



Making the Right Investments Now Is Key to Future Productivity

Quarterly U.S. Productivity and Innovation Snapshot

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Introduction

It has been four years since the start of the Great Recession in December 2007, and the U.S. economy is recovering steadily. Some indicators show strength such as the labor market, which added more than 600,000 jobs in the past three months. That is great for people looking for jobs right now, but many of these jobs are low-paying, low-benefit, and unstable. For the longer term people need well-paying, stable jobs, and those will depend in large measure on productivity growth. As we explain below, however, the U.S. economy shows some worrisome trends in its productivity growth.

Productivity growth—the rate at which we increase production for a given amount of work and resources—is at the heart of economic growth, competitiveness, and sustained improvements in living standards for working Americans. In an economy where workers share the fruits of their labors, productivity growth translates into more and better jobs, and rising incomes for middle-class families. A number of factors affect productivity growth in the future, including the pace of business investment, the availability of skilled workers, investments in science and research, and adequate financing to bring new ideas and products to market.

The indicators reviewed in this brief raise a number of concerns about the future of U.S. productivity and, in turn, competitiveness:

- **Productivity growth slowed sharply in the final quarter of 2011 and has increased at only a modest pace since the start of the current business cycle in December 2007.** Further widening of the U.S. high-tech trade deficit signals that the U.S. economy's competitive edge needs reshaping.
- **Business investment slowed in the three months through December 2011 and remains historically low.** Corporations are not directing their strong profits to

productivity-enhancing activities but rather are holding cash or buying back their own stock to prop up the share price.

- **Private venture capital investors remain reluctant to fund early-stage innovative business ideas.**

How productivity gains are distributed in the economy needs to be addressed, but the gains we're seeing are worryingly small. With higher productivity growth we can grow the pie of goods and services available for the same work and be better positioned to address long-term challenges facing the U.S. economy: increasingly threatened middle-class living standards, the economic needs of an aging population, long-term federal budget balance, environmental consequences of economic activity, and increased international competition from rapidly developing countries.

Achieving high productivity growth demands sustained policy attention to create private incentives and supply complementary public investments. The budget President Barack Obama delivered to Congress this week makes a down payment on these goals for renewing U.S. productivity growth with investments in:

- Basic education, affordability of college, and ongoing skills development of the workforce
- Increased support for research and development, and tax incentives for manufacturers who create jobs at home
- Tax incentives for business investment
- Improved efficiency of our transportation infrastructure to reduce business costs

Congress should move without delay to pass this budget and help build a stronger, more productive economy to secure long-term U.S. economic competitiveness.

Indicators point to slackening productivity

Productivity growth slows markedly

Worker productivity—the amount of goods and services produced in an hour of work in the nonfarm business economy—increased by 0.7 percent in the fourth quarter of 2011 but decelerated from 1.9 percent growth in the previous quarter. Productivity in the U.S. economy now stands 6.5 percent larger than at the start of the Great Recession, but this pace of growth lags behind that of previous economic recoveries. At the same point in the business cycle, productivity had increased by 7.9 percent on average for all prior post-World War II expansions.¹

Business investment decelerates too

Productivity growth in the economy overall tends to follow business investment with a long time lag—investments today lead to productivity growth one or two decades down the road. So low investment today will likely constrain productivity increases in the future.

Even before the Great Recession, U.S. business investment ran at its lowest level relative to gross domestic product, or GDP—the sum of all goods and services produced by workers and equipment in the United States—since the late 1960s. The recession and financial crisis drove business investment even lower, but since March 2010 business investment has grown faster than overall U.S. GDP.

But business investment in equipment, after a rapid expansion of 16.2 percent in the third quarter of 2011, decelerated to 5.2 percent in the fourth quarter of that year—the slowest pace since the economy began expanding again in June 2009. Acceleration of business investment from the summer of 2009 onward coincided closely with American Reinvestment and Recovery Act spending on public investment and middle-class tax cuts, and the demand it propelled from private businesses for investment goods helped boost equipment spending to 7.6 percent of GDP at the close of 2011.²

Though still recovering, business investment will only gain and sustain momentum if businesses expect more sales in the future, which can come from stronger consumption at home or from increased exports. In the short term export demand will face an uphill battle against Europe's simmering banking crisis and China's slowing growth, but Congress has the power to keep domestic sales strong by continuing the payroll tax cut and unemployment insurance benefits, which are set to expire at the end of February.

Businesses prioritize nonproductive ends

The low level of business investment has little to do with business profitability. The corporate profit rate in nonfinancial businesses—which fell to 1.8 percent of total assets in December 2008—has recovered and been consistently at or above 2.6 percent through 2011. Rather than hiring productive workers or making substantial new investments, though, businesses are directing resources toward nonproductivity-enhancing uses.

First, businesses are hoarding cash, which amounted to 7.2 percent of their total assets in September 2011, down slightly from June 2011, when cash holdings were at their highest level since December 1959.

Second, rather than hiring or investing, corporations are using strong profits to prop up their stock prices—a key factor in executive compensation—by repurchasing their own shares and paying out dividends. In total corporations devoted resources worth 108 percent

of after-tax profits to propping up share prices since December 2007. This means corporations are actually borrowing money to buy back their own shares and pay dividends, rather than putting that money into productivity-enhancing investments or hiring workers.³

Venture capital investment eschewing new companies

Funding by venture capital investors is recovering strongly, though it is still below levels before the financial turmoil of 2008. In the four quarters through December 2011, venture capital investment was up more than 45 percent, to \$28.6 billion since the end of the recession. But this level still remains 15 percent below pre-crisis levels and is only one-quarter the level of the late-1990s dot-com era, after adjusting for inflation.⁴

Though venture capital funding overall is recovering, venture investors are showing aversion to backing early companies to get off the ground. Financing for expansion and late-stage VC investments is up 47 percent since the end of the recession. Over the same time, meanwhile, financing for seed-stage companies is down 49 percent.

What this means is that many viable and transformational innovations are potentially not being brought to market because of the private sector's unwillingness to finance such investments.

High-tech trade deficit remains high

The U.S. trade deficit in high-tech goods such as aircraft, optical equipment, and medical devices improved slightly to just under \$97 billion in the 12 months through November 2011, the last month for which we have data. The improvement in November 2011 is a departure from recent trends, however. Over the past two years, U.S. imports of advanced technology goods grew more than twice as fast as the already-smaller exports of high-tech goods, at 7.5 percent and 3.1 percent respectively on an annualized basis. Despite improving over the previous year, the 12 months through November 2011 mark the fourth-largest high-tech trade deficit on record.⁵

The trend in the high-tech trade deficit is not a result of the overall direction of other U.S. trade. Compared to other U.S. exports high-tech exports are growing slowly. In contrast to high-tech exports, other U.S. exports grew 21 percent annually for the past two years.

This means that even though U.S. exports overall are becoming more competitive in the global marketplace, the U.S. high-tech sector is not keeping pace. Lagging performance of advanced technology trade also weighs on the overall U.S. trade deficit, amounting to 13.5 percent of the overall trade deficit in the year through November 2011.

Conclusion

The U.S. economy will not regain its productivity and competitive edge on its own. Policymakers must refocus their sights on ensuring America makes the necessary investments today in education, science, and research and development that play an essential role in driving private-sector innovation and productivity to ensure long-term growth and prosperity for the U.S. economy. Passing President Obama's budget is the first step toward committing America to the economic competition ahead.

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Endnotes

- 1 Bureau of Labor Statistics, *Nonfarm business sector labor productivity growth rates* (U.S. Department of Labor, 2012), available at <http://bls.gov/lpc/>.
- 2 Bureau of Economic Analysis, *National Income and Product Accounts* (U.S. Department of Commerce, 2012), tables 1.1.1 and 1.1.5, available at http://bea.gov/iTable/index_nipa.cfm.
- 3 Federal Reserve Board of Governors, *Flow of Funds Accounts* (Federal Reserve), tables F.102, L.102, and B.102.
- 4 National Venture Capital Association, "VC Investments Q4 '11" (2012), available at http://nvca.org/index.php?option=com_docman&task=doc_download&gid=841&Itemid=317.
- 5 Census Bureau, *U.S. International Trade Data* (U.S. Department of Commerce); Bureau of Labor Statistics, *Price indices for nonagricultural commodity exports and imports excluding petroleum* (U.S. Department of Labor).