CHAPTER 4

Investing in America's Future

A MAJOR CHALLENGE of the 1990s will be to increase the rate at which the productive capacity of the U.S. economy grows. Increasing the rates of growth of productive capacity and living standards will require higher rates of saving and investment. Yet longstanding tax, spending, and regulatory policies impede national saving and investment. Partly, if not entirely, because of these government policies, Americans save and invest a smaller fraction of gross national product (GNP) than their counterparts in other industrialized countries.

The Federal Government cannot, alone, produce dramatic increases in capacity growth. But it can foster an environment conducive to rapid long-term economic growth. *The President is committed to maintaining America's economic leadership, and has thus made it a central element of his economic program to remove impediments to saving, investment, and innovation.*

A higher rate of growth will significantly increase living standards and expand opportunities for both current and future generations. The cumulative effect of even a modest increase in the economic growth rate is enormous. Italy had only 40 percent of the per capita income of the United Kingdom in 1870, but, with an annual growth rate about one-half percentage point higher, overtook the United Kingdom by the 1980s. Growth rate differences of fractions of a percentage point have a substantial effect on how rapidly living standards increase from one generation to the next.

Economic growth can shape society more broadly as well. Rapid growth creates good jobs, thereby increasing economic opportunities for everyone. The poor benefit not only from these new economic opportunities, but also from the greater willingness of others to share their gains. Higher economic growth can reduce the potential for conflicts between generations. As the baby-boom generation begins to reach retirement age early in the next century, the ratio of retirees to workers will rise dramatically. Improving the productive capacity of the economy will permit the United States to accommodate more easily the needs of the future elderly population.

The prospects for rapid, long-term economic growth in the United States depend on investment in factories, equipment, knowledge, and skills. The rate of investment in the United States

is below that of other major industrialized countries, in part because the United States saves at a lower rate than other countries. A higher rate of investment will increase the competitiveness of the U.S. economy. Reducing the bias toward current consumption will increase saving, thereby raising the accumulation of capital assets—both domestic and foreign—by Americans. This accumulation in turn will expand the resources available for future consumption. Raising the rate of national saving is essential to fostering greater increases in future standards of living.

Government policies can have a major impact on the environment for economic growth. As stressed in Chapter 3, credible, stable monetary and fiscal policies are a key to reducing uncertainty and to promoting long-term growth. Tax and spending policies designed to remove impediments to working, saving, investing, and innovating can have a strong positive influence on economic growth. For example, reductions in marginal tax rates and broadening of the tax base, especially after the Tax Reform Act of 1986, have reduced the impact of tax distortions on economic decisions. Reducing the uncertainty in the legal system, removing barriers to the free flow of capital across international borders, and adopting regulatory policies that maximize market flexibility and encourage innovation can all improve the climate for growth.

DETERMINANTS OF GROWTH

The Nation's productive capacity depends on the level of technology, the supply and quality of capital, and the number and skills of workers. Increased utilization of labor and capital translates quickly into growth in the output of goods and services. As in most economic expansions, much of the relatively rapid growth since the recovery began in 1982 can be attributed to increases in the employment and utilization of existing resources, although productivity growth has also played a role and, indeed, has improved since the 1970s. Because fewer opportunities to increase utilization of available resources remain, the economy will need to rely more heavily on other sources of growth in the 1990s.

TECHNOLOGICAL CHANGE

Technological advances improve the productivity of inputs and the quality of output, thereby increasing the rate of economic growth and raising living standards. Innovations—in the form of new products, new machines, new production techniques, and new communication and transportation methods—exert an important beneficial effect on growth. Entrepreneurs, taking substantial risks (and sometimes failing), often translate new ideas into new products or processes. The Administration has advanced policies de-

signed to spur investment in research and innovation and to provide a more favorable environment for entrepreneurial activity and new business formation.

INVESTMENT IN PHYSICAL CAPITAL

Investment is a second major vehicle for increasing the rate of economic growth. Increases in physical capital—such as tools and machinery—make the labor force more productive, as each worker has more capital to use. Further, new investment permits technological improvements to permeate the U.S. economy, providing each worker with better capital. Investment is also needed to start the new business ventures that help to give the U.S. economy its vitality. Sustained high investment leads to higher productivity, higher wages, and higher standards of living.

The cost and availability of financial capital are critical parts of the investment climate. Increases in the total supply of funds to finance investment decrease the cost and increase the availability of capital. Although domestic saving has provided the bulk of funds for U.S. investment in recent years, foreign capital inflows—reflecting in part the attractiveness of U.S. investment opportunities—have provided about one-sixth of investment financing. Increasing the rate of national saving will provide more funds for investment and, as discussed below, should help to reduce the U.S. trade deficit. For these reasons, removing impediments to saving is a high priority of the Administration.

INVESTMENT IN HUMAN CAPITAL

A third major source of growth is raising the number of workers and improving their skills. Efforts by workers to increase their skills through training and education is investment in human capital. A highly skilled work force and a flexible labor market have long been basic economic strengths of the United States. But the increased complexity and competitiveness of the world economy demand new skills, greater training, and additional flexibility. Chapter 5 analyzes the challenges and opportunities for growth in human capital in the next decade.

TECHNOLOGICAL PROGRESS AND ECONOMIC GROWTH

Technological change has played a central role in economic growth. Many famous innovations—in agriculture, textile manufacture, transportation, communications, and electronics—have played an important role in economic growth and have led to a transformation of society over the past two centuries. The combined effect of a host of less visible minor improvements in product designs and

production techniques has been equally important. There is a role for government policy in financing technological progress because the full benefits of research are rarely captured solely by the firm or individual undertaking the research. Rather, additional benefits accrue to society as a whole. Because these additional benefits cannot be captured as part of the private-sector return, there is a natural tendency for private markets to do too little research and development from society's broader viewpoint. The Federal Government can offset this tendency through policies to raise national spending on research and development.

FACTORS THAT AFFECT TECHNOLOGICAL PROGRESS

Many people view technological progress as the result of work by solitary scientists or inventors motivated solely by curiosity. Yet ample evidence suggests that economic factors influence innovation. Thomas Edison, after unsuccessfully trying to sell his first invention (an automatic vote counter), vowed that he would work only on ideas for things that people would buy. The size of the potential market determines the return on invention and therefore influences investment in applied research. Even in universities, the availability of funding influences the direction of basic research.

But invention is only the first step in technological progress. To raise economic growth, an idea must be translated into a marketable product or service, applied on a production line, or built into a new machine. Development, which brings the fruits of research to market, is expensive: two-thirds of U.S. research and development (R&D) expenditures in 1988 were devoted to development rather than to basic or applied research. The actual application of an innovation is an important step beyond development. Information about the technological advance must be disseminated, and workers must be trained to use it. In many cases, it is prohibitively expensive to modify the old capital stock to embody new technology. Therefore, *the rate at which new technology actually augments productivity depends in part on the rate at which new capital goods are created, i.e., on the rate of investment.* A recent study estimates that 20 percent of the contribution of technological change to growth in the United States between 1949 and 1983 came from advances that were embodied in capital.

Raising the rate of investment in the United States may increase the rate of technological progress in other ways, although the size of these effects is difficult to determine. Higher rates of investment shorten the lag between innovation and use, increasing the return on research efforts and spurring additional advances. Further, use of new capital equipment and facilities may trigger discoveries of new ways of doing business, new production processes, and new potential products.

TRENDS IN R&D SPENDING

The United States spent $127.7 billion on R&D in 1987. This level reflects dramatic growth, as real R&D spending grew more than fivefold since 1953 and doubled as a fraction of GNP. As shown in Table 4–1, the United States spends more on R&D than four other leading industrialized nations combined. The share of total world R&D performed by the United States has, however, fallen over the past 25 years as other countries have grown rapidly and have approached or reached the technological frontier.

TABLE 4–1.—*R&D Expenditures for Five Major Industrialized Countries, 1987*

	France[1]	West Germany	Japan[2]	United Kingdom[2]	United States
R&D expenditures (billions of dollars)	16.4	22.8	41.7	15.7	127.7
As a percent of GNP	2.4	2.8	2.8	2.4	2.8
Estimated nondefense R&D expenditures (billions of dollars)	13.1	21.6	41.4	11.7	88.6
As a percent of GNP	1.8	2.6	2.8	1.8	2.0

[1] Data for France are based on GDP; consequently, percentages may be slightly overstated compared to GNP.
[2] Data for Japan and the United Kingdom are for 1986.

Note.—Foreign currency conversions to U.S. dollars are calculated based on Organization for Economic Cooperation and Development purchasing power parity exchange rates.

Source: National Science Foundation.

To the extent that R&D produces knowledge with the same benefits regardless of the size of the economy, the absolute level of R&D spending is the critical measure of R&D investment. An alternative measure of national R&D spending is its intensity—the share of GNP devoted to R&D. The United States, West Germany, and Japan each currently spend about 2.8 percent of their GNP on R&D, with France and the United Kingdom spending only slightly smaller fractions of their GNP (Table 4–1). But a larger proportion of the R&D in the United States is defense-related. The $88.6 billion that the United States spent on nondefense R&D in 1987 was a smaller fraction of GNP than were nondefense R&D expenditures in West Germany and Japan.

Although investment in R&D is only part of the explanation for the rate of technological change, it is clearly important. Average private rates of return on R&D investment are extremely high: estimated rates exceed 20 percent a year. Moreover, these returns do not reflect all of the returns to R&D, because it is difficult for an innovator to capture all of the benefits of an innovation. Some innovations cannot be patented; some patents are hard to defend; all patents eventually expire. An innovation may have spinoffs or ramifications that others bring to market. Users of the product, as well as the innovator, receive benefits. For these and other reasons, the returns to society of R&D investment are estimated to average twice those to the firm that makes the investment.

THE ROLE OF GOVERNMENT

For basic research, the difference between the benefits to society and the returns to those who perform the research is often particularly large. Basic research frequently increases knowledge that has wide application. Because it is usually difficult or inefficient to keep advances in basic research secret, the benefits accrue broadly. Private firms must weigh the costs and risks of a potential investment in basic research against the modest fraction of the total expected social benefit that they generally receive, and thus tend strongly to underinvest in basic research. Moreover, basic research contributes to the strength of universities, which train scientists and engineers for the private sector, as well as to our national defense. *The Federal Government has a key role in supporting basic research.*

Although industry performs about three-quarters of all R&D in the United States, the Federal Government plays an enormous role in science and technology. It provides 47 percent of the funds for R&D, most of which is undertaken by industry and universities. The Federal Government carries out R&D at many facilities, accounting for 11 percent of national R&D spending. It helps to finance the education of scientists and engineers. It protects the intellectual property rights of innovators through the patent system and laws dealing with copyrights, trademarks, and trade secrets. It encourages private innovation through a 20-percent income tax credit for research and experimentation (R&E) and by allowing most R&D expenses to be deducted for tax purposes immediately rather than spread over several years.

STRENGTHENING THE U.S. RESEARCH BASE

The Administration has proposed a broad program of initiatives that will strengthen the Nation's basic research base and enhance private-sector incentives to translate this knowledge into productive innovations.

Improving the Legal Environment

The Administration has advanced important proposals to improve the legal environment for innovation. First, the Administration is aggressively pursuing improved international protection of intellectual property. The current negotiations in the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) are an important forum for developing better international rules. Negotiations on intellectual property rights are also being conducted in the World Intellectual Property Organization and in trilateral talks with the European Community and Japan.

Second, the Administration has proposed reform of product liability laws. The current product liability system, with 50 different

State laws, generates excessive litigation, increases the cost of doing business in the United States, and discourages innovation, particularly in the form of new products. The Administration supports the adoption of uniform product liability standards based on three principles of fairness: the right of an innocent person to fair compensation for actual damages; liability based on responsibility for harm and not ability to pay; and encouragement of alternatives to costly litigation. The proposed changes to product liability laws would maintain incentives to produce safe products, but would restore balance to the tort system and reduce uncertainty—particularly for new products.

Third, the Administration supports continued elimination of unwarranted regulation. Deregulation can spur innovation as well as lower prices. New telephone equipment was rapidly introduced after deregulation of the market. Airlines created more efficient route structures after deregulation. Lives are extended and research is accelerated by the expedited approval of drugs for acquired immune deficiency syndrome (AIDS).

Deregulation also requires a continuous reexamination of existing regulatory policies in light of new technologies. Antitrust regulation, in particular, must be sensitive to changes in technology and in international competition. Unnecessary and burdensome regulations must not be allowed to stifle new products and processes.

Restoring the Capital Gains Tax Differential

Although applied research and development have high average rates of return, they are also quite risky. The high cost of capital such risk produces is a particularly onerous burden for new ventures and small businesses, which have only limited access to traditional sources of finance. Much of the return to entrepreneurs and their backers who bring new products to market—particularly through startup ventures—comes through increasing the value of the business. Reducing the tax rate on capital gains will reward those who bring successful ideas to market and will help provide a climate that encourages businesses to invest in new technologies and products.

Because capital gains are taxed only when assets are sold, the current high tax rate discourages the sales of assets and locks in investors. Reducing the tax rate on capital gains will free these investors to search for more productive new investments.

The Administration has proposed restoring a capital gains tax differential such as existed before the Tax Reform Act of 1986. Most major foreign competitors tax long-term capital gains less heavily than ordinary income, if they tax them at all. A lower tax rate on capital gains will encourage entrepreneurs to take risks to advance themselves by creating wealth for others: new firms hiring

new workers producing new products for new markets here and abroad. *Reducing the capital gains tax rate will encourage innovation and, by increasing investment, hasten the adoption of these innovations.*

Making Permanent the R&E Tax Credit

Under current law, the R&E credit is scheduled to expire on December 31, 1990. Before 1989, the credit was designed so that higher R&E expenditures reduced future credits, which diminished the incentives to undertake further research. In 1989, the incentives in the R&E credit were improved without substantially affecting revenue. *The Administration proposal to make the credit permanent would be an even more significant reform.* It would permit businesses to establish and expand research facilities without fearing that the tax laws will suddenly change.

Increasing Basic Research Funding

America's leadership in science and technology depends on excellence in basic research. Support for basic research, especially at the Nation's universities, makes a critical investment in the 21st century, both by creating knowledge and by training a new generation of scientists and engineers.

The Administration believes that Federal investment in research should focus on fundamental advances in science and technology that have broad relevance and that no individual firm or industry would have the incentive to produce on its own. Accordingly, the Administration supported substantial increases in Federal investment in basic and applied research in the 1990 budget. For 1991, the Administration has a number of new initiatives designed to expand the human frontier. These initiatives include major increases in funding for the National Science Foundation's research programs (continuing the progress begun in fiscal 1990 toward doubling the Foundation's budget by 1993), for space science and exploration to maintain America's leadership into the next century, and for the Superconducting Super Collider to provide new insight into the fundamental structure of matter. Increased funding will be more effective if it is accompanied by improved management of Federal research programs. One way to increase the effectiveness of Federal research spending is to encourage the timely transfer of scientific advances to private-sector applications.

Relying on the Market

Some have argued for a broad new Federal role: choosing specific civilian technologies and financing their development or commercialization by special tax treatment or direct subsidy—a so-called industrial policy. Such an expansion of the current Federal role is strongly opposed by this Administration.

The private sector has inherent advantages over government in identifying potentially useful new technologies. Private decisions are disciplined by careful market evaluations of their prospects. Government decisions, in contrast, are often influenced by noneconomic objectives and based on information supplied by self-interested parties, without regard to taxpayers' cost.

Governments in the United States and elsewhere have shown themselves to be less able than private businesses to pick specific technologies that will be commercially successful. They have often supported fashionable technologies with powerful advocates, rather than those that are economically productive. The billions of dollars in development costs and operating losses that have been invested in the Concorde by the British and French governments illustrate this phenomenon well. Moreover, in many cases governments have continued to support technologies in which they have invested, even if those technologies have been long since demonstrated to be economically unsound by market and technological developments. For example, the synthetic fuels program in the United States lived on for years after its economic futility was evident to most observers.

Over the past 40 years, the world has learned that excessive government involvement in the economy leads to unsound decisions, chokes off productive innovation, and, in the final analysis, slows growth and costs jobs. *The best way to support development of civilian technology is through improving private incentives for applied research and development, not by attempting the impossible job of second-guessing private-sector investments.* It is appropriate, however, for the government to support the development of technologies clearly related to national defense that a careful analysis indicates would not be generated by the private market. In such cases, the government has always relied primarily on the private sector to undertake the R&D required in the development process.

The Administration's proposals will improve incentives for innovation by:

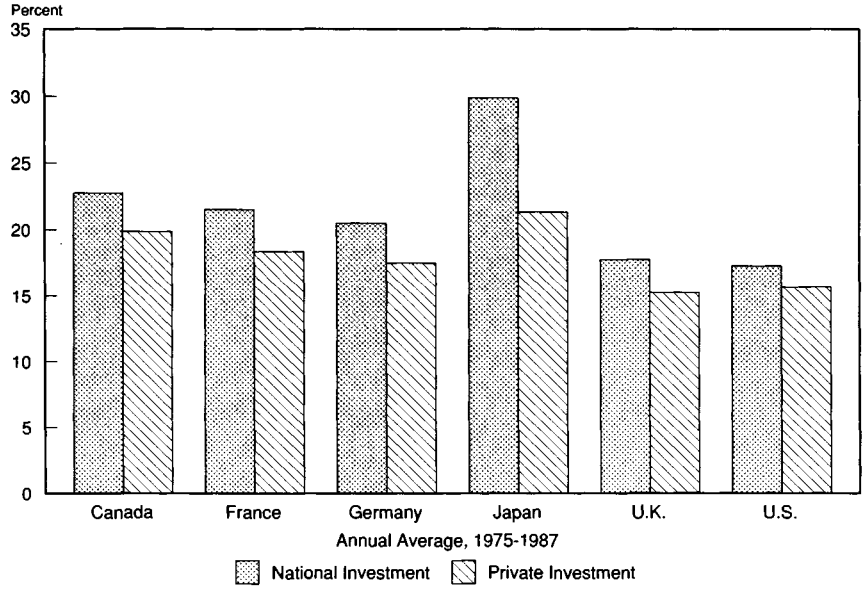
- Protecting intellectual property through international negotiations,
- Reforming product liability laws to restore balance to the tort system,
- Removing regulatory barriers to research, innovation, and development,
- Reducing the tax rate on capital gains to spur entrepeneurial activity,
- Making the R&E tax credit permanent to reduce uncertainty, and
- Substantially increasing funding for the basic research essential to America's future.

CAPITAL INVESTMENT

The United States has devoted substantial resources to investment, but the U.S. investment rate is low by international standards. Gross domestic investment, as a percent of GNP in the United States, is the lowest of the six major industrialized countries shown in Chart 4-1. Between 1975 and 1987, while the other countries devoted an annual average of 22.5 percent of their GNP to national investment, the United States invested only 17.3 percent. Even in Canada—a North American country with a similar economic structure—investment as a share of GNP was 5.5 percentage points higher than in the United States.

Chart 4-1

GROSS FIXED INVESTMENT AS PERCENT OF GNP. Investment in the United States between 1975 and 1987 was low by international standards.



Source: Organization for Economic Cooperation and Development.

One reason that the United States has a lower investment rate than other countries is that government policies are biased against investment. Moreover, several past attempts to address this policy imbalance have been abandoned after a short period, leading to increased uncertainty in the investment environment. *The Administration is committed to removing impediments to investment and to creating a stable environment conducive to long-run growth.*

CAPITAL ACCUMULATION IN THE UNITED STATES

The comparatively low rate of investment in the United States is not a recent phenomenon. As shown in Chart 4–2, real capital purchases have fluctuated around 16 percent of real GNP for the entire postwar period. During the long expansion since 1982, however, U.S. real gross investment performance has been quite strong. Similarly, the rate of investment in nonresidential fixed capital compares favorably with the historical record.

Using an alternative measure of investment, however, the recent U.S. investment record appears less impressive, even by historical standards. Chart 4–3 shows investment rates excluding depreciation—real net investment as a fraction of real net national product (NNP). (NNP is GNP less depreciation.) Using this measure, net investment has remained below the postwar average for the decade of the 1980s.

The difference between the gross and net investment rates during the 1980s reflects a change in the composition of the capital stock. Over time, equipment has risen as a share of the total capital stock. Because equipment wears out more quickly than other capital, this shift has raised the fraction of the capital stock that depreciates each year. Because measuring depreciation is difficult, true economic depreciation may differ from the estimates in the national income and product accounts. Nonetheless, the movement toward a greater share of equipment in the capital stock implies that the difference between gross and net investment has grown over time.

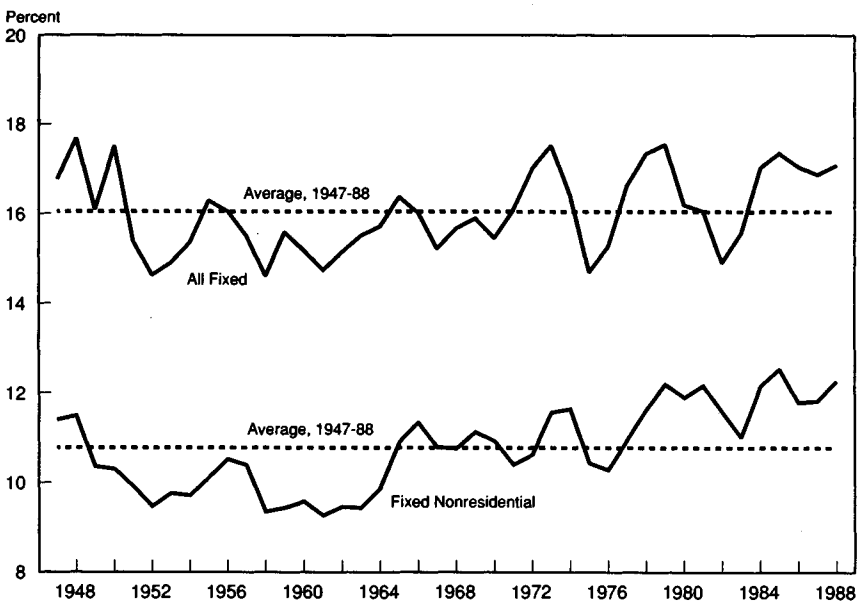
The significance of this trend goes beyond accounting. The gross rate of investment is particularly important when new capital is necessary to incorporate technical advances into production. Both replacement investment and capacity expansion will offer the opportunity to install improved equipment and newer technologies. In these circumstances, increasing the gross rate of investment permits faster adoption of innovations, raising the quality of the capital stock.

On the other hand, investment also contributes to economic growth by increasing the total amount of capital available for production. Only investment above the amount lost to depreciation, or net investment, serves to increase the available capital stock.

Neither investment measure alone is sufficient to judge the U.S. investment performance. The gross investment rate is a better indicator of opportunities to improve the quality of the capital stock, but may substantially overstate total capital accumulation. The rate of net investment may understate improvements in capital, but will better measure increases in the stock of available capital. *On balance, the investment rate in the United States is healthy by*

Chart 4-2

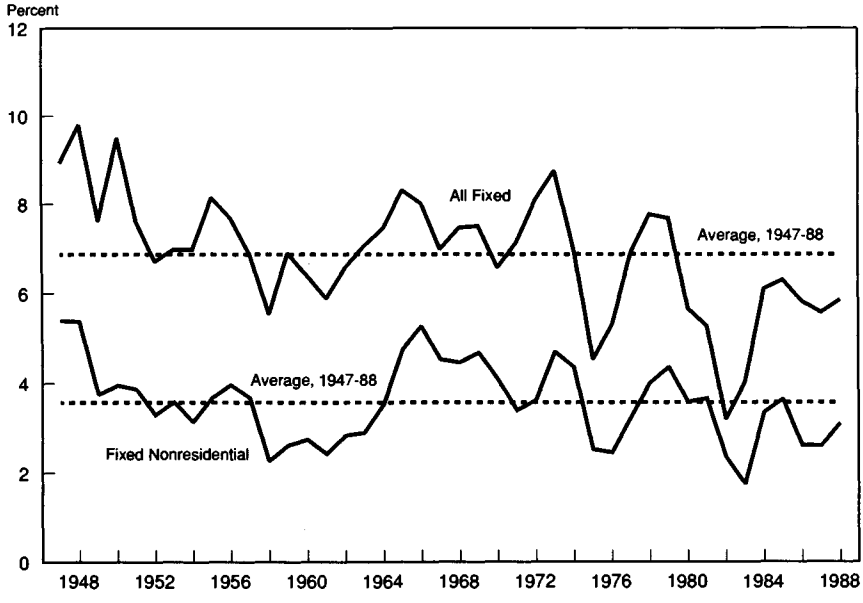
REAL GROSS INVESTMENT AS PERCENT OF GNP. Gross investment was high in the 1980s.



Source: Department of Commerce.

Chart 4-3

REAL NET INVESTMENT AS PERCENT OF NNP. Net investment was below average in the 1980s.



Source: Department of Commerce.

historical standards, but remains below the investment rates of other nations.

HOW A HIGHER INVESTMENT RATE BENEFITS THE ECONOMY

At first glance, small changes in the investment rate may not seem to have important consequences for economic growth. A simple example shows that this impression is misleading. Consider the effect of raising the net private investment rate by 1 percentage point of NNP. Using 1988 levels, this higher rate of investment would raise the annual growth rate of the net private capital stock by 0.5 percentage point. After 10 years, this higher growth rate would generate 6.4 percent more capital. A conservative estimate of capital's contribution to economic growth is its share of national income—roughly 30 percent. Using this estimate, the increased capital accumulation would imply that the level of GNP would rise by an additional 1.9 percent, which is equivalent to an increase in the annual growth rate of GNP of 0.2 percentage point.

Small Improvements Matter in the Long Run

Such seemingly small improvements have important implications over time. A 0.2 percentage point increase in the annual growth of output would substantially speed improvements in the standard of living for future generations. Raising the annual growth rate of real GNP from 2.8 percent to 3.0 percent, for example, would ultimately yield 10 percent more national income after 50 years than otherwise would have been available. This effect is sizable: 10 percent of 1988 GNP was $490 billion, much larger than total residential and nonresidential construction spending or than spending for defense and medicare combined.

Thus, even though the consequences of changes in the national investment rate are substantial, they emerge only gradually. Because even substantial increases in the rate of capital accumulation have only a small immediate effect on GNP, policymakers may underestimate the importance of a favorable investment climate. Moreover, the benefits of good policies that are not pursued cannot be observed directly. The costs of inappropriate policies are accordingly difficult to identify.

ALLOWING CAPITAL TO FIND ITS MOST PRODUCTIVE USE

Capital should be allowed to move freely to its most productive use. Private capital markets, driven by the search for the highest return, weed out investments expected to be inefficient or unsuccessful. Thus, *markets are the best judges of investment opportunities, and success and failure are best determined in the competitive marketplace.*

The sharp reductions in marginal tax rates in 1981 and 1986 have significantly reduced Federal Government interference with the allocation of funds among types of investment. The Federal Government has a smaller impact on private choices. Nevertheless, Federal Government policies still distort the allocation of funds across different industries because some industries are protected and others subsidized. While Federal policies sometimes provide investment funds directly, more often they alter investment incentives. For example, the double taxation of corporate income reduces incentives for corporate compared with noncorporate investment. Similarly, the mix of investment between purchases of equipment and additional business construction has been affected by recent swings in tax policy. Government tax, regulatory, and spending policies should interfere as little as possible with the efficient allocation of investment funds provided by capital markets. The Administration believes that preserving the efficient functioning of these markets is an important foundation for healthy growth.

INVESTING IN INFRASTRUCTURE CAPITAL

Roughly one-quarter of the capital stock in the United States is owned by Federal, State, and local governments. It is typical for discussions of investment behavior to focus on business investment, but government capital accumulation can also affect growth. Because the value of its product is not revealed through market transactions, the role of government capital in supporting the economy is sometimes underappreciated. For the same reason, however, government investment is not automatically subject to the same comparison of expected costs and returns that markets impose on private investment. Government investment plans should accordingly be carefully scrutinized using rigorous benefit-cost analysis.

The bulk of nonmilitary government capital is owned by State and local governments, although the original investment may have been in part federally financed. State and local government capital consists largely of schools and public infrastructure such as highways, streets, bridges, and sewers. Over the past two decades, a slowdown has occurred in State and local capital accumulation; the growth of the capital stock fell from an average rate of 4.9 percent a year in the 1950s and 1960s, to 2.2 percent in the 1970s, and to 0.9 percent in the 1980s. Part of this decline simply reflects a reduction in the size of the school-age population and the completion of road networks. But part of this decline is a real slowdown, and inadequate government infrastructure can impede improvements in productivity growth.

A growing share of travel is carried by aviation, but many parts of the current aviation infrastructure need to be modernized and expanded. The Administration proposes substantial funding in-

creases for aviation programs in 1991. These programs include modernization of aviation facilities and equipment, expansion of airport capacity, and increased funding for operations and R&D.

State and local governments—along with the private sector—must also fulfill their responsibilities to maintain and expand the Nation's infrastructure. *Taking advantage of productive opportunities to maintain and improve the infrastructure is an important part of Federal, State, and local government policies to raise economic growth.*

FINANCING NATIONAL INVESTMENT

For most of the postwar period, U.S. domestic saving was sufficient to finance domestic investment. As Table 4-2 shows, from 1950 to 1979, gross national saving—the sum of household, business, and government saving—exceeded gross private domestic investment in the United States, leaving an average of 0.3 percent of GNP available for net U.S. investment abroad. In those years, international capital flows were often ignored by policymakers and analysts, a practice that would be mistaken in today's economic environment.

TABLE 4-2.—*The Changing Finance of Investment, 1950–88*

[Percent of GNP]

	1950 to 1979	1980 to 1988
Gross private domestic investment	16.0	15.8
EQUALS:		
National saving	16.3	14.1
Private	16.8	16.7
Household	5.0	3.8
Business	11.8	12.9
Government	−.4	−2.6
Federal	−.6	−3.9
State and local	.2	1.3
PLUS:		
Net foreign capital inflows	−.3	1.6

Note.—Detail may not add to totals because of rounding.
Source: Department of Commerce, Bureau of Economic Analysis.

FOREIGN SOURCES OF FINANCING FOR NATIONAL INVESTMENT

The total flow of foreign saving into the United States has been about one-sixth of domestic investment in recent years. Between 1980 and 1988, the share of GNP devoted to gross investment was essentially the same as the average from 1950 to 1979, but the share of national saving fell more than 2 percentage points of GNP. As a matter of arithmetic, the difference between domestic

investment and domestic saving was provided by increased net inflows of foreign saving into the United States.

Foreign individuals and institutions invest their saving in the U.S. capital market to take advantage of available productive, high-yield investments. In 1988, these flows of foreign saving into the United States totaled $219.3 billion. Similarly, some U.S. domestic saving is directed toward investment opportunities in other countries; in 1988, this saving amounted to $82.1 billion. The difference, $137.2 billion in 1988, is the net capital inflow.

Foreign saving in the United States takes two forms. Some is foreign direct investment (FDI)—defined as development of a new business or acquisition of at least a 10-percent interest in a domestic company or tangible asset, such as an office building. The remainder is portfolio investment—purchases of financial instruments such as stocks or bonds. Of total foreign investment in the United States in 1988, $58 billion, or 26.7 percent, was FDI. FDI in the United States has grown rapidly in recent years. According to balance of payments measures, the book value of all foreign direct holdings reached $329 billion at the end of 1988, having increased at an annual rate of 19 percent from its 1983 value of $137 billion.

Some commentators view the growth in FDI with concern, arguing that direct foreign ownership of assets is somehow different from, and more threatening than, "passive" portfolio investments such as Treasury bills or corporate stocks and bonds. In general, such concerns are misguided. FDI benefits both foreign investors and the host economy. Like domestic investment, it can create jobs, produce valuable technological spillovers, and generate long-run increases in productivity. *Interfering with the free flow of foreign direct investment into the United States would harm the U.S. economy.*

The Magnitude of FDI in Perspective

The magnitude of FDI is widely misperceived. Although FDI in the United States has increased a great deal in the past several years, cumulative foreign holdings in the United States remain modest by international standards. In many other industrialized countries, total foreign holdings are a substantially larger proportion of gross domestic product (GDP) than in the United States. Moreover, with the exception of Japan, cumulative investment by the United States in other countries (again as a proportion of host-country GDP) far exceeds these countries' respective cumulative investment in the United States (Table 4-3). Indeed, because investments are measured at book value or acquisition cost, the figures in Table 4-3 understate the point. While the bulk of foreign holdings in the United States was recently acquired, many U.S. investments abroad were made in the 1950s and 1960s. The historical ac-

quisition cost greatly understates the current market value of these older U.S.-owned assets.

TABLE 4-3.—*Foreign Direct Investment, 1988*

[Direct investment holdings as percent of host-country GDP]

	Foreign holdings in the United States	U.S. holdings in foreign country
United Kingdom	2.1	5.7
Japan	.8	[1].5
Netherlands	1.0	6.8
Canada	.6	12.2
West Germany	.5	1.8
Switzerland	.3	10.4
France	.2	1.3

[1] Data for 1987.

Sources: Department of Commerce and International Monetary Fund.

Thus, *the recent increase in FDI is properly viewed not as an event unique to the United States, but as part of a process of global economic integration.* It is instructive to recall that the growth of U.S. direct investment abroad in the 1950s and 1960s was greeted with widespread mistrust in Canada, Europe, and many developing countries. One prominent commentator warned that U.S. investment would destroy established European companies. Hindsight shows that such alarmist sentiment was inappropriate, and that U.S. investment significantly benefited European economies.

In fact, foreign firms play a relatively small role in the American economy. Companies with 10 percent or more foreign ownership employ less than 4 percent of the U.S. labor force. Even in manufacturing, where the FDI presence is the largest, such companies account for under 14 percent of assets and employ only 7 percent of all workers. Thus, in absolute terms, as well as in comparison with other countries, the magnitude of foreign direct investment in the United States is relatively modest.

DOMESTIC SAVING AND NET CAPITAL INFLOWS

International capital flows break the link between domestic saving and investment rates in the short run. Net foreign capital inflows in the 1980s have helped to sustain U.S. investment and thus have contributed to economic growth, despite the low U.S. national saving rate. Nonetheless, for several reasons, increases in the national saving rate would further enhance growth in U.S. living standards.

First, over longer periods, the investment rate in advanced economies is ultimately constrained by the supply of domestic saving. Therefore, raising domestic saving is essential to sustaining the high levels of investment on which economic growth depends

over the long run. It is uncertain to what extent the United States could rely on sustained large capital inflows, even if it chose to do so.

Second, net capital inflows have, in recent years, allowed U.S. spending to exceed U.S. income. However, this pattern cannot persist indefinitely. Ultimately, although no one can be sure when, the United States will have to move to both a current account surplus and a net capital outflow as foreigners receive the returns on their investments in the United States. Some have inaccurately claimed that this transition will mean a reduction in U.S. living standards. In fact, the transition will require only that U.S. income grow faster than U.S. spending. The more rapidly U.S.-owned capital accumulates, the more rapidly U.S. income will grow. More rapid accumulation of U.S.-owned capital requires a higher rate of U.S. national saving. A higher saving rate will thus permit continued healthy growth of U.S. living standards during the transition to a current account surplus.

Third, increased net foreign capital inflows are accompanied by reduced net exports of goods and services (Box 4-1). This can lead to calls for protectionist trade policies, which interfere with international trade of goods and services and can lower living standards in the United States and abroad.

The goal of Administration policy is to remove impediments to national saving. Increased national saving will allow a higher level of domestic investment that is sustainable over the long run—a level that can be achieved regardless of the future of net foreign capital flows.

DOMESTIC SAVING TO FINANCE NATIONAL INVESTMENT

If U.S. investment performance is poor by international standards, recent U.S. saving performance is abysmal. Chart 4-4 indicates that the national saving rate has been much lower in the United States than in other industrial economies. Although substantial difficulties arise in measuring "the" rate of saving, by any measure the national saving rate in the United States is the lowest of these countries. Moreover, the lower rate of saving does not appear to be concentrated in one sector of the U.S. economy. Businesses, governments, and households all save at lower rates than their counterparts in other advanced economies.

The gross national saving rate (national saving as a percent of GNP) varied around 16 percent during the postwar period until the early 1980s, when it fell, as shown in Chart 4-5. Although the gross saving rate has partially rebounded over the past 2 years, during the 1980s it averaged more than 2 percentage points less than in the previous three decades (Table 4-2).

Box 4–1.—The Link Between Lower National Saving and Net Export Performance

As a matter of accounting, changes in net capital inflows and changes in trade flows are linked. Changes in trade flows do not, however, solely determine changes in net capital inflows. Neither are changes in net capital inflows totally responsible for movements in the balance of trade. Instead, economic factors affect both trade and capital flows simultaneously. It is generally recognized, however, that the imbalance between the U.S. saving rate and the higher U.S. investment rate is the fundamental source of the U.S. trade deficit.

When foreign investors enter U.S. capital markets, they must first exchange foreign currencies for U.S. dollars. In large part, these foreign currencies will ultimately be used to pay for goods and services imported from abroad. At the same time, U.S. investments abroad create similar transactions involving the U.S. dollar. The excess of foreign investment in the United States over U.S. investment abroad is the net capital inflow or borrowing from abroad. In order to balance the supply of dollars with the demand, this excess must be matched by a corresponding excess of imports to the United States over exports to other countries.

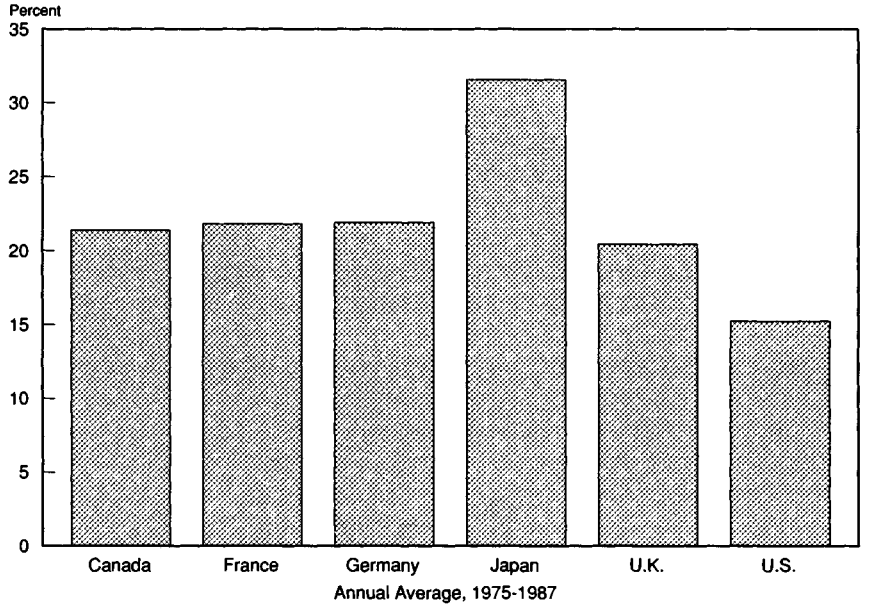
Adjustments in foreign exchange rates and differences in rates of return serve to coordinate this process by altering the incentives for investment and the attractiveness of imports and exports. For example, as capital flows into the United States, purchases of dollars raise the exchange value of the dollar, making imports cheaper and raising the purchase price of U.S. exports.

The sectoral gross saving rates shown in Table 4–2 help to identify the sources of this decline. The private saving rate has declined only slightly, but the composition of saving has shifted. During the period 1980 to 1988, the household saving rate fell by more than 1 percentage point relative to the 1950–79 period, but this decline was almost fully offset by a rise in business saving.

One possible reason for the decline in household saving in the 1980s is the large rise in household wealth attributable to increases in the value of household assets. For example, the stock market boom caused a doubling of the value of corporate stock owned by households between 1981 and 1988. Increases in wealth that are not spent are conceptually equivalent to new saving, but are not included in the national income and product accounts.

Chart 4-4

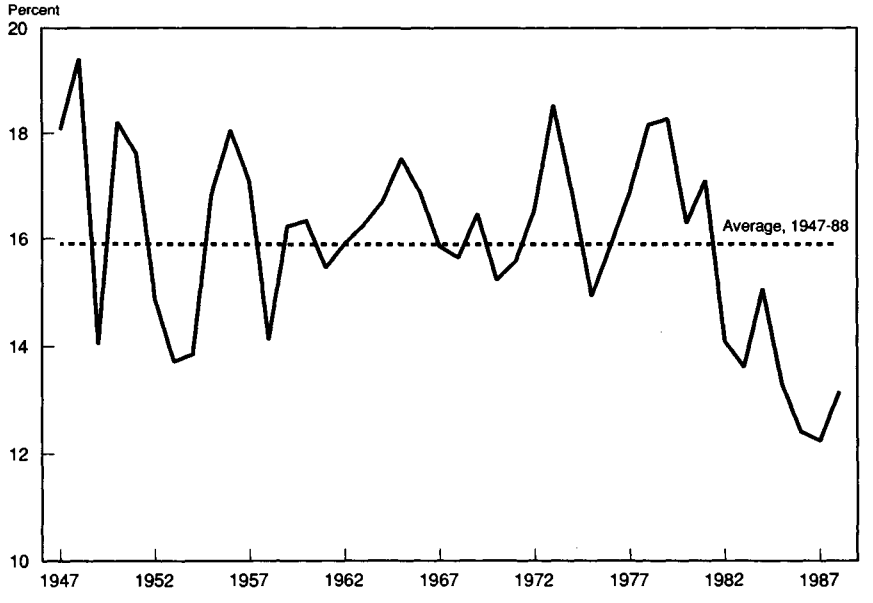
GROSS NATIONAL SAVING AS PERCENT OF GNP. Saving in the United States over the period 1975-1987 was low by international standards.



Source: Organization for Economic Cooperation and Development.

Chart 4-5

GROSS SAVING AS PERCENT OF GNP. National saving was below its historical average in the 1980s.



Source: Department of Commerce.

The government borrowing (or dissaving) rate has risen by more than 2 percentage points between the 1950–79 period and the 1980s, although State and local governments ran surpluses. In the 1980s, Federal Government deficit spending increased by more than 3 percentage points of GNP from its average over the period 1950 to 1979. *Federal Government deficits were the principal reason for lower gross national saving in the United States during the 1980s.*

For some purposes, it is useful to take account of the wearing out of the capital stock by considering the net saving rate: gross national saving minus depreciation, as a percentage of GNP. The decline in the net saving rate (4.5 percentage points) is even larger than the fall in the gross rate in the 1980s. While the increase in depreciation can be traced to shifts in the composition of assets, as discussed above, its measurement is imprecise. Using net saving rates, the decline in national saving reflects lower saving by all three sectors. Between 1950 and 1979, the business saving rate net of depreciation was 2.9 percent, while between 1980 and 1988, the net business saving rate was only 1.8 percent.

POLICY TOWARD INVESTMENT

Increased capital investment is a necessary part of more rapid U.S. economic growth. Policies should be designed to enhance the opportunities to make productive investments. To do so requires an understanding of the factors that influence firms' demands for capital investment. Moreover, in an increasingly integrated global economy, policies should not discriminate among investments by inhibiting foreign direct investment.

FACTORS THAT AFFECT DOMESTIC INVESTMENT

Investment is largely determined by four factors: expected growth in future demand for business output and the cost of capital (particularly real interest rates) affect expected profitability, business confidence influences the risk associated with investment, and business cash flow alters liquidity. When businesses expect demand to grow in the future, they must anticipate the pressure on productive capacity. Unless current capacity utilization is low, the need to increase the stock of plant and equipment raises investment. Studies find that growth in current output serves as a good proxy for expected growth in future demand and, of the four factors, has the strongest effect on investment.

Firms will invest as long as the expected profitability of investment exceeds the user cost of capital (Box 4–2). A higher cost of capital reduces investment by requiring investment projects to meet a higher standard. The magnitude of this reduction depends

on business expectations—investment responds most strongly to lasting changes in the cost of capital.

Box 4-2.—The User Cost of Capital

The user cost of capital for any specific investment, such as a new machine, is the minimum expected pre-tax rate of return it must yield in order to be profitable. The user cost includes all costs associated with financing and operating the machine. Two components of the user cost are strongly affected by government policy.

The first of these is the cost of the money tied up in the investment (sometimes called the cost of capital or the cost of capital funds). This cost varies directly with market interest rates and is thus affected by monetary and fiscal policies and the relation between domestic investment and domestic saving.

The second component is the taxes associated with operation of the investment. Thus, higher tax rates raise the user cost of capital, while more rapid depreciation allowances lower it by postponing tax payments. The double taxation of corporate profits increases the cost of equity-financed investments.

In addition to its cost, the availability of capital is a significant factor. Greater business cash flow potentially aids capital formation by allowing firms to finance investment internally. Cash flow is particularly critical when adverse financial market conditions raise the difficulty of external finance. Empirical studies support this argument, finding that higher levels of cash flow are related to greater investment.

Finally, although difficult to measure, increased confidence about the economic future reduces the perceived risk of investment decisions, thereby promoting investment. Policies should reflect the determinants of investment and be designed to minimize interference with investment decisions. *Investment responds most strongly to sustained increases in output and to maintained reductions in the cost of capital.*

IMPLICATIONS FOR DOMESTIC INVESTMENT POLICY

The analysis of key investment factors—output, the cost of capital, cash flow, and the uncertainty of the investment environment—offers insight into policies that can increase investment.

Policy Stability

Monetary and fiscal policies affect both the level and volatility of the cost of capital and sales growth. Erratic monetary and fiscal policies make the path of inflation and output more uncertain, inducing lenders and investors to demand a higher rate of return as

insurance against the risks of inflation and economic downturns. Policies that keep the economy close to its potential will improve expectations about sales growth, and thus encourage investment. When people expect stable growth, the risk component of interest rates is lowered and the cost of capital falls.

Stable tax and regulatory policies also encourage investment. When the rules change sporadically in ways that penalize previous investment, firms quickly learn that they cannot rely on current taxes and regulations in the future. These firms are less likely to invest or to respond to the new incentives. Governments, like individuals, benefit from reputations for credibility.

Unstable policy can also influence the timing and type of investment. Because firms do not know exactly what will happen in the future, they must consider the risk associated with their choices. If the environment is highly uncertain, investors may be less willing to commit their money today, preferring to wait for the cost or likelihood of mistakes to decline tomorrow. Those who do invest will likely shift toward short-term ventures at the expense of long-term undertakings.

Maintaining consistent policy toward investment, although difficult, is crucial. Investment spending each year involves a mix of new projects and completions of those started in the past. Hence, it takes time for investors to respond to changes in policies. Moreover, as discussed earlier, even substantial changes in the rate of investment require time to alter the rate of economic growth visibly. Thus, policymakers may be tempted to abandon well-designed, long-run policies in the interests of short-run expediency.

Given the desirability of stable policies, it is important to avoid sharp swings in investment incentives. The Economic Recovery Tax Act of 1981, for example, contained sharply accelerated depreciation allowances that were scaled back or eliminated the following year. Temporary incentives may produce a temporary investment boom, but will increase uncertainty about the long-run course of policy and ultimately discourage long-term growth.

Tax Policy Toward Investment

Tax policy significantly affects the cost of capital. The corporate and individual income taxes alter the cost of capital, as do depreciation allowances, and, in some past years, investment tax credits. Tax-induced increases in the cost of capital can lower overall investment. In addition, unequal tax treatment of different types of capital distorts incentives, alters the allocation of investment funds, and reduces investment efficiency.

The taxation of capital income at both the corporate and individual shareholder levels increases the cost of capital for corporations. Corporations pay taxes on earnings from new investment. Shareholders pay additional taxes on these earnings when they receive

dividends or when their sale of shares results in a capital gain. This double taxation of the returns on equity has existed for over 70 years and increases the cost of capital for investments financed in whole or part by corporate shareholders. Because corporations may deduct interest payments, but not dividends, the double taxation of returns on corporate equity also induces corporations to rely more heavily on debt finance. The induced increase in debt, in turn, raises the risk of corporate bankruptcies, with the attendant disruption and job loss.

It has been argued that double taxation is illusory because tax-exempt entities such as pension funds are large suppliers of capital funds, and they are not affected by Tax Code provisions applying to individuals. Similarly, a large fraction of current investment in the United States is financed from foreign sources. For these investment funds, the incentives depend upon the tax treatment of U.S. earnings in the home country.

These observations notwithstanding, the evidence favors a view that firms behave as if their new investment funds come, at least in part, from new equity. As a result, the cost of capital depends on the combined effect of corporate and individual taxes. The double taxation of equity earnings raises the cost of capital to U.S. corporations. Reducing combined taxes on equity earnings such as dividends and capital gains will therefore reduce this restraint on investment.

Tax policy also affects investment by unincorporated businesses. In 1988, nearly 15 percent of real, nonresidential fixed investment was undertaken by noncorporate businesses. For these businesses, one of the most important features of the income tax is the tax rate on capital gains. Much of the return on noncorporate investment takes the form of increases in the value of the business itself. Increasing the tax rate on the capital gains on ownership equity raises the cost of capital and reduces noncorporate investment. *A lower capital gains tax rate provides not only an incentive for increased investment by corporations, but also an incentive to raise noncorporate business investment.*

Further cuts in corporate tax rates would generate only limited investment incentives. As tax rates fall, taxes have a smaller impact on the after-tax return to investment. The Tax Reform Act of 1986 reduced marginal tax rates for corporations and for individuals, limiting the additional investment incentive that can be expected from further rate reduction. The Tax Reform Act also moved toward equalizing effective tax rates for different assets. The equalization provided an important benefit by reducing the significance of tax considerations in choosing among investment opportunities.

In the past, investment tax credits (ITCs) and changes in depreciation schedules were used to provide investment stimulus. ITCs reduced firms' tax liabilities by a fraction of the cost of equipment purchased, and hence reduced the user cost of capital for equipment. The ITC was introduced in 1962. Over the next two decades, the ITC was repealed, modified, or reinstated 7 times, sometimes in response to business cycle conditions. These frequent alterations in investment policy increased the uncertainty of the investment environment.

Depreciation allowances have also been used as an investment incentive. Depreciation allowances are intended to adjust profits for the costs of using capital assets during production. Accelerated depreciation was instituted in the 1950s and modified repeatedly thereafter. The acceleration was designed to lower the user cost of capital, to adjust imperfectly for inflation distortions, and to provide an incentive for greater investment.

While ITCs and accelerated depreciation stimulated investment, numerous studies indicated that they had an unfavorable effect on the allocation of investment among competing investment opportunities. For ITCs, the value of the investment credit was higher for shorter lived assets. With accelerated depreciation, the stimulus was also uneven, varying between structures and equipment and within asset classes. The uneven treatment led to underinvestment in assets that had less generous allowances and in some cases fostered unproductive investments. The Tax Reform Act of 1986 eliminated ITCs and attempted to match tax depreciation schedules and real economic depreciation more closely.

The most important investment incentives the Federal Government can provide are stable macroeconomic policies that keep output near its potential and inflation low, as well as an institutional framework that permits the free flow of investment to its most valuable use and encourages new business formation. The United States should also work toward removing longstanding tax impediments to investment by:

- Restoring the capital gains tax differential and
- Reducing the double taxation of corporate equity earnings.

FACTORS THAT AFFECT FOREIGN DIRECT INVESTMENT

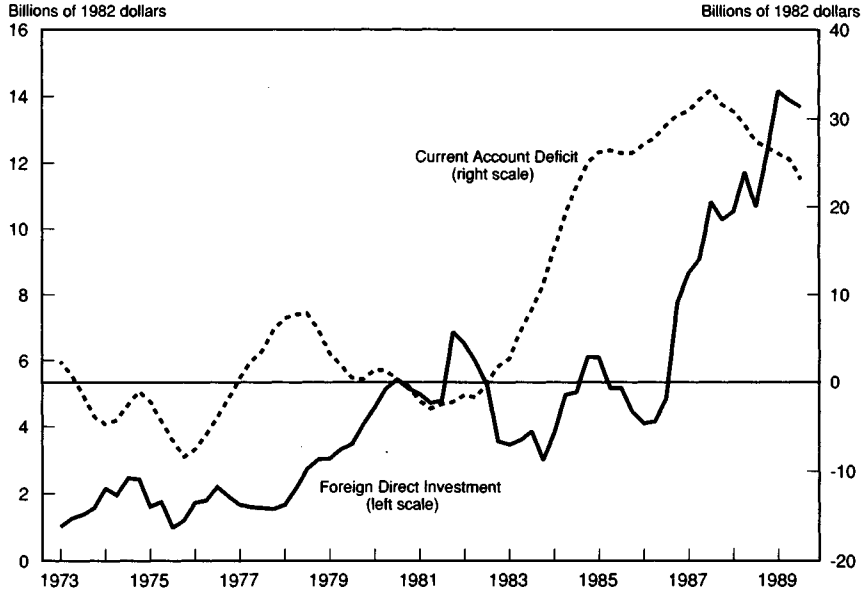
Many observers see the recent increases in FDI as closely related to macroeconomic factors, such as the trade deficit or the decline in the value of the dollar since 1985. But no automatic mechanism links FDI and the current account deficit. Although, as a matter of accounting, a higher current account deficit does imply higher *net* capital inflows, this change in flows can be effected by receiving increased gross inflows of either direct or portfolio investment from

abroad or by a reduced rate of U.S. gross direct or portfolio investment in other countries. For example, FDI in the United States can increase *without* a change in the current account if at the same time the United States is increasing its investment abroad. Indeed, U.S. companies have continued to increase their direct holdings abroad in recent years, in spite of large current account deficits—a recent example being the Ford Motor Company's acquisition of the United Kingdom's Jaguar PLC.

The data confirm that FDI is driven by much more than just current account balances. As Chart 4-6 shows, FDI inflows climbed in the late 1970s before a large current account deficit developed and continue to increase even as the current account improves. The experience of other countries is even more striking. For example, West Germany has run a current account *surplus* for decades but has seen foreign ownership of its manufacturing sector climb to 15 percent.

Chart 4-6

FOREIGN DIRECT INVESTMENT AND THE CURRENT ACCOUNT DEFICIT. Movements in foreign direct investment are not closely related to movements in the current account deficit.



Note: Consumer price index used as deflator. Data are quarterly.
Source: Department of Commerce and Department of Labor.

The upward trend in FDI over the past several years has coincided with a surge of mergers and acquisitions in the United States. In this same period, acquisitions of existing assets have played a growing role as a vehicle for FDI. Between 1982 and 1988, the pro-

portion of all new FDI (i.e., all foreign acquisitions or establishments of new enterprises) accomplished through mergers and acquisitions rose markedly.

This change reflects in part the development of a larger and more efficient market for corporate assets—a market that facilitates the movement of those assets into the hands of owners who expect to use them most productively. Not only can whole companies be purchased more easily, but also, because of restructurings and divestitures, particularly desirable assets or divisions can often be acquired on a stand-alone basis.

The United States is one of the most attractive nations in which to invest, in part because of the sheer size and scope of its markets: the United States produces 26 percent of the gross world product. As the global economy becomes more integrated and both U.S. and foreign firms adopt more sophisticated strategies in response, it is hardly surprising that foreign companies are, with increasing frequency, the highest bidders for U.S. corporate assets. International differences in capital costs for some foreign acquirors may also partially explain the rise of FDI in the United States.

Foreign-owned firms operating in the United States receive "national" treatment—they are subject to the same environmental, antitrust, and other regulations as domestically owned firms. Although the exact tax treatment may be affected by the tax code in their home country, they are liable for U.S. taxes and are subject to international tax treaties. They hire from the same labor pool as U.S. companies. As these facts might lead one to expect, foreign-owned firms do not differ markedly from their domestic counterparts in such business decisions as employee compensation and R&D expenditures.

IMPLICATIONS FOR POLICY TOWARD FOREIGN DIRECT INVESTMENT

U.S. policy toward foreign direct investment has long recognized that a free flow of investment capital across borders benefits both host and investor countries. As noted above, the United States generally provides foreign investors nondiscriminatory treatment under U.S. laws and regulations. It is in the interest of U.S. consumers, workers, and investors to maintain this open policy.

National security considerations have been a longstanding exception to this open investment policy. Like other developed countries, the United States has imposed restrictions on FDI in certain sectors for national security reasons. Various statutes incorporate these restrictions, including the Atomic Energy Act, the Federal Aviation Act, the Shipping Act, and the Federal Communications Act.

Under the Exon-Florio provision of the Omnibus Trade and Competitiveness Act of 1988, the interagency Committee on Foreign Investment in the United States reviews investments with potential national security implications and investigates sensitive transactions. The President can prohibit or suspend investments that threaten to impair U.S. national security. By the end of 1989, this committee had reviewed more than 200 transactions, undertaken investigations of 6 and referred 3 to the President for a decision. In each case, the President decided not to intervene. In line with the Administration's open investment policy and the provision of law, the Exon-Florio authority will be used only when no other measures are adequate to protect the national security.

Restricting foreign investment in the United States would weaken the economy. The Administration is pursuing the constructive approach of working to remove formal and informal barriers to international investment throughout the world. The initiatives being pursued include: encouraging the Organization for Economic Cooperation and Development (OECD) to strengthen the voluntary accord that grants national treatment to foreign-owned enterprises; making removal of investment barriers an important part of the negotiations with Japan on structural impediments; and working during the Uruguay Round of GATT for discipline on government-sponsored trade measures associated with investment.

POLICY TOWARD SAVING

The saving performance of the United States reflects, in part, longstanding features of Federal Government policy. Large, persistent Federal budget deficits directly reduce national saving. Many types of personal saving are taxed twice, once when the income is earned and again when the returns on the saving are received. Inflation increases taxable returns to capital without affecting real returns; these extra taxes further penalize saving and investment. For businesses, returns to corporate equity, particularly dividends, are taxed at both the corporate and individual levels. These and other policies need to be reexamined as part of any effort to increase national saving. *Current policies are biased toward consumption—whether in the household, business, or government sector—and against saving.*

National saving reflects the actions of the three principal sectors of the economy. Household saving is the result of the spending decisions by individuals and families; business saving reflects decisions by firms to retain after-tax profits; and government saving is the outcome of the political debate over revenue measures and spending priorities.

Government policy should focus on *national* saving. National saving determines the amount of domestic funds available for investment, affects the cost of capital, and influences the balance of trade. Policies toward saving must be analyzed both for each sector of the economy—household, business, government—and for the Nation as a whole. Policymakers must be especially careful not to develop incentives to raise private saving at the expense of public borrowing, thereby simply transferring a portion of the low national saving rate from the private to the public sector.

GOVERNMENT SAVING

The single most direct way for the government to increase national saving is to continue to reduce the Federal budget deficit. Some economists argue that reducing Federal deficits would not succeed in raising national saving because private savers would recognize the increased government saving and feel a corresponding reduction in their need to save. In this view, private saving adjusts to offset changes in government saving. This argument is both flawed and inconsistent with the evidence. For example, in the early 1980s, household saving fell even as Federal deficits rose. Because there is no offsetting decrease in private saving, reduced deficits will increase the pool of domestic funds available for private investment. To raise national saving effectively, however, deficit reduction should not be attained by increasing disincentives for private saving or by reducing government investment.

The Gramm-Rudman-Hollings Act was designed to reduce the deficit each year, reaching a balanced budget in 1993. The Administration remains firmly committed to deficit reduction. The Federal Government must end its role as a chronic borrower and stop draining the Nation's scarce savings pool.

Deficit reduction is not enough in view of the likely future demands that the retirement of the baby-boom generation will place on the Social Security system and, indeed, on the whole economy. The Administration proposes to establish a Social Security Integrity and Debt Reduction Fund to safeguard projected surpluses in the Social Security trust funds and to reduce the national debt. Reducing the national debt will increase the pool of domestic saving, reduce the current account deficit, lower the cost of capital, spur investment and productivity growth, and lead to higher future living standards. This proposal would prevent the use of Social Security receipts to finance other spending, reduce the legacy of public debt, and leave a more secure fiscal status to future generations.

HOUSEHOLD SAVING

Household saving is the most familiar component of national saving. Because the saving decision reflects so many individual

goals, however, fostering household saving is a difficult policy task. Households save as a precaution against accident, illness, or loss of job. For these purposes, savings must be sufficiently liquid to meet unexpected needs. Households also save to purchase homes and big-ticket durable goods and to pay future educational expenses. These saving goals are particularly important for young families who have few assets and relatively little financial flexibility. People also save to help finance their retirement and to leave bequests to their heirs. For these long-term goals, security or the rate of return to saving may dominate considerations of liquidity.

The overall household saving rate can change even when all individuals have the same proclivity to save over their lifetimes. One source of change in overall saving is change in the age structure of the population. Because of the baby-boom generation, those under 35 have constituted an unusually large fraction of the working population over the past 15 years. Young people typically save relatively little of their income, which explains part of the overall decline in saving. As the baby-boom generation ages, the household saving rate will rebound somewhat.

The response of household saving to changes in the rate of return on saving is a critical issue, because tax policy directly affects the rate of return. But increases in the rate of return have two opposing effects on saving. Higher rates of return lower the price of future consumption, thus *increasing* the incentive to save. Higher rates also reduce the amount of saving required to achieve a given level of future consumption, thereby *reducing* the incentive to save. Although this area is being actively researched and debated, empirical studies on balance suggest that saving increases modestly with higher rates of return.

Several options are available to allow savers to earn the untaxed rate of return for retirement purposes, but such options are not typically available for shorter term saving goals. Pensions, Keogh and 401(k) plans, and, for those eligible, deductible individual retirement accounts (IRAs) all permit individuals to deduct their contributions, with both contributions and earnings taxed only upon withdrawal.

Another form of tax-preferred savings account would not allow deductions for contributions. Withdrawals of both contributions and earnings, however, would be tax free. If a taxpayer is in the same tax bracket at the time of contribution and at withdrawal, such accounts would offer the same rate of return as deductible IRAs. As long as households realize this fact, their spending would be the same under either type of account.

Individual Retirement Accounts

IRAs represent one means to reduce the double taxation of saving and reduce the bias against saving. The degree to which this incentive is successful depends in part upon the limit for contribu-

tions to the IRA. Higher contribution limits increase the number of households who receive a saving incentive, because the pre-tax rate of return will apply to their last dollar saved. Higher contribution limits therefore raise private saving.

Deductible IRAs and pensions lower the distortion produced by tax treatment of retirement saving and are a valuable contribution to the climate for saving. Because of penalties for early withdrawal, however, they are not an attractive vehicle for savers with intermediate saving goals. The inaccessibility of savings in IRAs and pensions prior to retirement restricts their usefulness for these purposes. To address this issue, the Administration proposes easing the withdrawal requirements on IRAs to permit savers to use these funds for first-time home purchases.

Family Savings Accounts

To further reduce the bias against saving, especially for families with pre-retirement savings objectives, the Administration proposes creating a Family Savings Account (FSA). Contributions to FSAs would be nondeductible, but earnings on contributions would be exempt from income tax. Annual contributions to an FSA could be up to $5,000 for married couples and $2,500 for single people. FSAs would be limited to married couples with incomes below $120,000, singles with incomes below $60,000, and heads of households with incomes below $100,000. If contributions were held for at least 7 years, both the original contribution and all earnings could be withdrawn without tax. Withdrawals made in the first 3 years would be subject to both ordinary income tax and a 10-percent excise tax on the *earnings* alone. Earnings included in withdrawals made after 3 years, but before the 7-year period, would be subject to ordinary income tax.

The enhanced liquidity of the FSA provided by the shorter holding period is an important addition to policy toward saving. It is particularly valuable for families who wish to save for such pre-retirement objectives as a child's education or a down payment on a home. Further, the contribution limits are more generous than for existing IRAs. FSAs will increase household saving. Moreover, they are best viewed as part of the larger program to reduce the bias against saving in the United States.

Social Security

The most important Federal Government policy toward retirement is the Social Security program. Its effect on personal saving has been the object of intense study and controversy among economists. Individuals can substitute Social Security for retirement saving. In addition, Social Security reduces the riskiness of retirement consumption because benefits are indexed for inflation and are paid until the death of both the worker and spouse. As such,

they are essentially government insurance of a constant base level of consumption. These effects may reduce private saving.

Until recently, Social Security ran on a pay-as-you-go basis, with current workers' payroll taxes paying current retirees' benefits. As a result, no government saving was available to offset any reduction in private saving, suggesting that Social Security reduced national saving. After many studies and opinions, the weight of the evidence suggests that Social Security modestly reduced saving in the postwar period. However, reforms enacted in 1983 will produce substantial government saving in the future. As discussed above, the expected increase in government saving will be an important contribution to national saving, and the Administration has proposed policies to ensure that the integrity of projected future Social Security surpluses is protected.

BUSINESS SAVING

Corporate saving typically accounts for well over one-half of gross private saving, yet most debate regarding saving—whether among policymakers, academics, members of the press, or the public at large—focuses on either household saving or government saving. Businesses save out of earnings, by retaining and reinvesting some profits within the business rather than paying them out as dividends or share repurchases. The impact on business saving of a particular policy therefore depends critically on its effects on the level of earnings and on the incentive to pay them out.

By increasing the incentive to retain earnings, a lower capital gains tax rate will increase business saving. For shareholders, the return to retained earnings comes in the form of higher stock prices, which are taxed at the capital gains rate. Therefore, retained earnings are taxed both when the corporate income is earned and again when the gains are received. Lower capital gains tax rates will both reduce the pressure to pay dividends and increase the incentive for equity finance. Both effects increase retained earnings.

Under current law, dividends are also taxed twice, once when the income is earned by the corporation and again when it is paid out to shareholders. Eliminating the double taxation of corporation income—which can be accomplished in a variety of ways—has a theoretically uncertain effect on business saving. It would increase equity finance, but corporations would have a reduced incentive to retain their earnings.

Even if business saving is reduced slightly, however, total private saving might not fall. Eliminating the double taxation of dividends and lowering the tax rate on capital gains would increase the rate of return to household savers. Personal saving may increase in response by enough to offset any decline in business saving. More-

over, shareholders may change their saving in direct response to changes in business saving—they may see through the so-called corporate veil. If corporations save less for their shareholders, the shareholders can compensate by increasing their household saving. The available evidence indicates that a reduction in business saving is indeed offset—at least in part—by an increase in household saving. Shareholders consume only part of the higher payouts.

Share repurchases, takeovers, and leveraged buyouts have increased dramatically in recent years; net equity issues by U.S. nonfinancial corporations have been negative in each year since 1984. The effect of these repurchases on the corporate debt-to-equity ratio has been mitigated by the rise in the market value of equity over the same period. Still, the increasing trend to debt finance makes it more likely that the net effect of removing the tax bias against equity finance would be to increase private saving.

REMOVING IMPEDIMENTS TO SAVING

The Administration's proposals are a comprehensive approach to reducing the current policy bias against saving by households, businesses, and government.

- Reducing the Federal budget deficit is the most reliable policy to increase national saving. The Administration proposes to go further, establishing the Social Security Integrity and Debt Reduction Fund and using it to safeguard projected surpluses in the Social Security trust funds, to reduce the national debt, and to help finance increased investment and spur growth.
- Restoring the capital gains tax differential, as proposed by the Administration, will increase saving by both households and businesses.
- Establishing Family Savings Accounts (FSAs) will further reduce the bias against saving. The enhanced liquidity of the FSA is particularly valuable for families who wish to save for such pre-retirement objectives as a child's education or a down payment on a home.

SUMMARY

Economic growth is the foundation upon which the Nation's future rests. Ensuring solid growth and enhancing the economy's growth potential are therefore the primary goals of the Administration's economic policy. Economic growth will provide rising living standards and employment opportunities for American families, as well as the resources to achieve other national goals. In order to spur growth, the United States must increase its rate of investment in physical, intellectual, and human capital. It must also raise the low national saving rate.

Current Federal Government tax, spending, and regulatory policies discourage saving and investment. At a minimum, these policies should be moved toward neutrality between consumption and investment.

The Administration has proposed new initiatives to increase saving and investment. The most important is the commitment to a budget policy that will reduce the budget deficit and then the national debt. Restoring the capital gains tax rate differential will increase innovation, investment, and saving. Making the tax credit for research and experimentation permanent will expand private expenditures for innovation. Increased Federal spending for research will strengthen the Nation's knowledge base. Instituting Family Savings Accounts will encourage personal saving.

These initiatives represent a strong commitment to increasing national saving and investment and encouraging entrepreneurship and innovation.