1722

S. HRG. 106—563

THE SUPPLY-SIDE REVOLUTION: 20 YEARS LATER

HEARING

before the

JOINT ECONOMIC COMMITTEE CONGRESS OF THE UNITED STATES

ONE HUNDRED SIXTH CONGRESS

SECOND SESSION

March 9, 2000

Printed for the use of the Joint Economic Committee

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON: 2000

cc 65-595

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, D.C. 20402

JOINT ECONOMIC COMMITTEE

[Created pursuant to Sec. 5(a) of Public Law 304, 79th Congress]

SENATE

CONNIE MACK, Florida, *Chairman*
WILLIAM V. ROTH, JR., Delaware
ROBERT F. BENNETT, Utah
ROD GRAMS, Minnesota
SAM BROWNBACK, Kansas
JEFF SESSIONS, Alabama
CHARLES S. ROBB, Virginia
PAUL S. SARBANES, Maryland
EDWARD M. KENNEDY, Massachusetts
JEFF BINGAMAN, New Mexico

HOUSE OF REPRESENTATIVES

JIM SAXTON, NEW JERSEY, *Vice Chairman*
MARK SANFORD, South Carolina
JOHN DOOLITTLE, California
TOM CAMPBELL, California
JOSEPH S. PITTS, Pennsylvania
PAUL RYAN, Wisconsin
PETE STARK, California
CAROLYN B. MALONEY, New York
DAVID MINGE, Minnesota
MELVIN L. WATT, North Carolina

SHELLEY S. HYMES, *Executive Director*
JAMES D. GWARTNEY, *Chief Economist*
HOWARD ROSEN, *Minority Staff Director*

CONTENTS

OPENING STATEMENTS OF MEMBERS

WITNESSES

PANEL I

PANEL II

SUBMISSIONS FOR THE RECORD

THE SUPPLY-SIDE REVOLUTION: 20 YEARS LATER

Thursday, March 9, 2000

Congress of the United States,
Joint Economic Committee,
Washington, D.C.

The Committee met at 9:00 a.m., in Room 562 of the Dirksen Senate Office Building, the Honorable Connie Mack presiding.

Senators present: Senator Mack.

Representatives present: Representatives Stark and Ryan

Staff Present: Shelley S. Hymes, James Gwartney, Chris Edwards, Colleen J. Healy, Kerry Fennelly, Kevin Doyle, Lori Hodo, Joseph Pasetti, Kurt Schuler, Lawrence Whitman, Howard Rosen, and Daphne Clones.

OPENING STATEMENT OF SENATOR CONNIE MACK, CHAIRMAN

Chairman Mack. Let's get started this morning. We've got about an hour and a half to devote to this, then there are some other hearings that are taking place this morning in the Banking Committee on the Notra Commission that's reporting on the IMF and the World Bank. So for those of us who enjoy economics, this is a great day for -- well, I won't go into that story.

I want to thank all of you for coming.

Twenty years ago, the United States was in the midst of an economic upheaval. Inflation and unemployment were high and rising - productivity and real incomes were falling - and the economy was in recession. The only thing falling apart faster than the economy was the nation's confidence in itself. While President Carter lectured the nation on the "limits to growth," Americans became deeply shaken about the future of their nation.

With mainstream economic theory offering little useful advice, Congress struggled to make sense of what was happening to the economy. Congress' in-house economic think tank, the Joint Economic Committee, concluded that Washington's mismanagement of the demand-side of the economy was distorting price signals, imposing heavy costs on producers, and causing people to work, save, and invest less than they would have otherwise.

As President Reagan pointed out, federal policy in 1980 could have been summed up in a few short phrases, and I quote: "If it moves, tax it, if it keeps moving, regulate it. And if it stops moving, subsidize it." Consequently, in 1980, the Joint Economic Committee's Annual Joint Economic Report unanimously called upon Congress to adopt, and again, I quote "a comprehensive set of policies designed to enhance the productive side, the supply side of the economy."

In breaking with the failed Keynesian policies of the past, Sen. Lloyd Bentsen, then Chairman of the JEC, hailed the report as, and, again, quote "start of a new era of economic thinking." Indeed, it signaled the start of the supply-side revolution in America. Today, principally as a result of the supply-side policies pursued by the Reagan administration, the U.S. economy is healthy. Both inflation and unemployment are low. Productivity is growing rapidly and incomes are rising.

Since the end of 1981-82 recession, the economy has grown at an average annual rate of 3.7 percent. By contrast, the annual rate of growth in the 17 years prior averaged only 2.7 percent. Further, since 1982: real per capita consumption has risen 57 percent; the Dow Jones Industrial Average has risen 11-fold; industrial production has jumped 79 percent; and employers have created nearly 35 and a half million new jobs.

We as a nation should take care not to forget the economic policies which led to these remarkable economic conditions. Those policies include: a sustained commitment by the Federal Reserve to maintain price stability; lower marginal tax rates; lower trade barriers; smaller government; and deregulation.

Economic growth and prosperity should never be taken for granted. Accordingly, today's hearing will briefly examine the economic history of the past twenty years and address what remains to be done if we are to keep the U .S. economy and the American people thriving in the years to come.

This morning I have -- it's a real personal pleasure to have an individual who has been a dear friend of mine for the 18 years that I have been involved in politics. And it would not be appropriate to have a hearing on the supply-side revolution without having Jack Kemp with us this morning. I had hoped that your sidekick, Senator Roth, would have been able to join us, but he's unable to, he has a conflict.

I remember the days, Jack, when you would say to your colleagues in the House, probably when the stock market was at 8 or 900 points, telling us why the stock market was going to go to 3,000. And you remember the abuse that you used to take from your colleagues about those statements then. You should feel very proud of what your endeavors have brought to this nation. And I'm delighted to have you here this morning and to make a statement about these past 20 years.

[The prepared statement of Chairman Mack, and the Joint Economic Committee staff report entitled "The Supply-Side Revolution, 20 Years Later," appear in the Submissions for the record.]

PANEL I

STATEMENT OF JACK KEMP, CO-DIRECTOR, EMPOWER AMERICA

Mr. Kemp. Thank you. Thank you very much, Mr. Chairman, and more important than your graciousness towards me is your hospitality towards ideas and a radical idea, at least as you put it at the time it was introduced. And albeit we are talking about a 20-year retrospective, many of the seeds were sown in the '70s by a lot of men and women who are not here and several of whom are here including my friends Steve Entin and Alan Reynolds, Dr. Murray Weidenbaum, and David Malpass, among others. And I couldn't mention Entin without mentioning our dear departed friend, Dr. Norma Ture who had so much to do with establishing the econometrics of supply side that I feel quite justified to mention his name up front.

I love your line. It isn't your line, actually, it was Reagan's line and when things move somebody wants to tax them. And if they keep moving they want to, you know, regulate it and when it stops moving they want to subsidize it. That really was the cul-de-sac into which we had wandered in the late 1970s with the resultant effect of the simultaneity of both inflation and unemployment which we were told, Mr. Chairman, could not be solved in an orthodox demand-side model. This is a very controversial subject. Members of the Clinton Administration, bless their hearts, will be here to say, this is the greatest recovery of the last 1,000 years, and it started with the election of President Clinton.

And we who served with Ronald Reagan are obviously as proud of what happened in '80, '81, '82, and '83, as they are. So it's a partisan debate in many ways, but it also has bipartisan and transcendent meaning to what we do in the 21st Century. And your willingness to entertain a 20-year retrospective on what happened in the early '80s and its meaning for the early 21st Century is seminal because there has been a paradigm shift as you alluded to, Mr. Chairman. I've got a wonderful statement, it's too long, it's filled with too many statistics and I'll just submit it for the record and just kind of, from my standpoint, as one person at the epicenter of this paradigm shift or revolution, as some call it, just kind of speak from the heart or maybe the gut or both.

I want to thank you for the courage that you show by asking Kemp to lead off.

[Laughter.]

Mr. Kemp. I have been called a witch doctor, a snake oil salesman, a river boat -- a dangerous river boat gambler, Howard Baker, my friend, had called me one time, and a voodoo economist. And I would say to the partisan friends on the left, that was just coming from our party. You ought to hear what they said.

I remember reading in Fortune Magazine or Forbes, I forget which, in 1979, circa '80, Kenneth Errol, Professor Kenneth Errol. I think he was at MIT, he might have been at Harvard, shoot me if I miss some dates and miss some places, but this is the essence of his statement.

He said, "we liberal economists are totally discouraged today because we cannot find a solution to the trade-off between unemployment and inflation." There was no demand- side answer. Because historically demand-side economics said, simply pump up money supply to expand the demand for output and production and you will get a growing economy and if it grows too fast, you slow down the money side, the expansion of money and maybe even tweak the tax code and you will slow down the economy or go fight inflation.

And we were caught in a conundrum or a cul-de-sac which meant that after Richard Nixon took us off the anchor to gold in 1971, and the money supply was unleashed, inflation resulted and as Art Laffer pointed out, among other economists, a combination of inflation in the '70s, nominal incomes rising, but as nominal incomes rose to keep up with inflation in a steeply graduated income tax rate system, people who started out in the 20 percent bracket soon found themselves in the 30 percent bracket, you didn't even need to work your way up the tax code, you could sit still whether you were a worker, a teacher, a longshoreman, an auto worker in Buffalo, New York, or an investor, and you soon found yourself in 40 and 50 percent marginal income tax rates.

In fact -- excuse me -- in fact, Mr. Chairman, in the '70s when you came to Congress and I came to Congress, the United States tax code labeled income from investment and savings as, get this, unearned -- unearned income. That's rather pejorative to people who are investing and saving to try to expand their business or their farm or their portfolio.

That statement by Kenneth Errol always struck me because as I make a little bit of hay from the left, let me make a little more from the right. I remember Friedrich von Hayek an icon of the conservative cause and a hero of mine and yours too saying in 1979, Congressman Stark, you old colleague, nice to see you. I mean, my young-old colleague and friend.

[Laughter.]

Mr. Kemp. I was making a point, Pete, that the left and the right were caught in a cul-de-sac in the late '70s because our friends on the left did not have an answer to unemployment that did not include inflation and our friends on the right did not have an answer to inflation that did not include rising unemployment. Both Hayek and Milton Friedman both suggested in the late 1970s that the solution to 15 percent inflation, or 14 percent inflation in late 1979 was a recession. In fact, one economist said, we would need a depression. Another economist on the right said, we would need a series of recessions to fight inflation because we had to ring it out of the system and get people to stop demanding pay increases. Well, tell that to the Buffalo auto worker or the Florida farmer, or the California teacher.

So along came a guy by the name of Mundell who, incidentally, was recently awarded the Nobel Prize and he and Art Laffer did a study of this and they came out with what they called the Laffer-Mundell hypothesis. I don't want to give all the credit, but they deserve a lot of credit. And it was highlighted in the Wall Street Journal thanks to Bob Bartley -- a lot of the guys sitting up here, and the theory was that the answer to inflation was sound, hard money. That inflation was a monetary phenomenon, ergo, it could only be solved by reducing the printing of money.

I don't want to get fancy, but the Fed buys bonds and sells bonds, it drains reserves, and it expands reserves, so you fight inflation with monetary policy by selling bonds in their portfolio and draining reserves out of the system to make the currency more valuable. And the solution to the supply side of the economy, or the unemployment and recession side of the economy was less regulation, i.e., decontrol of oil and gas and other things like airlines which Jimmy Carter should get credit for. But it meant a sharp reduction in the tax rate, and it was all modeled on what John F. Kennedy had said at the New York Economic Club in 1962 when he said, "it's a paradoxical truth that high tax rates cause low tax revenue and the best way to get more revenue is to expand the economy. We're not seeking a deficit, but we'll take a temporary deficit in order to get future growth." And that was radical. And we picked up on that, you and I introduced, along with Senator Roth, and a lot of other crazy voodoo economists something called, you know, the 30 percent rate reduction, we took it from John F. Kennedy.

And Volcker came in and stopped inflation. Some of us thought he went overboard to a deflation, which is the opposite side of inflation, but nonetheless, the combination of the rate reduction with Paul Volcker's monetary tightness stopped inflation, got the economy growing, and inflation went down, unemployment went down, and there's the paradigm shift and Lloyd Bentsen for whom I have high regard in the 1980 annual report, I'm going to just sail through this, Mr. Chairman, I'm not going to read the whole thing, he said, "this signals the start, as you pointed out, of a new era of economic thinking. The past has been dominated," he said, "by economists who focused exclusively on demand side. They were trapped into believing that there's an inevitable tradeoff between unemployment and inflation." And he said, "This is great. America does not have to fight inflation during the 1980s by pulling up the drawbridge with the recession and will do millions of Americans to unemployment," and then he goes on to the Joint Economic Committee's report. And he finishes by saying, "This is a call. This is a clarion call." This is Bentsen talking, not Kemp or Mack, or Roth, and Reagan, albeit Reagan ran on it. Lloyd Bentsen said, "This is a call to lift the anchor" and in President Kennedy's words, "to get this country moving again."

So I think Reagan deserves some credit. I'll say this in my conclusion. I think President Clinton deserves credit. He appoints or reappoints Alan Greenspan, he appoints Bob Rubin, now Larry Summers, I can disagree with some of the things that have happened, but I cannot disagree with protecting the strong dollar as David Malpass has pointed out so often and signing a cut in the capital gains tax. That was Bill Steiger's bill in 1979 when the capital gains rate was 50 and he cut it to what, 28, and then Kemp- Roth took it down to 20. He appointed Rubin, Summers, Greenspan, signs a capital gains tax cut, passes the Roth IRA, I wish Bill were here, $2,000. You want to bring the middle class and working folks into the marketplace, you want to spread capitalism, lift the ceiling on the Roth IRA. No tax consequence on the sale of an asset out of a Roth IRA.

My young son is here today, and I hope he meets your young son running for office, but he's got a Roth IRA. I don't. I can't get one, because I make too much money. But if you want to increase savings, increase the reward for saving. You want to increase investment, increase the reward for investment. If you want to increase entrepreneurship, create more employees, create more entrepreneurs. It's relatively as simple as that.

Now, a couple of prescriptions on the supply-side. My walk on the supply-side this morning, and I'll jump out of here and let real economists talk.

Number one, we should reform the tax code and not just cut taxes. Excuse me, Governor Bush, I support cutting rates anytime, anywhere, anyplace, but we should reform the code, it stinks, it's counterintuitive, it's counterproductive, it's corrupting decisions. I don't know what the top rate should be, Steve Forbes says 17; George Bush says 33; President Clinton says 39.6; John McCain says 39.6, you know, the rate should be closer -- I don't know, Murray, what do you think, 25?

Dr. Weidenbaum. Sounds good.

[Laughter.]

Mr. Kemp. No, in peace time the top tax rate should be no higher than 25 percent according to Weidenbaum, Kemp, and Lord Maynard Keynes. Do you know when he said that?

Chairman Mack. Jack --

Mr. Kemp. In peace time there should be no tax higher than 25 percent.

Chairman Mack. -- we need to get you --

Mr. Kemp. Yeah. Social Security, let working folks invest some of their money not in T-bills at a 2 percent rate of return on average over the last 60 years, let them invest in a Schwab or a Fidelity or a -- let me get everybody in here -- a Merrill Lynch, or I don't know, the California -- Pete Stark is from California. The California State Teacher Pension Fund is invested in stock and bonds. We let the teachers and municipal employees of California invest in stocks and equities and bonds, why can't the American worker take a part of his or her payroll tax at 13 point what 5 percent, and put part of it into a growth- oriented -- I'd put it in a Roth IRA if it were me, but I know we can come up with a better way to spread capitalism to working folks.

And then finally, Mr. Chairman, this is the most important part of my speech -- my remarks, my walk on the supply-side. We've got to send a signal to Mr. Greenspan that inflation is not caused by too many people working. It's not caused by a stock market at 11,000. He should be managing the value of the currency. We elected the president, Reagan and Clinton, to have a chairman of the Fed answerable to no one other than his own conscience for one reason only, to protect and defend and preserve the value of that little piece of paper that is a contract between the United States Government and the people of America, and to devalue it or to debase it is to break the law or to cause a deflation that hurts the farmer and working folks and the poor or to fight the stock market or rising asset values or to worry about irrational exuberance, I want to say to my old friend Alan Greenspan, who may never read or see these words, Mr. Chairman, there is no reason to raise interest rates. There is no inflation out there. The problem is not inflation. We don't need a Greenspan standard. We need a -- perish the thought, a four-letter word, at 9:15 in the morning, we need something anchored to the ultimate value of the earth which is commodities and the price of gold. And at that level it tells me, we should be not raising interest rates, we could be lowering interest rates, we should be cutting tax rates, and we should tell the IMF, quit running around third-world countries and telling them to boost their exports by devaluing their currency and raising taxes to take it away from the rich.

Chairman Mack. Jack --

Mr. Kemp. Do you think I feel strongly about this. Thank you, Mr. Chairman, for the extra time.

Chairman Mack. Jack, I thank you for your comments this morning. The last thing I would say before we go to the next panel is that I made comments about your prediction that the stock market would go to 3,000. And I also remember your constant reminder to folks that there are more ways than either raising taxes or cutting spending to balance the budget.

Mr. Kemp. Right.

Chairman Mack. And that that would be accomplished through growth.

Mr. Kemp. Uh-huh.

Chairman Mack. And so, once again, I think you should feel very much justified --

Mr. Kemp. Thank you.

Chairman Mack. -- in the constant reminders that you have given, not only while you were in the Congress, but since you've left.

Mr. Kemp. That's fine.

Chairman Mack. And we appreciate greatly the role that you have played in all these.

Mr. Kemp. Thank you.

Chairman Mack. Thank you for being with us.

Mr. Kemp. And it's nice to see you, sir. Thank you. Thanks again for having these hearings. Little noted, but long remembered.

[The prepared statement of Mr. Kemp appears in the Submissions for the Record.]

Chairman Mack. Thank you. All right. Then if the gentlemen who are going to be on the next panel would come on forward, you know who you are.

PANEL II

Chairman Mack. Just to say again to each of you, thank you for your participation this morning. I think it is going to be an interesting discussion. I have -- as I mentioned earlier, we have another hearing on the Senate side of the Banking Committee this morning in which we will be hearing from the Meltzer Commission on issues having to do with the IMF and the World Bank and reading some of the testimony and listening to some of the discussions before that took place, I am stunned sometimes by the -- and this is a polite way to say it, the strength of feelings that are expressed by economists one towards the other. And so, again, I appreciate all of you being here this morning.

We do have with us Dr. Martin Baily who is Chairman of the Council of Economic Advisers, and we do appreciate so much that you would participate this morning.

Dr. Baily. Thank you.

Chairman Mack. We have Dr. Robert Solow, who is the Russell Sage Foundation. We also have Dr. Murray Weidenbaum, who was the Chairman of President Reagan's Council of Economic Advisers; Stephen Entin, Executive Director, Institute for Research on the Economic of Taxation; David Malpass, Chief International Economist, Bear Stearns; and last, but certainly not least, Alan Reynolds, Director of Economic Research, The Hudson Institute.

So, again, I appreciate you all being with us this morning and --

Representative Stark. Mr. Chairman --

Chairman Mack. Yes.

Representative Stark. -- if I could just be recognized for a disclaimer in defense of Dr. Solow, please.

Chairman Mack. Okay.

Representative Stark. For a second.

Chairman Mack. Absolutely.

OPENING STATEMENT OF REPRESENTATIVE PETE STARK, RANKING MINORITY MEMBER

Representative Stark. I happen to have studied my preliminary economics under Mr. Samuelson at his distinguished institution and took a course from Eli Shapiro in 19 -- maybe '52 or '53 as I was about to enter graduate school, when he predicted that the Dow Jones would go to 500 and we thought he was nuts.

[Laughter.]

Representative Stark. But I would like to say that Dr. Solow has nothing to do with the lack of knowledge that I have for economics. I was going to ask Mr. Kemp whether he remembered Dr. Jonathan Swift and his modest proposal, which was an economic proposal right on a par with Laffer's and the Kansas State School Board, but I didn't want Dr. Solow to have to suffer from what was obviously an outlier in the product of MIT. I welcome him back. It's good to see him after a few years.

Chairman Mack. Very good. Thank you, Pete. And, again, I think we will start with Dr. Baily.

STATEMENT OF DR. MARTIN BAILY, CHAIRMAN, COUNCIL OF ECONOMIC ADVISERS

Dr. Bailey. Thank you. I am happy to be a former student of Dr. Solow, and I think I try to take advantage of his wisdom.

It's a great privilege for me to be here and to get a chance to testify on the subject of supply-side economics. I think the Joint Economic Committee is to be congratulated retrospectively on its 1980 report on this topic and indeed for policies to increase supply and I think it's very fitting to have this hearing now to look back over the past 20 years.

I have prepared written testimony. Like Mr. Kemp's, it's relatively long, but I would ask if it could be placed in the record. I'm going to just touch on a few high points.

The first thing I want to say is that demand-side policies are important too and I think we should give tribute particularly to monetary policy in the last good many years that have contributed to price stability and at the same time allow this economy room to grow and achieve the kind of performance that we've had.

I think it's also worth noting that fiscal policy sometimes is needed to affect demand. It does have effects on demand that need to be taken into account as well as its effects on supply, and the current budget surpluses that we have are allowing us the option should we need to do so, of using fiscal policy to stimulate demand. I don't think that's what we need to do right now, but it might be sometime in the future.

But I'm going to focus here, I think appropriately, on supply, and I'm going to argue that there are some important policy lessons that we can learn by a comparison of the two, I think, distinct expansions of the '80s and the '90s. There were some common elements in those expansions. In both of them we had a lot of technological innovation, a lot of private sector dynamism, we had regulatory reform which started in the 1970s and continued in the '80s and in the '90s. We had policies to engage the U.S. economy with the global economy and to encourage competition. And I think all of those things were present in both of those expansions. But I think the two expansions differ in important respects. The supply-side policies of the 1980s did appropriately tackle some distortions that were induced by the tax system. They introduced some greater incentives for work, and I'd mention one that might be neglected in the general discussion, which is the earned income tax credit that was introduced by President Reagan and has been greatly expanded in the 1990s and has encouraged work effort by millions of Americans.

But those supply-side policies involved very large tax cuts and combined with continued increases in spending during the 1980s they resulted in very, very large budget deficits. We actually quadrupled the national debt to $3 trillion by 1992.

We did get strong economic growth following the very deep recession of 1982, and that growth, I think, was in part driven by the demand effects of those expansionary fiscal policies. But as the stimulus wore off from the growth in spending and the effect of the tax cuts, this expansion flagged. It was, I think, dragged down somewhat by high interest rates, and as it matured, we saw the pace of investments slow, we saw the pace of R&D spending slow, capacity growth slowed to a crawl, and productivity growth in that expansion became progressively weaker – less than 1 percent a year over the last four years of that expansion. And I'm going to point particularly to productivity growth as a key variable that we need to look at to see which supply side policies are working and which ones are not working.

I think, by contrast that in the 1990s expansion, we've seen strong private sector growth, especially investment, which has been encouraged by the fiscal discipline that we've had and the shift toward fiscal discipline in the 1990s, and the lower interest rates that have resulted from that. Real interest rates have been 30 to 50 percent lower in the '90s than they were in the 1980s and we've seen very strong investment in part as a result of that, 12.3 percent growth in investment and equipment and software. We've had growing strength in R&D spending that's really accelerated over the course of this expansion, capacity growth has kept pace with output, and most importantly, productivity growth has actually strengthened. It's been running at about 3 percent a year for the past four years. We saw a spectacular figure in the fourth quarter of 1999 of 6.4 percent. I don't think we can expect that to continue, but I think there are some clear signs that productivity growth, the trend of productivity growth, may have improved. Certainly we've seen over the past four years that that's the case.

The unemployment rate has fallen, dropping to around 4 percent, which is lower than any rate we achieved in the 1980s. The thing that's very striking is that those low unemployment rates have been achieved with low and declining core inflation rates. The core inflation rate, the

CPI taking out the effect of food and energy, dropped to 1.9 percent in 1999, its lowest level in 35 years.

So, there have been very distinctive features of this 1990s expansion: low inflation, low unemployment, and rising productivity growth. The other thing too that I should mention is that we've seen broad-based income growth; we've seen across-the-board for all income groups since 1993, we've seen increases in family income, robust increases in family income.

So what are some of the lessons that I think we should learn from this comparison? Clearly technology, information technology, has been important in the '90s expansion. It has been the private sector that should get a lot of credit for the performance we've seen – American business and American workers. But I think also the policy environment has helped. We've had a favorable interaction, where good policy combined with good opportunities in the private sector have given us more growth, lower deficits, and finally budget surpluses together with more investment.

The second lesson is that sometimes we think that if we just raise revenues, then the Government is going to spend it. Well, in the '90s we've seen a substantial rise in revenues. That was needed to balance the budget and return us to surpluses, but spending as a share of GDP has actually fallen and it's projected to continue to fall going forward.

Third, some people have argued that this is -- you have argued yourself, Mr. Chairman -- that this is in a way just one expansion. I pointed out, I think, what some of the important differences have been between the '80s expansion and the '90s expansion, but I think we should also remember that there was a recession, a noticeable recession that started in 1990. We had unemployment at or above 7 percent for 21 months. So I think we shouldn't forget that a lot of workers were out of jobs at that time. That was a persistent recession with a lot of turmoil in financial markets that lasted quite some time.

So the bottom line, I think, is that supply-side policies are important and are needed, but I think the right supply-side policies are ones of fiscal discipline, investing in people and technology, and encouraging trade and competition. These have worked, I think, and these are the right kinds of supply-side policies to continue into the future to make sure this line expansion continues into the future.

Thank you, Mr. Chairman.

Chairman Mack. Dr. Baily, thank you.

Dr. Weidenbaum.

[The prepared statement of Dr. Baily appears in the Submissions for the Record.]

STATEMENT OF DR. MURRAY WEIDENBAUM, CHAIRMAN, PRESIDENT REAGAN'S COUNCIL OF ECONOMIC ADVISERS, 1981-1982

Dr. Weidenbaum. Thank you, Mr. Chairman. By the way, I believe in response to Mr. Stark's concern about Jonathan Swift, and I was a little young at the time, but as I recall he urged the perfect form of taxation was a tax on women's beauty self-assessed.

[Laughter.]

Dr. Weidenbaum. There also was a counterpart tax on male prowess similarly assessed.

Representative Stark. Very creative guy.

[Laughter.]

Dr. Weidenbaum. Yes, indeed. An inspiration to economists ever since.

I submit, Mr. Chairman and Mr. Stark, that the genesis of the prosperity the United States is now enjoying was the supply-side policies introduced by Ronald Reagan. Did they work to perfection? No. Did those supply-side policies point the U.S. in the right direction? Yes.

We shouldn't forget that in addition to domestic prosperity we got something else from those supply-side policies, winning the Cold War.

I submit that the large and rapid increase in defense spending put a stress on the Soviet economy that it could not stand and thus was a key factor in the demise of the Soviet Union and the end of the Cold War. We should also recall that that unprecedented peace time military build up occurred simultaneously with success in bringing down what at the time was painful escalating double-digit inflation.

My colleagues on this panel will cover in detail the specific supply-side policies. My assignment was regulation. I just wanted to say in summarizing my full study on the subject which you've already published, I am pleased to see a sea change has occurred in public attitudes towards regulation since 1980. Command and control is no longer used in polite company. Proponents of regulations are now obliged to talk about incentives and alternatives. The most significant accomplishment occurred during the Reagan presidency. No new regulatory agency was established nor was any regulatory program expanded, yet the environment is cleaner, the workplace is safer, and progress made towards other social goals.

Finally, economic deregulation has injected more competition into the economy with strongly positive results. Thank you very much.

Chairman Mack. Thank you.

Mr. Entin.

[The prepared statement of Dr. Weidenbaum appears in the Submissions for the Record.]

STATEMENT OF DR. STEPHEN ENTIN, EXECUTIVE DIRECTOR, INSTITUTE FOR RESEARCH ON THE ECONOMICS OF TAXATION

Mr. Entin. Thank you, Mr. Chairman. I was here on the committee staff at the time that these reports were published and I had a hand in writing them. It's nice to see that someone has remembered that they exist.

I also went to the Treasury with Ronald Reagan and had a hand in implementing some of the recommendations of the Joint Economic Committee Report in the 1981 tax cuts.

My full report goes into the horrors of the 1970s --

Chairman Mack. Could you just hold for just a second, and he's going to take it from his time. But I do think it's important to stress that that report in 1980, as I understand it, was a bipartisan report. While I quoted Senator Bentsen, it was clear that his efforts to try to include all the different members, both House and Senate, Democrats and Republicans alike in the development of that report, I think is an important thing to note. I think also what it probably underscores and maybe is not thought of is how deep and economic problem was facing the nation at that time. It was so dramatic that individuals who many times won't give each other the time of day were prepared to sit down and say, we've got to do something different here. And I just -- again, I wanted to underscore the point that it was a bipartisan support. I don't know that there was anybody that was in opposition to it, but I didn't look that closely to it. But I know that, again, Democrats, Republicans, House and Senate members alike supported that report. And I apologize for breaking in on your comments.

Mr. Entin. No, they're very well taken comments, Senator Mack. The report was bipartisan. In fact, the '79 and '80 reports were both bipartisan, and were a reaction to what was going on in the 1970s economy. Something had to be found to break the back of the double-digit inflation, the double-digit interest rates, and the base-rate of unemployment that was almost three times that of the early 1960s. The policy mix that was developed in response to that set of economic situations split economic policies. Some were aimed at fighting inflation and some were aimed at promoting real growth. Prior to that the assumption was that policies only worked on demand. If you reigned in demand to fight inflation you were going to worsen unemployment and if you pumped up demand to get rid of unemployment, you were going to worsen inflation. There was no way out.

The new policy mix that was developed involved setting monetary policy the goal of bringing down the inflation rate. That was the Fed's only role to be played. It was to stop focusing on micro-managing real growth and to keep the dollar sound.

Government spending was to be reduced. Tax rates were to be reduced at the margin where they affect incentives to try to expand real output. Regulation was to be brought under control.

We did achieve that in 1981 and the economy did turn around, although the Federal Reserve had jumped the gun on the tight money and gave us the '81 recession. It does appear that the higher deficits, if you were a Keynesian, pumped up demand during the period. The deficits were due to the collapse of the inflation rate and the fact that the budgets assumed that it would be much harder to reduce inflation. So we did not cut spending as much as we intended to in real terms.

The recession also reduced revenues. But that was a passive result of the recession. It was not an active effort to increase the deficit to stimulate the economy. Indeed, the monetarists at the time had pointed out that you cannot stimulate the economy through demand management, through tax and spending changes because the Government simply ends up borrowing the money back. What we did do was change the incentives.

But we didn't keep those incentives in place. So to my supply-side friends I would like to say that we still have a lot of work to do. The 1981 tax cuts, for businesses consisted of faster depreciation and lower tax rates, and for individuals, lower marginal the tax rates. Both sides, businesses and individuals, investment and labor, got a tax cut.

But after 1981 we reversed policy. The Tax Equity and Fiscal Responsibility Act of 1982 was a tax hike on investment. The 1983 Social Security amendments were a tax hike on seniors. The Deficit Reduction Act of 1984 was a tax hike on real estate, all in the name of fighting the deficit. The 1986 Tax Reform Act produced lower rates and a broader tax base. But the base doubled up the taxes on capital and was a step in the wrong direction. It ruined the tax base. Then we had the tax rate hikes of 1990 and 1993.

That is why the economy got weaker toward the end of the 1980s; we backed off the program. The only reason we have a good rate of investment today is that Mr. Greenspan has brought down the inflation rate. If you take out the inflation change, the tax treatment of capital today is worse than in 1980 in the tax code. So what do we need to do? We need to fix that through fundamental tax reform, through privatizing Social Security, through rate cuts, but also through base adjustments with higher IRAs and faster depreciation write-offs.

Thank you.

[The prepared statement of Mr. Entin appears in the Submissions for the Record.]

Chairman Mack. Thank you very much. I'm going to skip down to the end of the table. I don't want to make Dr. Solow have to –

Dr. Solow. No, no, I would rather come -- I want to hear what these people --

Chairman Mack. We're going to give you an opportunity right now.

Dr. Solow. Okay.

Chairman Mack. Pull the microphone, if you would, a little closer to you.

STATEMENT OF DR. ROBERT SOLOW, NOBEL LAUREATE, RUSSELL SAGE FOUNDATION

Dr. Solow. I'm sort of here under false pretenses, Mr. Chairman. I pretend to be Robert Solow. In fact, I must be Alice because this is Wonderland.

[Laughter.]

Dr. Solow. The best summary of supply-side economics I know was uttered by Charlie Schultze, whom some of you will know as former Chairman of the Council of Economic Advisers, and a former director of the budget. He said, "There is absolutely nothing wrong with supply-side economics that dividing by ten wouldn't cure."

The problem is not that anybody is against incentives. The notion that incentives were invented in 1980 is a little odd. The only experience I have in Washington is at the Council of Economic advisors as a working stiff in 1961 and 1962. We successfully promoted the Investment Tax Credit because we thought it would provide financial incentives. We less enthusiastically argued for accelerated depreciation for tax purposes for the same reason. Incentives were invented and studied carefully, more than 100 years ago by economists.

If you had asked anybody out there in the street in 1980, what was the essence of supply-side economics the answer would have been (a) the Laffer curve: cutting taxes would increase revenues and we all live happily ever after. We know that didn't happen. There were a million excuses, of course, why it didn't happen. If I could rewrite history that way, every one of my children would be rich right now.

We do know that we ran deficits, we quadrupled the debt as Dr. Baily mentioned, we caused ourselves a lot of trouble. The other piece of supply-side economics was, that all of these incentives were going to do wonders for productivity increase. They didn't. Productivity grew during the decade of the 1980s at about the same rate as it had been growing for the previous ten years or so, slowing down slightly. Productivity did not begin to accelerate seriously until about 1996. Whether that will last, by the way, I don't know, you don't know, and I don't think God has made up his or her mind yet as to whether that acceleration is going to last. But it happened in 1996 and it owes nothing to policies that took place in the 1980s. I'm not sure even about policies that took place in the 1990s. For sure, however, it can't be bad to provide incentives for research and development. We have also, I think largely because of lower interest rates and continuing prosperity, had a very high rate of plant and equipment -- especially equipment -- investment in the U.S. in the past seven or eight years. We did not generate any big increase in the ratio of plant and equipment spending to GDP during the 1980s.

By the way, I found an obscure series, now no longer collected, about net business formation, how many business failures there are, how many new businesses are formed, what's the difference between them. The rate of net business formation was lower in 1989 and 1990 than it had been in 1980. It fell further in 1991 and 1992 and then up-ticked slightly in 1994 and the series was discontinued, probably for good statistical reasons. But if you asked what the supply side revolution promised, it really did not deliver. There really is no point in speaking about an expansion beginning at the end of the recession of 1981 and 1982; you don't measure growth from the bottom of one recession to the top of some following boom.

The recession in 1981-1982 occurred because -- this is an important point, maybe the last point I ought to make -- as several people have said, Paul Volcker was given the job of stopping what was an inflation that nobody liked. He was faced with a Congress that was generating an expansion of aggregate demand. It was generating it by cutting taxes with no corresponding reduction in expenditures. That made the task facing Volcker and the Fed very hard. They did what they were asked to do, and stopped the inflation. In the course of doing it a recession was created. It's not the first time that has happened, and it's not the last time that it will happen, but they did it.

It's very interesting. We give Alan Greenspan and the Fed today a lot of well-deserved credit for sustaining this expansion by an exploratory policy of keeping interest rates as low as it appears they safely can.

That was made possible, I think, by the 1993 budget deal. It gave the Fed some assurance that fiscal policy would no longer tolerate or encourage chronic deficits. It's important for you to remember that during the 1980s Paul Volcker twice a year appeared before Congress –

Chairman Mack. Dr. Solow, can I get you to finish your thought now so in fairness to the others we can move on.

Dr. Solow. -- appeared before the Congress and offered that same deal to the Congress. If you will tighten fiscal policy, I will ease monetary policy. And he had no takers. He should have had takers. He didn't.

Chairman Mack. Alice, we want to welcome you to the panel today.

[Laughter.]

Dr. Solow. Thank you. I shouldn't have eaten those mushrooms.

[Laughter.]

Chairman Mack. David Malpass.

STATEMENT OF DAVID MALPASS, CHIEF INTERNATIONAL ECONOMIST, BEAR STEARNS & CO.

Mr. Malpass. Thank you, Mr. Chairman and members. I would like to read the headings on my statement and submit it. The headings are "The Core of the Revolution" where I try to describe what's important in the new ideas that came out of 1980. There was a "Slow Start" as the supply-side revolution began spreading to other countries. We should recognize there's been a huge spread of supply-side thinking around the world, and has been accelerating in the 1990s with things like the NAFTA cut in tariffs between the United States, Canada and Mexico.

The next heading is "Hurray, A Tax Revolution outside the U.S." I tried to describe the tax cutting that is going on in huge measure – productivity-oriented tax cutting in Ireland, in Germany, in Italy, in Australia, in France, in Canada. These countries are by and large governed by left- leaning governments who are using purely supply-side rhetoric in order to describe why they're doing this. They aren't trying to increase their deficits, they're cutting tax rates because they think it will add to tax revenues over time and will create new jobs. They're using exactly the language from the 1980 Joint Economic Committee Report.

Another part of my testimony deals with "Hurray, First Steps in a Sound Money Revolution." Critical in 1980 was the recognition that you could only grow if you had sound money. It's taken 20 years almost for those ideas to spread outside the United States, but they're spreading fast. In Europe, all of the weaker countries that had such a hard time in the 1980s and early 1990s with inflation and with weak currencies are joining into the Euro. And the Euro is spreading. In Latin America we see countries stabilizing their currencies against the U.S. dollar and setting up monetary programs that will give long-term currency stability to them for the supply-side purpose of increasing investments. So, hurray, first steps in the sound money revolution.

Countries around the world are trying to create jobs by cutting taxes and installing sound money. That's the supply-side revolution. We should now be focused on how to make it spread faster. I don't think there should be any doubt about the revolution having been hugely successful in both the Reagan Administration and in the Clinton Administration. Think of how financial markets view the Clinton Administration; what were the key economic elements of what's happened in the Clinton Administration? There was the strong dollar policy that Robert Rubin set out. There was NAFTA, which Clinton didn't start but was able to finish. There was the capital gains tax cut in 1997. And there was President Clinton's very important statement that the era of big government is dead. So we have the supply-side revolution expanding powerfully in the United States.

The final part of my testimony is "lost opportunities." It addresses the path ahead, what could we do to do more. Two key things are still blocking the spread of the supply-side revolution, both in the U.S. and outside the U.S. First, many countries, our own included, use the static model in assessing what a tax cut will do. So even the Republicans now in the latest effort are talking about an expansion of the IRA. That's a wonderful thing to do, but the way they're explaining it is in these terms: how much revenue will be lost under a static model by the spreading of the IRA? I heard a number this morning on the radio that it was going to lose a certain amount of money. Clearly, if you're cutting tax rates for the purpose of creating more growth, it's not going to lose revenue, it's going to gain revenue. We're still using the static model which assumes people don't change any other behavior, all they do is stop paying a given tax, causing a loss to the Federal Government. This false modeling is done in foreign countries too. They have a very hard time finding the way to get an efficient tax code because they score it incorrectly.

A second lost opportunity is the confusion over inflation. Countries around the world are practicing the Phillips Curve. We err into that in our own country. That's stopping countries from realizing that they can get fast growth and a lot of job growth and low inflation all at the same time.

The key idea elements of the supply-side revolution aren't embedded enough. I give some other specific examples abroad of where the supply side revolution is not penetrating. Japan is a prime candidate, but also South Africa. Argentina is right now trying to raise taxes to reduce the fiscal deficit, and it's not working.

With that, I'll conclude: We had supply-side revolutionary ideas in 1980. They've worked very well. They've spread around the world. There's lots more to be done. There are a few specific blockages that are keeping it from being as effective as it could be. We should say, hurray, there's been a lot of progress and I think will be a lot more -- thanks, Mr. Chairman.

[The prepared statement of Mr. Malpass appears in the Joint Economic Committee staff report, "The Supply-Side Revolution: 20 Years Later," found in the Submissions for the Record.]

Chairman Mack. Thank you.

And Mr. Reynolds.

STATEMENT OF ALAN REYNOLDS, DIRECTOR OF ECONOMIC RESEARCH, THE HUDSON INSTITUTE

Mr. Reynolds. Thank you, Mr. Chairman. My paper -- my written testimony, is primarily about monetary policy, and that is the "demand side." But it took a long time for us to figure that out. We were, in the late '60s, early '70s, trying to use almost any instrument to control inflation other than monetary policy. We used surtaxes in '68, wage-price controls in '71, guidelines thereafter. The policy mix is critical, and it starts with Bob Mundell saying, in '71, to an empty house that what we needed to do was to pick the right tool for the right job. The right tool for preserving the value of money is monetary policy, period, end of story. And that frees up fiscal policy and deregulation to do microeconomic things – to do structural reform to remove impediments to growth, and to improve incentives. And learning that was the key to what's happened since.

My story pivots around three -- five graphs. I'm going to start with the third, which if you want to look at it, it's on page 14. That simply plots real GDP against inflation and shows that they invariably move in opposite directions. When inflation is high, economic growth is poor. When economic growth is strong, inflation is low. The very popular metaphor that inflation is a consequence of rapid real growth is not only wrong, it's backwards, it's backwards.

Figure 4 compares the "real" Fed funds rate. The Fed funds rate minus inflation – to real GDP growth. And this is important because Dr. Baily was saying that real interest rates depend primarily or largely on fiscal policy and hence he would say they are low. Well, real interest rates were not low in recent years; they're fairly high. I regard this as a sign of responsible monetary policy. When the real economy is growing rapidly, it turns out real interest rates have been in sync with that. At a 4 percent real growth, we have about a 4 percent real interest rate. That makes sense because the real return of capital is high in such times and lower during recessions.

In the past, the real interest rate was very volatile. The Fed often kept the funds rate below zero in real terms and that was very, very inflationary.

Figure 5 just does the same thing with nominal funds rate and nominal GDP. It shows again that the rate used to be even lower than nominal GDP growth and was a stimulus. Then it rose very high and then since about '83. You can use the growth in nominal GDP to predict the Fed. That's a good thing that the Fed has become more predictable. It makes our life simpler. But rather than focusing on nominal GDP, I think they should focus only on the inflation component of that.

I want to end very quickly with a comment on the other comments. A lot of people have said something wonderful happened in '93. I think that's pushing it a little. If we're going to compare '93 to '99, we should compare it '83 to '89 – both were expansion periods. And if you do that you'll find that the ratio of savings to GDP was 17.7 in the earlier periods, 17.4 in the latter, about the same. Real GDP growth was 4.3 in '83 to '89, 3.7 in '93 to '99, about the same. Productivity was 1.6 in '83 to '89 and 1.8 in 1993 to '99; it's higher in recent years due to information technology being so important. Basically those are two very terrific periods, and I think they both share the same thing. We are still focusing fiscal policy on incentives, i.e., the capital gains tax rate of Fed of '97. It certainly gave me an incentive invest in IPOs and things like that. And we are still using monetary policy to keep the dollar steady and stable. We're not pursuing a "talk the dollar down" policy. So I think we're really talking about one continuum where it went slightly off track in the early '90s, partly because of Gulf War commodity speculation fooled central banks into thinking there was more inflation than there really was.

Thank you very much.

[The prepared statement of Mr. Reynolds appears in the Joint Economic Committee staff report, "The Supply-Side Revolution: 20 Years Later," found in the Submissions for the Record.]

Chairman Mack. Well, I thank you, Mr. Reynolds for your comments and for all of you frankly and for trying to keep within the tight time frame that we gave you and I apologize for having to limit you to that.

I guess maybe just a couple of thoughts. One, I don't -- there may be some people out there who implied that incentives, the idea of incentives was created in 1980, but I think the important thing is to recognize that the importance of incentives were forgotten in the 1970s. and that the idea had to be reinserted into the U.S. economy. And, secondly, there was some discussions about the various aspects of the proposals that were put forward. There's no question in my mind that there was a clear shift in attitude with respect to monetary policy from the '70s to the '80s. I mean, the just didn't happen because I decided it.

A group of people said that the fundamental approach that was being used was just wrong, it wasn't working, and it needed to be changed. And, again, I give President Reagan the credit for the commitment to wringing out that inflation and getting this country moving again.

I remember the huge debates that took place in the '80s over free trade which on some hand there's an implication here that there was general and universal acceptance of the notion that we should be engaged in free trade. I remember. Dr. Solow says he remembers what happened prior to the 1980s. I remember very well the debates that took place in the Congress about protectionist legislation. And Ronald Reagan stood the ground, the pressures were enormous, but the benefits for having stood the ground have been enormous as well. And so I just -- I could go on with the fights that we have had and will continue to have over regulation, the fights that we've had and we will continue to have over lower taxes, lower tax rates, providing incentives, and I reject out-of-hand what I would consider a foolish notion that said by lowering the rejection of the idea that was said, the rejection of the idea that lower tax rates can produce higher revenues if it didn't happen is just, again, that comment is fundamentally wrong. And one has to look at the capital gains tax issue which, by the way, was started in '78 and '79, and, again, I give credit to those who recognized in '78 and '79 the importance of reducing the tax on capital formation in this country which, again, I think created the basis upon which we created a venture capital market that was able to fund the new ideas and the new technologies that were developed. That's the basis under which I think we've experienced a tremendous amount of growth in this economy.

You each may want to engage in responding to the comments that the other made, and, you know, I'm not going to keep you from doing that, but I would be interested in knowing what each of you thought was the single best thing that we could do to boost the economies long-term growth potential? And I'll just go right down the -- Dr. Baily, why don't you respond to that?

Dr. Baily. Well, as I indicated earlier, I think the basic policy framework that we are under right now is sound. And I think the number one thing we can do is to make sure that we don't drift back into an era of very large budget deficits that drain saving away from productive investment. And I think that's probably the number one priority.

I think this can be done, while at the same time maintaining, as I said, investments in people, training, and education, investments in technology. Those things, I think help. They help people to be more productive, they help the economy to be productive. I think regulatory reform is important. I think that's something we've continued to see. As you said, it started in the 1970s, it continued in the 1980s, and we've seen the Telecom Act which was bipartisan in 1996. So, again, we want to make sure that businesses continue to compete effectively against each other, I think that can be done, while maintaining appropriate concern about workers and industries that may need some help.

Chairman Mack. Thank you. Dr. Weidenbaum?

Dr. Weidenbaum. Thank you, Mr. Chairman. First of all, I think we need tax cuts coupled with tax reform to encourage saving. That key structural change would help reduce a rapidly expanding trade deficit.

Two, we need a new approach to regulatory reform. I think the current effort has run out of steam. The new approach that I urge is to focus on the early stage of the regulatory process where Congress enacts the law. So many of the problems we're facing in reducing the burdens of regulation result from strategies enacted in regulatory statutes often prohibiting the regulatory agencies from even considering costs in trying to balance benefits and costs.

I think that too much of the role of reform has been placed on the regulatory agencies and frankly the spotlight should come on the deficiencies here in the Congress in enacting the basic statutes on regulations.

Chairman Mack. Very good. Mr. Entin.

Mr. Entin. I think we need two things. I think the Federal Reserve has to keep fighting inflation, but not to fight real growth in the process.

Second, we need to get away from a tax system which taxes income consumed once, income saved twice, income put through the corporate sector three times, and income left in an estate four times. By fixing that, we'll lower the cost of capital and the cost of labor. We will increase the incentives to add to the productive capacity of the economy, which will help make more goods chasing less money, and help keep inflation low and keep real incomes rising.

Chairman Mack. Dr. Solow.

Dr. Solow. You asked for one thing, and I'll limit myself to one thing. The most important thing that country needs to do is to promote investment in the broadest possible sense to include not only real capital equipment, but human capital, new technology and the like. Anything that can be done in that direction will be helpful, anything that fails to do that will not be helpful.

Chairman Mack. Thank you. David?

Mr. Malpass. A price rule monetary policy so that we know that for the next 50 years the dollar will be stable and not unstable. A capital gains tax cut: that process is working, let's make it work more. That will bring in money to the government. It will make capital turn over faster and more efficiently.

Chairman Mack. What about income?

Mr. Malpass. And a universal IRA or some expansion of the IRA process which is very constructive.

Chairman Mack. Alan.

Mr. Reynolds. I endorse everything everyone said.

[Laughter.]

Mr. Reynolds. And particularly Robert Solow, I do think high marginal tax rates on the returns to human capital are prohibitive, so we should repeal the higher tax rates of the '93 bill. But I'm surprised that Steve Entin didn't add one more, so I will. I would allow people to take some risks with at least half of the money they currently toss into Social Security as a dark hole. And by "take risks" I mean also that if you opt out of a portion of the tax you should opt out of a portion of the benefits too. Social Security would then just become a floor and the second tier would be something you take care of on your own.

Chairman Mack. Okay. You've been mighty patient. Congressman Stark?

Representative Stark. Well, Mr. Chairman, thank you. Just a couple of things as we redesign history here. As I say, I still feel like I'm at a meeting of the Kansas School Board in terms of the scientific arguments. But in terms of the record, in the 1980 report of this

Committee, lost on page 21 and lost in the Reagan progress, there was a caveat after the recommendation of the tax cut of $25 billion. It said: "If in response to heightened world tensions, Congress and the Administration deem it appropriate to step up the rate of Federal Government outlays for defense purposes, the tax cut will need to be pared or deferred accordingly, or some other spending restrained in order to keep fiscal policy on a steady course." I don't think we paid any attention to that.

And then as to Ronnie Reagan's record as a great free trader, I recall the squirms and screams of my Toyota dealers in California, when the great leader from Twentieth Century Fox brought us quotas on Japanese car imports. Now, if any free trader knows something that does less for free trade than quotas, quotas are even worse than excise taxes. But Ronnie was never troubled as were the supply-siders with the niceties of reality. You know, if you believe, you believe. And if you believe hard -- it's like the world hunger thing, yes, everybody's got to believe this guy in San Francisco that says, you think hard enough about hunger, it will go away. And I suppose that is the case with supply-side economics.

But I do have a question. I guess I would direct it to Doctors Solow and Baily. I'm troubled that regardless of who wants to take credit for this wonderful economy, we still have 45 million people without health insurance. The welfare reform that was touted by the Republicans, signed by the Democratic President over the objection of many of us Democrats, has thrown more children into poverty and increased the number of children without health insurance. Five percent of Americans own 80 percent of the wealth in this country, and the real wages of the 1980s were still higher than they are today. We have people working for peanuts while 2 percent of the people who live in the Silicon Valley are driving the prices of tract houses above a million dollars.

I guess my concern which is certainly not a Republican concern, certainly not a supply-side concern, is for the majority of working people in this country who aren't participating in all this grand wealth that's being rained on the heads of the computer nerds and the Wall Street geniuses. Could we have in any way allowed a few more people, Bob Solow, to participate in this wonderful cornucopia of plenty? I mean, it's done well for the 1 or 2 percent of the wealthiest people in the country. They're getting wealthier by the day. But the average American isn't doing very well as compared to the 1980s. Why did we leave them out?

Dr. Solow. Well, I don't think it's "we" that left them out. That's a complicated business. First of all, prolonged low unemployment is at last -- just in the last year or two – beginning to do something good for the bottom of the income distribution.

Representative Stark. Yes.

Dr. Solow. It took one hell of a long time to happen. Longer than I or anyone I know thought it would take. But preserving low unemployment is the first thing.

Second, I believe somebody -- maybe it was Martin -- mentioned the earned income tax credit. If we want to reform the tax system, I think one important thing we ought to do is find a way to make the tax system provide incentives and help for those at the bottom of the ladder –

Representative Stark. The negative income tax.

Dr. Solow. -- and induce them to work. And mere cuts in tax rates will not help them because many of them don't make enough to pay any significant amount of taxes.

The third thing we can do, and this is pie in the sky, this is the sort of thing that people like me say all the time. It happens to be true, I guess, but I don't know how well, or how soon it will work. It is education and health and training aimed at those whom our school systems now fail for one reason or another, that's the best long run hope for this.

Dr. Baily. Can I add?

Representative Stark. Please.

Dr. Baily. I agree with everything that Bob Solow said, and I share your concern about the lack of health insurance. I think something needs to be done. President Clinton is proposing some additional help on the health care front and I hope that continues to be something as we move forward that we --

Representative Stark. Don't push your luck. I'm with you, but --

[Laughter.]

Dr. Baily. Well, it's a question of what's feasible, and I think he's doing as much as is feasible and would like to see more done. I think you are perhaps a little bit too pessimistic about the state of what's happening to the average worker or the average family. Median incomes are rising, they have risen in the last five or six years. Wages, I have here something from the -- from Jared Bernstein who is on the sort of left among the economic writers. His wage series here shows that real hourly wages in the bottom decile have risen really quite sharply in the last few years.

As Bob Solow said, it's taken a while, unfortunately, but the full employment economy is moving people up. Poverty rates have come down. For all families median incomes are rising and so I think there is --

[Simultaneous conversation.]

Representative Stark. But not for children, Doctor.

Chairman Mack. Unfortunately the number of children in poverty is --

Dr. Baily. We need to do more, I agree with you.

Mr. Entin. I think that the problems, as Mr. Stark has mentioned, are critical. And I think tax reform is only part of the solution. Other things have to be done as well. But let me point out that these things are a lot easier to handle in a strong economy than in a weak economy.

Representative Stark. Absolutely.

Mr. Entin. In the late '70s with double-digit inflation and very sharply rising taxes on working people because of bracket creep, after-tax family incomes were falling sharply in real terms. After the wringing out of the inflation and the resumption of economic growth, family incomes rose throughout the '80s until the '90-91 recession.

Only the top four-fifths of the families regained all of the income lost in the late '70s. By the end of the '80s the bottom fifth came close, but didn't quite make it. Then there was the setback in the '90-91 recession, and then it took this expansion finally to lift all boats.

The situation with health insurance would have been much worse if the unemployment rate had remained at the unacceptable levels of the late 1970s. But there's still more to be done.

Human capital needs to be addressed. High tax rates discourage employment, discourage training on the job, discourage getting an education. Most of the major tax reform plans would, in effect, allow a full deduction for all of the costs of tuition, and all of the costs of --

Representative Stark. That works on the upper brackets, Mr. Entin. I mean, if you don't --

Mr. Entin. No, younger people of all income brackets are trying to get college educations. And --

Representative Stark. They don't pay any taxes, their parents -- they're poor. What does a tax deduction do for a family with $30,000 in income?

Mr. Entin. Well, it's better than not allowing a tax deduction for tuition.

Representative Stark. Oh, piddle.

Mr. Entin. As I've said, you need to do other things. But the tax restructurings that we are discussing would mean that taxes, where they do now hurt, would stop hurting. There are other things that need to be done. Note though that the cost of training on the job, that is wages, are deductible now.

If you look at the cost of tuition funded by the property tax, that's deductible to the property owner. If you look at the grants of gifts to universities, those are tax deductible. Some tax reforms such as the flat tax would cut those out. That sort of tax reform should be avoided.

The Nunn-Domenici tax would allow charitable contributions to continue and property tax deductions to be taken. But certainly we should be allowing for a full deduction of the cost of education along with the deduction of the cost of plant and equipment. Human capital and physical capital need to be treated fairly under the tax system.

Representative Stark. How about making a credits deduction and making the credits refundable?

Mr. Entin. I think for the low income people you have to make credits refundable, otherwise, they can't make use of them.

I would quarrel a little bit with the characterization of the earned-income tax credit as an incentive to work. It's an incentive to get a bad job. But if you start earning more money and reach the point where you start losing the credit, the marginal tax rate on your incremental income can hit 50 percent. There are other things we do in the tax code, such as paying Social Security benefits and then trying to tax them if your income goes above another threshold that result in high marginal rates. In the case of seniors who work and are subject to tax on their Social Security benefits, the tax rates on their wages can range anywhere from 68 percent to 110 percent on incremental income. We have a lot of other phase-outs and phase-ins and quirks in the tax code that sound good because they give a little money up front, but then we start taking it back and discouraging any kind of effort on the part of the individual. We need a much cleaner, much simpler tax system where the incentives are given and then stay put and aren't grabbed back with hidden marginal tax rate hikes through bad recapture provisions.

Chairman Mack. If I could, let me turn to Congressman Ryan.

OPENING STATEMENT OF REPRESENTATIVE PAUL RYAN

Representative Ryan. Thank you, Mr. Chairman. Thank the gentlemen for coming.

I'm a younger man and I was 11 years old in 1981, so I'd like to ask --

Chairman Mack. Oooh, that hurts.

[Laughter.]

Representative Ryan. Sorry, guys, I didn't mean to take a shot at you.

[Laughter.]

Representative Ryan. I would like to ask if we could revisit the 1980s because I constantly hear a give and a take back, a give-back of the old rhetoric from the '80s and I still hear that. It was a decade of greed, the rich got richer, the poor got poorer.

Specifically, Dr. Solow, I would like to ask you, in that context, you said in your remarks that Paul Volcker came to Congress and said, I will ease monetary policy if you do a good job on fiscal policy; meaning, lower the deficits and eventually have no deficits, and don't cut taxes. What about the fact that income tax rate revenues actually increased after the 1981 tax cuts. Do you believe that it's the tax cuts that caused Volcker to do the monetary policy that he actually did which you say led to the recession, or was it the expenditure increases that did that?

Dr. Solow. I think that from Volcker's point of view or any macro-economist's point of view, what matters is the net federal contribution to demand compared with the available supply. And the difference between expenditure increases and tax reduction from that point of view is really minor. It matters a lot at a more detailed level as to what actually gets done. Tax reductions generally, and specifically the tax reductions of 1981 and 1982 were consumption promoting tax cuts. There was very little in the way of investment incentive there.

What Volcker was saying was here is an economy that has what he thought to be an irresponsible fiscal policy. He was in effect saying to the Congress, I cannot promote low interest rates and further expansion as long as fiscal policy being this expansionary.

Representative Ryan. Was that presupposing that revenues would actually decrease after the tax cuts --

Dr. Solow. Oh, yes.

Representative Ryan. -- basically a static analysis?

So the reality essentially proved them wrong after --

Dr. Solow. Sir, sir, the revenues of the Federal Government are not a function only of the tax rate, or only of the state of the economy, but of both of them. And if we want to talk seriously about that subject, we do have to distinguish those things. There have been a lot of comparisons here of the rise out of the recession of 1982 and the rise out of the recession of '92. The '82 recession was a lot deeper, the deepest since 1937, so naturally there are differences in the behavior of tax revenues. You cannot do single variable explanations of these things.

Representative Ryan. Well, I would like to ask the rest of the panel, and Mr. Entin, I see that you want to respond to that. I would like to ask the rest of the panel -- and I'll go to you, Steve, in a second -- two basic questions. Did the rich get richer and the poor get poorer in the 1980s or did everybody do better in the 1980s? Number one.

Number two, what was the effect performance the Reagan tax cuts, and the 1981 Kemp-Roth tax cuts? What actually happened to productivity, what actually happened to revenue growth, what actually happened to economic growth directly attributed to those '81 tax cuts?

And I'll go to you, Steve, first, to respond to that. And then we'll start --

Mr. Entin. I'll take you to a long lunch some day and we'll go through all of that.

[Laughter.]

Mr. Entin. After the declining after-tax incomes of the late '70s, in the 1980s, after-tax, real family incomes began rising again and reached new heights by the end of the decade except for the bottom quintile which just about got back to where it had started. They were all turning up.

The Reagan cuts did improve the economy compared to what it would have been if they hadn't happened. Not all of the provisions in the Reagan cuts raised revenues.

Where the rates were the highest and were really choking off activity, you got 100 percent-plus revenue feedback, but where the rates were low to start with, you didn't get 100 percent revenue feedback. You really shouldn't measure tax cuts hoping that every revenue dollar is going to come back in. But between the revenue reflows and the improved GDP, the public was better off.

Dr. Solow is absolutely right. Paul Volcker, like most Keynesians of the period, thought that any tax cut gave people money to spend, and it would pump up inflation. The idea that tax rates, not revenues, was what you needed to look at, and that they filtered into the cost of labor and the cost of plant and equipment and choked off capacity and were business costs, was absent from the Keynesian models. We now see that the models are changing and are recognizing this. But at the time they didn't. Volcker thought the tax cuts would be inflationary. Milton Friedman had debunked this years earlier. So had Bob Mundell. Friedman asked a very simple question in a Newsweek article. If the Government is spending $500 billion and cuts its taxes to $450 billion, where does the $50 billion difference come from, the tooth fairy? No. The Government has to borrow it back. So there's no demand effect from a tax cut. It's not inflationary, unless the Federal Reserve buys the $50 billion in bonds and injects new money, but that's monetary policy, not fiscal policy.

Monetary policy controls demand, fiscal policy affects the costs of production and the incentives to work, save, and buy plant and equipment. That was Mundell's insight, Friedman's insight, Ture's insight, Laffer's insight. Yes, some press people got carried away and said that any tax cut was going to pay for itself. Professional economists didn't say that, not the neoclassicists, or supply-siders, or the monetarists. They did say it would lower costs and help disinflate the economy.

So when Mr. Volcker leaned extra hard against the inflationary wind figuring it would not stop blowing and would get stronger, and the wind then collapsed because the tax cuts reduced the costs of production, well – you know what happens when you lean against a wind that stops blowing! You fall on your face. And the economy did. He was very surprised inflation came down as fast as it did. Even in the Administration budget we were still predicting 7 percent inflation in 1982 and it came in at under 4, December to December and we were saying we weren't going to get to 4 percent inflation until 1986. We wildly overestimated inflation and the difficulty of bringing it down.

Representative Ryan. I see that we're running out of time. So if I could ask the rest of the witnesses to try to get your remarks in -- why don't we start with Dr. Baily and just move on?

Dr. Baily. I'll just make two quick points. There is in my written testimony a chart which shows the so-called structural budget deficit. That's computed by the Congressional budget office and they try to take out of the overall budget deficit the effect of the business cycle, the rise and fall. And that shows that structural deficits rose precipitously during the 1980's expansion, through the first half of it, and stayed very high throughout that period.

The second point I would mention is that family income hit a peak in 1979 for the bottom quintile of $13,200. It then fell dramatically during the deep recession of 1982-83. After that, family income at the bottom did rise, but in 1982, at $12,441 it was still lower than it had been in 1979. That is not the pattern you see in the top quintile over that period.

Representative Ryan. But may I ask you just one quick question, Dr. Baily, since you touched on that. The Clinton Administration claims that the 1993 tax increase actually laid the foundation for current economic expansion we enjoin today. Would you encourage countries like Argentina and Ecuador to raise their taxes to spur economic growth at this time?

Dr. Baily. Whether taxes should be raised or lowered depends on the individual circumstances of the country and I'm not going to pronounce. Clearly there are developing countries where budget deficits have created serious problems for them, and they need to do something about it either on the expenditure side or on the tax side. They can't necessarily continue with those large deficits, but it depends on the individual circumstances. Sometimes it's better to do one thing, and sometimes the other.

Representative Ryan. Dr. Weidenbaum.

Dr. Weidenbaum. First of all, no one in the Reagan Administration said at the time that the tax cuts would pay for themselves. What we did say was that they were an essential part of the package to energize the economy. And I think that certainly was the case.

We are ignoring the other side of the budget. We spent a lot of time in 1981 and 1982 trying to control spending, not as successfully as we would have liked, and frankly there's enough blame to go along both ends of Pennsylvania Avenue. But the increases in civilian spending, I think, are a function of Congressional action. Certainly if you look at the basic Reagan economic program the President presented in early 1981, he had spending cuts offsetting the tax cuts and much of that did not materialize. Appropriations are enacted at this end of Pennsylvania Avenue.

As far as Paul Volcker is concerned, I used to regularly meet one-on-one with Volcker. I don't want to put words in his mouth, but he left me with the impression those days that he was very, very concerned with the totality of the budget, the fiscal situation and when he saw the looming large budget deficits, that resulted in monetary policy tighter than we had agreed on at the outset of the Reagan administration and really that tight monetary policy increased the likelihood of recession, of deep recession at the time, and that, of course, further increased the budget deficit. So the interaction between monetary and fiscal policy, I think, needs to be examined because the line of causation goes both ways.

And, by the way, on the subject of quotas, the Federal Government never imposed quotas on Japanese auto imports. That was an intricate kabuki dance and I was one of the dancers.

[Laughter.]

Dr. Weidenbaum. I'll recall that the Japanese voluntarily imposed export restraints to avoid Congress passing statutory quotas.

Representative Ryan. Thank you for the hair splitting.

Mr. Reynolds.

Mr. Reynolds. The rich are still getting richer, and we're importing a lot of poor people. But, you know, that's a separate issue.

Let me talk about the history that you missed. The '81 to '84 tax bill was phased in very gradually – mostly taking effect in '83-84, was very pro-capital in rapid depreciation, investment tax credit, reduction of capital gains tax rates. Investment was pretty strong in those years. There were also, of course, marginal rate reductions on human capital, and that is not simply a stimulus to consumption, it's a stimulus to personal effort.

The '86 bill reversed a lot of that, raising the capital gains tax rate, repealing the ITC (which I favored by the way) lengthening depreciation (which I don't favor). It was very pro-labor and anti- capital, if you will, and we got an increase in labor force participation rates. My wife even worked for a while in those years. Then I told her not to after the tax rate went back up.

And in '97 there was a pro-capital, particularly entrepreneurial capital, reduction of capital gains tax rate. If we could just get a combination of low marginal rates on labor and low marginal rates on capital, we would be much better off.

As far as the deficit goes; the deficit came down because defense fell from 6 percent of GDP to 3 percent of GDP. That's fairly simple and obvious. The peace dividend is a nice thing, we're glad to have it.

As far as the 1981-84 tax cut contributing to the deficit, particularly the personal income tax, personal income tax revenue, ever since 1954 has ranged from 9 to 10 percent of personal income regardless whether the tax rate was 90 or 28 or 36 or 39.6, regardless of loopholes. That seems to be about all they can squeeze out of taxpayers and variations are pretty much cyclical. There were two exceptions, '69 and '81, when the burden hit 11 briefly before we went into the tank. It's getting closer to 11 percent again today, mostly because capital gains are included in revenue and not included in personal income. But what that tells you is that if you're concerned about revenues, growth is the main thing to be concerned about. Tax policy matters primarily by its effect on economic progress and secondarily and almost not at all by the rate itself. Because the average rate seems to be the same regardless of what you do.

Thank you.

Chairman Mack. David, if you're going to wrap up, we're going to have to --

Mr. Malpass. Okay. I'd like to make two points, one is on Mr. Ryan's question of whether the rich get richer? Yes. In the '80s, the rich got richer and the poor got richer and the same thing in the 1990s; the rich got richer, and the poor got richer. If you look at those distribution tables, they're static tables. There's a glitch in the way they are calculated. They don't take a person that was poor and ask what happened to that person. If you pick a thousand people that in 1982 were considered poor and find out what happened to them four years later, they did very well. If you track a thousand people that were rich, tracked four years later you'll find that not all of them did very well.

In the United States we have a huge turnover in class. People that were poor are not necessarily poor now. The statistics simply don't track that class turnover that we have in the United States. It's a huge flaw in the whole idea of the rich richer and the poor poorer. They're not talking about the same people and so it's not an accurate representation of what goes on in the United States. I think it would be much better if people pulled far away from that rhetoric and simply looked at whether conditions are getting better for someone who wants to work. Clearly the conditions are much, much better for people who want to work.

A final point comes back to Mr. Stark's question about what supply-side economics wants to do. We would like to see everyone doing better, that's the goal. We have work to do outside the U.S. where there's a huge amount of poverty because they aren't following supply-side principles. The most useful thing we could do right now would be to project sound money and low tax rates abroad.

If you look around the world, there are lots of places where at $10,000 of income, people are paying 50 percent marginal tax rates. This is outrageous to any part of the U.S. political spectrum. Yet high tax rates are projected through the U.S. institutions abroad. I think supply-side economics offers a way for poor people to do better and rich people to do better.

Representative Ryan. Thank you, Mr. Malpass. A very fitting wrap up and thank you very much.

Chairman Mack. Again, I want to thank all six of you for participating this morning in our discussion. And thank both of the Congressmen for your participation and a special thanks to Dr. Weidenbaum, Mr. Entin, Mr. Reynolds, and Mr. Malpass for the work that you did in helping us with the report. So, again, thank all of you.

[Whereupon, at 10:38 a.m., the hearing was adjourned.]

SUBMISSIONS FOR THE RECORD

PREPARED STATEMENT OF SENATOR CONNIE MACK, CHAIRMAN

Twenty years ago, the United States was in the midst of an economic upheaval. Inflation and unemployment were high and rising – productivity and real incomes were falling – and the economy was in recession. The only thing falling apart faster than the economy was the nation's confidence in itself. While President Carter lectured the nation on the "limits to growth," Americans became deeply shaken about the future of their nation.

With mainstream economic theory offering little useful advice, Congress struggled to make sense of what was happening to the economy. Congress' in-house economic think tank, the Joint Economic Committee, concluded that Washington's mismanagement of the demand side of the economy was distorting price signals, imposing heavy costs on producers, and causing people to work, save, and invest less than they would have otherwise.

As President Reagan pointed out, federal policy in 1980 could have been summed up in a few short phrases: "If it moves, tax it. If it keeps moving, regulate it. And if it stops moving, subsidize it." Consequently, in 1980, the Joint Economic Committee's Annual Joint Economic Report unanimously called upon Congress to adopt, "a comprehensive set of policies designed to enhance the productive side, the supply side of the economy."

In breaking with the failed Keynesian policies of the past, Sen. Lloyd Bentsen, then-Chairman of the JEC, hailed the report as the "start of a new era of economic thinking." Indeed, it signaled the start of the supply-side revolution in America. Today, principally as a result of the supply-side policies pursued by the Reagan Administration, the U.S. economy is healthy. Both inflation and unemployment are low. Productivity is growing rapidly and incomes are rising.

Since the end of the 1981-82 recession, the economy has grown at an average annual rate of 3.7 percent in real terms. By contrast, the annual rate of growth in the 17 years prior averaged only 2.7 percent. Further, since 1982: real per capita consumption has risen 57 percent; the Dow Jones Industrial Average has risen 11-fold; industrial production has jumped 79 percent; and employers have created nearly 35.5 million new jobs.

We as a nation should take care not to forget the economic policies which led to these remarkable economic conditions. Those policies which include: a sustained commitment by the Federal Reserve to maintain price stability; lower marginal tax rates; lower trade barriers; smaller government; and deregulation.

Economic growth and prosperity should never be taken for granted. Accordingly, today's hearing will briefly examine the economic history of the past twenty years and address what remains to be done if we are to keep the U.S. economy and the American people thriving in the years to come.

Joint Economic Committee Staff Report
Office of the Chairman, Connie Mack
www.senate.gov/~jec

This staff report expresses the views of the authors only. These views do not necessarily reflect those of the Joint Economic Committee, its Chairman, Vice Chairman, or any of its Members.

The Supply-Side Revolution: 20 Years Later

Contents

This staff report was prepared by James Carter, Senior Economist to the Chairman, with assistance from Kevin Doyle, Administrative Director. Contact James Carter (202-224-0378) with any questions or comments.

Foreword

by Senator Connie Mack

Twenty years ago, the United States was in the midst of a virulent economic upheaval. Inflation raged at 13.5%. The unemployment rate was 7.1% and rising. Productivity was falling. Real incomes were falling even faster. And the economy was in recession.

The Keynesian thinking which had dominated economic policy making in Washington for decades could not explain, much less cure, the stagflation which enfeebled the U.S. economy. Keynesian theory held that the way to reduce inflation was to dampen aggregate demand and push the unemployment rate higher. At the same time, Keynesian theory held that the way to reduce unemployment was to boost aggregate demand and push the inflation rate higher. Plagued by unacceptable levels of both inflation and unemployment, Washington policy makers were at a loss for what to do.

With mainstream economic theory offering little useful advice, Congress struggled to find new theories which could make sense of what was happening to the economy. As Congress' in-house economic think tank, the Joint Economic Committee concluded that Washington's mismanagement of the demand side of the economy was devastating the economy's microeconomic foundations. Federal policies were distorting price signals, imposing heavy costs on producers; and causing people to work, save, and invest less than they would have otherwise.

Because many of the country's economic problems were products of the federal government's own making, Congress was in a position to do something about them. In its 1980 annual economic report, the Joint Economic Committee unanimously called upon Congress to adopt "a comprehensive set of policies designed to enhance the productive side, the supply side of the economy."

In breaking with the failed Keynesian policies of the past, Sen. Lloyd Bentsen, then the chairman of the Joint Economic Committee, hailed the report as the "start of a new era of economic thinking." Indeed, it signaled the start of the supply-side revolution in Washington.

Although supply-side economics is generally identified with its emphasis on reshaping tax policy, the supply-side revolution also changed mainstream thinking about monetary policy, regulatory policy, and the appropriate size and scope of government.

Today, principally as a result of the supply-side policies pursued by the Reagan administration, the U.S. economy is healthy. Both inflation and unemployment are low. Productivity is growing rapidly and incomes are rising. At the time of this writing, the economic expansion which began in the second quarter of 1991 has lasted a record 108 months. Notably, this expansion follows the Reagan expansion — the second longest peacetime expansion on record (92 months).

We as a nation should take care not to forget the economic policies which led to these remarkable economic conditions. Economic growth and prosperity should never be taken for granted. Accordingly, this report provides a brief economic history of the past twenty years and outlines what remains to be done if we are to keep the U.S. economy thriving in the years to come.

Senator Mack (R-FL) is Chairman of the Joint Economic Committee

Introduction

by Senator Lloyd M. Bentsen

I became Chairman of the Joint Economic Committee in January of 1979. The condition of the nation's economy at that point in time was terrible. Interest rates were high and climbing higher. Inflation was high and getting worse. Unemployment was dreadful and climbing.

The situation in the Congress reflected the unhappy condition of the American economy. Democrats and Republicans were becoming polarized. House and Senate Democrats were increasingly falling back to old 1930s government solutions to the problems of the economy. In 1978, Democrats on the Joint Economic Committee advocated price and wage controls, government employment programs, and budget deficits for the foreseeable future.

The Republicans, for their part, seemed stuck on personal income tax reduction as the only policy response to the economy's stagflation woes. Moreover, Democrats and Republicans seemed incapable of rational dialogue to develop together an effective program for the American economy.

The Carter Administration, while well intentioned, was itself in disarray. Too often the Administration was feuding with key Congressional Democrats and ignoring the Congressional Republicans altogether. In this atmosphere I decided that business as usual in the Joint Economic Committee was not good enough. We had to forge a bipartisan agreement for a set of policies that would be bold, creative, innovative, and would capture the attention of leaders on both sides of the aisle and at both ends of Pennsylvania Avenue.

I wanted the Committee to focus on the issue of productivity improvement as the single most effective mechanism to boost economic growth, lower unemployment, and reduce inflation. I also wanted to open up the process by consulting extensively with Democrats and Republicans on the Committee. I tried the idea of a bipartisan report on Congressman Dick Bolling of Missouri, the Committee's Vice Chairman. He loved the idea and promised to work with the House Democrats to gain their cooperation. Congressman Clarence Brown, the ranking Republican on the House side of the Committee also was enthusiastic and pledged to help gain the support of the House Republicans.

I knew I could count on my good friend, Senator Jacob Javits, the ranking Republican on the Senate side of the committee. Senator Javits was a fierce competitor, as I knew from the tennis matches we often played. He was also, however, a patriot who cared deeply about his country and was worried about the conditions of its economy. Senator Javits pledged his support and his help.

I also talked to Senator Ted Kennedy who, to my surprise, thought the idea of a bipartisan report would be good for the Congress. Senator Bill Roth of Delaware and Senator George McGovern of South Dakota, who disagreed on so much, both agreed that a bipartisan report was an excellent idea.

We had many extensive meetings and negotiating sessions over the course of several months in early 1980. The bargaining was tough, but the atmosphere was congenial and businesslike. By March of 1980 we had a consensus. It was not a consensus centered around the least common denominators of economic policy. Nor was it a consensus centered on meaningless platitudes. Rather, it was a consensus around bold policies. First, we agreed that the price controls on energy products had to be eliminated. Second, we produced a balanced tax program where half of the tax cuts were designed to increase investment, enhancing productivity and reforming the tax method of plant and equipment depreciation. Third, we suggested a reduction in the rate of growth of government spending. Fourth, we produced a program of rational regulatory reform. Finally, we suggested that the Federal Reserve focus on reducing the rate of growth of the monetary aggregates to curb inflation.

In the end, all members of the Committee, Democrats and Republicans, signed the report. It did capture the attention of both Democrat and Republican leaders on Capitol Hill, and President Carter told me he had read the report. Finally, the former Governor of California, then a candidate for President, also let it be known through his associates that he had thought the report was right on target.

I am grateful to all the members of the Committee for the work they did to produce this report, which eventually had so much influence on the direction of economic policy in our country.

Senator Bentsen (D-TX) served as Chairman of the Joint Economic Committee, 1979-1980.

Highlights of the 1980 Joint Economic Report

Introduction by Senator Lloyd M. Bentsen, Chairman

- "The 1980 annual report signals the start of a new era of economic thinking." (Pg. 1)

- "The Committee's 1980 report says that steady economic growth, created by productivity gains and accompanied by a stable fiscal policy and a gradual reduction in the growth of the money supply over a period of years, can reduce inflation significantly during the 1980s without increasing unemployment. To achieve this goal, the Committee recommends a comprehensive set of policies designed to enhance the productive side, the supply side of the economy." (Pg. 1)

- "The Joint Economic Committee is now on record in support of the view that tax policy can and should be directed toward improving the productivity performance of the economy over the long term and need not be enacted only to counter a recession." (Pg. 1)

- "The Committee continues to believe that the Federal Government must put its own financial house in order. That requires a steady reduction of the ratio of government spending to the gross national product and a full accounting of the command over resources now exercised by the Federal Government." (Pg. 2)

- "The current fiscal budget understates the proportion of the Nation's resources that are used for public purposes. The fiscal budget does not include private, State, and local government spending mandated by Federal regulations." (Pg. 2)

Introduction by Rep. Clarence J. Brown, Ranking Minority Member

- "The 1980 Joint Economic Committee Report is not a vague compromise of mushy logic. It is a clarion call to get this country moving again. And it offers a new, clear set of policies to generate real, sustainable economic growth without inflation. It is forthright, revolutionary, and important." (Pg. 4)

- "[G]rowth is critical; and saving, investment, and productivity are critical to growth." (Pg. 4)

- "The proper policy 'mix,' as outlined in this report is:

  (1) To fight inflation by the gradual (but sustained) reduction in the growth of the money supply and a gradual reduction of the ratio of Federal direct and regulatory spending to GNP.

  (2) To fight general unemployment by increasing real economic growth through tax reductions designed, not to pump money into the economy, but to restructure the tax code to increase the after-tax reward to additional saving, investment, production, and employment." (Pg. 5)

- "The tax cuts to stimulate saving, investment, and competitiveness will put more goods on the shelves and lower prices, thus reinforcing the anti-inflation monetary policy. The anti-inflation monetary policy will reduce the biases against saving and investment (now in the tax code) which occur as inflation destroys the depreciation allowances and savings returns and pushes people into higher tax brackets. The lowering of inflation will thus reinforce the tax changes in generating more production, real growth, and profits to operate government programs at lower tax rates. Both policies will raise labor productivity, increase the demand for labor, and reinforce the incentives to hire and train the unemployed." (Pg. 5)

The Design of Macroeconomic Policy for 1980 and Beyond

- "Long-term policies should have a twofold aim. First, they should promote growth at rates that are in line with the economy's actual potential for noninflationary real growth. Second, they should be structured to encourage an increase in these potential growth rates for the future." (Pg. 16)

- "It should be recognized that the Government's command over national resources is not accurately measured by the share of Federal outlays in GNP alone. Government regulatory activity also represents command over resources as it often requires State, local, and private spending." (Pg. 22)

- "Macroeconomic policy must be directed more toward the supply side of the economy; toward an expansion of our Nation's productive potential in a manner that raises dramatically the growth of American labor productivity. To accomplish this we need to step up sharply our Nation's rate of capital formation. Specific policies targeted at enhancing investment constitute only part of the answer, and not necessarily the most important part. Steady real growth and a lower rate of inflation are essential components of this process." (Pg. 29)

- "And we need to shift out of, not protect, those industries that cannot successfully compete with foreign firms." (Pg. 30)

Inflation, Productivity, and Regulatory Reform

- "The Committee is more convinced than ever that solutions to the inflation and productivity problems must be found on the supply side of the economy." (Pg. 31)

- "We believe that a comprehensive program to reduce inflation and improve the productivity of the American economy should include measures to reduce the unnecessary costs of redundant, ineffective, wasteful, and conflicting regulations and paperwork requirements." (Pg. 41)

- "[T]he cost of regulatory programs must be brought under control." (Pg. 42)

- "A regulatory budget would encourage government agencies to reduce the costs of regulation and improve the efficiency of regulatory programs." (Pg. 47)

- "When there are alternative ways of achieving the goals of a regulation, the least costly way should be adopted unless there is some overriding national objective that requires the adoption of a less cost-effective alternative." (Pg. 47)

- "Among the most unproductive uses of the Nation's resources are the time and energy wasted by American businesses and individuals in responding to excessive, repetitive, duplicative, or unnecessary Federal, State, and local recordkeeping and reporting requirements." (Pg. 48)

Employment, Small Business, and Housing

- "The medium- and long-run goals for employment and inflation established in the Full Employment and Balanced Growth Act of 1978 (the Humphrey-Hawkins Act) can only be achieved if our economic policies pursue the twin goals of long-term economic growth and improved productivity." (Pg. 52)

- "The best way to create new jobs is through economic growth." (Pg. 52)

Monetary Policy by Trial and Error

by Alan Reynolds

The U.S. suffered three increasingly painful episodes of "stagflation" in 1970, 1974-75 and 1980-82. That nasty combination of inflation and recession baffled mainstream macroeconomics. Recessions were supposed to be fixed by "stimulating demand," while inflation supposedly required the opposite remedy. Since it was obviously impossible to stimulate and dampen demand at the same time, many economists argued that we should simply tolerate the lesser evil of inflation, or adopt wage-price controls, or use higher tax rates to fight inflation and lower interest rates to fight recession.

The result of following this sort of advice from 1968 to 1980 was that inflation moved higher and higher, while recessions became longer and deeper. These were not accidents of fate, but the predictable consequence of the following misguided economic theories:

- *The fiscal theory of inflation*: Many prominent economists viewed inflation as a fiscal rather than monetary problem, or at least favored fiscal over monetary solutions (higher tax rates rather than "tight money").
- *The wage-push doctrine*: Blaming inflation on workers, wage-push theorists claimed that many years of double-digit unemployment would be required to prevent wages from pushing up prices.
- *The thermal metaphor*: The journalistic metaphor of an "overheating" economy leads people to expect rapid economic growth to be associated with higher inflation, and slow growth with low inflation, although there is no logic or evidence for that belief.
- *The Keynesian "policy mix"*: Many economists claimed the Fed could increase *real* economic growth by pushing down real interest rates, and argued that raising tax rates (and/or wage-price controls) was the best way of curbing inflation.

How Monetary Policy Works

Monetary policy is often described as a mysterious art, but the basic mechanics can be described with a little simplification. The essence of an "expansionary" monetary policy is that the Federal Reserve ("Fed") buys Treasury bills, paying for them by crediting bank reserves. With more reserves, banks make more loans (or buy bonds), and borrowers end up with more money in their checking accounts. If the Fed buys fewer T-bills, or (rarely) even sells them, it becomes more difficult to finance increased spending.

Some banks have more reserves than they need on any given day while others have less. Spare reserves are traded overnight at the "federal funds" interest rate. The Fed's Open Market Committee periodically sets this fed funds rate, which is roughly equivalent to instructing the open market desk to buy bills only if the rate drifts higher.

The "policy" aspect of Fed actions refers to targets and instruments. Most controversy has been over the targets the Fed should aim for, rather than about instruments (i.e., what the Fed should do if the targets are missed). Keynesian economists have often favored using monetary instruments (defined as lower interest rates) to boost the *real* economy and reduce unemployment. Monetarists usually advocated an "intermediary" target — growth of the monetary base (bank reserves and currency) or of a broad measure of money (M2).

In the mid-seventies, several supply-side economists proposed a "price rule" — what has since come to be known as inflation targets — sometimes suggesting the use of sensitive commodity prices, the yield curve and exchange rates as early warning signals.[1] Fed officials themselves often allude to numerous objectives, ranging from wage rates to stock prices. And central bankers everywhere have often blamed their mistakes on fiscal authorities, even when fiscal problems (such as high interest expenses for the Treasury) are the result of monetary mismanagement.

The fed funds rate is simply an instrument for hitting some target, not a goal in itself. Alternative instruments could include quantitative tools (e.g., instructing the open market desk to refrain from purchasing bills until some price index slows), or unsterilized exchange rate intervention.

A higher fed funds rate can be an indirect method of restraining the growth of liquid assets by limiting the Fed's supply of bank reserves. But high interest rates are not reliable indicators of "tight money."[2] On the contrary, interest rates are always highest in countries with chronic high inflation (such as Turkey or Russia), and lowest in countries with low inflation (such as Japan and Switzerland).

For a couple of years after October 1979, the Fed claimed to be using M2 as the target while using the fed funds rate as the instrument. Raising the fed funds rate was supposed to slow the growth of M2. But that combination of instruments and targets was bound to fail. Since the advent of flexible interest rates on checkable money market funds and accounts, a high funds rate has almost always been associated with *rapid* growth of M2. The fed funds rate averaged 12.1% from 1979 through 1984, yet annual growth of M2 remained high, at 9.2%. The fed funds rate then dropped to 4.7% from 1992 through 1999, yet annual growth of M2 slowed to only 4.3%. What changed in the nineties is *not* that high interest rates restrained M2, but that restraining bank reserves and inflation gave us slow growth of M2 (except in 1998) and low interest rates.

Inflation can make nominal interest rates a particularly unreliable indicator of what the Fed is doing. If expected inflation rises by two percentage points while the fed funds rate is increased by only one percentage point, then the real interest rate has actually declined. When inflation is accelerating faster than interest rates, it can be profitable to use borrowed money to speculate in rapidly appreciating tangible assets, such as metals or land.

Similarly, a lower interest rate is commonly assumed to be an "easier" policy. But deflation proves that low interest rates are a symptom of excess demand for money and therefore a relatively inadequate supply. In a deflation (such as the U.S. in the early thirties or Japan in recent years), people liquidate goods and assets at distress-sale prices in a hectic scramble for cash. Banks hoard excess reserves out of fear of bank runs. People hoard T-bills and currency because money will buy more tomorrow than today. Nominal interest rates on the safest securities may then be near zero, but that does *not* prove that monetary policy is either "loose" or ineffective. Monetary policy can affect the economy through many channels other than interest rates, including effects on exchange rates, on the relative attractiveness of financial and tangible assets, and on nonprice credit rationing (favoring big businesses for scarce bank loans).

---

[1] Manuel H. Johnson & Robert E. Keleher, *Monetary Policy: A Market Price Approach*, Greenwood, 1996. Alan Reynolds, "Alternatives to Current Monetary Policy," Joint Economic Committee, July 12, 1982.

[2] Meyer Burstein & Alan Reynolds, "The Wrong Way to Tighten," *The Wall Street Journal*, May 16, 1994. M.L. Burstein, *The New Art of Central Banking*, New York University Press, 1991.

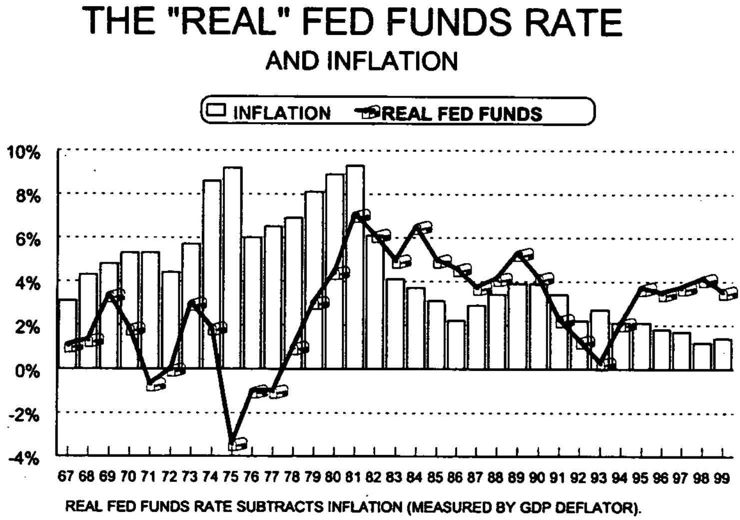
To visualize how monetary policy still matters even if interest rates are close to zero, just imagine what would happen if the Bank of Japan purchased the entire national debt and paid for it with new currency. Could anyone really argue that such a flood of liquidity would have no effect on prices? This mental experiment — imagining converting all interest-bearing government bonds into cash — illustrates that liquidity itself is important, not just the credit process of borrowing and lending. It also helps to illustrate why monetary policy is not at all the same as fiscal policy: Federal Reserve notes are much easier to spend than Treasury bonds.

Fiscal Fixes for Monetary Problems

Some of the worst policy blunders in world history arose from attempting to apply fiscal remedies to monetary problems (such as tripling income tax rates in June 1932 to "restore confidence"). In the late sixties, creeping inflation was assumed to be caused by budget deficits — "guns and butter." Given that diagnosis, the prescription was a 10% surtax in mid-1968, which put the top tax rate up to 77% in 1969. This tax on taxes was soon repealed as the economy slipped into recession in 1970. Yet the fiscal explanation of inflation never did match the facts, in this case or any other. Budget deficits were insignificant except in 1968, when the deficit was still no larger (2.9% of GDP) than it was as recently as 1994. The 1967 deficit was only 1.1% of GDP — smaller than in 1962 or 1998. Inflation had been creeping up for several years before 1968, yet inflation did not exceed 4% until *after* the surtax was put into place. Consumer prices rose 1.6% in 1965, 2.9% in 1966, 3.1% in 1967, 4.2% in 1968, and 5.5% in 1969.

Careless monetary policy fully explains the inflation of the late sixties, just as it explains every other

Figure 1



inflation. The fed funds rate barely kept ahead of rising inflation until 1969, and the discount rate was held below 5% until April 1968. In this effort to hold interest rates down, the Fed more than doubled its portfolio of government securities, from $26.5 billion in 1960 to $57.7 billion in 1970. Growth of M2 averaged nearly 8% a year, financing comparable growth of "aggregate demand" or spending (nominal GDP).

Figure 1 compares the "real" fed funds rate (after subtracting inflation) with a broad measure of inflation. Before 1981, real interest rates were erratic but usually low. The Fed let real rates rise briefly in 1969 and 1973, but then pushed real rates below zero during the ensuing recessions. The counter-cyclical easing was soon followed by another bout of inflation. In short, the Fed routinely pushed too hard on the monetary accelerator, but periodically stomped on the brakes for a few months. The Fed also pushed real rates down in 1992-93, after the brief 1990-91 slump, possibly contributing (along with increased tax rates) to the falling dollar and rising bond yields in 1994. With that exception, however, real rates have been comparable to real GDP growth rates since 1983.

The notion that selling Treasury bonds (a budget deficit) would have the same impact on inflation as printing money (a Fed open market purchase) never made much sense. If it were true, then governments could safely cover any borrowing requirements by simply printing currency rather than peddling IOUs.

If the government borrows from Peter to pay Paul, consumers as a group will *not* have "more money in their pockets." If the government runs a surplus, using excess taxes from Paul to buy back some bonds owned by Peter, then Paul will have less cash and Peter will have that much more. Deficits do not create money and surpluses do not destroy money. Only the Fed can do that.

Today, when even the slightest reduction of tax rates or revenues is said to threaten inflation, the old fiscal theory of inflation hangs on only as a mindless impulse. It does not survive as a matter of logic or evidence.[3] Except in extreme crises, when governments lose the capacity to borrow, inflation is entirely monetary, not fiscal.

The Wage-Push Doctrine

After the conspicuous failure of the surtax to reduce inflation, fiscal theorists decided that their theory was still right but reality had gone wrong. The urgent need for new scapegoats and excuses led to a new theory, the "wage-price spiral." The value of money still had nothing to do with monetary policy, but now it had nothing to do with fiscal policy either. Inflation was now said to be entirely a matter of private greed. Workers demanded big pay increases, so employers just passed their higher wage costs along in higher prices. Faced with these rising prices, workers "demanded" even bigger raises. The whole idea that prices and wages are set in such an arbitrary fashion contradicts basic price theory, but "microeconomics" was out of fashion.

Wage-push theorists saw only two ways to unwind the wage-price spiral, and judged one of them unacceptably painful. The feared pain arose from the nefarious "Phillips Curve," which claimed we could always trade a little more inflation for a lower unemployment rate, and vice-versa. Faced with high inflation,

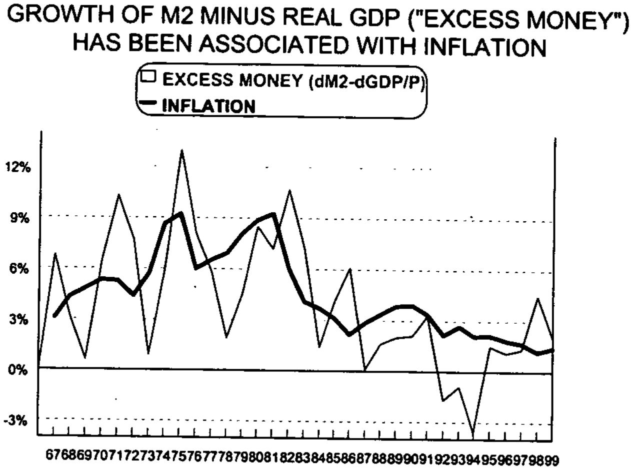
---

[3] After demonstrating graphically that demand slowed while supply accelerated in the 1980s, William Niskanen wondered why so many demand-side economists nevertheless attempted to attribute the real economy's strong performance to the invisible "demand stimulus" of budget deficits. "One explanation may be the residual-Keynesian perspective of many older economists, based on a theory — without evidence — that government deficits increase total demand." — "Myths About the 1980s," *The Wall Street Journal*, November 5, 1996.

Phillips Curve theorists claimed it would require years of very high unemployment to discourage stubborn workers from asking for the raises that supposedly caused inflation.[4]

The only painless solution, according to the wage-push theory, was for a government agency to dictate to people what their labor and products were worth. On August 15, 1971, the Nixon Administration froze wages and prices, and subsequently went through four agonizing phases of heavy-handed controls. The

Figure 2



Changes in M2 are December to December.

controls naturally focused on items heavily weighted in the price indexes, which seemed to hold measured inflation down for a while. But it was quite impossible to control prices of imports, new products (nothing to compare them with), used cars, land, and much more. Any money saved on prices of controlled items became excess demand for uncontrolled items. Where they were effective, controls boosted demand and discouraged supply, creating infamous "shortages" that made inflation even worse (a 12.3% CPI by the end of 1974). Wage-price "guidelines" were nevertheless revived by the Carter Administration, and so was double-digit inflation (13.3% by the end of 1979). Like the 1968-69 surtax, regulation of wages and prices was an inherently futile effort to solve monetary problems by nonmonetary means.

For those who prefer to measure monetary policy by quantities of cash rather than interest rates, **Figure 2** compares inflation with a rough measure of "excess" money — the growth of M2 minus the growth of *real* GDP. The underlying concept is that more money is needed to finance more transactions (at stable

---

[4] On May 1, 1978, Barry Bosworth, Director of the Council on Wage and Price Stability, told an Associated Press gathering that "to reduce the rate of growth in the money supply . . . [means] cutting production and throwing some people out of work in the hopes that a couple of million more unemployed will stop workers from asking from wage increases."

prices) when the real economy is growing rapidly, but that rapid money growth during a recession could only be financing higher prices.[5]

The link between excess money and inflation is imprecise in any single year, but the apparent monetary excesses of 1967-68, 1971-72, 1975-77 and 1980-83 were certainly followed by high inflation. No comparable episodes of excess monetary expansion have been sustained since then, and inflation has been moderate. Whether measured by the real fed funds rate in **Figure 1,** or by the relative growth of M2 and real GDP in **Figure 2,** the monetary origins of instability in the seventies should be apparent to anyone not totally blinded by archaic fiscal or wage-push theories.

An important lesson from **Figure 2** is that for any given growth of money (or of nominal GDP), faster *real* growth implies *slower* rather than faster inflation. This contradicts the illusion that inflation is a byproduct of "overheated" economic growth. Higher tax rates in 1968-69, 1990 and 1993 were indeed accompanied by slower *real* growth. But slower real growth must push inflation higher unless — as happened in each of those cases — the Fed responds with higher real interest rates.

Muddled Metaphors.

Financial journalists have long found it irresistibly tempting to compare the economy to a pot on the stove. Inflation thus becomes a simple matter of "overheating" and the Fed's job is to "cool off" excessive economic growth. Popular as it is, this thermal metaphor accurately describes the exact opposite of U.S. experience.

Figure 3 compares real growth with inflation. If inflation were due to rapid real growth, then we ought to see inflation and real growth moving up and down together. In fact, they invariably move in opposite directions. Since at least 1968-71, when the dollar was unhinged from gold, inflation has *always* accelerated during economic slumps, *never* when the economy was growing rapidly. And inflation has *always* slowed when the real economy was booming, never during recessions.

A spurt of inflation might conceivably appear to boost measured real GDP for a short while, due to speculating on inventories or real estate in the hope of reselling at a higher price. Even if that happened, it would still be backwards to say that real growth caused inflation. Similarly, recessions may lead to temporary cyclical discounts in the cost of industrial and building materials. But even that ephemeral improvement depends in part on whether or not the recession is global (depressing *world* demand for raw materials) and on what happens to the dollar (a falling dollar can raise commodity prices in dollars even if those prices have fallen in terms of, say, Japanese yen).

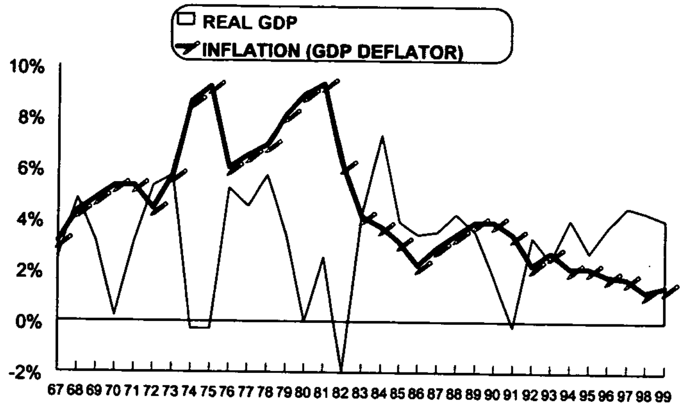
Cyclical caveats aside, **Figure 3** shows that no *sustained* period of low inflation has been associated with slow economic growth, and no sustained period of slow economic growth has been associated with low inflation. *Inflation is bad for real economic growth, and strong growth of production and productivity is good for price stability.* The paradoxical idea that an economy can somehow be in danger of growing faster than

---

[5] Causality is hard to prove. One might argue that people and firms just hold larger cash balances before deciding to spend, or that more M2 is what *enables* big spenders to create an inflated sellers' market.. In either case, *sustained* growth of M2 far in excess of the growth of real GDP is still a useful indicator of *big* swings in inflation.

Figure 3

INFLATION AND ECONOMIC GROWTH GENERALLY MOVE IN OPPOSITE DIRECTIONS



its "potential" to grow is an illogical myth. We can have high inflation or high real growth, but not both.

Keynesian v. Mundellian Policy Mixes

The failure of the 1968-70 surtax helped discredit the odd notion that tax penalties on marginal productive activity could somehow substitute for prudent monetary policy. But it took two more episodes of stagflation to undermine a closely related "policy mix" theme — namely, *the idea that budget deficits and easy money have equivalent effects on the growth of nominal GDP.* Those who argued for using an expert mix of fiscal and monetary devices always claimed (and still do) that a reduction of budget deficits could allow the Fed to push *real* interest rates lower without fear of inflation. Proponents of this Keynesian policy mix argued that budget surpluses would risk recession unless offset by a Fed willing to reduce real rates.[6] As shown by **Figure 1** above, however, the *real* funds rate hovered near 4% in 1995-99, regardless of the surplus.

Much of the controversy about what came to be known as supply-side economics in 1976 actually started in 1971 as a debate about this Keynesian policy mix. The supply side of the debate involved the neglected macroeconomic impact of microeconomic policies (such as marginal tax rates, tariffs and regulations) in causing distortions and disincentives that impede personal effort, investment and entrepreneurship. The demand side of the debate involved Keynesian habits of first regarding inflation as a desirable way to reduce unemployment (the Phillips Curve), and later being willing to experiment with

[6] "The Fed could cushion any depressing effect on the economy of . . . tax increases needed to reduce the deficit." Robert J. Samuelson, "Does Anyone Know History?," *Newsweek*, February 15, 1993.

absolutely *any* scheme *except* monetary policy (notably surtaxes and wage-price controls) as a means of dealing with inflation.

In 1971-75, "stagflation" became nearly as troublesome for economic theorists as it was for ordinary citizens. Macroeconomists had been engrossed in a turf war about the best way to manage demand — whether by manipulating the supply of government debt (budget deficits and surpluses) or the supply of cash (the money supply). **Figure 2** suggested that monetarists won this argument, as far as it goes. But the debate was all about "stabilization," not expansion. Both fiscalist and monetarist varieties of demand management held that governments could and should stabilize overall spending (aggregate demand) in the economy. Whether by fiscal or monetary means, the universally accepted goal of "macroeconomics" was to *stimulate* demand in recessions and *retard* demand in inflations. Even today, when the Fed has new plans to announce that the balance of risk leans more toward inflation *or* recession, the implication is that inflation and recession are polar opposites, not twins.

Unfortunately, the actual problems of 1970,1974-75 and 1979-82 did not offer us a choice of fighting either inflation or recession. We had plenty of both — "stagflation." The logic of demand-side economics implied that we had to choose which problem to fix. Even as recently as the early 1980s, it remained surprisingly respectable to argue that the wisest choice was to tolerate endless inflation rather than risk even a brief recession. A *New York Times* editorial on February 11, 1980 proudly announced that, "We have done our part over the months to curb the panic about inflation, to show that most Americans were better off with the disease than with the false remedy of recession."

As early as 1971, Robert Mundell, the recipient of the 1999 Nobel prize in economics, had explained that there was never any serious possibility of choosing inflation over recession. That false dichotomy was entirely theoretical, not real — the result of trying to hit two targets (supply and demand) with one instrument (demand management).

On February 12, 1971, Mundell attended a U.S. Treasury Consultants meeting, and urged that the correct policy mix to combat stagflation was to use monetary policy alone to slow the inflation, combined with a cut in tax rates to spur recovery from recession. This advice, published as "The Dollar and the Policy Mix" in a Princeton Essay in International Finance, fell on deaf ears. President Nixon's advisors ended up combining easy money with draconian wage-price controls.[7]

In 1999, the Nobel committee finally applauded Mundell's views about "how each of the two instruments, monetary and fiscal policy, should be directed toward either of the two objectives." Mundell described this as an "assignment problem." *If we are trying to fix two problems at the same time — boost supply and restrain demand — then we have to assign the best tool to each task.* Mundell has observed that "monetary policy has a comparative advantage over fiscal policy in attacking inflation and preserving exchange rate stability, and fiscal policy has a comparative advantage in increasing employment and stimulating growth."

Macroeconomics was, by definition, artificially separated from such "microeconomic" details as tax reform and deregulation. As a result, macroeconomists have always had trouble understanding Mundell's

[7] My 1971 critique of Nixonomics hinted at sound money and lower tax rates: "What we are experiencing is more of a tax-pull than a wage-push situation. Inflated government has raised the cost of living through high regulated rates and excess money creation, while it reduced real income and economic growth with oppressive taxation." Alan Reynolds, "The Case Against Wage and Price Controls," *National Review*, September 24, 1971.

"policy mix." They imagined that Mundell was simply advising a "loose" fiscal policy (big budget deficit) and a "tight" monetary policy (high real interest rates). Yet Mundell's concept of "fiscal policy" always emphasized the microeconomic, structural details of taxation — *incentives* — not merely the amount of government borrowing. And Mundell actually favors *good* money, not tight money — money that holds its value over decades and across national boundaries.

Mundell's 1971 policy advice finally began to be adopted in 1981-86, as the U.S., U.K. and many other nations assigned the task of maintaining price stability to monetary authorities, while enacting deep cuts in marginal tax rates to enhance productive incentives.

Economists of the Keynesian persuasion have long been vehemently opposed to the idea of using monetary policy to even "fight" inflation much less end it. In an interview with *Newsweek*, September 8, 1980, Paul Samuelson said "monetary policies must bring down real rates of interest to clear the market for investments." Samuelson favored "austere taxing policies" as an alternative to monetary restraint. Writing in the *Washington Post* on January 10, 1982, Robert Solow and James Tobin proclaimed that "it would be healthy to achieve whatever deflationary pressure is desirable with a mix of easier monetary policy and tighter fiscal policy."

Orthodox economists, left and right, vehemently denied that Mundell's policy mix would work. They first claimed that temporary budget deficits resulting from the military build-up must be inherently inflationary regardless of monetary policy. Some described supply-siders as "inflationists," simply because we advocated explicit price targets for the Fed and denied *fiscal* explanations of inflation.[8] Yet fiscal explanations of inflation should have lost credibility as soon as consumer price inflation dropped from 13.5% in 1980 to 3.2% in 1983, while the deficit more than doubled (to 6% of GDP).

Fiscalists eventually stopped arguing that budget deficits were inflationary, and switched to arguing that they instead cause "unsustainable" trade deficits. That trendy "twin deficits" fable soon proved unsustainable. The U.S. current account deficit grew huge in the late 1990s as the budget moved into surplus, while Japan's trade surplus grew larger as its budget deficit exploded. The ever-flexible fiscalists then did a complete flip-flop and argued that budget surpluses are *stimulative*. By early 2000, Treasury Secretary Summers was arguing that if the Treasury had run larger budget deficits in recent years, then businesses would have bought more Treasury bills instead of computers.

Although fiscal solutions to inflation always failed, and monetary solutions always worked, the old Keynesian policy mix nevertheless became the principal rationale for increasing marginal tax rates on pensioners and relatively productive two-earner couples in 1993. Although higher tax rates were clearly harmful to *real* growth (productivity growth slowed to only 0.8% a year in 1993-95), the seductive promise of 1993-94 was that higher tax rates would let the Fed lower real interest rates.

Real Rates Reflect Real Returns

Real GDP grew by 3.6% a year from 1983 to 1999 — a full percentage point higher than the 1970-82 average. Tax policy is still much better then it was in the seventies, but monetary policy has also greatly improved. Fed officials have sometimes *said* the wrong things, fretting about real growth or stock prices, but they have come close to *doing* the right thing.

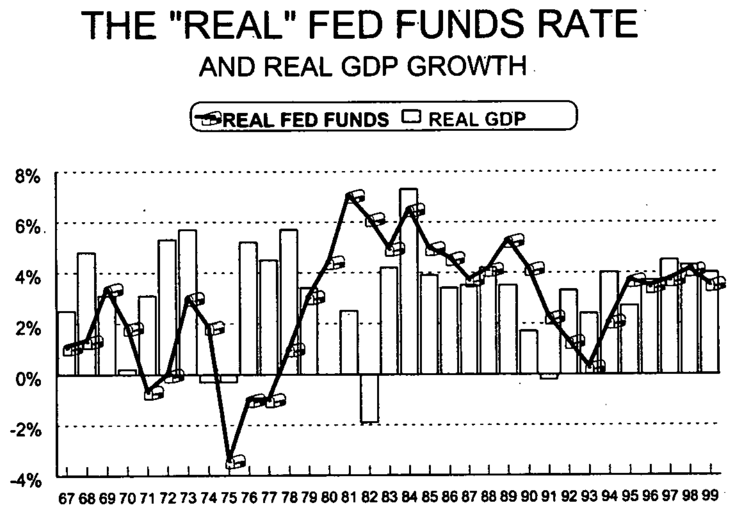
---

[8] "Today's tacit alliance between big spenders and supply-side inflationists . . . should result in the ultimate destruction of the dollar." Leland B. Yeager, "Supply-Side Inflationism," *Cato Policy Report*, July/August 1984.

As **Figure 4** shows, the fed funds rate has generally remained comfortably above the inflation rate since 1984, except in 1993, and movements in the real funds rate have been *relatively* restrained. By contrast, the Fed was *hyper-reactive* in the past — pushing the real funds rate way down in 1971 as a belated response to recession in 1970, then repeating an extreme version of the same mistake in 1975. Swinging from one extreme to the other, the Volcker Fed pushed the funds rate more than six percentage points above the inflation rate in 1982 and 1984, which fostered liquidation of raw materials and foreign assets, pushing the dollar up and dollar commodity prices down.[9]

Figure 4 reveals another huge factual inconvenience for the Keynesian policy mix. The whole point of trading higher tax rates for easy money was that lowering the *real* funds rate was supposed to be very

Figure 4



REAL FED FUNDS RATE SUBTRACTS INFLATION (MEASURED BY GDP DEFLATOR).

beneficial for investment and real GDP. Yet **Figure 4** shows that *the real funds rate has been relatively high while the economy was growing most vigorously, and very low (or negative) when the economy was in or near recession.*

When real rates were kept quite high from 1983 to 1989, this was widely blamed on the alleged supply-side mix of "tight" money and budget deficits (actually the rise and subsequent fall of deficits had to do with defense policy, not with economic policy advice). Keynesians repeatedly promised that smaller deficits would allow the Fed to push *real* rates much lower, presumably pushing real growth even higher than the awesome 4.3% average of 1983-89.

---

[9] Alan Reynolds, "The Fed Flirts With Deflation," *The Wall Street Journal*, July 12, 1984.

In February 1994, *The Economic Report of the President* claimed that, "With credible deficit reduction, the Federal Reserve will be able to achieve a given level of nominal demand with a less restrictive monetary policy. This shift in the policy mix should reduce future real short-term interest rates."

Evidently, the 1994 Clinton Administration did not yet regard "credible deficit reduction" as a stimulus to technological investment, but rather as an alternative to monetary restraint. In reality, the funds rate was doubled in little more than a year — rising from 3% in January 1994 to 6% by March 1995 — making a mockery of the government's "policy mix" forecast. In 1996-99, when the economy resumed growing at decent pace, the *real* fed funds rate was back up to about 4%. But the higher real rates of 1996-99 could no longer be blamed on some unproven theoretical link between budget deficits and interest rates. In short, *the central promise of the Keynesian policy mix — lower real interest rates from the Fed — proved to be a fraud, and would have been inflationary had it been attempted.* The budget, whether in deficit or surplus, never had anything to do with how high or low the Fed sets the funds rate in relation to inflation and/or real growth.

The central promise of the policy mix fable in the 1994 *Economic Report of the President* — "to reduce future real short-term interest rates" — was not just a bad forecast but also an irresponsible objective. The message of **Figure 4** is that short-term interest rates *cannot* remain low in real terms unless real economic growth is feeble. If the Fed tried to push real rates down through aggressive monetization of debt, regardless whether the budget was in deficit or surplus, that could be accomplished only by pushing inflation up and real GDP down (i.e., by stagflation).

As it turned out, short-term interest rates were relatively *high* in real terms from 1996 to 1999, similar to what they had been from 1986 to 1989. The shift from budget deficits to surpluses in recent years did *not* prevent real rates from being high whenever real GDP growth is high. In both 1983-89 and 1996-99, *real interest rates were high because investment opportunities were attractive and the real return on invested capital was high.* Attractive investment opportunities (not "twin deficits") also explain why foreign capital flowed *into* the U.S., financing a current account deficit and strong business investment in both periods.

The Fed can push the real interest rate *on cash* very low (as in 1975) or very high (as in 1982). But the Fed cannot push too far in either direction without creating a situation that will soon compel a reversal of policy. Pushing real rates too low in relation to real growth is inflationary, and pushing real rates too high is deflationary.

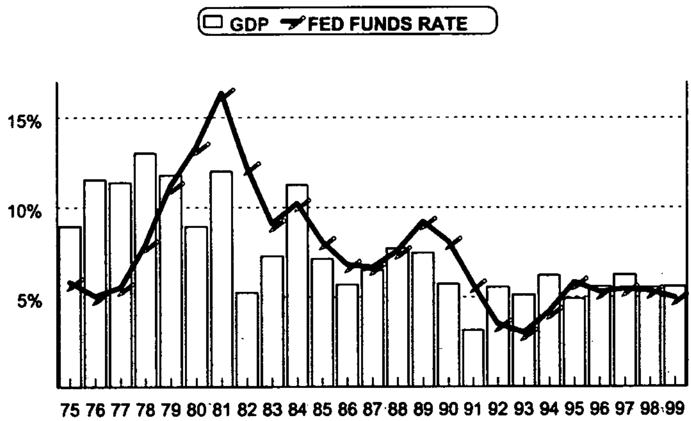
Real growth depends on the quantity and quality of labor and capital, not on the volume of Treasury bills purchased by the Fed. The Fed can only print money. The Fed cannot print machinery, buildings or jobs. The Fed's job is to avoid gyrations in the value of money. Monetary instability may discourage long-term business investment, but inflationary "ease" cannot improve long-term growth. The only government policies that affect long-term growth are those that reduce tax and regulatory impediments to productive effort, investment and entrepreneurship.

Forecasting the Fed

Figure 4 shows that the "real" funds rate has been fairly closely matched to the real GDP growth rate ever since 1984. The growth of *nominal* GDP adds inflation to real GDP growth. And the nominal (actual) fed funds rate likewise adds inflation to the real funds rate. So it follows as a matter of arithmetic that the federal funds rate has been remarkably similar to the rate of growth of *nominal* GDP since 1984. This close relationship is shown in **Figure 5**.

Figure 5

CHANGE IN NOMINAL GDP
AND THE LEVEL OF FED FUNDS RATE



It is unlikely that the FOMC has been consciously linking the funds rate to nominal GDP. What they have probably been doing is watching a variety of statistics that relate to *both* inflation and real growth, and eventually reacting to what appear to be trends over a year or so. It takes some time to distinguish temporary changes from trends (called "recognition lag"), and more time to develop a consensus that action is needed. As a result, it is a commonly acknowledged fact that the Fed is always *reacting to the past*. Anyone who watches the growth of nominal GDP over the past four quarters can come very close to predicting what the Fed will do to the fed funds rate. This is not a criticism. It is better to react slowly to a past that we know than to attempt "preemptive" strikes on the basis of notoriously inaccurate forecasts.

Even using these *annual* figures, it is easy to see that *movements in the funds rate (in 1987, 1989, 1993, and 1995) follow changes in the previous year's GDP*. Such delayed reactions have become so obvious that economists have taken to *using the economy to forecast the Fed*, rather than the other way around. John Taylor of Stanford does this using inflation and the deviation of real GDP from trend (i.e., the real rate is highest when growth is strong and lowest in recession). Robert Barro uses inflation plus job growth. Bennet McCallum advises the Fed to target nominal GDP (inflation plus real growth), which is similar in practice to the Taylor and Barro models for predicting what the Fed actually does. More complicated models may not do a better job than nominal GDP alone. In December 1999, Barro's model "suggests lower rates ahead," but faster growth of nominal GDP suggested higher rates (which is what happened).[10] The Taylor rule attracted considerable media attention in the fall of 1995, because, as Taylor then put it, "the weakening economy and

[10] Robert J. Barro, "How to Build Your Own Fed Crystal Ball," *Business Week*, December 6, 1999.

the relatively good news on inflation suggests somewhat more ease is coming."[11] Since the Fed reacts to stale news, the funds rate did dip briefly in early 1996. Yet Taylor's implied fine-tuning of the real economy was a poor rationale. The "weakening economy" of October 1995 suddenly expanded quite vigorously in the first half of 1996, thanks to commercialization of the Internet and a related investment boom in information technology.

Conclusion

A predictable Fed is surely preferable to a totally *un*predictable Fed. What **Figures** 4 and 5 suggest, however, is that the Fed is partly reacting to old news about where the *real* economy has been in the past, rather than to recent or leading indicators of where *inflation* may be headed in the future.

The Fed's apparent focus on *nominal* GDP growth, whether explicit or not, contains a residual fascination with limiting *real* GDP growth as well as inflation. This obsession with managing the real economy is evident in the Congressional testimony of Fed officials, which repeatedly express anxiety about the pace of *real* economic activity. Yet as saw in **Figure** 3 above, real GDP growth is *inversely* related to inflation. That means *successful* Fed efforts to slow or stop the growth of the real economy must be *inflationary*. And that, in turn, is why nominal GDP is far from an ideal target.

If the Fed attempted to maintain, say, a 5% growth rate for nominal GDP under any and all circumstances, that would require that inflation rise in recessions and fall in booms. If real growth was zero and nominal GDP rose by 5%, then inflation must be 5%. If real growth was 7% (as in 1984) and nominal GDP were still limited to 5%, then prices would have to *fall* by 2%. As a matter of recent history, inflation *has* been highest in recessions, including recessions thought to have been engineered by the Fed. Yet it would be peculiar to *institutionalize* inflation during recessions as a matter of deliberate policy. If consumers and companies came to expect the Fed to inflate whenever *real* GDP slowed (in order to hit a nominal GDP target), they would acquire a perverse incentive to time most purchases during periods of strong economic growth, when prices were stable.

There is no question that monetary policy has been enormously improved since 1983-84. The Fed has become far less erratic and capricious than it was in 1969-82, far more gradualist and cautious. Keeping inflation down over the long haul has had a much higher priority than it did in the past, when the Fed invariably "eased" dramatically after making only minor cyclical inroads into inflation. There is much greater understanding today, at least among younger economists, that monetary stability is a task that can *only* be accomplished by monetary policy, and that too many Fed goals (for real growth, wages or stock prices) are a dangerous distraction at best.

In practice, the Fed appears to have been acting as if it were targeting previous growth of *nominal* GDP — that is, the growth of *real* GDP plus inflation. Even this is an improvement, since Keynesian advice to the Fed had once been to focus *entirely* on real GDP, treating inflation as an unavoidable byproduct of rapid growth. The seventies showed what happened when we try using the Fed to fine-tune *real* growth, assigning inflation to such destructive gimmicks as surtaxes and price controls. Today, the Fed has it at least half right, because inflation can be the most variable component of nominal GDP.

---

[11] "The Taylor Rule for Predicting the Fed," *International Economy*, September/October 1995. Also, "How Low Should Rates Be?" *Business Week*, October 9, 1995.

The Federal Reserve has never had a remotely clear mandate about what it is expected to accomplish, and therefore never been accountable for failure. Lacking any guidance from the public and its elected representatives, the Fed has sometimes paid excessive attention to irrelevant indicators (stock prices and unemployment) and used a potentially misleading instrument (the fed funds rate) to aim at inappropriate targets (last year's growth of *real* GDP). What the Fed needs is fewer and simpler targets. The pace of real GDP, in particular, is best left to the private sector, responding to incentives that are distorted as little as possible by taxes and regulation. The Fed's only legitimate task is to protect the value of its own product, Federal Reserve notes.

Several other countries have enacted explicit inflation targets (usually at 2% or less) for which their central banks are held accountable. Such inflation targets began in New Zealand in 1989, followed by Canada in 1991, Britain in 1992, Sweden and Finland in 1993, and later by other countries such as Israel, Spain, Australia.[12] The once- heretical "price rule" advocated by a handful of supply-side economists has now been put into practice for quite a while, with an impressive track record so far. The Fed ought to welcome such a Congressional mandate to stabilize the purchasing power of the dollar.[13] Such a mandate could insulate the central bank from future political pressure to "reflate" too aggressively (as in 1971 and 1975) at the first sign of economic trouble, whether real or imagined.

Mr. Reynolds is Director of Economic Research at the Hudson Institute. He served as Chief Economist for President Reagan's OMB transition team in 1981.

---

[12] Ben S. Bernanke, Frederic S. Mishkin, *et. al., Inflation Targeting: Lessons from the Intl Experience*, Princeton University Press, 1999.

[13] Editor's Note: Senator Connie Mack introduced legislation (S. 1492) in 1999 to require the Board of Governors of the Federal Reserve System, when establishing monetary policy, to focus on price stability.

The Revolution in Tax Policy

by Stephen J. Entin

In 1979, and again in 1980, the Congressional Joint Economic Committee issued Annual Reports containing major views and recommendations supported by all of its Members, Democrat and Republican. This was the first time in 20 years that such a unified report had been possible, and it has not happened since.

The coincidence of views was the result of the peculiar economic developments of the 1970s. Whereas the 1960s had generally been marked by strong growth with limited inflation, the 1970s were a turbulent period culminating in rapid inflation and falling living standards. Finding a way out of the troubles of the 1970s required a new understanding of the workings of the economy and a new set of economic policies.

The Economy and Economic Policies of the 1960s and 1970s

The Kennedy Tax Cuts

In response to nearly back to back recessions between 1957 and 1961, President John F. Kennedy introduced a number of successful tax reductions. He created the investment tax credit (ITC) and reformed depreciation rules in 1962, and cut the corporate tax rate in two steps, from 52% in 1963 to 48% in 1965. He proposed his famous across-the-board cut in marginal tax rates for individual taxpayers, which was enacted after his death and signed into law by President Lyndon B. Johnson. That tax cut reduced marginal tax rates across the board by roughly 25 percent, from a range of 20% to 91% to a range of 14% to 70%. There followed a strong economic recovery which served as an important example for later tax policies, and was an important bit of evidence in the search for a better model of economic behavior and government's role in economic affairs.

Johnson and Nixon

The post-Kennedy expansion was brought to a halt by a vacillating monetary policy that first permitted a surge of inflation, then moved to choke it off, coupled with President Johnson's 10% Vietnam individual and corporate tax surcharge, effective 1968-1970. The result was the 1969-1970 recession.

The top tax rate on wage and salary income was reduced to 50% under President Nixon. However, efforts to hold down interest rates and to finance the Vietnam war with money growth eventually forced the United States off the gold standard, which further sheltered policy makers from the consequences of excessive money growth. Dollar devaluation and continued rapid money supply growth fueled inflation in the early 1970s.

Rather than deal with the monetary source of the inflation, the Nixon Administration resorted to wage and price controls, with disastrous results. Workers and employers found their wages and prices frozen. Resources were misallocated. Some businesses could not attract the workers, materials, or inventory they needed. Spot shortages were common. Other businesses that could not recover their costs were forced to close. On the evening news, there were films of farmers stuffing baby chicks into steel drums and closing the lids to suffocate them "humanely" because the cost of feed was greater than the regulated price the chickens would bring at maturity.

Eventually, the mandatory price and wage controls were abandoned, except for the energy market. Continued dollar inflation and regulated energy prices made the United States more dependent on foreign oil, and encouraged OPEC to move for sharply higher energy prices. The supply shock of the OPEC oil embargo that began in October, 1973, and related oil price increases, was exacerbated by the domestic energy controls, leading to widespread misdirection of the limited supply, spot shortages, gasoline lines, and odd-even day buying restrictions. Inflation hit double digits in 1974, triggering a policy reversal by the Federal Reserve. The economy was in recession from late 1973 to early 1975, but inflation was not brought firmly under control.

Ford and Carter

The Ford Administration relied heavily on the Federal Reserve to restart the economy through an easing of monetary policy. Energy price controls and the windfall profits tax were continued. Intrastate natural gas was brought under price controls for the first time, in exchange for an increase in the price on interstate gas. In 1975, President Ford proposed a $35 per person tax rebate on 1974 tax liabilities; this tax cut provided no incentive whatever to earn additional income. Subsequent modest tax changes primarily focused on personal exemptions and the standard deduction, which also lack incentive effects at the margin.

The Carter Administration also failed to rein in excess money growth. It tried voluntary wage and price guidelines to curb inflation, without success. In 1977, President Carter proposed a $50 tax rebate modeled on President Ford's ineffective $35 rebate. Congress rejected that as inadequate. The President was able to push through Congress a crude oil tax, followed by a the 1977 Social Security Amendments, which increased the amount of income subject to the payroll tax, and provided for a series of payroll tax rate increases over thirteen years.

In 1978, the President returned with a proposal to reduce corporate and individual tax rates slightly in all brackets, but with a significant increase in the progressivity of the tax structure. He sought to pay for part of the tax relief with increased taxes on capital gains and curtailment of various fringe benefits, and limits on business deductions that would have raised taxes on capital investment. The proposed individual tax relief was not adequate to offset the rising tax burdens on individuals due to inflation-related bracket creep. Congress rejected this approach, and designed its own. The 1978 tax bill gave a modest reduction in marginal tax rates for corporations, and increased the personal exemption to $1000. Its most important feature was a reduction in taxes on capital gains (the Steiger Amendment). The lower tax rate triggered increased capital gains realizations and actually raised revenue for the Treasury. Over all, the tax cuts were not deep enough to restore the work, saving and investment incentives that had been lost to inflation, but they were a step in the right direction.

In 1979 and 1980, OPEC again sent energy prices soaring, resulting in the second oil shock. President Carter's 1980 budget was a disappointment. It explicitly rejected tax rate reductions to offset bracket creep on the grounds that they might stimulate demand and inflation. It called for spending restraint to complete a "tight" budget package. The "tight" budget was advocated for the express purpose of avoiding a tighter monetary policy. The bond market took this as a signal that the Administration was unwilling to address the real source of inflationary pressures, and reacted very adversely. The President withdrew his budget, and submitted a new plan. In it, he requested that consumers help to rein in excess demand by refraining from using their credit cards. The public responded with a sharp reduction in consumption spending, sending the economy into the steepest one quarter decline since quarterly data were collected after World War Two.

Recap: the Impact of 1970s Policies on the Economy, Individuals and Businesses

Deteriorating Conditions

The 1970s were a time of rapid inflation and unacceptable levels of real growth and unemployment, a combination labeled "stagflation". (See chart 1.) From 1973 to 1980, the U.S. economy grew at a real rate of just over 2 percent per year, less than 60 percent of the 3.8 percent real growth rate from 1950 to 1973, and less than half the 4.5 percent real growth rate achieved between 1962 and 1969. Since the late 1960s, inflation and unemployment had been trending upward. CPI inflation; less than 2 percent in the early-to-mid 1960s, exceeded 12% in 1974 and again in 1979-1980. Unemployment ran as low as 3.4 percent in the late 1960s, but remained stubbornly above 5.7 percent in even the best years of the late 1970s. Interest rates were rising; the three month Treasury bill rate was just over 4 percent in 1971 and 1972; in 1980 it averaged 11.5 percent. Toward the end of the decade, productivity and real incomes, after-taxes, began to decline. There were bitter labor disputes and strikes.

By the end of the 1970s, the public was demoralized and unhappy with the triple burdens of inflation, taxation, and unemployment. The prevailing Keynesian economic theory and policy offered no apparent way out of these difficulties. Any effort to fight the inflation was presumed to require a prolonged increase in unemployment. Any policy that could reduce unemployment was presumed either to generate higher inflation or result in unacceptable increases in the federal budget deficit. Elected officials were groping for alternative policies to restore price stability and vibrancy to the economy.

Inflation, Bracket Creep, and Rising Tax Burdens on Capital

A new way of thinking about the economy and about fiscal and monetary policy was needed. These new insights were provided by monetarist and neoclassical (supply-side) economists. The effect of money growth on inflation and of inflation on taxes and economic performance provided the clues necessary to discover a new set of policies to deal with the dilemma.

Starting late in the late 1960s, and continuing throughout the 1970s, inflation did significant damage to the economy through its interaction with the federal tax system.

Higher nominal wages, either from real wage gains or cost of living increases, were forcing workers into higher tax brackets, raising their marginal tax rates. Higher inflation also raised taxes on saving. Taxes were imposed on inflated interest earnings and capital gains, and the depreciation allowances for plant and equipment were not adjusted for inflation, raising the cost of capital.

Marginal tax rates rose sharply on most taxpayers between 1965 and 1981. Before 1981, there were 15 tax brackets with rising marginal tax rates. Marginal tax rates went up every few hundred or few thousand dollars of income. These brackets, and the personal exemptions and standard deductions, were not automatically adjusted for inflation.

As workers received cost of living increases, more of their income was subject to tax, and their higher nominal wages spilled over into higher marginal tax rate brackets. Their real tax burdens rose, even though their real incomes had not increased. Although there were a dozen changes in exemptions or deductions between 1965 and 1980; each lowered the tax on the first few dollars of income, while leaving the remainder taxed at increasing marginal tax rates. So-called "bracket creep" raised taxes 16% for each 10% increase in

65-595 00 - 3

prices and wages. The increase in real tax revenues encouraged the government to keep inflating. Marginal tax rates rose, reducing incentives to work and save, and contributing to stagflation.

In 1965, the average family of four earning $7,800 was in the 17 percent income tax bracket. It was permitted to keep 83 cents of every extra dollar earned by working harder or saving more (ignoring payroll taxes). By 1981, before President Reagan's tax cut, the average family of four earning $26,275 was in the 24 percent bracket, keeping only 76 cents of each extra dollar. A family of four with twice the average income was in the 22 percent bracket in 1965 and in the 43 percent bracket in 1981 before the tax cut. Its after-tax incentive to increase its income fell from 78 cents to 57 cents on the dollar.

The rising disincentive effect of high marginal tax rates may appear as demands for higher wages or refusal to accept overtime; as pressure for shorter hours, longer vacations, and sheltered fringe benefits; as a shift of saving out of ordinary investments into tax free bonds, or into consumption. All of these reactions were seen in the 1970s.

In 1965, a saver in the 25 percent bracket could get 4 percent interest on a Treasury note at a time of 2 percent inflation. After losing 1 percent to taxes, and 2 percent to inflation, the saver was left with a 1 percent real after-tax return. In 1980, the same saver would have been in the 32 percent bracket. He could have gotten 15 percent on a Treasury bill, but the IRS would have taken nearly 5 points in tax, and inflation was nearly 13 percent. His after-tax real return was **minus** 3 percent. Personal saving fell from the 7.5 to 9 percent range in the 1967 to 1975 period to between 5 and 6 percent in 1979 and 1980.

Marginal tax rates on wages, interest, and dividends are part of the cost of hiring workers or raising capital. They are a real cost of doing business in the United States. Between 1965 and 1981, inflation, bracket creep and payroll tax hikes sharply raised the pre-tax cost to the employer of giving a worker a $1 after-tax raise. A typical worker in 1981 faced a 40 to 44 percent marginal tax rate on additional income, after federal and state income taxes and payroll taxes. That rate was up from only 26 to 30 percent in the late 1960s. Consequently, in 1981, it cost a firm more than $1.70 to compensate a worker for a $1.00 increase in the cost of living, up from about $1.40 in the late 1960s.

Put another way, in the 1970s, when the tax code was not adjusted annually for inflation (not indexed), an average worker had to ask for an 11.5 percent wage hike on his total earnings to keep pace with 10 percent inflation. Businesses cannot raise wages faster than the growth in their sales. It would have taken annual productivity growth of 1.5 percent to make this wage growth possible without layoffs. In fact, productivity growth averaged just 1.5 percent rate from 1963 through 1981. At double digit inflation, the government would be laying claim to 100 percent of the labor productivity gains in the economy and all of the resulting real wage growth!

Bracket creep was poisoning U.S. labor relations and was pricing U.S. labor out of world markets. The tax collector was the invisible third party at every bargaining table. Rising tax rates drove an ever-increasing wedge between labor and management, resulting in a series of bitter strikes. Strikes at International Harvester and Ford revolved about the issue of overtime. The coal miners walked out over wage demands that they needed to break even, but that the mine operators could not pass on to customers.

Business taxes were also increased by inflation. Depreciation deductions for the cost of plant, equipment, structures, and inventory are based on the original cost of the assets. The write-offs may not be claimed immediately, but must be taken over several years in the case of equipment, or several decades in the case of buildings. The write-offs are not adjusted for inflation. Between the delay in reporting the expenses, and the erosion of their value by inflation, the deductions are reduced in present value far below the real cost of the assets. As a consequence, business expenses are understated, and reported profits exceed real profits. The result is an increase in the effective tax rate on the earnings of capital. The higher is the rate of inflation, the higher is the resulting tax rate, and the lower the return to the owners of capital.

The following table shows the dip in the effective corporate tax rate after the Kennedy tax reductions of the early 1960s, and the sharp increase in effective tax rates in the 1970s as inflation increased. Capital-intensive industries suffered the most. A study of 1979 inflation-adjusted financial data by Price Waterhouse reported that the real effective tax rate for financial corporations was only 28 percent, but hit 72 percent for automotive firms, 75 percent for petroleum, and 78 percent for utilities. Even worse, when dividends are added to tax liabilities, many firms were paying out more than 100 percent of their real profits. Utilities paid out over 500 percent of their real after-tax income in 1979. Automotive firms paid out 139 percent of real after-tax profits. These businesses were, in effect, liquidating.

Effective Corporate Tax Rates										
1960	1962	1964	1966	1968	1970	1972	1974	1976	1978	1980
54.1%	47.0%	43.3%	43.3%	49.3%	58.4%	50.4%	76.8%	53.6%	50.9%	58.6%

Nonfinancial corporate tax liabilities as percent of corporate profits with inventory valuation adjustment and depreciation of fixed assets adjusted to replacement costs at double declining balance over 75 percent of Bulletin F service lives. Taken from Paul Craig Roberts, The Supply Side Revolution, Harvard University Press, Cambridge, Massachusetts, p. 73.

In the late 1970s, as the cost of investment increased, and the rate of return on investment fell, there was less willingness to add to the stock of plant and equipment. Investment failed to keep pace with the growth of the labor force. Productivity and real wage growth turned negative.

The adverse effects of inflation on real corporate earnings did not escape the attention of the stock market. Between 1968 and 1979, large capitalization stocks were virtually flat in nominal terms, and had lost over half their real value. Even with dividends, the real return over that period was a loss of more than 25%.[1]

Any way out of the difficulties of the 1970s would have to take into account these adverse effects of inflation on incentives to work, save and invest.

Rethinking Economics: Switch from Keynesian to Monetarist & Neoclassical (Supply-Side) Insights

Keynesian economics could not explain the inflation and low real growth of the 1970s, nor offer any policy prescriptions to cure the disorder. This failure led to the reassertion of the role of money in creating or eliminating inflation, and the micro-economic role of tax rates in affecting prices, incentives, and individual behavior.

Keynesian Emphasis on Macroeconomics and Aggregate Demand

Keynesians assume that the productive capacity of the economy and the supply conditions of labor are largely a given, at least in the short run. None of the incentive effects on the supply of labor and capital described above enter into their calculations. They assume that all government policies act primarily on aggregate demand — total spending on goods and services. Monetary policy acts on demand by adjusting the money supply, federal spending by acting directly on total outlays, and tax policy by raising or lowering disposable income.

Keynesians tend to favor government spending increases over tax reductions as a means of stimulating the economy. They hold that a dollar in government spending adds a dollar to demand, which triggers another dollar or more in spending by the recipients. A dollar of tax reduction, however, might be partially saved by the taxpayer. His initial spending out of the tax cut might be less than a dollar, and the subsequent rounds of spending would be smaller as well.

In the Keynesian model, stimulative fiscal or monetary policy boosts demand and moves the economy to a higher level of output and a higher level of prices. (See chart 2.) The aim of Keynesian economic policy is to keep demand at the right level to achieve reasonably full employment without excessive inflation. Below full employment and full utilization of capacity, additional output may be obtained with only a modest increase in the price level. At full employment and full utilization of capacity, additional output may be obtained only at the risk of higher, and more rapidly rising, prices. This unavoidable trade-off between lower unemployment and higher inflation is called the "Phillips Curve". According to the Phillips Curve, policy cannot independently set a target of zero inflation and achieve an acceptable level of unemployment, even in the long term.

The prevailing view at the time was that the economy could achieve roughly 4 percent unemployment with roughly 4 percent inflation, but that any effort to reduce unemployment would require higher inflation. It was argued that lower unemployment would require a lower real wage, to make hiring more affordable for employers. It was also argued that workers would not accept a drop in nominal wages (or, in the case of existing inflation, accept any wage increase less than the expected rate of inflation), but that, if the Federal Reserve created enough additional money to force the price level higher (or raise the inflation rate above the expected level), real wages would fall. Businesses were presumed to notice the rise in prices (or the increase in the rate of inflation) and the resulting drop in real wages, and increase hiring. Workers were presumed not to notice the rise in prices (or the increase in the rate of inflation) and the drop in real wages, and were presumed to be willing to take the additional jobs. This blind spot on the part of labor was called "money illusion". Because of money illusion, higher inflation could buy the economy some added output and employment (point E1 on chart 3).

Keynesian economics has a great deal of trouble handling a situation of simultaneous inflation and recession. If monetary and fiscal policies were set to stimulate demand to fight unemployment, inflation would get worse. If policies were set to fight inflation, unemployment would get worse. As long as fiscal policy (taxation and spending), and monetary policy were both viewed as affecting aggregate demand, there was no possibility of hitting both an inflation target and a growth target at the same time.

In fact, inflation and unemployment were both trending up in the 1970s, a clear contradiction of the Phillips curve notion. Keynesian analysts had no solution to these twin problems other than sustained recession to wring inflationary expectations out of the system.

Monetarist Emphasis on the Effect of Money on Demand

Monetarist economists, such as Milton Friedman at the University of Chicago and others, had long objected to this Keynesian view of demand management. Friedman pointed out that government spending must be paid for either by taxes or by government borrowing, and that a wider budget deficit will not spur spending and output.

An increase in government spending will not increase aggregate demand if it is financed by borrowing, because higher government borrowing will "crowd out" an equal amount of borrowing by investors and consumers, and curtail private demand to offset the increase in government demand. An increase in government spending financed by taxes will likewise reduce private demand by reducing private consumption or, more likely, by reducing private saving and investment. In any case, the government will simply be taking real resources (labor, materials, and the use of plant and equipment) that would have been employed by the private sector. Similarly, a tax cut in the absence of a government spending cut must be financed by higher government borrowing, which borrows back the increase in disposable income and prevents an increase in aggregate demand. With spending unchanged, no real resources are released to expand the private sector.

Monetarists agreed that faster money creation by the central bank would increase aggregate demand. Indeed, the only time that a fiscal deficit increases aggregate demand is if the central bank "accommodates" the fiscal change with faster money growth, in which case the stimulus is really from the change in monetary policy, not fiscal policy.

However, the monetarists warned that the economy was generally in or close to a state of full employment, and that "money illusion" on the part of workers was a myth: Faster money growth would increase not only demand and the prices of output, but would also boost wages and the cost of capital, because the public would quickly begin to expect higher prices and to demand higher wages and higher returns on capital to compensate. There would be no lasting gain in real output, only an increase in the price level.

If the Federal Reserve kept trying to increase employment by continually increasing the money supply, there would be inflation, not just a one-time jump in the price level. As people's expectations adjusted to any given rate of inflation, any temporary benefit with regard to higher real output would fade. The Federal Reserve would have to raise the rate of money growth and inflation again and again to fool the public into increasing output beyond capacity for any length of time. Each time, both supply and demand would adjust to the new higher rate of inflation (point E2 on chart 3). Therefore, monetary policy cannot promote abnormal levels of employment on a permanent basis, and any effort to do so would trigger unacceptable inflation.

Consequently, monetarists recommended that the Federal Reserve devote itself to price stability. Once people realized that prices were remaining stable, they would adapt their wage and price expectations to the new reality, and the markets would achieve the optimal level of real output and employment, with no lasting ill effects.

Supply-Side or Neoclassical Economics — the Excise Effects of a Tax

Fiscal policy, especially tax policy, has important <u>microeconomic</u> consequences. Microeconomics is the study of the behavior of individuals, businesses, and markets. It studies how these participants in the economy respond to changes in relative prices. In the microeconomic world, it is changes in prices (not changes in the government's spending or tax revenue, nor changes in the public's disposable income) that drive economic behavior. Neoclassical economics is the development of a picture of how the economy as a whole behaves on the basis of <u>microeconomic</u> principles. Supply-side economics is the popular term for the neoclassical economic revival of the 1970s and 1980s.

Since the work of Alfred Marshall in the 1890s and early 1900s, economists have regarded taxes as affecting behavior by changing prices and rewards. (See chart 4.) When an excise tax is imposed (or increased) on a product, the cost of the product to the consumer rises (Pc), and the price received by the producer falls (Pp). The spread between the consumer's price and the producer's receipt equals the tax rate.

At the higher price, the consumer will wish to buy less of the product. At the lower price to the producer, the producer will wish to produce less. The quantity of production declines. As output of the taxed product declines, resources are freed to produce more of other products on which the tax has not been imposed. The increase in the price of the taxed product relative to that of the untaxed products shifts the consumer's attention to the other goods.

Conversely, if a tax is removed (or reduced) on a product, the price paid by the consumer falls and the price received by the producer increases. The product becomes more attractive relative to other goods and services, and output and consumption of the product will increase. The price changes and the resulting changes in output are the "excise effect" of a tax.

The tax revenue is the tax per unit times the new reduced quantity of output (shaded rectangle). When a tax is imposed or increased, the gain in revenue is less than would have been the case if the tax had not reduced output. Conversely, when a tax rate is reduced, output rises and the drop in revenue is not as great as if output had remained unchanged. The effect of the tax rate on the tax base must always be taken into consideration in the analysis of a tax revenue proposal. Government revenue estimators do this to some degree when dealing with excise taxes, but they do not take these dynamic effects into account when dealing with individual and business income tax changes or payroll tax changes that affect the whole economy.

The "tax wedge" reduces the value of economic output, a "dead weight social loss" (the triangular area in chart 4). The value to consumers of the lost production exceeds the value of the resources that are released by the decline in output. The labor and capital resources released by the fall in production of the taxed product may find employment in the production of other products, in which case market output will be rearranged but will not fall significantly; or they may retreat into leisure or be disinvested (converted to consumption), in which case total market output will drop.

The tax rate increase may be thought of as shifting the supply curve backward to include the tax in the cost of production. The new supply curve is drawn to represent the gross-of-tax market price to the consumer. The representation of a tax rate change as a shift in the supply curve is the source of the term "supply-side economics".

Extending Supply Analysis to the Macro Economy — Excise Effects of Marginal Income and Payroll Tax Rates

A tax may be imposed on labor and on income from capital as well as on a product. The result is much the same as for an excise tax. Taxes imposed at the margin on labor and capital income force up the cost of labor and capital to the employer and reduce the after-tax reward to workers and savers. The term "at the margin" means the tax that is imposed on the next dollar that might be earned from working longer or adding to saving. Taxes that do not affect incremental effort have no effect on behavior. The tax rates in question could be the personal or corporate income tax rates, the payroll tax for social insurance, and any number of other tax rates that are piled onto economic effort at various stages.

The tax rates imposed on labor and capital affect two very important relative prices and the corresponding choices of the affected individuals. Individuals may use their time for leisure or for work to earn money to buy market goods and services. Higher tax rates on the earnings of labor make it more costly in terms of time to acquire market goods and services, encouraging people to work less and take more time off. Savers are acquiring assets that earn them additional income in the future. Individuals must give up current consumption in order to save. Higher tax rates on the earnings of capital raise the cost of obtaining additional income through saving and make current consumption relatively more attractive.

As taxes at the margin reduce the reward to work, saving and investment, people reduce the amount of labor and capital they are willing to supply. The supply of capital is more sensitive to taxes than is the supply of labor. (See charts 5a and 5b.) People seem quite willing to consume instead of save, or to invest abroad instead of in the United States. They have somewhat less ability to fine tune the amount of work they must do, especially if they are not self-employed, but there is still a significant response of the labor supply to changes in after-tax wages.

With tax rates rising virtually across the board, the reduction in the supply of labor and capital would inevitably result in reduced market output. The rise in the price of the taxed factors would not be confined to increasing the relative price of a few products; it would raise the price of all market activity relative to leisure and it would raise the cost of saving and investment relative to consumption. Resources would retreat from the market, and total output would fall or grow more sluggishly than otherwise. Since income is the payment for producing output, output equals income, and income would fall as well.

With a decline in total income, aggregate demand would be reduced too. Note, however, that the tax would not cause the decline in output by first reducing disposable income and demand, as in the Keynesian view. Rather, the adverse incentive effects of the tax on the supply of labor and capital would curtail the desire to produce, and the resulting reduction in gross market earnings of the suppliers would reduce demand in line with supply. The "first order" excise effect of the tax would lead to the reduction of aggregate supply, which would then lead to the "second order" income effect that would reduce aggregate demand. In the neoclassical world, taxes affect the economy by affecting prices and rewards, not by sloshing money around.

Marginal Tax Rate Reduction to Expand the Economy

Conversely, a **reduction** in marginal tax rates on labor or capital income would expand aggregate supply and expand the economy. (See chart 6.) Cutting the payroll tax rate or the personal marginal income tax rates would reduce the gross-of-tax cost of labor to the employer while raising the after-tax wage to the worker. Cutting the personal marginal income tax rates and the corporate tax rates, reducing the tax rate on capital gains, enhancing capital cost recovery allowances (depreciation write-offs), or implementing an investment tax credit, would reduce the gross-of-tax cost of capital to investors in plant and equipment. The supply of labor and capital services to the economy would increase, as suppliers of these services would be encouraged to substitute labor for leisure and saving for current consumption. There would be greater output. Those furnishing additional labor and capital to the production process would be paid, and then, and only then, would demand increase.

The increase in the supply of labor and capital services expands the capacity of the economy. Demand rises only in line with the added output. There is no inflationary pressure from a supply-enhancing tax reduction. The real price level (reflecting the real productivity of the labor force and the capital stock in turning materials into output) should remain unaffected or even decline as the government-imposed barrier to output is lowered.

The effect on the nominal price level from a supply-enhancing tax rate reduction would depend on the response of the Federal Reserve. If the Fed were to leave the money supply unchanged, the price level would probably fall as output rose relative to the money supply. If the Fed were to increase the money supply in line with the expansion of the real economy, the nominal price level would remain roughly unchanged.

Dealing with Stagflation

In summary, the monetarist and neoclassical revolutions in economic thought brought forward three important points. First, monetary policy is the strongest determinant of nominal demand, but ultimately most of its impact is on the price level, not on real output, which is determined by real factors and market forces. Second, fiscal policy does not primarily influence demand and inflation. It chiefly affects real output. Tax policy affects economic behavior by changing relative prices governing the choice between labor and leisure, and the choice between consumption versus saving and investment. Third, government spending and regulation crowd out and discourage private production; they do not add to it.

The new analytical framework was able to explain the poor economic performance of the 1970s and permitted the development of a set of economic policies designed to fight inflation, promote real growth and reduce unemployment simultaneously. Such a program would consist of reductions in marginal tax rates on labor and capital income, restraint of government spending, reduced regulation, and slower growth of the money supply. The reduction of government spending would free resources for private sector use. The reduction of regulation and marginal tax rates would reduce the cost of production and augment the supply of real output without making inflation worse (in fact, reducing costs and prices). The reduction of money growth would reduce the growth of aggregate demand and inflation without harming real output (even enhancing it by lowering the tax burden on capital).[2]

This combination of policies, some aimed at reducing inflation, and some aimed at increasing the supply of goods and services, would permit the expansion of the real economy and a reduction of inflation at the same time. The Keynesian economic framework, in which all policy tools were to be aimed at control-ling aggregate demand, could not have handled both problems at once, even if the tools operated as perceived by the Keynesians.

Growing Awareness on Capitol Hill of Inflation's Tax Impact and Damage to Incentives

As stagflation intensified, several Members of Congress became aware of the new policy ideas being developed to counter it, and attempted to enact them into law.

There was increasing support on the Banking Committees and the Joint Economic Committee for focusing the attention of the Federal Reserve on price stability. In spite of the dual goals of the Humphrey-Hawkins Act — low inflation and low unemployment — there was a building consensus that the Federal Reserve could best contribute to a strong economy and low unemployment by stabilizing prices.

Amendments to index the personal exemptions, standard deductions and tax brackets for inflation were offered to tax bills in 1976 through 1981 by Senators Bob Taft, Jr. (R-OH), Robert Griffen (R-MI), Bob Dole (R-KS), Bob Packwood (R-OR), and Bill Armstrong (R-CO). These tax indexing efforts did not pass until 1981, but they got more votes each year as inflation and bracket creep worsened.[3]

Senator Russell Long, Chairman of the Finance Committee, was deeply concerned about the Keynesian preference for spending over tax reduction as a means of stimulating the economy. The recently enacted Budget Reform Act of 1974 gave the Budget Committee the authority to set spending ceilings and revenue floors for the federal budget each year. There were a dozen Senate Committees interested in pleasing constituents by spending more and only one Committee, Finance, that pleased people by lowering taxes. Far more Members of Budget Committee served on spending committees than on the Finance Committee.

Consequently, in meeting any given deficit target, there was a distinct tendency for budget resolutions to raise the spending ceilings and then require the Finance Committee to raise taxes to match.

Senator Long was understandably interested in any theory that could demonstrate that tax cuts were better for the economy than spending increases, and that appropriately structured tax reductions could recoup some or all of their static revenue loss by expanding the economy. Senator Long was convinced that the surge in capital gains realizations and revenues following the 1978 capital gains tax cut was proof that the public did respond to tax changes, and was willing to support research in that areas. He arranged a $250,000 grant to Mike Evans, builder of the Chase Econometrics model, to build supply-related elements into a new model that could better assess the effects of federal fiscal policy on the economy.

Senator Orrin Hatch, a member of both the Joint Economic Committee and the Senate Budget Committee, tried unsuccessfully to get the Budget Committee to hold hearings on the major economic models that were often used to forecast the result of changes in government policy. There had been several years of correspondence between various members of Congress, the model builders, and model users at the Office of Management and Budget, the Treasury, and the Congressional Budget Office. These letters and reports had revealed that the supply-side incentive effects of tax changes were missing from the models. The Senate Budget Committee staffs, both majority and minority, and the CBO fiercely resisted opening up the issue of the models or the CBO's methods.[4]

In the House, Representatives John Rousselot (R-CA) and Marjorie Holt (R-MD) tried repeatedly to amend various Budget Resolutions to lower the revenue targets to leave room for across the board tax rate cuts. They argued that correctly designed tax cuts would not cost as much as the static revenue estimates from the Joint Tax Committee and the Congressional Budget Office indicated. Opponents of the tax cuts charged that the revenue reflows were speculative. Rousselot and Holt subsequently called for matching spending and tax reductions, and attracted considerable support for their efforts.[5]

Senator Bill Roth (R-DE) and Representative Jack Kemp (R-NY) responded to the academic focus on marginal tax rates and incentives by introducing a 30 percent across the board tax rate cut modeled on the Kennedy tax reductions. It was offered as an amendment to the 1978 tax bill, and received 30 votes.

Another supply-side amendment was offered to that same bill. Senators Sam Nunn (D-GA) and Lawton Chiles (D-FL) felt that a smaller but significant tax rate reduction was justified by events if accompanied by spending restraint. They proposed significant marginal rate cuts, combined with restriction of the growth of federal spending to inflation plus 1%, leading to a projected budget balance by 1982. The amendment passed the Senate 65 to 20. In an unusual move, the House, which had already passed its version of the tax bill, voted to instruct its conferees to accept the Senate substitute. Despite the consensus in both Chambers that it was time for a supply-side tax cut, the President threatened a veto. The Conference Committee leadership blocked the Nunn Amendment and reported back a far less effective bill.[6]

In 1979, the Joint Economic Committee Annual Report noted shortcomings in the econometric models. In 1980, the Committee held a hearing on the major commercial forecasting models and the use of such models by the Congressional Budget Office. At the hearing, several leading economic modelers and tax analysts discussed the role of supply-related incentives in economic theory. The majority of the witnesses testified that the major models were based largely on Keynesian principles, and could not correctly simulate the supply-enhancing effects of tax changes that increased the rewards to labor versus leisure or saving and investment versus consumption. Several told the Committee that they were investigating substantial changes to their models as a result of the growing evidence that these incentive effects were important.[7]

The Joint Economic Committee Reports

The use of either monetarist or neoclassical principles in the formulation of economic policy was controversial at the time. The Joint Economic Committee Reports were among the first indications that economic specialists in the Congress and serious economists on the Congressional staff were paying heed to the new economic thinking. The Committee's endorsement of some of the basic ideas of the new economics, in turn, lent political legitimacy to efforts to restructure federal economic policy along the lines suggested by these theories. Eventually, these new concepts had a profound impact on national politics. They became the guiding principles of the economic proposals of the Reagan campaign and the first year of the Reagan Administration and have influenced subsequent policy proposals to this day.

In 1977, and, in more detail in 1978, the Minority (Republican) sections of the JEC Annual and Midyear Reports described in detail the monetarist/neoclassical interpretation of stagflation. They blamed rising inflation on excessive money creation by the Federal Reserve. They described the adverse impact of inflation-related bracket creep on labor costs and on after-tax wages; how inflation raises nominal interest rates and drives down after-tax real interest rates, depressing the incentive to save; and how inflation reduces depreciation write-offs below the replacement cost of plant, equipment, and buildings, driving up the cost of capital and depressing investment.

The JEC Chairman, Senator Lloyd Bentsen (D-TX), was particularly concerned with the effect of inflation on investment. He was the author of a bill to shorten asset lives of depreciable property. The plan, known as "10-5-3", would have allowed the write-off of structures in 10 years, most equipment in 5 years, and automobiles in 3 years. It would have countered much of the adverse effect of inflation on the capital consumption allowances, and moved the tax system a long way in the direction of expensing.

By 1979 and 1980, Senator Bentsen and Ranking Minority Member Representative Clarence J. Brown (R-OH) were able to persuade the full Committee to support several recommendations consistent with the new view of economics. In particular, the Committee endorsed a gradual reduction in the growth of the money supply to fight inflation, and tax relief for business investment.

The joint reports made only passing reference in the main text to the personal side of the tax code, which was of more concern to the Minority Members and addressed in their supplemental views. Thus, the reports were not a blanket endorsement of sweeping reductions in marginal tax rates for individuals. Nonetheless, the reports made several key contributions to the tax debate.

They acknowledged the effect of taxation on the incentives to supply and employ the factors of production. They acknowledged a different mechanism by which policy affected output other than the prevailing Keynesian view that taxes affected output by altering disposable income, the deficit, and aggregate demand.

They set forth a different policy mix for the simultaneous attack on inflation and unemployment, constituting a partial break with the Phillips curve. The reports called for a gradual reduction of the rate of growth of the money supply to bring down inflation. They called for a reduction in federal spending as a share of GDP to reduce the claim on physical and financial resources (restraining demand while encouraging private investment). They endorsed reduction in the taxation of the returns on business investment to encourage the growth of investment, capacity, productivity, real output, employment and real wages.

The reports declared that it was possible to have real growth and rising employment while reducing inflation through this new mix of policies. They declared these policies to be mutually reinforcing. Lower inflation would reduce the tax burden on capital by reducing the loss of real value of the depreciation write-offs (bringing the capital consumption allowances more nearly into line with the replacement cost of plant, equipment, and structures). Lower inflation would reduce the tax bracket creep that was increasing on labor, which was putting upward pressure on wage demands and labor costs.

The main report stopped short, however, of endorsing lower marginal income tax rates for individuals and indexation of the tax bracket structure. The idea that the labor force did respond significantly to the after-tax wage (had a significantly positive elasticity of supply) was still too controversial in the economics profession. Some members may have felt that lowering marginal tax rates across the board gave too much to the "rich", or feared that indexing would deprive the Congress of a nice, low-profile source of ever-increasing revenues. Whatever the reasons, the majority of the committee was not yet prepared for further steps. They focused on lowering taxes on business investment, which had the strong support of the business community; they felt that any money that businesses got would be used for investment, which would raise productivity and wages.

It is ironic that this bipartisan support for tax relief was focused exclusively on business investment at the behest of the Democratic majority. It is also ironic that, today, candidates of both parties are ignoring or raising business taxes to focus all tax relief on individuals (and too much of that in a manner that provides no supply-side incentives).

The Reagan Program & the Economic Recovery Tax Act of 1981 (ERTA) — a Supply-Side Solution

The Economic Program

The policy approach of the incoming Reagan Administration incorporated the general approach outlined in the 1979 and 1980 Joint Economic Committee unified reports and went further to address some of the issues raised in the Minority Views in the 1978 and 1979 Reports. The Reagan program had four parts:

- A gradual slowdown in the rate of growth of money creation to fight inflation.
- Reduction in government spending as a share of GDP to release real resources (manpower and materials) to the private sector.
- Reduction in marginal tax rates on work, saving, and investment to spur real output, and protection of the individual rate structure from inflation.
- Reduction in government regulation of the economy to reduce production costs and improve economic efficiency.

Tax Rates and Tax Bases

It must be stressed, and it must be remembered, that the 1981 tax reduction program addressed the whole tax system, not just pieces. In particular, ERTA addressed two key issues, the level of the statutory marginal tax rates and the definition of the tax base. Furthermore, it did so at two levels, the individual level and the business level. All were necessary to roll back the high effective marginal tax rate disincentives that had built up during the 1970s.

Individual Tax Cuts

For individuals, ERTA reduced individual marginal income tax rates, in three stages, from a range of 14% to 70% under prior law to a range of 11% to 50%. It provided for indexing the personal exemptions, standard deduction, and tax bracket boundaries for inflation, starting in 1985, to eliminate bracket creep and to preserve the new tax rate structure in real terms against inflation.

The top long-term capital gains rate fell from 28% to 20%, and the use of IRAs was opened up to all taxpayers to make the tax treatment of saving more neutral. To counter that portion of the marriage penalty created by graduated tax rates, the lower earning spouse was allowed a deduction of 10% against the first $30,000 of wage and salary income (a maximum deduction of $3,000) to offset the higher marginal tax rate encountered when one spouse's income is added to that of the other on joint tax returns. Estate tax rates were to be phased down to 50%.

Business Tax Cuts

For businesses, ERTA included an increase in the rate of the investment tax credit to 10% from 7%, a cut in the corporate tax rate from 48% to 46%, and shorter asset lives for the purpose of determining capital consumption allowances. The shorter asset lives were in the pattern of, but slightly less generous than, Senator Bentsen's 10-5-3 initiative in the previous Congress. Equipment was to be written off over 3, 5, or 10 years, structures over 15 years. At then-prevalent rates of inflation, when fully phased in, the capital consumption provisions plus the ITC would have been roughly equivalent to allowing expensing (first year write-off of investment), which is the optimal tax treatment.

ERTA provided a "safe-harbor leasing" provision to enable all investment to take full advantage of the new tax treatment of capital investment. Firms that lacked sufficient current income to make full use of the ITC and faster write-offs on investment purchases could, instead, lease the equipment from investors who had sufficient income against which to use the deductions and credits.

After-Tax Incentives

The Reagan tax rate reductions were modeled on the Kennedy rate cuts. The Kennedy and Reagan rate cuts were roughly proportional across the board, and reduced taxes by roughly similar percents for all taxpayers. In both cases, however, the after-tax incentives at the margin rose the most where the tax rates had been highest and the after-tax rewards had been lowest to start with. It is the change in the after-tax incentives that matter for economic behavior, not the percent cuts in the tax rates.

In both cases, the across the board rate cuts encouraged people to earn and report more income, especially where tax rates had been the highest and the disincentives had been the worst. As theory would predict, following the rate cuts, upper income people began reporting more taxable income, and began paying a higher share of the total tax burden.

Cutbacks, Delays and Phase-Ins

The tax reductions were not effective immediately. Due to fear of creating a deficit, and to give the government time to trim spending, the tax cuts were scaled back and phased in slowly. President Reagan's original proposal for individual tax rates was a cut of 30% across the board, 10% a year for three years beginning January 1, 1981. As enacted, the marginal tax rate cuts were scaled back to 25% and were phased in more slowly. The final bill provided for a 5% cut on October 1, 1981; 10% on July 1, 1982; and 10% on July 1, 1983. The cut was not fully effective for an entire tax year until 1984. Furthermore, they were compounded (not full cuts from the original rates, but sequential.) The effective calendar year/tax year reductions amounted to a 1.25% cut in 1981, 9.75% in 1982, 14.5% in 1983, 18.8% in 1984, and 23% in 1985. Tax indexing was not made effective until 1985.

The acceleration of depreciation permitted for equipment under previous law (200 percent declining balance method instead of straight line) was temporarily scaled back to 150 percent declining balance. It was scheduled to be restored in stages (175 percent in 1985 and 200 percent in 1986).

Recession

Implementation of the Reagan program was not as coordinated as it might have been. The Federal Reserve shifted to an anti-inflationary posture in November, 1980, virtually the day after the election, and pursued stop-and-go money growth policies throughout 1981 and 1982. The small portion of the income tax cut effective in October of 1981 was less than the scheduled payroll tax rate increase of that year, and was inadequate to offset that year's underlying inflation-related bracket creep. By the second quarter of 1981, a few months before the tax bill was enacted, the economy entered recession.

Tax Policy Since 1981

The Tax Equity and Fiscal Responsibility Act of 1982 — a Tax Hike on Investment

No sooner was ERTA signed into law in August of 1981 than the Congress began having second thoughts. Because some businesses were indicating greatly expanded investment plans as a result of the safe-harbor leasing provision (which was the intent of the provision), the Finance Committee worried that it might substantially reduce tax receipts. Senator Bob Dole, Chairman of the Finance Committee after the Republican capture of the Senate, indicated that he would move to repeal safe-harbor leasing and otherwise trim back the business provisions of ERTA. The result was TEFRA, the Tax Equity and Responsibility Act of 1982, which was misnamed on both counts.

TEFRA repealed the restoration of accelerated depreciation scheduled for 1985 and 1986 under ERTA. That repeal revoked 80% of the ultimate reduction in the cost of capital for equipment promised in the 1981 Act. TEFRA also repealed safe harbor leasing.

TEFRA's timing was terrible. The economy appeared to begin a recovery in the summer of 1982, and the upturn might have taken off from there. Unfortunately, in anticipation of TEFRA's repeal of safe harbor leasing, major companies canceled tens of billions of dollars in major investment projects in 1982. The loss of that investment was sufficient to trigger renewed weakness in real economic output in the summer of 1982, which delayed the recovery by another six months. The extended downturn led to further deterioration in federal revenues.

Deficit Concerns

The budget deficits of the early 1980s were erroneously blamed on the tax rate reductions and led to calls for further tax increases. In fact, the deficits were due to the recession and to the sudden collapse of inflation.

Keynesians could not understand the new policy mix. They viewed monetary and spending restraint as contractionary, tax cuts as "stimulative" of consumption. What sense did it make to mix the policies up that way? The Federal Reserve shared the view that the tax cuts would stimulate demand and increase inflationary pressures. Consequently, the Fed leaned extra hard against the inflationary wind. But the tax rate reductions reduced the cost of labor and capital. With costs down, and after-tax incomes up, the inflation rate fell far faster than anyone expected. Intractable "core" inflation proved to be a myth.

The Administration and the Congress had budgeted for a much slower decrease in the inflation rate than actually occurred. Inflation fell from 12.5% in 1980 (December to December) to 3.8% in 1982. The Administration had expected over 7% inflation in 1982, and did not expect to achieve 4% inflation until 1986. Although the Congress had voted a reduction in the growth of real federal outlays, the nominal spending targets turned out to represent a substantial increase in real outlays. The reduction in forecast revenue due to the recession and the allowance of too large an increase in federal outlays for inflation were the primary sources of the budget deficit in the mid-1980s, not the tax cut.

Recovery, but Continued Panic Over the Deficit

By the end of 1982, however, the economy had bottomed out. The third installment of the tax cut produced the first significant **net** tax rate reduction for calendar 1983. Inflation was falling rapidly, boosting the value of the capital consumption write-offs, and winding down the bracket creep underlying the tax rate structure. Efficiency gains from the deregulation of energy prices was helping as well.

The strength of the economic recovery, 4.5% per year in real GDP growth from 1982 through 1986, also took the critics by surprise. Nor did the critics predict the strength of the increase in the level of employment — up 10 million jobs from 1980 levels by 1986, up 20 million before the end of the expansion in 1990. U.S. productivity gains in the mid-1980s actually exceeded Japan's. Real family after-tax income, depressed in the 1978-1982 period, began rising again, recovered its losses, and rose to new highs. The bad economic trends of the 1970s were reversed in the 1980s (chart 1).

Unfortunately, the Congress was not willing to wait for the budding economic recovery to generate additional revenue and reduce the deficit. Instead, calls for further tax increases led to considerable backsliding from the tax reduction program.

The 1983 Social Security Amendments — a Tax Hike on Seniors

The 1983 Social Security Amendments grew out of the recommendations of the National Commission on Social Security Reform (the Greenspan Commission). The 1983 Amendments accelerated payroll tax increases already scheduled under the 1977 Social Security Amendments. It affected marginal income tax rates, as well, by introducing the taxation of Social Security benefits. It did so in a particularly damaging way, by phasing up to half of Social Security benefits into taxable income as the taxpayer's income exceeded certain thresholds. This had the effect of imposing horrendous marginal tax rates on the elderly, especially on the elderly who work and exceed the earnings test limits. (See below.)

The Deficit Reduction Act of 1984 — a Tax Hike on Real Estate

DEFRA (The Deficit Reduction Act of 1984) repealed 30% of the reduction in the cost of capital for structures enacted in ERTA. DEFRA also froze temporarily the top estate tax rate at 55%; it had been scheduled to drop to 50% under ERTA by 1985.

Tax Reform Act of 1986 — Lower Rates, Broader Base, Bigger Bias Against Saving & Investment

The Tax Reform Act of 1986 (TRA86) reduced the number of tax brackets and sharply lowered individual income tax rates. It created two basic tax rates, 15% and 28%. Over a range of upper-middle income, a 5% surtax resulting in a 33% rate "bubble", recaptured the benefit of the 15% bracket, after which the tax became a flat rate of 28% on all income above exemptions and deductions.

TRA86 has been described as "broadening the tax base" by closing "loopholes" in order to lower the tax rates. Because of the low individual marginal income tax rate structure, TRA86 is often referred to as the ultimate supply-side tax bill. That is a misperception. In fact, TRA86 offset the static revenue loss of the personal rate reductions with several improper changes to the tax base that increased the income tax bias against saving and investment, overstating income from capital or otherwise subjecting it to increased double taxation. The net effect was to worsen the tax treatment of capital formation, both in absolute terms and relative to consumption uses of income. In particular, TRA86:

- Repealed the ITC and lengthened the asset lives of depreciable assets in a manner that eliminated the remaining investment-specific cuts in the cost of capital in ERTA; Congress dropped the Administration's request that longer asset lives be offset by indexing depreciation write-offs for inflation. TRA86 partially offset the impact of these changes by reducing the corporate tax rate to 40% in 1987 and 34% in 1988;

- Curtailed, for upper income taxpayers, the deductible IRA provisions of ERTA that provided neutral tax treatment of saving;

- Tightened "passive loss" rules that denied normal business deductions for investors who were not active managers of the affected enterprises, thereby overstating their actual income from the properties;

- Eliminated the 60% capital gains exclusion, resulting in ordinary income treatment of capital gains, but with the rate capped at 28% for assets held a year or more. The change increased the "double taxation" of business earnings.

Some of the existing real estate tax "shelters", such as non-recourse loans, were unjustified and worthy of repeal. However, the lengthening of asset lives for structures and the passive loss rules seriously affected the market for commercial and multi-family residential real estate, damaged the savings and loan industry, and weakened the banking system. With mortgage lending curtailed, the damage spread to single family home construction as well. The government was forced into a multi-billion dollar bail-out of the financial industry, the cost of which far exceeded any revenue raised by the harsher tax treatment of investment in real property.

Tax Rate Hikes in 1990 and 1993

Not only was the tax base made less neutral by the 1986 Tax Reform Act, but once the so-called "shelters" were repealed the individual rate cuts were gradually rescinded by later tax bills.

The 1990 tax act substituted a 31% top rate for the 33% bubble and the top portion of the 28% rate. That Act contained a temporary provision requiring the phase-out of personal exemptions and deductions for taxpayers with adjusted gross income above certain thresholds, effectively boosting the top marginal tax rate into the lower 40's.

The 1993 tax act imposed 36% and 39.6% individual income tax rates, and made permanent the phase-outs of exemptions and itemized deductions. It extended the Medicare portion of payroll tax to all wage income, boosting the marginal tax rate on income previously in excess of the FICA tax contribution base. It increased to 85 percent the amount of Social Security benefits subject to tax, and increased the phase-in rate and the resulting implicit spike in the marginal tax rate. The 1993 Act also increased the corporate tax rate to 35%. The freeze in the estate tax rate, which had been extended by the Revenue Act of 1987, was made permanent in the Omnibus Budget Reconciliation Act of 1993.

Some Incentives Restored in 1996 and 1997

The Senior Citizens' Right to Work Act of 1996 moderated the Social Security earnings test penalty for seniors under age 70 who have reached the normal retirement age (currently 65). Seniors ages 65 through 69 who continue to work while drawing benefits lose $1 in Social Security benefits for every $3 in earnings above a exempt amount allowed by law. The Act increased the amount of labor earnings allowed before losing benefits. The limit for 1996 was raised from $11,500 to $12,500, and was increased in stages in subsequent years to a new limit of $30,000 in 2002, after which normal indexation for wage growth will resume. There was no relief for seniors between age 62 and the normal retirement age. They still face a loss of benefits at an even higher rate, $1 for each $2 earned above a different, lower limitation. (As this is being written, the Congress is considering legislation that would eliminate the earnings test for the older seniors but does not include relief for the younger seniors.)

The Taxpayer Relief Act of 1997 reduced the long term capital gains tax rate to 20% for assets held eighteen months; the holding period was then reduced to 1 year in 1998 legislation. These reductions undid the capital gains damage done in 1986. Introduction of Roth IRAs undid some of the damage to saving incentives in the 1986 Act, but upper income taxpayers are still restricted from making use of them. Upper income individuals must turn to the tax exempt bond market for similar treatment.

Of the improvements in incentives to work, save, and invest initiated in the policy changes of 1981 and parts of the 1986 Tax Reform Act, few remained in place by the end of the 1990s. The few fiscal changes that survive are: a portion of the lower marginal personal income tax rates; lower capital gains tax rates; tax indexing; a lower corporate tax rate; deregulation of energy prices and some curtailment of regulation in other sectors. The only major piece of the original 1981 tax cut that was retained in 1986 and still remains in force in its original form is tax indexing. It is critical for the growth of saving and employment that indexing not be tampered with, and it is critical protection for taxpayers against Washington's appetite for money.

The other key policy change that is still in place is lower inflation. The Fed's continued vigilance against inflation in the 1990s has brought about a de facto tax reduction on capital formation that has protected the economy against the rising tax rates imposed by legislation. With inflation near zero, however, there is not much more that the Fed can usefully do in that regard.

What Remains to be Done?

The Reagan fiscal policies, with help from the Federal Reserve, brought down tax rates and inflation, and paved the way for a prolonged non-inflationary expansion. But there is still much work to do if the economy is to achieve its full potential. Many of the lessons of the 1960s and 1970s have been forgotten;

many of the steps taken to reduce tax rates have been repealed; and many more steps that should be taken are not even under serious consideration.

The tax code still raises revenue for the government in a highly complex, economically destructive manner. It employs high marginal tax rates imposed unevenly across individuals and across different types of economic activity. There is a significant tax bias against the use of income for saving and investment, and graduated tax rates that punish people the harder they work and the more they produce. Some of the marginal tax rates are explicit and visible to the taxpayer/voter. Other high rates are hidden and disguised to squeeze more revenue from an unsuspecting public without triggering a voter backlash.

High marginal tax rates, however disguised, depress work, saving, investment, productivity, output, and income. They trap the poor in poverty. They punish people who would like to save for their retirement or to help their children, which saving would also contribute to economic development that would benefit everyone. They drive experienced workers from the labor force.

The key tasks remaining in the area of tax policy are to reform the tax base to eliminate the anti-saving, anti-investment biases in the tax code; to lower and flatten the statutory tax rates; and to eliminate complexity. These goals are compatible because the biases in the code are the chief sources of the complications. One additional goal should be the adoption of dynamic scoring of the revenue consequences of tax proposals based on their microeconomic (supply side) incentive effects and the resulting supply responses of the taxpayers and the associated changes in gross domestic product and income.

Tax Biases Against Saving

Ferreting out and eliminating the high marginal tax disincentives to work, save, and invest requires a close look at the biases hidden in the tax code.

Under the broad-based income tax, most income is taxed when first earned (except limited amounts deferred in pension or IRA contributions). If it is used for consumption, there is generally no additional federal tax (except for a few selective excise taxes) on the enjoyment of the goods and services.

If the income is saved, however, there is an additional tax (sometimes more than one) on the earnings of the savings (the "service" being bought when the assets are acquired): there is a tax on interest in the case of a bond or bank account, a tax on rent in the case of ownership of real estate, and the corporate income tax in the case of ownership of stock. These added layers of tax are the **basic** income tax bias against saving. Whenever income that is saved and the returns on the saving are both subject to tax, the tax raises the cost of saving by more than it raises the cost of consumption, hence the bias. (See chart 7.)

Additional biases are created by taxing after-tax corporate earnings a second time as dividends, or, if they are retained and increase the value of the company, as capital gains when the shares are sold. Note that corporate dividends and retained earnings are both subject to this added layer of tax. In its latest study of corporate tax integration, the Treasury Department pointed out the advisability of dealing evenhandedly with this excess layer of tax on dividends and capital gains.[8]

The combined corporate and personal income taxes on dividends exceed 60% for some savers, leaving the highest-taxed shareholders less than $0.40 in after-tax return on each dollar of corporate earnings paid as dividends. The tax rate on retained earnings resulting in a long term capital gain reaches 48%.

Capital gains may also occur when a business's earnings outlook improves for reasons other than reinvestment. A new product or patent, a rise in sales, anything that would lead to a jump in anticipated income (income that the business has not even received yet) may boost the current valuation of the shares or business. If the higher expected business earnings come to pass, they will be taxed as corporate income and/or personal business or dividend income. To also tax the increase in the current value of the business, either upon sale, gift, or bequest, is to triple-tax the future income.

These business taxes are rendered more onerous by the denial of immediate or full accounting for certain business costs, which overstates real earnings and increases effective tax rates. In addition, another layer of tax arises if one corporation owns shares in another. Corporations are taxed on the capital gains they receive if they sell shares in another company, and on a portion of any dividends they receive from non-subsidiaries.[9] Shareholders of the receiving corporation then face additional tax as the dividends are passed on to them, and on the gains when they sell their shares in the receiving company.

Finally, if the saving outlives the saver, the federal unified transfer (estate and gift) tax may impose yet another layer of tax on the saving. Every dollar in an estate has already been, or will be, subjected to one or more layers of individual or corporate taxation. (If part of an estate consists of tax-deferred saving, the heir or beneficiary is required to pay income tax on it.) The transfer tax is always an added layer of tax.

These multiple layers of tax on saving and investment in current law derive from the "Haig-Simons" definition of taxable income, which was specifically designed to redistribute income from rich capitalists to poor workers. (Apparently, all savers are assumed to be rich, and anyone who doesn't save, no matter how high his salary income, is assumed to be poor.) However, the broad-based Haig-Simons income tax retards investment, which reduces wages and employment, and penalizes saving, keeping those who lack capital from getting any.

The basic tax bias against saving can be eliminated by extending tax deferral to all saving (as in a pension or deductible IRA), or by giving no deduction but exempting the returns (as in a Roth IRA or a tax-exempt bond). Additional biases can be eliminated by ending the double taxation of corporate income and scrapping the estate and gift tax. In fact, all the major tax reform plans move in one way or another to an unbiased, consumption/saving neutral tax system. (See chart 7.)

Fixing the Tax Rates and the Tax Base

The tax rates that matter are the marginal tax rates, the tax that would be imposed on the next unit of activity. Marginal tax rates govern the choice between working longer or taking more leisure, and between consuming more or saving or investing more.

The current personal income tax has 5 statutory marginal tax rates: 15%, 28%, 31%, 36%, and 39.6%. There is also an "alternative minimum tax" with rates of 22% to 24% on a broader definition of taxable income. These graduated tax rates act as a set of escalating excise taxes that ultimately choke off effort. The higher one's productivity and income, the more the tax rate discourages effort.

The statutory marginal tax rates don't tell the whole story, however. Tax rates can be much higher than they appear. If the tax system hits the same income more than once, or if tax rules overstate actual income, then the effective tax rate may be much higher than the apparent statutory tax rate. Consequently, it is not enough to have low tax rates. We must also have the right tax base. Correcting the tax base is at the heart of all of the major tax reform proposals.

Phase-Ins and Phase-Outs Produce Hidden Rate Hikes

In some cases, earning an extra dollar of income causes taxable income to go up by more than $1 because a tax credit or exemption is "phased-out" or a tax is triggered on Social Security benefits. And sometimes the tax rules mismeasure (overstate) a taxpayer's actual income to inflate Treasury revenue. All these cases result in a higher effective marginal tax rate. All such phase-outs or phase-ins should be eliminated, or replaced with a less destructive method of including the income in the tax base.

There are at least two dozen examples of phase-outs and phase-ins in the tax code, and more are added with each new piece of tax legislation. The complexity is astonishing and frustrating to taxpayers.[10]

Upper income taxpayers must phase out their personal exemptions and part of their itemized deductions as their income exceeds certain thresholds. The phase-out raises the top tax rates by about 2.5 to 5 percentage points for a couple, depending on the number of their dependents. The top marginal income tax rate is effectively pushed into the low forties.

Almost all the personally-managed retirement and education saving incentives and child credits in the tax code are phased out as incomes increase.

Even the poor face high marginal tax rates. Working parents with between $19,000 and $30,000 in income face an extra 21% implicit tax rate as they earn additional money, because their Earned Income Tax Credit is phased out by 21 cents for each additional dollar they earn. They also face a 15 percent income tax rate and a 15.3 percent payroll tax rate on an extra dollar of wages. Their combined tax penalty on added income is over 50%.

Social Security recipients face particularly high marginal tax rates. Their Social Security benefits are phased in to taxable income at a rate of $0.50 or $0.85 for each dollar by which the sum of their interest, dividends, and pension income (plus half of their Social Security benefits) exceeds certain thresholds. The extra jump in taxable income effectively raises tax rates on those sources of income. Marginal tax rates can reach 42% or 52%. The taxation of benefits can boost the implicit marginal tax rates on wage income in excess of the thresholds to 65%. For wage income that is also subject to the Social Security earnings test, the combined federal income tax rates and loss of benefits can cost retirees 109% of their added income, even before state income taxes. (See chart 8.) These terrible tax rates could be avoided if a portion of benefits were exempted from tax to protect people with low income and the rest were simply added to taxable income without reference to other income received by the taxpayer.

Taxing Income More than Once Makes Effective Rates Soar

Phase-ins are bad, but so is taxing the same income more than once. The payroll tax hits wage income a second time, adding 15.3% to the tax rate on labor compensation. The cure is to privatize retirement saving, eliminate the payroll tax, and allow individuals to put the money into their own personal retirement plans.

That second layer of tax on saving can be offset by deferring tax on *all* saving and taxing it on withdrawal, as is allowed for limited amounts contributed to a deductible IRA or pension plan. It can also be offset by taxing the money before it is saved, but not taxing the returns, as in a Roth IRA. Either the saving-deferred method or the returns-exempt method puts the saving on an even par with consumption.

Double taxation of saving matters a lot. Putting $1,000 a year in an IRA at 7.2% after inflation would yield over $400,000 in retirement savings at age 70. In an ordinary savings account, it would yield only $240,000. Neutral tax-deferred treatment of saving over a working lifetime could boost retirement income by 60 percent. (See chart 9.)

The extra layer of tax on corporate income should be eliminated through one or another form of "integration" of the individual and corporate taxes. If after-tax corporate earnings are paid out to shareholders, the combined individual and corporate tax rates on dividends can exceed 60 percent. (See chart 10.) If the after-tax corporate earnings are reinvested, which raises the value of the shares, the capital gains tax can result in combined tax rates of 48 percent. These rates can go even higher if one company gets dividends from another before passing them on to the shareholders.

Not only is corporate income taxed twice, but the income of all businesses is overstated and overtaxed by forcing businesses to wait for years or decades to record the cost of their capital outlays. Business capital outlays should be written off at once (expensed), not depreciated. Alternatively, the unused portions of the depreciation write-offs should be augmented annually by a market interest rate to offset inflation and the time value of money, so that the present value of the write-offs remains equal to the full cost of the asset.

Depreciation is a tax free loan to the government. A dollar spent on a seven year asset gets a write-off that is only worth $0.91 if inflation is zero. (See chart 11.) People who erect buildings (a 39 year write-off period) get a write-off worth only $0.55 for each dollar spent. The cost of the delay becomes even greater if there is inflation. At 5% inflation, the 7-year asset's write-off is worth only $0.81, and the building's write-off drops in value to $0.30. At modest rates of inflation, the overstatement of business income by depreciation can cut the rate of return on business investment in half. This is a huge disincentive to build up the capital stock. Productivity, wages, and employment suffer as a result.

The federal transfer tax (the estate and gift tax, also called the death tax) should be eliminated. Every cent saved to create an estate has either been taxed, or will be taxed, under some provision of the income tax. Ordinary saving by the decedent was taxed repeatedly when the decedent and the companies she or he may have owned shares in paid individual and corporate income taxes. Saving by the decedent in a tax-deferred retirement plan will be subject to the heirs' income taxes (as well as having been subject to the corporate income tax in the case of stock holdings). The death tax is always an extra layer of tax.

The bottom marginal tax rates of the estate and gift tax are offset by a credit, but once the estate reaches taxable levels the rates start at 37% and reach 55%. A surtax produces a 60% rate until the lower rates are "recaptured" and effectively raised to 55% of the whole estate. The credit is scheduled to expand to offset tax on the first $1 million of an estate by 2006. The death tax rate tops out at 55% if a parent leaves money to a child, but jumps to almost 80% if the bequest skips a generation. (See chart 12.) If a near-to-retirement couple are thinking of working an extra year just to add to an estate, the combined income, payroll and estate tax rates can exceed 78% or 90%, a profound disincentive to work and save.

There is considerable complexity and bias in the tax code relating to the treatment of foreign source income. The current practice is to tax foreign source income and to offset foreign-imposed taxes with a foreign tax credit, but only with severe restrictions that put American firms at a competitive disadvantage when operating abroad. The solution is to switch to a territorial tax, in which foreign income is taxed only by the foreign jurisdictions, and the U.S. foreign tax credit is eliminated.

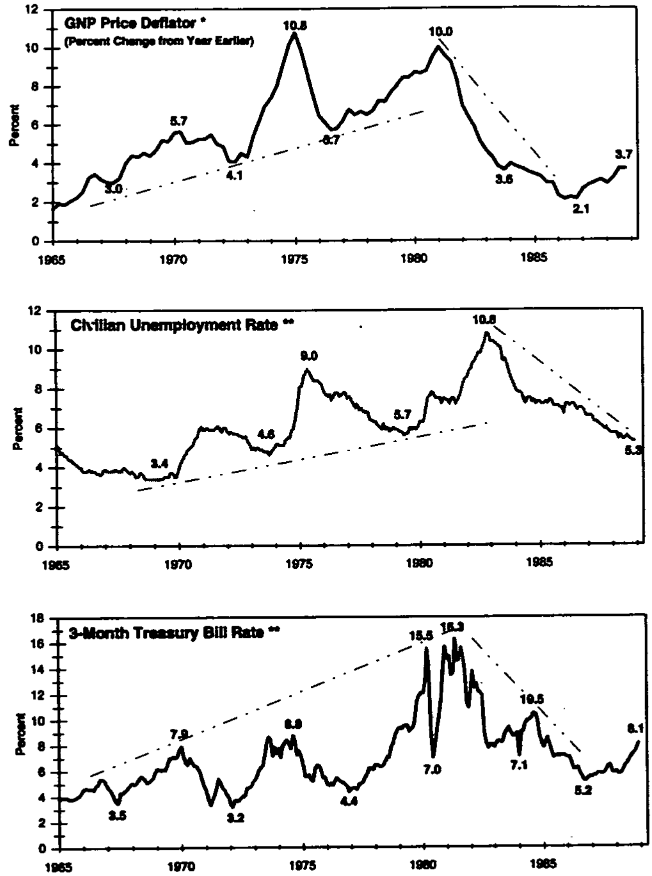
Fundamental Reform

All the major fundamental tax reform proposals eliminate the multiple taxation of saving and investment inherent in the broad-based income tax and provide a neutral tax system. The national sales tax and the individual portion of the USA Tax (Nunn-Domenici) are, in effect, saving-deferred taxes. The Armey Flat Tax is a returns-exempt tax for individuals, and a saving/investment-deferred tax for businesses. A simple, single rate saving-deferred cash flow tax for individuals would be another possibility, and the clearest way to show taxpayers what they are paying for government.[11]

One way or another, we need to reform this crazy tax system. A single rate tax, unbiased against saving, with no double taxation of business income and no tax on estates, could eliminate these hidden, high marginal tax rates. Moving to neutral tax treatment of saving and investment could add 25% to 30% to the stock of capital, boost productivity and wages, and raise national income by 10% to 15% over about 15 years. That would boost the average family income by $4,000 to $6,000 a year. It would guarantee a far more secure retirement for future generations. Fundamental tax reform would work hand in glove with the privatization of Social Security to benefit people during their working and their retirement years. In short, fundamental tax reform would reward people for improving their situations instead of forcing them into continued dependence on Big Brother government, and bring about a new burst of economic and political freedom for the new millennium.

Mr. Entin is the President and Executive Director of the Institute for Research on the Economics of Taxation in Washington, DC. He served as Deputy Assistant Secretary for Economic Policy, Department of the Treasury, 1981-1988. He was a staff economist with the Joint Economic Committee of the Congress, 1977-1981, and an aide to Senator Robert Taft, Jr., 1975-1976.

CHART 1 INFLATION, UNEMPLOYMENT, AND INTEREST RATES



* Quarterly data from 1965-I to 1988-IV.
** Monthly data from Jan. 1965 to Dec. 1988.

Chart 2 Keynesian Demand Management

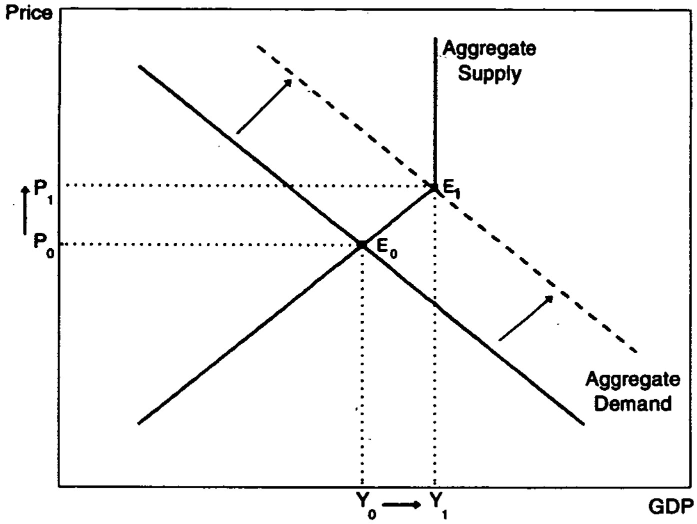


Chart 3 Neoclassical Monetary Policy
Permanent Shift In Money Growth Rate

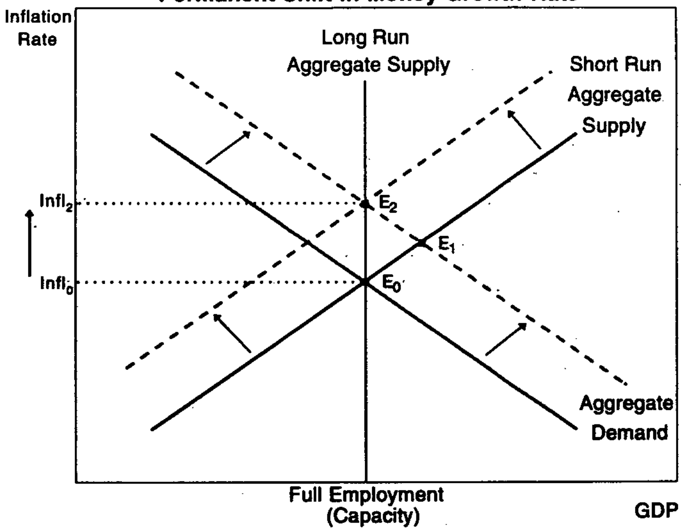


Chart 4 Imposition of a Tax

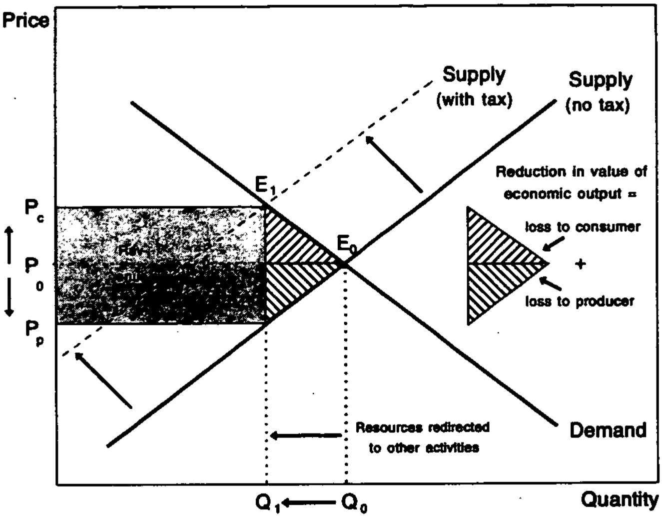


Chart 5a Effect Of Tax On Amount of Labor

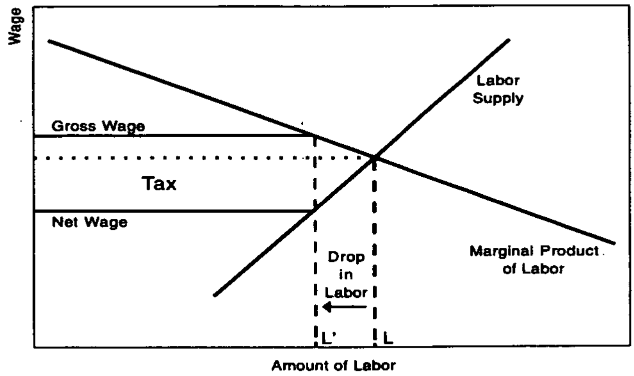


Chart 5b Effect Of Tax On Desired Capital Stock

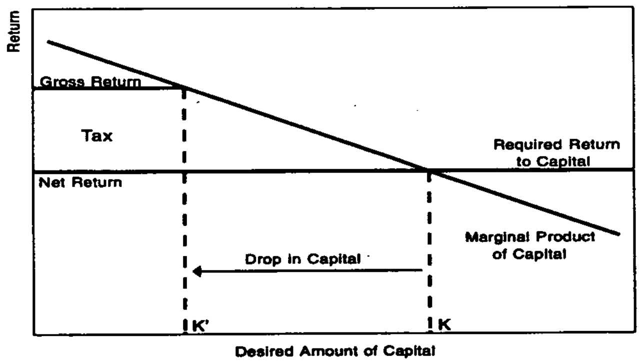


Chart 6 Expanding Capacity By Reducing Taxes At The Margin

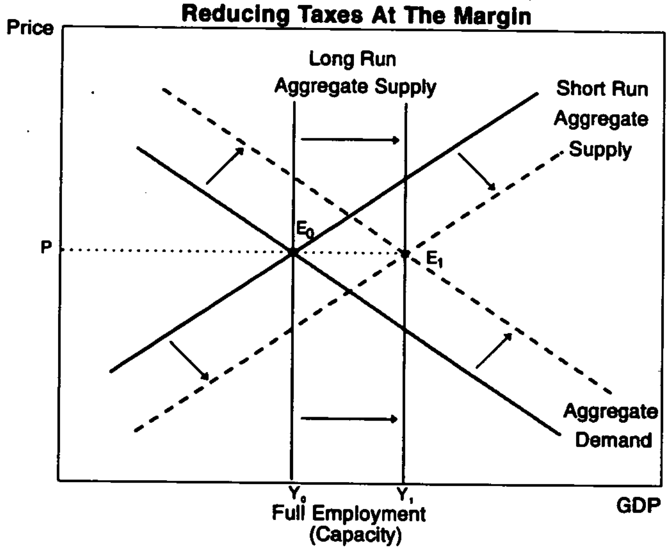


Chart 7 Income Tax Bias Against Saving and Two Cures

PRE-TAX INCOME NEEDED TO HAVE $100 FOR CONSUMPTION AFTER TAXES OR A $100 BOND PAYING $4 IN INTEREST AFTER TAXES UNDER ORDINARY INCOME TAX TREATMENT, IRA-TYPE TREATMENT, OR TAX EXEMPT BOND TREATMENT

		PRE-TAX INCOME	TAX	AFTER-TAX INCOME	INTEREST ON SAVING	TAX ON INTEREST	AFTER-TAX INTEREST	INCREASE (%) IN COST DUE TO TAX
NO INCOME TAX	CONSUMP-TION	$100	$0	$100	--	--	--	--
	SAVING	$100	$0	$100	$4	$0	$4	--
ORDINARY INCOME TAX AT 20% RATE	CONSUMP-TION	$125	$25	$100	--	--	--	25%
	SAVING	$156.25	$31.25	$125	$5	$1	$4	56.25%
DEDUCTIBLE IRA TREATMENT: AMOUNTS SAVED TAX DEDUCTIBLE, RETURNS ON SAVING TAXED		$125	$0	$125	$5	$1	$4	25%
TAX EXEMPT BOND TREATMENT: NO DEDUCTION OF SAVING, RETURNS NOT TAXED		$125	$25	$100	$4	$0	$4	25%

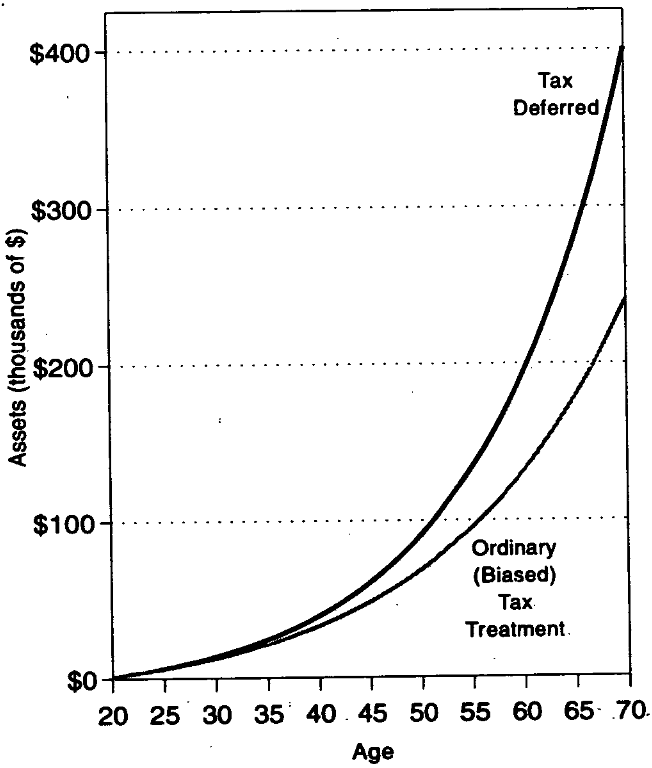
The 20% income tax, by taxing income when first earned and taxing the return on saving, raises the cost of consumption by 25% and the cost of obtaining additional future income by 56.25%, more than twice the increase in the cost of consumption. Under IRA or tax exempt bond treatment, the tax raises the cost of obtaining additional future income by 25%, the same penalty as on consumption.

Chart 8 Effective Federal* Marginal Tax Rates for Social Security Recipients

Statutory income tax rate	Marginal tax rates as Social Security benefits become taxable, in tier 1 (50% phase-in range) or tier 2 (85% phase-in range)			
	Income from savings, pensions		Wage income below earnings test threshold	
	Tier 1 (150% of statutory income tax rate)	Tier 2 (185% of statutory income tax rate)	Tier 1 (adjusted income plus payroll tax rate**)	Tier 2 (adjusted income plus payroll tax rate**)
15%	22.5%	27.8%	37.2%	42.1%
28%	42%	51.8%	56.2%	65.3%
	Wages subject to the Social Security earnings test, payroll and income taxes**			
	Ages 65-69		Ages 62-64	
	Tier 1	Tier 2	Tier 1	Tier 2
15%	68.1%	71.2%	85.4%	88.9%
28%	84.9%	90.7%	102.7%	109.3%

* Add 4 to 6 percentage points for typical state income tax rates.
** Assumes self-employed payroll tax, and allows for income-tax deductibility of "employer's" half of payroll tax and effect of deduction on modified adjusted gross income used to determine amount of Social Security benefits subject to income taxation. Figures would be very similar for employee beneficiaries after adding the employee and employer payroll tax rate adjusted for income tax deduction of employer's half at employer's income tax rate.

Chart 9 Advantage Of Tax Deferred Saving Over Ordinary (Biased) Tax Treatment: Build-up of $1,000 saved per year



Saving from age 20 onward, under tax-deferred system and ordinary "double taxation" (7.2% interest rate, 20% tax rate)

Chart 10 Multiple Taxation of Corporate Income		
	a) Dividend Payout	b) Retained Earnings
1) Corporate income	$1.00	$1.00
2) Corporate tax at top rate*	$0.35	$0.35
3) After-tax corporate income: (a) paid as dividend; or (b) retained, raising stock price	$0.65	$0.65
4) Individual income tax: (a) on dividend at top rate (39.6%); or (b) on after-tax retained earnings taken as a long-term capital gain (20%)*	$0.2574	$0.13
5) Total tax	$0.6074	$0.48
6) Total tax rate	60.74%	48%
7) Income left to shareholder	$0.3926	$0.52

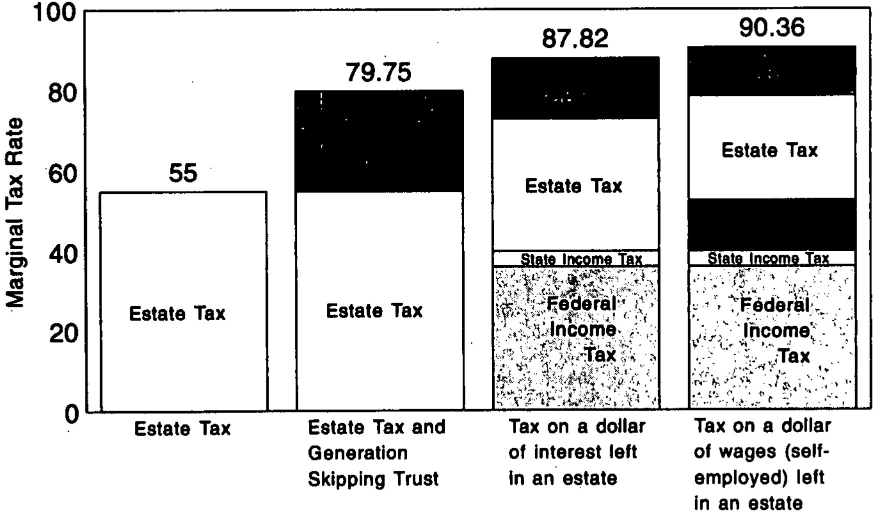
* Top corporate rates exclude corporate surtaxes. Top individual rate excludes effects of phase-outs of itemized deductions and personal exemptions and taxation of Social Security, which may raise effective top tax rates higher than the statutory rates. The top tax rate on short-term capital gains is 28%, whcih brings the combined tax rate to 53.2%.

Chart 11 Present Value of Current Law Capital Consumption Allowances per Dollar of Investment Compared to Expensing (First-year Write-off).

Asset lives:		3 yrs	5 yrs	7 yrs	10 yrs	15 yrs	20 yrs	27.5 yrs	39 yrs
Present value of first-year write-off of $1 of investment:		$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00
Present value of current law write-off of $1 if inflation rate is:	*0%*	$0.964	$0.937	$0.912	$0.877	$0.796	$0.742	$0.646	$0.550
	3%	$0.935	$0.888	$0.846	$0.789	$0.667	$0.592	$0.469	$0.367
	5%	$0.917	$0.859	$0.807	$0.739	$0.599	$0.519	$0.391	$0.295

Assumes a 3.5 percent real discount rate, 3-20 year assets placed in service in first quarter of the year, 27.5-39 year assets placed in service in January.

Chart 12 Marginal Tax Rates On Estates And Income Contributed To Estates



Assumes married couple in 36% tax bracket, who are self-employed, with a 6% state income tax as an itemized deduction.

Notes

[1] Derived from data on large company stocks: inflation adjusted total returns, in Ibbotson Associates, Stocks, Bonds, Bills, and Inflation, 1996 Yearbook.

[2] One of the first economists to propose this policy mix was Robert Mundell, a leading international economist and the recipient of the 1999 Nobel Prize for economics. Then at the University of Chicago, he was searching for a policy mix that would allow stronger real growth without creating inflation and weakening the dollar relative to other currencies. He was joined in advocating this set of policies by Professor Arthur Laffer, then at the University of Chicago Business School.

Another early advocate of sound money, lower tax rates, and reduced government spending, was Norman B. Ture, Washington tax consultant, who had been a staff economist on the Joint Economic Committee, an advisor to Ways and Means Chairman Wilbur Mills, and a former Treasury economist. He developed the earliest comprehensive descriptions of the primary effect of taxes on relative prices, supply, and output, and one of the earliest supply-side models of the economy. Dr. Ture later became the Under Secretary of the Treasury for Tax and Economic Affairs at the start of the Reagan Administration.

[3] In 1976, I was attached to the Joint Economic Committee as an aide to Senator Taft. The indexing amendment of 1976 required the preparation of considerable background information because the Members were largely unfamiliar with the concept. I also assisted the other Members and their staffs with the later indexing efforts, and noticed that, as inflation got worse, the Members became much more familiar with the issue. So did the general public. Representative Clarence Brown (R-OH), for whom I later worked on the JEC staff, was about to tell a group of constituents back in Ohio that he was introducing an indexing amendment. He started his talk by pointing out that inflation had raised taxes, whereupon one of the citizens present called out, "Then why don't you index the tax system?" Senator Armstrong finally succeeded in attaching indexing to the Senate version of the 1981 tax bill, even before President Reagan added indexing to the version of the tax proposal he sent to the House.

[4] For a full account of the maneuvering on this issue, see The Supply Side Revolution, by Paul Craig Roberts, Chapters 1 and 2 (Harvard University Press, Cambridge, Massachusetts, 1984). Also see Reaganomics, by Bruce Bartlett, Chapter 7 (Arlington House Publishers, Westport, Connecticut, 1981).

[5] Roberts, op. cit.

[6] Ibid.

[7] See Roberts and Bartlett, op. cit., for a fuller discussion.

[8] Department of the Treasury, *Integration of the Individual and Corporate Income Tax Systems, Taxing Business Income Once*, Washington, D.C., Jan. 6, 1992. In the introduction, p. 13, the study states: "Integration should distort as little as possible the choice between retaining and distributing earnings. The U.S. corporate system discourages the payment of dividends and encourages corporations to retain earnings..." Also see the section entitled "Bias Against Corporate Dividends Distributions", pp. 116-118.

[9] Suppose Corporation B owns shares in Corporation A. When Corporation A earns money, it pays tax. Then Corporation B, the recipient, pays tax when it receives a dividend from A or sells its shares in A.

Corporation B obtains some relief if it is paid in dividends: the dividends received deduction excludes from tax 70% of inter-corporate dividends. (The exclusion becomes 80% if B owns at least 80% of A and 100% if the companies are affiliated.) Corporation B obtains no relief, though, if it is paid via capital gains; it is then taxed at the full corporate tax rate, which is 35% for large companies. To lessen the multiple taxation of income at the corporate level, the corporate capital gains tax rate should be reduced and/or corporate capital gains realized when one company sells shares in another should qualify for an exclusion analogous to the dividends received deduction. Also, the dividends received deduction should be increased.

[10] See Michael Schuyler, "Phase-outs Are Bad Tax Policy", IRET Policy Bulletin No. 71, January 16, 1998, Institute for Research on the Economics of Taxation, Washington, DC.

[11] A proposal for such a tax is available from IRET. Or see our web site at www.iret.org.

Progress in Federal Regulatory Policy, 1980-2000

by Murray Weidenbaum

A sea change has occurred in public attitudes toward government regulation in the two decades since 1980. Like the state, the federal regulatory apparatus has not withered away. In some important dimensions, regulation has expanded substantially. Nevertheless, a fundamental shift has occurred in the public policy process.

"Command and control" is no longer a phrase used in polite company. Its place has been taken by almost obligatory references to "the magic of the marketplace." The proponents of regulation now feel obliged to talk about costs as well as benefits, private as well as public sector alternatives, incentives and disincentives, and thus to consider the disadvantages as well as the advantages of this form of government intervention in the larger society.

Despite significant achievements, the regulatory reform effort of the past two decades seems to have run its course. A new strategy is needed, one that focuses greater attention on reducing the shortcomings of the basic regulatory statutes, both to eliminate the barriers to agencies doing regulatory analysis as well as to reduce the discretion they often take in going beyond the role envisioned by Congress. Each congressional committee ought to be required to present estimates of the likely benefits and costs of regulatory actions necessary to implement proposed legislation. To improve the credibility of these estimates, Congress should establish an independent Congressional Office of Regulatory Analysis, staffed with experienced apolitical analysts willing to let the chips fall where they may.

1980: A Watershed Year

In many regards, 1980 was a turning point in government regulation. That year the regulatory workforce of the federal government reached a new high. The total of 121,791 represented a steep average annual rise of 5.8 percent from 1970 (see Figure 1). The next several years witnessed the sharpest decline in the employment of the federal regulatory agencies, at least in modern times. (Figure 2 shows a similar trend in another widely used measure of regulatory activity, federal outlays for regulation.)

Substantive policy changes, in the main, tended to follow a comparable trajectory. In the 1970s, Congress enacted a plethora of new or expanded regulatory programs covering consumer product safety, antitrust, toxic substances, overseas bribery, energy, strip mining, minimum wages, debt collection, age discrimination, water pollution, noise pollution, speed limits, campaign finance, product warranties, employee pensions, drinking water, hazardous materials, air pollution, job safety, and credit cards.

In the latter part of the decade, the stirrings of regulatory reform began to be visible. Congress passed a landmark airline deregulation bill in 1978. In the area of procedure, President Jimmy Carter expanded the process of reviewing proposed regulations launched earlier in the decade by President Gerald Ford.

The year 1980 was a period of transition. On the positive side, Congress eliminated much of the detailed apparatus of railroad and trucking regulation. In addition, the Regulatory Flexibility Act and the Paperwork Reduction Act were enacted.

Figure 1
Staffing of Federal Regulatory Activity, 1970-2000
(Fiscal Years, Full-time Equivalent Employment)

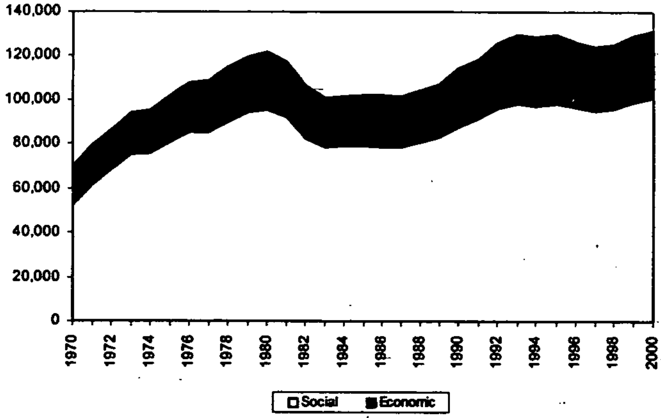
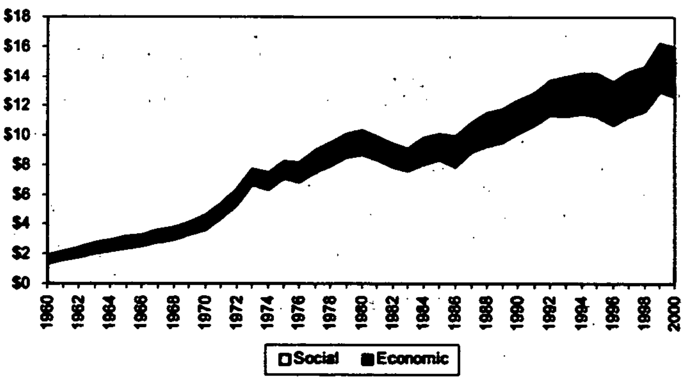


Figure 2
Spending on Federal Regulatory Activity, 1960-2000
(Fiscal Years, in Billions of Constant 1992 Dollars)



The regulatory flexibility statute was perfunctory. Although it nominally required rulemaking agencies to write regulations in a manner that would minimize the burdens on small business, actual compliance has been minimal. The paperwork law, which took effect in 1981, turned out to be a sleeper. It established the Office of Information and Regulatory Affairs (OIRA), the part of the Office of Management and Budget which carries out the centralized regulatory reviews mandated by President Reagan and continued by his successors.[1] Because it enjoys substantial bipartisan support, centralized regulatory review can be expected to stay regardless of the outcome of the elections in 2000.

Not all change on the regulatory front in 1980 represented progress. That year, Congress also created Superfund, a monument to the encouragement of costly litigation as a deterrent to environmental cleanup. The partial banking deregulation law enacted in 1980 produced a mixed bag of results. Phasing out interest rate ceilings was a direct move to a more competitive financial system. However, the change also contributed to the subsequent financial collapse of the savings and loan associations (S&Ls).

In late 1980, presidential candidate Ronald Reagan promised to rein in the expansion of regulation, especially by requiring detailed cost-benefit analyses for all new regulations.[2]

Expectations and Reality

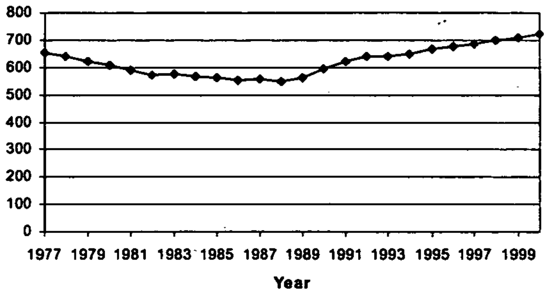
At the beginning of the 1980s, proponents of regulatory reform were enthusiastic. After years of massive expansions of the federal regulatory apparatus, at long last the tide would turn. Events in early 1981 surely seemed to confirm that expectation. Newly-elected President Reagan quickly eliminated energy price and allocation controls and the vestige of "voluntary" wage and price controls of the past. In the February 18, 1981 message outlining his supply-side economic program, President Reagan listed regulatory reform as one of the four key components. Fulfilling his campaign pledge, he issued a key executive order requiring federal agencies to demonstrate that the benefits of proposed new regulations exceeded their costs. President Reagan also charged OIRA with the responsibility to enforce this requirement. At the same time, he established a high-level Regulatory Relief Task Force chaired by the vice president to oversee the entire regulatory reform effort.

In many ways, results were very heartening. As noted earlier, the size of the federal regulatory establishment was curtailed for several years. Further, the regulatory review process instituted by President Reagan had a substantial impact. Although only a small proportion of the thousands of regulations reviewed by OMB was returned or withdrawn, the threat of such severe action often motivated substantial changes, including deferring some regulatory initiatives.

Several deregulatory statutes were enacted, such as the Bus Regulatory Reform Act of 1982 and the Shipping Act of 1984. The most significant accomplishment was so undramatic that it went unnoticed: during the Reagan presidency — and unlike other administrations in recent decades — no new regulatory agency was established nor was any major regulatory program substantially expanded. It was reminiscent of the Sherlock Holmes tale where the most significant clue was not action at all, but the fact that the dog did not bark.

The best available evidence on overall regulatory cost is illustrated in Figure 3, indicating that the aggregate burden of regulation declined substantially in the late 1970s and early 1980s. This reduction is

Figure 3
Annualized Regulatory Costs (1995 dollars, in billions)



attributable to significant economic deregulation of airlines, surface transportation, telecommunications, and financial services. In the mid-1980s, this wave of economic deregulation ended and the pace of environmental regulation intensified. Aggregate regulatory costs resumed their upward climb.

In the early 1980s, forecasts of regulatory doom and gloom were prevalent. The critics thought that the green eye-shade people in the Reagan administration were so determined to grant business "regulatory relief" that they were oblivious to the great damage that would be done to the environment, workers' health, and other vital social goals.

These dire forecasts did not come to pass. By every important standard, the environment is cleaner, the workplace is safer, and substantial progress has been made toward achieving the other goals at which social regulations are aimed. The major measures of workplace accidents maintained by the Bureau of Labor Statistics are down significantly from 1979. Almost all of the pollutants for which the Environmental Protection Agency has set national standards show substantial declines in emissions from 1982. More of the nation's rivers and lakes are now "fishable and swimable." Most fundamentally, the average life span of Americans continues to lengthen.

Moreover, the economic deregulation that started in the late 1970s and accelerated in the 1980s has injected competition into the market economy with strongly positive results. Costs and prices in the deregulated industries have come down while the pace of innovation has accelerated. The industries that have been or are being gradually deregulated include airlines, railroads, trucking, financial services, telecommunications, and utilities. These results have had a profound and pervasive influence in bringing down inflation and extending economic growth and rising living standards.[3]

However, progress on regulatory reform has not followed a straight line. The restraint on enacting new or expanded regulatory legislation weakened in the mid-1980s. In 1986, Congress passed a statute requiring removal of materials containing asbestos from school buildings. (Horror stories quickly accumulated about the illnesses caused by the resultant movement into the air of hitherto dormant asbestos products.) This was quickly followed by expansions of the statutes covering hazardous waste sites, age discrimination, and single employer pension plans.

In the late 1980s, Congress passed a number of new regulatory statutes, among them laws requiring advance notice of layoffs of 50 or more workers, a reauthorization of the nation's pesticide law, and massive new restrictions on S&Ls. Legislation in the early 1990s included a huge expansion of EPA's authority to regulate air pollution, a new and draconian law governing oil tanker design, a new civil rights law, the Americans With Disabilities Act, and expansion of the enforcement powers of the SEC. The Family and Medical Leave Act of 1993 gave employees a legal entitlement to take extended leave while retaining job reinstatement rights. In few cases were the benefits and costs of these new laws independently estimated prior to enactment. No systematic evaluation has been conducted since.

A variety of laws passed in the middle and late 1990s continued the renewed upward trend in regulatory enactments. Examples include the Lobbying Disclosure Act of 1995, the Food Quality Protection Act of 1996, the Health Insurance Portability and Accountability Act of 1996, and the National Securities Markets Improvement Act of 1996.[4] The federal regulatory agencies, especially EPA, responded with alacrity in generating another burst of rule-making initiatives. These ranged from a new "environmental justice" program to toughened air quality standards (the former lacked specific statutory justification while the latter was devoid of adequate scientific support).

Simultaneously, Congress has taken a few important steps toward reducing the burdens of government regulation. The Interstate Banking and Branching Efficiency Act of 1994 permitted banks to set up more interstate branches. In 1999, Congress voted to eliminate the wall separating banks and other financial institutions which had been set up by the Glass-Steagall Act of the 1930s. The Telecommunications Act of 1996 was intended to open up competition for local telephone service. However, progress has been delayed, mainly by the attempt of the Federal Communications Commission to closely regulate the process of deregulation. Also in 1996, the Interstate Commerce Commission was abolished, but its residual functions were transferred to the new Surface Transportation Board.

In 1993, the Clinton Administration rescinded the existing executive orders on regulatory review and replaced them with a new one that reaffirmed OMB (via OIRA) as the central agency charged with reviewing proposed regulations. On the surface, the new executive order requires the regulatory agencies to do many sensible things in the process of drafting rules, including considering benefits and costs and identifying market-based alternatives for meeting governmental objectives.

In reviewing the actions under the Clinton executive order, however, the General Accounting Office reported discouraging results in terms of substantive compliance. Experienced reviewers of federal regulations note that the agencies are not likely to comply seriously on a voluntary basis and will only respond to stringent judicial oversight and informed public pressure.[5] As an indicator of the shortcomings of the current regulatory review process, as of October 1998 the Competitive Enterprise Institute identified over 100 new rules, each of which was estimated by federal agencies to cost over $100 million a year. That is a costly pipeline of future regulation.[6]

Meanwhile, efforts to get Congress to pass a generic or comprehensive regulatory reform law continue. Under the Unfunded Mandates Reform Act of 1995, federal agencies are required to assess the benefits and costs of new regulations that impact significantly on state and local governments. Although the new law did not outlaw these mandates, it may have slowed down the creation of new ones. The same year, however, the proposed Comprehensive Regulatory Reform Act, which had passed the House of Representatives, failed in the Senate by one vote. The next year Congress did enact the Small Business Regulatory Enforcement Fairness Act, which established a procedure for congressional review of major rules. So far, not a single regulation has been overturned using these new procedures.

The Need for Further Regulatory Reform

The regulatory reform effort initiated in the late 1970s and early 1980s has run out of steam. What is needed is not a renewal of the earlier effort, but a shift in the basic thrust of regulatory reform. Virtually all proposals to date have focused on improving the way in which government agencies write regulations to carry out laws already enacted. Although this activity is useful, it ignores the compelling fact that the key decisions occur earlier in the process – when Congress passes an Occupational Safety and Health Act or an amendment to the Food, Drug, and Cosmetics Act or any other important regulatory law, usually with hundreds of pages of detailed specifications.[7]

Each congressional committee should be required, when drafting a regulatory statute, to present estimates of the expected benefits and costs of the regulatory program in the report accompanying the legislation. The committee should affirm that these benefits justify the program in light of its estimated costs. Such a statement, and the benefit-cost analysis supporting it, should be required before a legislative proposal can be reported to the full House or Senate.

In contrast, the way many regulatory statutes are now written both requires the agencies to ignore economic effects and precludes them from even considering the most cost-effective approaches. Key provisions of the Occupational Safety and Health Act, the Food, Drug, and Cosmetics Act, the Clean Air Act, the Safe Drinking Water Act, and the Superfund Act have been interpreted by the courts to prohibit the regulators from taking account of economic impacts when setting standards. Despite well-intended presidential directives, it is impossible for regulators to strike any sensible balance between the costs they impose and the benefits they generate when the basic regulatory laws prohibit costs from being considered at all.

Congress should eliminate provisions in existing regulatory statutes that prevent or limit regulatory agencies from considering costs or comparing expected benefits with costs when designing and promulgating regulations. Regulations that seek to reduce health or safety risks should be based on scientific risk-assessment and should address risks that are real and significant rather than hypothetical or remote. Confidence in benefit-cost analysis of regulations would be enhanced by use of a common set of assumptions and the requirement for peer review of the analyses. Moreover, major benefit-cost analyses should undergo retrospective reviews and updates.[8]

More fundamentally, all those involved in the government's decision-making process should realize that identifying a worthy objective does not necessarily create a need for regulation. Government is already a very substantial presence in the American economy. Today's large federal establishment has great difficulty carrying out the numerous responsibilities already assigned to it. In contrast, the ability of competitive markets to protect the public is very powerful and not fully appreciated. The burden should be on those who would replace the market with additional regulation to demonstrate with solid information and careful analysis that the public would benefit from a further extension of government into the private sector.

Small businesses are especially vulnerable to arbitrary actions by regulators. The Wisconsin toy producer who went out of business following an erroneous report by the Consumer Product Safety

Commission is a classic example of a little firm unable to cope with large bureaucracy. The agency refused to correct its error in a timely fashion even after acknowledging the mistake — and the company lost much of its sales as a result.

Often officials lack the authority to correct an error quickly, even when they want to do so. For example, the EPA admitted it erred in listing the household antibiotic Bacitracin as an "extremely hazardous" substance. However, the agency was precluded from deleting that erroneous listing without going through the same burdensome process that it does in newly listing a very hazardous product.[9]

A key barrier to reforming regulation is the common and erroneous perception that the costs of government regulation are of little concern to citizens because they are simply paid by business. That is not so. By and large, those costs are ultimately borne by the workers and consumers who make and purchase products and services produced under regulation. Moreover, much of the rule making extends to all employers, be they profit or nonprofit, in the public sector or in the private sector.

The American people deserve better results from the substantial resources devoted to regulation. Too many of these regulations have been grossly inefficient, causing us to waste scarce resources in the pursuit of trivial or imaginary improvements in human health protection and environmental quality. Gains in these areas may be possible, but we will obtain them only by chance if we continue present practices. If we are truly serious about achieving cleaner air and water, safer workplaces and residences, and better living standards, especially for the poor, then a vibrant and relentless program of independent regulatory analysis and oversight will be necessary along with institutional changes that discourage old, discredited ways of legislating and regulating. The reforms proposed in this report are not merely matters of procedure and economic accounting. By enhancing the accountability of our legislators and regulators, they would improve the lives of the American people.

Dr. Weidenbaum is the chairman of the Center for the Study of American Business and Mallinckrodt Distinguished University Professor at Washington University in St. Louis. He served as Chairman of President Reagan's Council of Economic Advisers, 1981-1982.

Notes

[1] Murray Weidenbaum, "Regulatory Process Reform," *Regulation*, Winter 1997, pp. 20-26.

[2] Statement by Governor Ronald Reagan, *Regulatory Reform*, Youngstown, Ohio, October 8, 1980, p. 4.

[3] For details, see Murray Weidenbaum, Business and Government in the Global Marketplace, Sixth Edition (Upper Saddle River, N.J.: Prentice-Hall, 1999), pp. 143-163.

[4] Ibid., pp. 42-45.

[5] Richard B. Belzer, *Independent Regulatory Oversight: A New Path to Regulatory Reform* (St. Louis: Washington University, Center for the Study of American Business, February 1999).

[6] Clyde Wayne Crews, Jr., *Ten Thousand Commandments* (Washington, D.C.: Competitive Enterprise Institute, March 1999), p. 19.

[7] *Modernizing Government Regulation* (New York: Committee for Economic Development, 1998).

[8] See Roger G. Noll, *The Economics and Politics of the Slowdown in Regulatory Reform* (Washington, D.C.: AEI Press, 1999), p. 35.

[9] *Modernizing Government Regulation*, p. 26.

Reducing the Size and Scope of Government

by Daniel Mitchell

Mr. Chairman and members of the Committee, my name is Daniel Mitchell, and I thank you for this opportunity to testify regarding the 20th anniversary of the Joint Economic Committee's (JEC) 1980 report on pro-growth economic policy. I currently serve as McKenna Senior Fellow in Political Economy at the Heritage Foundation, though the views expressed here are entirely my own.

The supply-side revolution is most associated with the marginal tax rate reductions of the 1980s. Indeed, the Committee's 1980 report, "Plugging in the Supply Side," played an important role in the enactment of the Economic Recovery Tax Act of 1981 (ERTA) and could be called the intellectual fountainhead of the 1986 Tax Reform Act (TRA).

While lower tax rates were a critical and necessary component of the effort to restore America's economy, supply-side economics involved much more than tax policy. Incentives to work, save, and invest are also affected by monetary policy, regulation, trade protection, and the burden of government spending. Indeed, the unifying theme of supply-side theory is that the economy will flourish when policy makers minimize all impediments to productive economic behavior.

Slowing the growth of government spending was an element of supply-side strategy. The goal was not really to produce budgetary savings, per se, but rather to reduce the economic inefficiency that occurs when resources are consumed by government. In other words, government spending should be reduced to ensure that more resources stay in the productive sector of the economy.

The Situation in 1980

The economy was in dire shape as the 1980s began. Inflation, interest rates, and unemployment were rising, while incomes were falling. Tax rates were high, regulatory red tape was strangling entrepreneurship, and government was consuming a growing percentage of the economy. It should come as no surprise, then, to know that the economy was stumbling. Indeed, the combination of stagnant growth and inflation resulted in a new word being coined – stagflation.

While the causes of economic decline were many, excessive levels of government spending surely played a role. Part of the problem was the seemingly inexorable progression of special interest programs. As Public Choice economists have taught, beneficiaries of federal largesse have an incentive to mobilize and lobby to get a place at the trough because the "value" of the program to them is relatively high. The average taxpayer, by contrast, has very little reason to actively fight any given spending program. Yes, they may be upset by rising tax burdens and government waste, but the per-taxpayer cost of any one program is sufficiently small that it is difficult to mount an organized opposition.

Another problem was that lawmakers were given an intellectual rationale for more government. The Keynesian theory of economics had attracted a large following in the post-WWII era, and advocates of this approach believed that deficit spending could stimulate economic growth. Even as late as 1980, the Keynesian viewpoint had many adherents in Washington and policy makers used that analysis to justify big spending increases during the preceding decades. (This theory eventually fell into disrepute, in large part because its core tenet that unemployment and inflation were supposed to move in opposite directions was so clearly at odds with reality.)

Regardless of whether legislators were satisfying special interest demands or genuinely trying to boost the economy with deficits, the consequences were the same: More government. Beginning in the mid-1960s and continuing through the 1970s, lawmakers significantly expanded the size of government. Between 1965 and 1980, the burden of government spending rose from 17.2 percent of gross domestic product (GDP) up to 21.6 percent. In other words, government was now consuming an additional 4.4 percentage points of the nation's output, an increase of more than 25 percent.

The numbers are even more striking when looking at domestic spending. In 1965, total domestic spending (discretionary and entitlements) totaled 8.6 percent of GDP. By 1980, however, domestic spending was consuming 14.8 percent of output – a dramatic and troubling increase of 72 percent.

As the 1980s began, therefore, the burden of government was dramatically rising. Domestic spending was climbing much faster than needed to keep pace with inflation. Even more worrisome, the previous 15 years had witnessed the ill-advised creation of new programs and expansion of existing programs. Moreover, since many of these new programs were entitlements – so-called mandatory spending programs, there was a very legitimate and grave concern that the continued growth of government was inevitable.

Changes in Federal Policy Since 1980

The battle to control federal spending was not "won" in a single effort. Indeed, efforts to maintain fiscal responsibility continue to the present day. Each and every budget cycle represents an opportunity to be either profligate or frugal with the taxpayers' money. Nonetheless, there are some important events that can be highlighted:

- President Reagan's Early Budgets – President Reagan was able to substantially trim the growth of domestic spending when he took office. Domestic discretionary spending, for instance, fell by more than 12 percent in real terms in Reagan's first fiscal year and another 2.5 percent his second year. These results are especially impressive since policy makers at the time were unable to foresee how fast inflation would decline. To be sure, Reagan did not get all of the savings for which he asked. Congress rejected many of the spending reforms the Administration supported, particularly in the entitlement arena. Nonetheless, substantial progress was achieved.

- The Gramm-Rudman-Hollings Era – The failure to reach a budget agreement in 1985 caused lawmakers to change the budget process in an indirect effort to reduce deficit spending. The 1985 change to the Budget Act, known as Gramm-Rudman-Hollings (GRH), mandated that projected budget deficits gradually decline, enforced by automatic spending cuts known as sequestration. The law did not work as advertised, and politicians proved quite creative in escaping the law's discipline, but spending almost surely grew slower than otherwise would have been the case if the law did not exist.

- The Relapse During the Bush Years – The slow but steady progress of the 1980s was almost completely reversed during the Bush presidency. Gramm-Rudman-Hollings was replaced by specific limits on discretionary spending, but, like 70 miles-per-hour speed limits in a school zone, the limits did not constrain imprudent behavior. Spending increased dramatically, an unfortunate development since CBO had projected, when Reagan left office, that deficits – which had declined to the $150 billion range – would continue to fall if Reagan's policies were left in place.

- The Early Clinton Years – Spending caps were extended in the first year of the Clinton Administration. While far from stringent, they did impose more control over spending than existed in the previous administration. Combined with the failure of the so-called stimulus legislation and rejection of the proposed nationalization of the health care system, spending growth was surprisingly modest. The inflation-adjusted growth of domestic spending fell dramatically compared to the Bush years.

- The GOP Takeover – The Republican victories in 1994 resulted in some spending reforms, culminating in the 1997 agreement to balance the budget. Throughout this process, discretionary spending caps were extended. As with GRH, the caps never worked as well as advertised, but they did prevent spending from growing even more.

- Today – At present, there is a distinct danger that some of the hard-won gains of the last 20 years may be undone. The Congressional Budget Office has prepared three different baselines indicating how fast government spending could grow over the next ten years. In short, the CBO figures indicate that failure to abide by the 1997 caps could result in $1 trillion of additional spending over the next ten years.

The past two decades have seen many approaches to government spending. From the spending reductions of the Reagan years to the spending increases of the Bush years, from the deficit targets of GRH to the discretionary spending caps of today, lawmakers have used policy and they have used process in the battle of the budget.

What Critics Predicted Would Happen

Opponents of fiscal discipline have made two arguments. The main focus of their efforts has been to defend government programs on a case-by-case basis. They may or may not agree that government is too big in general, but vociferously argue that each specific program deserves to be funded and that any reductions – even in the rate of growth – are "cruel" and "mean spirited." This debate, of course, continues to this day.

The second argument, though now largely discarded, is the claim that deficit spending is good for the economy. This was a key tenet of Keynesian economics. While there are still a few believers in this theory, two historical events have combined to make the theory untenable to most policy makers. These are:

(1) Deficits are Associated with Stagnation, not Growth – According to Keynesian theory, deficits are a principal cause of growth. Yet the record-breaking growth of the 1980s occurred as deficits fell from the levels they reached during the 1980-1982 double-dip recession. Likewise, massive spending increases during the Bush Administration did nothing to stimulate the economy (for international evidence, see the repeated failure of Keynesian stimulus packages in Japan). By contrast, the economy's strong performance since the mid-1990s is associated with a fiscal policy that has erased deficits and replaced them with large budget surpluses.

(2) Inflation and Unemployment have Risen and Fallen in Tandem – Another historical occurrence that undermined Keynesian economics has been the behavior of inflation and unemployment. According to the old theory, inflation and unemployment supposedly moved in opposite directions (the "Phillips Curve"), and it was the job of policy makers to inflate the economy to create jobs and contract the money supply when growth became too robust.

Unfortunately, at least for Keynesians, inflation and unemployment rose in unison during the 1970s, fell in unison during the 1980s, and have fallen together again in the 1990s.

What Actually Happened

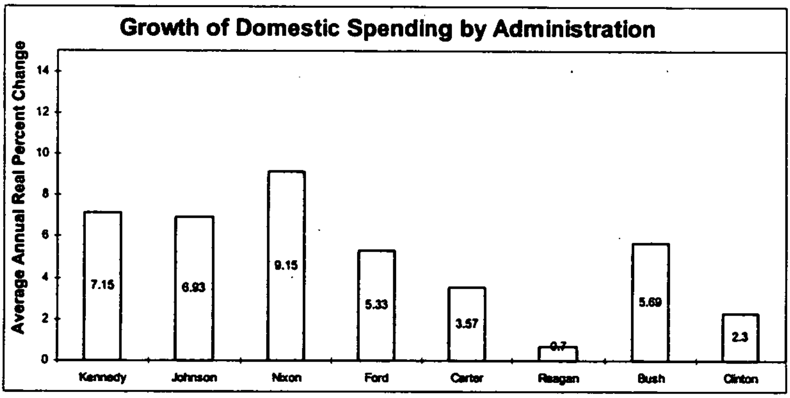
In most areas, the supply-side vision was an unambiguous success. The marginal tax rate reductions triggered a record expansion, and continue to yield benefits today. Market and industry deregulation has made American business far more competitive. Trade liberalization has resulted in major tax cuts on international trade. Last, but not least, the collapse of inflation has helped reinvigorate the economy by removing a major distortion.

To be fair, not all credit belongs to Ronald Reagan. Other administrations have implemented "supply-side" policies. Transportation deregulation, for instance, occurred in the latter years of the Carter Administration. NAFTA and GATT were implemented during the Clinton years, as was telecommunications and financial deregulation, agriculture reform, and the capital gains tax cut.

In other words, policy makers have enacted a number of pro-growth laws in the past two decades. It should come as no surprise, therefore, that the economic malaise and stagnation of the 1970s has been replaced by two decades of strong growth interrupted by one modest recession (which occurred, not coincidentally, during the 1989-1992 period when lawmakers veered back in the direction of bigger government).

Notwithstanding the success of market-oriented policies, conventional wisdom is that the inability to reduce the size of government was a failure of supply-side economics. To a large degree, the accuracy of this assertion depends on the yardstick that is used to measure success. A stringent standard, such as whether spending was reduced in nominal terms or whether the budget was balanced each and every year, indicates that spending control was the one failure of supply-siders.

Yet this simplistic assessment overlooks substantial evidence to the contrary. A more thorough



analysis demonstrates that government spending is far lower today than would have been the case in the absence of the reforms that began in 1980. Indeed, the following chart, which compares inflation-adjusted domestic spending growth by administration, illustrates that fiscal policy has become more frugal since 1980.

The following points illustrate the important progress that has been made in the last 20 years:

(1) Total spending has fallen as a percent of economic output – The least controversial measure of the burden of government is total federal spending as a percent of GDP. As stated earlier, this measure of the budget burden had climbed from 17.2 percent of the economy in 1965 to 21.6 percent of GDP in 1980. President Reagan managed to not only stop this relentless climb, but actually was able to gradually reduce federal spending slightly (21.2 percent of GDP) by the time he left office. In the years since then, the path Reagan set for the nation has more or less continued. Federal spending now consumes only 18.5 percent of GDP, the lowest level in 34 years.

(2) Domestic spending has fallen as a percent of GDP – Even more importantly, domestic spending has slowly but surely been reduced. Recall that domestic spending had reached 14.1 percent of GDP in 1980, up sharply from 8.6 percent of economic output in 1965. Once again, the supply-side revolution of the 1980s produced results. Not only was this upward trend halted, but much-needed cutbacks reduced the domestic side of the budget down to 12.5 percent of GDP. That number since has crept upwards, but still remains below 14 percent of GDP.

(3) Reagan's restoration of America's military was a wise investment – One reason total spending has fallen to the lowest level in 34 years is that defense outlays have shrunk to 3.0 percent of GDP, down from 4.9 percent of GDP in 1980. This budgetary savings was made possible by the Reagan's defense buildup and strong foreign policy. These changes, which ultimately led to the collapse of communism, have created a fiscal dividend for American taxpayers.

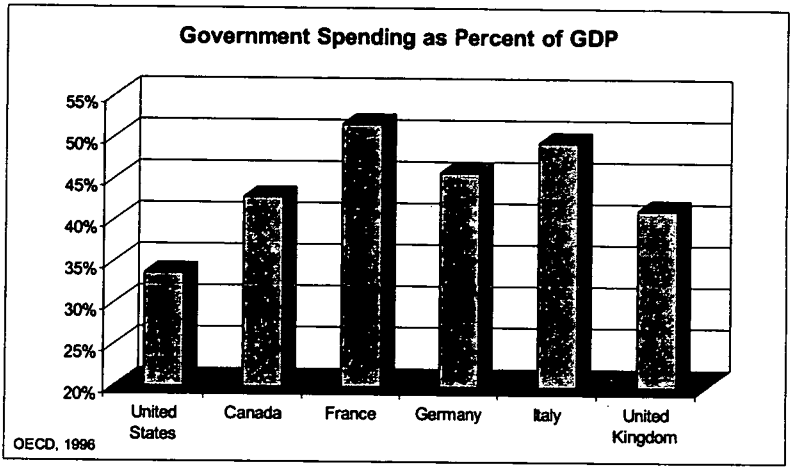
(4) The 1989-1992 reversal of supply-side policy was thankfully short-lived – Federal spending rose dramatically during the Bush Administration. Domestic spending jumped by almost 1.6 percent of GDP in just four years, undoing a good portion of the progress that was achieved during Reagan's two terms. Fortunately, and perhaps surprisingly, fiscal policy in the last eight years has been relatively responsible. As a percent of GDP, domestic spending is still higher than it was when Reagan left office, but it has been reduced by nearly one percent of GDP since Clinton took over.

(5) The US is in much better shape than most industrialized nations – Perhaps the most heartening news is to compare the US fiscal policy performance to other industrialized nations. Like the US, most other nations experienced a dramatic increase in the burden of government beginning in the 1960s. Unlike the US, however, other countries did not successfully halt the growth of government starting in 1980. As the accompanying chart indicates, total government spending in the US is now substantially lower than in other major industrialized nations.

Using a real-world yardstick, the supply-siders and their descendants did make real progress. Total spending is a smaller share of the economy than it was in 1980. Domestic spending also has declined slightly as a share of GDP. The achievements of the last 20 years are particularly impressive considering what has happened in the rest of the world.

What Remains to be Done

While the US is fortunate to have avoided the mistakes of other nations, simply doing "less worse" than others is not a recipe for long term success. Many government programs are either counterproductive or wasteful, not to mention have dubious constitutional authority. Sunsetting these programs would be sound fiscal and economic policy.



The most pressing fiscal policy concern, however, is the looming retirement of the baby boom generation. The first wave of baby-boomers will retire in 10 years, and those seniors and subsequent retirees are going to put heavy pressure on the budget. Failure to enact pro-growth reforms almost certainly will mean significant increases in federal spending – even if lawmakers reduce promised benefits and raise taxes (neither of which is an attractive option to begin with).

Fortunately, there is an approach that solves the problem. Lawmakers could allow younger workers to shift a significant portion of their payroll tax into private retirement accounts while using large budget surpluses to ensure that current retirees received every penny of promised benefits.

Such an approach would not completely alleviate the budgetary pressures that are associated with entitlement programs, but privatization certainly could solve the long-term financial problem affecting Social Security. Moreover, reform also is the best way of reducing debt on future generations. Many lawmakers are debating whether to reduce the $3.6 trillion national debt. Such an effort could yield some modest economic benefits, but privatizing Social Security would significantly shrink the program's $19.8 trillion unfunded liability and substantially boost national savings.

Successful reform of Social Security would result in smaller government, but it is important to stress that this is merely a fringe benefit of the policy. The reason to modernize the program is to ensure that today's workers can enjoy a comfortable and secure retirement.

With a modest level of fiscal responsibility and a commitment to reform, lawmakers can preserve the gains of the past 20 years and reap additional benefits in the future. The American experience offers compelling evidence that society is most likely to prosper when the burden of government is low.

Dr. Mitchell is McKenna Senior Fellow in Political Economy at the Heritage Foundation.

The Global Spread of Supply-Side Ideas

David R. Malpass

Mr. Chairman and Members of the Committee, thank you for the invitation to participate in this hearing. I've been asked to discuss the global spread of supply-side ideas.

In sum, U.S. economic success led other countries into better economic policies in the 1980s and is now forcing even reluctant bystanders to improve. If responsible, classical economic programs had been implemented earlier, world output would be literally trillions of dollars higher than it is now and many fewer people would be poor. This paper discusses the key events in the spread of supply-side ideas, including:

- the tax cutting revolution now taking hold in Europe, Canada and Australia
- Europe's implementation of the euro (exit from floating exchange rates)
- Britain's privatizations beginning in the 1980s
- tax rate cuts in many developing countries in the 1980s and early 1990s
- the North American Free Trade Agreement's supply-side cuts in import taxes.

The Core of the Revolution

America's rediscovery of classical economics around 1980 — termed the supply-side revolution — had an almost immediate impact on the U.S. but a slower impact abroad. To describe its effect abroad, I need to define the core of the revolution as I see it. The supply-side revolution started to restore proper economic policy in the U.S. after the abject economic failure of the 1970s. It is common-sense, responsible, classical economics, giving rise to nearly twenty years of economic success. In my view,

(1) The first principle of the supply-side revolution was that tax rates should be low to allow economic efficiency and growth. If not, people will diminish their efforts or distort their behavior to avoid the tax, slowing economic progress.

(2) The money produced by a responsible government must be a stable store of value for decades and centuries. This common-sense principle directly contradicts the economic theory that exchange rates should vary based on the strength of an economy or the size of its trade balance. In 1979, the U.S. economy was weak, yet Paul Volcker set out to stabilize the dollar, in part under strong pressure from Europe. Understood and communicated by Ronald Reagan, a strong, stable dollar became a permanent feature of U.S. economic policy (with notable exceptions in 1987 and 1993.) I think the U.S. should be more explicit in linking monetary policy to the goal of maintaining a stable currency.

(3) In general, assets held in the hands of the government are less productive than in the hands of the private sector. Margaret Thatcher recognized this, launched Britain's privatization process, and saw economic growth soar.

In combination, these principles — low tax rates, sound money and private ownership — allowed great leaps in the supply of capital, labor and talent — a supply-side revolution. This was a sharp contrast with the previous macroeconomic practice of managing consumer demand, prices, and trade balances. *For the United States, the result has been nearly twenty years of investment-led economic expansion, a boom in tax revenues for the government, a fiscal surplus, and a resurgence of entrepreneurism.*

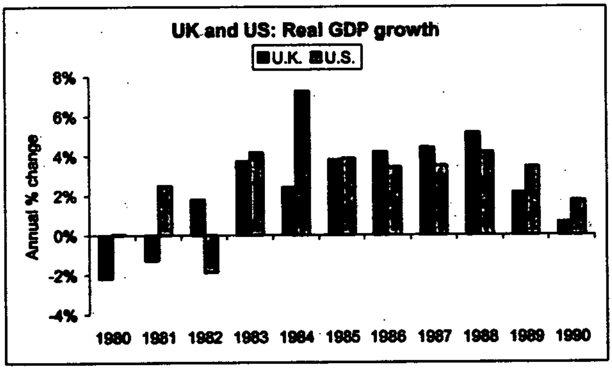
The U.S. has much to be proud of in the conduct of its own economic policy, but has done less than it should to cement the techniques of its prosperity or share them abroad. I've termed this a vacuum in our international economic policy (see the Wall Street Journal, April 21, 1999, Vacuum in International Economic Policy). Rather than uniting behind stable money and low tax rates, the U.S. continues to fight over these principles in both the political and economic spheres. *It is ironic that, at a time when tax rate cuts are sweeping the world, the U.S. has now fixated on paying down its national debt in lieu of continuing the successful rate cutting process.*

We enjoy the benefits of reasonably good economic policies here at home, but promote different, less successful policies abroad. *In particular, the U.S. has done little to promote the economic principles of stable money and lower tax rates in its diplomacy, through international organizations like the IMF, or from the president's bully pulpit.*

Slow Start, but Mounting Impact

During the 1980s, few other countries understood the significance of supply-side economics. Hong Kong was one that did. It held tax rates to very low levels and, in fact, joined the supply-side tax club well before the U.S. Hong Kong pegged its currency to the dollar in 1983 using a currency board. Between 1980 and 2000, Hong Kong's per capita income in U.S. dollars soared 384%, reaching $27,300.

Britain entered the 1980s with a less onerous tax system than the U.S. It delayed tax cuts, and instead focused on transferring public assets to the private sector. In addition, the British pound became relatively stable in 1981. The result was strong economic performance, especially during the second half of the 1980s as the combination of stable money, a larger private sector, and tax cuts began to kick in.



Alan Reynolds notes that 50 countries cut tax rates in the 1980s. He documented the spread of supply-side tax rates in NCPA Policy Brief #283 dated November 11, 1998. While some of the major economies raised rates in the early 1990s, coinciding with a decline in their average growth from 2.9% to 1.7%, the fastest growing economies of Asia, Africa and Latin America continued to bring tax rates down. These tax-cutting countries included Argentina, Bolivia, Botswana, Brazil, Chile, Colombia, Hong Kong, India, South Korea, Malaysia, Mauritius, Mexico, New Zealand and Singapore. The columns on the right in the Reynolds table below show that growth of real gross domestic product was far more rapid among countries with low and/or falling tax rates.

Top Marginal Tax Rates on Individual Income

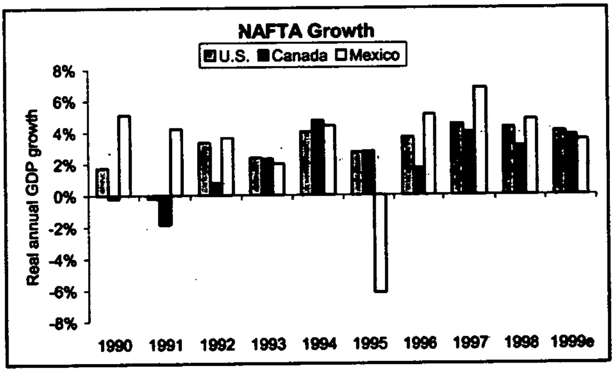
Countries with Low and/or Falling Tax Rates*	Highest Tax Rate: 1979	1984	1989	1996	1980-90	1990-96
Argentina	45	62	30	30%	-0.3	4.9%
Bolivia	48	30	10	13	0.0	3.8
Botswana	75	60	40	35	10.3	4.1
Brazil	55	60	25	25	2.7	2.9
Costa Rica	50	50	30	25	3.0	4.3
Chile	60	57	50	45	4.1	7.2
Colombia	56	49	30	30	3.7	5.5
El Salvador	60	48	30	30	0.2	5.8
Hong Kong	15	17	20	15	6.9	5.5
India	60	62	53	40	5.8	5.8
Indonesia	50	35	35	30	6.1	7.7
S. Korea	89	55	48	40	9.4	7.2
Malaysia	60	45	45	30	5.2	8.7
Mauritius	60	35	35	30	6.2	5.0
New Zealand	66	66	33	33	1.7	3.3
Pakistan	50	60	35	39	6.3	4.6
Peru	65	50	37	30	-0.2	6.0
Singapore	55	40	33	28	6.4	8.7
Thailand	60	65	55	37	7.6	8.3
Average	**54**	**50**	**35**	**31%**	**4.5**	**5.8%**
G-7 Countries						
Canada	58	50	47	53	3.4	1.9
France	60	53	53	52	2.4	1.1
Germany	56	56	53	58	2.2	2.2
Italy	72	65	50	51	2.4	1.0
Japan	75	70	50	50	4.0	1.4
United Kingdom	83	60	40	40	3.2	1.6
United States	70	50	28	40	2.9	2.4
Average	**68**	**58**	**46**	**49%**	**2.9**	**1.7%**

* Some countries that sharply reduced top tax rates to 25-35% in recent years - such as Uganda, Ghana, Sri Lanka, Tunisia and the Dominican Republic - are excluded due to lack of historical information. State and local taxes are not included for Japan, where they can add up to 15 percentage points, or for the U.S.

Source: NCPA

In April 1991, Argentina broke with the IMF and set out to grow quickly using sound money and lower tax rates. It installed a currency board which has kept the peso equal to the U.S. dollar for nearly ten years. The results were dramatic. The stock market surged in 1991 and 1992. Argentina's growth rate averaged 7.1% from 1992-1994, before falling into recession in 1995 after the Mexican peso devaluation. Economy Minister Domingo Cavallo explained in careful detail how the high tax rates on labor discouraged labor. However, under IMF guidance, the direction of Argentina's tax rates since 1995 has been upward, explaining the mediocre economic and stock market performance in the second half of the 1990s.

The North-American Free Trade Agreement was one of the major supply-side events of the revolution. By cutting tax rates on trade, it gave a new impetus to trade and investment. In the second half of the 1990s, Canada and Mexico have been two of the fastest-growing and steadiest economies in the world, thanks in large part to the low tax rates on their trade with the U.S. With the exception of 1995 when Mexico devalued the peso, note the evenness of the bars from 1993 forward.



Hooray: A Tax Revolution Outside the U.S.

The pace of supply-side economic change has increased dramatically in the late 1990s. Center-left governments in Germany and Italy are currently considering major tax rate cuts, using supply-side concepts about the need to create a more attractive investment climate. Australia's conservative coalition is cutting the capital gains rate in half. France is considering modest tax cuts. Tax cuts have become a major election issue in Canada. (The following summaries are based on the work of Polyconomics, a New Jersey economic consulting firm.)

- Ireland plans a 12.5% across-the-board corporate tax rate by 2005. In December 1999, it cut the personal income tax rates to 44% from 46%, and the standard rate was reduced to 22% from 24%.

- The German government has proposed a tax cut equal to 44 billion marks (US$ 22 billion) to be phased in over the next five years. The government plans to cut the main rate of corporate tax to 25% by 2001 from 40% currently. The government is also planning to abolish the current tax (which can run as high as 50%) on corporate asset sales, which could pave the way for large-scale corporate restructuring. As for personal income taxes, the lowest rate of tax will fall in stages to 15% by 2005 from 23.9% currently, and the top rate will fall to 45% in 2005 from 51% now.

- Italy has planned tax cuts of over 45 trillion lira (US$23 billion) between 2000 and 2003, with reforms mainly focused on personal and household taxes. The top rate of personal income tax will be lowered by 3% this year.

- In Australia, a series of tax reforms will be instituted on July 1. The threshold for the top personal income tax rate (47%) will be raised to A$75,000 (US$47,000) from A$50,000 (US$32,000) currently. The corporate tax rate will fall to 30% from 36%, and the capital gains tax rate will fall to 24% from 48%. In addition, the government will be replacing the current system of wholesale and state taxes with a 10% Goods and Services Tax.

- France has formed a plan to roll tax rates back to their 1995 levels by 2003. The bulk of this reform will be concentrated in VAT and residence tax rates, with the total cut equal to 120 billion francs (US$ 18 billion).

- Canada's ruling Liberal party is expected to announce a tax cut initiative as part of its February 28 budget announcement. The two leading center-right parties have each announced substantial tax cut proposals. The Canada Alliance has rallied around the idea of a 17% single tax rate on personal income, replacing the current 3 brackets (17%, 26% and 29%). The Canada Alliance also proposes the reduction of the top corporate tax rate to 21% from 28% currently, and cutting the capital gains tax in half. The Progressive Conservative party is proposing increasing the threshold for the 26% personal tax bracket to US$62,069 from US$41,400 currently, and increasing the basic personal exemption to US$8,276 from US$4,917.

- In the U.K., Chancellor of the Exchequer Gordon Brown is expected to propose a capital gains tax reduction. The proposal is likely to include a reduction in the capital gains tax to 22% from 40% for assets held at least three years. Furthermore, assets would now have to be held for just five years to qualify for a 10% capital gains tax rate, instead of the current ten years holding requirement.

In Latin America, many of the countries are moving away from using payroll taxes to finance retirement, following Chile. This is an important and growing innovation in the supply-side revolution.

Hooray: First Steps in a Sound-Money Revolution

In January 1999, Europe began implementing a single currency across eleven countries. I think sound money is a critical element in economic development. As more countries join the euro, they will enjoy the benefits already reaped by Italy, Portugal, Spain and others – dramatically lower interest rates and bond yields, higher stock markets, a lower cost of capital, and higher rates of investment. In effect, Europe is rolling back the economic malaise brought by unstable exchange rates in the 1970s.

The spread of the euro is, in my view, one of the most important engines for broadening and deepening the supply side economic revolution. In a January 6, 1999 Wall Street Journal article "New Money Will Bring Smaller Government", I argued that the euro would cause Europe's tax policies to improve (rather than deteriorate as was conventional wisdom). Without the confusion of floating exchange rates, differences in economic performance quickly force the higher tax rate country to cut rates. In February 1999, Germany's socialist Finance Minister, Oscar Lafontaine, resigned. By mid-1999, Chancellor Gerhardt Schroeder was proposing tax rate cuts to stimulate the German economy. Italy's Finance Minister recently said that the government has not ruled out lowering corporate tax rates, because the government is "constantly keeping an eye on the level of competitiveness of our companies in Europe."

In addition to the spread of the euro, important supply-side changes are taking place on exchange rates in other parts of the world. Three important developing countries – Mexico, Brazil and Turkey – have adopted currency stabilization programs with at least the acquiescence, possibly support, of the IMF. Dollarization is getting increasing attention in Latin America. In Asia, currency stability is again the norm after the economic calamity caused by the 1997 currency devaluations.

- In January 1996, Mexico supplemented its IMF program with a sound-money system called the "corto". Reminiscent of Paul Volcker's dramatic 1979 change in U.S. monetary policy, Mexico simply said that it would drain liquidity from the banking system when the peso was weak, stop draining when the peso had adequate strength. The results were impressive. Equities rose 79% in dollar terms in 1996 and 1997. Mexico's economic growth rate surged.

- In October 1999, Brazil met a test of its currency when the Real weakened toward 2 Reals per dollar, in the process winning a policy change from the IMF. Brazil used three mechanisms to strengthen the Real in October and November: a threat of currency intervention negotiated with the IMF, a strong reaffirmation of the inflation targeting process anchoring monetary policy, and a standstill in the interest rate reduction process. This forceful response to Real weakness was a very positive development in the evolution of Brazil's monetary policy and contributed to a 70% advance in Brazilian equities since November 1.

- In November, Turkey got the IMF to let it switch from targeting its real exchange rate to targeting its nominal exchange rate. This will dramatically lower Turkey's decade-long hyper-inflation, halting the spread of poverty and improving Turkey's political stability. The equity market nearly tripled in November and December as the implications of the new policy became clear.

- Dollarization is making some progress. U.S. policy toward dollarization softened between February and May 1999. Senator Mack has proposed legislation facilitating dollarization. In contrast with the harsh IMF and U.S. response to Indonesia's hopes for a currency board, Ecuador has been allowed to pursue its dollarization aspirations. Unfortunately, Argentina's interest in dollarization seemed to wane as soon as financial markets began to improve in 1999. Across most of Latin America, nominal interest rates are very high regardless of the country's economic health. This reflects market skepticism about the future of non-dollar exchange rates.

- In the fast-growing countries around China, currency stability is prized as a spur to investment, labor and entrepreneurism. Hong Kong's currency board peg has held since 1983. China has pegged its currency to the dollar since 1994. Currencies in Taiwan, Singapore, South Korea, Thailand and the Philippines have been stable or strong since 1998, allowing huge rebounds in economic production.

Lost Opportunities

Many countries remain deeply confused about common sense economic concepts, and have gotten little constructive input from the U.S. or the IMF. In particular:

- Many countries still use a static model to analyze tax revenues and government spending. They overestimate the revenues that come from a tax rate increase, underestimate the revenues that come after a tax rate reduction, and underestimate the negative economic effect of increased government spending. This provides a systematic bias toward more taxes, more government spending, and less economic growth.

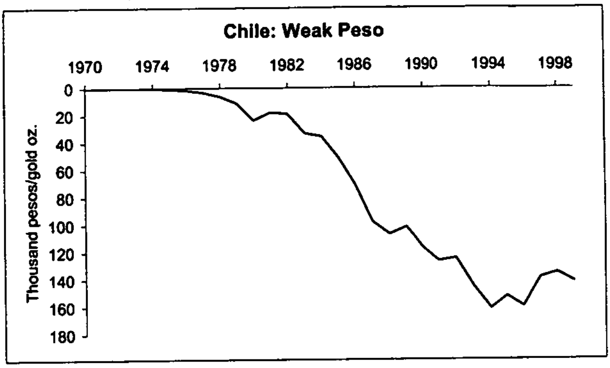
- Confusion over inflation remains deep. Rather than recognizing that it is a currency phenomenon, as the U.S. showed in the early 1980s when inflation stopped as soon as the currency stopped weakening, many countries still think in terms of Phillips curve worries that economic growth or full employment will add to inflation pressures.

As a result of faulty economic thinking, there have been devastating lost economic opportunities over the last two decades, subtracting trillions of dollars of GDP and wealth from the world economy. For example:

- **Japan** has been unable or unwilling to establish a stable value for the yen, leaving its economy underperforming for nearly 15 years. It insists on massive government spending programs. Its tax system got worse from 1989-92, with new taxes on land sales and capital gains. It cut income tax rates substantially in April 1999, but still has very high marginal tax rates. In recent weeks, talk of tax increases is mounting, including a proposal to impose a new corporate income tax.

- Across Latin America, unsound money blocked investment, labor and entrepreneurism. Countries dropped three or even six zeros from their currencies and still saw them depreciate, often under close IMF supervision. In many countries, real per capita income has actually declined since 1980. Inflation and recession combined to increase poverty rates. One of the best economic performers, **Chile** adopted many free-market economic principles, including deregulation, a degree of privatization, and low import tax rates (which caused a boom in Chile's trade). However, Chile's economic policies fell short of the crucial steps needed to create a "Chilean miracle". The peso weakened in both the 1980s and 1990s and tax rates remained very high, especially in middle-income levels. As a result, Chile's U.S. dollar per capita income grew less than inflation, only 89%, between 1980 and 2000, reaching $4,800.

65-595 00 - 5



- **Argentina** is now embarked on a round of IMF-supported tax increases in an effort to reduce its budget deficit. It is cracking down on tax evasion and smuggling, a process that often leads to capital flight and seldom to increased revenues. Argentina should lower tax rates and then work for a higher degree of compliance.

- **South Africa** exited apartheid, but never recognized that high marginal tax rates on labor are at the root of its high unemployment rate. Currency weakness and inflation pushed workers into high tax brackets, discouraging labor and employment. Per capita income is stuck below $3000.

- Guided by the IMF and the U.S., **Russia** destroyed the value of the ruble in the early 1990s and put a low priority on tax reform. It carried out some privatizations, but without the legal, political, or financial framework to make them work. Rather than join capitalism in creating productivity and prosperity, Russia has largely rejected capitalism. It will take a generation to undo the damage done to Russia's health.

In conclusion, I think supply-side economic ideas have had a positive and growing impact outside the U.S. Experience has shown that countries with lower tax rates invariably do better over the long term than those with higher tax rates. Sound money is crucial in allowing economies to develop and prosper. Unfortunately, there was no focused international movement to encourage sound economic principles, so many opportunities were lost. Looking forward, competition and the marketplace seem to be forcing many countries to adopt lower tax rates, sound money, and privatization, pointing to faster growth ahead for many countries.

Mr. Malpass is Chief International Economist for Bear Stearns. He served as Minority (Republican) Staff Director of the Joint Economic Committee, 1989-1990.

Attachment:
Table of gains in per capita income (included below)

Growth in Nominal Per Capita GDP (US$)		
Country	2000e	2000/1980
TAIWAN	$13,832	495%
KOREA	9,608	483%
SINGAPORE	29,054	480%
HONG KONG	27,298	384%
IRELAND	28,071	359%
PORTUGAL	12,562	313%
JAPAN	34,883	285%
THAILAND	2,174	212%
ISRAEL	16,666	211%
POLAND	4,438	194%
EGYPT	1,516	187%
UNITED STATES	34,199	180%
CHINA	856	178%
BRAZIL	3,413	178%
SPAIN	16,165	177%
ITALY	21,787	171%
AUSTRIA	26,673	161%
GERMANY	27,128	159%
UNITED KINGDOM	24,462	158%
FINLAND	27,097	153%
DENMARK	33,311	152%
HUNGARY	5,436	136%
GREECE	11,819	131%
COLOMBIA	2,352	130%
SWITZERLAND	36,755	124%
NORWAY	33,709	117%
BANGLADESH	380	117%
BELGIUM	25,769	113%
NEW ZEALAND	14,897	111%
NETHERLANDS	25,430	109%
U.S. CPI INDEX		**107%**
FRANCE	25,529	106%
MALAYSIA	3,666	106%
AUSTRALIA	21,431	102%
CANADA	21,018	91%
TURKEY	2,998	90%
CHILE	4,791	89%
PERU	2,215	85%
INDIA	480	80%
SWEDEN	27,588	77%
MEXICO	4,593	58%
PHILIPPINES	1,037	54%
INDONESIA	901	53%
PAKISTAN	411	31%
ARGENTINA	8,018	7%
SOUTH AFRICA	2,794	1%
VENEZUELA	4,212	-9%
ROMANIA	1,287	-16%
IRAN	1,787	-27%
ALGERIA	1,646	-27%
SAUDI ARABIA	5,836	-62%

source: IMF

PREPARED STATEMENT OF REPRESENTATIVE PETE STARK, RANKING MINORITY MEMBER

Mr. Chairman, looking back 20 years provides us sufficient evidence to analyze the consequences of economic policies implemented over that period. My hope is that we learn from our experiences and avoid making the same mistakes we made in the past.

The simple fact is that the Laffer-curve supply-side revolution was a complete disaster and American workers are still paying the price for it.

As a consequence of the 1981 tax cut, tax receipts not only did not rise, as were promised by Dr. Laffer and his infamous napkin, but rather they fell from 19 percent of GDP in 1980 to approximately 17.5 percent between 1983 and 1986. Government outlays, which included draconian cuts in social programs in order to pay for the large build-up in defense spending, stood at approximately 22.5 percent of GDP throughout the period. The result was budget deficits for "as far as the eye could see."

These ballooning budget deficits placed, and continue to place, a burden on American workers. Growing budget deficits caused the federal debt to triple between 1981 and 1992. Since 1981, American workers have paid approximately $2 trillion in interest on the debt, to finance the so-called "supply-side experiment" of the 1980s.

As this check shows, the only people who have reason to celebrate 20 years of supply side economics are Wall Street and foreign bondholders.

I have some new-found credibility in the area of ballooning budget deficits, as I was recently ranked the most fiscally-responsible Democrat in the House of Representatives by the National Taxpayers Union Foundation. My ranking was exceeded by only five Republicans. I dare say I ranked higher than other Members of this Committee.

In the end, the irony is that the Reagan Administration's so-called "supply-side experiment" was nothing more than a Keynesian expansion of consumer demand, without any improvement in investment. In fact, the "supply-side" policies of the 1980s actually hurt the exact investment they were intended to encourage. Despite these tax cuts, or maybe because of them, investment in plant and equipment remained flat, at less than 10 percent of GDP, from 1980 to 1992.

The only difference between that Keynesian expansion and others, was that this one was accompanied by a real decline in living standards of American workers. Workers watched the purchasing power of their paychecks fall 7 percent between 1980 and 1992. In addition, the 1981 tax cuts – which favored the wealthy – contributed to a considerable worsening in income inequality.

When the economic history books are written, I believe they will view the 1990s as the real supply-side experiment, not the 1980s. Consider the record: Since 1992, investment in plant and equipment has grown from less than 9 percent of GDP to almost 14 percent of GDP last year. Productivity growth rates, which averaged 1.5 percent annually between 1973 and 1995, have been closer to 3 percent annually since 1995. Just two days ago, the Commerce Department reported that productivity in the non-farm sector grew by 6.4 percent in the fourth quarter of last year. The week's upward revision in the fourth quarter's growth rate alone was greater than average productivity growth rates during most of the 1970s and 1980s.

Higher productivity enables wages to rise without igniting inflation. Real average weekly wages rose 6 percent over the last 7 years. The unemployment rate has been falling and now stands at approximately 4 percent, and there are no signs of renewed inflation due to the wage gains. There is a lot of good news in this economy, but there is still a lot which needs to be done to make up for the declines in living standards due to the supply-side experiment of the 1980s.

In contrast to the 1980s, the centerpiece of the last 7 years has been reducing and eliminating the budget deficit. Given the progress on this front, monetary policy has been more accommodating, allowing interest rates to fall, thereby improving the economic environment for investment. Increased investment has led to higher productivity growth rates, which in turn has enabled wages and salaries to grow without igniting inflation.

Now that's supply-side economics.

One of the most important lessons of the last 20 years is that the best way to increase tax revenues is simply to grow the supply-side of the economy – as we have been doing since 1993, not by drastically cutting taxes, as Arthur Laffer suggested.

PREPARED STATEMENT OF JACK KEMP

PLUGGING IN THE SUPPLY SIDE: A TWENTY-YEAR RETROSPECTIVE

By
Jack Kemp
Co-director,
Empower America

Before
The Joint Economic Committee
March 9, 2000

INTRODUCTION

Mr. Chairman, Mr. Saxton, members of the Committee, thank you for asking me to kick off this 20-year retrospective of *Plugging In The Supply Side*, the JEC's 1980 Joint Economic Report, which was, I might add, a unified, bipartisan annual report. What a remarkable achievement that was, what a memorable document it remains to this day and what a paradigm shift it precipitated.

In 1980, the US economy was in recession, the prime interest rate was 15 ½ percent, home mortgage interest rates were over 12 percent, the unemployment rate was over 7 percent—almost 40 percent for black teenagers—and inflation was running close to 14 percent a year.

This committee rose above partisanship and recommended adoption of the very supply-side economic policies the Republican challenger was advancing to help America deal with the unprecedented economic challenge in post-World-War-II America: the simultaneity of inflation and unemployment—in other words the unparalleled and unprecedented economic conundrum of how to bring down unemployment and grow the economy and fight inflation at the same time—something that had persistently confounded the Keynesian and Monetarist schools of economic thought in the United States. At one point *circa* 1978 or 1979, I remember the famous Keynesian economist J. Kenneth Arrow confessing, "We liberal economists are discouraged today by the fact that there doesn't seem to be a solution to the problem of simultaneous inflation and rising unemployment."

I cannot improve on the Report's Introduction by JEC Chairman Senator Lloyd Bentsen in which this committee laid out the solution to the problem that so confounded Professor Arrow and his entire profession at the time, so let me quote it at some length if I may:

> The 1980 annual report signals the start of a new era of economic thinking. The past has been dominated by economists who focused almost exclusively on the demand side of the economy and who, as a result, were trapped into believing that there is an inevitable trade-off between unemployment and inflation. America does not have to fight inflation during the 1980s by periodically pulling up the drawbridge with recessions that doom millions of Americans to unemployment. . . . steady economic growth, created by productivity gains and accompanied by a stable fiscal policy and a gradual reduction in the growth of the money supply over a period of years, can reduce inflation significantly during the 1980s without increasing unemployment. To achieve this goal, the Committee recommends a comprehensive set of policies designed to enhance the productive side, the supply side of the economy. The Committee also recommends a . . . deemphasis of macro-economic fine tuning. . . . Traditionally, tax cuts have been viewed solely as countercyclical devices designed to shore up the demand side of the economy. The Joint Economic Committee is now on record in support of the view that tax policy can and should be directed toward improving the productivity performance of the economy over the long term and [tax cuts] need not be enacted only to counter a recession. . . . the only way demand management policies alone can lower the inflation rate substantially is by maintaining unemployment at near depression levels throughout the decade.
>
> . . .The Committee continues to believe that the Federal Government must put its own financial house in order. That requires a steady reduction of the ratio of government spending to the gross national product . . .
>
> . . . More than a century ago, Oliver Wendell Holmes suggested that the most important thing in this world is not so much where we stand, but in what direction we are moving. 'We must sail,' he said, 'sometimes with the wind and sometimes against it—but we must sail and not drift, nor lie at anchor.' The Joint Economic Committee's 1980 unified annual report, points the Congress, the Administration, and the Nation in the right direction. It is a call to lift anchor and in

> President Kennedy's words to 'get this country moving again.'"

Wow. This was written by a Democrat in the same year that Ronald Reagan was running against Jimmy Carter on the campaign theme of getting the country moving again without leaving anyone behind by cutting tax rates and reigning in excessive money growth to combat inflation. For a brief moment in time, it appeared in 1980 that the avenue was clear for the Democratic Party—which remember Ronald Reagan said left him, not the other way round—to return to the principles it espoused when the Gipper was still a Democrat in good standing, before the Liberals adopted Keynesian demand-side thinking to justify their tax, spend, regulate and redistribute ideology.

Alas, it was not to be. In the 1980s, the disagreement between supply-side and demand side economics took on a partisan flavor, and the opportunity was lost to restore a classical economic foundation underneath both political parties. I also regret to say that in the 1990s, the supply-side foundation Ronald Reagan constructed beneath the GOP was also undermined. Today, both of our political parties have embraced the misguided policy mix of fiscal austerity and discretionary monetary policy.

REAGANOMICS IN A NUTSHELL

Ronald Reagan went on to win the presidency in 1980 and to implement his visionary supply-side economic program of 1) monetary restraint to reduce inflation and 2) lower marginal tax rates to restore the reward for work, saving and investing and to boost productivity and growth. Demand-side economists, as might have been expected, reacted to President Reagan's economic plan with derision. "Reaganomics" they called it, and they predicted that the program would spike inflation, increase unemployment and lead to ultimate economic decline.

Gardner Ackley, former chairman of the Council of Economic advisers under Lyndon Johnson, told Congress that it "would truly be a miracle" if inflation fell as the Reagan administration forecasted and predicted that in fact inflation would rise. In fact, it fell twice as fast as the Reagan administration predicted; coming in at 3.4 percent a year between 1983 and 1986 compared to a forecast of 6.0 percent.

When the 1981-82 recession hit before the Reagan economic program could be fully implemented, Lester Thurow, then at MIT, said that "the engines of economic growth have shut down here and across the globe, and they are likely to stay that way for years to come." In fact, economic growth revived and averaged 4.0 percent a year between the time the Reagan program was fully implemented in 1983 and 1989, his last year in office. And every where in the world that the policy mix of lower tax rates and sound monetary policy was adopted, the story was the same.

Such reactions from demand-side economists were predictable, and their allies, demand-side politicians, fought President Reagan tooth and nail every inch of the way. In the process, they became unplugged and abandoned every principle set forth by the 1980 Joint Economic Report. In discussing tax and fiscal policy, for example, the JEC report had observed that under current baseline projections, substantial budget surpluses would begin accruing within a year and that as a consequence, Congress was also likely to enact a tax cut. However, when President Reagan proceeded to ask Congress to do just that in 1981, demand-side economists and Liberals in the Congress howled that the tax cuts were inflationary and would explode the deficit.

Both the Council of Economic Advisers (CEA) and the Congressional Budget Office (CBO) agreed with the JEC's assessment that unless tax rates were cut, budget surpluses would accumulate. However, rather than taking those projected budget surpluses into account and scoring the projected "revenue loss" from the tax cuts against those surpluses, big-spending Liberals, who still controlled Congress, took advantage of the opportunity to increase spending and to attribute the resulting budget deficits to the tax rate reductions. It was quite a budgetary slight of hand but they got by with it because, frankly, many influential Conservatives remained in the demand-side paradigm and publicly wrung their hands and parroted Liberals' rhetoric about "irresponsible" tax cuts that would cause the deficit to explode.

So, instead of following the JEC's 1980 recommendation to reduce the ratio of government spending to the gross national product, the Congress went on a spending binge and increased spending from just over 20 percent of GDP in 1979 to more than 23 percent in 1985, a peace-time high. Huge deficits followed as a direct result of these spending increases, not the tax rate reductions.

In a report written for the Institute for Policy Innovation, Empower America's chief economist and former JEC Staff Director, Lawrence Hunter, demonstrates that even after taking the 1981/82 recession into account, the 1981 tax cuts did little more than offset budget *surpluses* that the Congressional Budget Office at the time was projecting as far as the eye could see. In fact, Dr. Hunter shows that if Congress had held spending to levels projected under current law in

1980, which provided for increases in entitlement spending to keep pace with inflation and demographic changes, the budget would have balanced in 1985. Even when the Reagan defense buildup is included in the calculations, if Congress had allowed entitlement spending to increase just sufficiently to keep pace with inflation and demographic changes, deficits would have been cut in half through 1985, and the budget would have come into balance by the end of the decade. As it was, even with Congress spending out of control throughout the decade, by 1989 when Ronald Reagan left office, the prosperity his economic program produced had brought the deficit back down to 2.9 percent of GDP, almost exactly the same share of GDP comprised by the deficit the day he assumed office in 1981 (2.7 percent).

Mr. Chairman, I believe these findings should dispel any lingering doubts about the efficacy of President Reagan's economic program and tax rate reductions: "During 1981-1985, the nation would experience cumulative budget deficits amounting to $813 billion, of which only about $84 billion, or 10 percent, could be attributed to the 1981 tax cuts. And even this effect was short-lived; coming mainly in 1983 and 1984, before the cumulative growth-enhancing effects of the tax cuts began to compensate in part for the tax rate reductions. In fact, by 1985, the 1981 tax cuts contributed absolutely nothing to the deficit. *The entire deficit by 1985 was a product of drastically increased spending.*"

In a nutshell, in spite of all the controversy and disagreement—former CEA head Walter Heller said Reaganomics would triple interest rates, and Nobel Prize winner James Tobin said it would produce a "stagnate, sputtering economy. . . and not much growth or improvement in unemployment."—the Reagan policy mix worked as advertised to slow the growth in the supply of money while increasing the demand for it. As a result, inflation collapsed, interest rates fell and economic growth revived. The great American job machine got underway. It was morning in America, and the prosperity that dawned in the 1980s continues on today.

Yet, something curious happened on the way to prosperity. The two political parties converged, neither on the supply side nor, for that matter, back on the old Keynesian demand side. The honor of being the last redoubt of the discredited Phillips Curve goes, I am sorry to say, to Fed Chairman Alan Greenspan and his fellow Federal Reserve Governors, who insist on using demand-side thinking in their never-ending quest to fine tune the economy, including the stock market. No, on Capitol Hill these days there aren't many Keynesians running around.

Instead, both political parties have converged to an even earlier mode of thinking: Hooverism, or what I call "austerity economics." But I'm getting ahead of myself. To fully appreciate the accomplishment of the JEC's 1980 annual report, it is necessary to go back for a moment to 1974 when supply-side economics made its political debut.

A WALK ON THE SUPPLY SIDE

For me personally, the capital gains tax rate reduction of 1979 (the Steiger Amendment) followed by publication of the 1980 JEC report was incredibly exciting and enormously satisfying. For the previous six years, I had been out on the circuit preaching the supply-side message to anyone who would listen and to quite a few who didn't want to listen as well. The Steiger Amendment and the JEC report were, at long last, tangible evidence that not only were supply-side ideas a theoretically coherent economic alternative to Keynesianism but also that supply-side theory had matured into a set of politically practical policy alternatives to the demand-side policies that had run the economy into the dirt.

It is hard now for citizens, many of whom were not even alive then, to remember what was happening in the mid 1970s, but I remember. I was a third-term Member of Congress from Buffalo, New York, and the country had begun to experience what economists said was impossible: rising unemployment and accelerating inflation, which later came to be called "stagflation." My blue-collar district in Buffalo was particularly hard hit when the price of oil quadrupled and unemployment came close to 20 percent. Conventional economists were calling for a tax increase to dampen inflation by reducing consumer demand and for the Fed to use easy monetary policy to off-set the "fiscal drag" to prevent a recession. President Ford was prepared to go along with them and actually proposed a tax increase to combat inflation before reversing himself the following year and proposing a $50 rebate.

I'm no economist but I knew none of this made any sense whatsoever. In 1974, I read Jude Wanniski's *Wall Street Journal* interview with Nobel Prize winner Robert Mundell, then an unknown economics professor at the University of Ottawa in Canada. Professor Mundell explained that the origins of surging inflation went back to President Nixon's devaluation of the dollar in 1971 and that the struggling economy was the result of the numerous misguided policies enacted since then to counteract the inflation. I discovered later that as early as 1972, Professor Mundell had predicted the inflation and the rise in oil prices that would follow President Nixon's closing of the gold window and devaluation of the dollar. In 1974, he knew that the tax increase being proposed by the Ford administration, if it materialized, would cause a worse recession than the one he already saw coming in 1975.

It was Robert Mundell and a student of his when he was at the University of Chicago, Arthur Laffer, who first saw stagflation's connection to the progressive tax structure and how "bracket creep" would steadily raise real rates of taxation to levels that would smother economic efficiency and drive down real wages and standards of living. Laffer dubbed it the "wedge model" based on the conventional idea that an income tax introduces a "wedge" between employers and their employees. A worker is paid, say $12.50 an hour or $500 per week, but because federal, state and local governments take a variety of income and payroll taxes out of the wage, the worker sees a net of, say, only $380, or $9.50 an hour. The $120 per week difference is the wedge. The worker is doing $500 worth of work, but getting only $380 for his labors, and has a tendency to offer less labor as the wedge increases. With a progressive income tax, the worker may be offered time-and-a-half for an extra hour's work, but because the extra hour is taxed at a higher progressive rate, the worker will get something less than time-and-a-half, at the extreme actually receiving less than his normal hourly wage. That is precisely what happened during the rapid inflationary years of the 1970s as the wedge became particularly onerous.

Based on these insights, Mundell and Laffer predicted a worsening economic situation throughout the second half of the 1970s with rising unemployment and accelerating inflation unless tax rates were reduced substantially and money growth gotten under control.

"The level of U.S. taxes has become a drag on economic growth in the United States," Mundell said in that 1974 interview. "The national economy is being choked by taxes—asphyxiated. Taxes have increased even while output has fallen, because of the inflation. The unemployment has created vast segments of excess capacity greater than the size of the entire Belgian economy. If you could put that sub-economy to work, you would not only eliminate the social and economic costs of unemployment, you would increase aggregate supply sufficiently to reduce inflation. It is simply absurd to argue that increasing unemployment will stop inflation. To stop inflation you need more goods, not less."

At every opportunity during the next four years, I preached the virtues of supply-side tax cuts and a commodity price rule to reduce inflation and to restore a stable anchor to the dollar. With the help of folks like Norm Ture, who was the resident econometrician of our little supply-side band, I proposed a 30 percent across-the-board tax rate reduction and was joined in the effort by Senator Bill Roth. In 1979, I was privileged to be able to present these ideas to Ronald Reagan, who understood immediately the implications of "plugging into the supply side." He adopted the Kemp-Roth tax bill as his own. Can you imagine, the top marginal tax rate was 70 percent then?

But in all honesty, I must admit that I agree with Jude Wanniski who did so much to popularize Robert Mundell's and Art Laffer's ideas on the editorial page of *The Wall Street Journal* when he later said, "he [Reagan] had the basic [supply-side] model before any of the Kemp group was born" because he studied classical economics in college in the late 1920s before Keynesianism itself was born.

THE GREAT DEBT-RETIREMENT FALLACY

Reaganomics succeeded in defeating stagflation and winning lasting prosperity. It was an enormous practical success but it left an unfinished agenda, and it never succeeded in permanently changing the political-economic paradigm in Washington, DC. In short, although many supply-side principles have been adsorbed into conventional wisdom and are now taken for granted, the supply-side paradigm as a coherent school of economic thought was unable to survive Ronald Reagan's passing from the political scene.

In its place, a misguided bipartisan policy consensus congealed in Washington DC: 1) Raise tax rates to balance the budget and keep federal revenues over 20 percent of GDP to run huge budget surpluses and retire the public debt; and 2) Rely on the discretion of the Fed to manage our money. Within the past few months, President Clinton and House Speaker Dennis Hastert have committed the Democratic and Republican Parties to retiring every dollar of debt held by the public no later than the year 2015. Both parties are making a profound mistake, using single entry bookkeeping to manage the financial and economic affairs of our country.

First, the leaders of both parties obsess over the size of the public debt ($3.6 trillion) without considering the nation's growing income-producing capacity to service that debt ($9 trillion in 1999 and currently growing at a trend rate of 3.2 percent a year after accounting for inflation). No wonder they miss the fact that although the debt held by the public rose by more than 50 percent from 1990 to 1999 (from $2,410 billion to $3,618 billion), the debt *burden* on the economy actually fell from 42.4 percent of GDP to 41.9 percent because the economy grew faster than the debt during the same period. Likewise, if the federal budget remains in balance and the economy grows during the next 15 years no faster than it has on average throughout the entire post-World-War-II era (3.2 percent a year), by 2015 the debt burden on the economy will have fallen to less than 18 percent of GDP without a single dollar of debt ever being retired.

Second, both parties obsess over the amount of interest due on the public debt (approximately $3,450 billion between 2000 and 2015) but fail to take into consideration the private investment opportunities that would have to be taxed away ($3,618 billion) in order to retire the public debt and eliminate those interest payments. Average annual debt service on the public debt is running about 6.3 percent currently, while even the stodgiest mutual fund earns rates of return in excess of 10 percent. Clearly, private investment of the surpluses is the more productive use of taxpayers' money even though it entails rolling the public debt over and paying interest on it in perpetuity. Nothing wrong with that.

England financed the bulk of its great public debt throughout the 19th Century by perpetual debt called Consols at very low interest rates (the so-called "Three Percents."). Indeed, one of the great advantages that a stable government like Britain or the United States possesses as a creditor is to be able to borrow without having to repay the principle because unlike an individual, a nation's future income stream does not invariably terminate; it too lives on in perpetuity barring conquest from abroad or collapse from within, in which case paying back debt ceases to matter. Lest we forget, our national debt is our money; so secure, so valuable an asset that we gladly accept it as a medium of exchange without demanding interest in return. Thomas Macaulay's *History of England*, written in the mid-Nineteenth Century recounts the saga of the great English public debt:

> ... the funded debt of England ... was in truth a gigantic, a fabulous debt; and we can hardly wonder that the cry of despair should have been louder than ever. ...Yet like Addison's valetudinarian, who continued to whimper that he was dying of consumption till he became so fat that he was shamed into silence, [England] went on complaining that she was sunk in poverty till her wealth showed itself by tokens which made her complaints ridiculous... The beggared, the bankrupt society not only proved able to meet all its obligations, but while meeting these obligations, grew richer and richer so fast that the growth could almost be discerned by the eye.

Those who uttered and those who believed that long succession of despairing predictions erroneously imagined that there was an exact analogy between the case of an individual who is in debt to another individual and the case of a society which is in debt to part of itself; and this analogy led them into endless mistakes. . . . They were under an error not less serious touching the resources of the country. They made no allowance for the effect produced by the incessant progress of every experimental science, and by the incessant effort of every man to get on in life. They saw that the debt grew and they forgot that other things grew as well as the debt.

Third, both parties make extravagant but unsubstantiated claims about how debt retirement will lower interest rates and strengthen the economy. The weight of the empirical evidence is that interest rates are determined by the combined effects of inflation, inflation expectations and the prevailing real rate of return to capital. There is no evidence that the current level of public debt raises interest rates by so much as a single basis point, and, therefore, there should be no reasonable expectation that retiring the debt would lower interest rates.

Our debt-phobic leaders also fail to take into consideration the fact that the current federal tax code, which would be relied upon to raise the surplus revenues to retire the debt, is economically destructive, impossibly complex and overly intrusive. It is corrupting, confiscatory, confusing, coercive and counterproductive. It is outrageously expensive, manifestly unfair, and it inhibits the industry and genius of the American people.

Every additional dollar of tax revenue raised through this tax code retards and damages the economy far more than any offsetting beneficial results one conceivably could hope to achieve by using that revenue dollar to retire public debt. Indeed, the current tax code is so economically destructive that for every additional dollar in tax revenue raised, overall GDP is reduced by about $1.50. Even without taking into consideration the fact that the rate of return on the private investment of the surpluses would exceed the rate of interest due on the public debt, the excessive economic cost alone of raising the surplus revenues through the current tax code would make debt retirement the fiscal equivalent of taking three steps back for every two steps forward. Clearly, by any rational measure, it makes more sense to cut tax rates, overhaul the tax code and return all of the budget surpluses to taxpayers than to employ the current tax code to raise the surpluses necessary to retire the public debt, which comes at the expense of stifling saving, shrinking investment and retarding economic growth.

We are living in a 21st Century economy but are stuck financing our government with a 20th Century tax code, and now our political leaders are attempting to foist on us a 19th Century debt-retirement strategy that is ill conceived, ill advised and counterproductive. Don't forget, the last time the public debt was retired during Andrew Jackson's administration, the economy slid into a severe contraction.

Think of it this way. What if you suddenly got a raise, came into an inheritance and also were given an opportunity to refinance your current mortgage at a lower interest rate, all at the same time? What would you do? Would you use the windfall of your inheritance to pay off your mortgage or would you take advantage of the opportunity to refinance your house at a lower interest rate and invest your inheritance in a mutual fund that pays considerably more than the mortgage interest rate? Of course, you would refinance your mortgage at the lower interest rate. Between your higher income and the lower mortgage interest rate, the debt burden of your mortgage would fall without having to accelerate repayment of the mortgage principle by so much as a single day. You then would be able to use your inheritance to take advantage of the investment opportunity that yields a rate of return higher than the interest rate on the mortgage.

It's called prudent financial management, and it is precisely the choice America faces as a nation. U.S. national income has risen because the economy is growing faster. The nation is presented with a sudden windfall of revenues in the form of budget surpluses. And it is possible to refinance the national debt at the lowest interest rates in a generation. It's a simple matter of choosing the most productive use of Americans' hard-earned income. Incredibly, both establishment political parties in Washington are asking voters to choose the less productive use of people's income. Instead of devoting budget surpluses to lowering tax rates and creating a 21st Century tax code, the Washington Political Establishment is demanding that we keep tax rates sky high to run huge budget surpluses and retire the public debt. It doesn't make sense.

PLUGGING SOCIAL SECURITY INTO THE SUPPLY SIDE

Reporters continuously ask candidates for Congress and the presidency the question, "What's more important, to save Social Security or cut tax rates?" The proper answer is that the *only* way to save Social Security is to cut tax rates. Unfortunately, candidates from both parties usually fail to get it right because they never seem to learn the simple, yet profound, truth expounded by President John F. Kennedy in 1961: "It is a paradoxical truth that tax rates are too high today and tax revenues are too low"

Once one is plugged into the supply-side paradigm, it is obvious to him that tax revenues are too low today, and always will be under the current tax code, because they are insufficient to make good on the $5 trillion unfunded Social Security liability that is staring us in the face. At the same time, the tax burden (revenues as a share of GDP) is too high because it drains away too much capital and labor effort form the private economy. Retiring the national debt will do nothing to change either fact.

Most, though not all, Americans are enjoying incredible prosperity. There is, however, a pervasive fear, which is reflected in official government economic projections of long-run annual economic growth of less than three percent, that sooner or later the prosperity will end and that it won't reach to the lowest rungs of the economic ladder before the crunch comes. There is also a growing awareness that even if the crunch doesn't come sooner from a policy mistake by Congress or the Fed, it will come later when the baby-boom generation begins to retire and the unfunded Social Security system hits the wall.

Retiring the national debt is a flaccid response to this conundrum by politicians who, in my opinion, just don't get it: The only way to cover the $5 trillion unfunded Social Security liability is: 1) to allow workers to put their payroll tax contributions into personal retirement accounts where they can take advantage of the marvel of compound interest at the same time 2) the government raises sufficient revenues to pay full benefits to all Social Security recipients who did not have the opportunity to devote their payroll tax contributions to personal retirement accounts because their payroll taxes went to support previous retirees. The only way to accomplish both objectives is to rip up this tax code and replace it with a simple, pro-growth, low-tax-rate, capital-friendly tax system that will lengthen, strengthen and broaden our current prosperity indefinitely into the future. Bottom line is, that is the only way to increase future tax revenues above current projections at the same time the tax burden (revenues as a share of GDP) is reduced. Only then will it be possible to reform Social Security and cover the $5 trillion unfunded Social Security liability.

65-595 00 - 6

THE REASON TO CUT TAX RATES AND REFORM THE TAX CODE NOW

It is possible to reduce the debt burden, fix Social Security and cut tax rates, all at the same time. Anyone who doesn't believe it, doesn't comprehend the hypothesis put forth by President Kennedy and confirmed by Ronald Reagan: "The purpose of cutting taxes now is . . . to achieve a more prosperous, expanding economy" and "the soundest way to raise the revenues in the long run is to cut the rates now." Washington's green-eye-shade mentality is blinding our leaders to the undeniable fact that the federal tax code is so economically destructive that unless something is done to reduce tax rates and overhaul the Code, our prosperity will erode just as C.O. currently projects and there will not be sufficient revenues to restructure Social Security for the 21st Century. Their obsession with debt is confusing them into believing that retiring the public debt will somehow strengthen Social Security.

This myopia is illustrated by the prevailing Washington myth that the American people are not interested in cutting tax rates; that they demand more goodies from government instead. Even though tax revenues as a percent of gross domestic product (GDP) are at 20.5 percent, near an all time high, and will continue to hover in the stratosphere above 20 percent for years to come unless tax rates are reduced, and even though there is universal agreement that the federal tax code is an abomination and Social Security is approaching bankruptcy, public opinion polls are routinely trotted out to demonstrate that people prefer the federal government to keep tax rates high so it can retire debt at the same time it spends more money.

I believe the Political Establishment is misreading the electorate completely. Voters have given up on politicians when it comes to seriously cutting tax rates, overhauling the tax code and fixing Social Security. They are no longer taken in by the offers of ersatz tax cuts and the schemes that purport to fix Social Security by raiding Social Security taxes to pay down public debt while allowing the unfunded Social Security liability to mount. Given these options, it is not surprising that voters look favorably on spending increases to pay for government benefits that they find more and more difficult to obtain on their own because the current tax code penalizes work, saving and investment and denies capital to those at the bottom who need it the most.

If there is one thing in life I know about it is cutting tax rates. I have made a career of coaxing and cajoling Congress and the president to cut tax rates. And I believe at the core of my being that people will support tax rate reductions enthusiastically if the reason for cutting them is explained. As it stands, the proponents of tax rate reductions have promoted them as just another means of government putting money in people's pockets, not as a means to achieve a larger worthy national objective. That's the reason people aren't buying it.

Our leaders must begin explaining to the American public that tax and monetary policies have to be directed at *saving Social Security and Medicare* by increasing the amount of capital available to workers so that they can continuously become more productive. There are currently about 3 workers supporting each retiree. In 20 years, there will be only two workers to support each retiree. That one-third decline in workers supporting retirees can only be compensated for in two ways: 1) Workers must be able to rely more on savings they build up during their working years and less on other workers to support them; and 2) two workers must have more capital available to make them more productive so the two of them, rather than three, can support that one retiree beyond what he has been able to provide for himself. That isn't a difficult concept. Voters are not stupid and are perfectly capable of understanding this profound economic truth.

If our leaders would plug back into the supply side and embrace a pro-growth strategy, they need never worry about getting tangled up in the debt-retirement fallacies put forth by the Political Establishment. The Establishment has no explanation of how debt retirement will allow workers to save more for their own retirement or how allowing the unfunded Social Security liability to mount will permit two workers rather than three to support one retiree in 20 years. Take it from an old tax cutter, once voters figure this out, they can be counted on to enthusiastically support tax rate reduction and tax reform and allowing workers to place their payroll tax contributions into personal retirement accounts.

THE LOOSE JOINT IN THE SYSTEM: MONEY

Ronald Reagan, Paul Volcker and later Alan Greenspan implemented a policy mix that succeeded in bringing down inflation while interest rates fell and the economy expanded. That success demonstrated that inflation is a monetary phenomenon: The singular source of inflation is a surfeit of money, and if an excess of money exists for long, it is because the Fed has erred. Sounds obvious now but it wasn't back in the 1970s when OPEC and rising oil prices were seen as the cause of inflation rather than the result of errant monetary policy.

Reaganomics' success also taught the lesson that monetary policy is best reserved for maintaining the value of the currency and is not appropriately used as just another policy instrument to fine tune the economy, a lesson the Fed seems to have forgotten. In other words, long-run economic growth is maximized when monetary policy is aimed solely at the objective of preventing inflation or deflation from occurring not when it is used in an ill-fated attempt to counteract and offset other external forces or other public policies impinging on the economy.

These accomplishments were enormous and they should not be taken for granted. However, these theoretical insights on the virtues of price stability were not accompanied by a consensus on how monetary policy should operate to achieve price stability. That lack of consensus left enormous and dangerous discretion in the hands of the Federal Reserve Board. We got lucky, for a while. At first it looked like Chairman Greenspan was in the process of introducing a commodity price rule into the deliberations of the Fed. But then, after accommodating the 1993 tax increases with easy monetary policy and setting off a mini-inflation, the Fed seemed increasingly to move away from rule-based monetary policy and back to economic fine tuning based on outmoded precepts like the Phillips Curve and the "crowding-out" thesis. As recently as this week Chairman Greenspan astounded financial markets by proclaiming too much productivity growth as a source of inflation.

Alan Greenspan is certainly one of the towering figures of the 20th Century for his role in taming inflation and helping steer the world toward market-oriented policies. Following President Clinton's reappointment of Mr. Greenspan to a fourth term, the self-effacing Fed Chairman was described in terms like "wise," "irreplaceable" and "revered," terms usually reserved for former presidents and war heroes, not central bankers. In the words of the *Wall Street Journal*, Vice President Gore "all but nominated Mr. Greenspan for sainthood while endorsing his reappointment." Other than Steve Forbes, all the other Republican presidential candidates joined in the hosanna chorus, Senator John McCain going so far as to imply that a Greenspan corpse would be preferable to any other living body occupying the Chair at the Fed.

But with all due respect to Chairman Alan Greenspan, a man I greatly admire and call a personal friend, his great accomplishment in taming inflation stands to be eclipsed, in my opinion, by his failure to leave the nation and the world a rule-based framework in which to conduct monetary policy after he is gone. The relative price stability he brought about may prove to be short lived precisely because, as it stands now, the uncertainty and confusion he has created in the policy making process may be what lives on as his permanent legacy. The "Greenspan Rule," on which we are apparently now operating requires future central bankers to ask, "What would Greenspan do?" Now that may look neat on tee shirts and bumper stickers but it doesn't suffice as a rule for making monetary policy. Markets need to know the objective basis upon which monetary policy is being made, particularly in this post-Cold War world, and effective monetary-policy decision rules should be institutionalized, not only for America but also for the entire world economy.

America has a great and valuable tradition of an independent central bank, which means the legislative, executive and judicial branches of government are precluded by law and custom from interfering in the policy-making process at the Fed. Since there is a natural tendency for bureaucrats to maximize their flexibility, central bankers tend to equate Fed "independence" with Fed "discretion." But, the two are not the same. We need an independent Fed to prevent monetary policy from becoming politicized. We should avoid discretionary monetary policy to prevent monetary policy from becoming personalized. While the Fed should not have to answer to any other political authority in formulating monetary policy, it must be held accountable to an objective monetary rule, preferably a market-based price rule that anchors the value of the dollar to the price of gold or other price-sensitive commodities.

Notwithstanding my high regard for the Chairman and the results he has achieved on inflation while heading the Fed, I must be critical of the manner in which he has achieved these results. The Chairman has expanded his own discretionary authority at the expense of the development of a rule-based policy process, and the uncertainty and confusion that results from this highly personalized process reflects itself in extreme market volatility.

The achievement of stable prices for a few years by the shear force of the Chairman's intellect and good judgement does not justify undermining a rule-based framework for conducting monetary policy over the long run. I am sad to say that after three terms, Mr. Greenspan's legacy as Chairman has been to undermine the development of a rule-based monetary policy process. Markets are left to guess what the Fed will do next, when it will do it and why based upon how they estimate Chairman Greenspan synthesizes the myriad of economic data swirling around in his head.

Since Mr. Greenspan assumed the Fed Chair in 1987, the Greenspan Fed has gone from explicit and avowed reliance on a market-based price rule to an inchoate, ill-defined decision process that manipulates short-term interest rates to fine tune labor and equity markets in the belief that inflation is produced by too many people working, equity prices rising too fast and businesses producing too much output. The Fed is operating out of a model that erroneously assumes a trade off between inflation and economic growth and has made it known in repeated statements that it will continue raising interest rates until the economy and the stock market stop growing faster than the unspecified rates it believes to be attainable. Imagine telling low-income Americans that their job opportunities must be sacrificed to the fight against inflation as if inflation is caused by too many people working.

Wouldn't it be better to allow the market to equilibrate the supply and demand for labor and to establish the rate of economic growth commensurate with that equilibrium than for the Fed constantly to be attempting to second-guess the market and fine tune the rate of economic growth in advance? The Chairman's usual response to this question is that the Fed must take preemptive action because there are long lags before inflation shows up in price indices like the CPI. In other words, he hints that the Fed already has made a mistake and is actively producing inflation but we just don't see it yet. The facts, however, save the Chairman from having to confess error. Excess liquidity (bank reserves created by the Fed that the market does not demand for economically productive purposes), which is the real source of inflation, manifests itself almost immediately in certain market-based indicators such as commodity prices, the price of gold and the foreign exchange value of the dollar. Based on these reliable indicators over time, there is no evidence that current monetary policy is inflationary nor is there any reason to put a brake on the American economy by raising interest rates.

In short, there is no reason for the Fed to be raising interest rates at this time other than the market's confidence in Mr. Greenspan personally that if he feels inflationary pressure in his gut, it must exist. Not only is such a cult of personality unreliable as a means of making monetary policy in the short run, it is corrosive of sound monetary policy over the long run. That is why the first order of business should be to restore a commodity-price rule for the conduct of monetary policy, so that when the next crisis hits, whether at home or another economic meltdown in some faraway corner of the world, we aren't dependent upon the wisdom and whims of the next Fed Chairman but rather can rely on rules and procedures put in place during the current Chairman's tenure. That's what our Founding Fathers did in the Constitution for most other areas of policy, and our responsibility with respect to monetary policy is no less today at the beginning of the 21^{st} Century.

Therefore, as the world's *de facto* central banker, Alan Greenspan has a responsibility to posterity to seize the day. He should expend some of that enormous stock of good will he has accumulated to lead the world toward a new, stable monetary arrangement. The time is ripe. Japan and Asia are ready. Europe is primed because of the Euro. America has the means to act, not through force of threats or economic coercion but rather through the power of example. No coordinated, multilateral action is called for. No new international financial architecture required. All the United States must do to lead the world toward a new global monetary arrangement is adopt a market-based price rule to fix the value of the dollar to a stable anchor. With the dollar serving as a benchmark as good as gold, the other two islands of monetary stability in the world, the Euro and the Yen regions, could gradually develop the confidence to maintain their currencies fixed at the same relative values by adjusting domestic European and Japanese monetary policy accordingly.

In this his last term as Chairman, Alan Greenspan has a perfect opportunity and the moral authority to leave a legacy of action in which it will be said of him: Alan Greenspan's great achievement in bringing price stability to the United States at the end of the 20^{th} Century was exceeded only by his achievement of bringing the world a new stable monetary arrangement for the 21 Century.

Thank you Mr. Chairman. I would be happy to take any questions.

TESTIMONY BY DR. MARTIN N. BAILY
CHAIRMAN, COUNCIL OF ECONOMIC ADVISERS
BEFORE THE
JOINT ECONOMIC COMMITTEE

THURSDAY, MARCH 9, 2000

Introduction

It is a great privilege to testify today on the subject of supply-side economics. We have seen in the decade of the 90s an emerging success of real supply-side economics. We ended the twentieth century with unemployment at 4 percent, core inflation at 1.9 percent. GDP growth over 4 percent a year for the past four years and productivity growth of nearly 3 percent. Real incomes and wages are rising for all groups. Just a few years ago, who would have predicted this? I will make the case for supply-side economics at its best, a virtuous circle where fiscal discipline has freed up capital for robust investment and strong productivity growth. This differs from the policies of the 1980s, which were called supply-side policies, even though in practice they resulted in very large budget deficits that hurt growth.

The Importance of Demand. Before turning to an analysis of the supply-side policies, let me state that both supply and demand are important to growth and prosperity. The short-term fluctuations of the economy are largely driven by variations in aggregate demand. There is a world of difference between unemployment at 10.8 percent, the rate that prevailed in November 1982 and unemployment at 4.1 percent, the rate in February of this year. There is a world of difference between inflation at 13.5 percent, the rate in 1980 and inflation at 2 percent, the average inflation rate of the past three years. Astute demand management policies, with monetary policy and the Federal Reserve playing the primary role in recent years, have kept demand strong while avoiding inflation and created the right environment for successful supply-side growth.

The Importance of Supply. In the 1950s and 60s, productivity growth (output per hour in the nonfarm business sector) averaged about 3 percent a year. After 1973, this fell back to 1.4 percent a year, less than half of its earlier growth rate. Over a ten-year period, the difference between 3 percent growth and 1.4 percent growth cumulates into an output difference of 17 percent for each hour worked. The economic cost imposed by slow productivity growth is large compared even to a severe recession.

It was not surprising, therefore, that in 1980 the Joint Economic Committee saw a need for policies that might reverse the slowdown in productivity growth and restore the growth of real wages. It is appropriate to celebrate the attention the Joint Economic Committee brought to the need for policies that would increase supply.

The supply-side economics that subsequently emerged in the 1980s focussed on two main arguments. First, the deregulation that had started in the 1970s should continue, to ensure that businesses compete vigorously against each other and that business decisions can be made in ways that best serve customers. Second, high tax rates were inhibiting work effort, investment and productivity growth, and hence that taxes should be cut drastically.

We can all agree that the movement to eliminate unnecessary or counterproductive government regulation has been enormously valuable. Consumers today benefit from increased competition in many areas, especially in transportation and communications. There has also been a successful effort to make other regulations more market friendly—using tradable permits to meet environmental goals, for example.

On the tax side, the top federal income tax rate in 1980 was very high and may have resulted in some economic distortions. For one thing, that 70 percent rate spawned a whole industry of people looking for ways to evade taxes. Overall, however, the evidence on labor supply suggests there was a very modest impact of the cuts in marginal tax rates on overall work effort. There is evidence of some increase in the labor supply of second earners in high-income families. But that is about it.

The big difficulty with the supply-side policies of the 1980s, however, is that any benefits they provided were overwhelmed by their costs. The large tax cuts, accompanied by rising federal spending, resulted in huge budget deficits that reduced national saving, raised interest rates and discouraged investment and growth. The clearest sign of this is that the policies of the 1980s did not improve the productivity trend from the anemic level it had followed after 1973. Productivity growth averaged less than one percent a year in the last four years of the 80s expansion, a rate below the post-73 trend. Moreover, the distributional effects of the tax cuts were adverse. The wealthiest taxpayers reduced their tax payments dramatically, while lower income families, facing increases in payroll taxes, ended up paying more in taxes.

The expansion of the 80s also left a legacy of financial institutions in turmoil and an economy mired in debt. Some now make light of the recession that followed and forget how anemic the initial years of the recovery were—unemployment remained at 7 percent or above for 21 months. The legacy of 80s fiscal imprudence was an important reason why, in early 1993, most observers forecast deficits as far as the eye could see.

Comparing Expansions. Important lessons about supply-side policies that work can be learned by looking at the expansion of the 90s and comparing it with the previous long expansions of the 60s and the 80s. The comparison with the 80s expansion is particularly valuable.

The expansion of the 80s and the expansion of the 90s share some important similarities. In both, technological innovation and private-sector dynamism played an important role. Both were helped by monetary policies that reduced inflation while accommodating growth. Both had deregulation and open trade. And both expansions began with considerable restructuring. But as well as these similarities, there are important differences. There are three distinctive features of the current record breaking expansion. The fact that low unemployment has been combined with low inflation. The fact that productivity growth has been getting stronger as the expansion continues. The fact that there are encouraging signs that the benefits of growth are being shared more evenly.

Distinctive Features of the Record Breaking Expansion

This expansion has enjoyed declining unemployment, declining core inflation and increasing GDP growth (Chart 1).[1] It is not unusual for unemployment to decline in an expansion, but the current unemployment rate of 4.1 percent is strikingly low. During the 1970s and 80s, the unemployment rate was much higher on average, even at cyclical peaks. And high unemployment and high inflation often went together—stagflation. You have to go back to the 1960s to see unemployment rates as low as they are today, and at that time inflation was accelerating sharply.

An Extraordinary Expansion: Rising Growth, Falling Unemployment, and Falling Core Inflation.

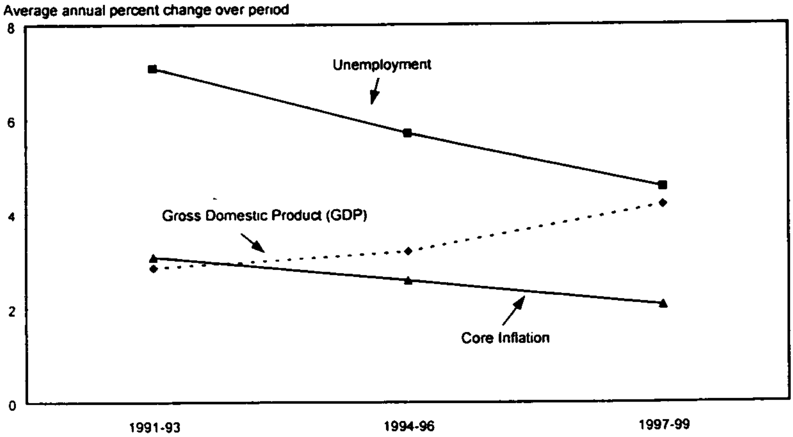


Chart 1: Unemployment, Inflation, and GDP Growth: 1991-1999

Note Data for GDP are in chained 1996 dollars Data for unemployment are the averages of the unemployment rates over the periods shown Data for core inflation are based on the CPI-U-RS
Sources Department of Commerce (Bureau of Economic Analysis) and Department of Labor (Bureau of Labor Statistics).

[1] The rapid increase in oil prices resulting from a reduction in OPEC exports has adversely affected inflation in 1999 and its impact continues into 2000. This does not change the fact that this expansion has seen a low and stable core rate of inflation.

The second distinctive feature of the 90s expansion is seen in the pattern of productivity growth (Chart 2). Typically there is a surge of productivity growth in the first year or so of an expansion. This is the bounce back from the decline in productivity that occurs in the recession that precedes an expansion. All three expansions show this initial surge in productivity growth. But in the 60s and the 80s, productivity growth fell after that initial surge, and by the time these expansions were 7 years old they were looking tired and listless. In the 80s expansion, productivity growth grew weaker and weaker.

Productivity Growth Has Fallen Over Time During Previous Long Expansions but Has Risen During the Current One.

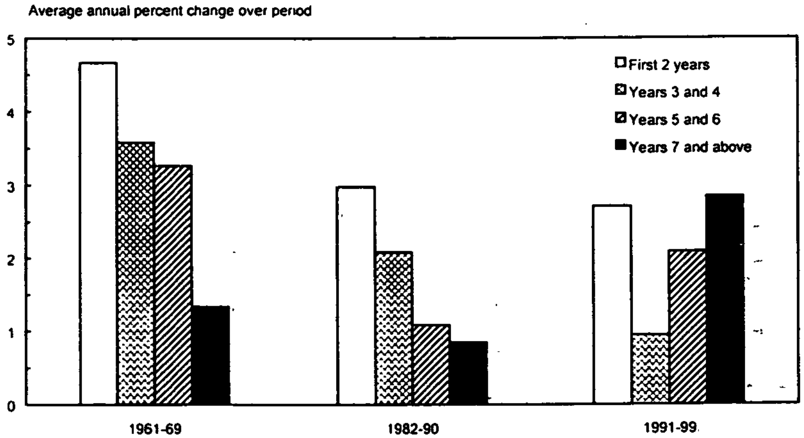


Chart 2: Growth in Nonfarm Business Sector Output per Hour During Expansions
Note The final column shows growth from 1997 through the third quarter of 1999
Source Department of Labor (Bureau of Labor Statistics)

The 90s expansion shows a strikingly different pattern. This expansion has been gaining strength. Productivity has been accelerating. Productivity can be measured in two ways, based upon how much has been produced in the non-farm business sector. And on how much income has been generated by that sector.. Based on a combination of those two approaches, growth of output per hour has averaged 2.9 percent a year since 1995. This is a sharp increase above the trend line of productivity growth over the previous twenty-two years and while it's still too early to tell definitively, it suggests that we may be on a path of faster productivity growth that will help us have faster, sustainable growth in the future.

The third distinctive feature of this expansion is the encouraging signs that the fruits of growth are now being shared more evenly (Chart 3). This contrasts with earlier periods. From 1973 to 1993 real family incomes grew very slowly and that growth was very uneven. Only the top quintile of the income distribution moved up at a reasonable pace, while the bottom two quintiles actually faced declining real incomes over this twenty-year period, when adjusted for inflation using the consumer price index. Over the five years from 1993 to 1998, the picture is very different. All of the income groups have seen good rates of income growth, and the lowest quintile has actually grown most rapidly. There is similar good news in terms of wages and earnings. Workers in the lowest wage or earnings groups achieved very strong gains as the unemployment rate fell below 5 percent in the second half of the 90s.

From 1973 to 1993, Incomes Rose for the Richest and Fell for the Poorest. Since 1993, Income Growth Has Been Solid Across All Income Groups.

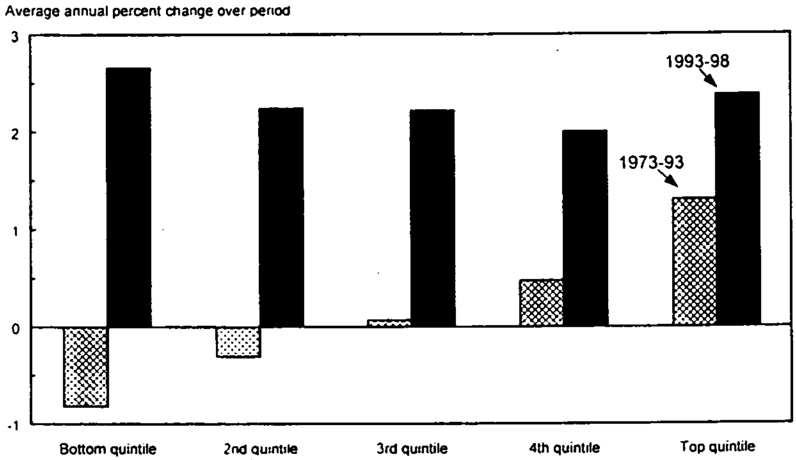


Chart 3: Growth in Mean Real Family Income by Quintile
Source: Department of Commerce (Bureau of the Census)

The Drivers of the Record Breaking Expansion: Technology, Pro-Investment Fiscal Policy, Competition and Trade, and Education and Skills.

Low inflation and unemployment, high productivity, and income gains across the board. These are distinctive features of the 90s expansion. But what has caused them? How are they related to the policies of the 90s. I examine this question next, arguing that the 90s have seen the right policies combined with the underlying strengths of the U.S. economy to give us this unique expansion.

Technology. The role of technology in driving growth in this economy is well known. And in explaining this wealth of opportunities, the dynamism of the private sector in the U.S. economy gets a lot of credit. American workers and businesses have given long hours and maximum effort.

Federal support for technology has played an indispensable role, providing the crucial funds for basic research and pre-commercial research, for example, in information technology and biotechnology.

Even after technological opportunities have been developed, productivity has not always risen. Recall that prior to this expansion, there was a puzzle where people questioned why the boom in technology in the 1980s seemed to have no effect on the productivity data. In order to translate innovation into growth, companies have to change the way they do business, develop new products and services, and respond to changes in the competitive environment. Workers must master new skills and, in some cases, must move to different jobs. Making the transition from new ideas to realized economic performance always involves some form of investment—in physical capital, plant and equipment; in human capital, education and training, or in intangible business capital, the development of new business systems. Companies in the 1990s appear to be making those investments and reaping the rewards of the faster productivity growth.

Stimulating economic growth is like creating a chemical reaction. All the right elements have to be in place, the mix has to be right. Policy cannot grow the economy on its own. But growth from the private sector will not take off if the policies are not right. The key to the longevity of this expansion has been that the dynamism of the private sector has reacted with a superb monetary policy, and, crucially, a pro-investment fiscal policy. In this expansion, the chemistry has been right.

Pro-investment fiscal policy. Fiscal policy has a major impact on the amount of investment that takes place. Budget deficits are not always bad. They can help stimulate an economy where demand is weak. But when the goal is to stimulate and sustain a supply-led, productivity-led expansion, persistent structural deficits are very damaging. They drain savings from the economy, increase interest rates, and discourage investment.

One of the most dramatic differences between this expansion and previous ones is that there were large and rising deficits in past expansions, and a massive turnaround to surpluses in the 1990s (Chart 4). The structural budget balance adjusts for the effect of the business cycle. It estimates what the deficit or surplus would be if the economy were at its sustainable long run level of GDP; that is, at potential GDP. In the 1980s, the structural deficit rose explosively to about 5 percent of GDP. And even after that, it stayed at 3 percent of GDP or above. This expansion inherited a massive structural deficit--more than three and a half percent of GDP in fiscal 1992. But the situation has been transformed so that now there is a structural surplus, one that is projected to grow into the future. It is true that the budget agreement of 1990 took a step forward in fiscal responsibility and bipartisan credit is deserved for that first step. But it was only a small step. The structural deficit continued to increase in 1991 and 1992. The big shift occurred with the budget agreement of 1993 and with the subsequent strength of revenues and restraints on spending.

In Contrast to Previous Long Expansions, Structural Budget Deficits in This Expansion Have Been Transformed into Surpluses.

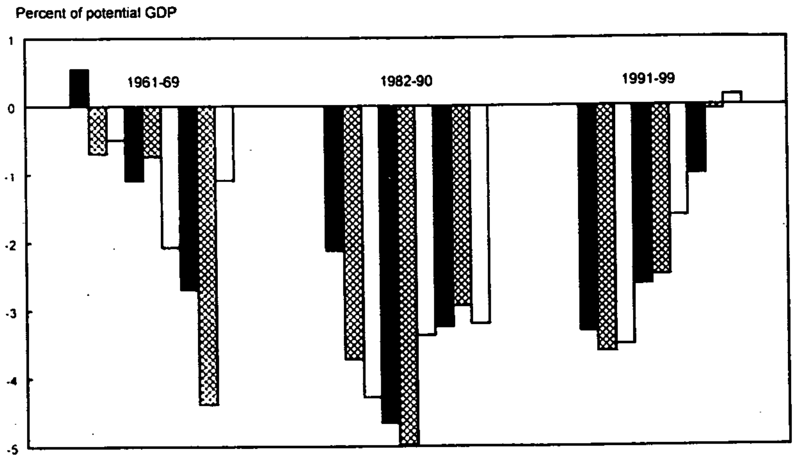


Chart 4: Structural Federal Budget Balances During Expansions
Note Years are fiscal years
Source Congressional Budget Office, Standardized-Employment Budget.

What you hope to see from a shift to fiscal discipline is lower interest rates and larger investment. That is exactly what we have seen. *Real interest rates have been 30 to 50 percent lower in this expansion than they were in the 80s expansion.* And investment has responded in force. Not all of the intangible investment in process improvement or in skills and training is measured in our investment data. But the investment we can measure provides a proxy for the total. We have seen growth of equipment investment and software at 12.3 percent a year since 1993, much of it concentrated in the information technology and communications areas, allowing the economy to take advantage of the innovation opportunities. This rapid step up in investment has been a vital ingredient allowing the acceleration of productivity growth we saw a moment ago. There is a direct link from fiscal discipline to the key productivity driver of this longest expansion.

Strong investment not only improves productivity, it adds to capacity. When capacity shortages develop, there is upward pressure on margins that can contribute to an inflationary spiral. So there is another direct link from fiscal discipline to the persistence of this expansion. In the 1990s, we have built capacity and helped hold down inflation. In the 1980s capacity growth slowed to a crawl as productivity growth slowed.

In 1993, the Administration undertook a major shift in policy, away from exploding budget deficits and towards fiscal discipline. At the time, the decision to embark on a program of deficit reduction, which was then passed in Congress by the narrowest of margins, was hailed by the press, and by experts such as Paul Volcker. The bond market rallied in response to the shift. Subsequently, the President and Congress continued the bipartisan steps towards fiscal discipline. It is time to look at the benefits that we have gained from ending persistent deficits. It is time to recognize the vital role that fiscal discipline has played in the chemistry of growth.

Competition and Trade. There is evidence that industries in which companies compete vigorously are more productive industries. Without the spur of competition, companies become complacent and keep doing things the old way even when new methods are available. Competition encourages change and forces companies to be more productive. Competing in the global economy adds additional benefits. The classical gain from trade comes as industries that have comparative advantage grow and those that lack it, contract. The resulting shift of resources raises overall levels of productivity. In addition, competing in the global economy also helps the spread of best practice production methods around the world. The U.S. economy has become more open and more integrated with the world economy. Trade as a percent of GDP has increased rapidly, especially in this expansion. And trade is only one element reflecting a broader integration with the global economy.

Increased globalization comes with costs. Many in Congress raise legitimate concerns about the impact of trade on some workers and industries. These concerns are reflected in the laws that protect us against unfair competition and that provide assistance to workers displaced by trade. But there is no question that engagement with the global economy has made our own economy more efficient and productive, with broad benefits to Americans.

President Clinton, in cooperation with Congress, has acted to enhance domestic competition, for example with measures such as the Telecommunications Act of 1996, and he has made engagement in the global economy a major policy thrust. Started by prior administrations, the Uruguay Round agreement and the NAFTA agreement were both ratified during this Administration. The importance of trade and competition are recognized by both sides of the aisle.

Education and Skills. The return to education is high and has risen over the past twenty years. Those with college degrees have, on average, earnings over 50 percent higher than high school graduates, and a substantial differential persists even after controlling for other determinants of earnings. The differential between high school graduates and high school dropouts is just as great. It thus makes eminent sense for our society to encourage young people, and not so young people, to acquire more education. This Administration has stepped up its efforts to provide loans and scholarships to allow any student who wants to go to college to have the opportunity to attend. And these supply-side investment policies have contributed to this expansion by adding to the pool of trained workers.

As well as education, perhaps the greatest growth benefit on the labor force side has been in training. The policies that have given us a high employment economy have encouraged employers to train workers to fill jobs that would otherwise be vacant. Companies complain about their inability to find workers with the skills that they need. But this is a problem with a silver lining. It gives these companies a great incentive to seek out workers and train them themselves. This upgrades the quality of the workforce and helps sustain a productive expansion.

Broad-Based Growth in a High-Employment Economy. As I said earlier, an important feature of this expansion is that all income groups have incomes rising at about the same rate. How does this fit with the drivers of the expansion that I have just described? Technological change and foreign trade have often been cited as reasons for rising income inequality. And perhaps they have been. But a simple lesson that we can learn from this expansion is that it is possible to have an economy where technology is moving rapidly, where trade is expanding, and yet there are also across-the-board real income gains.

An important reason for this is that rapid technology change and openness to trade are both factors keeping inflation down and allowing us to operate a high employment economy. When labor is scarce, the workers at the bottom of the wage distribution do better.

Conclusion

This has been an extraordinary expansion so far and we expect it to continue well into the future. It has been driven by a dynamic private sector and the hard work of American workers. It has been kept on track by astute monetary policy that has given the economy room to run while keeping guard against inflation. It has been helped by deregulation that started in the 1970s and continues today. But while recognizing these important factors, we must acknowledge the contribution of the policies of the 1990s to the expansion of the 1990s. We need to guide policy in the future with the lessons of what has worked so well. Most importantly, turning around the enormous fiscal imbalances of the past has freed up the resources needed to invest in capacity and in productivity improvement. Maintaining an open and competitive economy and investing in technology, education and skills have added to growth now and helped pave the way for more growth ahead.

The deficits of the 1980s drove up demand and played a role in the strong recovery of GDP after the deep recession of 1981. But in the end they were counter-productive. They created a tug of war with monetary policy that drove up interest rates. As that expansion matured, the pace of R&D spending slowed, and net domestic investment as a share of GDP declined. Capacity growth slowed to a crawl and productivity growth fell below even the anemic trend that prevailed after 1973 (Chart 5).

Today, in contrast, there does seem to be a new trend. We do not know for sure how long it will last, but by staying the course of the policy path we have been on, combining fiscal discipline with support for technology and the skills that are needed, we will give this economy its best chance. It is the best chance of getting the chemistry of growth right. These are the right kind of supply-side policies.

Productivity Has Moved Well Above its Long-term Trend During This Expansion.

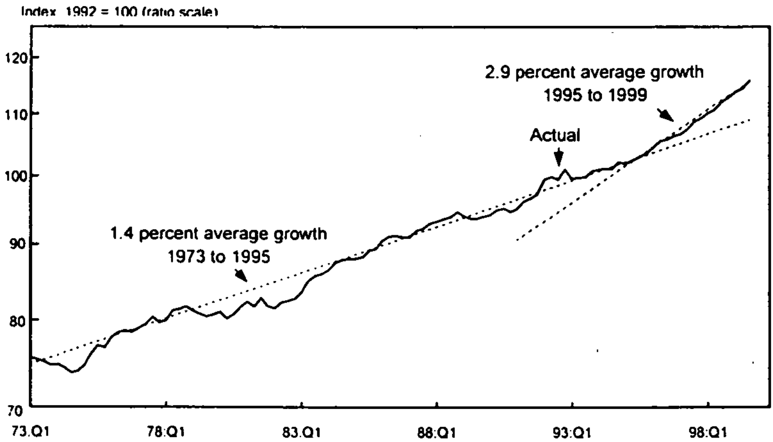


Chart 5. Labor Productivity (Nonfarm Business Sector)

Note Productivity is the average of income- and product-side measures Productivity for 1999 is inferred from the first three quarters

Sources Department of Commerce (Bureau of Economic Analysis) and Department of Labor (Bureau of Labor Statistics).

REGULATORY REFORM: PROGRESS AND UNFINISHED BUSINESS

by Murray Weidenbaum Murray Weidenbaum is the chairman of the Center for the Study of American Business and Mallinckrodt Distinguished University Professor at Washington University in St. Louis.

A Statement to a Hearing of the
Joint Economic Committee
U.S. Congress
Washington, DC, March 9, 2000

A sea change has occurred in public attitudes toward government regulation since 1980. Like the state, the regulatory apparatus has not withered away. In important dimensions, regulation has expanded substantially. Nevertheless, a fundamental shift has occurred in the public policy process.

"Command and control" is no longer a phrase used in polite company. Its place has been taken by references to "the magic of the marketplace." Proponents of regulation now feel obliged to talk about costs as well as benefits, private as well as public sector alternatives, incentives and disincentives, and thus to consider the disadvantages as well as the advantages of government intervention.

Despite significant achievements, the regulatory reform effort of the past two decades has run its course. A new strategy is needed, one that focuses on reducing the shortcomings of the basic regulatory statutes. We need to eliminate the statutory barriers to agencies doing regulatory analysis as well as the permissiveness that enables them to go beyond the role envisioned by Congress. Each congressional committee ought to be required to present estimates of the likely benefits and costs of regulatory actions necessary to implement proposed legislation — before that legislation is voted on. To improve the credibility of these estimates, Congress should establish an independent Office of Regulatory Analysis, staffed with experienced apolitical analysts willing to let the chips fall where they may.

1980: A Watershed Year

The year 1980 was a period of transition. Congress eliminated much of the apparatus of railroad and trucking regulation. Also, the Regulatory Flexibility Act and the Paperwork Reduction Act were enacted.

The regulatory flexibility statute was perfunctory, but the paperwork law turned out to be a sleeper. It established the Office of Information and Regulatory Affairs (OIRA), the part of OMB that carries out the centralized regulatory reviews mandated by President Reagan and continued by his successors.

Not all change on the regulatory front in 1980 represented progress. That year, Congress also created Superfund, a monument to costly litigation that deters environmental cleanup. In late 1980, presidential candidate Ronald Reagan promised to rein in the expansion of regulation, especially by requiring cost-benefit analyses for new regulations.

Expectations and Reality

At the beginning of the 1980s, proponents of regulatory reform were enthusiastic. After years of massive expansion of the regulatory apparatus, at long last the tide would turn. Events in early 1981 seemed to confirm that expectation. Newly-elected President Reagan quickly eliminated energy price and allocation controls and the vestige of general "voluntary" wage and price controls of the past. Fulfilling his campaign pledge, he issued a key executive order requiring federal agencies to demonstrate that the benefits of proposed new regulations exceeded their costs. President Reagan also charged OIRA with the responsibility to enforce this requirement.

In many ways, results were very heartening. The size of the regulatory establishment was curtailed for several years. The regulatory review process had a substantial impact. Although only a small proportion of the regulations reviewed by OMB was returned or withdrawn, the threat of such severe action often motivated substantial changes, including deferring some regulatory initiatives.

The most significant accomplishment was so undramatic that it went unnoticed: during the Reagan presidency no new regulatory agency was established nor was any major regulatory program substantially expanded. It reminds us of the Sherlock Holmes tale where the most significant clue was the fact that the dog did not bark.

In the early 1980s, however, forecasts of regulatory doom and gloom were prevalent. Critics thought that the green eye-shade people in the Reagan administration were determined to grant business "regulatory relief" and were oblivious to the damage done to the environment, workers' health, etc.

These dire forecasts did not come to pass. By every important standard, the environment is cleaner, the workplace is safer, and substantial progress has been made toward achieving the other goals at which social regulations are aimed. Moreover, economic deregulation has injected competition into the market economy with strongly positive results. Costs and prices in the deregulated industries have come down while the pace of innovation has accelerated.

However, progress on regulatory reform has not followed a straight line. The restraint on enacting new or expanded regulatory legislation weakened in the mid-1980s. The upward trend in regulation accelerated in the 1990s. Efforts to get Congress to pass a comprehensive regulatory reform law failed.

<u>The Unfinished Business of Regulatory Reform</u>

We must reluctantly conclude that the regulatory reform effort initiated in the late 1970s and early 1980s has run out of steam. We need to shift the basic thrust of regulatory reform. All proposals to date have ignored the compelling fact that the key decisions on new regulations occur much earlier in the process — when Congress passes an OSHA Act or an amendment to the FDA Act or a new Clean Air Act.

Each congressional committee should be required, when writing a regulatory statute, to present estimates of the expected benefits and costs of the regulatory program in the report accompanying the legislation. The committee should affirm that these benefits justify the program in light of its estimated costs. Such a statement, and the benefit-cost analysis supporting it, should be required before a legislative proposal can be reported to the full House or Senate.

Unfortunately, the way many regulatory statutes are now written both requires the agencies to ignore economic effects and precludes them from even considering the most cost-effective approaches. Despite well-intended presidential directives, it is impossible for regulators to strike a sensible balance between costs and benefits when the basic regulatory laws prohibit costs from being considered at all.

Congress should eliminate provisions in existing regulatory statutes that prevent or limit regulatory agencies from considering costs or comparing expected benefits with costs when designing and promulgating regulations. Regulations that seek to reduce health or safety risks should be based on scientific risk-assessment and should address risks that are real and significant rather than hypothetical or remote.

More fundamentally, all those involved in the government's decisionmaking process should realize that identifying a worthy objective does not necessarily create a need for regulation. Today's large federal establishment has great difficulty carrying out the numerous responsibilities already assigned to it. The burden should be on those who would replace the market with additional regulation to demonstrate with solid information and careful analysis that the public would benefit from a further extension of government into the private sector.

The American people deserve better results from the substantial resources now devoted to regulation. Too many of these regulations have been grossly inefficient.

causing us to waste scarce resources in the pursuit of trivial or imaginary improvements in human health protection and environmental quality. Gains in these areas may be possible, but we will obtain them only by chance if we continue present practices.

If we are truly serious about achieving cleaner air and water, safer workplaces and residences, and better living standards, then a vibrant and relentless program of independent regulatory analysis and oversight is necessary along with institutional changes that discourage old, discredited ways of legislating and regulating. The reforms I am proposing are not merely matters of procedure and economic accounting. By enhancing the accountability of our legislators and regulators, they would improve the lives of the American people.

IRET Institute for Research on the Economics of Taxation.

Statement of
Stephen J. Entin
Institute for Research on the Economics of Taxation
before the
Joint Economic Committee hearing on:
"The Supply Side Revolution: 20 Years Later"
March 9, 2000

Mr. Chairman:

My name is Stephen Entin. I am the President and Executive Director of the Institute for Research on the Economics of Taxation in Washington, DC.

Thank you for holding this anniversary hearing on the Joint Economic Committee's path-breaking reports on the impact of fiscal and monetary policy on the supply-side of the economy. I was on the staff of the Joint Economic Committee from 1975 through 1980, when the events leading up to these reports were unfolding, and I had a hand in preparing these documents. I then became Deputy Assistant Secretary for Economic Policy at the Department of the Treasury during the Reagan Administration, and worked to put many of the recommendations of these JEC reports into practice. Consequently, I very much appreciate the invitation to participate in this hearing. It is like coming home again.

In 1979, and again in 1980, the Congressional Joint Economic Committee issued Annual Reports containing major views and recommendations supported by all of its Members, Democrat and Republican. This was the first time in 20 years that such a unified report had been possible, and it has not happened since.

The coincidence of views was the result of the economic horrors of the 1970s. Whereas the mid-1960s, following the Kennedy tax cuts, had generally been marked by strong growth with limited inflation, the late 1960s through 1981 were a turbulent period culminating in rapid inflation and falling living standards. We tried to pay for a war and increased domestic spending with excessive money growth. We had a tax surcharge and a recession at the end of the 1960s. We began the 1970s with two devaluations, rising inflation and interest rates and wage and price controls. In mid-decade we had an oil embargo with gasoline lines and rationing by license plate, double digit inflation and another recession. At the end of the decade we had another oil shock, double digit inflation and interest rates, soaring tax rates, falling investment, falling after-tax income, strikes, and another recession with rising unemployment. By the end of the 1970s, the public was demoralized and unhappy with the triple burdens of inflation, taxation, and unemployment. (See chart 1.)

1730 K Street, N.W., Suite 910 • Washington, D.C. 20006 • (202) 463-1400 • FAX: (202) 463-6199

The prevailing Keynesian economic theory and policy offered no apparent way out of these difficulties. They could not explain why inflation, slower growth and rising unemployment were occurring at the same time, since they held inflation to be a spur to growth, and growth to be a source of inflation. Furthermore, any effort to fight the inflation was presumed to require a cut in "demand" by cutting spending, raising taxes, or retarding money growth, and would only work after a prolonged increase in unemployment knocked down "inflationary expectations". Any policy that could reduce unemployment was presumed to generate higher "demand" and higher inflation.

Inflation, bracket creep, and rising tax burdens on capital. Finding a way out of the troubles of the 1970s required a new understanding of the workings of the economy and a new set of economic policies. The effect of money growth on inflation and of inflation on taxes and economic performance provided the clues necessary to discover a new set of policies to deal with the dilemma.

Starting late in the late 1960s, and continuing throughout the 1970s, inflation did significant damage to the economy through its interaction with the federal tax system. Higher nominal wages, either from real wage gains or cost of living increases, were forcing workers into higher tax brackets, raising their marginal tax rates. At double digit inflation, the government was laying claim to 100 percent of the labor productivity gains in the economy and all of the resulting real wage growth. Bracket creep was poisoning U.S. labor relations and was pricing U.S. labor out of world markets. The few tax cuts of the period handed a fraction of the money back in the form of increased personal exemptions and standard deductions, but did little or nothing to lower marginal tax rates as the successful Kennedy tax cuts had done.

Taxes were also imposed on inflated interest earnings and capital gains, driving returns below zero. Business taxes were also increased by inflation's erosion of the real value of the deprecation allowances, which fell far below the replacement cost of plant and equipment and depressed investment. Between taxes and dividends, many major industries were paying out more than they were taking in; they were liquidating. Investment failed to keep pace with the growth of the labor force. Productivity and real wage growth turned negative. Between 1968 and 1979, large capitalization stocks lost over half their real value.

Any way out of the difficulties of the 1970s would have to take into account these adverse effects of inflation on incentives to work, save and invest.

Dealing with stagflation. Monetarist and neoclassical (supply-side) economists brought forward a different view of the world that offered a solution. They made three important points. First, inflation is monetary problem. Monetary policy's chief impact is on nominal demand and the price level. The Federal Reserve cannot and should not try to control real output, which is determined by real factors and market forces. Second, tax changes do not primarily influence demand and inflation by raising or lowering government revenue. Rather, changes in marginal tax rates affect real output by changing incentives to produce. They do so by affecting the prices governing the choice between labor and leisure, and the choice between consumption versus saving and investment. Third, government spending and regulation crowd out and discourage private production; they do not add to it. In this view of the world, efforts by the Federal Reserve to boost the economy by increasing money growth should lead to higher inflation and lower real output. Higher government spending should reduce private sector output, not boost it.

The new analytical framework was able to explain the poor economic performance of the 1970s and permitted the development of a set of economic policies designed to fight inflation, promote real growth and reduce unemployment simultaneously. Such a program would consist of reductions in marginal tax rates on labor and capital income, restraint of government spending, reduced regulation, and slower growth of the money supply. The reduction of government spending would free resources for private sector use. The reduction of regulation and marginal tax rates would reduce the cost of production and augment the supply of real output without making inflation worse (in fact, reducing costs and prices). The reduction of money growth would reduce the growth of aggregate demand and inflation without harming real output (even enhancing it by lowering the tax burden on capital).

The Joint Economic Committee Reports

The use of either monetarist or neoclassical principles in the formulation of economic policy was controversial at the time. The Joint Economic Committee Reports were among the first indications that economic specialists in the Congress and serious economists on the Congressional staff were paying heed to the new economic thinking. The Committee's endorsement of some of the basic ideas of the new economics, in turn, lent political legitimacy to efforts to restructure federal economic policy along the lines suggested by these theories. Eventually, these new concepts had a profound impact on national politics. They became the guiding principles of the economic proposals of the Reagan campaign and the first year of the Reagan Administration and have influenced subsequent policy proposals to this day.

In 1977, and, in more detail in 1978, the Minority (Republican) sections of the JEC Annual and Midyear Reports described in detail the monetarist/neoclassical interpretation of stagflation. They blamed rising inflation on excessive money creation by the Federal Reserve. They described the adverse impact of inflation-related bracket creep on labor costs and on after-tax wages; how inflation raises nominal interest rates and drives down after-tax real interest rates, depressing the incentive to save; and how inflation reduces depreciation write-offs below the replacement cost of plant, equipment, and buildings, driving up the cost of capital and depressing investment.

The JEC Chairman, Senator Lloyd Bentsen (D-TX), was particularly concerned with the effect of inflation on investment. He was the author of a bill to shorten asset lives of depreciable property. The plan, known as "10-5-3", would have allowed the write-off of structures in 10 years, most equipment in 5 years, and automobiles in 3 years. It would have countered much of the adverse effect of inflation on the capital consumption allowances, and moved the tax system a long way in the direction of expensing.

By 1979 and 1980, Senator Bensten and Ranking Minority Member Representative Clarence J. Brown (R-OH) were able to persuade the full Committee to support several recommendations consistent with the new view of economics. In particular, the Committee endorsed a gradual reduction in the growth of the money supply to fight inflation, and tax relief for business investment.

The joint reports made only passing reference in the main text to the personal side of the tax code, which was of more concern to the Minority Members and addressed in their supplemental views. Thus, the reports were not a blanket endorsement of sweeping reductions in marginal tax rates for individuals. Nonetheless, the reports made several key contributions to the tax debate.

They acknowledged the effect of taxation on the incentives to supply and employ the factors of production. They acknowledged a different mechanism by which policy affected output other than the prevailing Keynesian view that taxes affected output by altering disposable income, the deficit, and aggregate demand.

The reports called for a gradual reduction of the rate of growth of the money supply to bring down inflation. They called for a reduction in federal spending as a share of GDP to reduce the claim on physical and financial resources (restraining demand while encouraging private investment). They endorsed reduction in the taxation of the returns on business investment to encourage the growth of investment, capacity, productivity, real output, employment and real wages. The reports declared that it was possible to have real growth and rising employment while reducing inflation through this new mix of policies. Lower inflation would reduce the tax burden on capital by reducing the loss of real value of the depreciation write-offs (bringing the capital consumption allowances more nearly into line with the replacement cost of plant, equipment, and structures). Lower inflation would reduce the tax bracket creep that was increasing on labor, which was putting upward pressure on wage demands and labor costs.

The main report stopped short, however, of endorsing lower marginal income tax rates for individuals and indexation of the tax bracket structure. The idea that the labor force did respond significantly to the after-tax wage (had a significantly positive elasticity of supply) was still too controversial in the economics profession. Some members may have felt that lowering marginal tax rates across the board gave too much to the "rich", or feared that indexing would deprive the Congress of a nice, low-profile source of ever-increasing revenues. Whatever the reasons, the majority of the committee was not yet prepared for further steps. They focused on lowering taxes on business investment, which had the strong support of the business community; they felt that any money that businesses got would be used for investment, which would raise productivity and wages.

It is ironic that this bipartisan support for tax relief was focused exclusively on business investment at the behest of the Democratic majority. It is also ironic that, today, candidates of both parties are ignoring or raising business taxes to focus all tax relief on individuals, and too much of that in a manner that provides no supply-side incentives.

The Reagan Economic Program and the Economic Recovery Tax Act of 1981 (ERTA)-- a supply-side solution.

The program. The policy approach of the incoming Reagan Administration incorporated the general approach outlined in the 1979 and 1980 Joint Economic Committee unified reports and went further to address some of the issues raised in the Minority Views in the 1978 and 1979 Reports. The Reagan program had four parts:

- A gradual slowdown in the rate of growth of money creation to fight inflation.
- Reduction in government spending as a share of GDP to release real resources (manpower and materials) to the private sector.
- Reduction in marginal tax rates on work, saving, and investment to spur real output, and protection of the individual rate structure from inflation.
- Reduction in government regulation of the economy to reduce production costs and improve economic efficiency.

Tax rates and tax bases. It must be stressed, and it must be remembered, that the 1981 tax reduction program addressed the whole tax system, not just pieces. In particular, ERTA addressed two key issues, the level of the statutory marginal tax rates and the definition of the tax base. The two are related. Low tax rates are not good enough if income from saving and investment is being taxed several times at the individual and business level, and taxed more harshly than income that is used for consumption. The Reagan tax cuts dealt with excessive tax rates and inadequate allowances for the costs of earning income at both the individual level and the business level.

Individual tax cuts. For individuals, ERTA reduced individual marginal income tax rates across the board and provided for indexing the personal exemptions, standard deduction, and tax bracket boundaries for inflation to eliminate bracket creep. The top long-term capital gains rate fell from 28% to 20%, and the use of IRAs was opened up to all taxpayers to make the tax treatment of saving more neutral. Additional rate cuts were provided for two-earner couples and estates.

Business tax cuts. For businesses, ERTA included an increase in the rate of the investment tax credit to 10% from 7%, a cut in the corporate tax rate from 48% to 46%, and shorter asset lives for the purpose of determining capital consumption allowances. When fully phased in, the capital consumption provisions plus the ITC would have been roughly equivalent to allowing expensing (first year write-off of investment), which permits businesses to deduct the full real cost of their investments and is the optimal tax treatment.

After-tax incentives. The Reagan tax rate reductions were modelled on the Kennedy rate cuts. The Kennedy and Reagan rate cuts were roughly proportional across the board, and reduced taxes by roughly similar percents for all taxpayers. In both cases, however, the after-tax incentives at the margin rose the most where the tax rates had been highest and the after-tax rewards had been lowest to start with. It is the change in the after-tax incentives that matter for economic behavior, not the percent cuts in the tax rates. As theory would predict, following the rate cuts, upper income people began reporting more taxable income, and began paying a higher share of the total tax burden.

Cutbacks, delays and phase-ins. The Reagan tax reductions were not effective immediately. Due to fear of creating a deficit, and to give the government time to trim spending, the tax cuts were scaled back and phased in slowly, over four tax years for individuals and over six tax years for businesses. The small portion of the income tax cut effective in October of 1981 was less than the scheduled payroll tax rate increase of that year, and was inadequate to offset that year's underlying inflation-related bracket creep. Meanwhile, the Federal Reserve shifted to an anti-inflationary posture in November, 1980, virtually the day after the election, and pursued stop-and-go money growth policies throughout 1981 and 1982. By the second quarter of 1981, a few months before the tax bill was enacted, the economy entered recession.

Disinflation and deficits. The budget deficits of the early 1980s were erroneously blamed on the tax rate reductions and led to calls for further tax increases. In fact, the deficits were due to the recession and to the sudden collapse of inflation. The Federal Reserve shared the Keynesian view that the tax cuts would stimulate demand and increase inflationary pressures. Consequently, the Fed leaned extra hard against the inflationary wind. But the tax rate reductions reduced the cost of labor and capital. With costs down, and after-tax incomes up, the inflation rate fell far faster than anyone expected. Intractable "core" inflation proved to be a myth.

The Administration and the Congress had budgeted for a much slower decrease in the inflation rate than actually occurred. Inflation fell from 12.5% in 1980 (December to December) to 3.8% in 1982. The Administration had expected over 7% inflation in 1982, and did not expect to achieve 4% inflation until 1986. Although the Congress had voted a reduction in the growth of real federal outlays, the nominal spending targets turned out to be a big increase in real outlays. The reduction in forecast revenue due to the recession and the allowance of too large an increase in federal outlays for inflation were the primary sources of the budget deficit in the mid-1980s, not the tax cut.

Strong recovery. By the end of 1982, the economy had bottomed out. The third installment of the tax cut produced the first significant net tax rate reduction for calendar 1983. The strength of the economic recovery, 4.5% per year in real GDP growth from 1982 through 1986, also took the critics by surprise. Nor did the critics predict the strength of the increase in the level of employment -- up 10 million jobs from 1980 levels by 1986, up 20 million before the end of the expansion in 1990. U.S. productivity gains in the mid-1980s actually exceeded Japan's. Real family after-tax income, depressed in the 1978-1982 period, began rising again, recovered its losses, and rose to new highs. The bad economic trends of the 1970s were reversed in the 1980s.

Tax policy since 1981

Unfortunately, the Congress was not willing to wait for the budding economic recovery to generate additional revenue and reduce the deficit. Instead, calls for further tax increases led to considerable backsliding from the tax reduction program.

The Tax Equity and Fiscal Responsibility Act of 1982 was a tax hike on investment. TEFRA repealed 85% of the reduction in the cost of capital for equipment enacted in 1981, and prolonged the recession for several months.

The 1983 Social Security Amendments was a tax hike on seniors. Based on recommendations of the Greenspan Commission, the Act imposed taxes on Social Security benefits, and did so in a manner that imposes horrendous tax rates on seniors with modest amounts of income from wages or savings.

The Deficit Reduction Act of 1984 was a tax hike on real estate. DEFRA repealed 30% of the reduction in the cost of capital for structures enacted in ERTA.

The Tax Reform Act of 1986 gave us lower rates and a broader tax base; but greatly boosted the tax bias against saving and investment. The Tax Reform Act has been described as "broadening the tax base" by closing "loopholes" in order to lower the tax rates. Because of the low individual marginal income tax rate structure, TRA86 is often referred to as the ultimate supply-side tax bill. That is a misperception. In fact, TRA86 offset the static revenue loss of the personal rate reductions by overstating income from capital and subjecting it to increased double taxation. Asset lives were lengthened, the ITC was repealed, passive loss limits hit real estate investors, taxes went up on capital gains, and eligibility for IRAs was restricted to low and middle income savers. The net effect was to worsen the tax treatment of capital formation, both in absolute terms and relative to consumption.

Tax rate hikes were enacted in 1990 and 1993. The individual rate cuts of 1986 were gradually rescinded by the 1990 and 1993 Acts. Phase-outs of personal exemptions and deductions for taxpayers with adjusted gross income above certain thresholds effectively boost the top marginal tax rate into the lower 40's.

Some incentives were restored in 1996 and 1997. The Senior Citizens' Right to Work Act of 1996 moderated the Social Security earnings test penalty for seniors under age 70 who have reached the normal retirement age (currently 65). There was no relief for seniors between age 62 and the normal retirement age. The combined tax rates from the income tax, the taxation of benefits, the payroll tax, and the earnings test can still push marginal tax rates on some seniors to between 68% and 110%.

The Taxpayer Relief Act of 1997 reduced the long term capital gains tax rate to 20%. The reduction undid the capital gains damage done in the 1986 Act. Introduction of Roth IRAs undid some of the damage to saving incentives in the 1986 Act, but upper income taxpayers are still restricted from making use of them. Upper income individuals must turn to the tax exempt bond market for similar treatment.

Of the improvements in incentives to work, save, and invest initiated in the policy changes of 1981 and parts of the 1986 Tax Reform Act, few remain in place. Even before the 1990 tax hike, in terms of dollar value, all of the 1981 tax reduction had been repealed by 1990. (See chart 2.) The few fiscal changes that survive are: a portion of the lower marginal personal income tax rates; lower capital gains tax rates; tax indexing; a lower corporate tax rate; deregulation of energy prices and some curtailment of regulation in other sectors. The only major piece of the original 1981 tax cut that was retained in 1986 and still remains in force in its original form is tax indexing. It is critical for the growth of saving and employment that indexing not be tampered with, and it is critical protection for taxpayers against Washington's appetite for money.

The other key policy change that is still in place is lower inflation. The Fed's continued vigilance against inflation in the 1990s has brought about a de facto reduction in the tax rate on capital formation that has protected the economy against rising tax rates imposed by legislation. With inflation near zero, however, there is not much more that the Fed can usefully do in that regard.

What remains to be done?

The key tasks remaining in the area of tax policy are the same as in 1980. We have not made much progress. We have been boosting statutory tax rates on individuals and businesses, and have imposed hidden tax rate spikes through the phase-out of deductions and credits and the phasing into taxable income of Social Security benefits. We have based recent tax relief plans on the amount of money being handed out to favored groups rather than with the economic incentives, at the margin, in mind. Narrowly targeted credits and incentives have been designed to manipulate behavior; it is better to enact broad-based reductions in tax barriers to production and let the market determine what is produced, how, and by whom. We still need to reform the tax base to eliminate the anti-saving, anti-investment biases in the tax code, to lower and flatten the statutory tax rates and to eliminate complexity. These goals are compatible because the biases in the code are the chief sources of the complications. They can best be achieved through fundamental tax reform.

Fundamental tax reform would tax all saving on a par with income used for consumption. Saving would either be tax-deferred until it was spent, as in a deductible IRA or pension; alternatively, there would be no deduction for saving, but the returns would be untaxed, as in a Roth IRA. There would be no double taxation of corporate income, and no estate tax. Investment would be expensed, not depreciated. All the major tax reform proposals achieve these objectives.

Short of full-blown tax reform, Congress could shorten asset lives and adjust depreciation for inflation, expand eligibility and lift contribution limits for IRAs and pensions, cut marginal tax rates for individuals and businesses, eliminate the AMTs, and cut tax rates on capital gains and dividends. In addition, every income-related phase-out of deductions or credits or phase-in of taxation of benefits, as with Social Security, should be reformed to eliminate the perverse marginal tax rate spikes that result from these provisions.

Fundamental tax reform would work hand in glove with the privatization of Social Security and the reduction and elimination of the payroll tax. The tax reform would make investors eager to put the added saving from Social Security reform to work in the United States, adding to the stock of plant and equipment, boosting labor productivity and wages. The two reforms together would provide maximize benefits to people during their working and their retirement years.

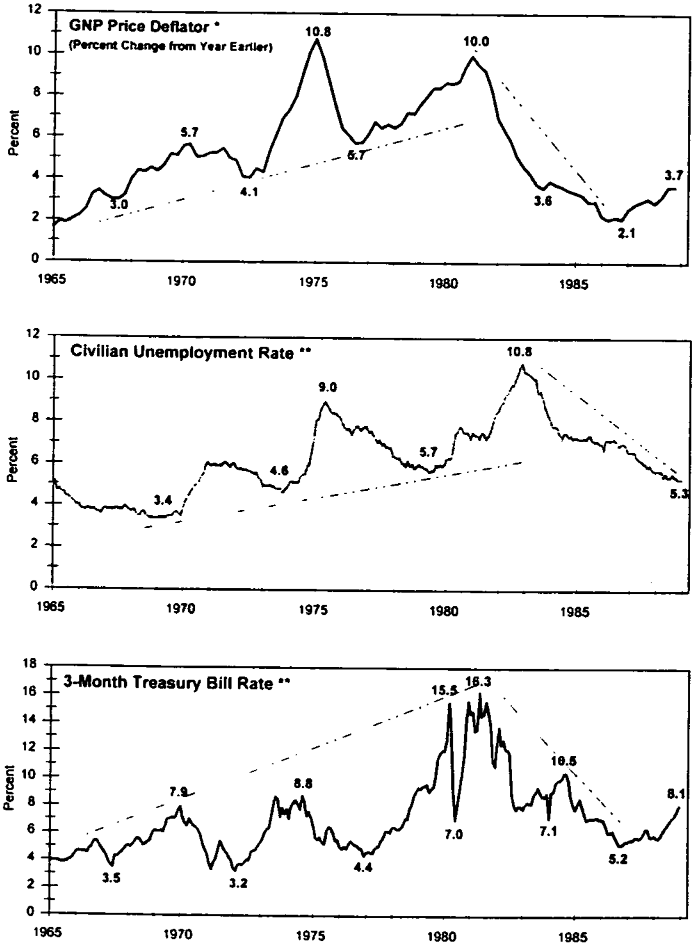
It would be easier to achieve these goals if Congress were to adopt dynamic scoring. Estimates of the revenue consequences of tax proposals should be based on their microeconomic (supply side) incentive effects and the resulting supply responses of the taxpayers and the associated changes in gross domestic product and income.

The Federal Reserve needs to do its part. It is drifting back into the bad habit of trying to regulate real growth instead of trying to control inflation. The private sector does not cause inflation. Growth does not cause inflation. A high stock market does not cause inflation. Indeed, the stock market goes up when it thinks that the Federal Reserve has done a good job of keeping inflation down. Only bad monetary policy can cause inflation. The only good thing that the Federal Reserve can do for the real sector of the economy is to stabilize the value of the dollar. It is not its job to worry about anything else.

High marginal tax rates, however disguised, depress work, saving, investment, productivity, output, and income. They trap the poor in poverty. They punish people who would like to increase saving for retirement or to help their children, saving which would also contribute to economic development that would benefit everyone. They drive experienced workers from the labor force.

One way or another, we need to reform this crazy tax system. A single rate tax, unbiased against saving, with no double taxation of business income and no tax on estates, could eliminate these hidden, high marginal tax rates. Moving to neutral tax treatment of saving and investment could add 25% to 30% to the stock of capital, boost productivity and wages, and raise national income by 10% to 15% over about 15 years. That would boost the average family income by $4,000 to $6,000 a year. It would guarantee a far more secure retirement for future generations. In short, fundamental tax reform would reward people for improving their situations instead of forcing them into continued dependence on Big Brother government, and bring about a new burst of economic and political freedom for the new millennium.

CHART 1 INFLATION, UNEMPLOYMENT, AND INTEREST RATES



* Quarterly data from 1965-I to 1988-IV.
** Monthly data from Jan. 1965 to Dec. 1988.

WHAT IS LEFT OF THE 1981 TAX CUT?

THE NET TAX INCREASES OF 1981 - 1990

TAX DECREASE (-) OR INCREASE, 1981-1990, BILLIONS OF DOLLARS:	
SUMMARY	
ERTA	-1490.0
NON-ERTA TOTAL	1856.3
NET TAX INCREASE	366.3
DETAIL	
ERTA	-1490.0
BRACKET CREEP	753.2
SOCIAL SECURITY	510.9
TEFRA 1982	365.6
HIGHWAY REVENUE ACT OF 1982	34.2
DEFRA 1984	132.4
TAX REFORM ACT OF 1986	-32.1
OBRA'S & CR'S (BUDGET RESOLUTIONS) 1985-1988	74.9
OTHER RETIREMENT ACTS (1983, 1986)	5.6
OTHER	11.4
NET TAX INCREASE	366.3

O