# Bank Credit Growth in the Tenth District: Recent Developments

*By William R. Keeton*

Bank credit, the sum of loans and securities at commercial banks, is widely viewed as providing information about the current and future state of the economy. Analysts have been concerned about the behavior of bank credit during the nation's recovery from the 1990-91 recession. At first, analysts worried the recovery would be hampered because banks were making too few loans and purchasing too many securities. More recently, loan growth has picked up and securities growth has slowed, a development some analysts view as a sign the economy is growing too fast to keep inflationary pressures in check.

Bank credit growth may also shed light on the current and future state of the district economy. Trends in Tenth District bank credit may vary substantially, however, from trends in the nation as a whole. For example, district banks could be in better financial condition than banks nationwide, making district banks more willing to lend. Or district businesses and households could be more optimistic about future earnings, making them more willing to borrow.

This article describes the growth in bank credit in district states during the recovery and compares the district experience with that of the nation. The article concludes that loan growth and securities growth followed the same pattern in the district as the nation, but that loan growth in the district was much stronger. The first section documents the acceleration in loan growth and slowdown in securities growth in the nation. The second section shows that loan growth and securities growth varied the same way in the district but that loan growth was stronger in the district. The next section shows that growth of most loan categories was stronger in the district than in the nation. The last section shows that loan growth was stronger in most district states than in the nation.

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## *BANK CREDIT GROWTH IN THE UNITED STATES*

Bank credit growth in the nation has shown a clear pattern of acceleration during the recovery. In the early stages, total bank credit grew sluggishly, increasing only 2 percent on average in 1991 and 1992 (upper panel of Chart 1). But as the recovery proceeded, bank credit grew more rapidly, increasing at an average rate of 6 percent in 1993 and the first half of 1994.[1]

The slow growth and subsequent recovery in U.S. bank credit were due entirely to changes in bank loans. U.S. bank loans fell 3 percent in 1991 and 1 percent in 1992. Loan growth then strengthened to 5 percent in 1993 and 7 percent in the first half of 1994.

Bank security holdings behaved in opposite fashion during most of the period, but not enough to outweigh the effect of loans on bank credit. Securities at U.S. banks rose very fast in the first two years of the recovery, growing 14 percent on average in 1991 and 1992. Securities growth then slowed to 8 percent in 1993, the same year loans began to accelerate. Securities growth slowed still further in the first half of 1994, falling to 3 percent.

These trends in loan growth and securities growth are not unusual for an economic recovery. Loans typically grow slowly during the early stages of recovery and then accelerate as the economy picks up steam. At the beginning of a recovery, businesses and households are usually too unsure about future prospects to borrow heavily. And banks are usually too worried about borrowers' ability to repay to lend aggressively. As the recovery proceeds, businesses and households become more willing to borrow and banks become more willing to lend. As a result, bank loans accelerate.

For the same reasons, security holdings usually grow rapidly at the beginning of a recovery and then slow down. When loan growth is weak, banks typically invest some of their excess funds in securities. As loans rebound, banks finance the new lending partly by drawing down security holdings.

While weak loan growth and strong securities growth were both to be expected coming out of the 1990-91 recession, most analysts agree that loan growth was unusually weak and securities growth unusually strong.[2] There are several reasons for this unusual behavior. First, businesses and households were especially unwilling to borrow because they overborrowed in the 1980s and wanted to clean up their balance sheets. According to this view, weak loan demand forced banks to invest less of their funds in loans and more in securities. A second reason is that banks were less willing to lend and more eager to buy securities at the start of this recovery because their heavy loan losses in the late 1980s made them and their regulators more cautious. A third reason is that the steep yield curve of the early 1990s made loans less attractive to banks than security investments, which tend to be longer term. Finally, the new risk-based capital standards caused banks to shift more heavily from loans to securities than usual by reducing the capital requirement on securities below that on loans.[3]

These explanations for the unusually weak loan growth and strong securities growth during 1991-92 are consistent with the acceleration in loan growth and slowdown in securities growth in 1993-94. By 1993, businesses and households had made significant progress in cleaning up their balance sheets, suggesting they should be more willing to borrow. Also, banks had made significant progress working down their delinquent loans and building up their capital, suggesting they should be more willing to lend. The yield curve also began to flatten in early 1993, reducing the incentive banks had to shift out of short-term loans into long-term securities.[4] Finally, it could be argued that banks had completed their adjustment to the new risk-based capital standards by 1993, allowing loan and securities growth to return to more normal rates.[5]

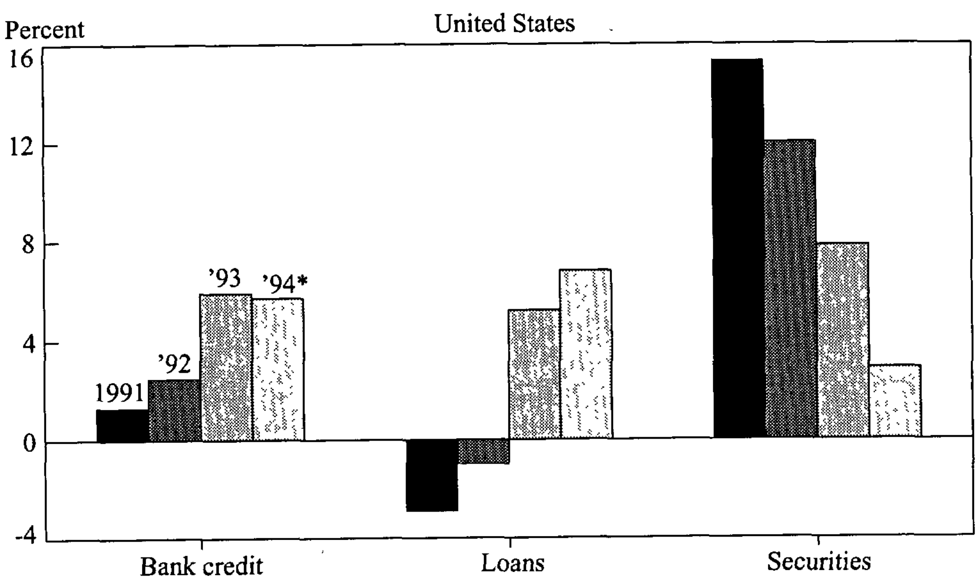
## *BANK CREDIT GROWTH IN TENTH DISTRICT STATES*

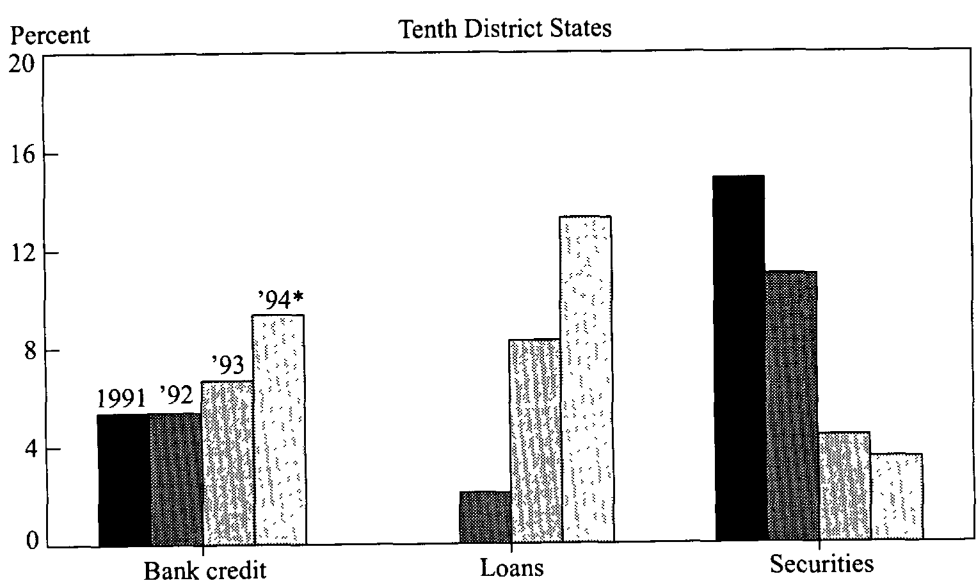
Bank credit growth increased in the district, just as in the nation, in the 1991-94 period. District growth rates, though, were higher than in the nation throughout the period (lower panel of Chart 1). Bank credit grew moderately in Tenth District states in the first two years of the recovery, increasing 5 1/2 percent in both 1991 and 1992. Bank credit growth then rose to 7 percent in 1993 and 9 1/2 percent in the first half of 1994.

As in the United States, the increase in bank credit growth in 1993-94 was due entirely to faster loan growth. District bank loans grew sluggishly in the first two years of the recovery, increasing only 1 percent on average in 1991 and 1992. Loan growth then jumped to 8 percent in 1993 and 13 percent in the first half of 1994, almost twice the national rate.

*Chart 1*

***Growth in Bank Credit, Loans, and Securities***




* First half, seasonally adjusted annual rate.

Although loan growth has followed the same accelerating pattern in the district and the nation during the recovery, growth has been consistently stronger in the district. In particular, loan growth was three percentage points higher in the district than the nation in 1991-93 and over six points higher in the first half of 1994. This faster growth in district bank loans accounts for the faster growth in district bank credit during the recovery.

Securities growth moved in the opposite direction from loan growth over the period, just as it did in the nation. From an average of 13 percent in 1991 and 1992, growth in district security holdings slipped to only 4 1/2 percent in 1993 and 3 1/2 percent in the first half of 1994.[6] Total growth in securities over the period was about the same in the district as the nation.

Why has loan growth been stronger in the district than in the United States during the recovery? Like the national economy, the district economy suffered a downturn in 1990-91, which helps explain why district loan growth was weak in 1991 and 1992. The downturn was less severe in the district, however, helping to explain why loan growth was not as weak in the district as the nation. For example, while district employment growth slowed in late 1990 and early 1991, it slowed less than national employment growth and was stronger throughout the period (Chart 2).

A second reason loan growth was not as weak in the district as the nation was that some of the special factors depressing loan growth early in the recovery were less important in the district. As noted earlier, one such factor was the desire by overleveraged borrowers to clean up their balance sheets. During the latter half of the 1980s, however, loans grew much slower in the district than the United States. For example, from 1984 to 1990, bank loans grew at an annual rate of 8 percent in the nation but only 3 percent in the district, due in large part to the agriculture and energy slumps of the mid-1980s. Thus, as the recovery began in 1991, borrowers may have felt less need to reduce debt burdens in the district than the nation.

Another factor that depressed bank lending in the nation at the start of the recovery was the reluctance of financially weak banks to take risk. But district banks had already suffered through and recovered from a period of heavy loan losses in the mid-1980s. As a result, they came out of the 1990-91 recession in better financial condition than banks nationwide. At the end of 1990, for example, noncurrent loans had risen to 3.7 percent of total loans in the United States but were only 2.1 percent of total loans in the district.

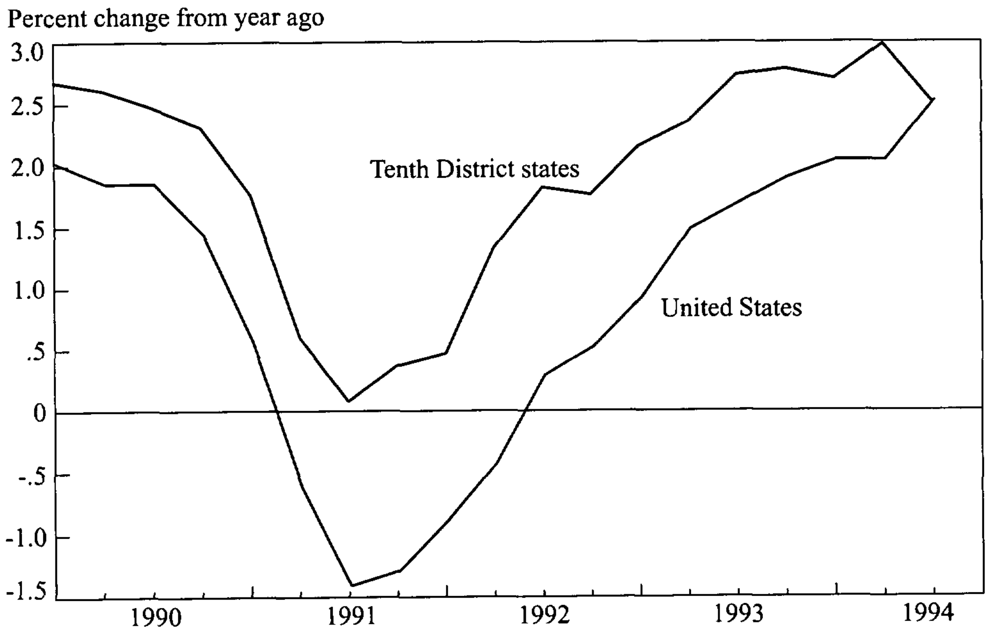
While the gap in loan growth during the first three years of the recovery is easy to explain, it is less clear why district loan growth exceeded U.S. loan growth so much in the first half of 1994. During the recent period, the district appeared to lose its lead over the nation in economic growth. For example, employment growth remained approximately unchanged in the district but increased in the United States, closing the gap between the two. Despite this convergence in economic growth, the gap in loan growth actually widened.

The sharper acceleration in district loan growth in the first half of 1994 could mean the district economy will outperform the national economy down the road. For example, loans may have risen as much as they did because district businesses and households became much more optimistic about the future and, thus, much more willing to borrow and spend. Or loans may have risen so sharply because district banks significantly eased their lending terms, making it much more attractive for district businesses and households to borrow and spend. In either case, the increased spending could cause the district economy to grow faster than the national economy in the rest of 1994 and 1995, as district firms step up production and hiring to meet the increased demand.

## *LOAN GROWTH BY CATEGORY*

Loan growth differed among types of loans but was stronger in most categories in the district than the nation. In both the United States and the district,

*Chart 2*
***Employment Growth***




Source: Bureau of Labor Statistics.

commercial and industrial loans, consumer loans, and commercial real estate loans started out weak and then strengthened. However, growth was stronger in the district than the nation in all three categories, especially commercial real estate loans. Home mortgage loans and agricultural loans were the main exceptions. These two categories grew at a healthy pace throughout the recovery and showed about the same strength in the district as the nation (Chart 3).

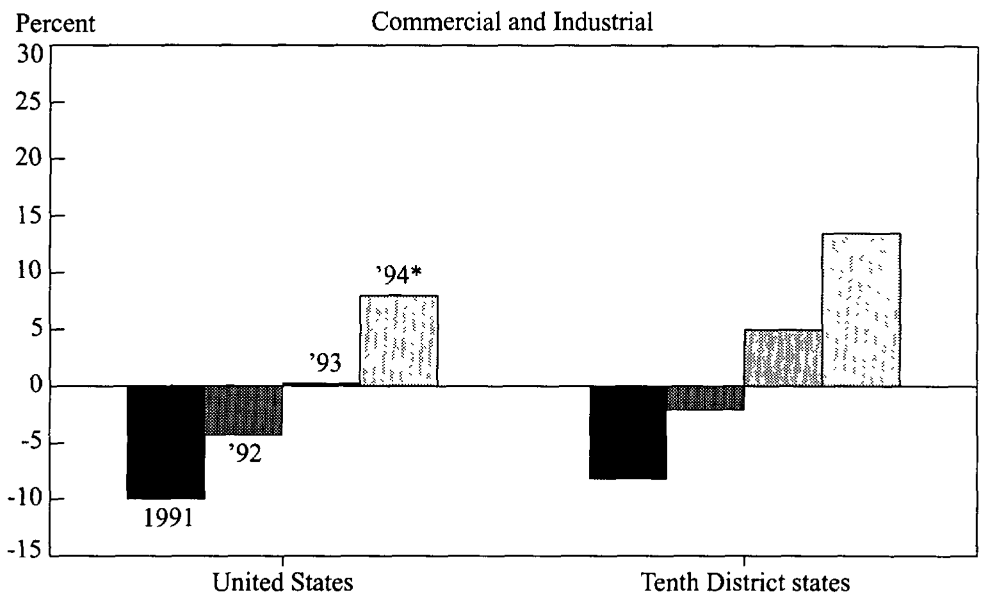
### *Commercial and industrial loans*

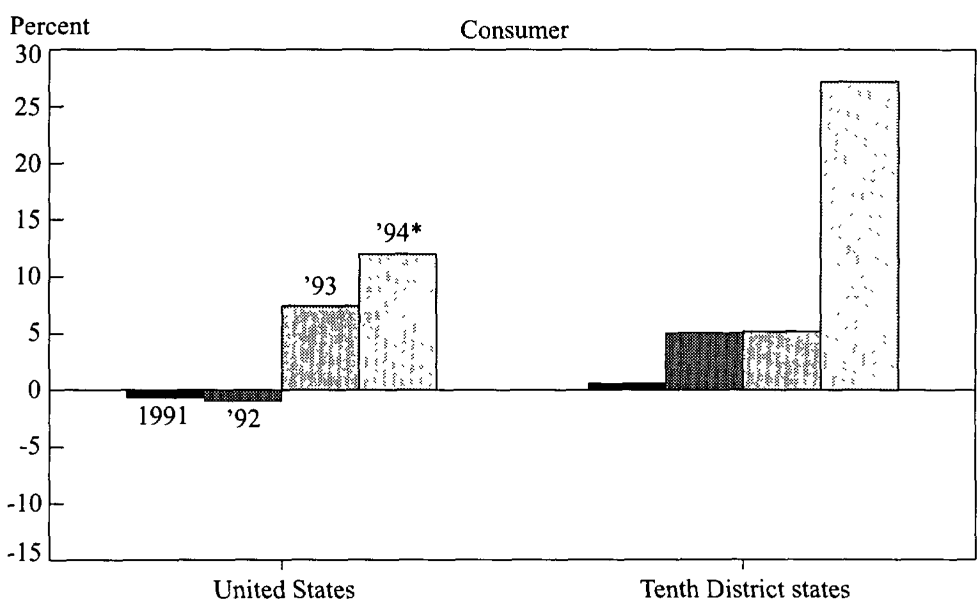
During most of the recovery, C&I loans have been the weakest loan category in the nation. Such loans fell 10 percent in 1991, declined another 4 percent in 1992, and barely increased at all in 1993. C&I loan growth finally rebounded in the first half of 1994, growing at an annual rate of 8 percent. The weakness in C&I loans in 1991-93 reflected both slow growth in total business borrowing and a shift in the composition of borrowing from bank loans and other short-term debt to long-term debt and equity.[7] In the first half of 1994, the strong economy boosted total business borrowing. And the rise in long-term rates and fall in stock prices early in the year induced businesses to rely more on banks and finance companies for credit. Finally, some analysts argue that banks were also bidding more aggressively for business customers in an effort to boost revenues (Knecht, Racine).

District C&I loans also fell sharply at the beginning of the recovery and rebounded later. The

*Chart 3*

***Loan Growth by Category***

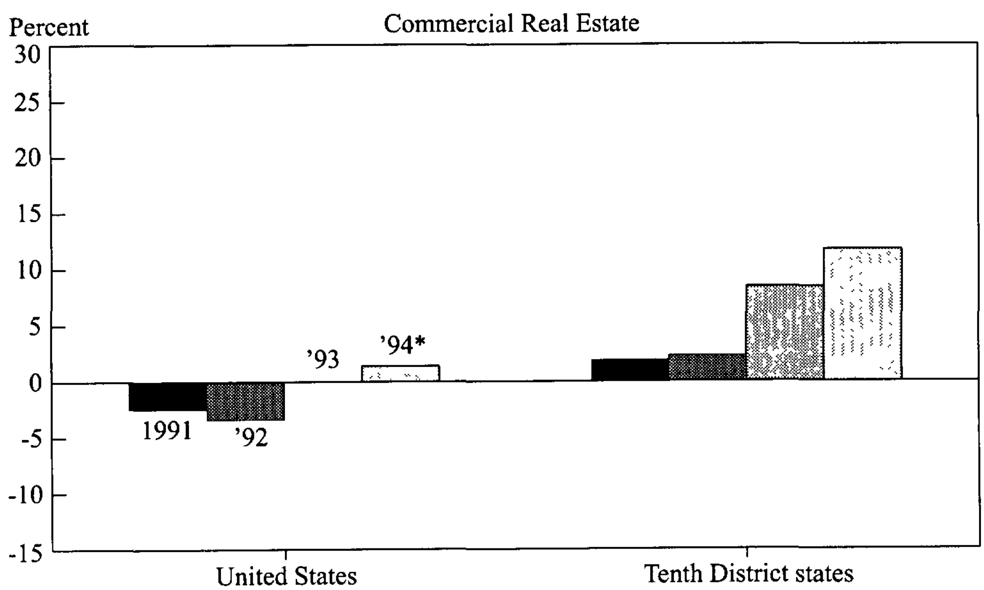


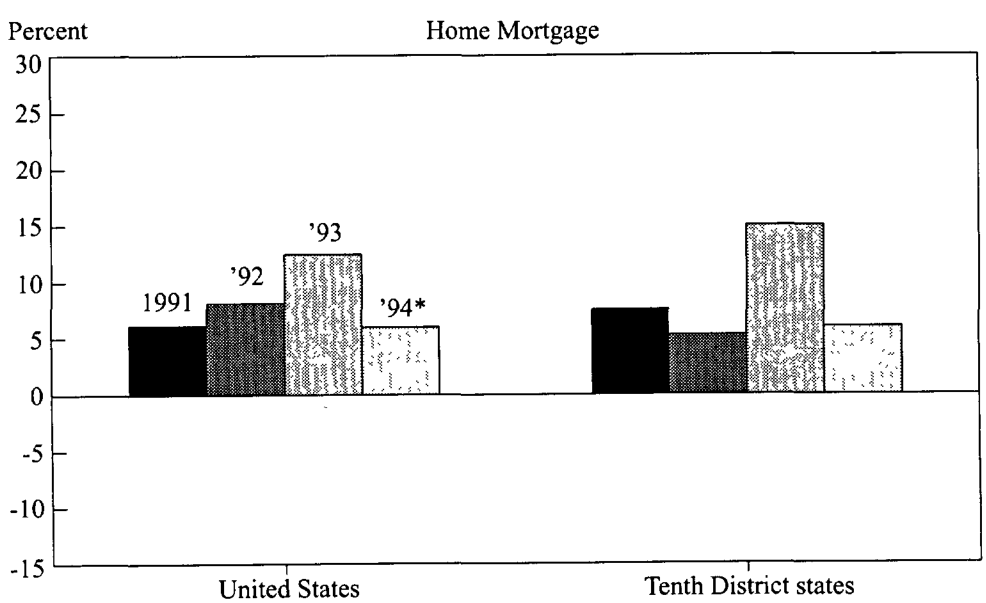




* First half, seasonally adjusted annual rate.

*Chart 3 (continued)*

## *Loan Growth by Category*

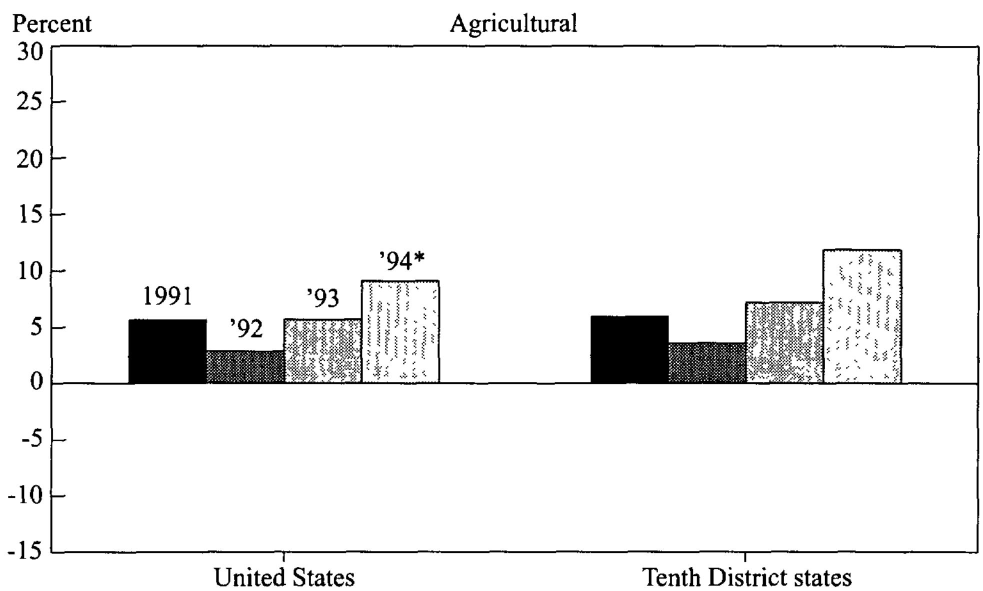



* First half, seasonally adjusted annual rate.

*Chart 3 (continued)*

***Loan Growth by Category***




* First half, seasonally adjusted annual rate.

main difference was that loan growth rebounded sooner and more strongly in the district than in the nation. After declining in both 1991 and 1992, district C&I loans grew 5 percent in 1993 and a very strong 13 1/2 percent in the first half of 1994. As in the case of total loans, the stronger growth in C&I loans in the district can be attributed to the faster economic growth in the region and the fact that district banks and businesses started the recovery in better financial condition.

### *Consumer loans*

Consumer loan growth in the nation was weak in the first two years of the recovery but then rebounded strongly. After falling about 1 percent in both 1991 and 1992, consumer loans at U.S. banks rose 7 1/2 percent in 1993 and an even stronger 12 percent in the first half of 1994. The rebound in consumer loans in 1993-94 coincided with strong growth in consumption spending, as households became more comfortable with debt service burdens and more optimistic about future income growth.

Growth in district consumer loans also started out weak and then accelerated. However, loan growth was stronger in the district than the nation most of the period, reflecting the faster job and income growth in the region. District consumer loans were flat in 1991, rose about 5 percent in both 1992 and 1993, and then grew at the exceptionally rapid rate of 27 percent rate in the first half of 1994. Some of the 1994 surge was due to the transfer of a credit card bank from outside the district. But even without the new bank, consumer loans would have increased sharply.

### Commercial real estate loans

Commercial real estate loans at U.S. banks were weak the first three years of the recovery and, in contrast to C&I loans, rebounded only slightly in the first half of 1994. Commercial real estate loans fell 2 1/2 percent in 1991 and an even sharper 3 1/2 percent in 1992. Loans then leveled off in 1993 and grew a mere 1 1/2 percent in the first half of 1994. Depressed real estate prices and an excess supply of office space contributed to the weakness in commercial real estate lending. Moreover, the banks that had been most active in such lending were in the worst financial condition and thus were most reluctant to lend. By 1994, the commercial real estate market had firmed sufficiently and banks' financial condition improved enough for lending to increase modestly.

Growth in commercial real estate loans has been much faster in the district than in the nation. Such loans increased in both 1991 and 1992, albeit at the sluggish rate of 2 percent. Commercial real estate loans then jumped 8 1/2 percent in 1993 and 12 percent in the first half of 1994. One reason for the strength in commercial real estate lending during the recovery is that construction spending has grown much faster in the district than the nation.[8] Construction loans fell at double-digit rates in 1991-92 but then rose at double-digit rates in 1993-94. This dramatic turnaround accounts for most of the acceleration in commercial real estate loans in 1993-94, even though construction loans are only a fifth of total commercial real estate loans.

### Home mortgage loans

Home mortgage loans were the strongest category in the nation during the first three years of the recovery. Despite reduced demand for housing, home mortgage loans at U.S. banks grew a healthy 6 percent in 1991 and 8 percent in 1992. Growth then jumped to 12 1/2 percent in 1993 before subsiding to 6 percent in the first half of 1994. One factor that helped sustain growth in home mortgages during the recovery was the absorption of troubled S&Ls into the banking industry and the reduced competition for borrowers from remaining S&Ls. Another factor was the high rate of mortgage refinancing during much of the period. Many households refinanced their mortgages with higher principal, using the proceeds to pay down high-cost consumer debt.

Changes in market interest rates help explain both the acceleration in loan growth in 1993 and the slowdown in 1994. As long-term interest rates came down in 1993, mortgage rates fell to their lowest levels since the early 1970s. This decline in mortgage rates not only increased the demand for new mortgages for home purchases but also further boosted the demand for refinancings. Conversely, when long-term rates went back up in 1994, refinancings and housing demand both fell, slowing the growth in home mortgage loans.

Home mortgage loans behaved much the same in the district as the nation. Loans at district banks grew 7 1/2 percent in 1991, 5 percent in 1992, and 15 percent in 1993. Growth then slowed to 6 percent in the first half of 1994, as home mortgage loans switched from the fastest growing category in the district to the slowest. The fact that loan growth varied the same way in the district as the nation over the period is not surprising, since changes in market interest rates have such a strong effect on housing demand and refinancing. However, it is surprising that district loan growth did not exceed national loan growth, given that the demand for new housing was much stronger in the district.[9]

### Agricultural loans

Agricultural loans at U.S. banks increased at a healthy pace during most of the period. Such loans grew 6 percent in 1991, unaffected by the recession. Growth slowed to 3 percent in 1992, returned to 6 percent in 1993, and then rose to 9 percent in the first half of 1994. The healthy loan growth during the recovery mainly reflected an increase in the percent of farm debt held by banks. Total farm debt rose only 1 percent a year from the end of 1990 to the end of 1993, but banks' market share increased from 34.5 percent to 38.0 percent at the expense of other lenders (U.S. Department of Agriculture).

In the district, growth in agricultural loans followed a similar pattern but was slightly stronger. From 6 percent in 1991, growth slowed to 3 1/2 percent in 1992. District agricultural loans then increased a strong 7 percent in 1993 and an even faster 12 percent in the first half of 1994.

## *BANK CREDIT GROWTH BY STATE*

In most district states, loan growth accelerated during the recovery, just as in the nation (Chart 4). Loan growth rates were higher in most district states than in the nation throughout the period. Average loan growth in 1993-94 was strongest in Colorado, where it exceeded 20 percent, and weakest in Kansas, where it was only 4 percent.

Until recently, securities growth also followed the national pattern in most district states, starting out strong and then slowing (Chart 5). In contrast to the nation, however, securities growth increased in several states in the first half of 1994. Over the period as a whole, growth was strongest in Colorado and weakest in Nebraska and Kansas. Contrary to what might be expected, the states with the fastest securities growth were not always the ones with the slowest loan growth.

The most striking differences in bank credit trends between the district and the nation occurred in the growth of loans rather than securities. This section briefly describes loan growth in each district state in order of average loan growth in 1993-94.

### *Colorado*

Loans in Colorado, after falling in 1991 and rising only moderately in 1992, rose at a rate well above 20 percent in 1993 and the first half of 1994. Absorption of S&Ls into the banking industry accounted for much of the 1993 loan growth. But even without S&L absorption, loans would have grown a strong 11 percent in 1993. The Colorado economy grew much faster than the national economy during the recovery, helping explain why loan growth ended up so much stronger in Colorado than the nation.

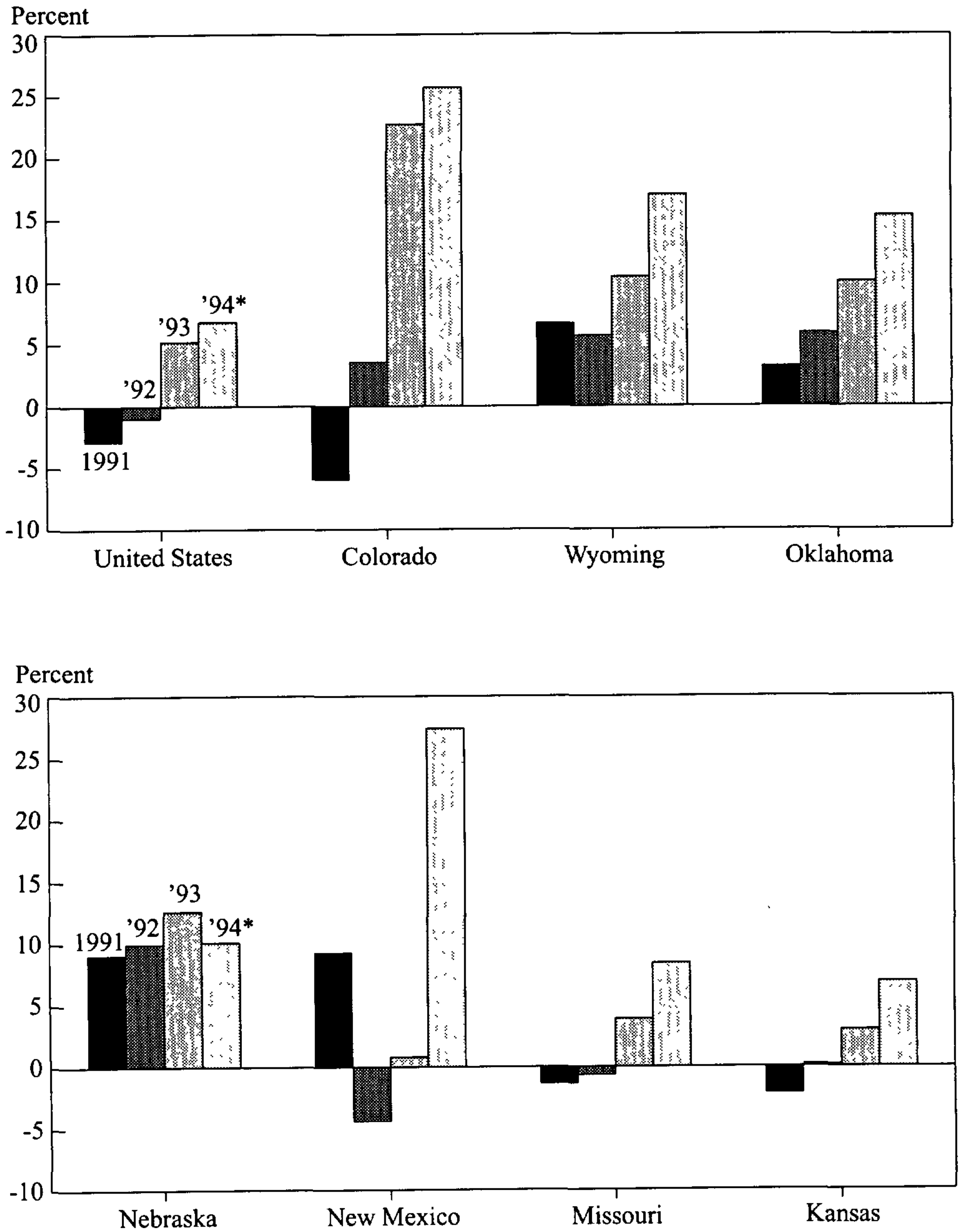
The rebound in loan growth in 1993-94 was widespread across categories, with home mortgage loans and commercial real estate loans showing special strength. Not all of the growth in these two categories was due to the absorption of S&Ls. Strong population growth boosted demand for home mortgages by increasing housing demand. Residential and nonresidential construction were also very strong, increasing the demand for construction loans. Also, the office vacancy rate in Denver continued to fall, helping revive the demand for commercial mortgages.

### *Wyoming*

Loans grew at a healthy pace the first two years of the recovery and then accelerated. From an average of 6 percent in 1991-92, loan growth jumped to 10 percent in 1993 and 17 percent in the first half of 1994, far exceeding national loan growth. Some of the difference in loan growth between Wyoming and the nation reflected a catching-up process. Due to slow loan growth in the latter half of the 1980s, Wyoming banks began the recovery with a loan-asset ratio of only 45 percent, well below that of most other states.

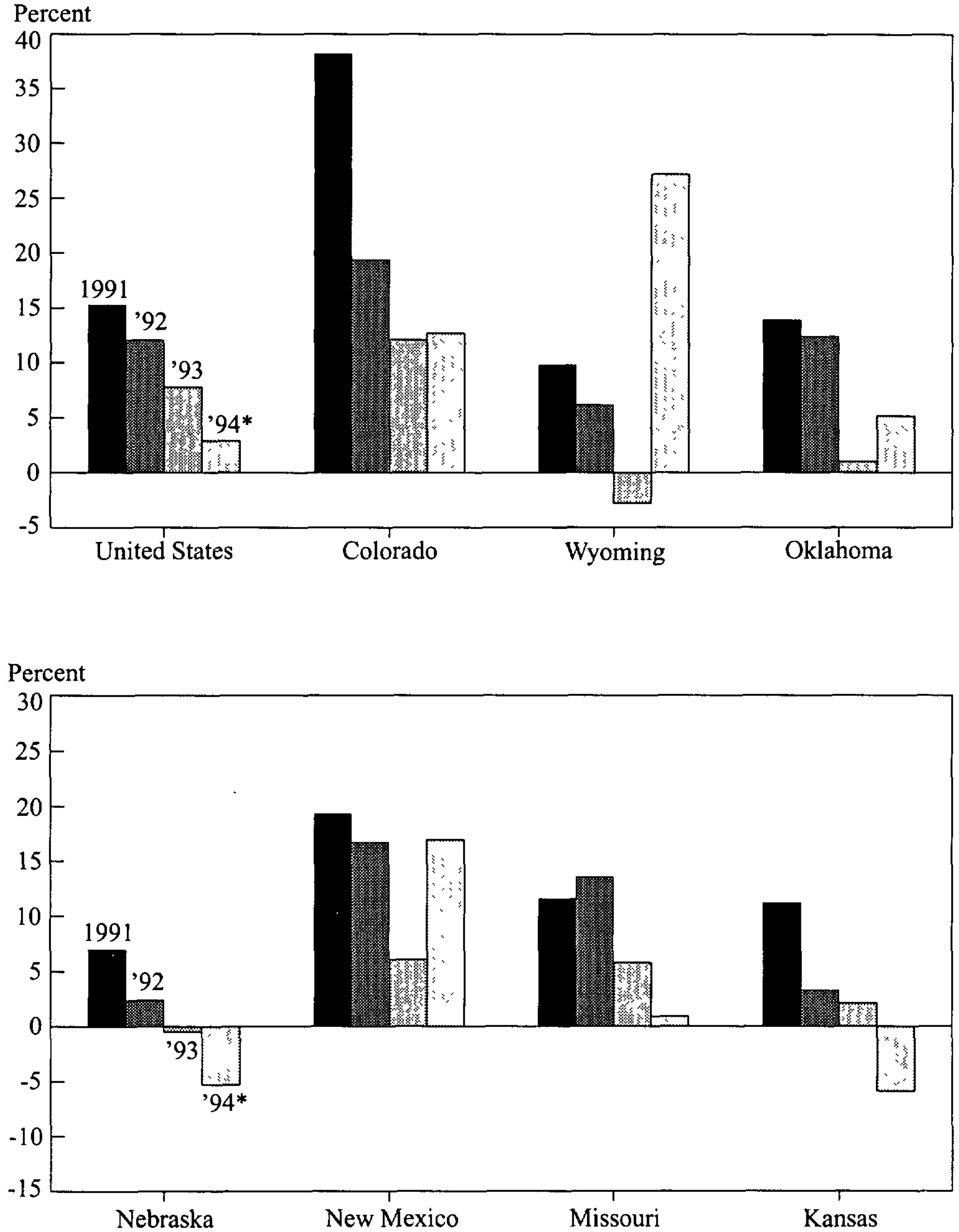
Commercial real estate loans, home mortgage loans, and agricultural loans were all strong, increasing at rates close to or above 20 percent in 1993-94. The only weak category was C&I loans,

*Chart 4*
***Growth in Loans***




* First half, seasonally adjusted annual rate.

*Chart 5*
***Growth in Securities***




* First half, seasonally adjusted annual rate.

which grew slower than in the nation during most of the recovery. These loans fell sharply in 1991, stayed flat the next two years, and increased at only a 2 1/2 percent rate in the first half of 1994.

### *Oklahoma*

Loan growth started out at a modest but positive rate and then increased steadily. Loan growth reached 10 percent in 1993 and rose to 15 percent in the first half of 1994, more than twice the national rate. As in Wyoming, one reason for the rapid loan growth was that Oklahoma banks began the recovery with a loan-asset ratio of only 46 percent due to exceptionally slow loan growth in the mid-to-late 1980s.

Growth was strong in all loan categories but especially in commercial real estate. These loans grew 12 percent in 1993 and 19 percent in the first half of 1994. Strong construction activity in the state boosted the demand for construction loans. Commercial mortgages also grew rapidly despite persistently high office vacancy rates in Oklahoma City.

### *Nebraska*

Loan growth has been strong in Nebraska throughout the recovery. Nebraska was the only state where loan growth slowed in the first half of 1994. At 10 percent, however, loan growth still exceeded the national average by several percentage points. The faster loan growth in Nebraska cannot be explained by faster economic growth, because the Nebraska economy grew somewhat slower than the national economy after 1992. Nor did the rapid loan growth represent a catching-up process. Nebraska banks began the recovery with a loan-asset ratio of 54 percent, a little above the district average, and ended up with a ratio of 61 percent, far above the district average.

While all loan categories grew rapidly, home mortgage loans were especially strong. These loans fell slightly in the first half of 1994, but only after surging 26 percent in 1992 and 50 percent in 1993. Although housing demand was not any stronger than in the nation, the growth in home mortgages brought holdings by Nebraska banks more in line with other states.[10]

### *New Mexico*

Loan growth fluctuated sharply in New Mexico due partly to special factors. Loans grew a strong 9 percent in the first year of the recovery due to the absorption of two failed S&Ls. But in contrast to the nation and the district, loan growth then slowed sharply in 1992-93. Loans ended the period by rebounding strongly, growing at a 27 percent rate in the first half of 1994. The transfer of a large credit card bank from outside the district accounted for much of the surge. Even without the new bank, however, loans would have grown at a rate of 11 percent in the first half of 1994, a marked improvement from the previous two years. Economic growth has been much higher in New Mexico than the United States, helping explain the fast loan growth in the state at the end of the period but not the slow growth earlier.

While total loans behaved erratically over the period, C&I loans, consumer loans, and commercial real estate loans all started out weak and steadily improved. Growth in the first half of 1994 was especially strong for C&I loans, which rose at a 21 percent rate, and for consumer loans, which increased at a 102 percent rate. Although most of the explosive growth in consumer loans was due to the new credit card bank, consumer loans would have risen at the rapid rate of 16 percent even without the bank. Home mortgage loans showed the most unusual behavior. These loans surged 57 percent in 1991 due to the absorption of the failed S&Ls. Home mortgage loans then declined the next two years, recovering only partially in the first half of 1994.

### *Missouri*

Loan growth in Missouri closely matched national trends during the period. Loans started out weak and then rebounded to 4 percent in 1993 and over 8 percent in the first half of 1994. The similarity in loan growth between Missouri and the nation is not surprising, given that the Missouri and national economies have grown at about the same rate.

While total loans have grown at similar rates in Missouri and the nation, commercial real estate loans have been much stronger in Missouri and home mortgage loans much weaker. Commercial real estate loans grew 4 percent in 1993 and 8 1/2 percent in the first half of 1994, well above the national average. On the other hand, home mortgage loans grew only 2 percent a year throughout the recovery. These differences in loan growth cannot be explained by differences in economic activity. Growth in housing permits has not been any weaker in Missouri than the nation, while growth in construction jobs and construction contracts has been only marginally higher.

### *Kansas*

Loans grew about the same in Kansas as the nation during the recovery. Loan growth got off to a weak start but improved to 3 percent in 1993 and 7 percent in the first half of 1994. Before slowing in the first half of 1994, the Kansas economy tracked the national economy fairly closely, helping explain why loan growth has been so similar.

The only loan category in which Kansas has failed to keep up with the nation is home mortgage loans. Such loans grew three percentage points below the national average in 1993 and then fell in the first half of 1994, while loans nationwide were rising. As in the case of Missouri, the weaker growth in home mortgage loans cannot be attributed to weaker housing demand, as housing permits have moved in lockstep with the nation.

## *CONCLUSIONS*

During the current recovery, bank credit trends in Tenth District states have matched national trends in some ways but differed in others. In both the district and the nation, loan growth started out weak and then accelerated as the recovery proceeded. Total security holdings also behaved about the same in the district as the nation, growing fast at the beginning of the recovery and then slowing sharply in 1993-94. The district differed from the nation in that it enjoyed stronger loan growth throughout the period. The gap in loan growth was evident in several categories but was greatest for commercial real estate loans, which rebounded sharply in the district in 1993-94 but remained weak in the nation.

While loan growth accelerated and securities growth slowed in almost all district states during the recovery, loan growth was stronger in some states than others. By 1993-94, loan growth was close to the national average in Kansas and Missouri but well above the national average in Colorado, Wyoming, Oklahoma, Nebraska, and New Mexico. Average loan growth in 1993-94 was especially strong in Colorado, where loans grew four times faster than in the nation.

The stronger loan growth in the district than the nation is explained by several factors. The district economy suffered a milder recession than the nation, and as a result, economic growth remained stronger through the end of 1993. District banks and borrowers also started the period in better financial health than their counterparts in the rest of the nation, having already suffered through and recovered from the agriculture and energy slumps of the mid-1980s. Finally, the sharper acceleration in district loan growth in the first half of 1994 could be a sign that the district economy remains fundamentally stronger than the national economy and will grow faster than the national economy in the rest of 1994 and 1995.

## *APPENDIX*

### *GROWTH IN BANK CREDIT, LOANS, AND SECURITIES*
*(Percent, annual rate)*

United States

| | 1991 | 1992 | 1993 | H1 1994 |
|---|---|---|---|---|
| Bank credit | 1.3 | 2.5 | 5.9 | 5.7 |
| Loans | -2.9 | -1.0 | 5.2 | 6.8 |
| C&I | -10.0 | -4.3 | .2 | 8.0 |
| Consumer | -.7 | -1.0 | 7.4 | 12.0 |
| Commercial R.E. | -2.5 | -3.4 | -.0 | 1.4 |
| Home mortgage | 6.2 | 8.2 | 12.5 | 6.0 |
| Agricultural | 5.7 | 2.9 | 5.7 | 9.1 |
| Securities | 15.3 | 12.1 | 7.8 | 2.9 |
| Memo: Nonfarm employment | -.9 | .9 | 2.0 | 3.0 |

Tenth District States

| | 1991 | 1992 | 1993 | H1 1994 |
|---|---|---|---|---|
| Bank credit | 5.4 | 5.4 | 6.7 | 9.4 |
| Loans | .4 | 2.1 | 8.3 | 13.3 |
| C&I | -8.2 | -2.1 | 5.0 | 13.5 |
| Consumer | .6 | 5.1 | 5.2 | 27.2 |
| Commercial R.E. | 1.9 | 2.3 | 8.4 | 11.7 |
| Home mortgage | 7.6 | 5.3 | 15.0 | 6.0 |
| Agricultural | 6.0 | 3.6 | 7.2 | 11.9 |
| Securities | 14.9 | 11.0 | 4.4 | 3.5 |
| Memo: Nonfarm employment | .5 | 2.2 | 2.7 | 2.8 |

Colorado

| | 1991 | 1992 | 1993 | H1 1994 |
|---|---|---|---|---|
| Bank credit | 7.2 | 9.6 | 18.2 | 20.4 |
| Loans | -6.0 | 3.6 | 22.7 | 25.7 |
| C&I | -8.3 | -4.9 | 10.0 | 23.3 |
| Consumer | -4.2 | 11.0 | -2.4 | 48.5 |
| Commercial R.E. | -11.3 | 1.5 | 26.2 | 19.2 |
| Home mortgage | -1.1 | 6.7 | 61.5 | 18.6 |
| Agricultural | -2.8 | 1.3 | 6.7 | 13.6 |
| Securities | 38.2 | 19.4 | 12.1 | 12.7 |
| Memo: Nonfarm employment | 1.8 | 3.9 | 4.0 | 2.7 |

*GROWTH IN BANK CREDIT, LOANS, AND SECURITIES (continued)*

Kansas

| | 1991 | 1992 | 1993 | H1 1994 |
|---|---|---|---|---|
| Bank credit | 3.1 | 1.5 | 2.6 | 1.3 |
| Loans | -2.2 | .2 | 3.0 | 6.9 |
| C&I | -10.5 | -7.6 | -1.0 | 11.9 |
| Consumer | -5.0 | -.4 | 6.4 | 16.7 |
| Commercial R.E. | 1.8 | 2.5 | -.8 | 3.9 |
| Home mortgage | 4.1 | 5.0 | 9.6 | -1.6 |
| Agricultural | 2.1 | 3.1 | 5.3 | 6.1 |
| Securities | 11.2 | 3.3 | 2.1 | -5.9 |
| Memo: Nonfarm employment | .8 | 1.6 | 2.3 | 1.4 |

Missouri

| | 1991 | 1992 | 1993 | H1 1994 |
|---|---|---|---|---|
| Bank credit | 2.5 | 3.9 | 4.6 | 5.7 |
| Loans | -1.4 | -.7 | 3.9 | 8.4 |
| C&I | -7.8 | -3.6 | 4.2 | 9.7 |
| Consumer | -4.7 | -.2 | 7.7 | 21.0 |
| Commercial R.E. | 6.2 | -.7 | 4.1 | 8.5 |
| Home mortgage | 2.3 | 1.5 | 1.6 | 2.4 |
| Agricultural | 10.1 | 3.1 | 4.8 | 10.3 |
| Securities | 11.6 | 13.6 | 5.8 | .9 |
| Memo: Nonfarm employment | -1.0 | 1.3 | 3.3 | 3.2 |

Nebraska

| | 1991 | 1992 | 1993 | H1 1994 |
|---|---|---|---|---|
| Bank credit | 8.4 | 7.3 | 8.2 | 5.2 |
| Loans | 9.1 | 10.0 | 12.6 | 10.1 |
| C&I | -4.7 | 9.2 | 7.3 | 11.9 |
| Consumer | 22.2 | 11.5 | 5.7 | 10.3 |
| Commercial R.E. | 5.6 | 11.5 | 11.1 | 12.7 |
| Home mortgage | 7.4 | 26.0 | 50.2 | -1.3 |
| Agricultural | 10.3 | 5.4 | 7.6 | 16.2 |
| Securities | 7.0 | 2.4 | -.5 | -5.3 |
| Memo: Nonfarm employment | .6 | 2.2 | 1.7 | .3 |

*GROWTH IN BANK CREDIT, LOANS, AND SECURITIES (continued)*

New Mexico

| | 1991 | 1992 | 1993 | H1 1994 |
|---|---|---|---|---|
| Bank credit | 12.5 | 2.8 | 2.9 | 23.1 |
| Loans | 9.3 | -4.4 | .8 | 27.4 |
| C&I | -14.5 | -5.7 | -2.0 | 21.3 |
| Consumer | -5.2 | 1.0 | 4.6 | 101.7 |
| Commercial R.E. | -4.3 | 3.3 | 7.6 | 9.2 |
| Home mortgage | 56.5 | -5.2 | -6.3 | 4.9 |
| Agricultural | 6.4 | -5.6 | 6.0 | 1.4 |
| Securities | 19.3 | 16.7 | 6.1 | 16.9 |
| Memo: Nonfarm employment | .7 | 3.9 | 3.3 | 6.6 |

Oklahoma

| | 1991 | 1992 | 1993 | H1 1994 |
|---|---|---|---|---|
| Bank credit | 7.7 | 8.8 | 5.9 | 10.7 |
| Loans | 3.2 | 5.9 | 10.0 | 15.3 |
| C&I | -5.0 | 4.4 | 10.8 | 16.6 |
| Consumer | 5.9 | 9.0 | 8.5 | 19.1 |
| Commercial R.E. | 6.3 | 7.6 | 11.7 | 18.5 |
| Home mortgage | 8.5 | 13.9 | 11.6 | 10.3 |
| Agricultural | 2.6 | 3.7 | 11.4 | 14.4 |
| Securities | 13.9 | 12.4 | 1.0 | 5.2 |
| Memo: Nonfarm employment | 1.1 | 1.3 | .5 | 3.6 |

Wyoming

| | 1991 | 1992 | 1993 | H1 1994 |
|---|---|---|---|---|
| Bank credit | 8.1 | 5.9 | 4.2 | 21.4 |
| Loans | 6.7 | 5.7 | 10.4 | 17.0 |
| C&I | -15.1 | 1.2 | -1.1 | 2.4 |
| Consumer | 11.6 | 3.9 | 7.3 | 11.4 |
| Commercial R.E. | -.9 | 4.2 | 24.1 | 32.9 |
| Home mortgage | 36.0 | 11.1 | 14.0 | 23.5 |
| Agricultural | 13.3 | 7.3 | 17.9 | 17.9 |
| Securities | 9.8 | 6.2 | -2.8 | 27.2 |
| Memo: Nonfarm employment | 1.7 | 1.7 | 2.3 | -.2 |

Notes: For bank credit, growth rates are December over December for 1991-93 and June over December for 1994:H1. For employment, growth rates are fourth quarter over fourth quarter for 1991-93 and second quarter over fourth quarter for 1994:H1. Data for 1994:H1 are seasonally adjusted. Trading account securities are excluded. Consumer loans include home equity loans, and C&I loans include acceptances of other banks.

## ENDNOTES

[1] All figures are from the detailed tables in the Appendix. The data are based on the Reports of Income and Condition filed by commercial banks and are for domestic offices of U.S. chartered banks. Data for the first half of 1994 have been seasonally adjusted by the author using the X-11 procedure. Growth rates for 1991 are for the entire year, even though the recovery did not officially begin until March. None of the conclusions would be affected by using the later starting point.

[2] Analysts have reached this conclusion by estimating how much of the weakness in loans and strength in securities can be explained by past behavior over the business cycle (Bernanke and Lown; Cantor and Wenninger; Federal Reserve Bank of New York; Johnson; Keeton; Rodriguez).

[3] Analysts disagree on the relative importance of these different explanations. For example, Baer and McElravey, Berger and Udell, and Hancock and Wilcox argue that risk-based capital requirements had little effect on loan and securities growth, while Haubrich and Wachtel, Jacklin, and Laderman argue the opposite.

[4] The average spread between the 30-year Treasury bond rate and the 3-month Treasury bill rate fell from 4.5 percentage points in the fourth quarter of 1992 to 3.1 points in the fourth quarter of 1993. The spread edged back up to 3.4 points in the second quarter of 1994, which was high for that stage of the business cycle but still below the previous peak.

[5] Another factor that contributed to the slowdown in securities growth in 1994 was a change in accounting rules that forced banks to record more of their securities at market value rather than historical cost. This accounting change reduced the rate of securities growth in the first half of 1994 by about 1 1/2 percentage points.

[6] The change in accounting rules mentioned in note 5 reduced the rate of securities growth in the district by about 1 1/2 percentage points in the first half of 1994.

[7] Empirical studies differ on whether C&I loans were unusually weak given the behavior of the economy. In a recent study by the Federal Reserve Bank of New York, Mosser and Steindel found that new lending by banks and thrifts to nonfinancial corporations was much weaker in 1991 and the first half of 1992 than expected given cash flow, plant and equipment spending, and inventory investment. Using different methodology, however, Lown and Wenninger found that growth in C&I loans by banks in 1990 and 1991 was about the same as expected given economic activity.

[8] From 1990 to 1993, for example, the value of construction contracts increased 37 percent in the district but only 7 percent in the nation. Over the same period, construction employment rose 12 percent in the district but fell 10 percent in the nation.

[9] For example, from 1990 to 1993, single-family housing permits increased 75 percent in the district but only 27 percent in the nation.

[10] At the end of 1990, home mortgages accounted for only 6 percent of assets, one of the lowest shares in the nation. By mid-1994, the share had risen to 9 1/2 percent, still low but closer to the rest of the nation.

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