thus consist of two parts: the rebuttal of a variety of fallacious, but popularly held views about capital, its ownership and its taxation: and a discussion of the implications of the discussion for reform of capital income taxation in the United States.

In brief summary, capital should not be thought of primarily in a "business versus labor" sense, nor should it be identified solely with corporate capital. It must be understood as the vehicle for citizens to transfer their resources from one point in time to a later point in time, especially from the peak earning years to those of retirement. Further, most of the capital stock is due to the lifetime accumulation of its owners, not to inheritance, and is much more widely dispersed in ownership than commonly supposed.

Recent evidence suggests that by substantially reducing the return to saving, heavy capital income taxes have sharply curtailed capital accumulation. This has created an enormous waste of resources and has also reduced labor productivity and hence wages.

The practical tax policy proposals these observations imply include the gradual substitution of expenditure taxation for income taxation, i.e., removing the accumulation of capital (saving) from the tax base.

2. *Fallacies About Capital, Its Ownership and Its Taxation*

Fallacy 1: Capital accumulation is important only to big business; reducing capital income taxes is a giveaway to business and would not benefit ordinary citizens.

What is saving or capital accumulation and why is it so important? Saving (capital accumulation) is the withholding of resources from current consumption in order to add to future productive capacity. It is the single most important determinant of economic growth. Basically, both institutional and personal saving amount to the same thing—whether a business saves (on behalf of its owners) to expand its capital stock or an individual puts aside funds anticipating retirement needs—transferring consumption from the present to the

future by adding to our productive capacity at the expense of current consumption.

The decision as to how much of our productive potential to devote to current consumption or saving is one of the most basic we make as a nation. The essential point is that in order to have greater consumption in the future we must accumulate more capital; to accumulate more capital, we must sacrifice current consumption. On an individual level, such a decision involves deciding how much of our income to devote to current consumption and how much to save for future needs; e.g., consumption during retirement when income declines substantially. Hence, the issue may be stated quite simply: Are the social benefits from increased saving (and hence future consumption) worth the cost incurred from decreased current consumption? I believe the answer is clearly yes, a point I elaborate below.

Fallacy 2: Most (nonhuman) capital is owned by people who inherited it rather than accumulated it themselves.

A popular conception is that a very large fraction of the capital stock is owned by persons who inherited it rather than accumulated it as part of their life cycle saving pattern. A casual random sample of my colleagues suggests that on average they believe about one-half of the capital stock is owned by persons who inherited it rather than accumulated it themselves. I believe that this is incorrect.

The first issue we must confront in determining the extent of capital ownership due to inheritance is to distinguish between what I shall call direct and indirect inheritance. One can conceive of a variety of types of inheritance which may be termed indirect inheritance, or the general trust fund passed from one generation to the next. Included in this list would be such items as government capital, general knowledge and technical change, etc. Each of these may have indirect effects on private nonhuman capital accumulation. I wish to separate from this type of general inheritance the direct inheritance passed from parents to children. Further, both since we have narrowed our focus to nonhuman capital and since intergenerational issues of human capital inheritance and investment have been discussed elsewhere, I shall ignore inheritance of human capital.

The only direct data on inheritances and bequests of nonhuman capital come from estate and gift tax returns. Due to the exclusions and deductions, only seven to nine percent of decedents file estate tax returns. It is, however, generally acknowledged that these wealthiest decedents account for the bulk of total nonhuman capital bequests. The top panel of Table 1 presents data for selected years on bequests reported on estate tax returns; I have calculated net bequests by subtracting various deductions and estate taxes from gross bequests. There are two slight problems here. First, the marital deduction may include some intergenerational transfers; and, net bequests may include some transfers within the elderly generation. Second, the recipients may have paid for a small part of these bequests by reverse intergenerational transfers during their lifetime. To these totals we add similarly calculated net gifts. Again, the same proviso apply. This produces a rather startling result: total annual transfers thus reported amount to only one-half of one percent of the capital stock! With about 25 years per generation, perhaps 10 to 15 percent of the capital stock is inherited in this way.

TABLE 1.—CAPITAL TRANSFERRED BY GIFT AND BEQUEST, SELECTED YEARS[1]

[In billions of dollars]

	1956	1960	1965
Gross estate value	8.90	14.62	21.76
Less deductions (debt, funeral, marital, administrative)	3.41	5.05	7.47
Less estate taxes	1.32	1.82	2.70
Equals net bequests	4.17	7.75	11.60
Gifts reported	1.36	2.32	3.96
Less deductions (charity)	.13	.30	.46
Less gift taxes	.11	.16	.41
Equals net gifts	1.12	1.86	3.09
Wealth transferred (net bequests plus net gifts)	5.29	9.61	14.69
Market value capital stock	1,362	1,736	2,315
Percentage of capital stock transferred	0.4	0.5	0.6

[1] Source: U.S. Internal Revenue Service, "Statistics of Income," selected years.

Of course, some intergenerational capital transfers will not be reported, as mentioned above; so perhaps we should use as a rough guide a number closer to 20 percent or so.[1] In any event, these data suggest that a very large fraction of the nonhuman capital stock is due to lifetime accumulation rather than inheritance. Further, the recent growth of private pensions, which now own one-third of corporate capital by one estimate,[2] suggests a spreading of the ownership of noninherited capital to the middle and lower-middle income classes.

With the possible exception of the few extremely large fortunes, it appears plausible, then, to discuss issues of the taxation of income from capital in the context of the desirable life-cycle taxation of consumption. First, however, let us delve deeper into the question of who ultimately pays for heavy taxes on capital income.

Fallacy 3: Most capital income accrues to the extremely wealthy.

It is correct that capital income is less equally distributed than labor income and that it accrues disproportionately to the wealthy. However, the percentage distributions of labor and capital income by income class are only moderately different. As Table 2 indicates, over three-fourths of capital income accrues to families with incomes below $50,000 (in 1972). While inclusion of capital gains would widen this gap somewhat, inclusion of the imputed income to housing and consumer durables would narrow it; *it is clear that even if capital income taxes are borne exclusively by capital, heavy taxes on capital income will not be borne primarily by the extremely rich.*[3]

Fallacy 4: Heavy taxes on capital do not affect capital accumulation.

Suppose we analyze substituting an equal (current) yield capital income tax for a labor income tax. This will affect saving behavior in two ways. To the extent that propensity to save out of capital income exceeds the propensity to save out of labor income, saving will decrease initially by the amount of the tax revenue times the difference in the marginal propensities to consume.

Probably more important, the capital income tax reduces the real net-of-tax rate of return to saving. If private saving has a positive interest elasticity, substituting a capital income tax for a labor income tax will decrease saving.

Further, the tax-induced decrease in saving decreases the capital/labor ratio in the economy. This in turn raises rates of return on capital and lowers wage rates.

There is now considerable evidence that the taxation of capital incomes, by reducing sharply the after tax rate of return, substantially decreases saving.

TABLE 2.—PERCENTAGE DISTRIBUTION OF SOURCES OF INCOME BY INCOME CLASS, 1972

Adjusted gross income class	Wages and salaries	Dividends, interest, rent
Under $5,000	5.8	6.6
$5,000 to $10,000	22.5	16.9
$10,000 to $20,000	48.8	25.7
$20,000 to $50,000	19.4	26.7
$50,000 to $100,000	2.5	11.3
$100,000 to $500,000	.9	11.0
$500,000 to $1,000,000		1.3
Over $1,000,000		1.5

Source: U.S. Internal Revenue Service, "Statistics of Income," individual income tax returns for 1972.

Drawing on U.S. aggregate time series data and employing several advances in econometric techniques, I have (Boskin [1977]) estimated a substaantial positive impact of real after tax rates of return on private saving. My estimated interest elasticities cluster around 0.4. This implies that a 10 percent increase in the after-tax rate of return (occasioned, for example, by cutting capital income taxes slightly) would increase private saving 4 percent holding other things constant. Given that income from capital is heavily taxed (estimates range from about 40 percent to 60 percent), such taxes have substantially impeded the accumulation of capital in the U.S. economy, the implied reduction in the capital labor ratio being 30 to 40 percent.

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[1] A similar estimate is obtained from data on the aggregate growth of the capital stock from generation to generation.

[2] See Drucker [1975].

[3] Of course, we would want to adjust these data to correspond to permanent income, as opposed to current income; however, I do not believe that such a correction would alter the basic conclusions.

I have elsewhere (Boskin [197]) estimated that this tax-induced distortion of the consumption saving choice leads to an enoromous inefficiency, on the order of $50 to $60 billion annually!

Fallacy 5: Taxes on income from capital are borne exclusively by owners of capital.

Since these taxes have sharply retarded capital accumulation, they have decreased the capital available per worker in the U.S. economy, i.e., they retard the productivity of labor, and hence wage rates. Elsewhere (Boskin [1977]), I have estimated that perhaps one-half of all such taxes are ultimately shifted to labor via reduced wages.[4] Workers have a huge stake in capital accumulation. While in the very short-run (say a year), collective bargaining might be seen as an issue of how to divide up a given income between capital and labor, in the long-run wages are tied to productivity which in turn reflects the available capital per worker.

Fallacy 6: The U.S. is saving enough today. This is one of the least-well understood issues in contemporary economic affairs. Proponents and opponents of this view have employed at least three fallacies in their argument.

The first is hidden in the use of the conventional measure of saving and its application to the comparison of the U.S. saving rate with that of other countries. Our rate is much lower than that of Japan and Western Europe and many persons have used this argument to conclude that our relatively slow rate of economic growth is due to too low a rate of saving. They ignore the fact that those two areas came out of the war with their capital stocks depleted, thus requiring substantial saving to replenish them; and that they ended up with a newer capital stock and all its advantages. Further, such comparisons ignore the important fact that *forms* of saving differ among countries; e.g., we devote a much higher fraction of income to education, a sort of investment in humans, than do most other countries.

The second fallacy is in the comparison of the current U.S. saving rate with our historical rate. We cannot conclude that the 1976 saving rate is desirable merely because we had the same rate in 1950 or 1960 unless we conclude that what we did then was correct. Further, the changes in the age structure of the population due to the post World War II baby boom and the recent decline in birth rates should have led to an increase in the rate of saving.

The third fallacy is an *exclusive* focus on business capital formation which ignores household capital formation. Historically, there have been substantial shifts between direct personal saving and saving through corporations. As tax rates change, people have found it more advantageous to save by having earnings retained by corporations in which they have investments, electing to pay a capital gains tax later rather than a high income tax now. *Our basic problem is with the total saving rate, not with one of its components.* If we conclude that we should save more as a nation, there is no reason to argue that the increased saving should be done exclusively, or even mainly, through the corporate sector.

How, then, should we think about whether we are saving enough, i.e. accumulating enough capital? As usual, we must compare the benefits with the costs.

The benefits from increased saving may be approximated by the social rate of return on private investment, the rate at which future consumption is produced from private investment. While this is not easy to estimate, most economists would accept a figure of about 10–12 percent, after accounting for inflation. Stated simply, if we put an extra $1,000 into private investment, it will produce an additional income flow of $120 per year. This extra income in the future will finance increased consumption.

For most goods and services, private markets automatically equate the incremental benefits and costs of the good in question. Market forces produce an output level where supply equals demand. The price of the good will balance the value to consumers (what consumers are willing to pay) with the cost to producers (which represents the value elsewhere in the economy of the resources used to produce the good). Unfortunately, in the case of saving, the personal and corporate income taxes drive a wedge between the benefits, or social rate of return to saving, and the costs, or opportunities foregone in saving. For example, if you invest in the corporate sector and your investment earns a 12 percent return, the corporation income tax will reduce your return by approximately 50 percent, or down to 6 percent. This is not the end of the story. As *you* receive that 6 percent, you pay personal income taxes, federal and state, on it.

[4] See also Feldstein 1974.

If your income is around $25,000 per year, you may well pay one-third of additional income in taxes. Hence, your $1,000 investment produces an income flow of $120 per year; after corporate taxes you get $60 per year; after personal taxes you may get only $40 per year! *Your* return on the investment is only one-third of the total return, 4 percent; the government, or taxpayers in general, reaps two-thirds of the benefit. The cost to consumers of foregoing future consumption in favor of present consumption is an annual return of 4 percent; the total return, including taxes, is 12 percent, or three times the cost! It is this divergence between the private return to the saver and the total, or social return that leads us to save too little, that makes the benefits of increased saving exceed the costs.

Our undersaving thus produces an enormous waste of resources. It also has another adverse effect, a reduction of future wages. Just as a farmer is more productive when he uses a tractor than when he tills the soil by hand, or an accountant is more productive with a computer than with a slide rule, so workers in general are more productive when they have more capital per worker. The primary determinant of wage rates is productivity. Thus, an increase in our rate of saving would increase the available capital per worker and hence future wages.

3. *Implications for Tax Policy Concerning Capital Income*

Perhaps a useful way to summarize the discussion above is to return to a central tax policy focus of the debate over the desirability of heavy taxation of capital income: the choice between income and consumption as a tax base. Proponents of heavy capital income taxation argue that expenditure taxation, which, relative to income taxation, deletes saving from the tax base, is (necessarily) less "equitable" than income taxation. I believe this view is inaccurate for a variety of reasons. First, the rate schedule in an expenditure tax is subject to choice. For instance, it can be made as progressive as in the income tax. Second, current income is a poor measure of economic well-being. Incomes fluctuate substantially over an individual's lifetime; indeed, current consumption is probably a much better measure of permanent income than is current income. Third, a substantial share of capital income taxes is ultimately shifted to labor. Fourth, the ownership of the capital stock is more diffuse than commonly supposed and is diffusing throughout the general population. Finally, a consumption tax is a wealth tax. This simple point is not commonly understood. From the household's lifetime budget constraint, we know that each household's wealth is the present value of its expected future earnings and capital income. Over its lifetime, the household's consumption[6] will equal the present value of its future income stream. Thus, a tax on consumption is a tax on wealth.

For all of these reasons, and more, I find the case against expenditure taxation unconvincing, and heavy taxation of capital quite likely to worsen the welfare of the general population.

I therefore propose then gradually abolish all taxes on income and replacing them with taxes on expenditure. As a practical matter, this would involve: 1. *abolishing the corporate income tax; 2. removing savings from the personal income tax base.*

These two policies would leave us with a tax on consumption (expenditures); such a tax, relative to our current heavy taxation of capital income, would increase the return to saving, and thus capital accumulation, future wages, and future consumption and income.

There is now considerable support for the view that such a tax system, relative to the current one, would not only be more efficient as regards capital accumulation but also would be more easy to administer. Further, a variety of features of the current income tax enable wealthy persons to achieve a very high standard of living (i.e., level of expenditures) without paying income taxes. Under a consumption tax, they would pay taxes commensurate with their standard of living.

Let me repeat that reduction of taxes on income from capital should not be thought of primarily as a way to "give business a break." Capital in whatever form is an intermediary in the lifetime consumption process of citizens. We should reduce capital income taxes to improve the efficiency of the allocation of resources of all of our citizens between present and future consumption, especially between working years and retirement.

It would also have the effect of substantially increasing future wages.

Finally, we note that if we continue to discourage private saving by our heavy taxation of its return, we will face the awkward prospect of a huge increase in

[6] Including bequests in consumption.

the number of elderly persons dependent upon Social Security for a substantial share of their retirement income and of an enormous increase in taxes on future workers necessary to finance these benefits. We must begin to deal with the undersaving problem soon, or see the already damaging consequences worsen in the years ahead. *The best place to start is with the abolition of income taxation, corporate and personal, in favor of consumption taxation.*

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Senator BENTSEN. Thank you very much, Mr. Boskin. That will be helpful to us. We will return to you for questioning, but I want to be sure veryone has a chance to present his testimony.

Mr. McLure, we are pleased to have you. I don't believe you have a prepared text. If you would limit your statement to 10 minutes, and then if you want to put supplementary remarks in the record, we would be pleased to have them.

STATEMENT OF CHARLES E. McLURE, JR., EXECUTIVE DIRECTOR FOR RESEARCH, NATIONAL BUREAU OF ECONOMIC RESEARCH, INC., CAMBRIDGE, MASS.

Mr. McLURE. Thank you, Mr. Chairman.

Let me begin by saying that I agree wholeheartedly with what Mike Boskin has said. I think there is a capital shortage. This is caused in large part by the bias in the tax system against saving, and that the way we ought to go, as a longrun proposition, is to replace the income tax with an expenditure or consumption tax revised at progressive rates.

This is, however, a very longrun position. It is not something that we'll be discussing in the next year or so. What we are likely to be discussing is integration of the personal and corporate taxes, so that is what I want to discuss with you today.

Let me say that I think I can be categorized as an early advocate of integration. I still am, and yet while I think integration is a good idea, it should not be sold on false pretenses. There is inclination in some quarters to do that, and I want to set the record straight.

Senator BENTSEN. Would you repeat that last point?

Mr. McLURE. I say I think integration has been sold in part on false pretenses, and I want to try to set the record straight as to what integration will and will not do.

Senator BENTSEN. You are about to speak to that, then?

Mr. McLURE. Yes. The primary fallacy that is abroad is that integration would necessarily spur capital formation. There are circumstances in which this indeed would occur, but under which it would occur, is if the revenue lost in the integration were made up by taxing

essentially the same people to whom you gave the tax relief, in order to keep the distribution of the tax burden more or less the same.

You might ask, "Why is that an interesting case?" I think it is an interesting case politically because there are going to be pressures to try to keep benefits of integration from accruing to high-income groups. So I think we have to ask, if you gave relief, and then took it back from the same groups, would you increase capital formation?

I think the answer is, "Yes; some, but not very much." This is not the case for integration. The case for integration lies elsewhere, in effects which, to some extent, are more esoteric but important.

First, integration would eliminate the present discrimination against investment in the corporate sector and in favor of the noncorporate sector. This may not seem to be very important, but I think that a substantial welfare loss is involved in this misallocation of capital from the corporate sector.

The second thing that the present system does is to encourage firms not to pay out dividends because dividends are taxed more highly than either interest incomes or retained earnings. Integration should increase dividend payout ratios, and by subjecting more flows of corporate income to the test of capital markets would presumably increase the efficiency with which our capital stock is used.

Another thing that the existing system does is to increase the firm's reliance on debt financing. I think this is undesirable in the sense that it increases vulnerability to cyclical variations and the liability for bankruptcy in the corporate sector. This is quite undesirable, although it is very difficult to quantify.

The primary "fly in the ointment" of integration, you might say, is twofold: One, if you can have what we call full integration, treating the corporation like a partnership, you're likely to have a slightly progressive impact. That is, it might make the distribution of the tax burden rest somewhat more heavily on the upper income groups.

Full integration is likely to be difficult as well as politically unpopular in some groups, and therefore, it is likely that if we have any form of integration, it will be what I will call dividend relief; that is, relief from double taxation of dividends, wihch wouldn't extend to retained earnings. If this happens, the implications are likely to be quite regressive; that is, we would be giving money essentially to the upper income groups who hold corporate stocks.

I agree with Mike that the picture is not quite what it looks. Much of the benefits would spill over to owners of noncorporate securities to labor, but there would be some tendency toward regressivity. So, the question, then, with regard to full integration, which I think is desirable, is whether it is feasible technically and politically.

Alternatively, we might have partial integration. We know that is feasible because the Europeans do it, but the question is, do we still get the efficiency benefits? I think the answer is, in large part we do, but at the same time we get some reduced progressivity. The question is, is the increased efficiency worth the loss in progressivity?

Finally, let me talk a moment about tax preferences. There is, I think, a tendency not to understand the relationship between tax preferences and integration. The corporate tax doesn't go away under integration, but tax preferences may. This is in part a policy decision; it is not automatic. But tax preferences can, if you wish, either pass

through to shareholders or they may be "washed out." That is, in Europe, the tax preferences are essentially stacked up against retained earnings; that is, it is assumed that dividends are paid first out of fully taxed earnings and the shareholder then gets the benefit of integration on the dividends. The tax preferences go entirely to reduce the corporate tax, that is, the tax on the retained part.

The question is, do we want it that way? I think that's a policy decision. We can go in any number of ways. We can stack the preferences totally against retentions or against dividends or we can prorate them. Once we've done that, then we can either pass through preferences on dividends or we can "wash them out." How capital formation is affected depends crucially on how the decisions are made. If you "wash out" the investment tax credits, that's quite a different thing from passing it through to the shareholder.

Finally, in addition to the investment tax credit, there is interest on State and local securities—perhaps not a major question—but is it consistent to allow the individual in his capacity as a private investor to invest in state and local securities tax-free, and yet if he does it through a corporation, he would have to pay a tax, that is, this preference would be "washed out." It probably isn't a constitutional question; it's a conceptual question.

To summarize this last part, integration is more than a simple idea. It's a very, very complex idea. And there are many policy decisions to be made, many of which affect the rate of capital formation; these have to be examined very carefully. Thank you.

Senator BENTSEN. Thank you, Mr. McLure.

Mr. Pechman, welcome back.

STATEMENT OF JOSEPH A. PECHMAN, DIRECTOR OF ECONOMIC STUDIES, THE BROOKINGS INSTITUTION

Mr. PECHMAN. Thank you very much, Senator. I want to say that I wholeheartedly disagree with my two colleagues on the long-run problem of saving this country.

Senator BENTSEN. Let me say, I'm not surprised.

Mr. PECHMAN. But I won't talk about that. I'll be glad to answer questions about it. I believe the issues that they raise are really long run and are not related to the current scene at all. I would like to devote myself to the major question of tax reform in 1977 and 1978.

We just had a Presidential campaign in which taxation was a major issue. I think everybody will agree that the major concern of the candidate who ultimately became President, and of the public, has been that our tax system has become messy—I think he used the word "disgrace"—and I agree with him. I think the tax law is too complicated, largely because Congress has tried to do too much with it. It would be much better if most of the exclusions, deductions, and preferences were eliminated from the tax law, and the revenue used to reduce the tax rates both on individual and corporate income very substantially.

The goal should be to reduce the individual income tax rates from the present 14 to 70 percent to something like a range of 10 to 50 percent. This, in my view would be the best step one can take, not only

to improve the equity of the tax system, but also to promote the objectives that this committee is seeking in its hearing today.

I want to add to that I do not believe, as my colleagues seem to believe, that any special devices, new instruments or gimmicks are needed in the tax system to promote capital formation. The major reason why business investment is lagging today has absolutely nothing to do with the tax system; it has to do with the fact that we have just undergone the most traumatic and deepest recession since 1938. Business investment is lagging because business does not have confidence in the future. I think the best way to promote business confidence is not by gimmicking up the tax system, but by promoting a healthy economy.

The Congress, in my view, has done a good job in the last 2 years in adopting a stimulating fiscal policy which is generating increased employment and income; if you continue to do what you have been going in the last couple of years, I am confident that by the end of this decade, we will have returned to full employment. At that point, investment will return to its historical levels. Maybe after we get back to full employment and after we get back to the kind of investment that we're accustomed to in full employment, we might at that time want to make a decision to promoting more saving, but I think it is much too premature and dangerous to entertain changes in the tax system right now to achieve that objective.

The key to tax reform in 1977–78 is, what to do about capital gains? Capital gains taxation is highly controversial. The present provisions in the tax law are extremely complicated, and it is the one set of provisions that has made life very, very complex for, not only the business community, but also the tax administrator and the average citizen. At this time, we should eliminate all the special provisions in the capital gains tax and just tax capital gains as ordinary income, that is, eliminate the differences between capital gains and other income. At the same time, the revenue that would be gained by the elimination of the capital gains preferences should be used to lower the rates to a maximum of 50 percent.

In 1969, Congress made the decision to lower the maximum rate on earned income in two steps, to 50 percent. That provision alone has increased the attractiveness of cash salary for corporate executives. The annual tabulations of corporate earnings demonstrate that corporate executives now find cash salaries more attractive than the former gimmicks, like deferred compensations and stock options.

I believe the same thing will happen in the taxation of profits and other property income. I'm not just saying that the 50-percent rate should be cut off at 50 percent; what I'm saying is that the tax rates should be tapered off to a maximum of 50 percent, which would mean substantial tax rate reductions for people in the middle and upper middle income tax brackets as well as in the highest bracket. This would make property income that it now subject to high tax rates and rates up to 70 percent, much more attractive. It is true that the average rate on capital gains will increase, but the average tax rate on dividends, interest, and rents would decline. On balance, investors will prefer straight income to the capital gains preference that they have today, just like executives now prefer cash salaries under the law that was enacted in 1969.

I recognize this is a very difficult issue, but I hope that your committee and the rest of the Congress will look at this particular point very carefully. It is, in my view, the key to improving the tax system in the years ahead.

I also want to say, that while the proposals that are made by representatives of small business seem attractive, you ought to look at them very carefully. It is not the case, in my view, that small business is being discriminated against by the tax system. It is true that small business has problems of raising equity capital, but that is the nature of small business. I think that the major thing we can do to help small business is not to mess up the tax law so that wealthy owners of "small business" get advantages from the tax gimmicks; the major contribution we can make is to have a healthy economy so small business can prosper. Some of the suggestions made by representatives of small business will simply make the tax system much more complicated and much more inequitable.

As to the question of integration, I really think the summary given by Charles McLure is excellent. He summarized the pluses and minuses very well. I agree with him that the effect of integration alone on capital formation would not be very great. In fact, if you do go to partial integration, as he indicated—partial integration is really a euphemism for dividend relief—that might encourage corporations to pay out dividends and reduce their retained earnings. Savings might, in fact, be reduced rather than increased.

My preference would be to proceed along what I call the traditional route of tax reduction. The Brookings Institution just released a book summarizing the budgetary outlook for the coming 4 years. In 1981, we see the possibility, if the administration and Congress achieve all their objectives, that there will be, roughly, $50 billion of "elbowroom" to use for either expenditure or tax cuts and——

Senator BENTSEN. We're running out of time again.

Mr. PECHMAN. I realize that. If you get to 5 percent unemployment and roughly 5 percent inflation, and if you limit Federal expenditures to about 21 percent of the gross national product in 1981, if all these things happen, you will have a surplus or a budgetary margin which will amount to about $50 billion, $30 billion of which will be available for increases in expenditures and $20 billion might be available for tax cuts. Of course, Congress can vary it one way or another. So, there is "elbowroom."

I would encourage Congress, instead of trying to adopt new techniques, to simplify the tax law and reduce the tax rates both on individual and corporate incomes; and if you want some more investment incentives, do it by way of improving the investment credit, by increasing the investment credit or making it refundable to business whose taxes are too low to take full advantage of it. And, also, I think it is important in view of the capacity problem that the investment credit be lastly applied to plant equipment.

In summary, I want to emphasize that I think it would be unwise to introduce new devices in the tax law today. The best thing to be done is to simplify the tax system by eliminating preferences and to use these funds to reduce the tax rates and also possibly increase investment credit.

[The prepared statement of Mr. Pechman follows:]

Prepared Statement of Joseph A. Pechman [1]

Tax Reform and Investment

I am glad to have this opportunity to discuss with the subcommittee the relation between tax reform and the rate of capital formation.

I believe that the major focus of tax reform in the next year should be to broaden the individual income taxe base and reduce the individual income tax rates substantially. The primary objective should be to improve the equity of the tax system—both horizontal and vertical—and to simplify it so that the ordinary taxpayer will be able to fill out his own tax return and the average businessman will be able to conduct his affairs without worrying about the tax implications. The goal should be to reduce the individual income tax rates from the present range of 14–70 percent to 10–50 percent.

I do not believe that drastic changes in the tax system are needed to promote saving and investment. Special preference to relieve the tax burdens of so-called small businesses complicate the tax law, enrich the wealthy people who are the primary owners of such businesses, and waste Federal funds that are urgently needed for other purposes. Proposals to "integrate" the individual and corporation income taxes would not raise business investment and would reduce the taxes of corporations and high income recipients. If, as I expect, there will be room for net tax reductions over the next few years, the corporate as well as individual income tax rates could be reduced. Additional investment incentives, if needed, could be provided through the investment tax credit.

Whatever is done through the tax structure, however, will not be nearly as potent as the overall monetary and fiscal policies that will be pursued. Business investment is lagging today because the economy is still suffering from the aftermath of the deepest recession since 1938. Instead of adding special tax gimmicks for investment, Congress should continue its efforts to restore high levels of employment and income as quickly as possible. This is the best contribution it can make to promote investment and a satisfactory rate of economic growth.

In my opinion, the key to tax reform is the elimination of the special provisions for capital gains and taxation of capital gains transferred by gift or at death. These changes alone would permit a reduction in the top bracket individual income tax rates to 50 percent. At the same time, they would bring about a great simplification in the tax law.

The taxation of all property income at a maximum rate of 50 percent should have a healthy effect on investment incentives and on financial arrangements. While the average tax rate on capital gains will be increased, the tax rates on dividends, interest, and rents will be reduced substantially. The attractiveness of investments will depend on their relative rates of return, and not on whether they can be made to yield incomes that are taxable at preferential rates. When the tax rate on earned income was reduced to a maximum of 50 percent, there was a substantial increase in cash salaries and a corresponding reduction in the attractiveness of alternatives like stock options and deferred compensation plans. I expect that the investor will also welcome straight income, without preferential rates, if he is assured that he can keep half or more after taxes.

Capital gains are not the only preferences in the tax law. The major business tax preferences are (*a*) percentage depletion for small producers of oil and gas and for all minerals producers; (*b*) deduction rather than capitalization of intangible drilling costs for oil and gas; (*c*) deferral of tax on income of foreign corporations controlled by U.S. shareholders; (*d*) deferral of tax through the Domestic International Sales Corporation (DISC); and (*e*) tax shelters which remain despite the revisions in the 1976 Act. In addition, business expense accounts are still being abused despite the effort made to tighten the law in the 1960s. Elimination of these preferences, which would increase tax receipts by about $6 billion a year, could be used to finance a reduction in the corporate rate. The cost of one percentage point in the corporate rate is about $1.3 billion a year, so that these reforms alone would provide the funds for a cut of almost 5 percentage points. Assuming there is enough elbow room in the budget for a net reduction in business taxes, I would also make the investment credit refundable and apply it to business plants as well as equipment.

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[1] Director of economic studies, the Brookings Institution. These views are my own and should not be attributed to the officers, trustees, or any of the staff members of the Brookings Institution.

Any form of integration of the corporation and individual income taxes would be costly and would reduce progressivity. If integration were in the form of dividend relief, corporations would be under great pressure to pay out more in dividends, and national saving (and investment) might be reduced. A more certain method of stimulating investment incentives would be to provide a direct incentive through the investment credit.

In summary, I believe that it would be unwise to introduce new devices into the tax law to help increase saving and investment incentives. It would be much better to clean up the tax system by eliminating preferences and use the funds to improve the investment credit and to lower the individual and corporation income tax rates.

Senator BENTSEN. Thank you, Mr. Pechman.

I, like a lot of businessmen, having had time to study integration no longer am confident that it will increase the rate of capital accumulation much. I certainly question it is going to mean much. I go along with both Professor McLure and you in that regard.

I would like to make a point about small businesses and new issues that's rarely mentioned, if at all, and that is the unintended effect from negotiated commissions. Negotiated commissions, in effect, help the big customer, the pension fund purchaser, the professional, major investors in the fiduciary role; but in doing so, they wiped out the small regional firms, lots of them. And the small regional firms are the ones that need to keep an interest in the stock of the local companies. But that is almost a dying breed. We don't see many of them any more. And the major national firms now don't take the time to study the small companies in the regions, out in what they think of as the hinterlands.

My concern on the capital gains is that if you get the capital gains rate up too high, the entrepreneur is not going to want to take risks. That's what worries me. I feel very much that there should not be a philosophical difference and there isn't one between earned income and investment income. They ought to be taxed the same, but I have a latent concern about your stopping this man from taking this serious risk on venture capital.

Mr. PECHMAN. I have the same concern. I certainly would not support simply eliminating the capital gains preferences and keeping the tax rates where they are today. A major part of the tradeoff should be a substantital lowering of the whole schedule of tax rates, not only getting that top rate down from 70 percent to 50 percent, but also the 40-percent rate down to 32 or 30 percent if you can afford it.

I think that businesss in general would be healthier if everybody knew what the marginal rates that applied to their income are real, rather than having to go through tax lawyers to arrange to put part of the operating income of the concern through the preferences. It seems to me that that is the simplest and most effective device.

If this proposal eventuated in a substantial increase in the tax on property income, I would not support it, but I don't think it would.

Senator BENTSEN. Professor Boskin.

Mr. BOSKIN. I find myself in the very embarrassing position of disagreeing with someone who is a friend, a former teacher, and former colleague, but it seems to me the estimates Professor Pechman is using in the revenue gained for the Treasury, like most tax, most tax venture expenditure estimates embody an extremely fallacious assumption that is most blatant with respect to capital gains; that is, we all of a

sudden announce that capital gains are going to be taxed in full. These estimates are based on the assumption that people will go along realizing the same amounts of capital gains they are now when taxed at preferential rates. I think the revenues that could be raised by increasing capital gains rates are substantially less than the revenue guestimates embodied in the tax expenditure budget.

Senator BENTSEN. Professor McLure.

Mr. McLURE. Let me just add something here. It occurs to me that if one wanted to combine something, he cou' . combine dividend relief—that is, relief from double taxation of dividends of the type you see on partial integration schemes—with a higher tax realized on capital gains. There are problems; but if one had higher tax on realized capital gains and dividend relief, then, presumably, you would have a two-pronged impetus for firms to pay out dividends. I should think that businessmen would find that less attractive than the economist would. But if you have dividend relief and everybody is paying out their dividends, then all those dividends would be taxed, as they are supposed to be, under the personal income tax of the individual, without any corporate tax, and you have, essentially, integration for virtually all of your corporate source income.

Granted, there would be some retained earnings and some people would worry about the fact that you would have fewer retained earnings. But you certainly would go a long way toward complete integration if you took this two-pronged approach, which, frankly, I don't think many people have considered.

Mr. PECHMAN. I do want to respond to Mike Boskin's point about revenue. He is entirely right if we kept the tax rates the same, but the proposal is not to keep the tax rates the same. The proposal is to reduce the tax rates substantially. I would like him to use his great expert econometrics on this question, to see what would happen in the real world if you went to a tax system that taxed capital gains just a little more heavily, and taxed other property less heavily.

Senator BENTSEN. Say that again.

Mr. PECHMAN. That is, my proposal would result in somewhat heavier taxation of capital gains, not a great deal, and reduced taxation of other property, dividends, interest, and rents; in those circumstances, I submit that the estimates we are talking about are not out of line.

Mr. BOSKIN. I would agree. We would have to reestimate. I was referring to the case of full taxation——

Mr. PECHMAN. That changes it.

Mr. BOSKIN. That's right—which is the proposal some people have made, and it is not your specific proposal.

Senator BENTSEN. That is interesting. Suppose an enterpreneur is about to get into a capital situation building a complex of condominiums, townhouses. You're talking about getting it up in, say, 18 months. A fellow puts up the equity capital—maybe he has to put up a half million or a million, whatever the equity is, and he has an exposure of 18 months. He is depending on what happens to this market. He looks and, if he makes it, he might make 100 percent return on that equity in 18 months. Would he take that kind of a risk if he has a 50-percent tax? Those are the kinds of things that are going to have to

be evaluated. One thing that that venture capitalist doesn't want to do is lose his seed corn.

Mr. PECHMAN. I should add that all proposals for taxing capital gains in full are usually accompanied with the corresponding proposal that the offset for losses be improved. For this year, deductions for losses are all owed up to $2,000 against ordinary income and next year, up to $3,000. This change occurred last year, and I would be very much in favor of increasing the limit very, very substantially. As my colleagues will tell you the literature does indicate that improved loss offsets do help to offset the disincentive fact that might occur.

Mr. BOSKIN. That's correct.

Mr. PECHMAN. But the second point is that business would probably be happy to know that they are living in a world in which their income would not be taxed by more than 50 percent; if their income was lower, it would be taxed less. I think that's a fair arrangement. I don't think that risk would dry up.

And, furthermore, the other advantages to the economy in improved efficiency and better allocation of resources among industries would offset the disincentives that might occur. So, I think the matter warrants attention.

Mr. MCLURE. I would like to take a different tack in answering your question to go back to what Professor Boskin said first. It seems to me the answer I would like to give to your question about the fellow who want to invest, is that we would tell him to go ahead and invest as he wished and make whatever rate of return he could. And to the extent he did not consume any of that return, we would not tax him at all. That is really an incentive. On the other hand, if he wants to go out and consume it all, we will tax him at a very high rate.

You see, a part of the problem is, we are accustomed to talking in an income tax context. We always do. And it is fairly difficult to get used to talking in an expenditure tax context.

Senator BENTSEN. Really is. It's a little hard for me to change.

Mr. MCLURE. I think it is practical. The nice thing about an expenditure tax, as Mike has said, is that if you take a certain amount of consumeption, spread it over a lifetime, and tax it—I have to say, in present value terms, that is allowing for interest—the tax patterns are going to be quite different, depending on when you consume; that is, according to whether you consume early or late. I think the tax burden should depend on the present value of consumption and not the time pattern of consumption.

Mr. BOSKIN. If I could elaborate on that. Our current tax system encourages them to spend precisely at the time we ought to be encouraging them to save for their retirement. That is the kind of problem we face.

Mr. Pechman has made much of simplifying the tax law, without the more serious question of how to deal with the administrative problems. I believe I said I wanted a gradual change in the tax base. Most of the complications that arise in the income tax, or many of them, would disappear with the expenditure tax. Now we are measuring capital income and all that. We could instead measure consumption as best we can. There are problems with measuring that as there are problems with measuring income, but many of the problems relate to the evaluation of capital items. That would disappear.

Mr. PECHMAN. I just wanted to add that I'll be glad to study it. To give you an example, these economists and others like them who espouse expenditure tax, don't mention to the policymaker that in effect we would be imposing a tax of, say, $2,000 on a person who buys an automobile for $6,000. The average effective rate of consumption tax on these and other durable goods would be higher than the effective rate of income taxes, which is roughly about 20 percent at the margin. It would have to be higher for an expenditure tax because the tax base is lower.

Many of these problems that arise under the expenditure tax are swept under the rug by economists. In the end, what you would get is an eroded expenditure tax, not the total consumption tax that they are talking about.

Senator BENTSEN. Food, medicine.

Mr. PECHMAN. Precisely, people would not want to see such items of consumption taxed, and there would be demands to alleviate tax burdens on durable goods consumption, and so on.

Furthermore, very few of the economists address themselves to what will happen to the distribution of wealth under an expenditure tax. The distribution of wealth is already very unequal, if we change from an income to expenditure tax, this distribution of tax would become more unequal.

If you scratch most economists, they tell you they would like to have higher estate taxes, but I'm not aware that we are getting higher estate taxes over the long run.

Senator BENTSEN. You get 77 percent on a maximum.

Mr. PECHMAN. If your wealth is subject to that rate, that is, if you happen to have died with that amount of wealth and before your tax lawyers removed it from the estate tax base.

Senator BENTSEN. It is a little more trouble removing it these days after.

Mr. PECHMAN. That's correct.

Senator BENTSEN. One more, then we'll have to stop.

Mr. BOSKIN. I would like to respond because there is somewhat of a misconception. Many of us advocate including bequests or inheritances in the base tax. If you do that, a consumption tax is a tax on wealth, that is, Senator, think of what you are going to be able to spend or bequeath for the rest of your life, the present value of your future earnings, plus the value of your capital; your spending plus your bequests equal your wealth. Over your lifetime, a consumption tax is a wealth tax and is neutral with respect to when you consume it.

Senator BENTSEN. Thank you very much, gentlemen. It has been provocative and helpful. Thank you very much.

[Whereupon, at 11:55 a.m., the subcommittee adjourned, subject to the call of the Chair.]

[The following information was subsequently supplied for the record:]

STATEMENT OF JAMES D. "MIKE" MCKEVITT, WASHINGTON COUNSEL, NATIONAL FEDERATION OF INDEPENDENT BUSINESS

Mr. Chairman, since the inception of the NFIB Quarterly Economic Report for Small Business nearly four years ago, approximately one in five small firms has consistently reported taxes to be their single most important business problem

(see Table 1). Only inflation has been and is still considered to be a more pressing matter. In fact, nearly 50 percent of all small businesses consider taxes or inflation to be their single greatest business problem.

Data collected by NFIB from its 510,000 member firms also clearly shows that small business wants to grow. In a survey conducted during the month of January, 60 percent of the 8,500 respondents indicated that they wish to expand their businesses. Sixteen percent of these small business owners said that they wish to expand "considerably" (see table 2).

Not surprisingly, the most important incentive for expansion and the hiring of new employees is greater business volume. But more than seven out of ten small firms that wanted to expand indicated "lower Federal taxes" as an expansion and hiring incentive (see Table 3). Even a substantial portion of small firms that desired to remain about the same size indicate "lower Federal taxes" would be an incentive to expand or hire additional employees (see Table 4).

These data are confirmed when the respondents were asked where they would put their money if net profits were substantially higher. Almost nine of ten (87 percent) indicated that at least part of the money would be reinvested in their businesses (see Table 5).

Small business unquestionably perceives Federal taxes as an important impediment to its vitality and growth. But differing from many common perceptions, this one appears to have a strong factual foundation.

The complexity of the tax code, by itself, hurts small business. Small firms simply cannot afford to employ the horde of expert lawyers, accountants and tax consultants used by large corporations to exploit and take full advantage of every beneficial provision of the Code. Nor is their cash flow condition sufficiently favorable and consistent in many cases to plan business activities around those tax breaks theoretically available.

In contrast, large corporations are able to use the provisions of the Code to pay a reduced effective tax rate. As a class, the 100 largest corporations in the U.S. paid an effective tax rate of between 25 percent to 30 percent over the past three years, while eight of these with earnings totaling $843 million paid no corporate income tax in 1974.

TABLE 1.—QUESTION: WHAT IS THE SINGLE MOST IMPORTANT PROBLEM FACING YOUR BUSINESS TODAY?

Most important problem	1976—Rank				1977	
	January	April	July	October	January	April
Taxes	2	2	2	2	2	2
Percent	17	21	22	20	21	21
Inflation	1	1	1	1	1	1
Percent	28	25	25	24	24	28
Inadequate demand for product	7	7	8	6	8	8
Percent	5	4	3	5	4	3
Interest rates, percent financing	5	5	5	5	7	7
Percent	8	6	7	7	5	5
Minimum wage laws, cost of labor	6	5	6	5	5	6
Percent	6	6	6	7	7	6
Other Government regulations, red tape	3	3	3	5	3	3
Percent	13	16	14	7	12	12
Competition from large business	4	4	4	3	4	4
Percent	10	9	9	13	10	9
Quality of labor	6	6	7	4	6	5
Percent	6	5	5	10	6	7
Shortage of fuels, materials or goods	8	8	9	7	9	9
Percent	1	1	1	([1])	2	1
Other; no answer: Percent	6	7	8	7	9	8
Total	100	100	100	100	100	100

[1] Less than 0.5 percent.

TABLE 2.—*Desire of small business to expand*

	Percent
Yes—Considerably	16
Yes—Moderately	44
No—Stay same	36
No—Already too big	2
N/A	3

TABLE 3.—INCENTIVES TO EXPAND OR HIRE FOR SMALL FIRMS DESIRING EXPANSION[1]
[In percent]

	Yes	No	Undecided
Greater business volume	92	7	1
Lower Federal taxes	71	25	4
Pay off business debts	46	49	3
Greater access to loanable funds	42	54	4
Lower interest rates	64	33	4

[1] No responses were omitted.

TABLE 4.—INCENTIVES TO EXPAND OR HIRE FOR SMALL FIRMS DESIRING TO STAY THE SAME SIZE[1]
[In percent]

	Yes	No	Undecided
Greater business volume	47	50	3
Lower Federal taxes	35	62	4
Pay off business debts	14	82	3
Greater access to loanable funds	11	87	3
Lower interest rates	25	72	3

[1] No responses were folded into the "No" column. It is assumed failure to respond is directly related to the lack of desire to expand.

TABLE 5.—DISPOSAL OF SUBSTANTIALLY INCREASED NET PROFITS BY SMALL FIRMS[1]
[In percent]

	Yes	No	Undecided
Bank the increased earnings	31	64	5
Invest stocks, bonds, etc	26	70	4
Pay off debts	62	36	1
Reinvest in business	94	5	1
Increase personal standard of living	38	58	4

[1] No responses were omitted.

There has been a failure by Congress and the Internal Revenue Service to recognize that consideration should be given to the practical ability of small businesses to cope with the intricacies of the Internal Revenue Code and its related regulations, rules and reporting requirements. Red tape and paperwork takes its toll in terms of both initiative and dollars, and about 40 percent of the $15 billion spent by small business on paperwork is tax related. This represents approximately $6 billion that could otherwise be invested in growth.

Two examples of well-intended and positive legislation which have been or may be muted by paperwork immediately come to mind. The first is ERISA. Mr. Bruce Fielding, NFIB's Secretary and member of the Federal Paperwork Commission has only recently (May 24, 1977) testified before a Senate Finance Subcommittee illustrating various problems created for small firms by ERISA's paperwork requirements.

A second example is the newly enacted Jobs Credit which small business strongly supports. While IRS regulations covering the Jobs Credit have yet to be promulgated, Mr. Fielding has informally drafted the simplest Employee Credit Schedule he could devise. Though this is a draft primarily for NFIB's internal use rather than to put forth in a formal presentation, we would ask you to compare it to the paperwork that would have resulted from the initial Jobs Credit proposal (see Table 6) made by NFIB to the House Ways and Means Committee.

TABLE 6

SMALL BUSINESS' PROPOSED JOBS CREDIT

Form No. 6000

EMPLOYMENT TAX CREDIT
QUARTER ENDED ____, 19__

1.	FICA wages for current quarter.		$
2.	FICA wages for same quarter of prior year.	$	
3.	Cost-of-living adjustment (%) of line 2).	$	
4.	Total (line 2, plus 3).	$	
5.	Increase (or decrease) in FICA wages (line 1, less 4).		$
6.	Percent increase (or decrease) in FICA wages (line 5 ÷ 4).		
7.	Employment tax credits, less recaptures carried forward from prior quarter (line 12, prior quarter's Form No. 6000).		$
8.	Employment tax credits allowed in the same quarter 5 years prior to the current quarter (line 10, Form No. 6000).		$
9.	Employment tax credits subject to recapture (line 7, less 8).		$
10.	If line 5 is an increase, employment tax credit to be applied against payroll tax liability for current quarter (line 5 x 6) but not in excess of 25 percent of line 5.		$
11.	If line 5 is a decrease, employment tax recapture to be added to payroll tax liability for current quarter (line 5 x 6) but not in excess of line 9.		$
12.	Employment tax credits carried-forward to line 8, next quarter's Form No. 6000 (line 9, plus 10, or less 11).		$

ENACTED NEW EMPLOYEE CREDIT 1977

A. Limitation on Total Wages

1. Total Remuneration PAID during 1977 (Form 940, Line 11) $________

2. Less: Total Remuneration PAID during 1976 (Form 940, Line 11) $________ Times 105 Percent 1.05 $________

3. Net Increase (If no increase, do not continue) $________

4. Tentative Tax Credit (50% of Line 3) $________

B. Calculation

5. Total Remuneration under $4,200 (Enter only the first $4,200 or less paid to individual employees) Paid during 1977 $________

6. Less: Total Remuneration under $4,200 Paid during 1976 (Form 940, Line 15) $________ Times 102 Percent $ 1.02 $________

7. Net Increase (If no increase, do not continue) $________

8. Line 5 times 50% $________

9. Tentative Tax Credit (50% of the Lesser of Line 7 or 8) $________

10. New Employee Tax Credit (Lesser of Line 4, Line 9, or $100,000) $________

11. Plus Vocational Rehabilitation Referrals (See Instructions) $________

12. Plus Carryover from previous year and partnerships, estates, trusts, and small business corporations (Attach Schedule) $________

13. Tentative New Employee Tax Credit
  a. Individuals-Enter amount on Line 4, Sch. C, Form 1040 $________
  b. Estates and Trusts-Enter amount on Line 8, Form 1041
  c. Corporations-Enter amount on Line 10, Form 1120

C. Limitation

14. (a) Individuals-Enter Amount from Line 18, Page 1, Form 1040
(b) Estates and Trusts-Enter Amount from Line 24 or 25, Page 1, Form 1041
(c) Corporations-Enter Amount from Line 9, Schedule J, Page 3, Form 1120 $________

15. Less: (a) Foreign Tax Credit $______
(b) Credit for the Elderly $______
(c) Investment Credit $______
(d) Work Incentive (WIN) Credit $______
(e) Contributions to Candidates for Public Office Credit $______
(f) General Tax Credit $______
(g) Credit for Child Care Expenses $______

16. Total-Add Lines 15 (a), (b), (c), (d), (e), (f) and (g) $________

17. Line 14 Less Line 16 $________

18. New Employee Tax Credit (Lesser of Line 13 or 17) $________

(a) Individuals-Enter Amount on Line 54, Page 2, Form 1040
(b) Estates and Trusts-Enter Amount on Line 28, Page 1, Form 1041
(c) Corporations-Enter Amount on Line 10 (d), Page 3, Form 1120

The point is that in dealing with small business the Congress and the Internal Revenue Service must remember they are working with ordinary people, not tax experts. Thus, complexity and paperwork can cause small businesses to ignore the very initiatives that are intended to help small businessmen and their employees.

Most provisions of the tax code simply were enacted without considering small business. That alone makes the Jobs Credit a milestone in business tax policy. NFIB doesn't believe every provision must be directed to the needs of small business for others have needs as well, but with small busines employing 56 percent of the private non-farm work force we should not by general practice be excluded from benefiting proportionately from business incentives.

Let me outline just two examples. In practice, ADR is worthless to most small businesses. Even many medium-sized firms don't use it. ADR simply is too complicated. With hundreds of depreciation schedules, it simply is not cost-effective for a mall businessman or his accountant to plow through the various schedules to determine his accelerated depreciation. Thus, the small firm uses straight line depreciation to his competitive disadvantage.

Another example is the Investment Tax Credit. NFIB isn't necessarily critical of ITC, but there is no doubt small busines doesn't benefit proportionately. In 1972, IRS statistics show that over 70 percent of the dollars from the ITC went to less than two-tenths of one percent of the corporations in the U.S. The following year, over two-thirds of the benefits from this section of the Code went to less than one-tenth of one percent of our corporations—and corporations make up less than 14 percent of all U.S. business establishments.

It is important to remember that small firms cannot grow and create jobs without capital. The supply of investment capital is relatively scarce and small business is in fierce competition for a share of the shrinking investment dollar.

A business can create growth capital only four ways:

by selling stock or an equity interest in a business;
by recovering capital already invested;
by borrowing or incurring debt;
and, by retaining profits.

Finding equity capital for small business is about like trying to locate a dinosaur. While borrowing, particularly from banks, is frequent, rates and terms are generally less favorable than for larger firms. That leaves only capital recovery and retained profits.

Small business growth capital is internally generated. Obviously, the ability of the individual entrepreneur to do so is contingent on a variety of factors

including his own managerial ability. But the government can ease or dampen his ability to internally generate growth capital and there is no better way than through the Code.

I would like to digress a moment to call your attention to a very important point of tax policy—incorporated vs. non-incorporated small business. For the most part, discussions of small business tax policy seem to focus on corporations. They tend to be the larger and more articulate small businesses, and their problems and capabilities are more readily identifiable. Further, when we speak in terms of business taxation, we tend to think in terms of corporate taxation. While NFIB believes the trend in small business is toward incorporation, the majority of full-time operating businesses remain proprietorships. Any small business tax policy, therefore, cannot ignore non-corporate business forms.

Two points then become critical to any discussion of small business tax policy: simplicity and utility for a wide range of both corporate and non-corporate small firms. These must be the cornerstones of any Congressional attempt to help small business. Without them your efforts will simply fail.

NFIB believes that these points are contained in a small business tax proposal that it and other members of COSIBA are preparing. When it is ready, we hope the Committee will give it careful and serious consideration.

TRANSPORTATION ASSOCIATION OF AMERICA,
Washington, D.C., July 22, 1977.

Hon. HUBERT H. HUMPHREY,
Cochairman, Subcommittee on Economic Growth and Stabilization, Joint Economic Committee, U.S. Senate, Washington, D.C.

Hon. LLOYD BENTSEN,
Cochairman, Subcommittee on Economic Growth and Stabilization, Joint Economic Committee, U.S. Senate, Washington, D.C.

DEAR MESSRS. CHAIRMEN: I understand that the Subcommittee on Economic Growth and Stabilization is currently conducting hearings on Federal tax policy, with a particular emphasis on the impact of such policy on the rate of capital formation.

On behalf of the Transportation Association of America and its members, I would like to express our support for tax policies that will facilitate the rate of capital formation in the transportation industry. Specifically, we support a further increase in the investment tax credit to 12 percent, together with administrative changes in Federal tax law to render earned tax credits more usable by transportation carriers.

The Transportation Association of America (TAA) is a national non-profit organization of carriers of all modes of transportation (air, motor, pipeline, rail, water and freight forwarders), as well as commercial users of the services of these carriers and investors in the transportation industry. The role of TAA is to serve as a forum in which these various interests may reconcile their diverse viewpoints on issues of major importance to transportation for the good of the industry as a whole. Members of TAA include leading corporations from all sectors of the U.S. business community; as information, I am attaching to this letter a current roster of TAA's Board of Directors.

For some time TAA and its members have been increasingly concerned over the difficulty of meeting transportation's investment needs in the coming years. For nearly three decades transportation has experienced a steady and debilitating decline in its ability to tap capital markets to meet the ever-expanding needs of the U.S. economy for its services. The table immediately following depicts the growth of this problem:

EXPENDITURES FOR NEW PLANT AND EQUIPMENT
[In millions of current dollars and percentage]

	1950	1955	1960	1965	1970	1976
Air transport	$100	$260	$660	$1,220	$3,030	$1,320
Railroad transport	1,180	1,020	1,160	1,990	1,780	2,350
Other transport	1,090	1,300	1,300	1,680	1,230	3,580
All U.S. industries	20,210	29,530	36,750	54,420	79,710	121,230
Transport investment as percent of all U.S. investment	11.7	8.7	8.5	9.0	7.6	6.0

This erosion of transportation capital continues, notwithstanding efforts that have already been made to improve the industry's situation. Increases in the investment credit level to 10 percent and other provisions which increase the ability of transportation carriers to make use of earned credits, as well as legislation to provide Government financial aid to rail carriers, have helped in this area. But transportation carriers continue to face the prospect of major shortfalls in their ability to generate needed investment capital.

About two years ago TAA formed a special Investment Council to study this problem. After review of both the industry's recent capital-formation and its reasonably anticipated needs for the near-term future, this Council developed estimates of the transportation capital picture for the balance of this decade. Below—updated to reflect first-quarter 1977 economic values (through application of the Gross National Product deflator)—are the results of this analysis in tabular form:

ESTIMATED ANNUAL CAPTIAL REQUIREMENTS OF PUBLIC INTERCITY CARRIERS, 1975-79

[In millions of constant 1977 dollars]

	Replacement	Expansion	Total	Annual outlays, 1970-74
Railroads	3,581	1,394	4,975	2,693
Airlines	1,334	1,444	2,778	1,880
Motor carriers	2,044	756	2,800	1,409
Oil pipelines	174	1,574	1,748	610
Water carriers	270	265	535	411
Intercity bus lines	105	13	118	105
Total	7,508	5,446	12,954	7,108

Thus, our industry is confronted with a shortfall of nearly $6 billion a year for each of the final five years of the current decade, according to this analysis. Moreover, more than half this time period has already passed; and for each past year that transportation carriers have been unable to fill their capital needs, an increasingly large capital-formation burden has been carried forward to future years.

It is now too early to determine to what extent legislative policy changes enacted last year have impacted, and will impact, this problem. It seems certain, however, that such changes, alone, cannot suffice to nearly double the industry's ability to generate investment capital, as would be required if the needs defined by TAA's analysis were to be fully met, even disregarding the steadily growing backlog of unfilld capital needs, TAA believes therefore that it is imperative that Congress move promptly, before this backlog can increase still further to unmanageable proportions, to further enact policies that will encourage capital formation in the economically vital transportation industry.

TAA and its members were dismayed when, early this year, the Carter Administration abruptly dropped its proposal to increase the investment tax credit level to 12 percent (with a further 1 percent increment available to help finance employee stock-option plans). It is our understanding that this plan was abandoned not for any reason associated with its own merits, but as a move to placate those who were distraught at the Administration's contemporaneous decision to withdraw its support for a personal income tax rebate. We can certainly understand the political pressures which compelled such a compromise decision at that time; but we also feel that this decision should not be permitted to prejudice the chances of an investment tax credit increase on its on merits, as a separate and independent measure.

We therefore urge that your Subcommittee give further serious consideration to the possibility to increasing the investment tax credit, at least on a temporary basis, to 12 percent. This will do much to aid the transportation industry in its efforts to fulfill its capital requirements for the near-term future.

It is, however, a sad truth that no level of increase in the investment tax credit alone can fully resolve transportation's capital difficulties. Too many transportation carriers, plagued for years with increasing problems in generating even enough capital to meet current needs, have succumbed economically. The much-publicized series of railroad bankruptcies in the Northeast sector of the country, which led to creation of the Government-financed Consolidated Railroad Corpo-

ration, is merely symptomatic of the industry's solvency problems on a national scale.

By the nature of Federal tax law, a carrier's ability to fully utilize earned investment tax credits is contingent upon its ability to generate sufficient earnings so that its Federal tax liability equals or exceeds the offsetting capacity of the tax credits. Recent legislation has liberalized tax policy in this area considerably, allowing an extended period in which to use earned investment credits and temporarily increasing the proportion of a transportation carrier's tax liability which may be offset by investment credits. But while these measures have provided some relief, it is our understanding that the transportation industry alone continues to show an outstanding balance of more than $1 billion in earned, but unused, investment tax credits.

In recognition of this situation, TAA has proposed two alternative approaches to permit a reduction of this transportation industry "bank" of investment credits. We believe action is urgently needed to increase the industry's ability to generate the investment capital it requires.

First, we urge that earned, but unused and expiring, investment credits be treated as refundable overpayments of tax. This would enable even impecunious carriers to take full advantage of the investment-credit provisions of Federal tax law, and would vastly improve these carriers' ability to generate capital. Under present law, there is a very great tendency for financial problems to pyramid; a carrier's earnings are too low to allow it to use earned investment credits, thus its capital-formation capabilities are impaired, thus its future earnings are compromised, and so on in a descending spiral whose ultimate destination is too often insolvency. And it is surely contrary to the public interest to permit such continued erosion of our national transportation system, which is so critical to the nation's economic welfare.

Alternately—or perhaps in tandem with this refundability proposal—we recommend that legislation be enacted to permit an unrestricted one-time transfer of earned investment credits from one taxpayer to another. This proposal has the advantage of treating our national transportation system as precisely what it is—an interrelated system of carriers whose activities, and investment, must be coordinated carefully to assure that our economy continues to receive the level of transportation service it needs, and on which it depends.

As a matter of public interest, we believe it is imperative that Federal tax policy be geared to encourage a maximum level of capital formation in the vital transportation sector. We cannot, as a nation, afford to let our national transportation system deteriorate to the point where it cannot fully meet, in an efficient and effective manner, the needs that are imposed on it by the exigencies of our economic progress. For this reason, we urge that your Subcommittee recommend that legislation be enacted to reach the goals we have described.

Thank you for your consideration. I would like to request that this letter be made part of the permanent record of hearings on this question.

Sincerely,

PAUL J. TIERNEY,
President.