

US Productivity After the Dot Com Bust

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Preface

"US Productivity After the Dot Com Bust" draws on ongoing research by the McKinsey Global Institute aimed at understanding the drivers and inhibitors of productivity growth.

In 2001 MGI investigated in detail what drove America's exceptional productivity growth during 1995–2000. Once again, using MGI's unique microeconomic approach, this work undertakes a sector-by-sector analysis to understand the sources of continued productivity growth in the US, even after the dot com collapse in 2000.

Martin Baily, Senior Advisor to MGI and Senior Fellow at the Institute for International Economics, and MGI Senior Fellow Jaana Remes from McKinsey's San Francisco Office worked closely with me to provide leadership to this project, which also benefited from the work of MGI fellows Jan-Dirk Henrich from McKinsey's Cologne Office and Maya Jolles from McKinsey's Benelux Knowledge Center. Susan Lund and Gina Campbell provided thoughtful input and editorial support.

MGI combines McKinsey's business experience with the rigor of academic discipline. This work is part of the fulfillment of MGI's mission to help global leaders understand the forces transforming the global economy, improve company performance, and work for better national and international policies.

As with all MGI research, we would like to emphasize that this perspective is independent and has not been commissioned or sponsored in any way by any business, government, or other institution.

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US Productivity After the Dot Com Bust

In the second half of the 1990s, US labor productivity surged. It grew at 2.5 percent a year, up from an annual average of just 1.4 percent between 1972 and 1995. But then the dot com bubble burst. Many observers expected productivity growth to fizzle out too, as companies reined in spending and struggled against the economic downturn. But productivity continued to grow at an impressive 2.6 percent a year to the end of 2003, the most recent date for which government figures on productivity by sector are available.

Looking at contributions to productivity growth sector by sector makes this outcome less surprising. In 2001, the McKinsey Global Institute (MGI) investigated in detail what was driving America's exceptional productivity growth.¹ Two popular explanations at that time were, first, increased demand triggered by the stock market boom and, second, companies across the economy making smart use of their growing IT investments. What we found, however, was that managerial and technological innovations in just six out of the economy's 59 sectors—wholesale trade, retail trade, securities, semiconductors, computer manufacturing, and telecommunications—accounted for virtually all net productivity growth between 1995 and the end of 1999 (Exhibit 1).

¹ For a detailed analysis of what drove productivity upwards at the end of the 20th century, see MGI report "U.S. Productivity Growth, 1995-2000" at http://www.mckinsey.com/mgi/publications/us/index.asp

Exhibit 1

1995-1999: 6 SECTORS LED THE WAY

CAGR*, percent

Cumulative contribution of selected sectors to US productivity growth acceleration



¹ Analysis based on US Bureau of Economics (BEA) sector data, which differ slightly from widely publicized US Bureau of Labor Statistics (BLS) aggregate data. BLS labor productivity growth figures show 1.4% CAGR for 1987-95 and 2.5% CAGR for 1995-2000
² Semiconductor industry representing 20% of overall productivity growth is a subset of Electronic and Electric Equipment, which as a group contributed 17%; computer manufacturing (representing 10% of overall productivity growth) is a subset of industrial Machinery and Equipment, which as a group contributed 12%

Source: Bureau of Economic Analysis; McKinsey analysis

Burgeoning demand and clever use of IT were important elements of growth in some of these sectors—notably securities trading—but by no means the whole story. As critical were conventional, low-tech capital investments—retailers' development of big box outlets, for instance—and changes in businesses processes, such as wholesalers' new approaches to warehouse management. These innovations were, in turn, spurred by good old-fashioned competitive intensity.

The report predicted that the product, service and process innovations underlying the productivity performance of the six key sectors could sustain growth of at least half the 1995–2000 rate over the next five years, in the range of 1.6 to 2.4 percent. In fact, productivity growth stayed near the top of the range. But did the contributions by sector change?

Changes in the way industry data are compiled mean it is not possible to make comparisons over a long period. However, consistently compiled data from 1998 to 2003 allow for some useful comparisons (Exhibits 2 and 3). Over those 5 years, only a few sectors were responsible for most of the productivity growth,

just as we found in our earlier research. Seven sectors accounted for 85 percent of total productivity growth over the period, five of them broadly similar to key sectors identified in our previous study: wholesale trade, retail trade, finance and insurance, computer and electronic products, and broadcasting and telecommunications.² These sectors had a disproportionate effect on the direction and rate of productivity change nationally either because they were such large employers or because they grew so rapidly. However, productivity growth since 2000 is somewhat less concentrated among the big hitters than before: between 1998–2000, the top four sectors represented 100 percent of total growth; from 2000–2003 the top seven sectors contributed only 75 percent of the total.

Since 2000, some of the sectors with the fastest growing productivity in 2000 saw growth slow down substantially—notably computers (although this comes as no surprise given the passing of Y2K and the dotcom bust). Yet the productivity growth rates in retail and wholesale trade have continued to accelerate from their already rapid rate. And interestingly, a much broader set of service industries have also seen their productivity growth speed up, including administrative support and scientific and technical services, as well as construction and restaurants. As a result, five of the top contributors to productivity acceleration after 2000 were service industries. Given that services represent 70 percent of US employment today, this is very good news indeed.

One reason that productivity growth held up so well from 2000–2003 is that fewer sectors than in our previous study saw their productivity decline, possibly the result of successful efforts by companies to cut costs. Sector productivity data beyond 2003 is not yet available, but recent figures for overall US productivity growth show that, while it has come down from its 2003 peak, it is maintaining a respectable 2.3 percent. This should be seen as a normal correction rather than a return to the listless productivity growth of 1972–1995. Indeed, the data from 2000–2003 shows plenty of scope remaining for most sectors to produce more for less. As long as competition between companies remains intense, the United States can look forward to strong productivity growth in the years to come, with all that implies for improvements in living standards.

² Real estate is a newcomer, but productivity in that sector wasn't measured under the old scheme partly because it is so hard to capture.

Exhibit 2

1998-2000: 4 SECTORS LED THE WAY

Percent

Cumulative contribution of selected sectors to US productivity growth acceleration-NAICS based

Source: BEA

Exhibit 3

2000-2003: MORE EVENLY DISTRIBUTED PRODUCTIVITY GROWTH Percent

Cumulative contribution of selected sectors to US productivity growth acceleration-NAICS based

Source: BEA

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