

Executive Summary Backgrounder

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The Impact of Government Spending on Economic Growth

Daniel J. Mitchell, Ph.D.

A growing government is contrary to America's economic interests because the various methods of financing government—taxes, borrowing, and printing money—have harmful effects. This is also true because government spending by its very nature is often economically destructive, regardless of how it is financed. The many reasons for the negative relationship between the size of government and economic growth include:

- **The extraction cost.** Government spending requires costly financing choices. The federal government cannot spend money without first taking that money from someone. All of the options used to finance government spending have adverse consequences.
- **The displacement cost.** Government spending displaces private-sector activity. Every dollar that the government spends means one less dollar in the productive sector of the economy. This dampens growth since economic forces guide the allocation of resources in the private sector.
- **The negative multiplier cost.** Government spending finances harmful intervention. Portions of the federal budget are used to finance activities that generate a distinctly negative effect on economic activity. For instance, many regulatory agencies have comparatively small budgets, but they impose large costs on the economy's productive sector.
- **The behavioral subsidy cost.** Government spending encourages destructive choices. Many government programs subsidize economically undesirable decisions. Welfare encourages people to choose leisure. Unemployment insurance programs provide an incentive to remain unemployed.
- **The behavioral penalty cost.** Government spending discourages productive choices. Government programs often discourage economically desirable decisions. Saving is important to help provide capital for new investment, yet the incentive to save has been undermined by government programs that subsidize retirement, housing, and education.
- **The market distortion cost.** Government spending hinders resource allocation. Competitive markets determine prices in a process that ensures the most efficient allocation of resources. However, in both health care and education, government subsidies to reduce out-of-pocket expenses have created a "third-party payer" problem.
- **The inefficiency cost.** Government spending is a less effective way to deliver services. Gov-

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ernment directly provides many services and activities such as education, airports, and postal operations. However, there is considerable evidence that the private sector could provide these important services at higher quality and lower costs.

- **The stagnation cost.** Government spending inhibits innovation. Because of competition and the desire to increase income and wealth, individuals and entities in the private sector constantly search for new options and opportunities. Government programs, however, are inherently inflexible.

The common-sense notion that government spending retards economic performance is bolstered by cross-country comparisons and academic research. International comparisons are especially useful. Government spending consumes almost half of Europe's economic output—a full one-third higher than the burden of government in the U.S. This excessive government is associated with sub-par economic performance:

- Per capita economic output in the U.S. in 2003 was \$37,600—more than 40 percent higher than the \$26,600 average for EU-15 nations.
- Real economic growth in the U.S. over the past 10 years (3.2 percent average annual growth) has been more than 50 percent faster than EU-15 growth during the same period (2.1 percent).
- Job creation is much stronger in the U.S., and the U.S. unemployment rate is significantly lower than the EU-15's unemployment rate.
- Living standards in the EU are equivalent to living standards in the poorest American states—roughly equal to Arkansas and Montana and only slightly ahead of West Virginia and Mississippi, the two poorest states.

The global evidence is augmented by dozens of academic research papers. Using varying methodologies, academic experts have found a clear negative relationship between government spending

and economic performance. For instance, a National Bureau of Economic Research paper found: “A reduction by one percentage point in the ratio of primary spending over GDP [gross domestic product] leads to an increase in investment by 0.16 percentage points of GDP on impact, and a cumulative increase by 0.50 after two years and 0.80 percentage points of GDP after five years.” According to a New Zealand Business Roundtable study, “An increase of 6 percentage points in government consumption expenditure as a percentage of GDP, (from, say 10 percent to 16 percent) would tend to reduce the annual rate of growth of GDP by about 0.8 percent.”

An International Monetary Fund study confirmed that “Average growth for the preceding 5-year period...was higher in countries with small governments in both periods.” Even the Organisation for Economic Co-operation and Development admitted:

Taxes and government expenditures affect growth both directly and indirectly through investment. An increase of about one percentage point in the tax pressure—e.g. two-thirds of what was observed over the past decade in the OECD sample—could be associated with a direct reduction of about 0.3 per cent in output per capita. If the investment effect is taken into account, the overall reduction would be about 0.6–0.7 per cent.

This is just a sampling of the academic research presented in the main paper. While no single research paper should be viewed as definitive, given the difficulty of isolating the impact of one policy on overall economic performance, the cumulative findings certainly bolster the theoretical and real-world arguments in favor of smaller government.

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Background

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Daniel J. Mitchell, Ph.D.

Policymakers are divided as to whether government expansion helps or hinders economic growth. Advocates of bigger government argue that government programs provide valuable “public goods” such as education and infrastructure. They also claim that increases in government spending can bolster economic growth by putting money into people’s pockets.

Proponents of smaller government have the opposite view. They explain that government is too big and that higher spending undermines economic growth by transferring additional resources from the productive sector of the economy to government, which uses them less efficiently. They also warn that an expanding public sector complicates efforts to implement pro-growth policies—such as fundamental tax reform and personal retirement accounts—because critics can use the existence of budget deficits as a reason to oppose policies that would strengthen the economy.

Which side is right?

This paper evaluates the impact of government spending on economic performance. It discusses the theoretical arguments, reviews the international evidence, highlights the latest academic research, cites examples of countries that have significantly reduced government spending as a share of national economic output, and analyzes the economic consequences of those reforms.¹ The online supplement to this paper contains a comprehensive list of research and key findings.

Talking Points

- Government spending undermines economic growth by displacing private-sector activity. Whether financed by taxes or borrowing, government spending imposes heavy extraction and displacement costs on the productive sector.
- Academic research confirms that government spending harms economic growth. Large government sectors reduce both the level of economic activity and the rate of economic growth.
- Nations like Ireland, New Zealand, and Slovakia have boosted their economies by dramatically lowering the burden of government spending. Government is too big in the United States, but fiscal discipline during the Reagan and Clinton years helped to limit the size of the federal government and give America a competitive advantage. Indeed, higher levels of government spending help to explain why Europe is falling further behind the United States.

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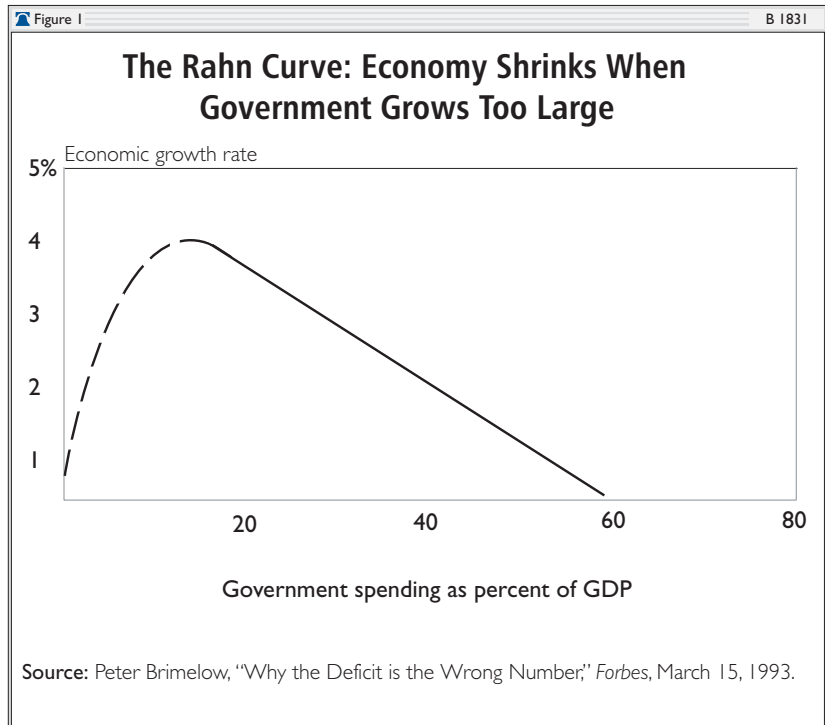
This paper concludes that a large and growing government is not conducive to better economic performance. Indeed, reducing the size of government would lead to higher incomes and improve America's competitiveness. There are also philosophical reasons to support smaller government, but this paper does not address that aspect of the debate. Instead, it reports on—and relies upon—economic theory and empirical research.

The Theory: Economics of Government Spending

Economic theory does not automatically generate strong conclusions about the impact of government outlays on economic performance. Indeed, almost every economist would agree that there are circumstances in which lower levels of government spending would enhance economic growth and other circumstances in which higher levels of government spending would be desirable.

If government spending is zero, presumably there will be very little economic growth because enforcing contracts, protecting property, and developing an infrastructure would be very difficult if there were no government at all. In other words, some government spending is necessary for the successful operation of the rule of law. Figure 1 illustrates this point. Economic activity is very low or nonexistent in the absence of government, but it jumps dramatically as core functions of government are financed. This does not mean that government costs nothing, but that the benefits outweigh the costs.

Costs vs. Benefits. Economists will generally agree that government spending becomes a burden at some point, either because government becomes too large or because outlays are misallo-



cated. In such cases, the cost of government exceeds the benefit. The downward sloping portion of the curve in Figure 1 can exist for a number of reasons, including:

- **The extraction cost.** Government spending requires costly financing choices. The federal government cannot spend money without first taking that money from someone. All of the options used to finance government spending have adverse consequences. Taxes discourage productive behavior, particularly in the current U.S. tax system, which imposes high tax rates on work, saving, investment, and other forms of productive behavior. Borrowing consumes capital that otherwise would be available for private investment and, in extreme cases, may lead to higher interest rates. Inflation debases a nation's currency, causing widespread economic distortion.
- **The displacement cost.** Government spending displaces private-sector activity. Every dol-

1. Daniel J. Mitchell, "Academic Evidence: A Growing Consensus Against Big Government," supplement to Daniel J. Mitchell, "The Impact of Government Spending on Economic Growth," Heritage Foundation *Backgrounder* No. 1831, at www.heritage.org/research/budget/bg1831_suppl.cfm. The supplement is available only on the Web.

lar that the government spends necessarily means one less dollar in the productive sector of the economy. This dampens growth since economic forces guide the allocation of resources in the private sector, whereas political forces dominate when politicians and bureaucrats decide how money is spent. Some government spending, such as maintaining a well-functioning legal system, can have a high “rate-of-return.” In general, however, governments do not use resources efficiently, resulting in less economic output.

- **The negative multiplier cost.** Government spending finances harmful intervention. Portions of the federal budget are used to finance activities that generate a distinctly negative effect on economic activity. For instance, many regulatory agencies have comparatively small budgets, but they impose large costs on the economy’s productive sector. Outlays for international organizations are another good example. The direct expense to taxpayers of membership in organizations such as the International Monetary Fund (IMF) and Organisation for Economic Co-operation and Development (OECD) is often trivial compared to the economic damage resulting from the anti-growth policies advocated by these multinational bureaucracies.
- **The behavioral subsidy cost.** Government spending encourages destructive choices. Many government programs subsidize economically undesirable decisions. Welfare programs encourage people to choose leisure over work. Unemployment insurance programs provide an incentive to remain unemployed. Flood insurance programs encourage construction in flood plains. These are all examples of government programs that reduce economic growth and diminish national output because they promote misallocation or underutilization of resources.
- **The behavioral penalty cost.** Government spending discourages productive choices. Government programs often discourage economically desirable decisions. Saving is important to help provide capital for new investment, yet the incentive to save has been undermined by government programs that subsidize retirement, housing, and education. Why should a person set aside income if government programs finance these big-ticket expenses? Other government spending programs—Medicaid is a good example—generate a negative economic impact because of eligibility rules that encourage individuals to depress their incomes artificially and misallocate their wealth.
- **The market distortion cost.** Government spending distorts resource allocation. Buyers and sellers in competitive markets determine prices in a process that ensures the most efficient allocation of resources, but some government programs interfere with competitive markets. In both health care and education, government subsidies to reduce out-of-pocket expenses have created a “third-party payer” problem. When individuals use other people’s money, they become less concerned about price. This undermines the critical role of competitive markets, causing significant inefficiency in sectors such as health care and education. Government programs also lead to resource misallocation because individuals, organizations, and companies spend time, energy, and money seeking either to obtain special government favors or to minimize their share of the cost of government.
- **The inefficiency cost.** Government spending is a less effective way to deliver services. Government directly provides many services and activities such as education, airports, and postal operations. However, there is evidence that the private sector could provide these important services at a higher quality and lower cost. In some cases, such as airports and postal services, the improvement would take place because of privatization. In other cases, such as education, the economic benefits would accrue by shifting to a model based on competition and choice.
- **The stagnation cost.** Government spending inhibits innovation. Because of competition and the desire to increase income and wealth, individuals and entities in the private sector

constantly search for new options and opportunities. Economic growth is greatly enhanced by this discovery process of “creative destruction.” Government programs, however, are inherently inflexible, both because of centralization and because of bureaucracy. Reducing government—or devolving federal programs to the state and local levels—can eliminate or mitigate this effect.

Spending on a government program, department, or agency can impose more than one of these costs. For instance, all government spending imposes both extraction costs and displacement costs. This does not necessarily mean that outlays—either in the aggregate or for a specific program—are counterproductive. That calculation requires a cost-benefit analysis.

Do Deficits Matter?

The Keynesian Controversy. The economics of government spending is not limited to cost-benefit analysis. There is also the Keynesian debate. In the 1930s, John Maynard Keynes argued that government spending—particularly increases in government spending—boosted growth by injecting purchasing power into the economy.² According to Keynes, government could reverse economic downturns by borrowing money from the private sector and then returning the money to the private sector through various spending programs.

This “pump priming” concept did not necessarily mean that government should be big. Instead, Keynesian theory asserted that government spending—especially deficit spending—could provide short-term stimulus to help end a recession or depression. The Keynesians even argued that policymakers should be prepared to reduce government spending once the economy recovered in order to prevent inflation, which they believed would result from too much economic growth. They even postulated that there was a tradeoff between inflation and unemployment (the Phillips Curve) and that government officials should

increase or decrease government spending to steer the economy between too much of one or too much of the other.

Keynesian economics was very influential for several decades and dominated public policy from the 1930s–1970s. The theory has since fallen out of favor, but it still influences policy discussions, particularly on whether or not changes in government spending have transitory economic effects. For instance, some lawmakers use Keynesian analysis to argue that higher or lower levels of government spending will stimulate or dampen economic growth.

The “Deficit Hawk” Argument. Another related policy issue is the role of budget deficits. Unlike Keynesians, who argue that budget deficits boost growth by injecting purchasing power into the economy, some economists argue that budget deficits are bad because they allegedly lead to higher interest rates. Since higher interest rates are believed to reduce investment, and because investment is necessary for long-run economic growth, proponents of this view (sometimes called “deficit hawks”) assert that avoiding deficits should be the primary goal of fiscal policy.

While deficit hawks and Keynesians have very different views on budget deficits, neither school of thought focuses on the size of government. Keynesians are sometimes associated with bigger government but, as discussed above, have no theoretical objection to small government as long as it can be increased temporarily to jump-start a sluggish economy. By contrast, the deficit hawks are sometimes associated with smaller government but have no theoretical objection to large government as long as it is financed by taxes rather than borrowing.

The deficit hawk approach to fiscal policy has always played a role in economic policy, but politics sometimes plays a role in its usage. During much of the post–World War II era, Republicans complained about deficits because they disap-

2. John Maynard Keynes, *The General Theory of Employment, Interest and Money* (1936), in *The General Theory*, Vol. 7 of *Collected Writings of John Maynard Keynes*, ed. Donald Moggridge (London: Macmillan for the Royal Economic Society, 1973), at cepa.newschool.edu/het/essays/keynes/gtcont.htm (February 2, 2005).

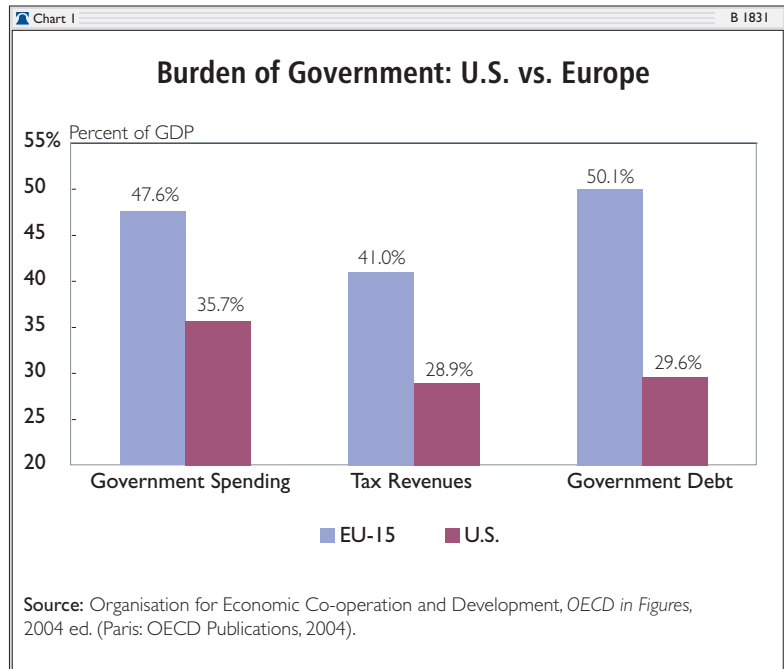
proved of the spending policies of the Democrats who controlled many of the levers of power. In more recent years, Democrats have complained about deficits because they disapprove of the tax policies of the Republicans who control many of the levers of power. Presumably, many people genuinely care about the impact of deficits, but politicians often use the issue as a proxy when fighting over tax and spending policies in Washington.

The Evidence: Government Spending and Economic Performance

Economic theory is important in providing a framework for understanding how the world works, but evidence helps to determine which economic theory is most accurate. This section reviews global comparisons and academic research to ascertain whether government spending helps or hinders economic performance.

Worldwide Experience. Comparisons between countries help to illustrate the impact of public policy. One of the best indicators is the comparative performance of the United States and Europe. The “old Europe” countries that belong to the European Union tend to have much bigger governments than the United States. While there are a few exceptions, such as Ireland, many European governments have extremely large welfare states.

As Chart 1 illustrates, government spending consumes almost half of Europe’s economic output—a full one-third higher than the burden of government in the U.S. Not surprisingly, a large government sector is associated with a higher tax burden and more government debt. Bigger government is



also associated with sub-par economic performance. Among the more startling comparisons:

- Per capita economic output in the U.S. in 2003 was \$37,600—more than 40 percent higher than the \$26,600 average for EU–15 nations.³
- Real economic growth in the U.S. over the past 10 years (3.2 percent average annual growth) has been more than 50 percent faster than EU–15 growth during the same period (2.1 percent).⁴
- The U.S. unemployment rate is significantly lower than the EU–15 unemployment rate, and there is a stunning gap in the percentage of unemployed who have been without a job for more than 12 months—11.8 percent in the U.S. versus 41.9 percent in EU–15 nations.⁵
- Living standards in the EU are equivalent to living standards in the poorest American states—roughly equal to Arkansas and Mon-

3. Organisation for Economic Co-operation and Development, *OECD in Figures*, 2004 ed. (Paris: OECD Publications, 2004), at www1.oecd.org/publications/e-book/0104071E.pdf (February 2, 2005). The EU–15 are the 15 member states of the European Union prior to enlargement in 2004: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

4. *Ibid.*

5. *Ibid.*

tana and only slightly ahead of West Virginia and Mississippi, the two poorest states.⁶

Blaming excessive spending for all of Europe's economic problems would be wrong. Many other policy variables affect economic performance. For instance, over-regulated labor markets probably contribute to the high unemployment rates in Europe. Anemic growth rates may be a consequence of high tax rates rather than government spending. Yet, even with these caveats, there is a correlation between bigger government and diminished economic performance.

The Academic Research. Even in the United States, there is good reason to believe that government is too large. Scholarly research indicates that America is on the downward sloping portion of the Rahn Curve—as are most other industrialized nations. In other words, policymakers could enhance economic performance by reducing the size and scope of government. The supplement to this paper includes a comprehensive review of the academic literature and a discussion of some of the methodological issues and challenges. This section provides an excerpt of the literature review and summarizes the findings of some of the major economic studies.

The academic literature certainly does not provide all of the answers. Isolating the precise effects of one type of government policy—such as government spending—on aggregate economic performance is probably impossible. Moreover, the relationship between government spending and economic growth may depend on factors that can change over time.

Other important methodological issues include whether the model assumes a closed economy or allows international flows of capital and labor. Does it measure the aggregate burden of government or the sum of the component parts? These

are all critical questions, and the answers help drive the results of various studies.

The effort is further complicated by the challenge of identifying the precise impact of government spending:

- Does spending hinder economic performance because of the taxes used to finance government?
- Would the economic damage be reduced if government had some magical source of free revenue?
- How do academic researchers measure the adverse economic impact of government consumption spending versus government infrastructure spending?
- Is there a difference between military and domestic spending or between purchases and transfers?

There are no “correct” answers to these questions, but the growing consensus in the academic literature is persuasive. Regardless of the methodology or model, government spending appears to be associated with weaker economic performance. For instance:

- A European Commission report acknowledged: “[B]udgetary consolidation has a positive impact on output in the medium run if it takes place in the form of expenditure retrenchment rather than tax increases.”⁷
- The IMF agreed: “This tax induced distortion in economic behavior results in a net efficiency loss to the whole economy, commonly referred to as the ‘excess burden of taxation,’ even if the government engages in exactly the same activities—and with the same degree of efficiency—as the private sector with the tax revenue so raised.”⁸
- An article in the *Journal of Monetary Economics* found: “[T]here is substantial crowding out of private spending by government spending....

6. Fredrik Bergström and Robert Gidehag, “EU Versus USA,” *Timbro*, June 2004, at www.timbro.com/euvsusa/pdf/EU_vs_USA_English.pdf (February 2, 2005).

7. European Commission, Directorate-General for Economic and Financial Affairs, “Public Finances in EMU, 2003,” *European Economy*, No. 3, 2003, at europa.eu.int/comm/economy_finance/publications/european_economy/2003/ee303en.pdf (February 2, 2005).

8. Vito Tanzi and Howell H. Zee, “Fiscal Policy and Long-Run Growth,” *International Monetary Fund Staff Papers*, Vol. 44, No. 2 (June 1997), p. 5.

The Keynesian Stimulus Myth

Until the 1970s, some economists believed that government spending—especially debt-financed increases in government spending—boosted growth by “injecting” purchasing power into the economy, ostensibly by putting money into people’s pockets. According to Keynesian theory, people would then spend the money, spurring growth. Politicians understandably liked Keynesianism because it provided a rationale for spending more money.¹

Some researchers even estimated that larger levels of government were associated with higher levels of economic output, but their studies often contained severe methodological errors.² More sophisticated analysis avoids this measurement problem and, not surprisingly, finds that government spending does not stimulate growth. In simple terms, Keynesian theory overlooks the fact that government does not have some magic source of money. The government cannot inject money into the economy without first taking it out of the economy via taxes or borrowing.

The Keynesian theory fell into disrepute once it became apparent that spending increases were associated with economic stagnation in the

1970s and that lower tax rates and spending restraint triggered an economic boom in the 1980s. Even though it has lost favor among economists, however, the Keynesian mindset is still alive among politicians and journalists, who commonly comment on the need to boost spending to enhance growth.

Interestingly, John Maynard Keynes would probably be aghast at how his theories have been used to support bigger government. Before his death, he stated that economic performance would be undermined if government spending exceeded 25 percent of gross domestic product (GDP).³ Since the burden of government is over 50 percent in some European nations and more than 30 percent in the United States (including state and local government spending), Keynes would probably be a vigorous advocate of smaller government today. As Milton Friedman succinctly explained, “Our country would be far better off with a federal budget of \$1 trillion and a deficit of \$300 billion than with a fully balanced budget of \$2 trillion.”⁴ (For a more complete discussion, see Appendix 1 in the supplement.)

1. Patrick D. Larkey, Chandler Stolp, and Mark Winer, “Theorizing About the Growth of Government: A Research Assessment,” *Journal of Public Policy*, Vol. 1, No. 2 (May 1981), p. 201.
2. See P. Hansson and M. Henrekson, “A New Framework for Testing the Effect of Government Spending on Growth and Productivity,” *Public Choice*, Vol. 81 (1994), pp. 381–401, and Olivier J. Blanchard and Roberto Perotti, “An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output,” *Quarterly Journal of Economics*, Vol. 117, No. 4 (November 2002).
3. Roger Kerr, “New Zealand’s Flawed Growth Strategy,” Centre for Independent Studies (St. Leonards, New South Wales, Australia), *Policy*, Vol. 19, No. 1 (Autumn 2003), p. 4, at www.cis.org.au/policy/autumn03/polaut03-1.pdf (February 2, 2005).
4. Milton Friedman, “Balanced Budget: Amendment Must Put Limit on Taxes,” *The Wall Street Journal*, January 4, 1995.

[P]ermanent changes in government spending lead to a negative wealth effect.”⁹

- A study from the Federal Reserve Bank of Dallas also noted: “[G]rowth in government stunts general economic growth. Increases in government spending or taxes lead to persistent decreases in the rate of job growth.”¹⁰
 - An article in the *European Journal of Political Economy* found: “We find a tendency towards a more robust negative growth effect of large public expenditures.”¹¹
 - A study in *Public Finance Review* reported: “[H]igher total government expenditure, no matter how financed, is associated with a lower growth rate of real per capita gross state product.”¹²
 - An article in the *Quarterly Journal of Economics* reported: “[T]he ratio of real government consumption expenditure to real GDP had a negative association with growth and investment,” and “Growth is inversely related to the share of government consumption in GDP, but insignificantly related to the share of public investment.”¹³
 - A study in the *European Economic Review* reported: “The estimated effects of GEXP [government expenditure variable] are also somewhat larger, implying that an increase in the expenditure ratio by 10 percent of GDP is associated with an annual growth rate that is 0.7–0.8 percentage points lower.”¹⁴
 - A *Public Choice* study reported: “[A]n increase in GTOT [total government spending] by 10 percentage points would decrease the growth rate of TFP [total factor productivity] by 0.92 percent [per annum]. A commensurate increase of GC [government consumption spending] would lower the TFP growth rate by 1.4 percent [per annum].”¹⁵
 - An article in the *Journal of Development Economics* on the benefits of international capital flows found that government consumption of economic output was associated with slower growth, with coefficients ranging from 0.0602 to 0.0945 in four different regressions.¹⁶
 - A *Journal of Macroeconomics* study discovered: “[T]he coefficient of the additive terms of the government-size variable indicates that a 1% increase in government size decreases the rate of economic growth by 0.143%.”¹⁷
 - A study in *Public Choice* reported: “[A] one percent increase in government spending as a percent of GDP (from, say, 30 to 31%) would raise
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9. Shaghil Ahmed, “Temporary and Permanent Government Spending in an Open Economy,” *Journal of Monetary Economics*, Vol. 17, No. 2 (March 1986), pp. 197–224.
 10. Dong Fu, Lori L. Taylor, and Mine K. Yücel, “Fiscal Policy and Growth,” *Federal Reserve Bank of Dallas Working Paper* 0301, January 2003, p. 10.
 11. Stefan Fölster and Magnus Henrekson, “Growth and the Public Sector: A Critique of the Critics,” *European Journal of Political Economy*, Vol. 15, No. 2 (June 1999), pp. 337–358.
 12. S. M. Miller and F. S. Russek, “Fiscal Structures and Economic Growth at the State and Local Level,” *Public Finance Review*, Vol. 25, No. 2 (March 1997).
 13. Robert J. Barro, “Economic Growth in a Cross Section of Countries,” *Quarterly Journal of Economics*, Vol. 106, No. 2 (May, 1991), p. 407.
 14. Stefan Fölster and Magnus Henrekson, “Growth Effects of Government Expenditure and Taxation in Rich Countries,” *European Economic Review*, Vol. 45, No. 8 (August 2001), pp. 1501–1520.
 15. P. Hansson and M. Henrekson, “A New Framework for Testing the Effect of Government Spending on Growth and Productivity,” *Public Choice*, Vol. 81 (1994), pp. 381–401.
 16. Jong-Wha Lee, “Capital Goods Imports and Long-Run Growth,” *Journal of Development Economics*, Vol. 48, No. 1 (October 1995), pp. 91–110.
 17. James S. Guseh, “Government Size and Economic Growth in Developing Countries: A Political-Economy Framework,” *Journal of Macroeconomics*, Vol. 19, No. 1 (Winter 1997), pp. 175–192.

The Deficit–Interest Rates–Investment–Growth Myth

During the past 50 years, both Republicans and Democrats have argued that reducing the budget deficit is an elixir for economic growth. The theory works as follows: A lower budget deficit leads to lower interest rates, lower interest rates lead to more investment, more investment leads to higher productivity, and higher productivity means more growth.

All other things being equal, these are reasonable assertions, but fiscal policy should focus on the deficit only if the aforementioned relationships are robust. There are many reasons, however, to believe that the deficit–interest rates–investment–growth hypothesis is overstated.

Specifically, the empirical data indicate that deficits have an extremely small impact on interest rates. Interest rates are determined in world capital markets in which trillions of dollars change hands every day. Even a large shift in the U.S. government's fiscal balance is unlikely to have any noticeable impact. This is why economists have failed to find a meaningful link between deficits and interest rates.¹

Moreover, it is not clear that interest rates are the main determinant of investment. Demand for credit is a key factor, which is why higher interest rates are correlated with periods

of stronger economic growth. Financial institutions and other lenders make funds available to borrowers because that is how they make money. In order to earn a profit, the interest rate charged on loans and other investments must be high enough to compensate for factors such as projected inflation rates and likelihood of default.

Taxes also affect interest rates. When tax rates are high, investors must charge a higher interest rate.² The different interest rates charged on tax-free municipal bonds and high-quality taxable corporate bonds illustrate this relationship. For instance, over the past 24 years, interest rates for taxable AAA corporate bonds have averaged nearly 2 percentage points higher than interest rates for tax-free municipal bonds—a large difference given the low level of expected default for both bonds.³

This means that a tax increase—particularly in marginal income tax rates—would be likely to *increase* interest rates because the increase in interest rates caused by the higher tax burden would more than offset any theoretical reduction in interest rates caused by a lower deficit. (For a more complete discussion, see Appendix 2 in the supplement.)

1. For instance, see U.S. Department of the Treasury, Office of the Assistant Secretary for Economic Policy, "The Effect of Deficits on Prices and Financial Assets: Theory and Evidence," March 1984, at www.treas.gov/offices/economic-policy/deficits_base.pdf (February 2, 2005). See also Eric M. Engen and R. Glenn Hubbard, "Federal Government Debt and Interest Rates," American Enterprise Institute *Working Paper* No. 105, June 2, 2004, at www.aei.org/docLib/20040825_wp105.pdf (February 2, 2005).
2. Aldona Robbins, Gary Robbins, and Paul Craig Roberts, "The Relative Impact of Taxation and Interest Rates on the Cost of Capital," in Dale Jorgenson and Ralph Landau, eds., *Technology and Economic Policy* (Cambridge, Mass.: Ballinger Press, 1986).
3. Council of Economic Advisers, *Economic Report of the President* (Washington, D.C.: U.S. Government Printing Office, 2004), p. 370, Table B–73, at www.gpoaccess.gov/usbudget/fy05/pdf/2004_erp.pdf (February 2, 2005).

the unemployment rate by approximately .36 of one percent (from, say, 8 to 8.36 percent).¹⁸

- A study from the *Journal of Monetary Economics* stated: “We also find a strong negative effect of the growth of government consumption as a fraction of GDP. The coefficient of -0.32 is highly significant and, taken literally, it implies that a one standard deviation increase in government growth reduces average GDP growth by 0.39 percentage points.”¹⁹
- The Organisation for Economic Co-operation and Development acknowledged: “Taxes and government expenditures affect growth both directly and indirectly through investment. An increase of about one percentage point in the tax pressure—e.g. two-thirds of what was observed over the past decade in the OECD sample—could be associated with a direct reduction of about 0.3 per cent in output per capita. If the investment effect is taken into account, the overall reduction would be about 0.6–0.7 per cent.”²⁰
- A National Bureau of Economic Research paper stated: “[A] 10 percent balanced budget increase in government spending and taxation is predicted to reduce output growth by 1.4 percentage points per annum, a number comparable in magnitude to results from the one-sector theoretical models in King and Robello.”²¹
- Another National Bureau of Economic Research paper stated: “A reduction by one percentage point in the ratio of primary spending over GDP leads to an increase in investment by 0.16 percentage points of GDP on impact, and a cumulative increase by 0.50 after two years and 0.80 percentage points of GDP after five years. The effect is particularly strong when the spending cut falls on government wages: in response to a cut in the public wage bill by 1 percent of GDP, the figures above become 0.51, 1.83 and 2.77 per cent respectively.”²²
- An IMF article confirmed: “Average growth for the preceding 5-year period...was higher in countries with small governments in both periods. The unemployment rate, the share of the shadow economy, and the number of registered patents suggest that small governments exhibit more regulatory efficiency and have less of an inhibiting effect on the functioning of labor markets, participation in the formal economy, and the innovativeness of the private sector.”²³
- Looking at U.S. evidence from 1929–1986, an article in *Public Choice* estimated: “This analysis validates the classical supply-side paradigm and shows that maximum productivity growth occurs when government expenditures represent about 20% of GDP.”²⁴
- An article in *Economic Inquiry* reported: “The optimal government size is 23 percent (+/-2 percent) for the average country. This number, however, masks important differences across

18. Burton Abrams, “The Effect of Government Size on the Unemployment Rate,” *Public Choice*, Vol. 99 (June 1999), pp. 3–4.

19. Kevin B. Grier and Gordon Tullock, “An Empirical Analysis of Cross-National Economic Growth, 1951–80,” *Journal of Monetary Economics*, Vol. 24, No. 2 (September 1989), pp. 259–276.

20. Andrea Bassanini and Stefano Scarpetta, “The Driving Forces of Economic Growth: Panel Data Evidence for the OECD Countries,” Organisation for Economic Co-operation and Development *Economic Studies* No. 33, February 2002, at www.oecd.org/dataoecd/26/2/18450995.pdf (February 2, 2005).

21. Eric M. Engen and Jonathan Skinner, “Fiscal Policy and Economic Growth,” National Bureau of Economic Research *Working Paper* No. 4223, 1992, p. 4.

22. Alberto Alesina, Silvia Ardagna, Roberto Perotti, and Fabio Schiantarelli, “Fiscal Policy, Profits, and Investment,” National Bureau of Economic Research *Working Paper* No. 7207, July 1999, p. 4.

23. Vito Tanzi and Ludger Shuknecht, “Reforming Government in Industrial Countries,” International Monetary Fund *Finance & Development*, September 1996, at www.imf.org/external/pubs/ft/fandd/1996/09/pdf/tanzi.pdf (February 2, 2005).

24. E. A. Peden, “Productivity in the United States and Its Relationship to Government Activity: An Analysis of 57 Years, 1929–1986,” *Public Choice*, Vol. 69 (1991), pp. 153–173.

regions: estimated optimal sizes range from 14 percent (+/-4 percent) for the average OECD country to...16 percent (+/-6 percent) in North America."²⁵

- A Federal Reserve Bank of Cleveland study reported: "A simulation in which government expenditures increased permanently from 13.7 to 22.1 percent of GNP (as they did over the past four decades) led to a long-run decline in output of 2.1 percent. This number is a benchmark estimate of the effect on output because of permanently higher government consumption."²⁶

Spending Control Success Stories

Both economic theory and empirical evidence suggest that government should be smaller. Yet is it possible to translate good economics into public policy? Even though many policymakers understand that government spending undermines economic performance, some think that special-interest groups are too politically powerful and that reducing the size of government is an impossible task. Since the burden of government has relentlessly increased during the post-World War II era, this is a reasonable assumption.

Moreover, there is a concern that the transition to smaller government may be economically harmful. In other words, the economy may be stronger in the long run if the burden of government is reduced, but the short-run consequences of spending reductions could make such a change untenable. This Keynesian analysis is much less prevalent today than it was 30 years ago, but it is still part of the debate.

President	Total Outlays	Total		
		Discretionary	Nondefense Discretionary	Mandatory
Johnson	35.8%	33.4%	34.2%	47.1%
Nixon	5.3%	-15.2%	22.5%	57.3%
Carter	17.2%	10.1%	7.6%	17.6%
Reagan, 1st	14.5%	8.3%	-9.7%	11.5%
Reagan, 2nd	7.4%	7.0%	0.2%	5.0%
Bush (41)	7.8%	-3.4%	13.9%	20.7%
Clinton, 1st	4.2%	-8.0%	0.7%	11.7%
Clinton, 2nd	8.1%	8.1%	14.4%	16.6%
Bush (43)	19.7%	30.2%	25.3%	20.8%

Source: Veronique de Rugy, "President Reagan: Champion Budget Cutter," American Enterprise Institute, June 9, 2004, at www.aei.org/publications/filter.pubID.20675/pub_detail.asp (February 3, 2005)

There are examples of nations that have successfully reduced the burden of government during peacetime.²⁷ They show that it is possible to reduce government spending—sometimes by dramatic amounts. In all of these examples, policymakers enjoyed political and economic success. For instance:

- **Ronald Reagan** dramatically reversed the direction of public policy in the United States. Government—especially domestic spending—was growing rapidly when he took office. Measured as a share of national output, President Reagan reduced domestic discretionary spending by almost 33 percent, down from 4.5 percent of GDP in 1981 to 3.1 percent of GDP in 1989.

Reagan's track record on entitlements was also impressive. When he took office, entitlement spending was on a sharp upward trajectory, peaking at 11.6 percent of GDP in 1983. By

25. Georgios Karras, "The Optimal Government Size: Further International Evidence on the Productivity of Government Services," *Economic Inquiry*, Vol. 34, (April 1996), p. 2.

26. Charles T. Carlstrom and Jagadeesh Gokhale, "Government Consumption, Taxation, and Economic Activity," Federal Reserve Bank of Cleveland *Economic Review*, 3rd Quarter, 1991, p. 28.

27. Spending reductions following a war are quite common but tend not to be very instructive since government is almost always bigger after a war than it was before hostilities began.

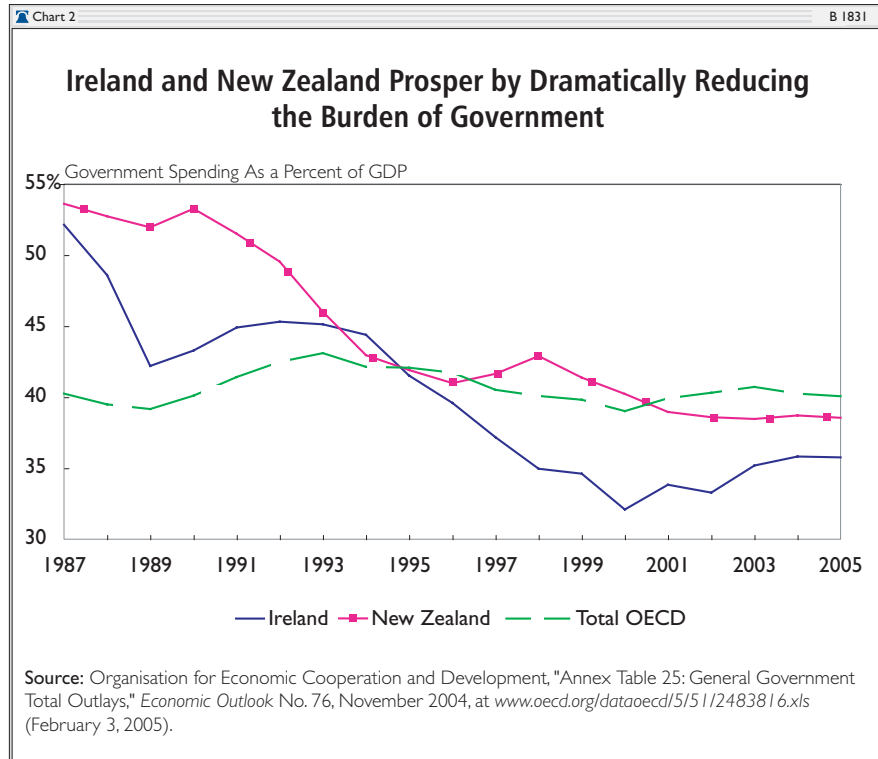
the time he left office, entitlement spending consumed 9.8 percent of economic output.

As a result of these dramatic improvements, Reagan was able to reduce the total burden of government spending as a share of economic output during his presidency while still restoring the nation's military strength.²⁸

Table 1 shows Reagan's impressive performance compared to other Presidents, measured by the real (inflation-adjusted) growth of federal spending.

- **Bill Clinton** was surprisingly successful in controlling the burden of government, particularly during his first term. His record was greatly inferior to Ronald Reagan's, and some of the credit probably belongs to the Republicans in Congress, but Clinton managed to preside over the second most frugal record of any President in the post-World War II era. Domestic discretionary spending fell from 3.4 percent of GDP to 3.1 percent of GDP, and entitlement spending dropped from 10.8 percent of GDP to 10.5 percent of GDP.²⁹

These were modest reductions compared to Ronald Reagan, and many of them evaporated during Clinton's second term once a budget surplus materialized and undermined fiscal discipline. Nonetheless, when combined with reasonable economic growth and the "peace dividend" made possible by President Reagan's victory in the Cold War, the total burden of



federal spending fell as low as 18.4 percent of GDP in 2000, the lowest level since 1966.³⁰

- **Ireland** has dramatically changed its fiscal policy in the past 20 years. In the 1980s, government spending consumed more than 50 percent of economic output, and high tax rates penalized productive behavior. This led to economic stagnation, and Ireland became known as the "sick man of Europe." However, the government decided to act. As one economist explained, "After a stagnant 13-year period with less than 2 percent growth, Ireland took a more radical course of slashing expenditures, abolishing agencies and toppling tax rates and regulations."³¹

28. Office of Management and Budget, *Budget of the United States Government, Fiscal Year 2005: Historical Tables* (Washington, D.C.: U.S. Government Printing Office, 2004), p. 128, Table 8.4, at www.gpoaccess.gov/usbudget/fy05/pdf/hist.pdf (February 2, 2005).

29. *Ibid.*

30. *Ibid.*, p. 23, Table 1.2.

31. Benjamin Powell, "Markets Created a Pot of Gold in Ireland," *Cato Institute Daily Commentary*, April 21, 2003, at www.cato.org/dailys/04-21-03.html (February 2, 2005). This article was previously published by Fox News on April 15, 2003.

The reductions in government were especially impressive. A Joint Economic Committee report explained: "This situation was reversed during the 1987–96 period. As a share of GDP, government expenditures declined from the 52.3 percent level of 1986 to 37.7 percent in 1996, a reduction of 14.6 percentage points."³² As Chart 2 illustrates, Ireland has been able to keep government from creeping back in the wrong direction. Little wonder that a writer for the *Financial Post* wrote that "Ireland's biggest export was people until the country adopted enlightened trade, tax and education policies. Now it is the Celtic Tiger."³³

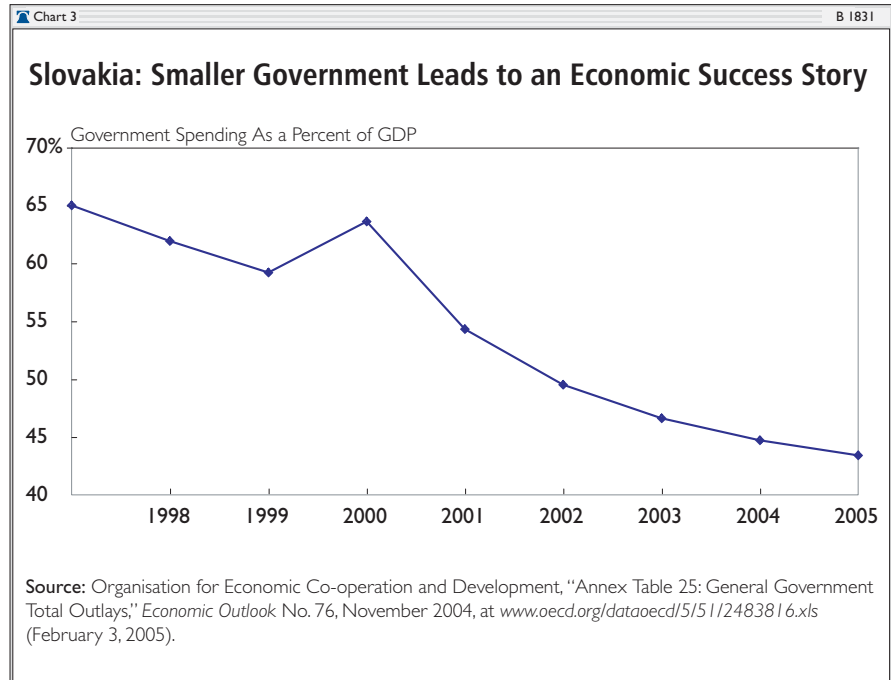
- **New Zealand** has an equally impressive record of fiscal rejuvenation. Government spending has plunged from more than 50 percent of GDP to less than 40 percent of economic output. One former government minister justifiably bragged:

When we started this process with the Department of Transportation, it had 5,600 employees. When we finished, it had 53. When we started with the Forest Service, it had 17,000 employees. When we finished, it had 17. When we applied it to the Ministry of Works, it had 28,000 employees. I used to be Minister of Works,

and ended up being the only employee.... We achieved an overall reduction of 66 percent in the size of government, measured by the number of employees.³⁴

It is especially amazing that New Zealand was able to accomplish so much in such a short period of time. In the first half of the 1990s, "Real spending per capita fell by 12 percent."³⁵ This fiscal reform, combined with other free-market policies, helped New Zealand recover from economic stagnation.

- **Slovakia** is a more recent success story, but it may prove to be the most dramatic. After suffering from decades of communist oppression and socialist mismanagement, Slovakia is becoming the Hong Kong of Europe. With a



32. James Gwartney, Robert Lawson, and Randall Holcombe, *The Size and Functions of Government and Economic Growth*, Joint Economic Committee, U.S. Congress, April 1998, p. 20, at www.house.gov/jec/growth/function/function.pdf (February 2, 2005).

33. Diane Francis, "Ireland Shows Its Stripes," *Financial Post*, October 9, 2003.

34. Maurice McTigue, "Rolling Back Government: Lessons from New Zealand," *Imprimis*, April 2004, at www.hillsdale.edu/newimprimis/2004/april/default.htm (February 2, 2005).

35. Bryce Wilkinson, "Restraining Leviathan: A Review of the Fiscal Responsibility Act of 1994," New Zealand Business Roundtable, November 2004, at www.nzbr.org.nz/documents/publications/publications-2004/restraining_leviathan.pdf (February 2, 2005).

19 percent flat tax and a private social security system, Slovak leaders have charted a bold course that includes significant reductions in the burden of government. As Chart 3 demonstrates, government spending has plummeted in just seven years from 65 percent of GDP to 43 percent of GDP.

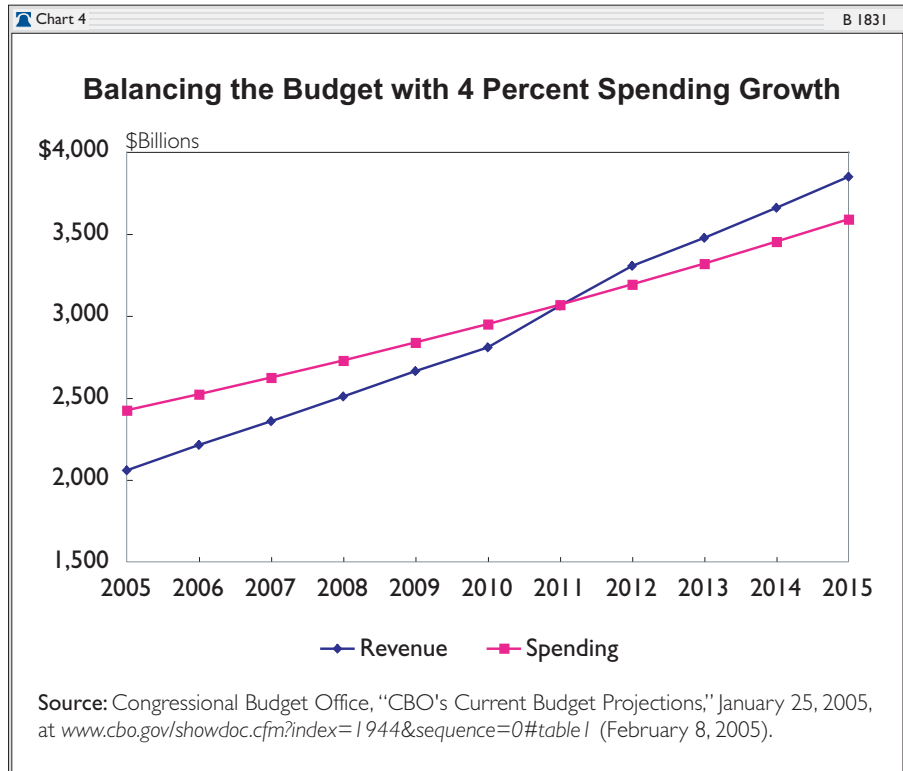
Policymakers in the United States should seek to replicate these successes. A smaller government will lead to better economic performance, and it also is the only pro-growth way to deal with the politically sensitive issue of budget deficits.

Even a modest degree of discipline can quickly generate a balanced budget. As Chart 4 illustrates, a spending freeze balances the budget in two to three years, and limiting the growth of spending to the rate of inflation balances the budget in four to five years. Even if spending is allowed to grow by 4 percent each year, the budget deficit quickly shrinks—even if the Bush tax cuts are made permanent.

Other Economic Policy Choices Matter

The size of government has a major impact on economic performance, but it is just one of many important variables. *The Index of Economic Freedom*, published annually by The Heritage Foundation and *The Wall Street Journal*, thoroughly examines the factors that are correlated with prosperity, finding that the following policy choices also have important effects independent of the level of government spending:

- **Tax Policy.** The tax system has a pronounced impact on economic performance. For instance, the federal tax burden in the U.S. is about 17 percent of GDP, which is less than the aggregate tax burden in Hong Kong. Yet, since Hong Kong has a low-rate flat tax that generally does not penalize saving and investment, it



raises revenue in a much less destructive manner. Similarly, the current U.S. tax system raises about the same level of revenue as it did 25 years ago, but the associated economic costs are lower because marginal tax rates have been reduced on work, saving, investment, and entrepreneurship.

- **Monetary Policy.** The monetary regime will help or hinder a nation's economy. Inflation can quickly destroy economic confidence and cripple investment. By contrast, a stable monetary system provides an environment that is conducive to economic activity.
- **Trade Policy.** A nation's openness to trade exerts a powerful impact on economic prosperity. Governments that restrict trade with protectionist policies saddle their nations with high costs and economic inefficiencies. Conversely, free trade improves economic efficiency and boosts living standards.
- **Regulatory Policy.** Bureaucracy and red tape have a considerable effect on a country's economy. Deregulated markets encourage the efficient allocation of resources since decisions are

based on economic factors. Excessive regulation, by contrast, can result in needlessly high costs and inefficient behavior.

- **Private Property.** Independent of the level of government spending, the presence of private property rights plays a crucial role in an economy's performance. If government owns or controls resources, political forces are likely to dominate economic forces in determining how those resources are allocated. Likewise, if private property is not secured by both tradition and law, owners will be less likely to utilize resources efficiently. In other words, for any particular level of government spending, the security of private property rights will have a strong effect on economic performance.

These five factors are certainly not an exhaustive list. Other factors that determine a nation's economic performance include the level of corruption, openness of capital markets, competitiveness of financial system, and flexibility of prices. The *2005 Index of Economic Freedom* contains a thorough analysis of the role of all these factors in promoting economic growth.³⁶

Conclusion

Government spending should be significantly reduced. It has grown far too quickly in recent years, and most of the new spending is for purposes other than homeland security and national defense. Combined with rising entitlement costs associated with the looming retirement of the baby-boom generation, America is heading in the wrong direction. To avoid becoming an uncompetitive European-style welfare state like France or Germany, the United States must adopt a responsible fiscal policy based on smaller government.

Budgetary restraint should be viewed as an opportunity to make an economic virtue out of fiscal necessity. Simply stated, most government spending has a negative economic impact. To be sure, if government spends money in a productive

way that generates a sufficiently high rate of return, the economy will benefit, but this is the exception rather than the rule. If the rate of return is below that of the private sector—as is much more common—then the growth rate will be slower than it otherwise would have been. There is overwhelming evidence that government spending is too high and that America's economy could grow much faster if the burden of government was reduced.

The deficit is not the critical variable. The key is the size of government, not how it is financed. Taxes and deficits are both harmful, but the real problem is that government is taking money from the private sector and spending it in ways that are often counterproductive. The need to reduce spending would still exist—and be just as compelling—if the federal government had a budget surplus. Fiscal policy should focus on reducing the level of government spending, with particular emphasis on those programs that yield the lowest benefits and/or impose the highest costs.

Controlling federal spending is particularly important because of globalization. Today, it is becoming increasingly easy for jobs and capital to migrate from one nation to another. This means that the reward for good policy is greater than ever before, but it also means that the penalty for bad policy is greater than ever before.

This may be cause for optimism. A study published by the IMF, which certainly is not a free-market institution, has stated:

As the international economy becomes more competitive, and as capital and labor become more mobile, countries with big and especially inefficient governments risk falling behind in terms of growth and welfare. When voters and industries realize the long-term benefits of reform in such an environment, they and their representatives may push their governments toward reform. In these circumstances, policymakers find it easier to overcome the resistance of special-interest groups.³⁷

36. Marc A. Miles, Edwin J. Feulner, and Mary Anastasia O'Grady, *2005 Index of Economic Freedom* (Washington, D.C.: The Heritage Foundation and Dow Jones & Company, Inc., 2005).

For most of America's history, the aggregate burden of government was below 10 percent of GDP.³⁸ This level of government was consistent with the beliefs of the America's founders. As the IMF has explained, "classical economists and political philosophers generally advocated the minimal state—they saw the government's role as limited to national defense, police, and administration."³⁹ America's policy of limited government certainly was conducive to economic expansion. In the days before income tax and excessive government, America moved from agricultural poverty to middle-class prosperity.

Reducing government to 10 percent of GDP might be a very optimistic target, but shrinking the size of government should be a major goal for policymakers. The economy certainly would perform better, and this would boost prosperity and make America more competitive.

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37. Tanzi and Shuknecht, "Reforming Government in Industrial Countries."

38. See U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States: Colonial Times to 1970* (Washington, D.C.: U.S. Government Printing Office, 1975).

39. Tanzi and Shuknecht, "Reforming Government in Industrial Countries."