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Productivity in Banking

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The banking sector has posted strong growth in labor productivity for almost two decades. The shift in trend productivity growth for banking predates by more than a decade the much-touted New Economy productivity shock of the second half of the 1990s, which is most often associated with advances in information technology (IT).

To be sure, as an information-based industry, banks have invested in IT, and advances in IT have facilitated innovations in financial products and delivery systems. But, as this *Economic Letter* discusses, the timing of the boost to labor productivity in banking suggests that the impetus for firms to push for greater productivity also came from other factors—deregulation and increased competition, which led to the acceleration of the broad restructuring in banking.

Deregulation opens the way

The early 1980s marked a watershed for banking. Pressures from years of mounting competition eroded support for such regulations as limiting interest rates on deposits and geographic expansion by banks. In 1982, the last vestiges of deposit interest rate ceilings were removed, except for restrictions on certain transactions accounts. In addition, state restrictions on intrastate and interstate branching began to fall, culminating in federal legislation allowing nationwide branching in the early 1990s. And gradually, banks were allowed to expand into new activities, including securities and insurance services; the Gramm-Leach-Bliley Act of 2000 made the full affiliation of commercial banks and most other financial services a reality.

Before the first wave of deregulation in the early 1980s, banks responded to competitive pressures by looking for ways around binding regulations. For example, banks engaged in so-called non-price competition—they not only offered premiums, such as toasters, but they also provided free services. Non-price competition meant hiring more employees and other additions to costs that were less efficient than pricing services more directly.

Deregulation opened the way for a new era of price competition, freer entry into banking, and eventually new activities for banks. In the new era, the infrastructure created to compete under the old rules had to change. In the process, inefficient firms, previously protected by regulation, had to adapt, be absorbed, or just fail. The scale of this adjustment was massive. Figure 1 shows that, with the rise in bank failures and increase in mergers, the number of banks turned down in the mid-1980s and continued to drop, resulting in more than a 40% decline in the number of banks.

Along with these structural changes, banks began introducing new, less labor-intensive systems for providing services. Over the past two decades, bank customers have seen a proliferation of ATMs, as well as the greater use of banking phone centers, the spread of “supermarket” branches, and the expansion of point-of-sales transactions. These innovations, along with the expansion into new activities and the growth of more sophisticated financial services, have changed banks’ demand for labor, including the mix of skills that banks require of their staffs.

Productivity trends

The breakthrough and continuation of deregulation in banking coincide closely with a remarkably long-lived shift in the growth in labor productivity among banks. A commonly used measure of labor productivity of an industry is output per hour, that is, the volume of its products or services produced for each hour of labor input. This measure of productivity can increase for several reasons. For example, firms could increase the amount or quality of the equipment they use. Firms also could improve the organization of production processes, provide better training for their workers, or employ workers with higher levels of formal education.

Figure 2 charts the index output per hour for banks and shows a distinct break in trend in the early 1980s. From 1983 through 1999, output per hour in banking grew an average 2.8% per year (average compounded growth), compared to 0.7% over the previous 10 years. Since 1982, productivity growth in banking has dipped at times, for example, during the credit crunch of the early 1990s, and a slowdown in 1998 helped hold down the post-1995 growth rate to 1.7% per year. However, overall, it appears that the higher trend in growth in output per hour in banking held up through the end of the 1990s.

The banking industry’s shift in productivity growth significantly predates the mid-1990s shift that is commonly associated with the so-called New Economy. Sinc e1995, growth in output per hour for the broad nonfarm business sector of the U.S. economy has averaged about 2.5% per year, compared to 1.5% a year for the first half of the decade. Much of this pickup in labor productivity growth has been associated with the IT sector. For example, among computer and office equipment producers, productivity grew on average more than 40% a year from 1995 to 1999, up from about 28% from 1990 to 1995.

The banking sector did not contribute to the pickup in overall productivity growth since 1995—not because productivity growth in banking was slow, but because banking productivity growth already had been relatively high for several years. Indeed, on balance, labor productivity growth in banking has outpaced the gains made in the broader economy in the 1990s, though it still has been modest compared to the IT sector.

Less reliance on labor

Another measure of productivity suggests that, in realizing faster growth in output per hour, banks also

have reduced their relative reliance on labor. Figure 3 shows the ratio of total salaries and benefits to the value of bank output, where the latter is measured as the sum of net interest income plus non-interest income. The ratio held steady through much of the 1960s and 1970s before turning down in the early 1980s. The drop in the ratio says that the gains in labor productivity in banking have involved more than just shifting to higher-skilled (higher-paid), more productive workers. Rather, the drop is consistent with banks' improving work processes and relying relatively more on inputs such as IT equipment and software.

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