Mr. Chairman and distinguished members of the Subcommittee on Domestic Monetary Policy, I am pleased to appear before you to discuss current questions about the availability of credit. As you are all aware, this has been an issue of particular concern in New England. The lessons learned from our experience during both the credit laxity of the mid 1980s and the ensuing reaction should assist us in avoiding similar credit difficulties in the future.

In the hope of providing some perspective on these problems, I will begin by attempting to define what is commonly called a “credit crunch.” I will then describe how developments in the financial and real sectors of the economy led to restricted credit availability, and why the situation has been particularly acute in New England. Finally, I will conclude with the outlook for the future, and caution that while we do not want to return to the credit conditions of the mid 1980s, which often were characterized by excessive credit expansion, we also must make sure that the 1990s do not become a period of excessive credit contraction.

Definition of a Credit Crunch

One particular difficulty with the debate over the credit crunch is that the term is used to describe a variety of credit conditions. Few borrowers believe they should ever be refused credit, and they interpret a denial as evidence of broader credit problems rather than a problem specific to the project for which they seek credit. Few loan officers believe that they ever refuse credit for profitable projects, but the uncertainties surrounding any project and the underlying health of the economy make credit assessments essentially judgmental. The natural gap between optimistic borrowers and skeptical lenders is inherent to the credit process. Even during periods of rapid credit expansion, some
borrowers will be denied credit that would certainly be granted in a world with complete information and no uncertainties. Thus, anecdotal evidence of credit denials is hardly evidence of a credit crunch.

Perhaps the best definition of a credit crunch can be reached by determining whether current lending patterns conform to standard practices at the same phase of previous business cycles. Clearly, lending behavior must change over the business cycle. Because credit evaluation is so dependent on expectations, the outlook for projects can vary significantly depending on whether lenders expect the economy to contract or expand. If credit conditions during recessions were to be compared to conditions during expansions, all recessions would qualify as credit crunches. Thus, a more useful definition of credit crunch asks whether credit availability is unusually restrictive for the current stage of the business cycle.

Historically, credit crunches have been associated with disintermediation, the loss of bank deposits when higher rates of return on assets were available from outside the banking sector. In the absence of regulation, depository institutions would normally have responded to such a loss of funds by raising the rates they paid on deposits; however, this was prevented in the past by ceilings on interest paid on bank deposits. The extent of bank losses of deposits would vary across institutions, depending on their depositors' sensitivity to return differentials, but most depository institutions responded to periods of disintermediation by tightening credit. As market interest rates dropped, the ceilings on bank deposit rates would become nonbinding and disintermediation and the so-called “credit crunch” would end.

The Current Capital Crunch

Our current credit problems are not the result of a drain of bank deposits, to be ended by lower interest rates. In substantial measure this period of tight credit is the result of a loss of bank capital, rather than a loss of deposits. The shrinking availability of credit from banks thus may be more accurately characterized as a capital crunch rather than a credit crunch.

This capital crunch has been uneven in its effects on our depository institutions. Equity capital losses have been particularly large in the Northeast, where banks have suffered extensive loan losses as a result of declining real estate prices and a bubble in real estate lending in the mid 1980s. Similarly, not all borrowers are equally affected by problems in the banking sector, since many borrowers depend almost entirely on financing unassociated with banks. Therefore, the current capital crunch primarily affects bank-dependent borrowers located in sectors of the country that have experienced large losses of capital.

Banks are but one of many sources of financing for many borrowers, particularly large ones. Depository institutions play a declining role in providing funds to the nonfinancial sector of the economy (Figure 1). The recent drop in the flow of depository credit primarily reflects the loss of intermediation services of the thrift industry. However, all depository institutions have had a diminished role in lending, as an increasing number of nonfinancial firms directly accessed national and international financial markets and many consumer and mortgage loans were held by nondepository institutions as a result of securitization. In addition, other financial intermediaries have begun to compete in markets traditionally dominated by depository institutions. This competition is likely to increase, as problems in the banking sector limit the ability of banks to compete effectively with other financial institutions.

Thus, large firms and borrowers whose loans can easily be securitized will not be seriously hurt by the erosion in some banks' capital positions. The sector most likely to be affected is made up of small firms, which traditionally have relied heavily on bank credit to finance their operations. Banks have focused on this sector because lending to small firms requires an understanding of the local economy, the characteristics of small businesses, and the business acumen of management. Banks' expertise in evaluating and monitoring credit, particularly for these small privately held firms, has not been seriously invaded by competition from other financial intermediaries. But if this important source of financing is lost, small firms have few credit alternatives.

Existing relationships between borrowers and
lenders are particularly important and often difficult to replicate for small businesses. Thus, when a current lender to small firms either goes out of business or cuts back its lending activity, many companies have an extraordinarily difficult time in developing new access to credit. A primary reason for this is the simple economics of business lending. In many ways, the costs of gathering and evaluating information are as great for a one-hundred-thousand-dollar loan as for a loan ten times that size.

Small businesses in New England have been particularly hurt by the capital crunch because the loss of bank capital is greatest in this region, which is also hardest hit by the recession (Figure 2). While the nation as a whole has maintained a relatively stable rate of growth of both bank capital and assets, the New England experience has been quite different. Capital and assets grew rapidly during the mid 1980s but have declined sharply since then.

The loss of bank capital in New England is particularly troubling. With little prospect of issuing new stock in the current economic environment, banks can restore their capital-to-asset ratio only by retaining more earnings and shrinking their assets.

Figure 1
Funds Advanced by Commercial and Savings Banks Relative to Total Net Borrowing by the Domestic Nonfinancial Sector

Figure 2
Percentage Change in Capital and Assets of Commercial and Savings Banks

Many institutions in New England have been reducing their dividends and contracting their lending. In some areas this has made loans unavailable to otherwise creditworthy borrowers who are dependent on bank financing.

It is the loss of bank capital that differentiates credit availability at this stage of the current business cycle from similar periods previously. Thus, the an-
Figure 3

New England Employment as a Percentage of United States Employment, Major Industry Groupings

During the 1980s, employment in New England increased gradually but steadily despite only modest increases in the population (Figure 3). However, this smooth growth in New England employment as a whole masked large swings in several industry groups. Manufacturing of durable goods, a traditional strength of New England, grew rapidly in the late 1970s and early 1980s, fueled by growth in computer and other high technology companies. However, employment in these industries peaked by 1984 and declined for the rest of the decade as New England computer manufacturers lost market share.

This decline in manufacturing did not cause a drop in overall employment because of a simultaneous increase in construction employment. New England's share of construction employment started to increase in the late 1970s and rose very sharply after 1983. The construction boom, in turn, helped stimulate support industries such as financial services. Thus, the decline in one of our major industries, durable goods manufacturing, was camouflaged by the extraordinary increase in construction and related industries.

Figure 4

Employment in Massachusetts during Periods of Recession
(Indexed to the Peak)

During the 1980s, many regions experienced business cycles out of sync with the country as a whole. The Southwest experienced an oil cycle, many Midwestern states experienced a farm cycle, and New England experienced a real estate cycle. Each of these cycles in the real economy has an analog in the financial economy.

Answer to whether we are experiencing a credit crunch is yes, at least in that respect. Regions that have lost substantial bank capital are experiencing tighter credit conditions than they would otherwise. The major cause of this credit crunch is not monetary policy or changes in bank regulation, however, it is the loss of bank capital resulting from excessive credit growth during the mid 1980s. To understand our current problems with credit availability, it is essential to understand the changes in bank lending patterns that occurred in the 1980s.

Economic and Financial Developments in the 1980s

During the 1980s, many regions experienced business cycles out of sync with the country as a whole. The Southwest experienced an oil cycle, many Midwestern states experienced a farm cycle, and New England experienced a real estate cycle. Each of these cycles in the real economy has an analog in the financial economy.
Such explosive growth in real estate was not sustainable in a region with only small increases in population. By the late 1980s the construction boom turned to bust, and that decline plus continuing weakness in manufacturing spilled over to other sectors of the regional economy. The result has been the worst drop in employment experienced in New England in the past two decades (Figure 4). In the previous three recessions, employment declines subsided approximately 10 months after the peak. By contrast, New England employment has been declining for the past 25 months and the trough may not occur until late this year or early next year.

Drops in employment of this magnitude were bound to have reverberations in the financial sector. Moreover, because the construction boom was financed almost entirely by credit, the banking sector had a large exposure to any downturn in real estate. Depository institutions had many incentives to expand their real estate portfolios. Losses from Third World loans, farm loans, and oil loans encouraged the large New England banks to look for lending opportunities within their own region. Smaller thrift institutions, flush with new funds from conversion to stock ownership, were also aggressively seeking new lending opportunities. The rapid expansion of real estate lending in New England (Figure 5) led to a relaxation of lending standards. While real estate lending roughly doubled nationwide between 1984 and 1988, real estate lending in New England grew nearly fourfold. This caused bank performance to be tied to the health of the real estate market. In 1990 real estate loans comprised about one-half of all loans and leases for New England commercial banks, a dramatic increase from less than one-third in 1985. On a purely anecdotal basis, in my conversations with bankers I have been struck by how much the very vocabulary we use reflects this increase in real estate lending. You could close your eyes and think you were talking to thrift bankers ten years earlier. Many of our institutions had essentially become real estate lenders rather than traditional commercial bankers.

At first, increasing bank exposure to the real estate market was quite profitable. New England house prices, which in 1984 were already 35 percent higher than those in the nation as a whole, had increased so rapidly that by 1987 they were twice the national average (Table 1). These price increases outstripped the ability of both individuals and firms to pay, resulting in excess capacity. As this excess capacity increased over time, real estate prices softened and then began to fall. This has been even more

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### Table 1

**Housing Cost Increases in Massachusetts, 1984–90**

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<td><strong>Housing Prices (000)</strong></td>
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<tr>
<td>United States</td>
<td>$72.4</td>
<td>85.8</td>
<td>93.1</td>
<td>95.5</td>
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<td><strong>Boston Metropolitan Statistical Area</strong></td>
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<tr>
<td>Boston/U.S. (U.S. = 100)</td>
<td>135</td>
<td>206</td>
<td>195</td>
<td>182</td>
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<tr>
<td><strong>Massachusetts Wages Relative to Wages in the United States (U.S. = 100)</strong></td>
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<td>Annual Pay—Private Sector</td>
<td>100</td>
<td>108</td>
<td>112</td>
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<tr>
<td>Average Hourly Earnings of Mfg. Production Workers</td>
<td>92</td>
<td>99</td>
<td>104</td>
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n.a. = not available.

Source: New England Economic Indicators Database; U.S. Department of Labor, Employment and Earnings, and the National Association of Realtors.

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Figure 5

**Real Estate Lending by Commercial and Savings Banks**

First District versus United States 1979 to 1990

Note: The sharp increase in First District real estate lending from 1984 to 1987 is due in part to an increase in the number of FDIC-insured institutions.

Source: Call Report data for FDIC-insured institutions.
true of commercial real estate than of the residential sector. Given the large exposure of New England depository institutions in real estate, this caused substantial problems for the banking sector.

The Current Situation

The drop in real estate prices caused a substantial increase in nonperforming assets, much of it in real estate loans (Figure 6). As nonperforming assets grew, banks were forced to increase their loan loss reserves, resulting in lower capital (Figure 7). Even worse, this decline may not yet fully reflect the extent of the problem. Nonperforming assets as a percentage of equity plus reserves have been rising through the end of 1990, indicating that further losses of bank capital are still possible (Figure 8). The capital position of many institutions has become sufficiently impaired that downsizing has been necessary. While most downsizing has involved selling or securitizing assets, banks have also tightened their credit standards.

During the explosive growth in lending in New England during the 1980s, credit controls at some institutions had become lax. Most banks have responded to the increase in nonperforming loans by reevaluating loan practices established during the boom, and some banks have concluded that more conservative lending standards are required. Correction of imprudent lending practices was indeed a necessary condition for restoring some stability to the New England banking market. Nonetheless, the shortage of capital and the need for many institutions to downsize have made credit availability more difficult, particularly for small firms, which are most dependent on banks for financing.

Problems with credit availability are measured periodically by a survey conducted by the National Federation of Independent Business (Figure 9). In the survey they ask, "Are loans easier or harder to get than they were three months ago?" They subtract responses of "easier" from responses of "harder": therefore, an increase reflects tighter credit conditions. Small businessmen surveyed in New England during the boom thought that credit conditions were easier than did their counterparts in the rest of the country. However, since the late 1980s the survey indicates a substantial increase in New England respondents who believe that credit is tighter. This survey, along with considerable anecdotal evidence, suggests that small business has recently experienced significantly more difficulty in obtaining credit.
The Outlook and Policy Implications

At least in New England, the 1980s was a period of excessive lending. In response to the large loan losses that occurred as a result of this "bubble," banks and bank regulators naturally have reevaluated lending practices. A return to more prudent lending is essential for the financial health of the banking industry. However, we must ensure that the early 1990s do not become a mirror image of the mid 1980s. Given that credit judgments by both bankers and regulators ultimately reflect human sentiments, it can be expected that to some extent the overly optimistic expectations of the 1980s may be replaced by overly pessimistic expectations in the 1990s. With respect to the regulators, and I certainly include myself in that group, I believe the more valid criticism relates to how we reacted to the boom in the 1980s and whether we should not have done more to dampen it, rather than to the degree of overreaction that has occurred since. While this is strictly my personal view, I do believe a shift in regulatory sentiment about some New England institutions may have occurred that, while understandable or even appropriate on a case-by-case basis, may have been perverse for the econo-
omy as a whole. Any such possible overreaction by regulators and banks is now dissipating, however.

Despite the many problems with credit availability, we are finally beginning to see a few rays of hope. As our most troubled institutions are restructured to bring in new capital, many financial institutions are once again in a position to provide loans to creditworthy borrowers. Painful as the high unemployment rate and the drop in real estate prices are, they will provide the catalyst for restoring New England's competitive position in manufacturing, which requires land and labor costs more in line with costs in the rest of the nation. Finally, any restoration of the economy requires a restoration of consumer confidence, which now appears to be improving (Figure 10). As economic activity resumes, a more sustainable rate of economic growth and a more viable banking sector will emerge in New England as in the rest of the country. The painful lesson for everyone that emerges from the New England experience is that avoiding booms, which become bubbles, is the only way to prevent busts.

I hope we have all learned that. Thank you for the opportunity to testify.

1 A part of the increase shown for New England is accounted for by an increase in the number of FDIC-insured institutions.