Regional Outlook

Federal Deposit Insurance Corporation — Second Quarter 1998

FDIC
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Region

Division of
Insurance

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In Focus This Quarter

◆ ***Gain-on-Sale Accounting Can Result in Unstable Capital Ratios and Volatile Earnings*—The accounting for transferring and servicing financial assets causes asset sellers, particularly high-growth lenders, to recognize significant noncash income related to retained economic interests in the sold assets. This is true whether a company securitizes its own assets or sells its assets as a conduit to another securitizer. Values are often driven by management assumptions about future performance of the sold assets. Major writedowns of gain-on-sale assets by some finance and mortgage companies underscore the importance of careful scrutiny of these assumptions by banks and their supervisors.** *See page 3.*

By Allen Puwalski

◆ ***How Will the Expansion End?*—Analysts are now focusing on when and how the current expansion will end. Although no one can accurately predict when a recession will begin, two possible scenarios have emerged. Each scenario has important implications for lenders as they prepare for the possibility of slower economic growth or recession.** *See page 7.*

By Paul C. Bishop

◆ ***Trends Affecting the Allowance for Loan and Lease Losses*—In today's environment, in which loan availability is abundant, growth is strong, and competition is fierce, some industry leaders and regulators have expressed concern about the loosening of underwriting standards and greater risk in bank loan portfolios. At the same time, the allowance for loan and lease losses (ALLL) relative to total loans at many insured institutions is declining. As the economic expansion reaches an advanced age, an important question for insured institutions is whether their ALLLs adequately reflect the risks associated with changing industry practices.** *See page 11.*

By Andrea Bazemore

Regular Features

◆ ***Regional Economy*—Strong economic growth, flattening yield curves, and lower mortgage rates are stimulating home purchases and a surge of refinancings in the Region…banks in the Region may face tightening margins because of the large volume of refinancings in the pipeline…demographic trends may dampen housing market activity over the long term.** *See page 16.*

By Norman Gertner

◆ ***Regional Banking*—The Region's financial institutions remain healthy despite weakness in credit cards and the Asian crisis…as more consumers refinance mortgages, savings banks and thrifts may see tighter margins because of their higher concentrations in residential real estate loans…a marked shift toward fixed-rate mortgages exposes financial institutions to increased interest rate risk in the long term.** *See page 20.*

By Karen A. Wigder

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Gain-on-Sale Accounting Can Result in Unstable Capital Ratios and Volatile Earnings

- **Gains generated from asset sales under SFAS 125 rely on management assumptions about the lifetime performance of the assets sold and may not materialize in cash if the assumptions prove incorrect.**

- **Gain-on-sale accounting has been most significant to securitizers, but nonsecuritizers can and do retain economic interests that give rise to significant gain-on-sale assets.**

- **Finance companies seeking to shift attention from gain-on-sale assumptions may find willing bank correspondents.**

- **The rating services have modified capital and earnings analysis in order to lessen what they consider distortions caused by SFAS 125.**

Statement of Financial Accounting Standards No. 125 (SFAS 125), Accounting for Transfers and Servicing of Financial Assets and Extinguishing of Liabilities, causes asset sellers, particularly high-growth lenders, to recognize significant noncash income. Applying SFAS 125, which became effective on January 1, 1997, can give rise to significant noncash gains and related assets if an economic interest is retained in assets sold. The value of retained interests in assets sold is quantified on the basis of management's assumptions about future charge-off rates, repayment rates, and the rate used to discount the expected cash flows from the loans sold. Because the value of these assets changes when actual performance deviates from the assumptions, the quality of earnings, capital, and liquidity for a lender that relies significantly on gains on sale must be considered carefully.

The recent writedowns of interest-only (IO) assets by a few major finance companies have led to a higher level of scrutiny of companies whose financial statements are influenced significantly by gain-on-sale accounting. The Securities and Exchange Commission has recently increased its scrutiny of publicly traded companies that use gain-on-sale accounting, and it may soon require assumptions regarding defaults, prepayments, and discount rates to be disclosed in financial statements. The same companies that enjoyed soaring stock performance thanks to high earnings growth caused by gain-on-sale accounting have seen their stock values tumble as they have had to write down their gain-on-sale-related assets.

Several major credit rating companies have recognized the significant effect of gain-on-sale accounting under SFAS 125 on interpreting financial statements. These companies have issued comments or reports dealing with SFAS 125's effect on the quality of earnings and capital of the companies they rate and how they adjust their analysis as a result. The consensus of these papers is that gain-on-sale accounting for companies that securitize often results in significantly higher reported earnings and equity compared to balance sheet lenders—without, in many cases, materially changing the underlying economics or credit risk to the originator of the assets.[1] Generally, the rating services have modified capital and earnings analysis in order to lessen what they consider distortions caused by SFAS 125.

There Are Risks Associated with Gain-on-Sale Accounting

The asset booked in connection with an SFAS 125 loan sale is an IO strip that represents the present value of future excess spread cash flows generated by the transferred assets. Generally, asset-backed securitizations, including some classified as mortgage-backed securities, are structured so that each month the expected cash flows from the underlying assets will be sufficient to pay the investor coupon, the trust expenses, the servicing fee, and net charge-offs. The cash flow that the underlying assets will generate each month cannot be known with certainty because the underlying asset may allow for variable principal payments (e.g., credit card accounts), or the borrowers may default. Securitizations are structured so that there is enough cushion between the *expected* cash flows and the required payments and

[1] Duff & Phelps Credit Rating Company, "Securitization and Corporate Credit Risk." *Special Report Financial Services Industry,* July 1997; T. E. Foley and M. R. Foley. "Alternative Financial Ratios for the Effects of Securitization Tools for Analysis." *Moody's Special Comment,* September 1997; H. L. Moehlman, R. W. Merrit, and N. E. Stroker. "Capital Implications of Securitization and Effect of SFAS 125." *Fitch Research*, September 16, 1997.

expected charge-offs to absorb fluctuations in *actual* cash flows and *actual* charge-offs. This cushion is excess spread. As actual cash flows vary from projections, so does the excess spread generated.

According to SFAS 125, when a company sells assets and retains the right to future excess spread cash flows, the calculation of the gain on the sale includes the capitalization of this right. In many transactions, the gain on sale consists entirely of the fair value of the IO strip that represents this right—none of which is necessarily received in cash. In addition, with many transactions, cash receipt is further delayed while cash flows go to fund the spread account, which is analogous to an internal loan loss reserve.

SFAS 125 states that quoted market prices in active markets are the best evidence of fair value and should be used whenever available. Although there have been some sales of these IO strips, the number of sales is not yet sufficient to constitute an active market. When market prices are not available, SFAS 125 states that the estimate of fair value should be based on the best information available. In practice, fair value of the excess spread is determined by present valuing the expected cash flows using a discounted cash flow model.

The value of the right to future cash flows is determined on the basis of management's assumptions about the charge-off rate, the average life of loans, and the rate used to discount the cash flows. *These input assumptions drive the model results and, therefore, the magnitude of the gain.* The stability of the value of the IO will depend greatly on the extent to which the input assumptions accurately describe the pool performance over the life of the transferred assets. Changes in economic or market conditions that were not anticipated in the initial cash-flow assumptions will likely cause the pool of loans to perform differently than initially projected.

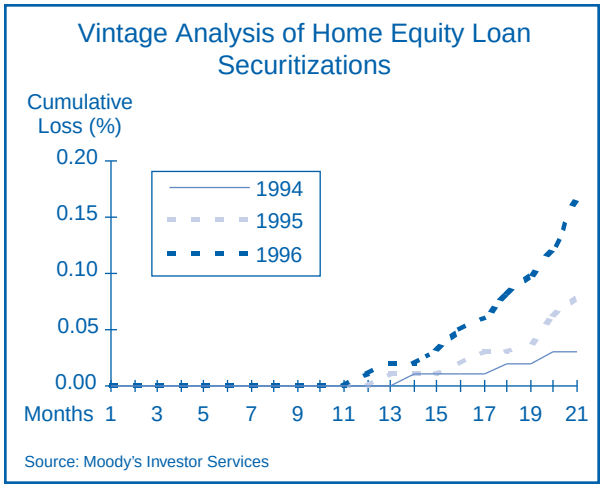
Gain-on-sale accounting is significant to securitizers. To illustrate the significance of the IO account to a securitizer's reported income, consider one major subprime lender. During fiscal year 1997, this company's IO asset grew by over $141 million. Despite a $28 million writedown of the IO asset, the net growth of the asset constituted over half of total revenue and over eight times net income. The revaluation of the IO was necessitated by higher-than-expected prepayment rates.

Current market conditions were not anticipated by many companies that benefited from high earnings related to gain-on-sale accounting. Several other major securitizers have reduced the carrying value of their IO assets in the face of either rising charge-off rates or higher prepayment rates. Writing down an IO strip largely represents a company's admission that it will not generate on a cash basis income that was booked previously.

Chart 1 displays the cumulative charge-off rates by vintage for ***Moody's*** index of home equity loan securitizations. The index consists mostly of prime mortgages, so the loss rates are still low. However, the rising trend in losses is noteworthy and reflects the growing influence of subprime securitizations on the index and the related decline in underwriting standards as competition has increased in this market. Loans originated in 1995 and 1996 are causing progressively larger and earlier losses. After 21 months of seasoning, the cumulative loss rate on loans originated in 1996 is .17 percent—almost six times the loss rate experienced by the 1994-originated cohort at the same age. Despite the continued low loss rates for the home equity market in general, subprime lenders are experiencing accelerated loss rates that are eroding the value of their interests in excess spreads.

There may be a tendency for management to base assumptions about expected loss rates on loans sold solely on past experience with similar loans. Such an approach may not capture changes in market conditions and trends. For example, the Moody's data demonstrate that loss rates on home equity loans, including first liens, have been trending upward rapidly. This trend implies that when estimating loss rates, management should consider the potential for changes in market con-

CHART 1



ditions over the life of the sold assets as well as the past performance of similar assets.

Like loss rates, prepayment rates have risen substantially in the subprime mortgage market. Several factors have contributed to the rise. One factor is the trend toward higher loan-to-value (LTV) loans in the mortgage market, which has allowed borrowers to obtain additional cash from their homes without waiting to pay down principal. Mortgage bankers report the tendency of some subprime borrowers, often debt consolidators, to maintain outstanding balances at the highest possible LTV. With maximum LTV ceilings rising, debt consolidators can refinance home equity loans without having to amortize existing debt.

Another important factor contributing to rising prepayment rates is competition among lenders for volume growth. To continue to grow volume, lenders have been sacrificing margins on loans to offer a better rate to borrowers. When estimating prepayment rates for subprime borrowers, it has been normal to expect that they would need to improve their credit rating, or "credit cure," before they would find it economical to refinance. Stiff competition for volume has allowed borrowers to find better rates without credit curing and has stimulated them to refinance prior to the time estimated at origination. Falling interest rates and a relatively flat yield curve are likely to increase prepayment rates.

In standard finance theory, uncertainty about the future level of losses and prepayment rates is compensated for by discounting the cash flows at a higher rate. Some analysts advocate using a discount rate similar to the required rate of return for equity investments. Faced with changing conditions, one large finance company that specializes in high LTV lending announced in December 1997 that it was increasing the discount rate it uses to value new IO strips from 12.5 percent to 33 percent.

The IO Strip Asset Is Growing at Insured Depository Institutions

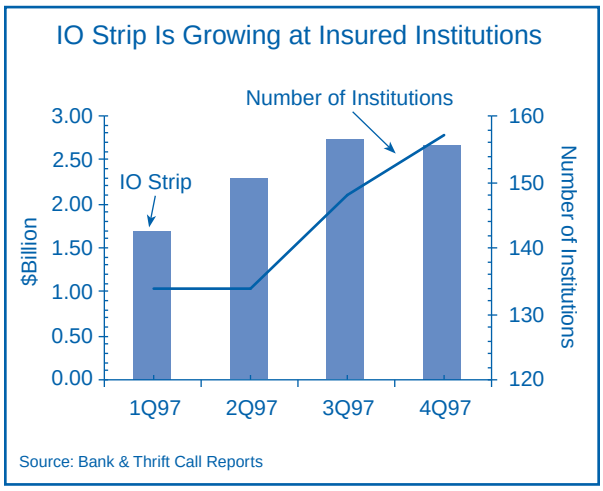
As of December 31, 1997, only 30 institutions reported this IO asset at more than 5 percent of tier 1 capital. However, some institutions have booked gains that should have given rise to a call-reportable IO strip but did not properly report the assets. Therefore, the current reporting may understate the prevalence of the asset.

Furthermore, the recent attention to gain-on-sale accounting from the public equity markets has at least a few large finance and mortgage companies seeking business strategies that shed IO strip-related volatility from their financial statements. One such strategy already in use is to leave the economic interest in excess spread with the correspondents that originate the loans. This is done as follows: The correspondent originates loans for purchase by a finance company. The finance company pays par for the loans, and instead of being paid an origination fee or a premium for the loans, the *seller* retains the right to excess spread generated over the life of the loan. The seller books a gain and an IO asset that capitalizes this right to receive future cash flows. The nature of the IO asset is exactly the same whether it arises directly from a securitization or from a sale of loans to a securitizer. *If this strategy is used widely by finance and mortgage companies, then IO strips are likely to grow among institutions that originate loans for sale to these companies* (see Chart 2).

For insured depository institutions, the capital effects of SFAS 125 need to be evaluated carefully. Analysis of the financial statements and leverage ratios of insured institutions should consider fully issues related to the quality of earnings and the stability of capital posed by the volatility of the IO strip. Insured institutions that engage in significant asset sales while retaining economic interests that give rise to SFAS 125–related assets are subject to distortions similar to those of nonbank financial companies.

The activity of originating and selling loans and booking associated gains can lead to capital ratios that

Chart 2



appear high by traditional bank standards. For several reasons, the leverage ratio can appear particularly high. First, although the asset may be more volatile than mortgage serving rights, there is no limit to the amount of IO strip that a bank can include in tier 1 capital. Second, the amount of IO strip booked increases capital by a gain on the net of the tax effect. The extent to which the amount remains in capital depends, of course, on the institution's dividend policy. Third, the denominator of the leverage ratio is reduced by the sale because the loans are no longer assets of the bank. The cumulative result can be a significant boost to the leverage ratio.

Several insured institutions report an IO strip at greater than 25 percent of tier 1 capital. For an institution whose primary line of business is originating and selling subprime mortgages, the asset can quickly reach a level exceeding tier 1 capital. In a little more than a year of originating and selling subprime mortgages to a major securitizer, one institution has amassed IO assets that it has valued at more than 150 percent of tier 1 capital.

The institutions that have concentrations of 25 percent or more of tier 1 capital in IO assets have a median leverage ratio of about 11 percent. In contrast, the median equity capital ratio for nonbank mortgage securitizers tracked by ***SNL DataSource*** is about 30 percent. Public debt markets or banks that lend to these finance companies appear to require significantly higher capital levels than regulatory minimums required for banks.

The potential for growth of the IO strip asset at insured institutions seems strong. In some circumstances, minimum capital standards for banks may require significantly less capital for IO asset exposure than the public equity markets. Perhaps more important, the quick rise of the significance of gain-on-sale accounting to the mortgage and consumer credit markets exemplifies the speed with which exposure to risk can be acquired through the securitization market. Strong demand for asset-backed securities coupled with changing accounting emphases, which in this case favor asset sellers, can lead quickly to substantial exposures.

Allen Puwalski, Senior Financial Analyst

Risk-Based Capital (RBC) Treatment of the Gain-on-Sale–Related IO Asset

If the IO asset derives from excess spread that absorbs charge-offs from the sold assets, then the IO strip constitutes recourse from the sold assets for RBC purposes. RBC standards require capital to be held against this exposure. In general, the capital requirement for this exposure is the amount of capital that would have been required for the assets had they not been sold. If the sold assets are one- to four-family residential mortgages, they may receive a 50 percent risk weighting. Subprime mortgages are not necessarily precluded from receiving this weighting.

In order to apply the 50 percent risk weighting, the capital standards require that one- to four-family residential mortgages be fully secured and prudently underwritten. The "fully secured" requirement precludes high-LTV loans with LTV ratios of greater than 100 percent from receiving reduced capital requirements, but the language of the RBC regulations does not necessarily preclude subprime mortgages in general from receiving the reduced risk weighting. Although the capital standards require that mortgages be prudently underwritten to qualify for the 50 percent risk weighting, it is not entirely clear how the term "prudently underwritten" applies to subprime mortgages. A higher expected loss rate alone may be insufficient cause for presuming that the mortgages are not prudently underwritten.

The rationale for reducing the capital requirement for traditional one- to four-family mortgage lending is related to the maturity of the market and consistently low loss rates. As noted above, the subprime mortgage market is changing rapidly, and loss rates can be much higher than in traditional mortgage lending. Accordingly, bank managements need to be aware of the potential volatility and risks associated with gain-on-sale assets associated with subprime mortgages.

How Will the Expansion End?

- **Despite a very low unemployment rate and high industry capacity utilization, inflation has been unusually subdued during this expansion, with price declines in some sectors.**

- **After seven years of expansion, most analysts expect the economy's growth to slow in the coming months.**

- **The last seven expansions have ended with an inflation-driven increase in short-term interest rates; in contrast, some analysts believe that the next recession will be caused by a period of falling prices for commodities, finished goods, and perhaps wages.**

- **Insured institutions that base lending and strategic decisions on assumptions of continued robust economic growth should scrutinize and test those decisions against possible adverse change in economic conditions.**

The current economic expansion is the third longest on record since World War II. Since mid-1991, when the expansion began, more than 15 million new jobs have been created and inflation-adjusted gross domestic product (GDP) has increased by nearly 20 percent. In fact, the unemployment rate reached a 24-year low when it fell to 4.6 percent in November 1997 and again in February 1998. At the same time, inflation has remained unusually low, at only 2.3 percent during 1997.

Analysts are now focusing on when and under what circumstances the current expansion will end. While no one can accurately predict *when* the expansion will end, two related but competing theories about *how* it will end have emerged in recent months. The first and more familiar scenario occurs when the Federal Reserve increases short-term interest rates to prevent a rapid increase in inflation caused by an overheating economy. The second scenario, a deflation-induced contraction, is less familiar in the context of recent recessions. This scenario posits a period of falling prices for commodities, finished goods, and, under the most severe circumstances, even wages.

Whatever the cause of the next downturn, its effects are likely to be important for the performance of lenders. During the 1990–91 recession, for example, the widespread deterioration of economic conditions was reflected in a number of indicators: Inflation-adjusted GDP fell by 2 percent; the number of business failures rose by nearly 40 percent; unemployment increased by more than 40 percent to 9.8 million; the unemployment rate peaked at more than 7 percent; single-family housing starts fell by almost 22 percent; and the bank card delinquency rate increased from 2.4 percent to 3.3 percent. This experience suggests that no matter what triggers the next downturn, dramatic adverse changes in the drivers of bank performance will likely result.

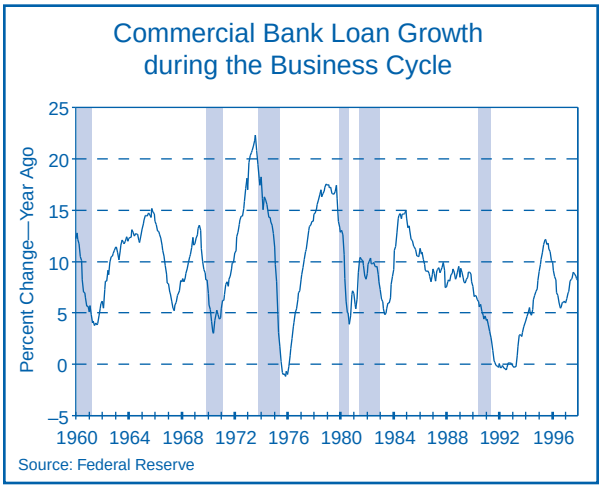
How Have Economic Expansions Usually Ended?

Although to some extent each business cycle is unique, virtually all of the post–World War II expansions have shown a similar characteristic: Toward the end of the expansion, inflation has accelerated. As the economy expands, the prices of inputs, including the wages of workers, are bid up as firms compete for resources to meet demand. The overall inflation rate will rise if prices increase across a large number of industries. Left unchecked, an increase in the overall price level may itself feed back into the labor market through demands for higher wages.

By raising short-term interest rates, the Federal Reserve can limit what might otherwise lead to a rapid increase in both wages and prices. Higher interest rates will reduce sales of capital goods, housing, and consumer durables, the demand for which is very sensitive to the level of interest rates. One reflection of this sensitivity is the changing pattern of loan growth over the business cycle. During periods of expansion, the demand for loans grows rapidly as businesses and households borrow to finance purchases of capital goods and consumer durables. If short-term interest rates are increased in response to inflationary pressures, loan growth will slow as businesses and consumers reduce their demand for loans. If interest rates continue to increase, loan growth may decline as it has done before and during each recession. The cyclical movement of loan growth (with vertical bars indicating periods of recession) is shown in Chart 1 (next page).

Looking more closely at short-term interest rates, Chart 2 (next page) illustrates the federal funds rate during the

Chart 1



last seven business cycles. While an increase in short-term interest rates has preceded each recession, it should be noted that an increase in rates is not sufficient to induce a recession. An increase in rates in 1984 was followed by a period of rapid growth that lasted until 1990. More recently, the increase in rates during 1994 was accompanied by a slowdown in the economy, but not a recession.

What Is Different about Inflation during This Expansion?

With history as a guide, one would expect inflation to rise as the current expansion matures. Chart 3 illustrates consumer price inflation during the four longest postwar expansions, including the current one. The chart shows the inflation rate at various points after the expansion began. During the expansion between 1975 and 1980, for example, the inflation rate was nearly 12 percent at the start of the expansion but fell to just over 6 percent after four quarters. Inflation remained at approximately 6 percent until the twelfth quarter of the expansion, after which it accelerated to more than 12 percent by the end of the 20-quarter expansion.

The current inflation trend differs from previous expansions in two ways. First, by the later stages of previous expansions, inflation was accelerating (see Chart 3). In contrast, there are few signs of accelerating consumer price inflation during the current expansion. In fact, it appears that the rate of inflation is declining; the United States has experienced disinflation.[1] Second, among expansions that have lasted more than 20 quarters, the current rate of inflation is one of the lowest since World War II. Consumer inflation is both decreasing and low by historical standards.

What Are the Two Views about Future Inflation?

Two views have developed about how the current expansion will end. The debate, couched in terms of the expected rate of future inflation, is of more than academic concern. The Federal Reserve's decision about

[1] In popular discussions of inflation rates and the price level, terminology is sometimes used loosely. To clarify, a declining rate of inflation, properly described as disinflation, means that prices are increasing at a progressively slower rate over time. Deflation is defined as a generally falling price level or, equivalently, a negative inflation rate.

Chart 2

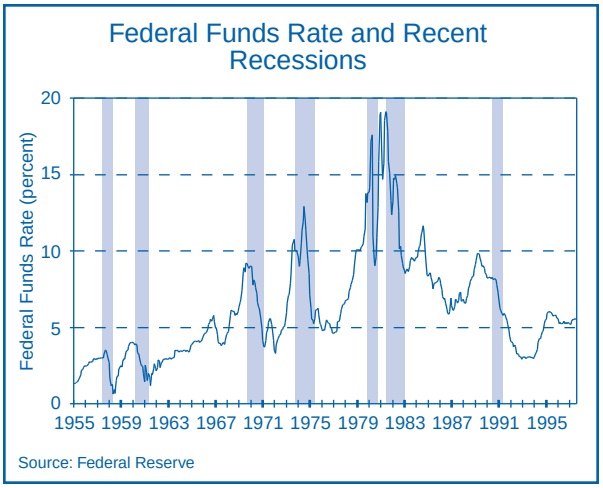
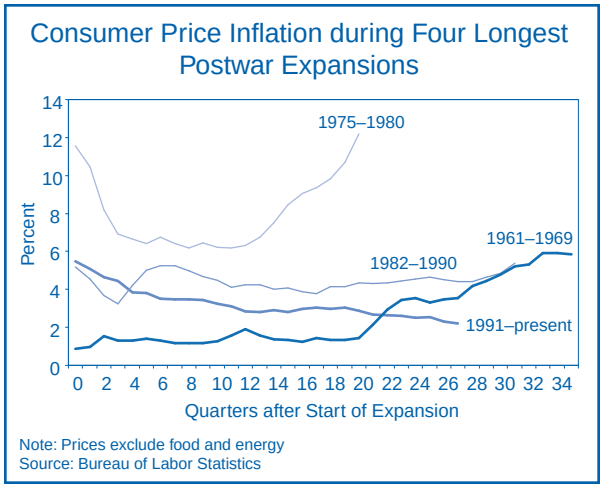


Chart 3



whether to change short-term interest rates may be influenced by arguments on either side of the debate.

The Traditional View

Although inflation has been tame during this expansion, adherents of the traditional view believe that impending inflation still poses a danger to the longevity of the expansion. Evidence cited to support this view includes a very low unemployment rate and rising inflation-adjusted wages. The reasons for the low inflation rate include low energy prices, inexpensive imports, and brisk domestic and international competition. These factors have delayed the onset of inflationary pressures, but they will not remain favorable indefinitely. The underlying dynamics have not changed significantly from those that led to rising inflation during every other recent economic expansion. This is also the view of the Federal Reserve Open Market Committee, as stated in the minutes of its November 12, 1997, meeting:

> *The reasons for the relative quiescence of inflation were not fully understood, but they undoubtedly included a number of special factors…the risks remained in the direction of rising price inflation though the extent and timing of that outcome were subject to considerable debate.*
>
> ***—Federal Reserve Bulletin, February 1998, p. 104***

The Deflation View

Alternatively, some analysts suggest that a recession may be brought about by a period of deflation. Advocates of this scenario base their view on the unusually low and falling inflation rate in the United States, even after seven years of economic expansion. They also suggest that the national economy of the 1990s is markedly different from that of the 1970s and 1980s. Intense global competition is now the norm and not the exception. Worker productivity growth is believed to be higher than the official data show, meaning that wage growth will not translate as readily as before into price increases. The U.S. economy is more prone to a period of falling prices than at any time in the recent past, especially in view of decreasing rates of inflation and deflationary forces originating from the ongoing Asian financial crisis.

What Does the Evidence Show?

Because determining economic policy is necessarily a forward-looking process, policymakers look at many indicators to determine the likely future course of inflation. A brief review of some of the more popular indicators reveals contradictory readings that can support either the inflation or deflation scenario.

Wage Growth

The national unemployment rate is currently very low, signaling that labor markets are near capacity in terms of their ability to create new jobs. The nation's unemployment rate was below 5 percent for nine months during 1997. This rate has been well below what many analysts thought possible without a sharp rise in inflation. As labor market conditions have tightened, wage growth has increased. Since 1993 the rate of growth has been on a steady upward trend, from a low of just over 2 percent to about 4 percent in the first quarter of 1998.

Capacity Utilization

Capacity utilization, the percentage of industrial capacity that is currently in use, has risen since early 1997. Utilization has been around 83 percent since mid-1997, a threshold rate that has traditionally signaled impending inflationary pressures at factories, mines, and utilities.

Commodity Prices

Many commodities, such as metals, crude oil, and unprocessed food products, have exhibited weak prices during the past several months. Between mid-1996 and early 1998, the ***Knight-Ridder Commodity Research Board Price Index*** fell by more than 15 percent. Key to the decline was a 35 percent decrease in crude oil prices.

Finished Goods Prices

Since the data show that both labor and physical capital are at high rates of utilization, the traditional inflation scenario suggests that there will be increasing price pressures. In the manufacturing sector, such price pressures would likely show up first in the prices of goods as they leave the factory. The price of finished goods rose by only 0.4 percent during 1997, however. On a monthly basis, prices declined during eight months in 1997.

Service Sector Prices

The service sector accounts for a growing portion of all output and employment in the U.S. economy. Labor costs generally account for a much higher percentage of input costs in the service sector than in the manufactur-

ing industries. Additionally, many service industries operate in local markets and are insulated from national or global competition. Consequently, inflation rates in the service sector are generally higher than in the goods sector. Service sector inflation has, however, been on a downward trend, falling from 5.5 percent in 1990 to 3.1 percent in 1997.

Import Prices

Since early 1996, import prices have fallen precipitously. The decline is due in part to the rising value of the dollar, which has reduced the cost of imports. Non-petroleum import prices have fallen by 5 percent since early 1996. Within that group, capital goods prices have decreased by 12 percent over the same period.

One factor that will continue to put downward pressure on prices is the turmoil in Asian markets. Asian exporters are now much more competitive with the rest of the world, following the drop in the value of their currencies. Consequently, U.S. firms that compete with Asian producers will be under greater pressure to cut prices. At the same time, reduced Asian demand for U.S. exports could lead to a ballooning trade deficit and a softening of export prices. In January 1998, for example, the United States reported a record-breaking trade deficit of $12 billion, caused in part by slower export growth.

From this brief review, it is apparent that signs of impending inflation are at best mixed. Clearly, U.S. labor markets are at or near full effective capacity, and the utilization of factories and physical capital is also very high. There is little evidence that these factors are causing an increase in prices at either the producer or consumer levels.

How Will the Expansion End?

Although no one can accurately determine when the expansion will end, most analysts are predicting slower economic growth in the second half of 1998. Indicators such as the unemployment rate suggest that growth will be limited by the availability of labor needed to produce an increasing supply of goods and services. Weak or declining output prices in some sectors could act as a further constraint on economic growth.

Among economists, the traditional view that the expansion will end following a rise in inflation and an increase in short-term interest rates appears to be the more prevalent view. Nevertheless, the possibility that the next economic downturn might be triggered by the ripple effects of declining output prices should not be dismissed, especially in light of the potentially adverse and less familiar risks associated with deflation. What is clear for insured institutions is that at this stage of the economic expansion, lending and strategic decisions predicated on an assumption of continued robust economic growth should be carefully scrutinized and considered in light of a possible deterioration of economic conditions.

Paul C. Bishop, Economist

Why Might Deflation Be a Concern?

The most significant difference between the inflation and deflation scenarios is reflected in the response of financial markets. One of the consequences of inflation is that a dollar in the future is of less value than today's dollar. In a deflationary environment, the opposite is true—a dollar in the future will buy more goods and services than a dollar today.

In a deflation scenario, debtors would see the real value of their financial obligations rise and might therefore be hesitant to borrow. A fixed monthly mortgage payment, for example, would be paid back with increasingly valuable dollars over time. Asset values could fall, especially since the purchase of an asset, such as a house, would require inflation-adjusted debt repayments that increase through time. Likewise, consumer credit debt obligations, such as payments on outstanding credit card balances, would become increasingly onerous. For households already experiencing credit problems, the prospect of a period of sustained deflation would worsen their financial position. At the very least, deterioration in credit quality would be expected, along with an increase in the number of business and personal bankruptcies.

Trends Affecting the Allowance for Loan and Lease Losses

- **Allowance for loan and lease loss (ALLL) levels are declining relative to total loans.**

- **Some industry leaders and regulators have expressed concern about the loosening of underwriting standards and greater risk in bank loan portfolios.**

- **Significant growth in riskier loan types calls attention to the need to scrutinize closely the adequacy of the allowance.**

Weakening underwriting standards and significant growth in riskier loan types have increased the risk exposures of some insured institutions to an economic downturn. Meanwhile, the ALLL relative to total loans has declined in recent years. This article provides information on trends in the ALLL over time and by loan type and discusses the factors analysts consider when evaluating the adequacy of the ALLL. Special attention is given to issues related to the volatility of loan losses and the composition of the loan portfolio.

Historical Perspective on the Allowance for Loan and Lease Losses

The nation is currently witnessing one of the longest economic expansions since World War II. It is to be expected that some institutions will reduce their ALLL coverage during periods of improved economic conditions. However, in the current environment—in which loan availability is abundant, growth is strong, and competition is fierce—some industry leaders and regulators have expressed concern about the loosening of underwriting standards and greater risk in bank loan portfolios. At the same time, the ALLL relative to total loans for commercial banks has declined to the lowest point in a decade (see Chart 1). This allowance ratio has diminished because commercial banks' loan loss provisions have not kept pace with new loan growth. In some cases, banks have determined that their allowances are higher than necessary and have taken negative loan loss provisions, which are credited back to income.

This decline in reserve coverage has been broad based, with the exception of credit card specialists. Commercial banks with concentrations in commercial lending and large multinational banks have significantly reduced the level of reserves to total loans in recent years. Table 1 (next page) shows that since 1993, ALLL ratios at both commercial lending banks and multinational banks have declined 31 percent. Moreover, commercial lending banks with assets exceeding $10 billion have reduced ALLL ratios by slightly over 37 percent, or 98 basis points, over the same period.

The low level of nonperforming and charged-off loans, coupled with prevailing favorable economic conditions, is doubtless a significant factor in the reduction of

CHART 1

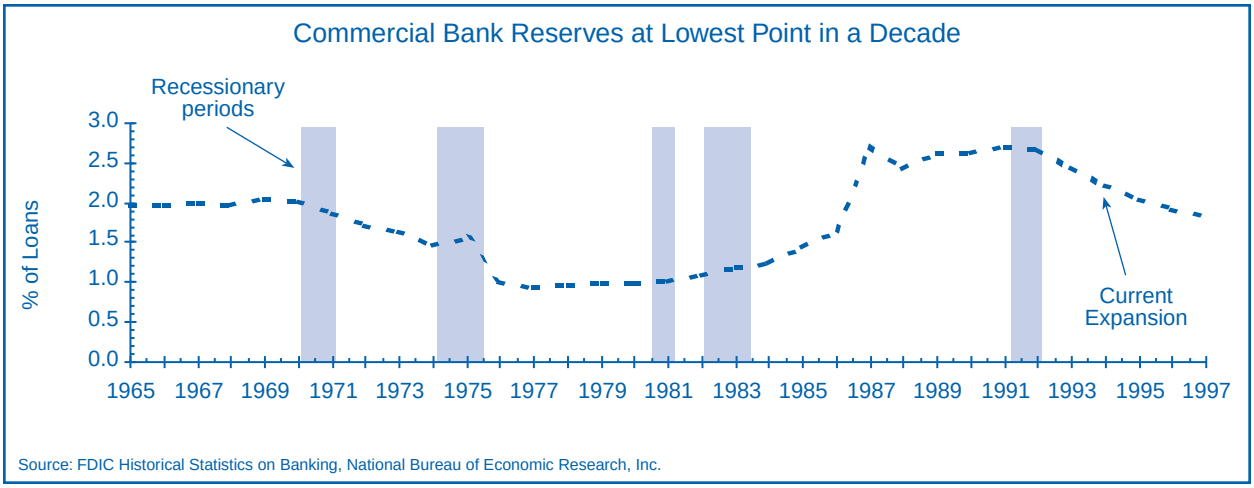


Table 1

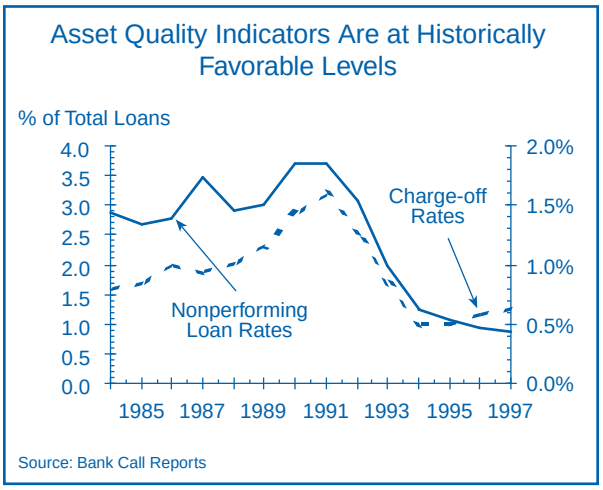
Commercial Bank Allowance for Loan and Lease Losses to Total Loans by Lender Type							
Type of Lender	Number of Banks	Assets ($Billions)	1997	1996	1995	1994	1993
Multinational	11	$1,383	2.14	2.25	2.55	2.83	3.10
Commercial	3,207	$1,915	1.63	1.71	1.90	2.16	2.37
Credit Card	67	$202	4.21	3.48	3.21	2.89	3.35
Mortgage	286	$120	1.26	1.45	1.45	1.69	1.87
Agricultural	2,373	$120	1.53	1.66	1.69	1.75	1.83

Definitions for lender types by order of priority: Multinational—assets >$10 billion and foreign assets >25% of assets; Commercial—C&I plus CRE loans >50% of assets; Credit Card—credit card loans >50% of assets; Mortgage—1- to 4-family mortgages and mortgage-backed securities >50% of assets; Agricultural—agricultural production and agricultural real-estate loans >25% of total loans.
Source: Bank Call Reports

ALLL levels. Asset quality indicators such as nonperforming loans and loan loss rates are at historically favorable levels. At year-end 1997, the banking industry's nonperforming loans were just under 1 percent of total loans, the lowest in 13 years. The industry's loan charge-off rates (with the exception of consumer loans) are also at historical lows. (See the ***Regional Outlook,*** first quarter 1997, for a detailed discussion of consumer loan losses.) However, even with the problems in consumer lending, the banking industry's aggregate loan loss rate is down significantly from levels in the early 1990s (see Chart 2).

As the economic expansion reaches an advanced age, an important question for insured institutions is whether their ALLLs adequately reflect the risks associated with changing industry practices. Insured institutions could experience strains on profitability and capital if allowance levels are inadequate. Given changing underwriting trends and loan delinquency patterns, a related question is whether reliance on past loss experience in setting the allowance will be an adequate measure for current losses.

Chart 2



Trends in Underwriting Prompt Regulatory Cautions

Over the past year, various underwriting and lending practices surveys by the FDIC, the Office of the Comptroller of the Currency (OCC), and the Federal Reserve have noted easing of terms and weakening underwriting standards on loans, especially in commercial loan portfolios. *It is important to note that, in 1997, nearly two-thirds of the commercial banking industry's loan growth was centered in the commercial real estate (CRE) and commercial and industrial (C&I) loan categories* (Chart 3).

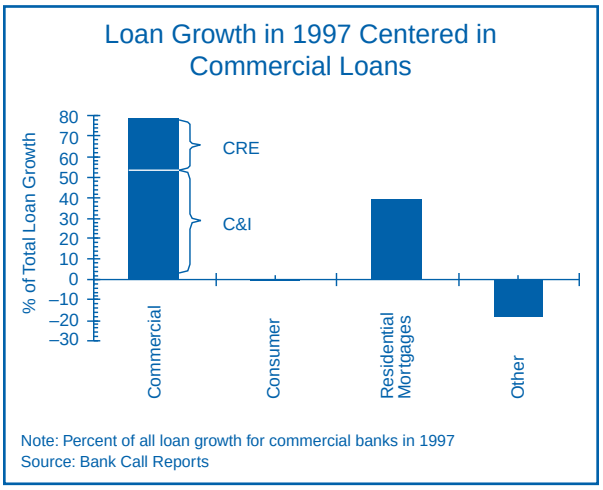
In the FDIC's ***Report on Underwriting Practices*** for April 1997 through September 1997, examiners noted "above-average" risk in current underwriting practices for new loans at almost 10 percent of the 1,233 FDIC-supervised institutions examined. Of the institutions with above-average risk, 12 percent did not adjust pricing for loan risk. Examiners noted that several of the 852 institutions examined that were making business loans had poor underwriting standards, including lack of documentation of the borrower's financial strength

(21 percent) and poor and unpredictable loan repayment sources (14 percent). Also, of the 571 institutions specifically involved in asset-based business lending, 20 percent often failed to monitor collateral. Furthermore, 20 percent of the 398 institutions examined that were actively engaged in construction lending repeatedly failed to consider alternative repayment sources, and 29 percent often funded speculative projects. In contrast, just one year earlier, in the ***Report on Underwriting Practices*** for April 1996 through September 1996, examiners reported that only 11 percent of the institutions examined that were actively engaged in construction lending often funded speculative projects.

The Federal Reserve's ***Senior Loan Officer Opinion Survey*** for November 1997 and February 1998 both indicated some easing of commercial business lending terms and standards. Also, the OCC's ***1997 Survey of Credit Underwriting Practices*** stated that the level of inherent credit risk continues to increase for components of both commercial and consumer loan portfolios. These underwriting trends have resulted in increased risk profiles for some insured institutions, while ALLL ratios at some institutions continue to decline.

In August 1997, the OCC issued an Advisory Letter voicing its concern about declining allowance levels in commercial banks. The OCC cited as primary concerns the apparent increases in credit risk reported by examiners, such as weakening underwriting trends in the syndicated loan market, easing of other commercial underwriting standards, and consumer lending delinquency and charge-off trends. Moreover, the OCC found that some banks were using flawed reserve methodologies for estimating loan loss rates, including an overreliance on historical loss rates.

CHART 3



Factors Affecting Adequacy of the ALLL

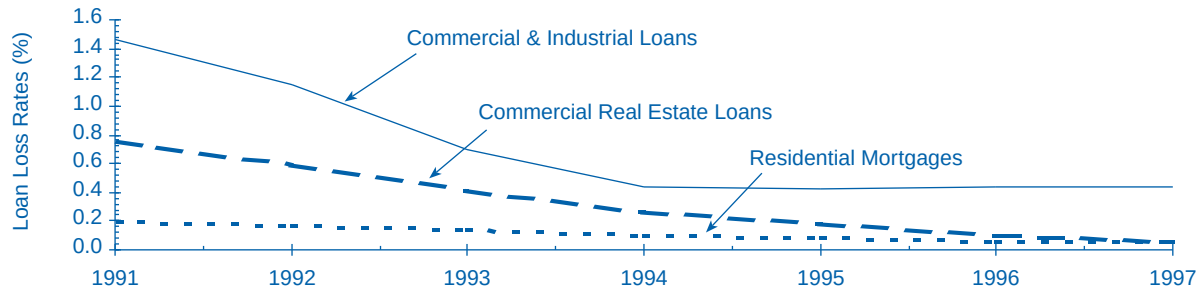
In using offsite data to assess allowance adequacy, analysts consider financial ratios such as the allowance to total loans, reserve coverage (allowance to nonperforming loans), loan loss provisions to charge-offs, and loan delinquency levels. These ratios are evaluated against historical benchmarks. At the same time, however, analysts supplement the analysis with consideration of the potential effects of current industry trends. For example, the banking industry is currently witnessing higher than normal losses in consumer lending spurred by increased bankruptcy filings and the migration of loans from current to charged off without intervening delinquencies. An institution that has a sizable consumer loan portfolio may therefore need to attach more weight to recent loan loss data in setting the allowance, since historical trends may not adequately reflect reserving needs.

Insured institutions exhibit different management and portfolio characteristics that significantly influence the level of the allowance. These characteristics include the diversification of a loan portfolio (diversification by borrower, loan type, geography, or industry), the history and recent trends of credit losses, management's practices in the recognition of losses, trends in past-due and nonperforming loans, underwriting practices, and economic conditions.

New techniques continue to be developed to improve the reliability of allowance estimates. Management information systems, which enable the collection of more refined historical data, coupled with the application of statistical techniques, are helping some institutions formulate more statistically reasoned allowance estimates. Loan management tools such as credit scoring systems, risk rating systems, and consideration of economic cycles in the review of historical loss and delinquency data all are aiding bankers in the reserving process. While these new techniques provide more analytically defensible estimates, they do not diminish the role of judgment in assessing ALLL adequacy.

The role of judgment in setting the ALLL is underscored by the volatility of loan losses over time.

Chart 4



"Volatility" in this context refers to the degree to which loan losses have diverged or might diverge from the long-run averages. Volatility in loan losses can result from changes in the business cycle, local economic events, and major one-time events. For example, a bank relying on a historic average loan loss calculation to derive its reserve level could find itself underreserved if it does not adjust its historical loss rates for deteriorating economic conditions and suddenly incurs greater loan losses than it had anticipated simply on the basis of past performance.

Generally, different types of loans experience varying loan loss rates because of the inherently different risks and varying levels of volatility within each type. Chart 4 shows that commercial loans, such as commercial and industrial loans and commercial real estate, historically have had greater losses than residential loans. Furthermore, the loss rates on commercial loans have not only been higher, they have been more volatile over the years, while average losses on mortgage loans have varied little.

Volatility in loan losses is determined not only by economic events but also by banks' willingness to take risk. Banks that adopt more liberal underwriting policies and high loan growth objectives may experience greater loan default risk and greater volatility in loan loss rates than suggested by their own past experience. For example, Chart 4 shows that mortgage lending has had low and stable loss rates on average. The recent growth in subprime and high loan-to-value mortgage lending, however, may result in increased volatility and losses for some lenders going forward.

All of these factors suggest that ALLLs would be expected to vary considerably both over time and across loan types. Table 2 shows that this has been the case. The ALLL is reported as a single line item on the Call Report. This makes it difficult to estimate how much of the ALLL is attributable to a particular loan type or to compare allowance levels for banks with significantly different loan portfolios. Table 2 shows the results of a statistical regression estimation of commercial bank allowance allocations across the various loan types for

Table 2

ALLL Allocations Have Varied over Time and by Loan Type (Commercial Banks under $1 Billion)*

Loan Type	1997 (%)	1996 (%)	1995 (%)	1994 (%)	1993 (%)	1992 (%)	1991 (%)
C&I	1.71	1.85	1.87	2.06	2.14	2.29	2.45
CRE	1.44	1.54	1.77	1.83	1.97	2.02	1.99
Mortgages	0.92	1.00	1.05	1.19	1.22	1.07	0.91
Credit Cards	4.47	4.42	3.32	3.11	3.20	3.29	3.59

* Estimated regression results
Source: Bank Call Reports

1991 through 1997 for commercial banks with under $1 billion in assets. Not surprisingly, CRE and C&I loans received relatively higher allowance allocations than residential mortgage loans, indicating that banks saw greater risk in these loan types. Also, credit card loans consistently received higher allocations than the other loan categories, and the allocations have increased in recent years owing to the increased delinquencies and charge-offs in this area.

Conclusions

The adequacy of the ALLL is measured not only relative to historical loan loss experience but also relative to current conditions that may cause losses to differ from past experience. Increased losses could result from adverse economic developments, from changes in banks' appetite for taking risk, or both. In this regard, reported weakening in underwriting standards is increasing some banks' risk exposure to an economic downturn. Institutions with high concentrations in riskier loans, significant growth in riskier loans, or weaknesses in underwriting may be most at risk. Especially for such institutions, the adequacy of the ALLL and its methodologies merits close scrutiny.

Andrea Bazemore, Banking Analyst

New York Region: Economy Strengthening, but Falling Interest Rates Pose Challenges

- **Strong economic growth, flattening yield curves, and lower mortgage rates are stimulating home purchases and a surge of refinancings in the Region.**
- **Banks in the Region may face tightening margins because of the large volume of refinancings in the pipeline.**
- **Demographic trends in the Region may dampen housing market activity over the long term.**

Economy Remains Strong as Inflation and Interest Rates Fall

The nation continues to experience exceptionally robust economic growth. The gross domestic product, the broadest measure of economic activity, rose 3.8 percent in 1997—the fastest pace of economic expansion since the late 1980s. In addition, measures of inflation remain extremely low. The consumer price index, for example, advanced only 2.3 percent in 1997, the fifth consecutive year of less than 3 percent growth. This combination of fast economic growth in a low inflationary environment has spawned jobs and lowered unemployment across the nation and the Region. In some parts of the Region, personnel shortages have become severe as labor markets have tightened. Fixed-rate mortgage interest rates have fallen to their lowest point since 1993, and the spread between fixed and adjustable-rate mortgages has narrowed considerably (see Chart 1).

In addition, as long-term interest rates have dropped faster than short-term rates, the yield curve has flattened considerably (see Chart 2). The difference between the ten-year Treasury bill and the six-month bill, for example, dropped from 90 basis points in January 1997 to 30 basis points at the end of January 1998. A flatter yield curve provides substantial incentive for borrowers of adjustable-rate mortgages (ARMs) to refinance into fixed-rate loans, particularly since borrowers tend to prefer the certainty of fixed-rate loans. The combination of lower interest rates and a flattening yield curve has produced a wave of mortgage refinancings (see ***Current Regional Banking Issues***).

Large Numbers of Mortgage Refinancings Are in the Pipeline

In 1993, mortgage interest rates were slightly lower than they are today. A February 1998 report by ***Merrill Lynch*** found that 75 percent of existing mortgages were refinanced between 1992 and 1993, when mortgage rates declined. In recent months, declining mortgage rates again have stimulated a surge in demand for mort-

CHART 1

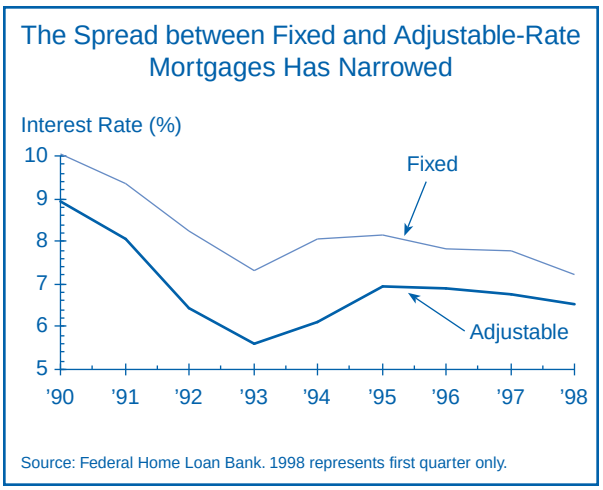
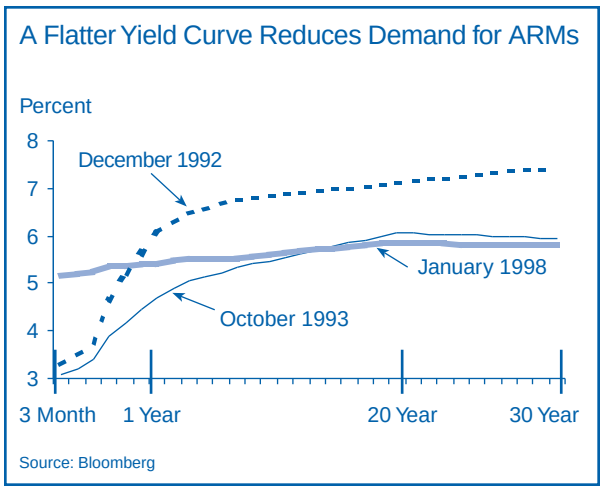


CHART 2

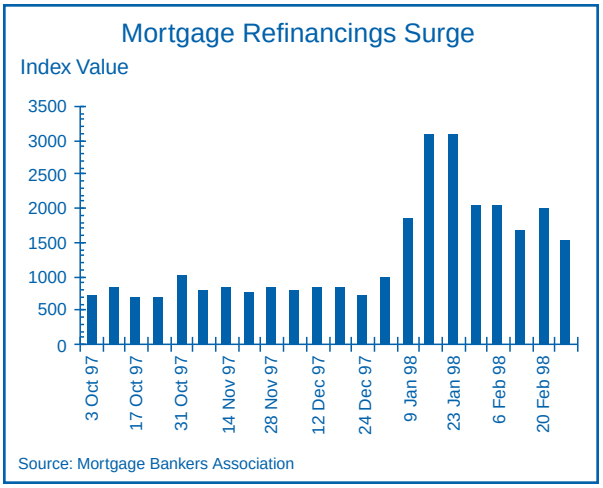


gage refinancings. The ***Mortgage Bankers Association's*** (MBA) market index, which measures mortgage loan applications, recently jumped to between 600 and 700, up from around 200 one year ago. A separate MBA refinancing index that tracks refinancings moved from about 700 in October 1997 to over 3000, an increase of over 400 percent, before falling back in late January 1998 (see Chart 3).

In January 1998, both indices were higher than their 1993 peaks, and the percentage change in these indices from their December levels suggested a tripling of refinancing rates in early 1998. Such growth would imply prepayment speeds far in excess of those experienced in 1993. Back then, some mortgages could not be refinanced because depressed housing prices in the early 1990s meant that many homeowners lacked sufficient equity in their property to refinance. With home prices rising, many owners now have greater equity, enabling easier refinancing. *A large number of prepayments could significantly compress bank margins and squeeze profitability* (see ***Current Regional Banking Issues***).

The magnitude of increases in prepayment volume may, however, be somewhat less than suggested by the MBA refinancing index. ***Solomon, Smith Barney*** uses a title search index, developed by ***Dow Jones,*** to forecast prepayments. This index paints a somewhat more muted picture of the number of refinancings. The title search index avoids two of the major problems of the MBA refinancing index, which Solomon believes contains an upward bias. First, multiple title searches on the same property are screened out. Mortgage brokers indicate that it is fairly common for people to file multiple applications during periods of heightened refinance activity in order to obtain the best deal. Second, title searches for mortgage applications of new homes are excluded. Solomon, Smith Barney believes that the title search index is a more reliable indicator of prepayment levels. Even so, the title search index indicates that a surge in refinancings is well on the way, although perhaps not to the extent seen in 1992 to 1993. Merrill Lynch also believes that there will be fewer refinancings than suggested by the MBA index. Merrill Lynch indicates that the pace of refinancings cannot be sustained at the 1993 level. In 1993, refinancings were high because mortgage rates had been so much higher prior to that year. During the past several years, mortgage rates have been lower.

CHART 3



A January 1998 report by ***PaineWebber*** notes that the economy between 1992 and 1993 was different than it is today and refinancings may not reach the share of new loan originations they hit in 1992 to 1993. Presently, new home sales and housing starts in the nation remain relatively strong. The current refinancing boom follows six years of economic expansion in which the housing industry has been stronger than expected. The trend continued into 1998. According to the ***National Association of Realtors*** (NAR), sales of existing homes surged 8.7 percent in February 1998 over January, the highest rate compiled in 30 years of record-keeping by the NAR. By contrast, in 1992 to 1993, the refinancing surge followed a recession. Unit sales between 1991 and 1993 averaged only about 3.5 million units. Because of the high volume of sales, the 1997 to 1998 wave of refinancings may be a lower percentage of total mortgage originations than it was in the earlier period.

Lower Interest Rates Stimulate the Region's Real Estate Markets

Even though the flatter yield curve may put pressure on margins, the Region's banks could benefit from the low interest rates. Lower interest rates historically have been associated with stronger economic activity. In the present strong-economic low-inflation environment, lower interest rates already have been stimulating the residential real estate market. For example, using mortgage recording and real property transfer tax collections to reflect originations and property transactions, there has been a huge surge in the volume of mortgages and property transfers in **New York City** (see Chart 4, next page). Projections by the city's ***Office of Management and Budget*** for the rest of 1998 forecast continued strong growth. In addition, existing home sales for

CHART 4

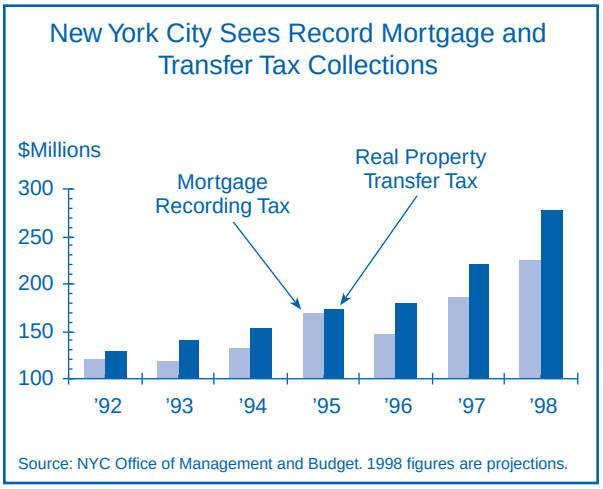
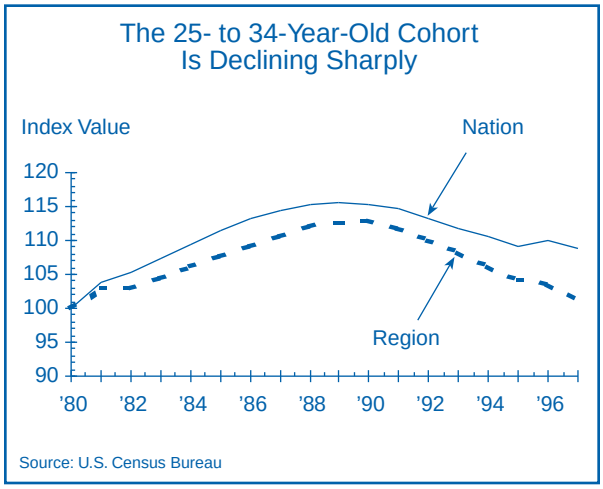


CHART 5



single-family homes, condos, and co-ops were up between 4 and 6 percent in **New York** and **Pennsylvania** between the fourth quarter of 1996 and the fourth quarter of 1997. In **Maryland,** existing home sales were up almost 19 percent. Reports from **New Jersey** and **Delaware** also indicate strong growth in home sales. Moreover, home prices are also rising: Data compiled by the ***Office of Federal Housing Enterprise Oversight*** show that prices are now at all-time highs in the Region.

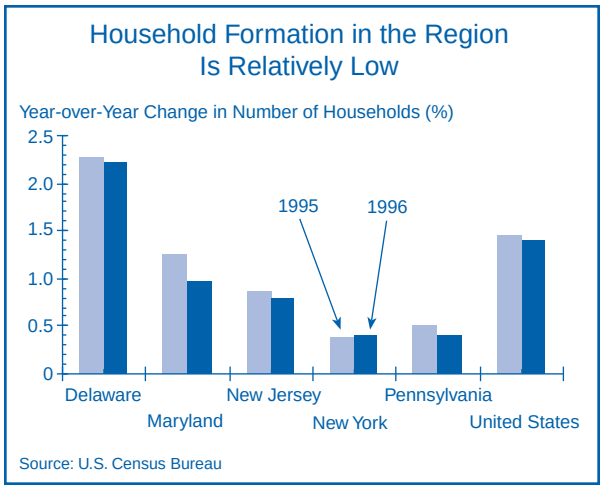
Not only are more mortgages being originated, but lower interest rates are contributing to a stronger economy in the Region. The result is more jobs and higher incomes, and financial institutions are helped by these improved economic conditions. Refinancings may provide consumers with extra cash to purchase automobiles, make home improvements, and take vacations. Other consumers may see refinancing as a way to restructure or consolidate other forms of debt, such as credit cards and home equity lines of credit.

Regional Demographics Are Less Favorable for Future Housing Activity

Despite the lower mortgage rates and the more favorable economy, the housing market may remain constrained over the next few years because of fundamental demographic trends in the nation and the Region. According to the U.S. Census, the age cohort of 25 to 34 represents the bracket in which household formation usually begins. However, the number of 25- to 34-year-olds is declining nationwide; it is falling even more quickly in the Region (see Chart 5). The situation is most noticeable in New York and Pennsylvania, where rates of new household formation have been less than half the national rate (see Chart 6).

Housing indicators may be reflecting this demographic trend. Compared to a surge in new permits elsewhere in the nation, new permits for multifamily homes in the Region have risen only modestly, and permits for single-family homes have stayed flat for several years. The somewhat higher permit activity for the two- to five-unit homes reflects construction of multifamily homes, which have become more popular in the Region as the cost of new construction has soared. Only New Jersey has seen a rise in development of new single-family homes. Nevertheless, growth in both permit categories remains well below their late 1980s levels.

CHART 6



Implications: Over the long run, these demographic trends may reduce future demand not only in the starter home market, but also in the housing market as a whole. Reduced household formation may limit the ability of older households to sell their current homes and trade up. Banks may find a slow-growing pool of potential young homeowners in the Region, which could limit future originations.

Norman Gertner, Regional Economist

For More Information

Bond Market Roundup: Strategy. Solomon, Smith Barney, January 23 and January 30, 1998.

Disinflation: What It Means for Mortgage Companies. PaineWebber, January 26, 1998.

Economic and Financial Update Report. Merrill Lynch, February 1998.

Current Regional Banking Issues

- **The New York Region's financial institutions remain healthy despite credit card weakness. Money center banks' earnings are affected by the Southeast Asian economic crisis.**
- **Financial institutions are facing a wave of refinancing activity as interest rates remain low, the yield curve flattens, and competition intensifies.**
- **Small financial institutions and savings institutions have the heaviest dependence on residential real estate mortgages and may therefore face the most interest rate risk.**
- **Financial institutions face a variety of potential risks associated with the current interest rate environment, including thinning margins, reinvestment risk, and pressure on underwriting standards.**

Solid Performance Reported in 1997 Despite Weakness in Credit Cards and Asian Crisis

The Region's banks and thrifts reported healthy financial conditions in 1997 (see Table 1). Insured institutions in the New York Region reported an average return on assets (ROA) near its all-time high despite a continued decline in net interest margins (NIM), primarily because of lower noninterest expenses. The Region's average leverage capital ratio fell slightly from 1996 levels but continues to be strong. Overall past-due ratios continue to decline, reflecting improvement in commercial real estate loan portfolios. Credit card loan portfolios are still showing signs of weakness, however. Nonperforming credit card loans as a percentage of credit card loans are about the same as in 1996, but charge-offs rose quite significantly in 1997. Further, although credit card charge-offs fell in January 1998, delinquencies remain high. This situation evidences a prolonged weakness in the sector and may portend further high levels of charge-offs later in the year, since delinquencies have been a leading indicator of charge-offs.

New York's money center banks reported that earnings were hurt by the Southeast Asian economic crisis in the fourth quarter of 1997, primarily because of trading losses and increased loan loss provisions. *Nonetheless, most of them reported increases in net income for the fourth quarter of 1997 over the same quarter in 1996.* Industry analysts indicate that a slowdown in underwriting and advisory business in Southeast Asia could translate into dampened earnings throughout 1998, especially for multinational players with substantial fee-generating businesses in that region. Analysts also contend, however, that these banks, having learned their lesson from the Latin American debt crisis of the 1980s, have comparatively little credit exposure to Southeast Asian countries.

Table 1

New York Region Institutions Continue to Show Strength

Financial Indicators	12/31/97	12/31/96	12/31/95
Return on Assets	1.09	1.04	.99
Net Interest Margin	3.52	3.66	3.80
Return on Equity	14.45	13.66	13.09
Tier 1 Leverage	7.09	7.14	7.30
Nonperforming Assets/Total Assets	0.82	0.92	1.12
Past-Due Loans (%)	2.60	2.69	3.02
Nonperforming Credit Card Loans (%)	5.07	5.08	4.51
Credit Card Charge-Offs (%)	5.95	4.82	4.13

Source: Bank and Thrift Call Reports

Mortgage Refinancing Activity Heats Up

The current interest rate environment is very favorable to consumers looking to refinance mortgages. Many financial institutions are lowering refinancing costs in order to keep customers or attract new business, making it more economical to refinance. Financial institutions in general are more willing to waive fees for applications, appraisals, and legal services or to roll these fees into the new mortgage ("zero-cost" mortgages). Technological advances have eased the application process and boosted lending efficiency by shortening the amount of time required to make a loan.

As a result, various sources estimate that *in February 1998, between 55 and 65 percent of mortgage applications were for refinancings, almost double the percentage of a year earlier.* There are reports of consumers refinancing to save as little as 1/2 percent or refinancing several times in the past year. Consumers are refinancing to lower payments, lock in low rates, and increasingly, to consolidate nonmortgage debt. Adjustable rate mortgage (ARM) borrowers are particularly active. The ***Federal Home Loan Mortgage Corporation*** (Freddie Mac) estimates that 90 percent of conventional ARM borrowers can refinance into a fixed-rate mortgage at a net savings. Earnings at many of the Region's insured institutions may be pressured if this environment persists. From a long-term perspective, bankers may face the challenge of operating on thinner margins while incurring more interest rate risk, particularly if the yield curve remains relatively flat for an extended period.

Institutions with Higher Concentrations in Mortgage Loans May Be More Affected

Residential real estate lending is one of the primary business lines of most of the Region's insured institutions, particularly smaller institutions, as well as savings banks and thrift institutions. As of December 31, 1997, for institutions with under $1 billion in total assets, residential real estate loans comprise more than 52 percent of total loans, compared to just 30 percent for institutions with more than $10 billion in assets. The concentration is even higher among banks with total assets under $100 million (see Table 2).

Savings banks and thrifts, by nature consumer oriented, have significant concentrations in residential real estate loans (see Table 3). Almost 83 percent of thrifts' loan portfolios are residential real estate loans. Put another way, the Region has 197 (out of 949) financial institutions with 50 percent or more of total assets in residential real estate loans. Of the 197, all but 15 are savings banks or savings and loan associations. Further, although these institutions comprise about 20 percent of all institutions in the Region, they hold only 5 percent of the assets in the Region, reflecting their generally smaller size.

Institutions with a concentration of ARMs are particularly vulnerable in a low-interest-rate, flattened-yield-curve environment. According to Freddie Mac, ARMs make up approximately 30 to 40 percent of all residential mortgages for commercial banks. However, thrift portfolios traditionally are dominated by ARMs. Thrifts therefore may be more susceptible to the risks associat-

Table 2

Residential Real Estate Loans Are Predominant in Smaller Institutions

Total Assets	Residential Real Estate Loans as Percentage of Total Loans*
Over $10 Billion	30.1
$1–$10 Billion	40.8
$100 Million to $1 Billion	52.3
Under $100 Million	61.7

* As of 12/31/97
Source: Bank and Thrift Call Reports

Table 3

Savings Institutions Have Most Residential Real Estate Loans

Type of Institution	Residential Real Estate Loans as Percentage of Total Loans*
Savings and Loans	83.0
Mutual Institutions	78.0
Savings Banks	72.5
National Banks	41.4
State Member Banks	35.8
State Nonmember Banks	34.5

* As of 12/31/97
Source: Bank and Thrift Call Reports

ed with such an environment, which are discussed below.

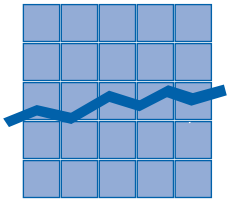
The Flat Yield Curve Is Spurring a Shift into Long-Term, Fixed-Rate Mortgages…

In March 1998, ***Freddie Mac's Primary Mortgage Market Survey*** indicated that the average interest rate for 30-year fixed-rate mortgages declined to 7.08 percent, compared to 7.94 percent one year earlier. In contrast, the average rate of ARMs fell *very slightly* to 5.67 percent, compared to 5.71 percent one year earlier, evidencing the narrowing spreads between short- and long-term rates (see ***Regional Economy***). With short-term rates high relative to long-term rates, holders of ARMs have a strong incentive to refinance into fixed-rate instruments. As of March 1998, a fully indexed ARM was likely to have a coupon rate in excess of fixed rates. Additionally, there is very little difference between current rates for long-term, fixed-rate mortgages and those on five- and seven-year balloon mortgages, making the latter less attractive to borrowers. Further, new mortgage originations are more likely to be fixed-rate loans, as new homeowners have a natural inclination to lock in low rates.

During the earlier refinancing waves between 1991 and 1993, the short-term end of the yield curve was relatively low, so that ARMs and balloon mortgages still had rates that were attractive to consumers. ARM teaser rates approximating 3 percent were common at a time when long-term rates were above 6 percent, creating a wide spread. ***Inside Mortgage Finance*** recently published data made available by Freddie Mac indicating that during the earlier refinancing waves, approximately 15 percent of fixed-rate loans actually were refinanced into ARMs or balloons. For ARMs, 30 to 40 percent of refinancings went back into the shorter duration mortgages, and for balloon mortgages, over 70 percent did so. These refinancings provided an ample supply of shorter duration mortgages for insured institutions seeking to replace runoff and expand their loan portfolios. Today's flatter yield curve will not provide the same opportunities. Data from Freddie Mac for the fourth quarter of 1997 show that *87 percent* of ARMs being refinanced today switch to 15- or 30-year fixed-rate mortgages. Also, through November 1997, only 18 percent of new mortgages carried adjustable-rate features, down from 33 percent a year earlier.

…Which Exposes Financial Institutions to Interest Rate Risk and Thinning Margins

The implication of these trends is that financial institutions will have more low-yielding, fixed-rate residential mortgages on their books, potentially squeezing future margins and increasing interest rate risk. There is evidence that other asset yields may decline as well, especially if current conditions persist. For example, as commercial real estate markets improve throughout the Region, commercial borrowers are also seeking to refinance existing debt. Banks' and thrifts' funding structures are primarily short term, in the form of deposits, which usually means that funding costs are well below yields earned on longer term assets. *The flatter yield curve means that these funding costs are not declining in line with earning asset yields, which puts downward pressure on net interest margins.* With earnings at historically high levels, narrowing margins alone do not warrant great concern. However, with a high proportion of low-yielding, fixed-rate assets on their balance sheets, financial institutions may be more vulnerable to interest rate fluctuations. At the very least, institutions will have to look hard at their hedging strategies to ensure flexibility in their asset and liability management.



Other Risks Lurk as Well

There are other risks associated with the current refinancing boom. Mortgage-backed securities (MBS), which lose value as prepayments rise because of lost income potential, have become very volatile. Financial institutions investing in MBS could face valuation writedowns and reinvestment dilemmas. As of December 31, 1997, MBS comprised 11 percent of the total assets of the Region's financial institutions. Additionally, in the past few years, insured institutions have shifted non-MBS portions of investment portfolios from U.S. Treasury securities toward U.S. agency debt (another 10 percent of total assets). A large portion of this debt, particularly that issued in the past three years, is callable, which creates reinvestment risk. In addition, institutions holding mortgage servicing rights may see declines in noninterest income or writedowns of mortgage servicing assets because of accelerated prepayments in those mortgage portfolios.

Intense competition raises concerns that institutions may compromise underwriting standards in an effort to retain customers or book new business. Banks and other financial services companies are aggressively marketing refinancing opportunities and low-cost loans. Such competition and demand for loans has already resulted in declining spreads relative to U.S. Treasury securities. Alan Greenspan, Federal Reserve Board chairman, was recently quoted in the ***American Banker*** as saying to Congress, *"We must be concerned about becoming too complacent about evaluating repayment risk. Bad loans are made when you experience low yield spreads."* He further stated that spreads are historically thin because "banks are accepting only 'modest' compensation for the risks they are incurring." With margins already considered "razor thin," the easing of other terms and conditions that could affect overall credit quality may be on the rise and warrants close scrutiny.

Will the Refinancing Wave Last?

There is much debate as to how long this refinancing wave will last and how big it will be. The flatter yield curve and the intense competition among financial institutions make refinancing viable for more consumers than during the last refinancing wave in 1993. Also, since home prices in the Region have been on the rise over the past several years, consumers have additional home equity that they may tap to consolidate higher interest rate debt such as credit cards and floating-rate home equity lines of credit. If short-term rates decline, returning the spread between short- and long-term rates closer to its historical average, further refinancings could result as ARMs become more attractive again. Conversely, if rates rise, the primary incentive to refinance would disappear. Also, the refinancing waves in 1991 through 1993 followed an 11-year period when 30-year fixed-rate mortgages averaged in excess of 10 percent. According to ***Bloomberg,*** as of December 31, 1997, only 11 percent of all securitized Fannie Mae/ Freddie Mac 30-year mortgage pools bore coupons in excess of 8 percent. With the rate differential between outstanding mortgages and current rates much narrower than in the early 1990s, prepayment activity may lose steam fairly quickly.

Karen A. Wigder, Financial Analyst

For More Information

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