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Employment and Wages in California's Financial Services Sector

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The U.S. financial services industry—especially banking—has undergone substantial technological change and industry restructuring during the 1990s. A variety of new techniques and services have been introduced in all areas of the financial services sector, and industry restructuring through mergers and consolidation has been a defining feature of the banking industry in recent years. Merger activity has been especially notable in California, with several high-profile mergers of large banks in recent years symbolizing the trend. California also stands out as a state where restructuring has resulted in a contraction in bank offices.

Through their effects on cost, quality, and the types of services provided, technological change and industry restructuring are likely to generate gains for stockholders and customers. Such effects have been the primary focus of existing research on the restructuring of the financial services industries. Far less attention has been paid to the implications for employment, despite the possible impact of technological change and industry consolidation on the number and mix of jobs.

In this *Economic Letter*, I examine recent trends in employment and wages in California's financial services sector. I focus largely on the banking sector, in which some of the most significant and widespread changes have occurred. Comparison of the trends in California and the nation as a whole provides some perspective on the roles of technological change and industry restructuring in the determination of employment and wage changes. The evidence suggests that these factors have reduced employment at California banks, although wage and salary payments for workers remaining in this sector have risen rapidly in recent years.

Technology and changes in industry structure

During the 1990s, the financial services industries, especially commercial banking, experienced pronounced shifts in the techniques by which their services are produced and distributed as new computer technology and related information-processing technologies were developed. The most prominent example is the widespread proliferation and use of ATMs as outlets for routine consumer banking transactions. Other examples that apply to routine transactions include increased reliance on point-of-sale debit transactions using bank cards, the growth of in-store branches, and increased availability and use of banking by phone and personal computer (Morisi 1996, Laderman and Martinez 1998). Banks have instituted other labor-saving technological advances as well. One example is credit scoring, a statistically based method for evaluating loan applications and expected repayment performance, which increasingly is being applied to consumer and business loans.

In addition to any direct effects on employment, these changes in technology may affect employment indirectly by providing incentives for bank mergers and mergers between banks and other providers of financial services. Some technological changes create production techniques with a substantial "fixed-cost" component: the costs largely take the form of an up-front outlay, with relatively low additional costs per customer served. This raises the optimal scale of output and potential benefits associated with mergers. Alternatively, the introduction of new technologies may widen banks' markets, in geographic and product terms; mergers and acquisitions may be the low-cost option for expansion into the new market segments.

Such technological and structural changes tend to reduce the need for traditional "brick and mortar" bank offices through replacement by automated and centralized facilities. In recent years, these forces have been powerful in California. The number of branches of commercial banks in California fell 15% between 1991 and 1997, from about 5,000 to 4,300. (This number includes the many in-store branches located in supermarkets and other retail stores.) In contrast, for the nation as a whole, the number of bank branches rose 15% between 1991 and 1997, from about 52,400 to 60,300.

Potential effects on employment and wages

There are several avenues by which technological change and industry restructuring can affect employment and wages. The most obvious is the reduced need for bank staff—especially tellers—due to a reduction in branching. Also, mergers are likely to create redundancy in operational areas shared by the entities that join, thereby requiring the elimination of positions and separation of the employees who filled them. In turn, reduced demand for workers whose skills are tailored to the financial services sector will create excess supply of these workers and place downward pressure on their wages within the sector.

On the other hand, some aspects of changing technology and industry structure may tend to increase employment and wages. To exploit nascent increases in the optimal scale or scope of production enabled by new technologies, banks may need to expand employment following mergers, particularly if the resulting combination of assets is more productive. Regarding wages, the mix of workers may shift towards those with more rather than less investment in skills, or the productivity of existing workers may rise. For example, ATM machines directly substitute for bank tellers, who are at the lower end of bank salary scales. This reduces the share of low-wage workers in the banking sector. Moreover, the technological changes that underlie convergence may improve the productivity of the workers managing the information flow in new financial conglomerates, or require that workers hired have greater skills than in the past (Demsetz 1997).

On net, technological change and restructuring in the financial services industry have ambiguous effects on employment and wage growth. It is difficult to separate out the effects of changing technology and industry restructuring because they are closely related. However, comparing employment and wage trends between California and the nation as a whole will provide some perspective regarding the effect of the restructuring of branch networks.

Employment effects in California and the nation

Figure 1 shows payroll employment in the broad finance sector and in the depository institution subsector for California and the nation; each series is measured relative to its value in January 1989, which is normalized to equal 100. (Banks account for about three-fourths of employment at depository institutions, with thrifts and credit unions accounting for the remainder.) Employment growth in the finance sector was reduced by the 1990-91 recession, and as of late 1993 it was about at its 1989 level, in California and nationwide. Finance sector employment in California fell precipitously during 1994 and early 1995. This decline—about 45,000 jobs, or nearly 12% of the finance sector total—largely was due to a sharp contraction in mortgage banking and escrow-related jobs. Finance employment nationally fell for the same reason, but by a much smaller percentage than in California; the losses in California constituted more than 40% of the losses nationwide during this period.

The figure shows that a key restraining factor for job growth in the finance sector has been declining employment among depository institutions (which account for just over half of all finance jobs). The number of these jobs nationwide declined steadily during the first half of the 1990s. From the peak of nearly 2.3 million jobs in August 1989, about 250,000 (just over 10%) were lost by the end of 1995, with virtually no growth since then. The decline in California was steeper and has continued into 1999. From a peak of 275,000 jobs as of May 1990, about 60,000 (22%) had been lost by the end of 1995, and over 10,000 have been lost since then. As of January 1999, employment at California depository institutions had fallen 26% relative to the 1990 peak.

In contrast to the loss of jobs at depository institutions, employment gains have been rapid in other finance subsectors in recent years. On a yearly basis, employment growth in the nation's finance sector excluding depository institutions was 8½% during 1995-97, and for California the corresponding growth rate was nearly 13%. These gains more than offset losses among depository institutions during this period. As of February 1999, finance sector employment nationally was about 11% above its level from January 1989. In California, recent job gains recovered most of the jobs lost earlier in the 1990s, although employment in the state's finance sector remained slightly below its mid-1990 peak (by 2,300 jobs, or about one-half percentage point).

These figures suggest that consolidation in branch networks and other adjustments in California's banking sector have taken a toll on bank employment. In percentage terms, the employment decline at California depository institutions during the 1990s was just over twice as large as the national decline (22% versus 10%). On the other hand, recent strength in other finance sectors has largely offset employment declines in banking. Employment growth in these other sectors reflects the tremendous surge of activity in financial markets in recent years, which in turn was enabled by improvements in information-processing technology similar to those that led to the restructuring of the banking industry.

Wage effects in California and the nation

Have these changes also reduced wages and salary growth for employees at depository institutions? Figure 2 displays real wage and salary payments per employee at depository and nondepository institutions for the period 1989-97 (adjusted for inflation using the GDP deflator for personal consumption expenditure). Although we are unable to separate out nondepository institutions from depositories, depository institutions account for about 2½ times as many jobs as nondepositories, so the trends in wages and salaries in this broad sector are dominated by employment at depositories.

In California, real yearly wage and salary payments per worker at depository and nondepository institutions were nearly flat between 1989 and 1994, rising by only 1.6%; for the nation, they rose about 5%. However, between 1994 and 1997, wage and salary payments for workers at depository and nondepository institutions surged, rising 19% in California and 14% nationally. (By comparison, in California and nationally, real wage and salary payments per worker for all nonfarm industries were flat between 1989 and 1994 and rose 5.7% between 1994 and 1997.) On net, for the entire period 1989-97, real wage and salary payments per worker in this sector rose 21% in California and 20% nationally, so the salary gap between California and the rest of the nation rose slightly.

The size and pattern of these changes suggest that following an initial period of adjustment to rapid consolidation, salaries in this sector in California have recovered. In fact, the underlying changes in industry technology and structure may have provided the basis for the recent acceleration of salary growth. On the other hand, the salary gains among depository institutions have not been sufficiently large or rapid to offset declining employment and raise total salary payments in this sector.

Conclusion

Employment at depository institutions fell substantially more in California during the 1990s than in the United States as a whole. It is difficult to disentangle the effects of technological innovation from effects due to mergers per se. However, it appears that extensive restructuring of branch networks and other adjustments in California substantially restrained employment growth at California banks. Despite these employment reductions, the employees who remained in the sector fared well: wage and salary payments per employee at depository and nondepository institutions rose substantially in the last few years, which suggests that employees in this sector benefited from higher productivity techniques or were subject to upgrading of skill requirements.

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