

## Economic Growth

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Economic growth enhances living standards and provides resources to the public and private sectors that are helpful in curing all sorts of social ills. It is, therefore, distressing that for the period between 2015 and 2025, the [Congressional Budget Office \(CBO\) is projecting](#) a GDP growth rate of only 2.1 percent per year—a much lower rate than the 3.3 percent that the United States enjoyed on average from 1950 to 2014.

The most important reason for the slowdown is a reduction in the rate of growth of the number of hours worked as baby boomers retire in large numbers while relatively fewer people are entering the labor force due to lower birth rates. The growth rate of hours worked in the nonfarm business sector is expected to fall from an average of 1.3 percent per year in the previous 64 years to 0.6 percent in 2015-2025.

The rate of increase in physical capital stock is another important source of economic growth, but businesses are unlikely to invest as much when the labor force is growing slowly. CBO expects the growth in the volume of services derived from capital stock in the nonfarm private sector to fall from 3.7 percent annually in the 1950-2014 period to 2.9 percent in 2015-2025. The growth in capital stock has also been harmed significantly by low investment during the Great Recession and during the period of slow growth that followed.

Growth that cannot be explained by the growth in the labor force or capital stock is called total factor productivity (TFP). Growth in TFP is mainly the result of technological progress, but many other factors play a role. The quality of the labor force is important and that is enhanced by education and training. Improvements in management practices can enhance TFP while regulations can retard it. Many other small factors, such as the amount that the private sector must spend to protect itself against crime, are also at work.

CBO expects only a minor decline in TFP growth to 1.3 percent in the next ten years in the nonfarm private sector compared to 1.4 percent in the 1950-2014 period. [Robert Gordon](#), a well-known economist at Northwestern University, is much more pessimistic. He believes that inventions in the future will not be nearly as important as the inventions of the past such as the telephone, the automobile, and the computer. If that is true and there is a dramatic fall in the growth of TFP, future growth will decline far more than expected by CBO. It is difficult to judge the validity of Gordon's hypothesis, but one must be skeptical of any prediction of the end of a trend that has lasted for centuries. This paper assumes that the more optimistic forecast of the CBO is accurate.

In some economic models it is assumed that physical investment is necessary to implement technological improvements. That may be true, but for the purposes of this discussion, little harm is done by considering investment and TFP separately.

The policy discussion that follows will not be complete because almost everything that the government does either enhances or retards growth. And, as usual, there are not many opportunities for a free lunch. Enhancing growth often means saving more privately or publicly. That means giving up current consumption, which is not very popular given that the reward is slow to materialize. Moreover, growth enhancing policies often conflict with other social goals. For example, a flat tax may be more conducive to growth than a progressive tax, but many will object to a flat tax's distributional implications. Environmental rules delay infrastructure

investments and make them more expensive. The rules could be more efficient, but some rules are tolerated in order to reduce environmental damage.<sup>i</sup>

Economic growth is most commonly defined to mean a sustained increase in income per capita, that is to say, an increase in average living standards. Most of the policies discussed in what follows focus on improving living standards at a more rapid pace. However, enhanced growth accompanied by an increase in population growth can be beneficial even though living standards do not improve. The combination of growth in the economy and the population, for example, makes it easier to sustain a certain absolute level of defense expenditures and can be helpful in dealing with problems inherited from the past, such as pension liabilities or the national debt.

Because growth enhancing policies often impose a sacrifice or conflict with other social and economic goals, it is necessary to be modest about what can be accomplished. But modest accomplishments can have a very large impact. Increasing the real rate of economic growth by only 0.2 percent per year for the next 10 years does not sound like much, but the implied increase in 2025 GDP is over 2 percent and is worth well over \$400 billion in 2015 dollars.

[Some political candidates and academics think](#) that raising the growth rate to 4 percent per year is a reasonable goal. This would require quickly reversing the damage done by the Great Recession which slowed capital investment and damaged the quality of the labor because of long periods of unemployment. But that would be no easy trick and even if it could be accomplished, 4 percent growth would only be possible for a brief period. Rapid growth would soon run into the constraint imposed by the slowly growing labor force. Consequently, it is difficult to imagine growth of 4 percent lasting for as long as 10 years, and the following analysis is about periods at least that long.

My emphasis is on important policy issues involved in promoting economic growth that are almost certain to arise in the 2016 presidential campaign and on some issues that might be ignored, but should not be.

#### Policies That Would Enhance the Rate of Growth of Hours Worked

Because the slowdown in the rate of increase of hours worked is by far the most important cause of the expected decline in potential GDP growth, it is natural to focus on policies that would increase the size of the labor force.

##### Immigration

Increasing legal immigration is the most direct response to the problem of slow increases in hours worked, but then the question becomes: “What sort of immigrant do we want to attract?” The nation could follow Canada’s lead and give highest priority to attracting the highly skilled. That would have the biggest positive impact on the standard of living of the rest of the population, but it means paying less attention to the humanitarian goal of uniting families, which has been an important goal of U.S. policy. There is a delicate balancing act here, but an increase in immigration would make it possible to attract more skilled workers without greatly deemphasizing the goal of uniting families.

##### Improving the Labor Force Participation Rate of Older Americans

The retirement of baby boomers is a major reason for the decline in the rate of growth of the labor force. More people apply for Social Security benefits at 62 than at any other age. Many seeking early retirement are in good health and have a long expected life ahead of them. Some will outlive their financial resources.

Increasing the labor force participation of older workers is not an issue that is frequently debated, but it deserves more attention. Many of our institutions evolved when it was considered beneficial to encourage early retirement, so that baby boomers would have more opportunity for advancement. Those few defined benefit plans remaining in the private sector and more common public defined benefit plans are structured to encourage retirement at an early age. Such plans can and should be reformed to encourage longer work.

High health costs discourage employers from taking on older workers. At the moment, private insurers must absorb medical costs before Medicare steps in. That could be reversed. It is not expensive, because the youngest among the elderly are not very costly.

The availability of Social Security encourages retirement, including early retirement. But the system is not now financially sustainable. Slowing the growth in average benefits by phasing in an increased age at which full benefits are available would induce many to work longer while improving the sustainability of the system. Increasing the early retirement age of 62 would have a more dramatic effect, but there would have to be some provision for hardship cases.

### Improving the Quality of the Labor Force

#### Education and Training

Data clearly show that high school graduates do better economically than dropouts and that college graduates do much better than high school graduates. Presumably these differences indicate the worth of the workers to the economy and that longer periods in school could have a beneficial effect on productivity and economic growth.

The federal government finances a relatively small portion of K-12 education, but it exercises much influence through its grant making powers. Some believe that it exercises too much authority and that decisions are better left to state and local government. That is a topic worthy of debate, especially now with the controversy about the Common Core. The issues in which the role of the federal government is important and usually controversial include: the amount to be spent on pre-school activities; the role of school choice and charter schools; whether national achievement tests should be required; and the amount of financial aid provided for school lunches and breakfasts.

The federal government plays an even more important role in higher education than in K-12 education. The federal government provides tuition assistance with a bewildering array of tax incentives that badly needs simplification. But the biggest programs are student loans and Pell grants. It was decided many decades ago that it was better to provide assistance directly to students rather than to colleges. This approach was based on the assumption that colleges would then go out and compete for students by becoming more effective. It appears that this approach has failed. Tuition has soared—perhaps partly because of the increase in demand caused by student loans—and too many students are graduating or dropping out with huge debts.

We need candidates who engage in fundamental rethinking of federal support for postsecondary institutions. Perhaps it would be better after all to provide more aid to institutions rather than to students. This approach would be especially appealing if it were possible to structure assistance in a way that would encourage efficiency and limit tuition increases. However, that would not be easy, and it is necessary to beware of unintended consequences. Nevertheless, the nation needs new ideas and proposals from the candidates.

Nor is the need for new ideas any less pressing in deciding what the federal government should do to increase the effectiveness of worker training programs. It is not easy to design a program that provides a sufficient boost to income to make up for the loss of income and private sector experience while training. There have been many evaluations of training programs and there is a great need to identify those with the biggest impacts and to support these effective programs while dropping the many programs that do not pass muster.

### Increasing the Quantity and Quality of Investment

#### Budget Deficits

In 2014 net private saving was \$1,220 billion and federal dissaving was \$582 billion. As the economy approaches full employment, the federal deficit is a major negative force reducing the amount of saving available to finance private investment. This reduces future wages and living standards. The impact can be mitigated to the extent that the United States borrows from foreigners, but then a higher proportion of future income has to be devoted to paying interest and dividends to nonresidents.

In its [June 2015 long-run budget projections](#) CBO estimates that if, during the period through 2025, deficits, excluding interest payments, could be held a cumulative \$2 trillion below the levels implied by CBO's 2015 baseline and with the reduction then continued at the same percent of GDP through 2039, real GNP per capita would be 3 percent higher in 2040.<sup>ii</sup> If a cumulative \$4 trillion reduction was possible, the increase in real GNP per capita would rise to 5 percent in 2040 or by \$4,000 measured in 2015 dollars.

The estimated increases in income may seem small, but the changes in policy are not dramatic. A \$2 trillion reduction in the deficit, excluding interest, equals only 2.3 percent of the cumulative value of spending plus tax revenues expected over the period. A \$4 trillion change amounts to 4.7 percent.

#### Tax Reform

The current tax system is inefficient, inequitable, and extremely complicated. There is little doubt that it is a drag on economic growth because of the way it distorts economic choices. The elimination of deductions, credits, and exclusions in individual and business taxation would allow lower marginal tax rates and reduce disincentives for saving and work effort. Moreover, if investment and labor were allocated to where they were most productive instead of to where they enjoy the largest tax benefits, the productivity of the capital stock and labor force would be much improved.

Our current income tax system is not really an income tax system. It contains elements of both income taxation and consumption taxation. Taxing consumption more heavily and savings and investment less heavily would be more conducive to economic growth. Michael Graetz has suggested a system that would rely heavily on a VAT while using some of the proceeds to relieve the lower part of the income distribution of any income tax burden.<sup>iii</sup> The income tax would be retained for the upper part of the distribution. Alternatively, a progressive, cash flow consumption tax can be designed for the whole population. Whatever the direction of reform, almost all public finance scholars would agree that a pure income tax system or a pure consumption tax system would be much more efficient than the mess that we have now.

The last major tax reform in 1986 was preceded by a long period of discussion that some would date back to the late 1970s. The debate could not have been successfully

culminated without strong presidential leadership. That will be needed if current efforts are to be successful.

### Infrastructure Investment

Public investment must complement private investment as the nation seeks more economic growth. Although it is now said that there is a crying need for public infrastructure investment, it must be admitted that such investment has been allocated very inefficiently in the past. Indeed, wasteful boondoggles have been too common; e. g., the Tombigbee Waterway and the bridge to nowhere. Probably for that reason, CBO estimates that the rate of return to public investment is only one-half of what can be earned from private investment. Consequently, if the country is to do more infrastructure investment, it is important to do it better.

The basic problem is rooted in the political nature of the federal system. It is impossible to provide highway funds to Virginia, where they are desperately needed, without also giving them to Montana, where there are very few cars per mile of road. Our approaches to the geographical allocation of highway and other types of infrastructure funding are in dire need of reform. Efficiency may be enhanced by devolving more functions to the states, reforming the current grant structure, and relying more on public-private partnerships.

### Reducing the Negative Impact of Regulations

Regulations have a profound impact on growth.<sup>iv</sup> Very often there would be an increase in efficiency if command and control regulation were replaced by market forces. A carbon tax would be far more efficient than regulatory approaches to combating climate change and other pollution taxes could also be used to improve the environment.

Unfortunately, command and control regulation is generally more politically acceptable than using the price mechanism. That increases the urgency of subjecting much more regulation to benefit-cost analysis. The Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget analyzes the efficiency of regulations, but can cover only a tiny portion of those issued. Presidential candidates should indicate whether they would greatly expand the cost-benefit analysis of regulations and if so, how.

### Public and Private Spending on Research and Development

#### Public Research and Development Spending

Direct federal spending on R&D peaked relative to GDP in 1964 at 2.1 percent. In 2014 it was 0.8 percent of GDP. The fall is, in large part, the result of the relative decline in defense spending which is more heavily weighted toward R&D than nondefense spending. But civilian R&D spending has also declined relatively from 1.0 percent of the GDP in the mid-1960s to 0.4 percent for most of the early part of the 21<sup>st</sup> century. The [president's 2016 budget](#) indicates that it will decline further to 0.3 percent of GDP in fiscal 2015.

Public R&D spending is now so low that its impact on economic growth must be trivial. It is worth debating whether it should be increased back to 1960s levels.

#### Private R&D Spending

Private R&D spending is heavily favored by the tax system. Although it is in the nature of an investment, R&D expenditures can be expensed. This essentially eliminates any tax burden on the return to the investment. If the investment is financed by debt with deductible interest, the tax burden is pushed into negative territory.

In addition, some R&D expenditure is favored by the research and expenditure tax credit. There is considerable debate over the effectiveness of this credit and it is difficult to administer. It deserves some careful scrutiny and perhaps, a simplifying reform. Generous tax treatment is often justified because it is believed that innovators do not enjoy the full pecuniary gains resulting from their inventions and substantial benefits spill over to the rest of the population.

### Conclusions

Many of the policies discussed above involve more spending. However, spending on education, infrastructure, public R&D, and many other programs is being squeezed out by rapidly growing entitlements for the elderly and by a strong reluctance to raise taxes. Getting these programs under control and accepting modest tax increases is a very indirect approach to furthering economic growth, but it may open the way to much more productive spending.

The foregoing analysis does not pretend to be a complete review of all federal policies that presidential candidates could address to enhance economic growth. However, the policy options that are included do suggest that there is much that could be done. The future generations that would benefit will not be voting in the 2016 presidential election. Nevertheless, the country has a moral obligation to represent their interests—and so do the presidential candidates.

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<sup>i</sup> It might be said that environmental improvements should be included in the GDP and therefore as a contribution to economic growth. But it is not easy to put a dollar value other than considering the costs of improvements and not the value of benefits.

<sup>ii</sup> GNP equals GDP minus income that flows abroad. It is therefore a better measure of the standard of living of U. S. residents.

<sup>iii</sup> Michael Graetz, *100 Million Unnecessary Tax Returns: A Simple, Fair, and Competitive Tax Plan for the United States* (New Haven: Yale University Press, 2007).

<sup>iv</sup> John Dawson and John Seater, "Federal Regulation and Aggregate Economic Growth," *Journal of Economic Growth*, forthcoming. A summary of the article's findings can be found in John Bailey, "Federal Regulations Have Made You 75 Percent Poorer," accessed July 9, 2015, <https://reason.com/archives/2013/06/21/federal-regulations-have-made-you-75-per>.