

The Impact of the Welfare State on Workers

Executive Summary

This is the second study in a series I have commissioned on the impact of the welfare state on various aspects of the American economy. The first study, *The Impact of the Welfare State on the American Economy*, examined the drag on economic growth resulting from excessive levels of federal spending. The second study, *The Impact of the Welfare State on Workers*, analyzes the relationship between the size of the federal government and recent trends in income and compensation.

The first section of this study debunks the myth advanced by Labor Secretary Robert Reich that seeks to blame the income stagnation under the Clinton Administration on a recovery in business profits. This study refutes the notion that business profits cause income stagnation, and instead demonstrates that healthy business profits tend to generate compensation gains for American workers. This section of the study also shows that when appropriate inflation measures are used, hourly wages and benefits received by the typical worker increased about 26 percent between 1973 and 1994, after adjustment for inflation. This study demonstrates that there was a very close relationship between productivity and compensation growth during this period.

The second section of the report focuses on the relationship between excessive federal spending, productivity, and compensation. Among the conclusions of the study are the following:

- When federal spending as a share of GDP exceeds a level of 17.4 percent, additional federal spending becomes literally counterproductive, with negative effects on productivity and compensation growth.
- At present levels of federal spending as a share of GDP, restraining federal spending by one dollar during the current year would yield an increase of 26 cents in total wages and benefits. Sustaining this budget restraint over a seven year period would produce cumulative gains of \$1.68.
- Over time, the drag of excessive federal spending on productivity and compensation growth are striking. If federal spending had been held constant at its 1965 share of 17.6 percent of GDP, and federal taxes adjusted accordingly, the present value of the gains to the typical worker over the period 1973-1994 would have amounted to \$106,800, enough to purchase a median priced new home.

This study provides a public service by quantifying the sizable costs of excessive federal spending to the average worker in the U.S. I am pleased to make this study available to the Congress and public, and hope it contributes to an informed debate about the counterproductive effects of excessive federal spending in America.

Jim Saxton
Vice-Chairman
Joint Economic
Committee

The Impact of the Welfare State on Workers

by
Lowell Gallaway and Richard Vedder

PROLOGUE

This is the second in a series of studies designed to explore the question of whether the federal government in the United States is **too large**. In the first study, the general issue of the effect of the size of the federal government, measured as a percent of Gross Domestic Product (GDP), on the level of GDP is analyzed. Our major finding in that study is that beyond a level of federal spending amounting to 17.57 percent of GDP, additional federal expenditures have a **negative impact**. At current levels of spending and GDP, restraining federal spending by a dollar will add 38 cents to GDP.

In this study, we pursue this question at a more disaggregated level, focusing on the impact of an oversized government on the real compensation of workers in the United States. What we discover is a set of relationships that is quite consistent with our earlier findings. Specifically, we find that restraining current federal spending by one dollar will lead to a 26 cent increase in the real compensation of workers. The details of our analysis follow. The first section examines measurement issues and the relationship between productivity and compensation growth. The second section statistically examines the effects of an excessive federal government on wages and benefits.

I. THE LABOR INCOME GROWTH PROBLEM

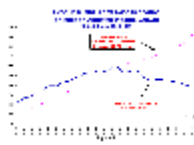
"It was the best of times, it was the worst of times."

**Charles Dickens,
*A Tale of Two Cities***

Charles Dickens did not have the American labor market in mind when he penned those famous words. However, with modest rewording to read, "Was it the best of times or the worst of times," they rather accurately describe the current controversy centering on the pattern of growth (or lack of growth) of the real economic rewards to workers in the United States. Depending on how one defines the pay of workers, and which price index is used to convert from nominal to real terms, almost any

story can be told. [1] Figure 1 illustrates the extreme versions of the possible scenarios that may be sketched. The solid line describes average weekly earnings for the private sector of the economy deflated by the official consumer price index. The data are in index number form, with 1973 set equal to 100. [2] This data series shows an increase from 62.4 in 1947 to 100 in 1973 and, then, a decline to 79.3 in 1994.

On the other hand, the broken line in Figure 1 describes movements in worker compensation per hour deflated by the Gross Domestic Product deflator for the non-financial corporate business sector of the American economy. It stood at 49.9 in 1948, rose to 100 in 1973, and increased further to 137.7 in 1994, quite a different picture than that provided by the weekly earnings series.

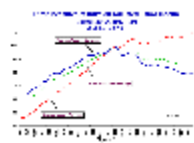


[Click here to see Figure 1.](#)

The Wage Measurement Problem

Two factors account for the widely disparate views of the world described graphically in Figure 1. First, the average weekly earnings series does not take into account changes in the number of hours worked per week, and second, it ignores the increasing importance of fringe benefits as a part of the payment package available to workers. Hours of work have been systematically declining throughout the post-World War II era. [3]

The negative impact of this decline on average weekly earnings is illustrated in Figure 2. Three series are presented there, average weekly earnings, average hourly earnings (both for the private sector of the economy), and average workers compensation per hour for the business sector of the American economy. All are deflated by the official consumer price index (CPI-U). A comparison of the weekly and hourly earnings series shows that, in 1947, the weekly index exceeded the hourly index by 9.1 percent. However, in 1994, the situation was reversed. The hourly series was larger than the weekly by 6.8 percent. Thus weekly and annual earnings averages understate wage growth because these measures are not adjusted for the decline in hours during the period.



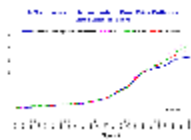
[Click here to see Figure 2.](#)

Even more important is the increasing importance of fringe benefits. In 1947, the compensation per hour index was 19.7 percent less than the hourly earnings series. By 1994, it was 28.1 percent **greater**. Moving from a simple hourly earnings to an hourly compensation analysis makes a tremendous difference. It changes the story from one of major declines in economic rewards to employees since 1973 to one of modest increases.

The Price Index Problem

Definitional distortions are only one part of the problem of assessing the growth pattern in the real value of the package of economic payments received by workers. The choice of a price index to convert nominal to real values is crucial. To illustrate the importance of the price index issue, the behavior over time of four such indices is shown graphically in Figure 3. [4] The four indices are:

1. The official consumer price index (CPI-U),
2. A special price index series disseminated by the Bureau of Labor Statistics known as the CPI-U-X1,
3. The price deflator for Gross Domestic Product, and
4. The price deflator for the corporate, non-financial, business sector of the economy.



[Click here to see Figure 3.](#)

A few words are in order concerning the first two of these indices. The CPI-U-X1 was developed by the Bureau of Labor Statistics in response to criticisms of the determination of the CPI-U. It is widely recognized that the CPI-U developed a pronounced upward bias circa 1980 due to the manner in which it was treating housing sector costs. The official Census Bureau position on the use of this index is as follows: [5]

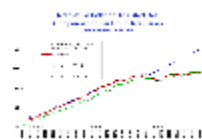
The Bureau of Labor Statistics (BLS) developed an experimental Consumer Price Index (CPI-U-X1) for researchers who wish to make historical comparisons with the current Consumer Price Index for All Urban Consumers (CPI-U) which uses the rental equivalence approach to measuring shelter services. Prior to 1983, the measurement of homeowner costs included changes in the asset value of homes. ... This rental equivalence approach is a methodology that isolates the shelter services component and, therefore, is a superior measure . . .

Therefore, BLS recommends the use of CPI-U-X1 to those who need a CPI series that treats homeowner costs consistently over time.

Prior to the late 1970s, there is little problem with the price indices (see Panel A of Figure 3). For the most part, they move in unison. However, since then, there has been a substantial divergence in the four price indices we have described. By 1994, the CPI-U is 24.2 percent higher than the GDP deflator for the corporate, non-financial, sector of the economy (see Panel B of Figure 3). Such variation is capable of producing greatly disparate perceptions of what has been happening to the wages and compensation of workers in America. With three different wage and compensation measures and four different price indices, there are twelve possible variants of wage and compensation data. Values for these twelve wage and compensation indices are shown in Table 1 for 1947 (or, in some cases, 1948), 1973, and 1994.

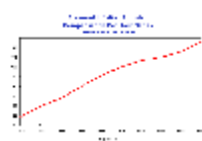
[Click here to see Table 1.](#)

Our preferred set of indices is that which describes the behavior of compensation per hour for workers. It more nearly measures the total per unit cost of labor to employers, as well as the total value of all money wages and various fringe benefits received by each unit of labor supplied in the market place. The four different versions of the real compensation per hour data series are shown in Figure 4. The differences are dramatic. Using the CPI-U, the real compensation shows a value of 109.3 (1973=100) in 1994. With the CPI-U-X1, it is 116.7; with the GDP deflator 124.2; and with the non-financial corporate business deflator 137.7



[Click here to see Figure 4.](#)

Notice that none of these data series substantiate the worst-case horror stories of sharply declining real economic returns to workers since 1973. Choosing among them is a difficult task. Only one can be rejected out of hand, that using the CPI-U. Beyond that, a case can be made for each of the other three, depending on whether you wish to focus solely on consumer goods or on some broader measure of goods and services produced in the American economy. Our solution to this problem is to use an average of the three data series derived by using the CPI-U-X1 and the two price deflators. The resulting real compensation series is shown in Figure 5. It shows a level of compensation in 1994 of 126.0.



[Click here to see Figure 5.](#)

The Compensation Growth Issue

While the real compensation series shown in Figures 4 and 5 all indicate an increase in the hourly compensation of workers since 1973, a comparison of that growth with what occurred earlier in the post-World War II era clearly indicates a decline in the rate of growth in more recent years. Table 2 shows the annual growth rate in real wages or compensation for all twelve variants of the wage and compensation series reported in Table 1 plus that shown in Figure 5 for both the pre-1973 and post-1973 periods. In all twelve cases, the rate of growth is much greater in the pre-1973 period. In fact, in

the first seven variants, growth is substantial and positive prior to 1973 and negative in the years following. It is only in the last six that growth is positive in both of these periods. In the case of the five variants of the real hourly compensation series, it more than doubles in the years 1947-1973. After 1973, the best rate of growth shows more than a one-third increase and our preferred measure increases by just a little more than one-fourth. This pronounced slowdown in the rate of growth in real hourly compensation needs to be explained.

[Click here to see Table 2.](#)

The Reich Hypothesis

Secretary of Labor Robert Reich has offered an explanation of this phenomenon. In a Department of Labor press release, [6] he states, "There is something wrong with rising profits, rising productivity and a soaring stock market, but employment compensation heading nowhere." The thrust of Reich's claim is that increases in profits imply decreases in compensation.

The Reich hypothesis can be evaluated quite simply. Standard data sources provide information on the share of the total value of output that is accounted for by corporate profits. One such source contains data for the non financial corporate business portion of the economy. [7] From it, the share of the total value of output attributable to after-tax corporate profits can be calculated. We then used this data series in an attempt to explain variations in the real compensation per hour data series shown in Figure 5. Specifically, we explored the relationship between year-to-year changes in the corporate profits measure and year-to-year changes in real hourly compensation.

The results are reported in Table 3 for two different versions of the relationship and two different time periods. One version analyzes the linkage between changes in the corporate profits statistic and changes in compensation in the same period. The other looks at the same relationship, but asks the question, "Do changes in the corporate profit share this year affect the change in compensation between now and next year?" The two time periods used are 1948-1994 and 1973-1994.

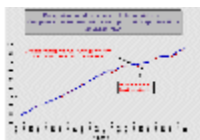
[Click here to see Table 3.](#)

Two rather clear findings emerge from the information contained in Table 3. First, there is no evidence of a significant relationship between changes in the corporate profit share of the value of output and changes in real compensation in the same year. The Reich hypothesis is not confirmed. Second, and more important, changes in the corporate profit share this year and changes in real hourly compensation next year are somewhat related (in a statistical sense) [8] to one another. However, the direction of the relationship directly contradicts the Reich hypothesis, being positive in nature. Increases in the corporate profit share this year are associated with increases in real hourly compensation next year. Interestingly, the relationship is more statistically significant in the post-1973 period. It seems clear that the Reich hypothesis makes no useful contribution to explaining the slowing of the rate of growth in real hourly compensation since 1973. It, along with its "class warfare" overtones, should be rejected. Any insights into the reasons for the compensation slowdown must come from elsewhere.

The Productivity Hypothesis

An alternative to Robert Reich's conjectures is to examine the behavior of the productivity of labor when seeking to explain variations in real compensation through time. Historically, levels of labor compensation have moved very closely with advances in the productivity of the labor input into the productive process. [9] Thus, perhaps the slower growth in labor compensation in recent years is merely a product of a lack of growth in the productivity of labor. A strong case can be made that this is so. The importance of productivity in this respect is illustrated quite vividly by Figure 6. It shows the pattern of behavior of average productivity per hour in the business sector and our preferred real hourly compensation series since 1947. The correspondence between the two is almost perfect.

The graphic evidence shown in Figure 6 indicates that the observed retardation in the growth of real compensation in the United States can be traced to a similar retardation in the rate of productivity growth in the United States. Why the slowing in productivity growth? A reasonable hypothesis is that productivity growth is influenced in some fashion by governmental activities.



[Click here to see Figure 6.](#)

II. THE SIZE OF GOVERNMENT AND PRODUCTIVITY GROWTH

The increased command of government over scarce resources may have lowered productivity in America by shifting some resource allocation decisions from the relatively productive private sector to the less productive public sector. Why, however, is the public sector less efficient, less capable of producing high levels of output per worker? Six factors are key to understanding the government's negative role in productivity growth: behavioral incentives, monopoly, rent-seeking, regulation, benefit-cost asymmetry, and the shortsightedness effect.

Incentives

In the market-driven private sector, managers have a strong incentive to raise outputs in relation to inputs used to produce those outputs. Higher productivity means greater profits, as costs fall in relation to revenues. Greater profits, in turn, usually mean higher rewards to the managers and other employees considered responsible for the enhancement of productivity. Greater rewards might come in form of higher prices on company stock (particularly valuable when employees have stock options or are in a ESOP plan), profit sharing bonuses, or simply higher salaries. Market prices convey information that make decision-making relatively easy, easing resource allocation decisions. Ultimately, profits are generated by satisfying the needs of consumers. Profits serve as a measure by which managers of businesses can be held accountable by their bosses, the stockholders.

By contrast, in the public sector, managers seldom receive any rewards for enacting cost-reducing or output-enhancing measures. Indeed, in some cases, increases in productivity merely mean the manager in question has a smaller budget, and also must incur the wrath of fellow employees who may suffer from the changes which provided the advance in output per worker. The lack of profit signals makes it difficult to evaluate performance and thus hold managers accountable.

All of this explains why corporate downsizing by large, profitable companies such as IBM, ATT and Eastman Kodak is commonplace as firms try to enhance efficiency and thus shareholder value. Government downsizing, however, is far less common despite the fact that already the public sector is, on average, already less productive than the private one.

Monopoly

For most governmental services, there is a single provider. The government has a monopoly on the provision of the service. A government bureaucracy does not feel pressure to cut costs to meet competition from competing providers of goods or services. In general, that is not the case typically with providers in the private sector, who face competition from one or more firms anxious to offer a better product at a lower price. Competition prods firms into efficiencies and into offering improved products. The lack of competition may explain why, by most measures, productivity has not risen rapidly in the provision of, for example, education and postal services.

Rent-Seeking Behavior

As government grows, efforts to use the political process to redistribute income from the general taxpaying public to specific individuals or groups also intensify. Highway contractors promote "infrastructure investment", public employees seek large salary increases, businesses seek subsidies, still others favor public assistance of one form or another. When a group receives a payment without providing anything in return, it collects "economic rent." By any measure, most of the increase in real federal government expenditures in the past generation have gone for "transfer payments" - money being taken from the general taxpaying public and given to favored groups.

Mancur Olson calls these groups "distributional coalitions" and argues persuasively that they impair economic growth. [\[10\]](#) A host of studies have argued that rent-seeking behavior

negatively impacts on growth. [11] The return to productive activity by ordinary citizens is reduced by taxes used to cover transfer payments. [12] On the other hand, the receipt of transfers is often contingent on the recipient showing a **lack** of productivity. Payments are given for not working (unemployment insurance, disability payments, welfare). The availability of alternative sources of income reduces incentives to work, reducing aggregate output.

Regulation

In a world without government, profit-maximizing private entrepreneurs have every incentive to raise productivity - to reduce the use of inputs for any given quantity of output. Government regulation, if it is meaningful, interferes with this process. Governmental constraints limit the ability of firms to use resources as they like. If Machine A is used, government rules may specify how the equipment can be used. Labor laws regulate compensation of employees (e.g., minimum wage laws, the Davis-Bacon Act), sometimes reducing employment and thus output. In short, if it is correct that, other things held the same, cost-minimizing firms try to maximize output per worker, any government rule that forces behavioral changes will, almost by definition, lead to lower productivity. The cost of regulation may well reach into the hundreds of billions of dollars annually or beyond. [13] Of course, some regulation may be needed, but this can become excessive and generate more costs than benefits.

Concentrated Benefits/Disbursed Costs and Rational Ignorance

The quality of public sector decision making is distorted by the fact that when benefits of government action are concentrated among a relatively small proportion of the population, but costs are widely disbursed among all taxpayers, many projects are undertaken that would not otherwise survive objective scrutiny. "Pork barrel" projects are typically public works schemes benefiting thousands of people but paid for by millions. The beneficiaries see significant benefits per recipient from the project, so campaign hard for its enactment. Non-benefiting taxpayers who are paying for most of the project typically find its cost very low, so they are not likely to protest.

A hypothetical example demonstrates the point. Suppose the people of a community talk their influential congressman into slipping a new project into an appropriations bill. Let us say the project provides \$200 million in benefits to the one million persons of the community receiving the improvement - \$200 per person or \$800 for a typical household of four. People in that community will clamor for the project, as the benefits are big enough to provoke serious lobbying. Suppose the project cost the 260 million American taxpayers \$300 million - \$1.15 a person or less than five dollars for a family of four. The costs are so small that the typical taxpayer is not going to expend time and resources fighting the marginally harmful project. The average taxpayer is "rationally ignorant" about the project. Yet the costs to society (\$300 million) are greater than the benefits (\$200 million), so the investment is clearly one with a negative return to society. Yet the asymmetrical lobbying on the project will typically lead to it being undertaken. This principle is at work literally hundreds, if not thousands, of times annually in various types of special interest legislation.

The Shortsightedness Effect

Many investments that raise productivity take several years to complete. The costs of the project come quickly, but the benefits largely accrue many years in the future. In the private sector, investments of this type are undertaken since firms know that such investment is vital to maximizing the present value of future profit streams. In the public sector, however, payoffs received even two or more years from now from expenditures made today are politically irrelevant, since congressmen must face re-election within a very few years of the date the decision is made to proceed with the expenditure. There is a bias, then, to make decisions that have immediate benefits and deferred costs, when in fact some of those decisions are socially undesirable, since the present value of those future costs exceed the value of the benefits. The costs, however, are largely disguised from the voters, while the benefits are obvious. Similarly, some worthwhile expenditures are not undertaken even where the present value of benefits exceed costs simply because the benefits are in the future and the political value of those benefits to existing congressmen are minimal.

Thus the political process promotes "shortsighted" decisions, and leads to such fiscal policy strategies as large deficit financing (spend today and derive political benefits financed in the future by disguised taxation). The shortsightedness effect is one factor in explaining the persistence of budget deficits. When new social programs are begun, typically they are structured so first or second year costs are moderate, but "out year" expenditures soar. Politicians than can claim "I helped get you new program A" and derive political benefits for programs that may have, net, **greater** financial costs than benefits.

An Empirical Evaluation of Government's Impact on Productivity

The preceding argument has emphasized the negative side of government activities. However, not all government actions are counterproductive. There are things that government can do that improve the functioning of the economy, such as providing for national defense, maintaining a system of laws that assist in settling contractual disputes and provide for the safety of individuals and their property, providing a basic infrastructure, and establishing a minimal safety-net for its citizens. In the strictest economic sense, the positive effects of government tend to reduce the costs of producing goods and services, thereby raising productivity and lowering prices. What is critical in evaluating the impact of the Federal government on the average productivity of labor is the net effect of its positive and negative contributions. When government is small, additions to it are more likely to improve the nation's economic performance. However, as it becomes larger and larger, it tends to stray off more and more into programs that produce the kinds of inefficiencies previously described. What this indicates is a systematic relationship between the size of the Federal government and the average productivity of labor. At low levels of government spending and activity, the contributions to enhancing levels of productivity are positive, but at high levels, they are negative. [\[14\]](#)

The availability of numerical data detailing levels of federal government expenditures, expressed as a percent of GDP, and the average productivity of labor allow a statistical evaluation of the suggested relationship between the size of government and the productivity of labor. To do this, we estimated a statistical relationship of the form:

$$(1) PR = a + b G - c G^2 + d T + e$$

where PR represents the annual average productivity of labor, T delineates the passage of time, G is federal government spending as a percentage of Gross Domestic Product, and G² is the square of the variable G. The variable T is included to control for the long term growth in the average productivity of labor. The statistical results are reported in Table 4. All of the independent variables are statistically significant at commonly accepted levels. Also, the signs of the variables indicate that the hypothesis that beyond some size growth in the magnitude of government adversely affects the productivity of labor is confirmed. Interestingly, the value of G beyond which growth in government begins to exert its negative effects is a Federal government share of Gross National Product of 17.42 percent, almost exactly the same value found in our earlier analysis of the impact of government on real Gross Domestic Product.

[15]

Variable	Coefficient	Significance
Intercept	0.0000	0.0000
G	0.0000	0.0000
G ²	-0.0000	0.0000
T	0.0000	0.0000
Adjusted R ²	0.0000	

[Click here to see Table 4.](#)

To firmly establish the quantitative linkage between the size of the Federal government and the compensation of labor, a statistical estimate of the productivity-compensation relationship is also reported (see Table 5). [16] As expected, on the basis of Figure 6, the average productivity of labor and real compensation are powerfully related. This indicates that the already observed effect of the size of government on labor productivity is directly transferable to real compensation, indicating that growth in the size of the Federal government beyond the optimal level of 17.4 percent has operated to reduce the level of real compensation per worker in the American economy.

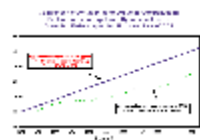
Variable	Coefficient	Significance
Intercept	0.0000	0.0000
G	0.0000	0.0000
G ²	-0.0000	0.0000
T	0.0000	0.0000
Adjusted R ²	0.0000	

[Click here to see Table 5.](#)

Further insight into the magnitude of the impact of the growth of government on wage levels in the United States can be obtained by asking the question, "What would have happened if the size of government had remained stable at some lower level, as opposed to the increase reflected in the actual historical record. Making such an assumption permits calculating a hypothetical productivity and real wage series that then can be compared with the actual. A good point of departure for this purpose is the year 1965, at which time federal government spending stood at 17.6 percent of Gross Domestic Product, very close to the optimal level of Federal government spending as a share of Gross Domestic Product that we have estimated. When the necessary calculations are made, the results shown in Table 6 (and displayed graphically in Figure 7) are obtained. Since our primary interest is in explaining the retardation of the growth in real

compensation since 1973, the actual and hypothetical compensation series have been indexed on 1973 (=100). What we find is that holding the level of federal government spending constant at 17.6 percent of Gross Domestic Product since 1973 would have produced a level of real compensation in 1994 some 13 percent higher than what actually occurred.

[Click here to see Table 6.](#)



[Click here to see Figure 7.](#)

The picture of how large government negatively influences the level of economic activity in the American economy is now clear. When government grows beyond the level that optimal for the economy, it introduces inefficiencies that increase the cost of producing goods and services and reduce the real returns to labor. The cumulative impact of these inefficiencies over a substantial period of time is immense. Using the actual estimates of compensation per hour in the non-financial corporate business sector and the data describing the average number of hours worked per week in the private non-agricultural sector, we have estimated the present value of the annual losses per worker (measured in 1994 dollars) of oversized government in the years since 1973 (through 1994). In 1994 alone, the total loss of compensation amounted to \$4132, some \$344 per month. Over a longer period of time, for someone who had worked the typical workweek and earned the typical compensation during those years, the present value of the cumulative cost of the excessive federal government totals \$71,200.

There also would be gains from the reduction in federal taxes that almost certainly would have followed in the wake of holding federal spending at 17.6 percent of GDP. During the period 1973-1994, federal government revenues averaged 18.7 percent of GDP. If the revenue share would have fallen by 1.1 percentage points (the difference between 19.7 and 17.6 percent) in this interval, the increase in after-tax compensation would have been about half the gain attributable to the productivity increases that would have ensued as the result of restraining government spending. [17] Increasing the \$71,200 figure by fifty percent gives an estimate of \$106,800, exactly the median price of a home in the United States in 1993. [18] Roughly speaking, an oversized government in the years 1973-1994 has cost the average worker the value of a typical home.

The Future of Real Compensation

What is done is done. The question that remains is, "What about the future?" "What can be done to rectify this situation in the years ahead?" The obvious answer is to impose restraint on federal government spending. Using the relationships we have developed, it is possible to estimate the marginal effect of restraining spending growth on levels of real compensation. Assuming 1994 levels of GDP and federal spending, restraining spending by \$100 billion would result in about a 1.5 percentage point reduction in federal spending as a percent of GDP (from 22.0 to 20.5 percent). Using the statistical results reported in Table 4, this would produce an 0.8 percent increase in both productivity and compensation of workers. When that rate of increase is applied to the business sector total compensation data contained in the National Income and Productivity Accounts, a total increase in compensation of \$26 billion is indicated. Thus, \$100 billion of federal spending restraint would produce a \$26 billion increase in total real compensation of workers, 26 cents per dollar of spending restraint.

Replicating an analysis reported in our earlier study of the impact of oversized government on GDP, we estimate that a dollar of spending restraint this year that is maintained over the following six years will generate \$1.68 of additional total real compensation for workers.

CONCLUSION

Several striking conclusions emerge from this study:

1. The worst-case horror stories of declining real income payments to workers since 1973 are not true. When appropriately defined and deflated to take into account changes in price levels, there has been a meaningful increase, some 26 percent, in the real compensation package received by the typical worker for an hour's labor.
2. While there has been growth in real compensation per hour since 1973, the rate of increase has slowed perceptibly when compared with the pre-1973 post-World War II period.
3. Secretary of Labor Robert Reich's "excessive profits" explanation for the retardation of real compensation growth is contradicted by the available evidence.
4. The pattern of growth in real compensation over time almost exactly mirrors the behavior of the average productivity of labor. Consequently, growth in both real compensation and labor productivity slowed in the post-1973 era.
5. The average productivity of labor is significantly affected by the percentage federal expenditures are of GDP. Beyond a federal government share of GDP of 17.4 percent, additional spending impacts adversely on average output per hour of labor services employed. Of course, this translates into a similar impact on the real hourly compensation of workers.
6. If federal spending had been held constant at its 1965 share of 17.6 percent of GDP, and federal taxes adjusted accordingly, the present value of the gains to the typical worker over the period 1973-1994 would have been \$106,800, an amount sufficient to purchase a typical home in the United States.
7. At present levels of federal spending and GDP, restraining federal spending by a dollar during the current year will yield an increase of 26 cents in total worker compensation. Sustaining that restraint over a seven year period would produce cumulative gains of \$1.68 in total compensation.

What these findings strongly indicate is that spending restraint at the federal level is critical to enhancing the level of worker compensation in the United States. Every dollar of such restraint eliminates 26 cents of the deadweight burden imposed on workers by the inefficiencies created by a federal government that has become too large.

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ENDNOTES

1. Karl Zinmeister summarizes this controversy quite well in, "Coming this Year: Marx for Dummies," **Wall Street Journal**, January 25, 1996, p. a22.
2. 1973 is used as the base year because it is a business cycle peak and many of the real wage series we will refer to also peak at that time.
3. Between 1973 and 1994, average weekly hours in the private sector of the economy fell from 36.9 to 34.7, a decline of 6.0 percent. Source: Department of Labor, Bureau of Labor Statistics, as reported in **Economic Report of the President, 1995** (Washington, DC: Government Printing Office, 1995), Table B-45, and **Economic Indicators** (Washington, DC: Government Printing Office, 1995), November 1995, p. 15.
4. The price index issue has been moving to the forefront in recent years. The Boskin Commission report argues that the problem is even more acute than suggested here. However, we have confined our discussion to a series of currently published official indices.
5. U. S. Department of Commerce, Bureau of the Census, **Measuring the Effect of Benefits and Taxes on Income and Poverty: 1979 to 1991**, Current Population Reports, **Consumer Income**, Series P-60, No. 182RD (Washington, DC: U. S. Government Printing Office, 1992), page H-1.
6. Department of Labor press release, statement by Secretary Robert Reich, June 22, 1995.
7. Data are obtained from **Economic Report of the President, 1995** (Washington, DC: Government Printing Office), B-14, p. 291, and **Economic Indicators** (Washington, DC: Government Printing Office), November 1995, p. 3.
8. For the entire period, the relationship is significant at about the ten percent level. However, for the years 1973-1994, it is significant at the five percent level.
9. For a discussion of the relationship between real wages and productivity, see our **Out of Work: Unemployment and Government in Twentieth Century America** (New York and Oakland, Calif.: Holmes and Meier and Independent Institute, 1993), particularly Chapter 11.
10. Mancur Olson, **The Rise and Decline of Nations** (New Haven: Yale University Press, 1982).
11. For example, see Richard Vedder and Lowell Gallaway, "Rent-Seeking, Distributional Coalitions, Taxes, Relative Prices and Economic Growth," **Public Choice**, vol. 51, 1986, pp. 93-100.

12. For a recent study citing dozens of papers demonstrating the adverse effects of taxes on economic growth, see Richard Vedder, **State and Local Taxes and Economic Growth: Lessons for Federal Tax Reform**, Staff Study, Joint Economic Committee of Congress (Washington, DC: Joint Economic Committee, 1995).

13. Professor Vedder is completing a study for the Center for the Study of American Business at Washington University in St. Louis that demonstrates this point using time-series data on productivity and regulatory effort (as measured by spending on regulation). The tentative title is **Federal Regulation's Impact on the Productivity Slowdown**.

14. The relationship described here is an extension of the Armey curve concept explored in our earlier study for the Joint Economic Committee, **The Impact of the Welfare State on the American Economy** (Washington, DC: December, 1995).

15. See our **The Impact of the Welfare State on the American Economy**, Joint Economic Committee study (Washington, DC: Joint Economic Committee, 1995).

16. This regression equation is constrained to run through the origin. The basis for this is the **a priori** expectation that at a zero level of average productivity of labor, real compensation would be zero.

17. The reduction from 1994 levels of federal spending to the 17.6 percent level would have increased the average output per hour of labor by 2.1 percent.

18. **Statistical Abstract of the United States, 1994** (Washington, DC: Government Printing Office, 1995), Table 1208, p. 732.