

**TAXATION AND ECONOMIC GROWTH:
THE EMERGING CONSENSUS
AMONG THE EXPERTS**

by

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EXECUTIVE SUMMARY

Whether measured in terms of investment, capital used per hour worked, or labor productivity, the performance of the U.S. economy over the past decade has been poor:

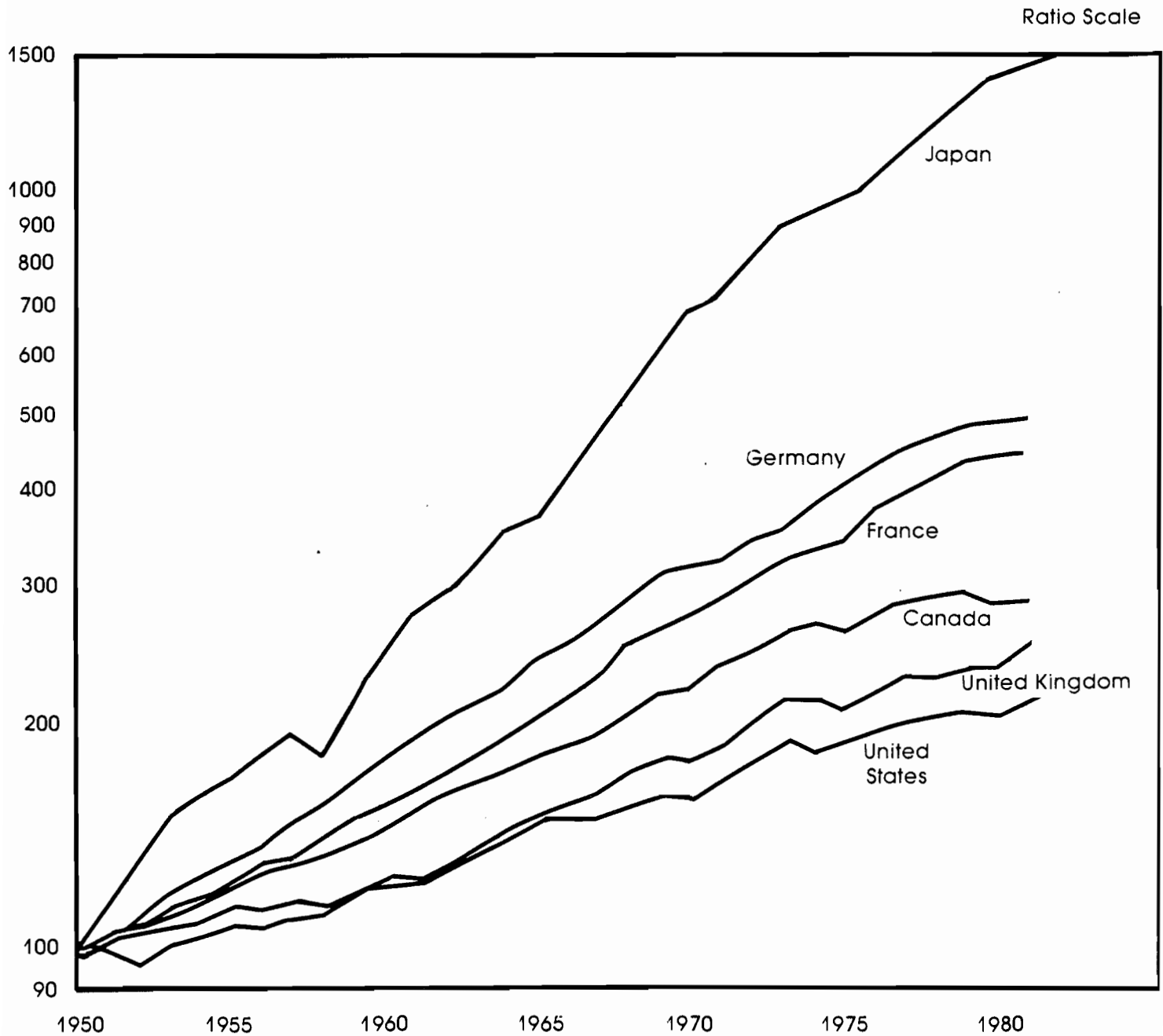
- Between 1947 and 1973, net investment averaged 7.1 percent of U.S. GNP. Between 1973 and 1984 it averaged only 5.4 percent.
- From 1948 to 1973, the amount of capital employed per hour worked grew at a rate of 2.8 percent per year, then slowed to a rate of 1.8 percent from 1973 to 1981.
- From 1973 to 1981, the annual growth of productivity was the lowest of any decade since the early part of the century.

The U.S. economy, also has performed poorly compared to other developed countries. The reason? Over the last few years evidence has been pouring in from every corner of the academic and scholarly world concerning this question. Virtually all of the studies reach the same conclusion: High taxes and big government hurt economic growth.

The recent emphasis by Ronald Reagan, Margaret Thatcher and other world leaders on limiting government spending and cutting taxes has spurred scholars to investigate carefully the effects of government policies on economic growth. Their findings support the fact that government taxing and spending have a real impact:

- One study found that the number of new jobs created among the states is highly sensitive to corporate income tax rates.
- Another study found that between 1969 and 1976, of the 37 states that had below-average tax increases, all but three had higher than average economic growth.
- Of the 13 states with above-average tax increases, all but three had below-average economic growth.
- An international study of 104 countries found that government spending had a strong, negative impact on economic growth.
- Among developed countries, those with the largest increase in the share of spending done by government experienced the biggest decline in their economic growth rates.

INCREASE IN OUTPUT PER EMPLOYEE-HOUR IN MANUFACTURING (1950 - 1981)



Index: 1950 level is set equal to 100 for all countries

Source: Bureau of Labor Statistics

TAXES AND ECONOMIC GROWTH: THE EMERGING CONSENSUS AMONG THE EXPERTS*

Before the 1970s, most economists paid little attention to capital formation and productivity growth in the United States, reflecting general agreement that the American economy had worked reasonably well to generate economic growth and capital formation over the years. Since the mid-1970s, however, there have been many studies of the sluggish growth in productivity and declining rates of real investment in this country.¹

The results of these studies are producing a consensus among economists, businessmen, and politicians. The consensus is that the growth of big government causes poor economic performance, and that an interventionist system generates less economic growth than does a freer system.

HOW GOVERNMENT INTERFERES WITH ECONOMIC GROWTH

Economists take it as axiomatic that (1) Sustained economic growth requires increases in a country's productive capacity; (2) Increases in productive capacity require new net investment spending; (3) Increases in investment require increases in saving, and (4) Anything which reduces the incentive to save, reduces the flow of saving into investment, distorts investment decisions, or causes invested capital to be used inefficiently retards economic growth.

The question, then, is not whether government policies are harmful to economic growth. The question is to what degree government policies have been harmful.

¹ Board of Governors of the Federal Reserve System, Public Policy and Capital Formation (Washington, D.C.: Federal Reserve System, 1981); James R. Wilburn, ed., Productivity: A National Priority (Malibu, CA: Pepperdine University Press, 1982); George M. von Furstenberg, ed., The Government and Capital Formation (New York: Pergamon Press, 1980); Charles D. Kuehner, ed., Capital and Job Formation (Homewood, IL: Dow Jones-Irwin, 1978); Arnold W. Sametz, Prospects for Capital Formation and Capital Markets (Lexington, MA: Lexington Books, 1978). Franco Modigliani and Richard Hemming, editors, The Determinants of National Saving and Wealth (New York: St. Martin's Press, 1983); Martin Feldstein, Capital Taxation (Cambridge, MA: Harvard U. Press, 1983): ch. 4, "Increasing Capital Formation": Michael R. Darby, "The U.S. Productivity Slowdown," American Economic Review, 74 (June, 1984), pp. 301-22.

*This study is based in large part on a longer study, to appear in Taxation and the Deficit Economy: Fiscal Policy and Capital Formation in the United States, edited by Dwight R. Lee; copyright 1985 by the Pacific Institute for Public Policy Research, 177 Post St., San Francisco, CA 94108.

TABLE I
ECONOMIC GROWTH
WITHOUT GOVERNMENT INTERFERENCE

1. INCOME IS THE INCENTIVE
TO PRODUCE.

2. PEOPLE SAVE OUT OF CURRENT
INCOME IN ORDER TO HAVE
HIGHER FUTURE CONSUMPTION.

3. SAVING IS THE SOURCE OF
FUNDS FOR INVESTMENT.

4. INVESTMENT IN CAPITAL
AND LABOR INCREASES
PRODUCTIVE CAPACITY.

5. INCREASED CAPACITY MAKES
MORE PRODUCTION POSSIBLE.

6. MORE PRODUCTION MEANS
HIGHER INCOME AND A HIGHER
STANDARD OF LIVING.

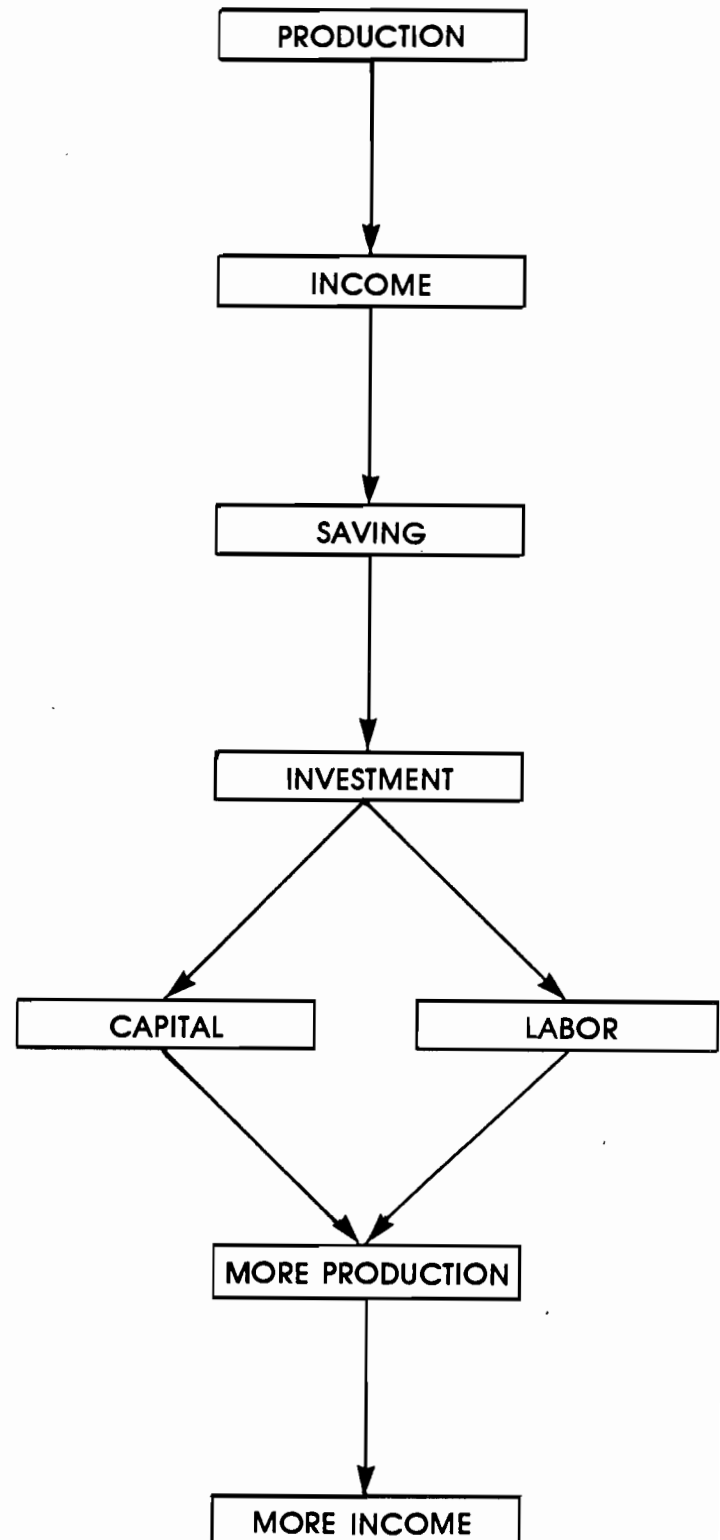


TABLE II
HOW GOVERNMENT INTERFERES
WITH ECONOMIC GROWTH

1. TAX AND SPENDING POLICIES
REDUCE THE INCENTIVE
TO PRODUCE.

2. TAXES ON INVESTMENT INCOME
REDUCE THE INCENTIVE TO SAVE,
AS DO GOVERNMENT TRANSFER
PROGRAMS.

3. FUNDS BORROWED BY GOVERNMENT
ARE TAKEN FROM THE POOL OF
SAVINGS AND USUALLY ARE CONSUMED
RATHER THAN INVESTED.

4. FUNDS INVESTED BY GOVERNMENT
PRODUCE LOW YIELDS,
AND TAXES AND
REGULATIONS DISTORT
PRIVATE INVESTMENT
DECISIONS.

5. REGULATIONS CAUSE
INEFFICIENCY AND LOWER
OUTPUT.

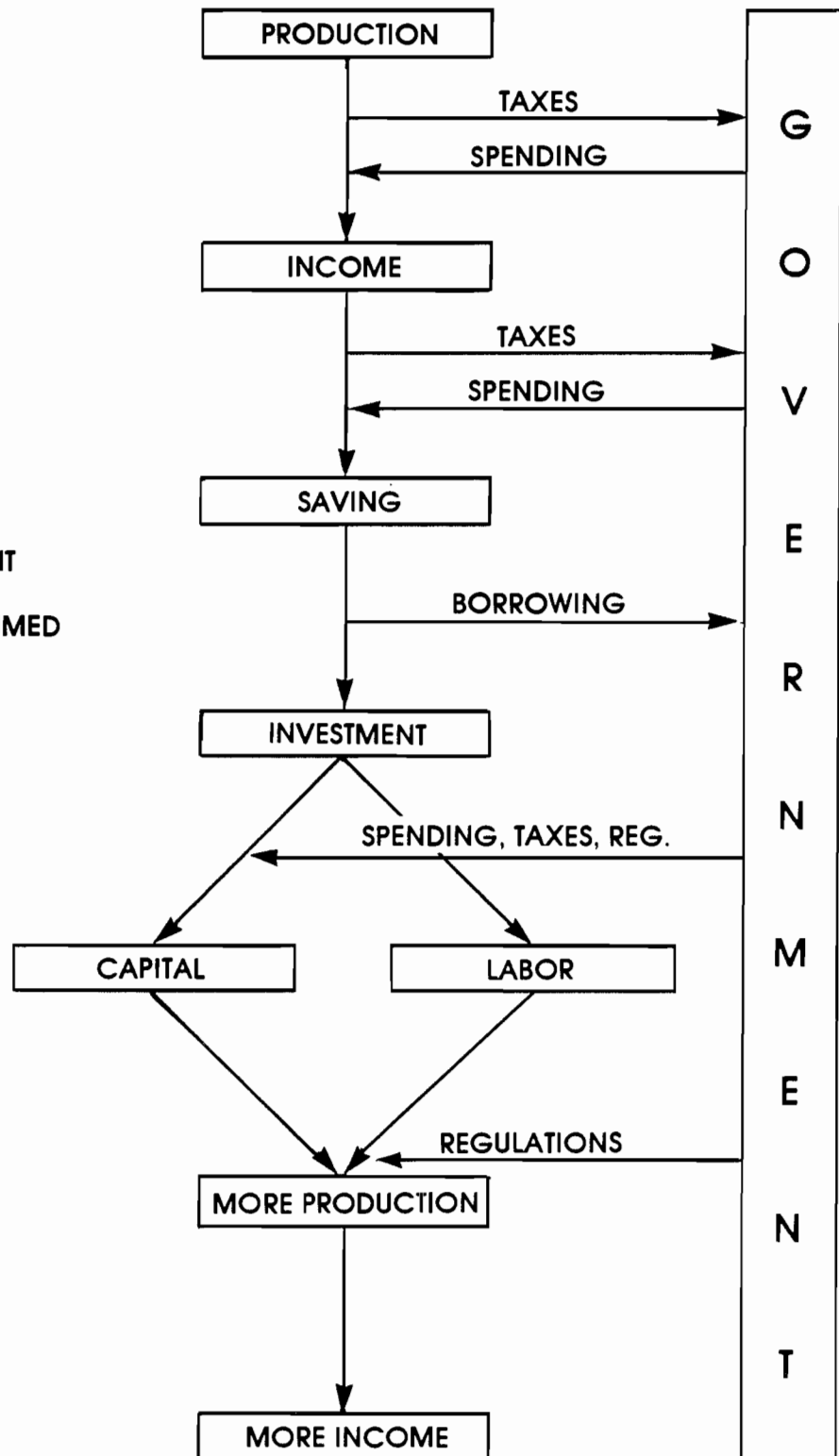


Table I summarizes the process of economic growth, and Table II summarizes the ways in which government policies interfere with growth. The major forms of interference are:

- **Policies that reduce the incentive to earn an income.**

Economists have long known that there is a relationship between income and saving: The more income, the more saving. Thus, any policy which discourages productive work reduces society's income and therefore reduces savings.

In America, as in other developed countries, we tax employment and subsidize non-employment. People react to these incentives, and therefore, the country has a slower rate of economic growth.

- **Policies that encourage consumption rather than saving.**

Once an income is earned and the taxes on it are paid, people are free to decide what proportion will be consumed and what proportion will be saved. Federal tax policies distort this choice. For the most part, the Federal Government does not tax the benefits of consumption. But it does tax the benefits of saving by taxing income from investment. The more we penalize saving relative to consumption, the less saving there will be.

People accumulate capital based on the expectation that government will not expropriate it. If this expectation is absent, then people will prefer to consume their capital instead of safeguarding it for the expropriators. Rolls Royce limousines on the streets of London, for example, are a consequence of high British taxes on investment income. Periodic cases of "capital flight" in underdeveloped countries dramatically demonstrate what happens when governments attempt to confiscate capital. As economist Mancur Olson writes:

All economists agree that events, or even expectations, that discourage investment or destroy productive capital will lower the level of income. Thus, societies that are politically unstable or often subjected to foreign invasion are likely to have less productive investment and lower rates of growth than they would otherwise have had. There will be more flights of capital and fewer investments in plant or equipment that can pay off only in the long run.²

² Mancur Olson, The Rise and Decline of Nations (New Haven: Yale University Press, 1982), p. 4.

- **Policies that reduce the flow of savings into investment.**

Private savings do not automatically translate into private investment. Government's borrowing in the credit market to finance huge deficits drains capital that otherwise would be available for private investors. In addition, politicians tend to be present-oriented rather than future-oriented: All too often funds borrowed by government are channeled into consumption rather than investment. As a result, net investment as a whole is reduced.

- **Policies that reduce the yield on invested capital.**

Some government spending, of course, is investment spending, and on occasion this spending results in useful additions to future productive capacity, as is the case for certain public works projects.

But on the whole, government is a poor investor, making decisions on the basis of political advantage rather than economic merit. In these cases, funds are diverted from higher-yielding private investment opportunities to lower-yielding pork-barrel projects.

In addition, there are a wide array of other government policies that distort private investment decisions and divert financial capital away from areas where the real rate of return is high to areas where the return is low. Government tax policies are not neutral. Some investment returns receive privileged tax treatment (e.g., owner-occupied housing and tax shelters) while others are taxed heavily (e.g., double taxation of corporate dividends).

- **Policies that reduce the efficiency of the economic system.**

Government policies stifle economic growth in other ways. Through spending, and regulatory policies, government causes the economic system to operate less efficiently. The Occupational, Safety and Health Administration, for example, has had no detectable effect in reducing accident rates at the workplace, but has imposed enormous costs on the production process.³ The use of tariffs and quotas retards the transfer of

³ Robert S. Smith, "The Impact of OSHA Inspections on Manufacturing Injury Rates," Journal of Human Resources, 14 (Spring 1979), pp. 145-70; W. Kip Viscui, Risk By Choice (Cambridge, MA: Harvard University Press, 1983); David P. McCaffrey, "An Assessment of OSHA's Recent Effects on Injury Rates," Journal of Human Resources, 18 (Winter 1983), pp. 131-46.

resources out of protected, low-productivity industries and into unprotected, high-productivity industries.

HOW SERIOUS IS THE PROBLEM?

Whether measured in terms of net investment, capital used per hour worked, or labor productivity, the evidence suggests that the problem is a major one:

- Between 1947 and 1973 net investment averaged 7.1 percent of U.S. GNP. Yet over the last decade it has averaged only 5.4 percent.
- From 1948 to 1973, the amount of capital per hour worked grew at a rate of 2.8 percent per year, and then slowed to a rate of 1.8 percent from 1973 to 1981.
- From 1973 to 1981 the annual growth of productivity--defined as output per hour worked--was the lowest since 1909-1918, when there was no improvement in productivity.

How does the U.S. compare to other countries? Poorly. International evidence suggests that among developed countries there is a strong, positive relationship between the amount of investment and increases in labor productivity. The U.S. has lagged well behind other developed countries in the percentage of income invested. As a result, it lags behind in productivity increases.⁴

- For example, between 1963 and 1979, Japan devoted 32 percent of its GNP to gross investment and experienced a 6.5 percent annual increase in labor productivity.
- Over the same period of time, only 17 percent of U.S. GNP was devoted to gross investment and annual increases in productivity averaged only 1.2 percent.

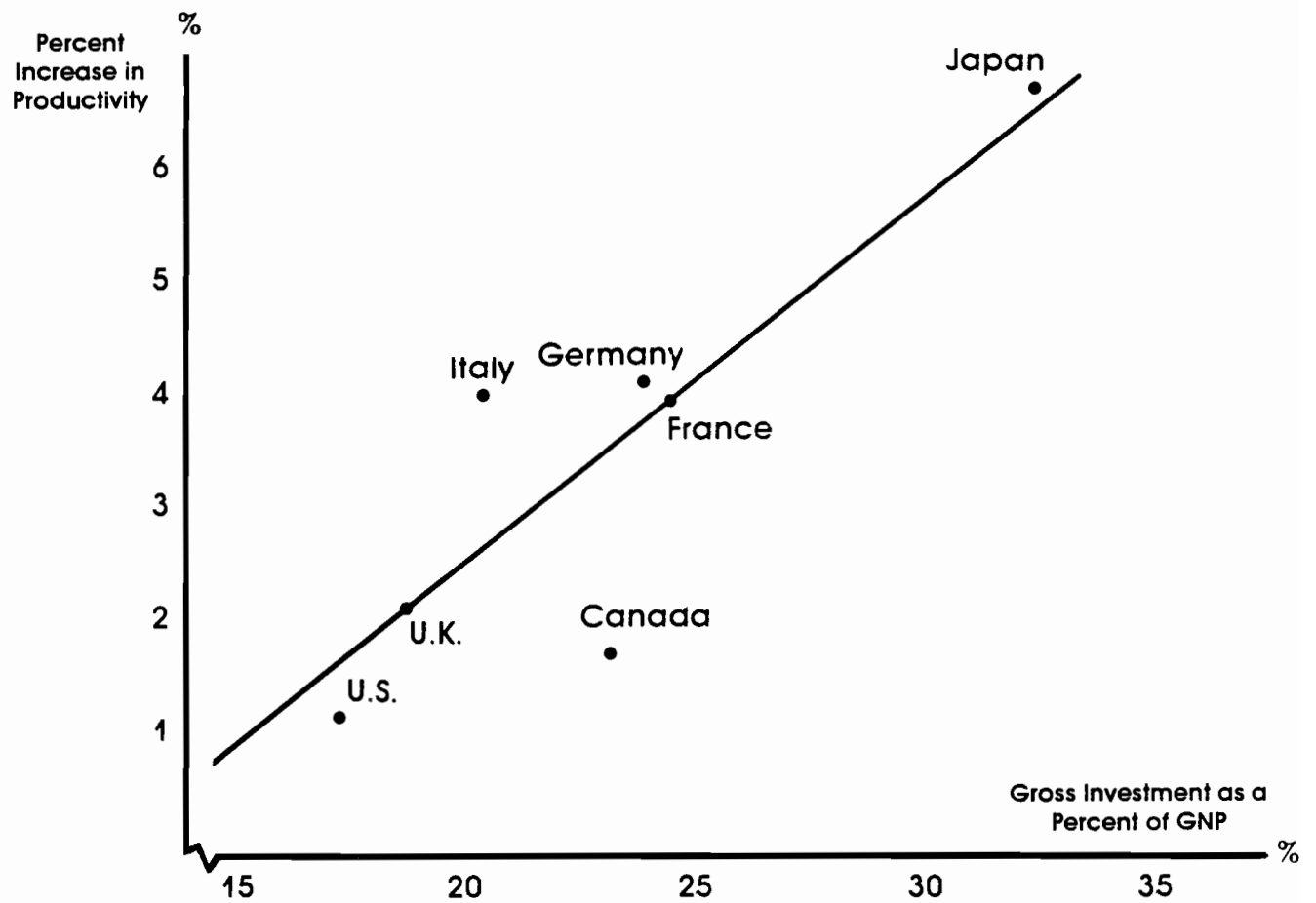
Increases in labor productivity mean more output per hour worked, and this, in turn, means more income and a higher standard of living. While the U.S. economy has expanded in the postwar period, its growth rate has lagged behind most developed countries.⁵

- Between 1950 and 1981, output per man hour in U.S. manufacturing increased by a little more than 100 percent.

⁴ Robert M. Dunn, Jr., Economic Growth Among Industrialized Countries: Why The United States Lags (Washington, D.C.: National Planning Association, 1980), p. 15.

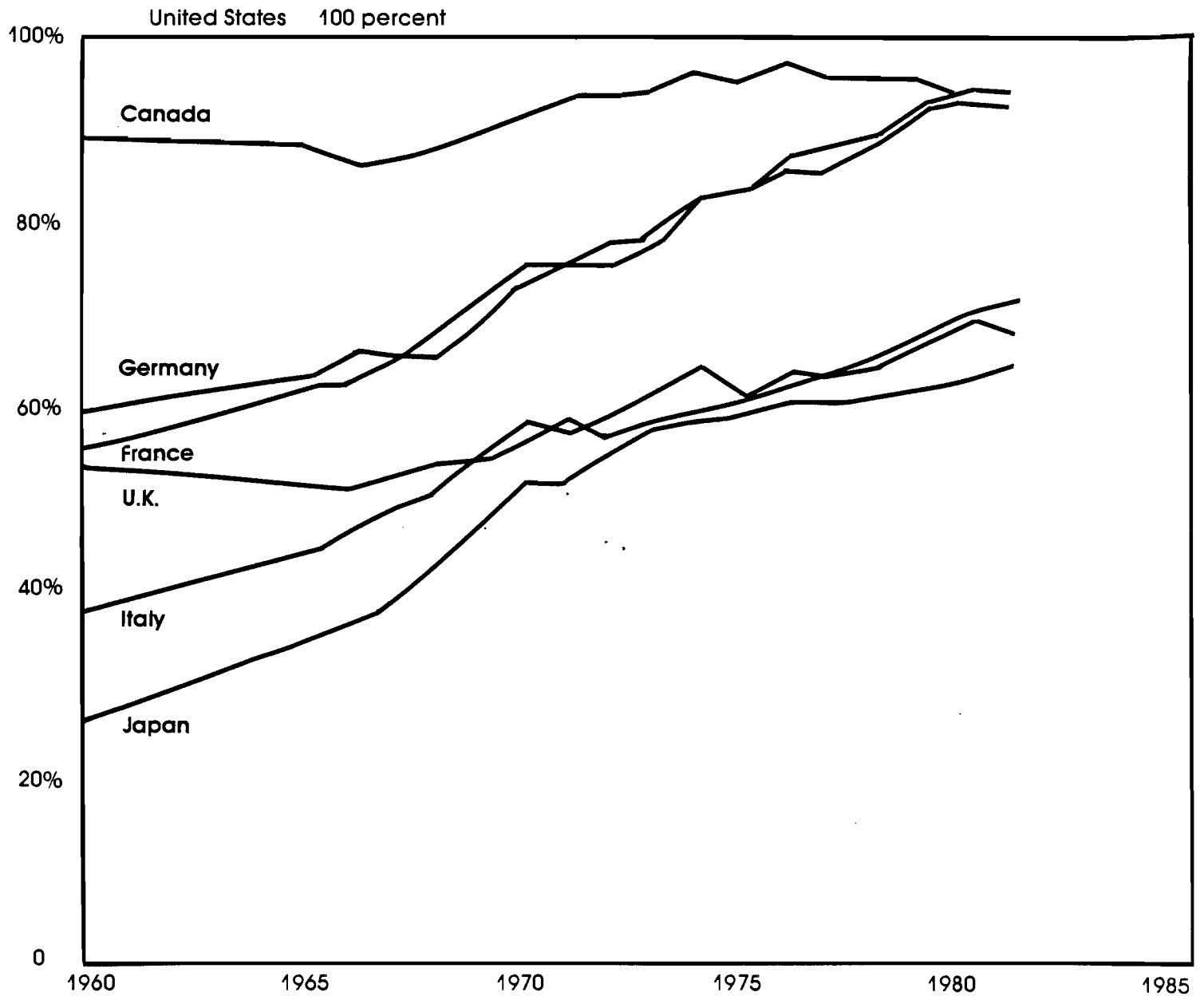
⁵ Bureau of Labor Statistics, Bulletin 2172, June, 1983, p. 25 and Statistical Abstract of the United States, 1985, p. 853.

INVESTMENT and PRODUCTIVITY (1963 - 1979)



Source: Robert M. Dunn, Jr., Economic Growth Among Industrialized Countries: Why the United States Lags (Washington, D.C.: National Planning Association, 1980) p. 15

REAL GROSS DOMESTIC PRODUCT PER EMPLOYED PERSON



Source: Bureau of Labor Statistics

- In Germany it increased by more than 400 percent.
- In Japan it increased by almost 1,400 percent.

All is not gloom and doom in the U.S. performance relative to other countries, however. While other countries have been gaining on us, there is no indication that they are about to surpass us. Herbert Stein, former Chairman of the President's Council of Economic Advisors put it this way:

Between 1960 and 1979, Japanese real per capita output rose from 31.5 percent of ours to 70.2 percent of ours. But the rate of gain on us fell sharply. If it continues to fall at the same pace, Japan's real per capita GNP would still be only 74 percent of ours in 2083.⁶

What is true of Japan also is true of other developed countries. As they come closer to catching up with the U.S., their growth rates tend to fall. What explains this phenomenon? According to one explanation, the industrialized countries started with major differences in the amounts of capital goods and output per person at the end of World War II. The countries that began with low capital per person grew faster and invested larger portions of their income. These countries were willing to make bigger sacrifices. Yet as these countries come closer to the U.S. standard of living, they are less willing to sacrifice.⁷

Another explanation is that the economic growth rates among countries are due mainly to wise or unwise government policies, rather than the private decisions of their citizens.

WHAT DIFFERENCE DOES GOVERNMENT SPENDING MAKE?

Evidence is beginning to mount that a major determinant of economic growth among industrialized countries is the percent of GNP spent by government.

A recent study of 104 countries for the years 1961-1976 found that government spending had a strong, negative impact on the growth rate of per capita gross domestic product. The negative relationship was shown to exist for the full sample of countries. It also was shown to exist within

⁶ Cited by Melvyn Krauss, The American Spectator (September 1983), p. 17.

⁷ Irving Kravis, Alan Heston, and Robert Summers, World Product and Income, International Comparisons of Real Gross Product (Baltimore: John Hopkins University Press, 1982).

groups of countries with similar levels of development, whether weighted or unweighted by population, and excluding or including major oil exporters.⁸

Katouro Sakoh, Director of International Trade Policy at the Council for a Competitive Economy, explains the role of government in contributing to Japan's economic growth:

The Japanese government contributed to the enormous economic success of Japan--based not on how much it did for the economy, but on how much it restrained itself from doing. Its interference in the economy was only sporadic and slight, including efforts aimed at industrial development.

But the Japanese government helped provide an economic environment for private enterprise by maintaining a small and balanced budget, fairly low and stable interest rates, relatively low rates of taxation, stable prices, brief expenditures, and very few government-owned enterprises. Moreover, by maintaining the political stability necessary to promote private investment, the government contributed even further to a great increase in the growth of the economy.⁹

In recent years, however, the Japanese government has been growing faster than the Japanese economy. As a result, its economic growth rate, although still relatively high, has been falling.¹⁰

- Between 1967 and 1982, the percent of gross domestic product (GDP) spent by the Japanese government rose from 19 to 34 percent, and its growth rate fell by 55 percent.
- Over the same period, the percent of GDP spent by the U.S. government rose from 32 to 38 percent, and its growth rate fell by 30 percent.

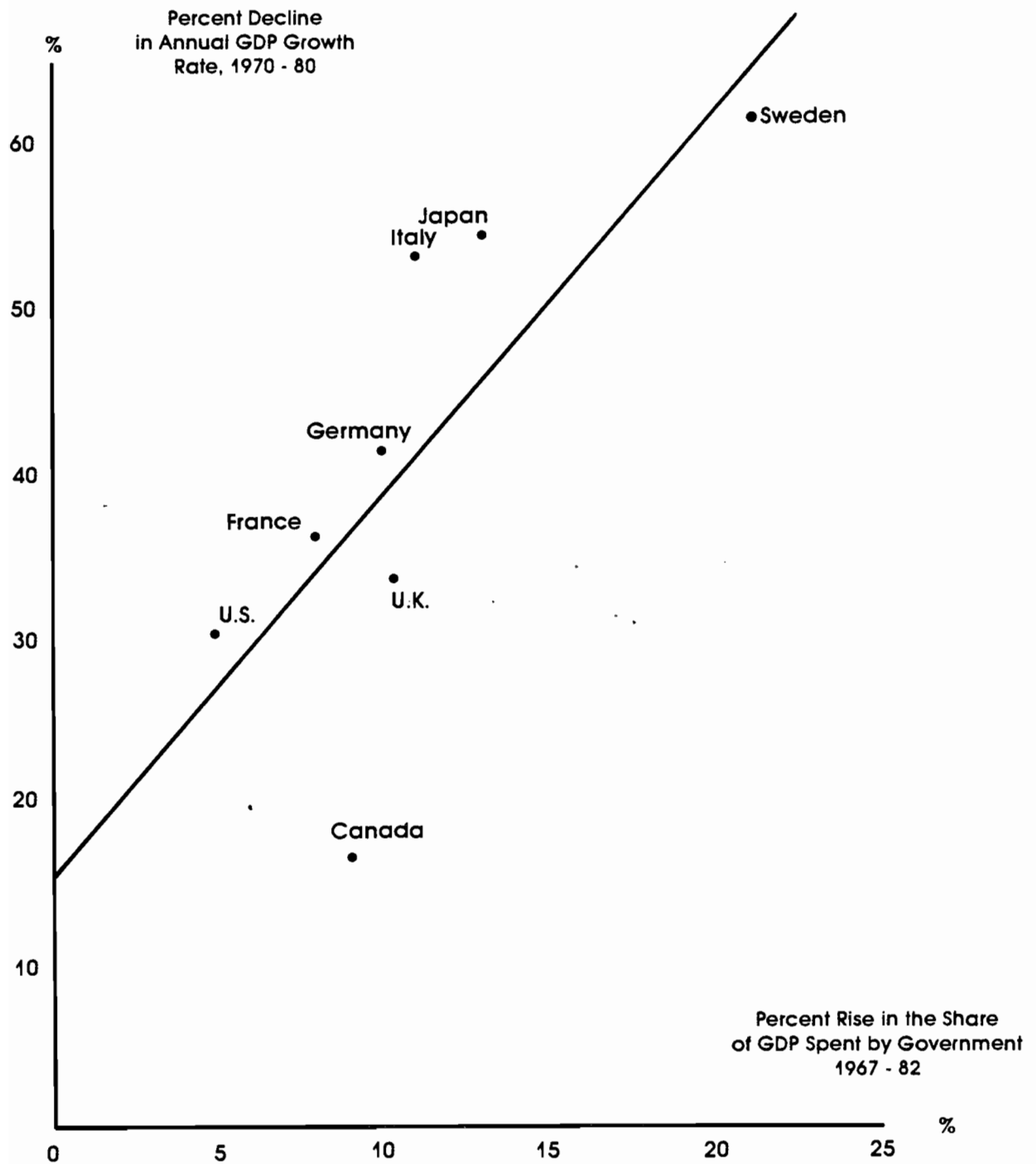
There is some evidence that the way government spends its funds has a fundamental effect on economic growth. In most developed countries, increases in government spending largely have been increases in transfer

⁸ Daniel Landau, "Government Expenditure and Economic Growth: A Cross-Country Study," Southern Economic Journal, 49 (January 1983), pp. 783-92.

⁹ The Cato Institute, Policy Report (December 1983), p. 9.

¹⁰ World Bank, World Development Report, 1982 and United Nations, Supplement to World Economic Survey, 1983.

GOVERNMENT SPENDING AND ECONOMIC GROWTH



Source: Calculated from World Bank, World Development Report, 1982,
and United Nations, Supplement to World Economic Survey, 1983.

payments to individuals. As noted earlier, these transfer payments reduce the incentive to work and save. For example:¹¹

- Between 1967 and 1982, in Sweden (the world's premier welfare state) the share of GDP spent by government rose from 40 to 62 percent.
- Over the same period Sweden's growth rate fell by 61 percent.

A number of recent studies have tried to quantify the effects of U.S. government spending on work and savings in the U.S.:

- For example, one study found that U.S. welfare programs reduce savings by as much as 20 percent.¹²
- Another study showed that decreases in projected government spending under the Reagan program led to almost one million more employed people in the labor force.¹³

HOW MUCH DO TAXES MATTER?

Until recently, economists had done little to investigate the effects of taxes on work incentives, productivity and economic growth. When the election of Ronald Reagan popularized supply-side economics, however, economists went to work to see if the president was correct. It turns out that many of President Reagan's instincts were right.¹³

- According to a study published by the Urban Institute, Reagan's tax and spending cuts have increased the U.S. labor force by as many as 4.1 million people.
- This implies that the Reagan tax and budget cuts created as many as 3.8 million new jobs.

Studies of state and local taxes also show that taxes have a big impact on jobs.

11 Ibid.

12 Sheldon Danziger, Robert Haveman, and Robert Plotnick, "How Income Transfers Affect Work, Savings and the Income Distribution," Journal of Economic Literature, 19 (September 1981), p. 1019.

13 David R. Henderson, "Analyzing the Reagan Record," NCPA, October 1984, pp. 9-12. Estimates based on Robert H. Haveman, "How Much Have the Reagan Administration's Tax and Spending Policies Increased Work Effort?," in Charles R. Hulten and Isabell V. Sawhill, eds., The Legacy of Reaganomics: Prospects for Long-Term Growth (Washington, D.C.: The Urban Institute Press, 1984).

- One study showed that a 30 percent increase in the Philadelphia's income tax reduced employment in manufacturing by 11 percent and reduced employment in non-manufacturing by 12-14 percent.¹⁴
- During its big-spending days (1970-1975) New York City lost 459,000 jobs--a 12 percent drop. Since the City's default in 1975, however, a slower growth in city expenditures has been accompanied by a gain of 200,000 jobs--a six percent increase.

For the last two decades the South and Southwest have been the fastest growing regions in the United States, reflecting a major shift in the country's economic activity. A study by Robert Newman explains why. Employment growth among the states is strongly related to corporate income tax rates, the degree of unionization of the labor force, and the presence of "pro-business" right-to-work laws.¹⁵ Newman showed that relatively capital-intensive firms are especially sensitive to changes in the corporate tax while labor-intensive firms are especially sensitive to the rate of unionization and right-to-work laws. Tax rate differentials and right-to-work laws not only affect movement to the South, but also influence movement within the South.

TAXES AND GROWTH

Recent studies have shown that there is a very strong correlation between low taxes and economic growth among the states.¹⁶

- Between 1969 and 1976, of the 37 states that had below-average increases in taxes, all but three (or 90 percent) had above-average economic growth.
- Of the 14 states (and the District of Columbia) with above-average increases, all but three had below-average economic growth.

Further evidence is furnished by a study of Massachusetts and a study of New Hampshire and Vermont.

¹⁴ Ronald E. Grieson, "Theoretical Analysis and Empirical Measurements of the Effects of the Philadelphia Income Tax," Bruce Bartlett and Timothy P. Roth, eds., The Supply-Side Solution (Chatham, N.J.: Chatham House, 1983).

¹⁵ Robert J. Newman, "Industry Migration and Growth in the South," Review of Economics and Statistics, 65 (February 1983), pp. 76-86.

¹⁶ Warren T. Brookes, The Economy in Mind (New York: Universe Books, 1982), p. 187 and p. 195.

Massachusetts.¹⁷

Between 1970 and 1978 the total tax burden in Massachusetts rose from less than 13 percent of income to 17.6 percent; from three percent below the 50-state national average to 11 percent above it; from twenty-second to the fifth highest taxing state in the nation. The primary reason for this meteoric rise in the state's tax-burden was a 137 percent increase (in real dollars) of welfare spending, lifting the state to number one in that category. Exactly as supply-side economists would predict, these disincentives in "Taxachusetts" caused a corresponding decrease in the state's growth of output and personal income:

- In eight years, per capita income fell from 10 percent above the national average to three percent above it, and the state was transformed from one of the fastest growing in the country (in terms of per capita income) to forty-seventh in 1977.
- The unemployment rate moved from one to two percentage points below the national average in 1965-72 to two to three percentage points above it during the middle 1970s.

Riding the winds of California's Proposition 13, the Massachusetts Legislature passed a \$340 million property-tax-relief program for fiscal 1979. The state's voters replaced free-spending Governor Michael Dukakis with conservative Edward J. King, who enacted a four percent spending cap in fiscal 1980. And, voters overwhelmingly approved the Proposition 2, which placed a limit on property taxes. Between 1979 and 1982 the state's tax burden dropped a full three percentage points, from 17.5 percent to 14.5 percent of total income--taking Massachusetts from the fifth highest taxing state in the nation to below the national average for the first time in a decade. The results were staggering:

- Personal income in Massachusetts rose from three percent above the national average in 1979 to eight percent above it in 1982--the most dramatic upsurge in history for any state.
- The unemployment rate fell to the second lowest among the major industrial states.

This turn-around was not performed with massive infusions of capital (the amount of capital used per worker actually declined). Instead it was achieved with the vigor of a high-growth, low-capital, high-technology economy. Knowledge, innovation, and human capital were the driving forces of the expansion.

Vermont and New Hampshire.¹⁸

These neighboring states are similar in terms of geography and industry. Yet economists Colin and Rosemary Campbell found that while Vermont was the third most heavily taxed state in the nation (taking 19.2 percent of personal income), New Hampshire was forty-seventh (taking 13.4

¹⁷ Ibid. Ch. 8, "Massachusetts on the Laffer Curve."

¹⁸ Ibid. pp. 188-89.

percent). The Campbells could detect no measurable differences in the quality of public services, and all measures of economic growth show that New Hampshire is far ahead of Vermont.

HOW MUCH DOES REGULATION MATTER?

The rate of productivity growth in the economy is highly associated with the rate of growth of capital. Between 1973 and 1979, for example, the simple correlation between growth in capital per unit of labor and growth in output per unit of labor was .62 among U.S. industries.

One of the poorest performing industries during the 1970s in terms of productivity was mining. Between 1973 and 1979 productivity in mining declined at an average annual rate of 5.2 percent, while capital in the industry declined at an average rate of 3.0 percent per year. Some of the productivity decline can be attributed to the diminished capacity of active mines and some to labor strikes by bituminous coal miners. But health, safety, and environmental regulations also were involved. Among the measures reducing output were the 1960 Coal Mine Health and Safety Act, state reclamation laws, and the Federal Surface Mine Control and Reclamation Act of 1977.¹⁹

A series of in-depth studies would be required to trace the specific impact of government regulation on industries. We already know that hobbling an industry through union wages, strikes, work rules, taxation, and regulation imposes new costs and obstacles to success, just as common sense would suggest. But our empirical knowledge of the specific costs of these obstacles is still meager.

HOW MUCH DO INTEREST RATES MATTER?

An important determinant of savings is the rate of return that savers expect to realize. The higher the reward for saving, the more savings there will be. How important is this relationship?

- Michael Boskin analyzed U.S. data from 1929 to 1969 and concluded that a 10 percent increase in the real after-tax rate of return on savings, other things being equal, increases net saving by three to four percent²⁰.

19 Rose N. Zeisel, "Productivity Challenge in Bituminous Coal Industry, 1950-79," A BLS Reader on Productivity, Bulletin 2171 (Washington, D.C.: U.S. Government Printing Office, 1983), pp. 56-57.

20 Michael J. Boskin, "Taxation, Saving, and the Rate of Interest," Journal of Political Economy, 86, no. 2, pt. 2 (April 1978), pp. S3-S27; also see Boskin, "Some Issues in 'Supply-Side' Economics," Karl Brunner and Allan Meltzer, eds., Supply Shocks, Incentive and National Wealth, (Amsterdam: North-Holland, 1981), pp. 201-20.

- Other studies have shown even stronger effects, indicating that a 10 percent increase in the rate of return on savings may increase savings by as much as 25 percent.²¹

Deregulation of financial institutions is often cited as a major reason for the high real rates of interest observed in modern times. (The real rate of interest is the market rate of interest minus the rate of price inflation). Many view these high real rates of interest with alarm.

Yet high real rates are not necessarily a bad thing. Government constraints, such as the prohibition of interest on checking accounts and limits on the interest paid on savings accounts probably depressed savings immediately following World War II. However, under recent financial market deregulation real rates of interest today are at a postwar high. The result: the rate of private savings hit 18.4 percent of U.S. GNP in 1984, also the highest in postwar history. Moreover, as the table shows, real interest rates are not high compared to the pre-World War II experience in the United States, a period when financial markets also were unregulated.

TABLE III
REAL RATES OF INTEREST

<u>Period</u>	<u>Market Rate^a</u>	<u>Rate of Inflation^b</u>	<u>Real Rate^c</u>
1840-60	8.6	-0.5	9.1
1867-80	6.7	-2.4	9.1
1880-1900	5.6	-0.7	6.3
1900-16	5.5	2.4	3.1
1920-40	3.3	-1.6	4.9
1947-60	2.3	2.5	-0.2
1960-80	5.9	4.7	1.2
1981-84	11.4	5.8	5.6

a Market rate of interest on 4-6 month prime commercial paper.

b Based on the GNP deflator.

c Market rate of interest minus the rate of price inflation.

Sources: 1840 to 1980, Robert J. Barro, Macroeconomics (New York: John Wiley & Sons, 1984), p. 286; 1980 to 1984, Economic Report of the President, February, 1985, pp. 237, 310.

²¹ Robert E. Keleher, "Supply-Side Tax Policy: Reviewing the Evidence," Bruce Bartlett and Timothy P. Roth, eds., The Supply-Side Solution, (Chatham, N.J.: Chatham House, 1983); for mixed evidence see Gerald A. Carlino, "Interest Rate Effects and Intertemporal Consumption," Journal of Monetary Economics, 9 (March 1982), pp. 223-34.

THE ROLE OF "HUMAN CAPITAL"

There is a danger in being too materialistic in analyzing capital and investment. As economist Thomas Sowell says, "The long-run prosperity of any country depends not upon physical capital but upon the ability to reproduce that capital."²² This observation is important when analyzing the fate of underdeveloped countries--especially in the light of the recent attention given to technology transfer. Transferring capital goods from one country to another is not nearly as important as transferring the ability and willingness to reproduce and maintain that capital. The rusting machinery in poor countries around the world demonstrate that the problem is not a "capital shortage" but a shortage of human capital and appropriate institutional arrangements. Evidence from ancient Britain, Rome, and China reinforces this point.²³

Human capital could be called 75 percent of U.S. wealth because 75 percent of national income is received by labor. Yet evidence suggests that our investment in human beings has declined apace with our investment in physical capital. For example, the Scholastic Aptitude Test scores declined from a verbal achievement average of 466 in 1967 to 425 in 1983, and the math scores dropped from 492 to 468.²⁴

The proportion of young people in school is greater than ever, marked by dramatic increases in women and minorities enrolled in higher education. Yet some kinds of education add little to productivity.²⁵

- U.S. schools conferred 45,600 engineering degrees in 1960 and 100,500 in 1982, while the number of law degrees went from 9,200 to 36,000 in the same period.
- Today U.S. schools are awarding nearly two law degrees for every five engineering degrees, up from one new lawyer for every five engineers 20 years ago.

²² The Cato Institute, Policy Report (January 1983), p. 7.

²³ Ibid.

²⁴ Bureau of Census, Statistical Abstract of the United States, (Washington, D.C.: U.S. Government Printing Office, 1985), p. 147.

²⁵ Ibid., p. 159.

If engineers are skilled at expanding the pie and lawyers are skilled at dividing the pie, schools are graduating more "pie-cutters" today than they have in the past. A similar story holds true for the rapid growth of accountants.²⁶

- U.S. schools conferred 26,000 accounting degrees in 1972 and 59,350 in 1984--a 230 percent increase.
- Major public accounting firms (10 or more CPAs) hired 8,800 new accounting degree holders in 1972 and 17,920 in 1984.

Another discouraging index of changes in U.S. ingenuity is the "U.S. Balance of Patents" calculated by J. Peter Grace.²⁷

- Between 1966 and 1976 the number of foreign patents granted to U.S. inventors declined from 59,000 to 41,000. Over the same period, the number of U.S. patents granted to foreign inventors rose from 13,700 to 25,500.

CONCLUSION

Economists take it as axiomatic that government taxing, spending, and regulatory policies that reduce the incentive to save, that reduce the flow of saving into high-yielding private investments, or that distort investment decisions, harm economic growth. Only in the last five years, however, has the statistical evidence on the seriousness of the problem accumulated. What is remarkable is the consistency of the evidence at the international, national, state, local, and industry levels, and the variety of economists, businessmen, and politicians who now take the evidence seriously.

NOTE: Nothing in this report should be construed as necessarily reflecting the views of the National Center for Policy Analysis or as an attempt to aid or hinder the passage of any bill before Congress or any state legislature.

²⁶ American Institute of Certified Public Accountants, The Supply of Graduates and the Demand for Public Accounting Recruits (New York, NY: AICPA, 1985).

²⁷ J. Peter Grace, "Removing the False Assumptions from Economic Policymaking," James R. Wilburn, ed., Productivity: A National Priority, (Malibu, CA: Pepperdine University Press, 1982), p. 10.

ABOUT THE AUTHOR

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