the future of the skilled labor force in new england: the supply of recent college graduates





# letter from the president

Thank you for your interest in the work of the Federal Reserve Bank of Boston and the Federal Reserve System. I am happy to share this report on our 2008 activities and to provide some observations on the year—a very challenging one for the U.S. economy.

Financial turmoil and difficulties in credit markets began in 2007 and persisted through 2008. Economic challenges are now taking a toll on many Americans and on companies large and small. Officially in recession since the end of 2007, despite positive GDP growth in the first half of 2008, the United States saw economic conditions deteriorate sharply in the second half of the year as both consumers and businesses retrenched. Consumer wealth was buffeted by declining home values and falling stock prices, and as the year ended the unemployment rate had risen to 7.2 percent in the nation and 6.9 percent in New England.

To help address the ongoing difficulties in financial markets and the weakening economy, the Federal Reserve was very proactive in 2008. We took the federal funds rate target to only slightly above zero—essentially as low as it can go—and created a variety of lending facilities to restore liquidity and help lower the elevated spreads on many interest rates in the marketplace. Well-functioning credit markets are essential to restoring the economy's health, and I believe the measures taken by the Federal Reserve, coupled with fiscal policy, will provide critical support in the year ahead.

Difficult economic times and turbulent financial markets led to several significant initiatives for the Bank in 2008. One was a major foreclosure-prevention workshop that we and the New England Patriots Charitable Foundation held at Gillette Stadium in August. The event brought thousands of troubled borrowers together with their loan servicers. It was just one manifestation of the Bank's broader focus on the problems stemming from subprime mortgages and on finding ways to address rising foreclosures. Another notable initiative was the lending facility that we in Boston set up for the Federal Reserve System. This facility, the AMLF (asset-backed commercial-paper money market mutual fund liquidity facility), helped ease strains experienced by money market mutual funds and "seize-ups" in commercial-paper markets by providing loans to banks enabling them to buy high-quality asset-backed commercial paper from the funds. These and other aspects of our work this year are described in the Bank Highlights section of this report.

The Bank also made strong contributions to our core areas of expertise, including monetary policy, supervisory policy, payments and other services for financial institutions and the U.S. Treasury, economic research, and regional and community initiatives. An important Bank priority is providing high-quality analysis of public policy issues

affecting the New England region—and a particular focus in 2008 involved New England's future skilled labor force and steps that might help the region retain recent college graduates. Alicia Sasser, a senior economist in our New England Public Policy Center, has contributed an essay on this topic to this annual report, and has helped spark ongoing policy discussions among business leaders, policymakers, and educators that we hope will result in strategies that benefit the region.

The events of 2008 demonstrate that the nation's financial regulatory framework needs to be reconsidered. Reform of our financial regulatory framework promises to be a major topic for policymakers in 2009, and my hope is that the deliberations will be guided by a few key principles. Specifically, I believe that macroeconomic stability must be a priority of financial regulation, in addition to the safety and soundness of individual institutions. And, because it is central to macroeconomic stability, systemic financial stability needs greater focus (with roles in a crisis more clearly articulated). Liquidity risk, so evident in 2008, similarly deserves greater attention in policy and in regulatory structures. And regulatory coordination (both domestic and international) needs careful thought and attention, as does strengthening market infrastructure (including standardizing securitization contracts and establishing exchanges for more transactions).

In closing, I want to thank the staff of the Bank for their dedicated efforts in a very challenging year. I know they join me in seeking to make a difference in the public's interest. I also thank our directors and the members of our advisory groups for their commitment and their desire to work with us.

In particular, I want to express the Bank's appreciation for the service and insights of Kathleen Marcum, President and CEO of Millbury National Bank, who completed three years of service as a member of our Board of Directors in 2008. Kate's energetic counsel and expert perspective as a lender have been of great benefit to the Bank, and we thank her.

Sincerely,

Eric S. Rosengren

President and Chief Executive Officer



# the future of the skilled labor force in new england:

The supply of recent college graduates

One of New England's greatest assets is its skilled labor force, which has historically been an engine of economic growth in the region. But the skilled labor force of the future is growing more slowly in New England than in the rest of the United States. Since 2000, the population of "recent college graduates"—individuals aged 22 to 27 with a bachelor's degree or higher—has grown by less than 9 percent in New England, roughly half the U.S. increase. This is better than the 11 percent drop in the number of recent college graduates that the region experienced in the previous decade. But the increase since 2000 has not offset those earlier losses, making New England the only region to see a decline in this population since 1990.

As a result, the need to attract and retain recent college graduates has become a salient issue in every New England state. Even with the current economic downturn, policymakers and business leaders alike realize the need to keep a long-term perspective to ensure that there is a sufficient pipeline of skilled workers to fill the region's high-growth, high-demand jobs when the economy recovers—many of which are likely to require post-secondary education and training.<sup>1</sup>

What are the factors affecting New England's stock of recent college graduates? How have these factors changed over time? What is the relative importance of these factors in explaining the decline and slower growth in the number of grads? Research conducted in 2008 by the New England Public Policy Center at the Federal Reserve Bank of Boston investigated these questions as well as the potential policy actions that could be undertaken to address the issue.<sup>2</sup> Among the factors examined, retaining a greater share of graduates educated at New England's colleges and universities emerged as the most promising and immediate channel to expand this important source of skilled labor. Furthermore, contrary to the usual litany of reasons offered to explain why individuals leave New England—cold winters, high cost of living—our research showed that recent college graduates leave the region primarily for employment opportunities, suggesting that there are tangible actions states can take to boost retention.

Bolstering New England's skilled labor force will likely require some combination of short-term actions aimed at improving retention and long-term policies designed to boost educational attainment. For example, efforts to improve retention—such as expanding internship opportunities for students and branding the region to appeal to recent graduates—are likely to have a direct impact on increasing the region's supply of recent college grads. Other policies aimed at boosting educational attainment among native young adults—such as alleviating college debt burdens and increasing investments in public higher education—may ultimately sustain the region's supply of skilled workers in the face of future demographic changes.

Alicia C. Sasser Senior Economist New England Public Policy Center

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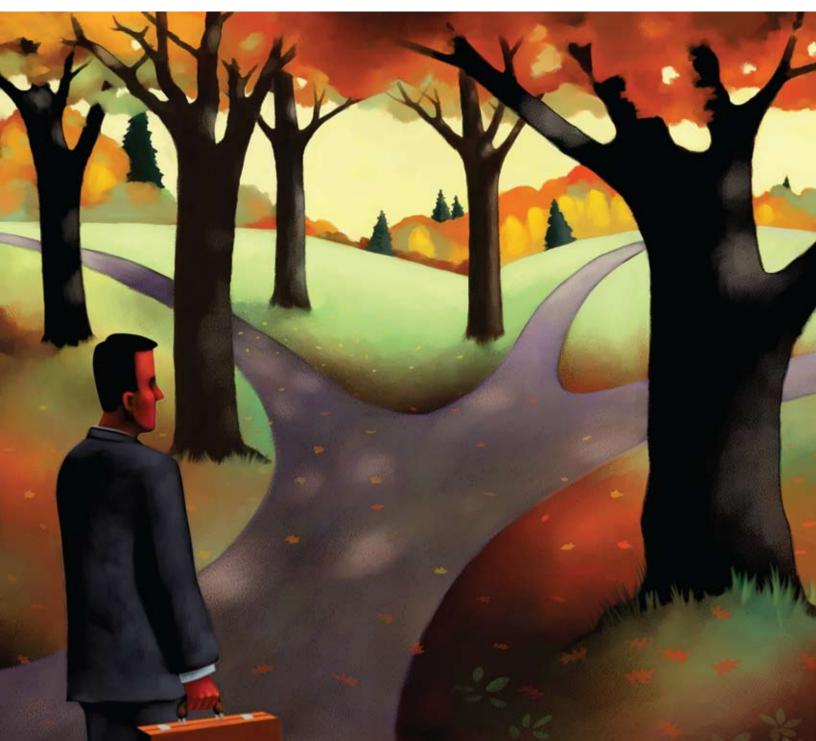
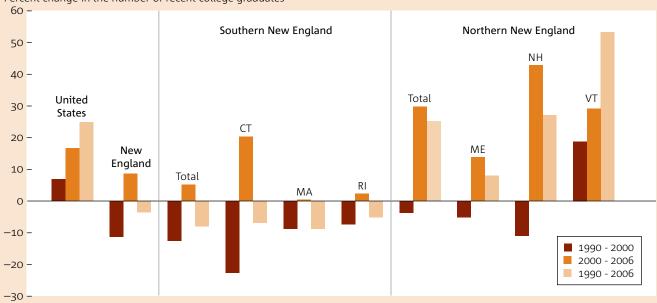


Figure 1

#### **Slower Growth**

Between 1990 and 2000, the number of recent college graduates in New England fell, and the number has been growing more slowly than in the nation as a whole since then.

Percent change in the number of recent college graduates



Source: 1990 and 2000 Census and 2006 American Community Survey.

Note: Recent college graduates are individuals aged 22-27 years who have completed a bachelor's degree or higher (master's, PhD, or professional degree).

This article summarizes our recent research as well as some strategies that are currently underway in New England to increase the region's supply of recent college graduates. Our hope is that this information will serve as a basis for constructive dialogue among the various stakeholders—policymakers, business leaders and college officials—to encourage proactive efforts that will cultivate our skilled labor force and ultimately foster greater economic growth for the region.

# Changes in the supply of recent college grads

Trends in the supply of recent college graduates have varied considerably within the region over the past two decades, with much of the initial decline and subsequently slower growth occurring in southern New England. Between 1990 and 2000, the number of recent college grads fell steeply in southern New England—primarily because of a sharp drop in Connecticut (see Figure 1). However, while Connecticut rebounded quickly between 2000 and 2006, Massachusetts and Rhode Island experienced slow or no growth. Over the entire period, the number of recent college grads in southern New England fell by 8 percent.

In northern New England, the initial decline between 1990 and 2000 was not as steep. What's more, since 2000, the population of recent grads in northern New England has grown rapidly—particularly in New Hampshire. Over the entire period, northern New England's recent college grad population grew at a rate similar to that of the nation.

# Factors affecting the stock of recent grads

What are the underlying factors behind these trends? Every year, the region adds to its stock of recent college graduates as each successive cohort of young adults flows through the

education pipeline: entering college, completing degrees, and choosing where to locate. Thus, three main factors affect the stock of recent college grads:

- The supply of young adults to be educated at New England institutions—whether native to the region, from other parts of the United States or from abroad—is the primary source of growth for the region's population of recent grads. Students who attend college in New England account for more than three-quarters of the recent grads living in the region.
- The rate of educational attainment among native young adults—or the percentage of high school graduates who choose to go on to college-is also key because native New Englanders account for roughly 70 percent of college enrollments within the region.
- The migration decisions of individuals also affect supply. Regions may increase the size of this population either by retaining those educated within the region or by attracting those who have received degrees elsewhere. Retention is especially important in New England because the region imports a relatively high share of its student body from other parts of the country—about 30 percent of the incoming class each year.

### How these factors have changed

Among the three factors examined, changes in the supply of young adults account for most of the sharp drop and subsequently slower growth in the number of recent college graduates in New England. Fortunately, rising educational attainment helped the region swim against

the tide of slower population growth, as the share of high school graduates attending college rose more sharply in New England than the rest of the nation. In contrast, changes in the migration patterns of recent college graduates have not been very large over this period, accounting for only a small fraction of the overall trend in the number of recent college grads.

The first factor—the supply of native young adults-fell sharply in New England during the 1980s, particularly in southern New England. This trend primarily reflects a period of low birth rates: During the 1970s, after the baby boom, birth rates fell across the country, but more so in New England. The result is that, twenty years later, New England had roughly 25 percent fewer native young adults of college-going age during the 1990s compared with the prior decade (see Figure 2).

Since then, the number of young adults of college-going age in New England has grown at a slower rate than in other parts of the country. Moreover, despite a growing number of students coming to the region

Figure 2 **Fewer Young Adults** Due to sharply lower birth rates during the 1970s, New England had 25 percent fewer native young adults of college-going age some 20 years later. Number of individuals aged 17 years Index 1981=100 150 New England 140-Connecticut Maine 130 -Massachusetts New Hampshire 120-Rhode Island Vermont **United States** 110-100 90 80 -70 -60 -50 1980 1985 1990 1995 2000 2005 Source: Census Population Estimates, 1980-2005, US Bureau of the Census

from elsewhere in the United States and abroad, the increases from these two groups were a drop in the bucket compared with the sharp drop in the number of native young adults. Essentially, the region has not been producing enough of the basic input—young adults—to put through the education pipeline.

Fortunately, relatively high rates of educational attainment among the region's young adults offset its sharply lower birth rates. The share of New England high school graduates attending college rose from roughly one-third to just over one-half during the 1990s—far faster than the U.S. average. As a result, the educational attainment of native young adults grew more rapidly in New England than in most other parts of the nation, particularly in southern New England. By 2006, nearly one in three native young adults in the region had a college degree, compared with slightly more than one in five young adults in the country as a whole (see Figure 3). Thus, even though the region had 25 percent fewer native young adults, the number of recent college graduates fell by only 11 percent because a greater percentage of individuals earned their degrees.

Some New England leaders are concerned that, despite a high rate of educational attainment, the region attracts and retains too few college graduates—or at least fewer than it did in the past. In fact, migration patterns have changed little over time for this group. In terms of attracting college graduates who attended school elsewhere, the region fares quite well, particularly when one considers its smaller population size. Interestingly, more than half of those migrating into New England are natives who have received their degrees elsewhere and choose to return upon graduation.

Figure 3
Rising Educational Attainment

By 2006 one in three native young adults in New England had a college degree compared with just one in five for the United States.

Native recent college graduates as a percent of native young adults aged 22-27 years 35 New England 30 Connecticut Maine Massachusetts New Hampshire 25 Rhode Island Vermont United States 20 15 1980 2006 1960 1970 1990 2000

Source: 1960, 1970, 1980, 1990, 2000 Decennial Census and 2006 American Community Survey, US Bureau of the Census.

Note: Recent college graduates are individuals aged 22-27 years who have completed a bachelor's degree or higher (master's, PhD, or professional degree).

When it comes to retention, the situation is more complex than it might appear. For example, typical migration rates for New England often show net out-migration among recent college grads—meaning that more individuals appear to be leaving than entering the region. However, such rates reflect only moves made upon graduation from region of institution to region of adult residence, failing to capture the earlier inmigration of students to attend college.

Why is that important? New England attracts a relatively high share of students from outside the region, with more students arriving to attend college than leaving to attend college elsewhere. This makes it one of the largest importers of college students in the country. Even though the region holds onto only a fraction of those incoming students after they graduate, it still comes out ahead—increasing its stock of recent college grads by more than it would have if it had educated only its native population.

Does New England retain enough recent college grads? Yes and no. On the positive side, the number of students who migrate into the region to attend school more than offsets the number of graduates who leave the region upon graduation. So when the earlier in-migration of students is accounted for, the region actually increases its stock of recent college grads for a given class.

Yet compared with other regions, New England retains a lower percentage of students upon graduation. For the graduating class of 2000, 70.5 percent of recent college grads were still living in New England one year after graduation, compared with 79.9 percent for the Mid-Atlantic region and 87.5 percent for the Pacific region (see Table 1). Similar rates for the class of 1993 show that this pattern of retention has changed very little since the early 1990s.

# What explains new england's lower retention

New England's lower retention rate primarily reflects the high share of non-native students who migrate into the region to attend school. Having already migrated once to attend college, these students have a higher propensity to relocate after graduation-often to return homewhether to take a job or be closer to family. For example, roughly 20 percent of those migrating into the region to attend college were still living here one year after graduation, compared with over 90 percent of native graduates. In addition, New England's retention of non-native graduates is relatively low compared with most other parts of the country. So, besides having a greater share of non-native graduates, New England is less likely to retain them than other regions (see Table 2, page 10).

The high share of students graduating from private and very selective institutions in New England also lowers the region's retention rate. For a given class, more than half of those graduating from New England colleges and universities earned their degree from a private or a very selective institution—a far higher share than in most other regions. These graduates, able to reap the benefits of their high-quality education by moving to any number of locations, have low retention rates in general across all Census divisions. However, as with non-native graduates, New England's retention rates for graduates of private and very selective institutions are lower than those of other regions (see Figure 4, page 11). So, besides having a greater share of graduates from private or very selective institutions—who have low overall retention rates— New England is also less likely than other regions to retain those graduates.

# Why recent college grads leave new england

These individuals are voting with their feet—they have decided to relocate based on a variety of factors. Those include economic factors, such as the availability of jobs, compensation levels, and the cost of living; and non-economic factors, such as proximity to family, educational

#### Table 1

## **Retaining College Graduates**

The share of recent college graduates staying in New England upon graduation is lower than the share in other regions and has changed little since the early 1990s.

### Percent of graduates living in same region as BA institution one year after graduation

	Class of 2000		Class of 1993	
Rank	Division	Percent	Division	Percent
1	Pacific	87.5	Far West	88.3
2	West South Central	85.1	Southeast	85.1
3	Mid-Atlantic	79.9	Southwest	85.1
4	East North Central	79.7	Mid East	83.5
5	South Atlantic	79.1	Plains	82.9
6	Mountain	76.4	Great Lakes	80.9
7	West North Central	74.9	Rocky Mountains	76.3
8	East South Central	72.2	New England	67.0
9	New England	70.5		

Source: 2000/01 and 1993/94 Baccalaureate and Beyond Longitudinal Survey, National Center for Education Statistics, US Department of Education

Table 2

**New England** 

Mid-Atlantic

East North Central

East South Central

West North Central

West South Central

South Atlantic

Mountain

Pacific

## **Retention Varies by Student Origins**

New England attracts a relatively high share of non-native students, the majority of whom leave the region when they graduate.

Percent of

college

students

who are non-natives

28.5

14.3

11.6

15.5

16.2

18.4

9.4

14.2

6.0

\_\_\_\_

Percent of graduates living in same region as BA institution one year after graduation

All graduates	Non- native graduates	Native graduates
70.5	22.7	91.0
79.9	28.6	88.7
79.7	18.0	87.8
72.2	15.3	82.8
79.1	29.2	89.1
74.9	21.5	86.9
85.1	24.2	91.4
76.4	26.2	84.8
87.5	32.3	91.0

Source: 2000/01 Baccalaureate and Beyond Longitudinal Survey, National Center for Education Statistics, U.S. Department of Education.

Note: Data are for the graduating class of 2000.

opportunities, and local amenities such as weather, culture, and recreational activities.

Contrary to conventional wisdom, recent college grads are leaving New England primarily for job-related reasons-not housing costs. According to the Current Population Survey, about half of those leaving New England during the past decade cited employment-related reasons. Just under one-third left for "other" reasons-almost exclusively to attend or leave college-reflecting the large share of non-native students who leave upon graduation. Another 17 percent left for family-related reasons, such as a change in marital status or to establish their own household. In contrast, housing-related reasons accounted for less than 2 percent of moves from New England among recent college graduates (see Figure 5, page 12).

On second glance, this is perhaps not surprising, given that recent college grads are more likely to be seeking rental rather than owner-occupied housing. Earlier research by the Boston Fed showed that rental housing, unlike owner-occupied

housing, is relatively affordable in New England compared with other regions.<sup>3</sup> Indeed, the Mid-Atlantic and Pacific regions—both with relatively high housing costs—were two of the three top destinations for recent college grads leaving New England, supporting the finding that housing costs are not the main drivers of their decision to relocate.

Indeed, surveys of current college students and recent college grads across New England consistently find that employment opportunities are one of the key drivers behind where to locate upon graduation. For example, respondents of a 2002 survey of recent college grads in Maine reported that the level of pay, the quality and availability of jobs, and the location of family members ranked as their top concerns in deciding whether to remain in the state.<sup>4</sup> Similarly, recent college grads participating in a 2003 study by the Greater Boston Chamber of Commerce reported leaving the region primarily for more desirable and more easily-available jobs elsewhere.<sup>5</sup> In addition, about one-quarter of respondents cited affordability, and just under a quarter cited the desire for a better "city experience."

Other surveys reveal that job-related perceptions are also a barrier for recent college graduates looking to return to New England. A 2007 survey of New Hampshire college seniors and recent graduates revealed that job characteristics, salaries, and family concerns were the top factors affecting their migration decisions. Almost half of recent graduates who had left New Hampshire wanted to return, citing the state's high quality of life, but reported that limitations in the job market posed a barrier. Likewise, Vermont's Next Generation Workforce Study found that graduates who had left the state cited small-town living and access to recreation as reasons to return but that a shortage of suitable jobs and the price of commuting were impediments to relocating back to the state.

# Efforts to shore up the supply of recent grads

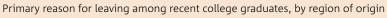
Understanding which factors affect the supply of recent college graduates is key in developing both short-term and long-term strategies to bolster New England's skilled labor force. Although increasing the supply of young adults to be educated would have the greatest impact, short of a baby boom, the region would need to attract more non-native students-of which only 20 percent are likely to stay upon graduation. Instead, a more promising and immediate strategy would be to focus on the other two factors: retaining a greater share of students who come to New England to attend college while also encouraging greater college attendance and completion among native young adults.

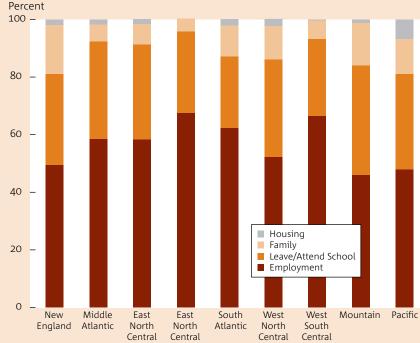
In the short run, efforts to improve retention are likely to have a direct impact on increasing the region's supply of recent college grads-particularly among non-native students and those educated at private and selective institutions. These are individuals who have chosen New England for their postsecondary education—despite cold winters and possibly incurring greater student debt-but also have a greater tendency to leave upon graduation. It may be inevitable that some of these graduates will choose to relocate-such as to be closer to family. Yet there are multiple opportunities to engage students during the course of their four years and make it less likely that they will leave due to lack of information or misperceptions about the job market, cost of living, or quality of life here. For example, actions on the part of firms and colleges to expand internship opportunities can help graduates learn first-hand about local job opportunities. Similarly, state-led efforts to "brand" the region as a place to

Figure 4 **Retention Varies by Institution** The high share of students graduating from private and very selective institutions, who are more likely to migrate than other graduates, also lowers the region's retention rate. Percent of graduates living in same region as BA institution one year after graduation 100 ■ Very Selective Private Public 90 All 80 70 60 50 New Middle East West South West Pacific East Mountain England Atlantic North North Atlantic South South Central Central Central Central Source: 2000/01 Baccalaureate and Beyond Longitudinal Survey, National Center for Education Statistics, US Department of Education Note: Data are for the graduating class of 2000. Categories (very selective, private, public) are not mutually exclusive

Figure 5 **Reason for Leaving New England** 

Recent college graduates leaving New England over the past decade did so primarily for job-related reasons—few cited housing as their motivation.





Source: Current Population Survey, U.S. Bureau of the Census, 1999-2007. Note: Recent college graduates are individuals aged 22-27 years who have completed a bachelor's degree or higher (master's, PhD, or professional degree).

"work, play and stay" can help demonstrate all that the region has to offer students upon graduation.

In the long run, boosting educational attainment among native young adults may help sustain the region's supply of skilled workers in the face of future demographic changes. However, higher education leaders indicate that raising educational attainment beyond the region's already high level will require a commitment to increasing college access and readiness—particularly among minority and immigrant students.8 For example, flattening college attendance rates and falling levels of completion have prompted efforts to alleviate debt burdens while ramping up college readiness programs and honors programs. However, it should be acknowledged that these initiatives are likely to face significant financing obstacles-at least in the near term-given the severe fiscal difficulties that state governments are now confronting.

The New England states are in the first stages of pursuing policies with an eye to increasing the supply of recent college graduates. These initiatives are fairly new, and thus far

little evidence exists as to their effectiveness. Each of these four options-expanding internship opportunities, branding the region, alleviating college debt burdens, and increasing investment in higher education—is discussed in the following sections. Where possible, specific examples of actions taken around the region are provided along with insights gleaned from interviews with those on the front lines who are charged with implementing these efforts.

# Expanding internship opportunities

More formal and widespread use of internship programs across New England could potentially be a win-win-win situation: allowing students to gain experience, lowering recruiting costs for employers, and enhancing the reputation of the region's colleges and universities. In particular, such efforts would help all graduates—and especially non-natives, who have lower retention rates-learn more about local job opportunities and form networks within the region. Yet with few exceptions, employers and colleges do not seem to be making these connections on a wide scale but rather on an ad-hoc basis such as the chief executive officer's alma mater.

Recent college graduates consistently cite the availability of good jobs as their most important concern when deciding where to locate, yet are often unaware of local employment opportunities. A 2005 survey of roughly 1,100 graduating students by the Worcester Regional Research Bureau (WRRB) found that 70 percent of respondents indicated career opportunities and associated pay and benefits were important factors in deciding where to locate. Yet only 8 percent of respondents gave the highest rating of "excellent" when asked how they rated opportunities to learn about local employers and employment opportunities. Given that two-thirds of respondents who were looking for jobs said they planned to leave central Massachusetts upon graduation, the WRRB concluded that students needed to learn more about the opportunities in the region to boost retention. 9

Internships can serve a dual purpose: bridging the information gap for students and acting as a vehicle to full-time employment for firms. A 2008 annual survey conducted by the National Association of Colleges and Employers (NACE) reports that internships have been on the rise since 2004. This increase is primarily driven by employers that have formal programs in place to test out potential hires. In recent years, employers have converted a greater percentage of interns into full-time employees, often using internships to identify talent early and pre-empt competitors by making offers in the fall rather than the spring.<sup>10</sup> For the Northeast, NACE estimates that roughly 70 percent of internships led to full-time job offers in 2008. About three-quarters of those job offers were accepted so that a little more than half of all internships resulted in full-time employment last year.<sup>11</sup>

Connecting students with local employers may lead to greater retention after graduation—a clear benefit to both regions and firms looking to maintain or expand their supply of skilled workers. For example, the 2005 WRRB survey found that students in central Massachusetts who either worked off-campus or participated in an internship or co-op were more likely to stay in the area compared with those that did not take advantage of such opportunities.<sup>12</sup> And according to NACE, firms with formal internship programs also have higher retention, with just over 90 percent of new recruits still employed after one year, compared with only 60 percent of new recruits at firms without a formal program.<sup>13</sup> However, it may be the case that firms hosting internships also offer other advantages-such as higher wages and more generous benefits-that affect retention.

Yet despite the obvious benefits of internship programs, their use is far from universal among employers-particularly small firms. For example, among a representative sample of 25 employers, the WRRB found that only half had used student interns and/or viewed internships as a way to test out a potential hire.14 One-on-one interviews revealed that many smaller companies lack the time and resources needed to recruit and/or supervise interns. Indeed, recruiting interns can be time-intensive. According to NACE, most firms find that "hightouch" methods such as attending career fairs, recruiting on-campus, cultivating key faculty contacts, and soliciting referrals from former interns are the most effective means. Although firms also employ less time-intensive "high-tech" methods-nearly 70 percent of firms post positions on their own web sites or those of a college career center-these techniques are deemed significantly less effective.15

Some regions have sought to expand the use of internships by providing a central place for students and firms to connect through an online regional clearinghouse. For example, in 2007, the Colleges of Worcester Consortium, a 40-year-old alliance of 13 area colleges in central Massachusetts, developed an online internship database to enable employers of all sizes to tap into the pool of educated workers in central Massachusetts. Consortium CEO Mark Bilotta estimates that last year more than 1,000 students reviewed postings by some 250 companies using the online database. In addition, the Consortium helped place 9,900 students in community service, work study, and research internships through its community placement program. <sup>16</sup> (For more information on the Consortium and their online internship database, see the sidebar on page 16.)

Internships present a win-win-win situation: students gain experience, employers lower recruiting costs, and academic institutions enhance their reputations.



Helping firms to forge stronger ties with academic institutions may also expand the use of internship programs. For example, Bentley University fosters close connections with a host of employers, providing firms with a menu of opportunities to increase visibility among students. These include both curricular and extra-curricular activities that are designed to span the entire academic year and include all classes of students (freshman to seniors) as well as graduate students and faculty. Bentley also encourages companies to establish an on-campus presence as an "employer-in-residence" by designating a senior representative to visit the university on a weekly basis and consult with students.

According to Len Morrison, Bentley's executive director of corporate relations, it is important for companies to identify which institutions are good matches so that there will be a high yield from internships into full-time employment. For example, when the goals of the school are aligned with those

of the employer, collaborative relationships are formed between faculty and management, yielding more meaningful internships that include on-the-job learning, mentoring, leadership development, and evaluation. Companies should work with university staff, faculty, and alumni to establish a campus "brand" and designate internal "school champions." Morrison points out that it is important for employers to maintain relationships with core schools even when there is turnover in career service staff or a downturn in hiring. 17

Providing financial assistance-either directly through public funding or indirectly through academic credit—may also expand the use of internships, particularly among those that do not have the resources to offer paid positions. The 2008 NACE survey reported that over 90 percent of employers with internship programs offer paid positions with an average wage of \$16.33 per hour—a significant hurdle for smaller companies looking to vie for talent.18 Some states have addressed this problem directly by helping companies fund internships. For example, the state of Vermont awarded 14 grants totaling \$530,000 to a combination of both public and private organizations to help fund paid positions for roughly 450 high school and college students in FY 2009.<sup>19</sup> Alternatively, it has been suggested that states should encourage more colleges and universities to offer academic credit for internships in lieu of pay. When academic credit is offered, faculty members are more likely to help students plan their internships, resulting in a higher-quality experiential learning opportunity. Yet according to the Northeast Internship Survey, only 35 percent of students who participated in an internship did so for college credit.20

## Branding the region

Branding the region to appeal to recent college graduates, particularly non-natives, as a place to "work, play and stay" could help New England shake off its "old, cold and expensive" image and boost retention rates. Surveys reveal that familiarity and comfort with a region-whether because of familial connections or quality of life—play a role in the migration decisions of recent college graduates. This is particularly relevant for New England, which receives a large influx of freshmen each year—about 30 percent of the incoming class—from other parts of the country.

New Hampshire's "55% Initiative" aims to develop a marketing campaign to help ensure that students do not leave the state because of lack of information or misperceptions about job opportunities, cost of living, or quality of life. Led by the University System of New Hampshire (USNH), the Initiative calls for increasing the percentage of college graduates who remain in the state after graduation to at least 55 percent. Initial surveys of college seniors and recent graduates conducted by USNH showed that most leave based on the perception of better jobs and higher salaries in other states. As a result, policymakers and business leaders called for a marketing effort that would heighten awareness of the state's key attributes and its employers, designed to shift perceptions and dispel the myth that New Hampshire lacks jobs. The Initiative assigned five college marketing classes a semester-long project to develop innovative ways to promote New Hampshire to future college graduates and encourage them to remain in the state. The ideas presented by the students will be used in developing the initiative's marketing campaign. <sup>21</sup> (For more information on the Initiative and their marketing campaign, see the sidebar on page 20.)

Social networking is also increasingly used as a means to brand the region and give students and recent graduates a sense about what New England has to offer. This can be seen in the proliferation of Young Professional Associations (YPAs) around the region such as FusionBangor in Bangor, Maine, HYPE in Hartford, Connecticut, and IUGO in Nashua, New Hampshire. Often formed by the local chambers of commerce, these associations encourage young professionals, including recent college graduates, to learn about and become involved in their communities. YPAs frequently partner with local college alumni offices to connect with graduates in the area; some even hold events on campus to boost membership. Events typically held by YPAs include networking luncheons, informational seminars, charity activities, real estate tutorials, and wine tastings. Anecdotal evidence suggests that membership in YPAs generates higher civic engagement and participation in community service, potentially boosting retention by creating a personal attachment to the region.<sup>22</sup>

## Alleviating college debt burdens

One long-term strategy aimed at increasing the region's supply of recent college graduates is to alleviate college debt burdens, thereby encouraging college attendance and completion and ultimately boosting the educational attainment of the region's population. College debt burdens have increased over the past decade with undergraduate federal borrowing growing by 51 percent, inflation adjusted, between 1997 and 2006.<sup>23</sup> Moreover, students attending New England's colleges and universities are more likely to graduate with debt, and the average size of that debt is often larger compared with the national average. According to the Project on Student Debt, the percentage of students graduating with debt from a four-year college in New England ranged from 58 percent in Connecticut to 74 percent in New Hampshire, compared with 59 percent nationwide in 2007. In addition, the average student debt reported for New England graduates was 5 to 8 percent higher than the nationwide figure of \$20,098. Four of the six New England states rank among the top ten in the nation based on the average debt of their graduating seniors.<sup>24</sup>

One way states are alleviating college debt burdens is by providing tax incentives for recent college graduates who choose to remain in the state upon graduation. For example,

Branding the region to appeal to recent college graduates as a place to "work, play, and stay" could help New England shake off its "old, cold, and expensive" image and boost retention rates.

# bringing students and employers together (virtually)

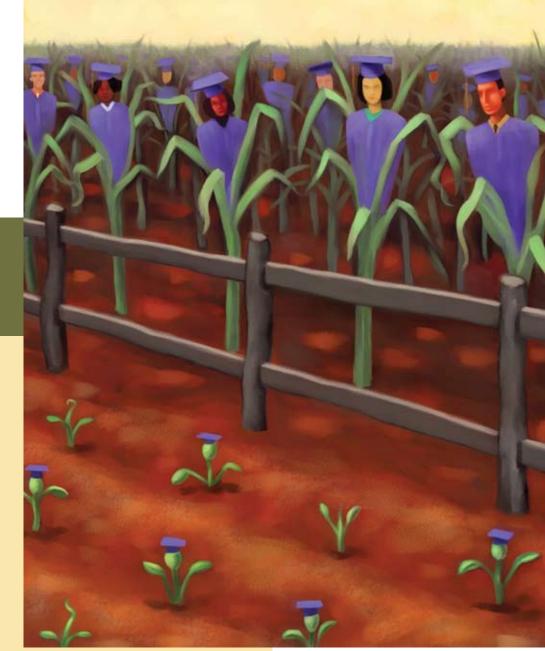
The Colleges of Worcester Consortium created an online database of internship opportunities to expose students to local employment opportunities.

As a key player in the local economy, the Colleges of Worcester Consortium has strong ties to the business community, providing a forum for members and community leaders to explore ideas and concerns affecting higher education and its role in promoting the region's educational, economic and cultural vitality. In response to the concerns of business leaders, the Consortium, in cooperation with the Worcester Regional Research Bureau, conducted a Talent Retention Survey of some 5,000 graduates in the class of 2005 to determine their postgraduation career and location decisions and factors influencing those decisions. The findings from the survey suggested that the more involved students were offcampus, the more likely they were to stay in the region upon graduation.1

In response to the survey's findings, the Consortium created an online database of internship opportunities to engage students in the local community. The database serves as a clearinghouse for colleges and regional employers where firms can post their internship positions and students can explore what opportunities exist in their area. Students seek work in every field from social work to law, business to engineering, with most internships offering academic credit for professional-level work. Some schools even sponsor special projects that enable students to work on a specific business problem in collaboration with an individual firm as part of their coursework.<sup>2</sup>

According to Mark Bilotta, CEO of the Consortium, a key component to the success of this initiative was the existence of the Career Services Directors Committee, which consists of career services officers from each school.<sup>3</sup> The committee works as a collective unit to provide career-related programs and services that could not otherwise be offered to their students and was instrumental in getting buy-in from all the local schools and laying the groundwork for a sustained effort. For example, a concern among member colleges was that the Consortium would be treading on, rather than enhancing, existing relationships that individual colleges had already cultivated. One way around this was to ensure that students would be able to access the online database from their own campus career center. As it turned out, sharing these relationships across campuses was mutually beneficial. In addition, banding together and using the resources of the Consortium made the development and creation of the online database more cost effective than it would have been if undertaken by a single member college.

Bilotta also points to communication and promotion aimed at both students and employers as another key factor that helped make the launch of the online database a success. For example, the Worcester Regional Research Bureau hosted several focus groups to learn what features would be most useful and attractive for college students and recent graduates. Working closely with



College Central Network, the database was designed to allow students to access it from their own campus career center web pages, upload their resumes so they could be submitted online to posted internships, and receive e-mails about programs, services and internship-related topics. In addition, the Consortium promoted the online database to firms through events such as its annual Consortium Career Fair, which typically draws roughly 100 local employers and 700 students, as well as its more targeted Working in Worcester Open House.

Although the Consortium currently does not collect statistics on the conversion rate of its internships into full-time employment, anecdotal evidence abounds as career advisors report countless

stories of students and employers alike that have benefitted from the program. Students from the Consortium member institutions have been offered full-time positions as a direct result of their internship experience at local companies such as EMC Corporation, The Amaral Group, GE, Worcester Business Journal, and St. Vincent's Hospital. Barbara Clifford, executive director of the Corridor Nine Area Chamber of Commerce, notes, "Thanks to the leadership of Mark Bilotta, CEO of the Colleges of Worcester Consortium, who stepped up to the plate to lead the charge on an internship website, the first part of the action plan has come to life."4

- <sup>1</sup> Worcester Regional Research Bureau. 2006. "Central Massachusetts Talent Retention Project." Worcester, MA.
- <sup>2</sup> Colleges of the Worcester Consortium. "Discover the Intellectual Capital of Central Massachusetts." Worcester, MA.
- <sup>3</sup> Per conversation with Mark Bilotta, CEO, the Colleges of the Worcester Consortium, on November 29, 2008.
- <sup>4</sup> Clifford, Barbara. "Stemming the Tide of the Brain Drain." The Buzz, an advertising supplement of the Telegram & Gazette, April 2007.

Opportunity Maine seeks to boost college attendance, degree completion, and retention by allowing any graduate of a Maine college (public or private) to claim a tax credit for payments on student loans for up to 10 years. The credit, available since January 2008, is capped annually at the level of tuition and fees of the state's public higher education system—roughly \$1,500 for associate's degree earners and \$5,500 for bachelor's degree earners.<sup>25</sup> Students enroll by completing an "opportunity contract" through their financial aid office. This enables the state to track participants, including their loan information and residency. Program administrators hope to link this information to a new state database to evaluate impacts on educational attainment and workforce development.

According to Rob Brown, executive director of Opportunity Maine, the program-launched as a citizen's initiative-has enjoyed strong support among business, civic, and higher education leaders for several reasons. First, the universality of encompassing all college graduates, rather than limiting the credit to those of a certain age range, occupation, or industry, helped form a broad coalition for the bill's passage. Second, the ability to piggyback on the existing tax system rather than create a new agency or funding stream appealed to lawmakers. And third, the idea that the program would benefit only those who live, work, and pay taxes in the state after graduating made the program attractive to voters.<sup>26</sup>

Other New England states have targeted loan-forgiveness programs aimed at increasing the supply of recent college graduates in particular industries such as biotech or occupations such as teaching. For example, Connecticut provides loan forgiveness of up to \$5,000 for graduates working in the engineering industry and up to \$10,000 for those working in biotech.<sup>27</sup> In addition, five of the six New England states have loan forgiveness programs for college graduates who remain in their respective states to become teachers.<sup>28</sup>

Alternatively, encouraging employers to offer loan forgiveness programs to recent college graduates can also help alleviate student debt burdens. For example, employers that participate in New Hampshire's Stay Work Play Incentive Program contribute up to \$8,000 to pay down federal college loans of newly hired graduates. Payments are made directly to loan providers and are phased in over the graduate's first four years of employment. The payment structure is designed to reduce student loan debt while also enhancing worker retention for employers and reducing their overall hiring and training costs. In return, employers are promoted as part of the state's "55% Initiative," a statewide effort to encourage more new college graduates to stay in the state. Participating organizations are required to report the number of employees that receive incentive payments, the total dollar value of those incentives, and the retention rate on an annual basis to gauge the program's overall impact.<sup>29</sup>

# Increasing investments in public higher education

Another long-term strategy for increasing New England's supply of recent college graduates is to invest more heavily in the region's public colleges and universities. A 2005 report by the Nellie Mae Foundation called New England's higher education system the "last best hope" for sustaining the region's population, workforce and economy, urging states to enhance the quality of their higher education systems to "attract young people here and keep them here once they graduate."30 Greater investment in the region's public institutions could also encourage a greater number of academically talented native students-who have higher retention rates than non-native students—to stay in the region for college rather than attend a flagship public university elsewhere. Finally, efforts to expand access and improve readiness-particularly among minority and immigrant populations-could encourage greater college attendance and completion among the region's native young adults.

Opportunity Maine seeks to boost retention by allowing any graduate of a Maine college to claim a tax credit for payments on student loans.

Public higher education in New England is underfunded relative to other parts of the country. According to the New England Board of Higher Education, Americans paid on average \$242 each in annual state taxes to support public higher education and student aid in their states during fiscal year 2007. New Englanders, however, paid just \$177 in appropriations per capita. This is not a new phenomenon—appropriations for public higher education in five of the six New England states have grown more slowly than the U.S. average over the past 10 years. Although higher funding does not necessarily indicate greater quality, fewer resources are likely to make it more difficult for New England's public institutions to compete with better-funded public universities in other states.

Some New England states are targeting their investments in public higher education with an eye to making their state universities more competitive. A prime example of this is the establishment of Commonwealth College, an honors college at the University of Massachusetts Amherst. Originally designed as an honors program at UMass Amherst, Commonwealth College became a separate college within the university in 1998. The College's mission is to give students an outstanding academic experience through small, intensive classes, an array of interdisciplinary seminars, and community service learning courses. Students take at least one honors course each semester and must complete a capstone project to graduate with the College's designation on their diplomas and transcripts. Tuition is equal to that of the overall university, about \$10,000 per year, making Commonwealth College a more affordable alternative to prestigious private institutions.<sup>32</sup>

This combination of intellectual rigor and affordability has enabled Commonwealth College to attract some of Massachusetts' most talented students and in so doing has helped UMass Amherst achieve greater prominence, according to Priscilla Clarkson, dean of Commonwealth College. Now in its tenth year, the College has 3,700 students on the Amherst campus, with roughly 85 percent of each incoming class comprising native students. And as enrollment has surged, selectivity has increased over the past decade both for Commonwealth College and across the entire UMass Amherst campus. The College's fall 2008 entering class had qualifications that resembled those of prestigious private institutions, boasting on average a combined SAT score of 1320, a high school grade point average of 4.09, and a class rank that placed them in the top 5 percent of their graduating high school class.<sup>33</sup>

Other investments in public higher education seek to expand access and improve readiness—particularly among minority and immigrant populations—to increase educational attainment among the region's native young adults. For example, the New England Board of Higher Education's "College Ready New England" initiative—an alliance of leaders from K-12 education, higher education, business, and government—focuses on increasing the region's economic competitiveness and well-being by expanding college participation and success.<sup>34</sup> CRNE's mission is twofold: (1) to ensure that all students leave high school well-prepared for postsecondary success; and (2) to improve college attendance and completion rates, particularly among low-income and minority students and first-generation college-goers. As a first step, the initiative is working with coalitions in each New England state to implement the American Council on Education's "KnowHow2Go" outreach campaign. Launched in a number of states, the campaign is designed to motivate students to stay in high school, increase academic achievement, prepare for entrance exams, apply and enroll in college, and complete bachelor's degrees.

Some New England states are targeting their investments in public higher education with an eye to making their state universities more competitive.

# creating a successful brand

New Hampshire's

"55% Initiative"
aims to increase the
percentage of college
graduates who
remain in the state
after graduation,
through a tourism-like
marketing campaign.

In 2005, the University System of New Hampshire (USNH) began taking a more active role in reaching out to the business community to become a "partner of choice." During a series of listening sessions with the Chambers of Commerce, the State's Department of Resources and Economic Development (DRED), and other business and association leaders, it became clear that employers were concerned with finding the skilled workers they needed to grow their businesses. Anecdotal evidence from surveys of college-bound high-school seniors showed that only 50 percent planned to live in New Hampshire after college.

In response, USNH created the "55% Initiative" to increase the percentage of college graduates who remain in the state after graduation from the current 50 percent to at least 55 percent, through a "tourism-like" marketing campaign. Leaders of the initiative project that even this small shift in the migration rate of college graduates would have a sizeable impact, adding more than 600 employees to the state's workforce in one year. The Initiative has garnered broad support in the business community, with a number of organizations and firms signing on in support such as the NH Business and Industry Association, the NH High Tech Council, six Young Professionals Associations, Liberty Mutual, BAE Systems, and several area chambers of commerce.<sup>1</sup>

As a first step in the initiative, USNH researchers surveyed over 3,000 college seniors and recent alumni to gain insight into their future plans and why they planned to stay or leave New Hampshire upon graduation. The survey revealed that although students typically viewed quality of life, proximity to natural resources, and housing as very important reasons to stay in New Hampshire, there was a strong link between the perception of the state's job market and the decision to leave the state. Roughly 40 percent of graduates believed there were no jobs in their field, with out-of-state students having an even more negative view of the New Hampshire job market. Based on the results of the survey, a team of marketing faculty from the local colleges and universities, along with their students, designed a marketing campaign to promote New Hampshire as a destination for young people.<sup>2</sup>

Involving students in the design and promotion of the branding campaign was a "natural next step" in the mind of Matt Cookson, associate vice chancellor of external relations for USNH, as they represent the initiative's target demographic.<sup>3</sup> Students from Keene State College, Plymouth State University, and the University of New Hampshire presented their ideas to business leaders and educators at a meeting in May 2008. Many of their ideas resonated with the audience, ranging from busing students to centralized job fairs, creating a statewide web site for new graduates, and using YouTube videos of young professionals telling their stories about how they chose to launch their careers in New Hampshire.

Although the actual marketing campaign has yet to get underway, students who worked on the project said that it changed the way they thought about New Hampshire



and also their plans to leave the state after they graduated. At Plymouth State University, five of the 18 students working on the project who had planned to pursue a career outside of New Hampshire decided to remain in the state upon graduation. According to Cookson, this is evidence that "students are not fully aware of the opportunities here, the quality of life, and the fact that more of their paycheck might wind up in their pocket. Getting this information to them can change their minds."4

Cookson also sees that partnering with the state's Young Professional Associations (YPAs) will be key in successfully communicating and promoting the state's branding initiative. These organizations offer the social networking opportunities that many new graduates are eager to tap and have a vested interest in encouraging recent graduates to stay in the regions where they operate. There are currently six YPAs in New Hampshire with a combined membership of approximately 8,000 individuals.<sup>5</sup> Early on in the process, USNH Chancellor Reno joined with board members from two of the state's young professional networks at separate events to bring attention to the issue and the initiative. More recently, USNH collaborated with the YPAs to develop an online survey of their membership. The survey will assist the YPAs in gauging the impact they have on young professionals as well as enhance the earlier research on why individuals leave the state.<sup>6</sup>

- <sup>1</sup> Cookson, Matt. 2007. "Effort to Keep More College Graduates in NH Gains Support and Momentum." University System of New Hampshire, http://www.usnh.edu/initiatives.
- <sup>2</sup> Cookson, Matt. 2008. "The 55% Initiative. Summary of activities for 2007 and next steps." University System of New Hampshire, http://www.usnh.edu/initiatives.
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- <sup>4</sup> University System of New Hampshire. 2008. "Student Input Helps Advance the 55% Initiative and Confirm Need to Connect with New Grads in New Hampshire to Encourage them To "Stay, Work, and Play" Here." Press Release, May, http://www.usnh.edu/initiatives.
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The Federal Reserve Bank of Boston and the Greater Boston Chamber of Commerce are exploring how internships can be used more effectively to link college students and Boston area employers.

# **Looking Forward**

In some sense, New England is a victim of its own success. The region's colleges and universities excel at producing highly skilled college graduates who are likely to have job opportunities in any number of locations. Yet we retain a lower share of recent college grads than other regions—largely because we educate a relatively high share of non-native students, who have a greater tendency to leave upon graduation. So, despite the success of the region's higher education industry, employers may still face challenges when hiring recent college graduates.

Fortunately, our findings suggest some tangible steps that states can take in the near term to retain more recent college graduates. For example, recent college graduates appear to be moving primarily to seek the best job opportunities. Thus activities aimed at addressing the primary concerns of graduates leaving the region—such as expanding the use of internships are likely to have the most immediate impact. Efforts to brand the region as a place to "work, play, and stay" can augment these actions by making recent college graduates more aware of the region's employment opportunities and recreational amenities. As Bentley University economics professor Patricia Flynn observed in the Boston Globe last year, "Being offered a really good job will override housing costs, snow, and a lot of other issues."35

Long-term efforts aimed at raising educational attainment among native young adults can also help sustain the region's supply of skilled workers in the face of future demographic changes. For example, efforts to alleviate college debt burdens and increase investments in public higher education can encourage greater college attendance and completion, particularly among minority and immigrant populations. However, it is likely that these initiatives will encounter short-term financing obstacles, given the severe fiscal difficulties that state governments are now confronting.

Looking ahead, New England is likely to face even greater competition for college graduates in the future—particularly in a global economy where workers and jobs are more mobile. Understanding which responses are likely to be the most effective requires a clear understanding of the factors that affect the supply and retention of these graduates. Our hope is that armed with such an understanding, business leaders, policymakers, and universities can better identify joint initiatives to expand the region's supply of recent college graduates.

In this vein, the Federal Reserve Bank of Boston and the Greater Boston Chamber of Commerce have begun to explore ways in which internships can be used more effectively to expose college students to the employment opportunities and other attributes of the Boston area. This joint effort, currently in the planning stages, was prompted by the findings presented here and by a report commissioned by the Chamber assessing the workforce needs of local firms. <sup>36</sup> The hope is that this initiative will have applicability elsewhere in New England and shed light on one of the ways we can achieve greater success in meeting the demands of the region's employers for skilled workers.

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- <sup>25</sup> Ginn, Clifford. "Economic Impact of the Opportunity Maine Initiative." http://www.opportunitymaine.org.
- <sup>26</sup> Per conversation with Rob Brown, Executive Director of Opportunity Maine, November 25, 2008.
- <sup>27</sup> Pinhel, Rute, Sarah Bourne, and Joan Soulsby. 2008. "Loan Forgiveness Programs." OLR Research Report. 2008-R-0498.
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# 2008 bank highlights

Deterioration in housing and financial markets carried over from 2007 into 2008. The Bank was challenged on many fronts as the Federal Reserve System, working cooperatively with other government entities, was called upon to address multiple dimensions of the financial turmoil. With the involvement of virtually all departments, the Bank contributed to policy-making; aided in the development of new market-supporting interventions; conducted research to provide enhanced understanding of the mortgage crisis; and organized a large workshop to bring together distressed borrowers and mortgage servicing firms for discussions aimed at averting foreclosures. At the same time, the Bank made additional strides in its work on payments systems for the U.S. Treasury and in its efforts to advance electronic payment systems generally. The Bank also began an initiative to address the adequacy of New England's skilled labor force in coming years.

#### Highlights of 2008 include the following:

- The foreclosure-prevention workshop that the Bank organized and co-sponsored at Gillette Stadium in Foxborough, Massachusetts, in August attracted approximately 2000 borrowers, one-third of whom received some modification in their mortgage that may enable them to stay in their home and avoid foreclosure.
- In September, over a weekend, the Bank set up a new lending facility to fund purchases by banks of high quality asset-backed commercial paper from money market mutual funds. We learned on Friday that this facility would be needed, and staff spent the next several days establishing lending procedures, preparing legal opinions, installing computers and telephone lines, coordinating staffing, and making financial institutions aware of the new borrowing procedures. The facility was up and running on Monday morning and, after eight days of operation, had \$152 billion in loans outstanding, providing needed liquidity to money market mutual funds and taking stress off the commercial paper market. The facility is referred to by its acronym: AMLF (asset-backed commercial paper money market mutual fund liquidity facility).
- A group of the Bank's economists conducted research designed to better understand the
  mortgage crisis and ways to address it effectively. Using a variety of datasets, they described the characteristics of the subprime mortgage market and showed how negative
  home equity is related to foreclosures. In particular, their research showed that negative
  home equity is a necessary, but not sufficient, factor in precipitating foreclosure. A second
  necessary factor is a mortgage payment that has become unaffordable, perhaps because
  of a job loss. Homeowners who cannot afford their mortgage payments and have negative

The Bank was challenged on many fronts as the Federal Reserve System was called upon to address multiple dimensions of the financial turmoil.





equity are likely candidates for foreclosure, suggesting that foreclosure-reduction policies might best be targeted to this group of homeowners.

- In its work for the U.S. Treasury, the Bank expanded use of the Internet Payment Platform to include two new federal agencies and several thousand additional suppliers. The IPP is an application developed by the Bank to enable federal agencies to handle all purchase orders, invoices, workflow data, and payment information efficiently in a single webbased system. In a second program serving the U.S. Treasury, the Stored Value Card program, the Bank also managed expanded use and achieved improved operating efficiency. Early development work continued on the Bank's third program for the U.S. Treasury, a cash management system that will enable the Treasury to concentrate cash flows from depository institutions and thereby manage the public's money more efficiently.
- In September, the Bank completed the migration of all First District paper check processing from its check processing facility in Windsor Locks, Connecticut, to the Federal Reserve Bank of Philadelphia. The Bank worked closely with New England depository institutions to encourage the adoption of electronic collection prior to consolidation.
- Our New England Public Policy Center continued its exploration of issues surrounding the adequacy of New England's skilled labor force in coming years. Their work indicated that young college graduates leave the region primarily for employment reasons, leading to discussion of how to mitigate the departure of graduates. The essay in this annual report describes the Policy Center's findings and possible avenues to increase New England's supply of young college graduates. In a further look at labor force issues, the Policy Center sponsored a yearend conference assessing the role of baby boomers in meeting the region's future skilled labor force needs.
- We upgraded our building, 600 Atlantic Avenue, significantly in 2008, making numerous energy-saving and environmentally friendly changes as well as improvements to staff space, public areas, and tenant space. We were pleased to achieve full tenant occupancy in 2008, with 31 percent of the building now occupied by tenants. We began the process of applying for LEED (Leadership in Energy and Environmental Design) certification and hope our building will become one of the few in Boston to earn this designation, which is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings.

# the bank in the community

While many responsibilities of the Federal Reserve Bank of Boston are regional, national, and global in scope, the Bank also seeks to serve the communities throughout its District in a variety of outreach activities. In addition, Bank staff are engaged in the local community, working and volunteering on many projects and initiatives.

- · We Care About Kids
- · Community Care Day
- · Homeless Children's Holiday Party
- · Books and Kids Program
- · FinTech Scholars Program
- · Math and Kids Program
- · United Way
- · Citizen Schools
- · Operation Hope
- · School-to-Career Economics Club
- Boston Summer Jobs Program
- Boston Private Industry Council
- · Asian American Civic Association, Inc.
- National Consumer League LifeSmarts Program
- · Massachusetts School Bank Association
- Classroom at the Workplace
- Boston After School Jobs Program
- · Job Shadow Day
- · School-to-Career Project
- · Workforce Development

- · YMCA Training, Inc.
- WriteBoston
- · Boys & Girls Reading Club
- · Excel High School Partnership
- Mayor Menino's Boston Earned Income Tax Credit Campaign
- · Timilty Middle School Promising Pals

The Bank seeks to serve the communities throughout its District in a variety of outreach activities.

# board of directors



Seated, left to right: Kirk Sykes, Eric Rosengren, Kathleen Marcum, Michael Wedge. Standing, left to right: Stuart Reese, Robert Kraft, Henri Termeer, Lisa Lynch, Paul Connolly, David Lentini.

**Dr. Lisa M. Lynch, Chair**Dean and Professor of Economics
The Heller School for
Social Policy and Management
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Seated, left to right: James Cunha, Jeff Fuhrer, Lynn Browne, Roland Marx. Standing, left to right: Geoff Tootell, Linda Mahon, Chris Gale, Cindy Conley, James Nolan.

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Paul M. Connolly First Vice President Chief Operating Officer

Lynn E. Browne **Executive Vice President** Economic Advisor

Jeffrey C. Fuhrer Executive Vice President Director of Research

Cynthia A. Conley Senior Vice President General Counsel

James S. Cunha Senior Vice President

Christopher J. Gale Senior Vice President

Linda J. Mahon Senior Vice President

Roland H. Marx Senior Vice President General Auditor

Ronald E. Mitchell, Jr. Senior Vice President

James T. Nolan Senior Vice President Director of Supervision, Regulation and Credit

Geoffrey M.B. Tootell Senior Vice President Deputy Director of Research

# new england advisory council



Seated, left to right: Amar Kapur, James Brett, Eric Rosengren, Lynn Goldfarb, Gregory Howey.
Standing: Charles D'Amour, Michael Dubyak, Keith Hutchins, William Gurley, Joseph Nagle, Paul Connolly, Ted Krantz, Ralph Crowley, Dwight Sargent.

Ralph Crowley President and CEO Polar Beverages, Inc.

Charles L. D'Amour President and COO The Big Y

**Michael E. Dubyak** President and CEO Wright Express

**Lynn Kraemer Goldfarb**President
L.K. Goldfarb Associates

Oz Griebel
President and CEO
MetroHartford Alliance

William D. Gurley President and CEO (retired) Stanadyne Corporation **Gregory B. Howey**President
Okay Industries

**Keith Hutchins**Partner
The Flower Hutch

Amar Kapur President and CEO Aimtek, Inc.

**Ted Krantz**President
Airmar Technology Corp.

Craig Moore Consultant

Joseph A. Nagle President and CEO Delta Dental of Rhode Island Meredith Reuben Chief Executive Officer Eastern Bag

**Dwight Sargent**President
Pompanoosuc Mills Corporation

Daniel Wolf President and CEO Cape Air, Hyannis Air Services, Inc.

Advisor James Brett President and CEO The New England Council

# community development advisory council



Seated, left to right: Bruce Seifer, Richard Walker, Aimee Griffin Munnings, Eloise Vitelli. Standing, left to right: Stuart Arnett, William Armitage II, Eric Rosengren, Mayte Rivera, Sharon Conard Wells.

### William Armitage II

Executive Director Biddeford-Saco Area Economic Development Corporation

#### **Stuart Arnett**

Managing Partner Arnett Development Group LLC

#### Jeanne Cola

Senior Vice President Citizens Bank Rhode Island

## Frederick McKinney, Ph.D.

President Connecticut Minority Supplier Development Council

### Aimee Griffin Munnings

Executive Director
New England Black Chamber
of Commerce

### Andrea Pereira

Senior Program Director LISC Connecticut

### Marc Reich

President Ironwood Capital Management LLC

#### Mayte Rivera

Director of Community Development Massachusetts Division of Banks

#### **Bruce Seifer**

Assistant Director for Economic Development City of Burlington, Vermont

#### Michael Swack

Dean, School of Community Economic Development Southern New Hampshire University

### **Raymond Tung**

Senior Vice President United Commercial Bank

#### Eloise Vitelli

Director of Program and Policy Development Women, Work, and Community Augusta, Maine

### **Sharon Conard Wells**

Executive Director West Elmwood Housing Development Corporation

### Darnell Williams

President and CEO Urban League of Eastern Massachusetts

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Dana E. Warren Jr.

Vice President

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Lisa Perlini

Assistant Vice President

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April 2, 2009

To the Board of Directors

The management of the Federal Reserve Bank of Boston ("FRBB") is responsible for the preparation and fair presentation of the Statement of Financial Condition, Statements of Income and Comprehensive Income, and Statement of Changes in Capital as of December 31, 2008 (the "Financial Statements"). The Financial Statements have been prepared in conformity with the accounting principles, policies, and practices established by the Board of Governors of the Federal Reserve System and as set forth in the Financial Accounting Manual for the Federal Reserve Banks ("Manual"), and as such, include amounts, some of which are based on management judgments and estimates. To our knowledge, the Financial Statements are, in all material respects, fairly presented in conformity with the accounting principles, policies and practices documented in the Manual and include all disclosures necessary for such fair presentation.

The management of the FRBB is responsible for establishing and maintaining effective internal control over financial reporting as it relates to the Financial Statements. Such internal control is designed to provide reasonable assurance to management and to the Board of Directors regarding the preparation of the Financial Statements in accordance with the Manual. Internal control contains self-monitoring mechanisms, including, but not limited to, divisions of responsibility and a code of conduct. Once identified, any material deficiencies in internal control are reported to management and appropriate corrective measures are implemented.

Even effective internal control, no matter how well designed, has inherent limitations, including the possibility of human error, and therefore can provide only reasonable assurance with respect to the preparation of reliable financial statements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The management of the FRBB assessed its internal control over financial reporting reflected in the Financial Statements, based upon the criteria established in the "Internal Control – Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, we believe that the FRBB maintained effective internal control over financial reporting as it relates to the Financial Statements.

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Paul M. Connolly, First Vice President

Paul M. Coundly

Ion D. Colvin. Chief Financial Officer

To the Board of Governors of the Federal Reserve System and the Board of Directors of the Federal Reserve Bank of Boston:

We have audited the accompanying statements of condition of the Federal Reserve Bank of Boston ("FRB Boston") as of December 31, 2008 and 2007 and the related statements of income and comprehensive income and changes in capital for the years then ended, which have been prepared in conformity with accounting principles established by the Board of Governors of the Federal Reserve System. We also have audited the internal control over financial reporting of FRB Boston as of December 31, 2008, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. FRB Boston's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on FRB Boston's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

FRB Boston's internal control over financial reporting is a process designed by, or under the supervision of, FRB Boston's principal executive and principal financial officers, or persons performing similar functions, and effected by FRB Boston's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the accounting principles established by the Board of Governors of the Federal Reserve System. FRB Boston's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of FRB Boston; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with the accounting principles established by the Board of Governors of the Federal Reserve System, and that receipts and expenditures of FRB Boston are being made only in accordance with authorizations of management and directors of FRB Boston; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of FRB Boston's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

## Report of Independent Auditors

As described in Note 4 to the financial statements, FRB Boston has prepared these financial statements in conformity with accounting principles established by the Board of Governors of the Federal Reserve System, as set forth in the *Financial Accounting Manual for Federal Reserve Banks*, which is a comprehensive basis of accounting other than accounting principles generally accepted in the United States of America. The effects on such financial statements of the differences between the accounting principles established by the Board of Governors of the Federal Reserve System and accounting principles generally accepted in the United States of America are also described in Note 4.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of FRB Boston as of December 31, 2008 and 2007, and the results of its operations for the years then ended, on the basis of accounting described in Note 4. Also, in our opinion, FRB Boston maintained, in all material respects, effective internal control over financial reporting as of December 31, 2008, based on the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Boston, Massachusetts

Deloitte + Touche LLP

April 2, 2009

# **Statements of Condition**

As of December 31, 2008 and December 31, 2007 (in millions)

	2008	2007
Assets		
Gold certificates	\$ 424	\$ 449
Special drawing rights certificates	115	115
Coin	56	36
Items in process of collection	41	82
Loans to depository institutions	16,393	178
Other loans	23,765	-
System Open Market Account:		
Securities purchased under agreements to resell	3,355	2,143
U.S. government, Federal agency, and government-sponsored enterprise securities, net	21,064	34,363
Investments denominated in foreign currencies	1,411	592
Central bank liquidity swaps	31,498	629
Bank premises and equipment, net	144	140
Prepaid interest on Federal Reserve notes due from U.S. Treasury	-	108
Accrued interest receivable	447	294
Other assets	28	26
Total assets	\$ 98,741	\$ 39,155
Liabilities and Capital		
Federal Reserve notes outstanding, net	\$ 32,872	\$ 32,946
System Open Market Account:		
Securities sold under agreements to repurchase	3,706	2,027
Deposits:		
Depository institutions	49,810	532
Other deposits	27	25
Deferred credit items	69	92
Interest on Federal Reserve notes due to U.S. Treasury	213	_
Interdistrict settlement account	10,264	1,356
Accrued benefit costs	73	65
Other liabilities	19	14
Total liabilities	97,053	37,057
Capital paid-in	844	1,049
Surplus (including accumulated other comprehensive loss of \$10 million		
and \$3 million at December 31, 2008 and 2007, respectively)	844	1,049
Total capital	1,688	2,098
Total liabilities and capital	\$ 98,741	\$ 39,155

# Statements of Income and Comprehensive Income

As of December 31, 2008 and December 31, 2007 (in millions)

	2008	2007
Interest income:		
Loans to depository institutions	\$ 84	\$ -
Other loans	470	-
System Open Market Account:	0.1	66
Securities purchased under agreements to resell	81	66
U.S. government, Federal agency, and government-sponsored enterprise securities	1,114	1,802
Investments denominated in foreign currencies	34	14
Central bank liquidity swaps	202	1
Total interest income	1,985	1,883
Interest expense:		
System Open Market Account:		
Securities sold under agreements to repurchase	32	79
Depository institutions deposits	55	-
Total interest expense	87	79
Net interest income	1,898	1,804
Non-interest income:		
System Open Market Account:		
U.S. government, Federal agency, and government-sponsored enterprise securities gains, net	168	-
Foreign currency gains, net	56	49
Compensation received for services provided	31	47
Reimbursable services to government agencies	27	25
Other income	49	18
Total non-interest income	331	139
Operating expenses:		
Salaries and other benefits	107	104
Occupancy expense	20	19
Equipment expense	11	12
Assessments by the Board of Governors	47	39
Other expenses	37	54
Total operating expenses	222	228
Net income prior to distribution	2,007	1,715
Change in funded status of benefit plans	(7)	4
Comprehensive income prior to distribution	\$ 2,000	\$ 1,719
Distribution of comprehensive income:		
Dividends paid to member banks	\$ 55	\$ 35
Transferred (from) to surplus and change in accumulated other comprehensive loss	(205)	653
Payments to U.S. Treasury as interest on Federal Reserve notes	2,150	1,031
Total distribution	\$ 2,000	\$ 1,719

The accompanying notes are an integral part of these financial statements.

# Statements of Changes in Capital

For the years ended December 31, 2008 and December 31, 2007 (in millions, except share data)

				Surplus					
	Capi	tal Paid-In	Income letained	Accumu ( Comprehe	Other	Tot	al Surplus	Total	Capital
Balance at January 1, 2007 (7.9 million shares)	\$	396	\$ 403	\$	(7)	\$	396	\$	792
Net change in capital stock issued (13.1 million shares)		653	-		-		-		653
Transferred to surplus and change in accumulated other comprehensive loss		-	649		4		653		653
Balance at December 31, 2007 (21.0 million shares)	\$	1,049	\$ 1,052	\$	(3)	\$	1,049	\$	2,098
Net change in capital stock redeemed (4.1 million shares)		(205)	-		_		-		(205)
Transferred from surplus and change in accumulated other comprehensive loss		-	(198)		(7)		(205)		(205)
Balance at December 31, 2008 (16.9 million shares)	\$	844	\$ 854	\$	(10)	\$	844	\$	1,688

#### Structure

The Federal Reserve Bank of Boston ("Bank") is part of the Federal Reserve System ("System") and is one of the twelve Reserve Banks ("Reserve Banks") created by Congress under the Federal Reserve Act of 1913 ("Federal Reserve Act"), which established the central bank of the United States. The Reserve Banks are chartered by the federal government and possess a unique set of governmental, corporate, and central bank characteristics. The Bank serves the First Federal Reserve District, which includes Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, and a portion of Connecticut.

In accordance with the Federal Reserve Act, supervision and control of the Bank is exercised by a board of directors. The Federal Reserve Act specifies the composition of the board of directors for each of the Reserve Banks. Each board is composed of nine members serving three-year terms: three directors, including those designated as chairman and deputy chairman, are appointed by the Board of Governors of the Federal Reserve System ("Board of Governors") to represent the public, and six directors are elected by member banks. Banks that are members of the System include all national banks and any state-chartered banks that apply and are approved for membership in the System. Member banks are divided into three classes according to size. Member banks in each class elect one director representing member banks and one representing the public. In any election of directors, each member bank receives one vote, regardless of the number of shares of Reserve Bank stock it holds.

The System also consists, in part, of the Board of Governors and the Federal Open Market Committee ("FOMC"). The Board of Governors, an independent federal agency, is charged by the Federal Reserve Act with a number of specific duties, including general supervision over the Reserve Banks. The FOMC is composed of members of the Board of Governors, the president of the Federal Reserve Bank of New York ("FRBNY") and on a rotating basis four other Reserve Bank presidents.

# 2. Operations and Services

The Reserve Banks perform a variety of services and operations. Functions include participation in formulating and conducting monetary policy; participation in the payments system, including large-dollar transfers of funds, automated clearinghouse ("ACH") operations, and check collection; distribution of coin and currency; performance of fiscal agency functions for the U.S. Treasury, certain federal agencies, and other entities; serving as the federal government's bank; provision of short-term loans to depository institutions; provision of loans to individuals, partnerships, and corporations in unusual and exigent circumstances; service to the consumer and the community by providing educational materials and information regarding consumer laws; and supervision of bank holding companies, state member banks, and U.S. offices of foreign banking organizations. Certain services are provided to foreign and international monetary authorities, primarily by the FRBNY.

The FOMC, in the conduct of monetary policy, establishes policy regarding domestic open market operations, oversees these operations, and annually issues authorizations and directives to the FRBNY to execute transactions. The FRBNY is authorized and directed by the FOMC to conduct operations in domestic markets, including the direct purchase and sale of securities of the U.S. government, Federal agencies, and government-sponsored enterprises ("GSEs"), the purchase of these securities under agreements to resell, the sale of these securities under agreements to repurchase, and the lending of these securities. The FRBNY executes these transactions at the direction of the FOMC and holds the resulting securities and agreements in the portfolio known as the System Open Market Account ("SOMA").

In addition to authorizing and directing operations in the domestic securities market, the FOMC authorizes and directs the FRBNY to execute operations in foreign markets in order to counter disorderly conditions in exchange markets or to meet other needs specified by the FOMC in carrying out the System's central bank responsibilities. The FRBNY is authorized by the FOMC to hold balances of, and to execute spot and forward foreign exchange and securities contracts for, fourteen foreign currencies and to invest such foreign currency holdings, ensuring adequate liquidity is maintained. The FRBNY is also authorized and directed by the FOMC to maintain reciprocal currency arrangements with fourteen central banks and to "warehouse" foreign currencies for the U.S. Treasury and Exchange Stabilization Fund ("ESF") through the Reserve Banks.

Although the Reserve Banks are separate legal entities, they collaborate in the delivery of certain services to achieve greater efficiency and effectiveness. This collaboration takes the form of centralized operations and product or function offices that have responsibility for

the delivery of certain services on behalf of the Reserve Banks. Various operational and management models are used and are supported by service agreements between the Reserve Banks providing the service and the other Reserve Banks. In some cases, costs incurred by a Reserve Bank for services provided to other Reserve Banks are not shared; in other cases, the Reserve Banks reimburse the other Reserve Banks for services provided to them.

Major services provided by the Bank on behalf of the System and for which the costs were not reimbursed by the other Reserve Banks include Internet and Directory Services, Financial Support Office, and Centralized Accounting Technology Services. Beginning in 2007, a portion of the Centralized Accounting Technology Services costs related to services provided to the System in support of the electronic access channel are redistributed to the Federal Reserve Bank of Chicago. The Bank's total reimbursement for these services was \$2 million and \$3 million at December 31, 2008 and 2007, respectively, and is included in "Other Income" on the Statements of Income and Comprehensive Income.

# 3. Recent Financial Stability Activities

The Federal Reserve has implemented a number of programs designed to support the liquidity of financial institutions and to foster improved conditions in financial markets. These new programs, which are set forth below, have resulted in significant changes to the Bank's financial statements.

## Expanded Open Market Operations and Support for Mortgage Related Securities

The Single-Tranche Open Market Operation Program, created on March 7, 2008, allows primary dealers to initiate a series of term repurchase transactions that are expected to accumulate up to \$100 billion in total. Under the provisions of the program, these transactions are conducted as 28-day term repurchase agreements for which primary dealers pledge U.S. Treasury and agency securities and agency Mortgage-Backed Securities ("MBS") as collateral. The FRBNY can elect to increase the size of the term repurchase program if conditions warrant. The repurchase transactions are reported as "System Open Market Account: Securities purchased under agreements to resell" in the Statements of Condition.

The GSE and Agency Securities and MBS Purchase Program was announced on November 25, 2008. The primary goal of the program is to provide support to the mortgage and housing markets and to foster improved conditions in financial markets. Under this program, the FRBNY will purchase the direct obligations of housing-related GSEs and MBS backed by the Federal National Mortgage Association ("Fannie Mae"), the Federal Home Loan Mortgage Corporation ("Freddie Mac"), and the Government National Mortgage Association ("Ginnie Mae"). Purchases of the direct obligations of housing-related GSEs began in November 2008 and purchases of GSE and agency MBS began in January 2009. There were no purchases of GSE and agency MBS during the period ended December 31, 2008. The program was initially authorized to purchase up to \$100 billion in GSE direct obligations and up to \$500 billion in GSE and agency MBS. In March 2009, the FOMC authorized FRBNY to purchase up to an additional \$750 billion of GSE and agency MBS and up to an additional \$100 billion of GSE direct obligations.

The FRBNY holds the resulting securities and agreements in the SOMA portfolio and the activities of both programs are allocated to the other Reserve Banks.

#### Central Bank Liquidity Swaps

The FOMC authorized the FRBNY to establish temporary reciprocal currency swap arrangements (central bank liquidity swaps) with the European Central Bank and the Swiss National Bank on December 12, 2007 to help provide liquidity in U.S. dollars to overseas markets. Subsequently, the FOMC authorized reciprocal currency swap arrangements with additional foreign central banks. Such arrangements are now authorized with the following central banks: the Reserve Bank of Australia, the Banco Central do Brasil, the Bank of Canada, Danmarks Nationalbank, the Bank of England, the European Central Bank, the Bank of Japan, the Bank of Korea, the Banco de Mexico, the Reserve Bank of New Zealand, Norges Bank, the Monetary Authority of Singapore, Sveriges Riksbank, and the Swiss National Bank. The activity related to the program is allocated to the other Reserve Banks. The maximum amount of borrowing permissible under the swap arrangements varies by central bank. The central bank liquidity swap arrangements are authorized through October 30, 2009.

## **Lending to Depository Institutions**

The temporary Term Auction Facility ("TAF") program was created on December 12, 2007. The goal of the TAF is to help promote the efficient dissemination of liquidity, which is achieved by the Reserve Banks injecting term funds through a broader range of counterparties and against a broader range of collateral than open market operations. Under the TAF program, Reserve Banks auction term funds to depository institutions against a wide variety of collateral. All depository institutions that are judged to be in generally sound financial condition by their Reserve Bank and that are eligible to borrow under the primary credit program are eligible to participate in TAF auctions. All advances must be fully collateralized. The loans are reported as "Loans to depository institutions" in the Statements of Condition.

## Lending to Primary Dealers

The Term Securities Lending Facility ("TSLF") was created on March 11, 2008, to promote the liquidity in the financing markets for U.S. Treasuries and other collateral. Under the TSLF, the FRBNY will lend up to an aggregate amount of \$200 billion of U.S. Treasury securities to primary dealers secured for a term of 28 days. Securities loans are collateralized by a pledge of other securities, including federal agency debt, federal agency residential mortgage-backed securities, and non-agency AAA/Aaa-rated private-label residential mortgage-backed securities, and are awarded to primary dealers through a competitive single-price auction. The TSLF is authorized through October 30, 2009. The fees related to these securities lending transactions are reported as a component of "Non-interest income (loss): Other income" in the Statements of Income and Comprehensive Income.

The Term Securities Lending Facility Options Program ("TOP"), created on July 30, 2008, offers primary dealers the option to draw upon short-term, fixed-rate TSLF loans in exchange for eligible collateral. The options are awarded through a competitive auction. The program is intended to enhance the effectiveness of the TSLF by ensuring additional securities liquidity during periods of heightened collateral market pressures, such as around quarter-end dates. TOP auction dates are determined by the FRBNY, and the program authorization ends concurrently with the TSLF.

## Other Lending Facilities

The Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility ("AMLF"), created on September 19, 2008, is a lending facility that provides funding to U.S. depository institutions and bank holding companies to finance the purchase of high-quality asset-backed commercial paper ("ABCP") from money market mutual funds under certain conditions. The program is intended to assist money market mutual funds that hold such paper to meet the demands for investor redemptions and to foster liquidity in the ABCP market and money markets more generally. The Bank administers the AMLF and is authorized to extend these loans to eligible borrowers on behalf of the other Reserve Banks. All loans extended under the AMLF are recorded as assets by the Bank and loans extended to borrowers that settle to depository accounts in other Districts are processed through the interdistrict settlement account. The credit risk related to the AMLF is assumed by the Bank. The Bank is authorized to finance the purchase of commercial paper through October 30, 2009.

# 4. Significant Accounting Policies

Accounting principles for entities with the unique powers and responsibilities of a nation's central bank have not been formulated by accounting standard-setting bodies. The Board of Governors has developed specialized accounting principles and practices that it considers to be appropriate for the nature and function of a central bank. These accounting principles and practices are documented in the *Financial Accounting Manual for Federal Reserve Banks* ("Financial Accounting Manual" or "FAM"), which is issued by the Board of Governors. All of the Reserve Banks are required to adopt and apply accounting policies and practices that are consistent with the FAM, and the financial statements have been prepared in accordance with the FAM.

Differences exist between the accounting principles and practices in the FAM and generally accepted accounting principles in the United States ("GAAP"), primarily due to the unique nature of the Bank's powers and responsibilities as part of the nation's central bank. The primary difference is the presentation of all SOMA securities holdings at amortized cost rather than using the fair value presentation required by GAAP. U.S. government, Federal agency, and GSE securities, and investments denominated in foreign currencies comprising the SOMA are recorded at cost, on a settlement-date basis, and are adjusted for amortization of premiums or accretion of discounts on a straight-line basis. Amortized cost more appropriately reflects the Bank's securities holdings given the System's unique responsibility to conduct monetary policy. Although the application of current market prices to the securities holdings may result in values substantially

above or below their carrying values, these unrealized changes in value would have no direct effect on the quantity of reserves available to the banking system or on the prospects for future Bank earnings or capital. Both the domestic and foreign components of the SOMA portfolio may involve transactions that result in gains or losses when holdings are sold prior to maturity. Decisions regarding securities and foreign currency transactions, including their purchase and sale, are motivated by monetary policy objectives rather than profit. Accordingly, fair values, earnings, and any gains or losses resulting from the sale of such securities and currencies are incidental to the open market operations and do not motivate decisions related to policy or open market activities.

In addition, the Bank has elected not to present a Statement of Cash Flows because the liquidity and cash position of the Bank are not a primary concern given the Reserve Banks' unique powers and responsibilities. Other information regarding the Bank's activities is provided in, or may be derived from, the Statements of Condition, Income and Comprehensive Income, and Changes in Capital. There are no other significant differences between the policies outlined in the FAM and GAAP.

Preparing the financial statements in conformity with the FAM requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates. Certain amounts relating to the prior year have been reclassified to conform to the current-year presentation. Unique accounts and significant accounting policies are explained below.

## a. Gold and Special Drawing Rights Certificates

The Secretary of the U.S. Treasury is authorized to issue gold and special drawing rights ("SDR") certificates to the Reserve Banks.

Payment for the gold certificates by the Reserve Banks is made by crediting equivalent amounts in dollars into the account established for the U.S. Treasury. The gold certificates held by the Reserve Banks are required to be backed by the gold of the U.S. Treasury. The U.S. Treasury may reacquire the gold certificates at any time and the Reserve Banks must deliver them to the U.S. Treasury. At such time, the U.S. Treasury's account is charged, and the Reserve Banks' gold certificate accounts are reduced. The value of gold for purposes of backing the gold certificates is set by law at \$42 2/9 a fine troy ounce. The Board of Governors allocates the gold certificates among the Reserve Banks once a year based on the average Federal Reserve notes outstanding in each Reserve Bank.

SDR certificates are issued by the International Monetary Fund (the "Fund") to its members in proportion to each member's quota in the Fund at the time of issuance. SDR certificates serve as a supplement to international monetary reserves and may be transferred from one national monetary authority to another. Under the law providing for U.S. participation in the SDR system, the Secretary of the U.S. Treasury is authorized to issue SDR certificates somewhat like gold certificates to the Reserve Banks. When SDR certificates are issued to the Reserve Banks, equivalent amounts in dollars are credited to the account established for the U.S. Treasury, and the Reserve Banks' SDR certificate accounts are increased. The Reserve Banks are required to purchase SDR certificates, at the direction of the U.S. Treasury, for the purpose of financing SDR acquisitions or for financing exchange stabilization operations. At the time SDR transactions occur, the Board of Governors allocates SDR certificate transactions among the Reserve Banks based upon each Reserve Bank's Federal Reserve notes outstanding at the end of the preceding year. There were no SDR transactions in 2008 or 2007.

#### b. Loans to Depository Institutions and Other Loans

Loans are reported at their outstanding principal balances net of commitment fees. Interest income is recognized on an accrual basis. Loan commitment fees are generally deferred and amortized on a straight-line basis over the commitment period, which is not materially different from the interest method.

Outstanding loans are evaluated to determine whether an allowance for loan losses is required. The Bank has developed procedures for assessing the adequacy of the allowance for loan losses that reflect the assessment of credit risk considering all available information. This assessment includes monitoring information obtained from banking supervisors, borrowers, and other sources to assess the credit condition of the borrowers.

Loans are considered to be impaired when it is probable that the Bank will not receive principal and interest due in accordance with the contractual terms of the loan agreement. The amount of the impairment is the difference between the recorded amount of the loan and the amount expected to be collected, after consideration of the fair value of the collateral. Recognition of interest income is discontinued for any loans that are considered to be impaired. Cash payments made by borrowers on impaired loans are applied to principal until the balance is reduced to zero; subsequent payments are recorded as recoveries of amounts previously charged off and then to interest income.

# c. Securities Purchased Under Agreements to Resell, Securities Sold Under Agreements to Repurchase, and Securities Lending

The FRBNY may engage in tri-party purchases of securities under agreements to resell ("tri-party agreements"). Tri-party agreements are conducted with two commercial custodial banks that manage the clearing and settlement of collateral. Collateral is held in excess of the contract amount. Acceptable collateral under tri-party agreements primarily includes U.S. government securities; pass-through mortgage securities of Fannie Mae, Freddie Mac, and Ginnie Mae; STRIP securities of the U.S. government; and "stripped" securities of other government agencies. The tri-party agreements are accounted for as financing transactions and the associated interest income is accrued over the life of the agreement.

Securities sold under agreements to repurchase are accounted for as financing transactions, and the associated interest expense is recognized over the life of the transaction. These transactions are reported at their contractual amounts in the Statements of Condition and the related accrued interest payable is reported as a component of "Other liabilities."

U.S. government securities held in the SOMA are lent to U.S. government securities dealers to facilitate the effective functioning of the domestic securities market. Overnight securities lending transactions are fully collateralized by other U.S. government securities. Term securities lending transactions are fully collateralized with investment-grade debt securities, collateral eligible for tri-party repurchase agreements arranged by the Open Market Trading Desk, or both. The collateral taken in both overnight and term securities lending transactions is in excess of the fair value of the securities loaned. The FRBNY charges the primary dealer a fee for borrowing securities, and these fees are reported as a component of "Other income."

Activity related to securities purchased under agreements to resell, securities sold under agreements to repurchase, and securities lending is allocated to each of the Reserve Banks on a percentage basis derived from an annual settlement of the interdistrict settlement account.

# d. U.S. Government, Federal Agency, and Government-Sponsored Enterprise Securities; Investments Denominated in Foreign Currencies; and Warehousing Agreements

Interest income on U.S. government, Federal agency, and GSE securities and investments denominated in foreign currencies comprising the SOMA is accrued on a straight-line basis. Gains and losses resulting from sales of securities are determined by specific issue based on average cost. Foreign-currency-denominated assets are revalued daily at current foreign currency market exchange rates in order to report these assets in U.S. dollars. Realized and unrealized gains and losses on investments denominated in foreign currencies are reported as "Foreign currency (losses) gains, net" in the Statements of Income and Comprehensive Income.

Activity related to U.S. government, Federal agency, and GSE securities, including the premiums, discounts, and realized gains and losses, is allocated to each Reserve Bank on a percentage basis derived from an annual settlement of the interdistrict settlement account that occurs in April of each year. The settlement also equalizes Reserve Bank gold certificate holdings to Federal Reserve notes outstanding in each District. Activity related to investments denominated in foreign currencies, including the premiums, discounts, and realized and unrealized gains and losses, is allocated to each Reserve Bank based on the ratio of each Reserve Bank's capital and surplus to aggregate capital and surplus at the preceding December 31.

Warehousing is an arrangement under which the FOMC agrees to exchange, at the request of the U.S. Treasury, U.S. dollars for foreign currencies held by the U.S. Treasury or ESF over a limited period of time. The purpose of the warehousing facility is to supplement the U.S. dollar resources of the U.S. Treasury and ESF for financing purchases of foreign currencies and related international operations.

Warehousing agreements are designated as held for trading purposes and are valued daily at current market exchange rates. Activity related to these agreements is allocated to each Reserve Bank based on the ratio of each Reserve Bank's capital and surplus to aggregate capital and surplus at the preceding December 31.

## e. Central Bank Liquidity Swaps

At the initiation of each central bank liquidity swap transaction, the foreign central bank transfers a specified amount of its currency to the FRBNY in exchange for U.S. dollars at the prevailing market exchange rate. Concurrent with this transaction, the FRBNY and the foreign central bank agree to a second transaction that obligates the foreign central bank to return the U.S. dollars and the FRBNY to return the foreign currency on a specified future date at the same exchange rate. The foreign currency amounts that the FRBNY acquires are reported as "Central bank liquidity swaps" on the Statements of Condition. Because the swap transaction will be unwound at the same exchange rate that was used in the initial transaction, the recorded value of the foreign currency amounts is not affected by changes in the market exchange rate.

The foreign central bank pays interest to the FRBNY based on the foreign currency amounts held by the FRBNY. The FRBNY recognizes interest income during the term of the swap agreement and reports the interest income as a component of "Interest income: Central bank liquidity swaps" in the Statements of Income and Comprehensive Income.

Activity related to these swap transactions, including the related interest income, is allocated to each Reserve Bank based on the ratio of each Reserve Bank's capital and surplus to aggregate capital and surplus at the preceding December 31. Similar to other investments denominated in foreign currencies, the foreign currency holdings associated with these central bank liquidity swaps are revalued at current foreign currency market exchange rates. Because the swap arrangement will be unwound at the same exchange rate that was used in the initial transaction, the obligation to return the foreign currency is also revalued at current foreign currency market exchange rates and is recorded in a currency exchange valuation account by the FRBNY. This revaluation method eliminates the effects of the changes in the market exchange rate. As of December 31, 2008, the FRBNY began allocating this currency exchange valuation account to the Bank and, as a result, the reported amount of central bank liquidity swaps reflects the Bank's allocated portion at the contract exchange rate.

#### f. Interdistrict Settlement Account

At the close of business each day, each Reserve Bank aggregates the payments due to or from other Reserve Banks. These payments result from transactions between the Reserve Banks and transactions that involve depository institution accounts held by other Reserve Banks, such as Fedwire funds and securities transfers and check and ACH transactions. The cumulative net amount due to or from the other Reserve Banks is reflected in the "Interdistrict settlement account" in the Statements of Condition.

## g. Bank Premises, Equipment, and Software

Bank premises and equipment are stated at cost less accumulated depreciation. Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets, which range from two to fifty years. Major alterations, renovations, and improvements are capitalized at cost as additions to the asset accounts and are depreciated over the remaining useful life of the asset or, if appropriate, over the unique useful life of the alteration, renovation, or improvement. Maintenance, repairs, and minor replacements are charged to operating expense in the year incurred.

Costs incurred for software during the application development stage, whether developed internally or acquired for internal use, are capitalized based on the cost of direct services and materials associated with designing, coding, installing, and testing the software. Capitalized software costs are amortized on a straight-line basis over the estimated useful lives of the software applications, which range from two to five years. Maintenance costs related to software are charged to expense in the year incurred.

Capitalized assets, including software, buildings, leasehold improvements, furniture, and equipment are impaired and an adjustment is recorded when events or changes in circumstances indicate that the carrying amount of assets or asset groups is not recoverable and significantly exceeds the assets' fair value.

#### h. Federal Reserve Notes

Federal Reserve notes are the circulating currency of the United States. These notes are issued through the various Federal Reserve agents (the chairman of the board of directors of each Reserve Bank and their designees) to the Reserve Banks upon deposit with such agents of specified classes of collateral security, typically U.S. government securities. These notes are identified as issued to a specific Reserve Bank. The Federal Reserve Act provides that the collateral security tendered by the Reserve Bank to the Federal Reserve agent must be at least equal to the sum of the notes applied for by such Reserve Bank.

Assets eligible to be pledged as collateral security include all of the Bank's assets. The collateral value is equal to the book value of the collateral tendered with the exception of securities, for which the collateral value is equal to the par value of the securities tendered. The par value of securities pledged for securities sold under agreements to repurchase is deducted.

The Board of Governors may, at any time, call upon a Reserve Bank for additional security to adequately collateralize the outstanding Federal Reserve notes. To satisfy the obligation to provide sufficient collateral for outstanding Federal Reserve notes, the Reserve Banks have entered into an agreement that provides for certain assets of the Reserve Banks to be jointly pledged as collateral for the Federal Reserve notes issued to all Reserve Banks. In the event that this collateral is insufficient, the Federal Reserve Act provides that Federal Reserve notes become a first and paramount lien on all the assets of the Reserve Banks. Finally, Federal Reserve notes are obligations of the United States government. At December 31, 2008 and 2007, all Federal Reserve notes issued to the Reserve Banks were fully collateralized.

"Federal Reserve notes outstanding, net" in the Statements of Condition represents the Bank's Federal Reserve notes outstanding, reduced by the Bank's currency holdings of \$5,409 million and \$5,886 million at December 31, 2008 and 2007, respectively.

#### i. Items in Process of Collection and Deferred Credit Items

"Items in process of collection" in the Statements of Condition primarily represents amounts attributable to checks that have been deposited for collection and that, as of the balance sheet date, have not yet been presented to the paying bank. "Deferred credit items" are the counterpart liability to items in process of collection, and the amounts in this account arise from deferring credit for deposited items until the amounts are collected. The balances in both accounts can vary significantly.

#### j. Capital Paid-in

The Federal Reserve Act requires that each member bank subscribe to the capital stock of the Reserve Bank in an amount equal to 6 percent of the capital and surplus of the member bank. These shares are nonvoting with a par value of \$100 and may not be transferred or hypothecated. As a member bank's capital and surplus changes, its holdings of Reserve Bank stock must be adjusted. Currently, only one-half of the subscription is paid-in and the remainder is subject to call. A member bank is liable for Reserve Bank liabilities up to twice the par value of stock subscribed by it.

By law, each Reserve Bank is required to pay each member bank an annual dividend of 6 percent on the paid-in capital stock. This cumulative dividend is paid semiannually. To reflect the Federal Reserve Act requirement that annual dividends be deducted from net earnings, dividends are presented as a distribution of comprehensive income in the Statements of Income and Comprehensive Income.

#### k. Surplus

The Board of Governors requires the Reserve Banks to maintain a surplus equal to the amount of capital paid-in as of December 31 of each year. This amount is intended to provide additional capital and reduce the possibility that the Reserve Banks will be required to call on member banks for additional capital.

Accumulated other comprehensive income is reported as a component of surplus in the Statements of Condition and the Statements of Changes in Capital. The balance of accumulated other comprehensive income is comprised of expenses, gains, and losses related to other postretirement benefit plans that, under accounting standards, are included in other comprehensive income, but excluded from net income. Additional information regarding the classifications of accumulated other comprehensive income is provided in Notes 12 and 13.

#### l. Interest on Federal Reserve Notes

The Board of Governors requires the Reserve Banks to transfer excess earnings to the U.S. Treasury as interest on Federal Reserve notes after providing for the costs of operations, payment of dividends, and reservation of an amount necessary to equate surplus with capital paid-in. This amount is reported as "Payments to U.S. Treasury as interest on Federal Reserve notes" in the Statements of Income and Comprehensive Income and is reported as a liability, or as an asset if overpaid during the year, in the Statements of Condition. Weekly payments to the U.S. Treasury may vary significantly.

In the event of losses or an increase in capital paid-in at a Reserve Bank, payments to the U.S. Treasury are suspended and earnings are retained until the surplus is equal to the capital paid-in.

In the event of a decrease in capital paid-in, the excess surplus, after equating capital paid-in and surplus at December 31, is distributed to the U.S. Treasury in the following year.

## m. Interest on Depository Institution Deposits

Beginning October 9, 2008, the Reserve Banks began paying interest to depository institutions on qualifying balances held at the Banks. Authorization for payment of interest on these balances was granted by Title II of the Financial Services Regulatory Relief Act of 2006, which had an effective date of 2011. Section 128 of the Emergency Economic Stabilization Act of 2008, enacted on October 3, 2008, made that authority immediately effective. The interest rates paid on required reserve balances and excess balances are based on an FOMC-established target range for the effective federal funds rate.

# n. Income and Costs Related to U.S. Treasury Services

The Bank is required by the Federal Reserve Act to serve as fiscal agent and depository of the United States. By statute, the Department of the Treasury has appropriations to pay for these services. During the years ended December 31, 2008 and 2007, the Bank was reimbursed for all services provided to the Department of the Treasury as its fiscal agent.

#### o. Compensation Received for Services Provided

The Federal Reserve Bank of Atlanta ("FRBA") has overall responsibility for managing the Reserve Banks' provision of check and ACH services to depository institutions and, as a result, recognizes total System revenue for these services on its Statements of Income and Comprehensive Income. Similarly, the FRBNY manages the Reserve Banks' provision of Fedwire funds and securities transfer services, and recognizes total System revenue for these services on its Statements of Income and Comprehensive Income. The FRBA and FRBNY compensate the other Reserve Banks for the costs incurred to provide these services. The Bank reports this compensation as "Compensation received for services provided" in the Statements of Income and Comprehensive Income.

## p. Assessments by the Board of Governors

The Board of Governors assesses the Reserve Banks to fund its operations based on each Reserve Bank's capital and surplus balances as of December 31 of the prior year. The Board of Governors also assesses each Reserve Bank for the expenses incurred for the U.S. Treasury to prepare and retire Federal Reserve notes based on each Reserve Bank's share of the number of notes comprising the System's net liability for Federal Reserve notes on December 31 of the prior year.

## q. Taxes

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property and, in some states, sales taxes on construction-related materials. The Bank's real property taxes were \$6 million and \$5 million for the years ended December 31, 2008 and 2007, respectively, and are reported as a component of "Occupancy expense."

## r. Restructuring Charges

The Reserve Banks recognize restructuring charges for exit or disposal costs incurred as part of the closure of business activities in a particular location, the relocation of business activities from one location to another, or a fundamental reorganization that affects the nature of operations. Restructuring charges may include costs associated with employee separations and asset impairments. Expenses

are recognized in the period in which the Bank commits to a formalized restructuring plan or executes the specific actions contemplated in the plan and all criteria for financial statement recognition have been met.

Note 14 describes the Bank's restructuring initiatives and provides information about the costs and liabilities associated with employee separations. The costs associated with the impairment of certain of the Bank's assets are discussed in Note 9. Costs and liabilities associated with enhanced pension benefits in connection with the restructuring activities for all of the Reserve Banks are recorded on the books of the FRBNY.

# s. Recently Issued Accounting Standards

In September 2006, FASB issued SFAS No. 157, "Fair Value Measurements" ("SFAS 157"), which established a single authoritative definition of fair value and a framework for measuring fair value, and expands the required disclosures for assets and liabilities measured at fair value. SFAS 157 was effective for fiscal years beginning after November 15, 2007, with early adoption permitted. The Bank adopted SFAS 157 effective January 1, 2008. The provisions of this standard have no material effect on the Bank's financial statements.

In February 2007, FASB issued SFAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities, including an amendment of FASB Statement No. 115" ("SFAS 159"), which provides companies with an irrevocable option to elect fair value as the measurement for selected financial assets, financial liabilities, unrecognized firm commitments and written loan commitments that are not subject to fair value under other accounting standards. There is a one-time election available to apply this standard to existing financial instruments as of January 1, 2008; otherwise, the fair value option will be available for financial instruments on their initial transaction date. SFAS 159 reduces the accounting complexity for financial instruments and the volatility in earnings caused by measuring related assets and liabilities differently, and it eliminates the operational complexities of applying hedge accounting. The Bank adopted SFAS 159 effective January 1, 2008. The provisions of this standard have no material effect on the Bank's financial statements.

In February 2008, FASB issued FASB Staff Position ("FSP") FAS 140-3, "Accounting for Transfers of Financial Assets and Repurchase Financing Transactions." FSP FAS 140-3 requires that an initial transfer of a financial asset and a repurchase financing that was entered into contemporaneously with, or in contemplation of, the initial transfer be evaluated together as a linked transaction under SFAS 140 "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities" unless certain criteria are met. FSP FAS 140-3 is effective for the Bank's financial statements for the year beginning on January 1, 2009 and earlier adoption is not permitted. The provisions of this standard will not have a material effect on the Bank's financial statements.

#### 5. Loans

The loan amounts outstanding to depository institutions and others at December 31 were as follows (in millions):

		2008	2007
Primary, secondary, and seasonal credit	\$	243	\$ 178
TAF		16,150	_
Total loans to depository institutions	\$	16,393	\$ 178
AMLF	\$	23,765	\$ -
Total other loans	\$	23,765	\$ _
	' <u></u>		 

#### Loans to Depository Institutions

The Bank offers primary, secondary, and seasonal credit to eligible borrowers. Each program has its own interest rate. Interest is accrued using the applicable interest rate established at least every fourteen days by the board of directors of the Bank, subject to review and determination by the Board of Governors. Primary and secondary credits are extended on a short-term basis, typically overnight, whereas seasonal credit may be extended for a period up to nine months.

Primary, secondary, and seasonal credit lending is collateralized to the satisfaction of the Bank to reduce credit risk. Assets eligible to collateralize these loans include consumer, business, and real estate loans, U.S. Treasury securities, Federal agency securities, GSE obligations, foreign sovereign debt obligations, municipal or corporate obligations, state and local government obligations, asset-backed securities, corporate bonds, commercial paper, and bank-issued assets, such as certificates of deposit, bank notes, and deposit notes. Collateral is assigned a lending value deemed appropriate by the Bank, which is typically fair value or face value reduced by a margin.

Depository institutions that are eligible to borrow under the Bank's primary credit program are also eligible to participate in the temporary TAF program. Under the TAF program, the Reserve Banks conduct auctions for a fixed amount of funds, with the interest rate determined by the auction process, subject to a minimum bid rate. TAF loans are extended on a short-term basis, with terms of either 28 or 84 days. All advances under the TAF must be fully collateralized. Assets eligible to collateralize TAF loans include the complete list noted above for loans to depository institutions. Similar to the process used for primary, secondary, and seasonal credit, a lending value is assigned to each asset accepted as collateral for TAF loans.

Loans to depository institutions are monitored on a daily basis to ensure that borrowers continue to meet eligibility requirements for these programs. The financial condition of borrowers is monitored by the Bank and, if a borrower no longer qualifies for these programs, the Bank will generally request full repayment of the outstanding loan or may convert the loan to a secondary credit loan.

Collateral levels are reviewed daily against outstanding obligations and borrowers that no longer have sufficient collateral to support outstanding loans are required to provide additional collateral or to make partial or full repayment.

#### Other Loans

The Bank administers the AMLF and is authorized to extend loans to eligible borrowers on behalf of the other Reserve Banks. All loans extended under the AMLF are recorded as assets by the Bank and, if the borrowing institution settles to a depository account in another Reserve Bank District, the funds are credited to the institution's depository account by the appropriate Reserve Bank and settled between the Banks through the interdistrict settlement account. The loans extended under the AMLF are nonrecourse, so that the Bank has recourse only to the collateral pledged by the borrowers. The credit risk related to the AMLF is assumed by the Bank, and any losses are not recorded by the other Reserve Banks. No losses were incurred on loans extended in 2008. Eligible collateral under the program is limited to U.S. dollar-denominated ABCP that is rated not lower than A-1/P-1/F-1 and must be purchased from an eligible money market mutual fund. The terms of loans under the AMLF are limited to 120 days if the borrower is a bank or 270 days for non-bank borrowers. The interest rate for advances made under the AMLF is equal to the Bank's primary credit rate offered to depository institutions at the time the advance is made.

The maturity distribution of loans outstanding at December 31, 2008, was as follows (in millions):

	Primary, secondary, and seasonal credit				(	Other loans
Within 15 days	\$	132	\$	8,600	\$	9,682
16 days to 90 days		111		7,550		14,083
Total loans	\$	243	\$	16,150	\$	23,765

#### Allowance for Loan Losses

At December 31, 2008 and 2007, no loans were considered to be impaired and the Bank determined that no allowance for loan losses was required.

# 6. U.S. Government, Federal Agency, and Government-Sponsored Enterprise Securities; Securities Purchased Under Agreements to Resell; Securities Sold Under Agreements to Repurchase; and Securities Lending

The FRBNY, on behalf of the Reserve Banks, holds securities bought outright in the SOMA. The Bank's allocated share of SOMA balances was approximately 4.194 percent and 4.609 percent at December 31, 2008 and 2007, respectively.

The Bank's allocated share of U.S. government, Federal agency, and GSE securities, net held in the SOMA at December 31 was as follows (in millions):

	 2008	2007
U.S. government securities:		
Bills	\$ 773	\$ 10,500
Notes	14,042	18,516
Bonds	5,147	5,116
Federal agency and GSE securities	827	
Total par value	20,789	34,132
Unamortized premiums	337	368
Unaccreted discounts	(62)	(137)
Total allocated to the Bank	\$ 21,064	\$ 34,363

At December 31, 2008 and 2007, the fair value of the U.S. government, Federal agency, and GSE securities allocated to the Bank, excluding accrued interest, was \$23,758 million and \$35,815 million, respectively, as determined by reference to quoted prices for identical securities.

The total of the U.S. government, Federal agency, and GSE securities, net, held in the SOMA was \$502,189 million and \$745,629 million at December 31, 2008 and 2007, respectively. At December 31, 2008 and 2007, the fair value of the U.S. government, Federal agency, and GSE securities held in the SOMA, excluding accrued interest, was \$566,427 million and \$777,141 million, respectively, as determined by reference to quoted prices for identical securities.

Although the fair value of security holdings can be substantially greater than or less than the recorded value at any point in time, these unrealized gains or losses have no effect on the ability of the Reserve Banks, as central bank, to meet their financial obligations and responsibilities and do not represent a risk to the Reserve Banks, their shareholders, or the public. The fair value is presented solely for informational purposes.

Financial information related to securities purchased under agreements to resell and securities sold under agreements to repurchase for the years ended December 31, 2008 and 2007, were as follows (in millions):

	Securities purchased			purchased	Securities sold u			old under
	under agreements to resell				agreements to repurchase			epurchase
		2008		2007		2008		2007
Allocated to the Bank:								
Contract amount outstanding, end of year	\$	3,355	\$	2,143	\$	3,706	\$	2,027
Weighted average amount outstanding, during the year		4,070		1,616		2,746		1,606
Maximum month-end balance outstanding, during the year		4,991		2,373		4,134		2,027
Securities pledged, end of year		-		-		3,309		2,030
System total:								
Contract amount outstanding, end of year	\$	80,000	\$	46,500	\$	88,352	\$	43,985
Weighted average amount outstanding, during the year		97,037		35,073		65,461		34,846
Maximum month-end balance outstanding,								
during the year		119,000		51,500		98,559		43,985
Securities pledged, end of year		-		-		78,896		44,048

The contract amounts for securities purchased under agreements to resell and securities sold under agreements to repurchase approximate fair value.

The maturity distribution of U.S. government, Federal agency, and GSE securities bought outright, securities purchased under agreements to resell, and securities sold under agreements to repurchase that were allocated to the Bank at December 31, 2008, was as follows (in millions):

						Subtotal:				
					U.S. go	vernment,		Securities	5	Securities
	Federal agency		al agency	Fede	ral agency,	purchas	sed under	SC	old under	
	U.S. go	vernment		and GSE		and GSE	ag	greements	agree	ements to
		securities	S	ecurities		securities		to resell	re	purchase
	(	(Par value)	(P	ar value)	(	Par value)	(Contrac	t amount)	(Contract	amount)
Within 15 days	\$	803	\$	19	\$	822	\$	1,678	\$	3,706
16 days to 90 days		880		138		1,018		1,677		-
91 days to 1 year		2,656		41		2,697		-		-
Over 1 year to 5 years		7,270		476		7,746		-		-
Over 5 years to 10 years		4,082		153		4,235		-		-
Over 10 years		4,271		-		4,271		-		-
Total allocated to the Bank	\$	19,962	\$	827	\$	20,789	\$	3,355	\$	3,706

At December 31, 2008 and 2007, U.S. government securities with par values of \$180,765 million and \$16,649 million, respectively, were loaned from the SOMA, of which \$7,582 million and \$767 million, respectively, were allocated to the Bank.

# 7. Investments Denominated in Foreign Currencies

The FRBNY, on behalf of the Reserve Banks, holds foreign currency deposits with foreign central banks and with the Bank for International Settlements and invests in foreign government debt instruments. These investments are guaranteed as to principal and interest by the issuing foreign governments.

The Bank's allocated share of investments denominated in foreign currencies was approximately 5.688 percent and 2.585 percent at December 31, 2008 and 2007, respectively.

The Bank's allocated share of investments denominated in foreign currencies, including accrued interest, valued at foreign currency market exchange rates at December 31, was as follows (in millions):

	2008	2007
Euro:		
Foreign currency deposits	\$ 317	\$ 185
Securities purchased under agreements to resell	232	66
Government debt instruments	262	121
Japanese yen:		
Foreign currency deposits	198	73
Government debt instruments	402	147
Total allocated to the Bank	\$ 1,411	\$ 592

At December 31, 2008 and 2007, the fair value of investments denominated in foreign currencies, including accrued interest, allocated to the Bank was \$1,423 million and \$592 million, respectively. The fair value of government debt instruments was determined by reference to quoted prices for identical securities. The cost basis of foreign currency deposits and securities purchased under agreements to resell, adjusted for accrued interest, approximates fair value. Similar to the U.S. government, Federal agency, and GSE securities discussed in Note 6, unrealized gains or losses have no effect on the ability of a Reserve Bank, as central bank, to meet its financial obligations and responsibilities.

Total System investments denominated in foreign currencies were \$24,804 million and \$22,914 million at December 31, 2008 and 2007, respectively. At December 31, 2008 and 2007, the fair value of the total System investments denominated in foreign currencies, including accrued interest, was \$25,021 million and \$22,892 million, respectively.

The maturity distribution of investments denominated in foreign currencies that were allocated to the Bank at December 31, 2008, was as follows (in millions):

	Euro	Japanese Yen	lotal
Within 15 days	\$ 432	\$ 198	\$ 630
16 days to 90 days	66	36	102
91 days to 1 year	100	113	213
Over 1 year to 5 years	 213	253	466
Total allocated to the Bank	\$ 811	\$ 600	\$ 1,411

At December 31, 2008 and 2007, the authorized warehousing facility was \$5.0 billion, with no balance outstanding.

In connection with its foreign currency activities, the FRBNY may enter into transactions that contain varying degrees of off-balance-sheet market risk that result from their future settlement and counter-party credit risk. The FRBNY controls these risks by obtaining credit approvals, establishing transaction limits, and performing daily monitoring procedures.

# 8. Central Bank Liquidity Swaps

Central bank liquidity swap arrangements are contractual agreements between two parties, the FRBNY and an authorized foreign central bank whereby the parties agree to exchange their currencies up to a prearranged maximum amount and for an agreed-upon period of time. At the end of that period of time, the currencies are returned at the original contractual exchange rate and the foreign central bank pays interest to the Federal Reserve at an agreed-upon rate. These arrangements give the authorized foreign central bank temporary access to U.S. dollars. Drawings under the swap arrangements are initiated by the foreign central bank and must be agreed to by the Federal Reserve.

The Bank's allocated share of central bank liquidity swaps was approximately 5.688 percent and 2.585 percent at December 31, 2008 and 2007, respectively.

At December 31, 2008 and 2007, the total System amount of foreign currency held under central bank liquidity swaps was \$553,728 million and \$24,353 million, respectively, of which \$31,498 million and \$629 million, respectively, was allocated to the Bank.

The maturity distribution of central bank liquidity swaps that were allocated to the Bank at December 31 was as follows (in millions):

		2008			2007
	Within	16 days to		16	days to
	15 days	90 days	Total	9	0 days
Australian dollar	\$ 569	\$ 730	\$ 1,299	\$	-
Danish krone	-	853	853		-
Euro	8,588	7,985	16,573		524
Japanese yen	2,724	4,256	6,980		-
Korean won	-	589	589		-
Norwegian krone	125	343	468		-
Swedish krona	569	853	1,422		-
Swiss franc	1,093	339	1,432		105
U.K. pound	7	1,875	1,882		-
Total	\$ 13,675	\$ 17,823	\$ 31,498	\$	629

# 9. Bank Premises, Equipment, And Software

Bank premises and equipment at December 31 were as follows (in millions):

	2008	2007
Bank premises and equipment:		
Land	\$ 27	\$ 27
Buildings	142	133
Building machinery and equipment	30	29
Construction in progress	3	3
Furniture and equipment	56	60
Subtotal	258	252
Accumulated depreciation	 (114)	(112)
Bank premises and equipment, net	\$ 144	\$ 140
Depreciation expense, for the years ended December 31	\$ 12	\$ 11

The Bank leases space to outside tenants with remaining lease terms ranging from 1 to 9 years. Rental income from such leases was \$12 million and \$11 million for the years ended December 31, 2008 and 2007, respectively, and is reported as a component of "Other income." Future minimum lease payments that the Bank will receive under noncancelable lease agreements in existence at December 31, 2008, are as follows (in millions):

2009	\$ 11
2010	10
2011	9
2012	9
2013	9
Thereafter	19
Total	\$ 67

The Bank has capitalized software assets, net of amortization, of \$7 million at December 31, 2008 and 2007. Amortization expense was \$2 million and \$1 million for the years ended December 31, 2008 and 2007, respectively. Capitalized software assets are reported as a component of "Other assets" and the related amortization is reported as a component of "Other expenses."

Assets impaired as a result of the Bank's restructuring plan, as discussed in Note 14, include check equipment, software, and leasehold improvements. Asset impairment losses of \$4 million for the period ending December 31, 2007, were determined using fair values based on quoted fair values or other valuation techniques and are reported as a component of "Other expenses." The Bank had no impairment losses in 2008.

# 10. Commitments and Contingencies

In the normal course of its operation, the Bank enters into contractual commitments, normally with fixed expiration dates or termination provisions, at specific rates and for specific purposes.

At December 31, 2008, the Bank was obligated under noncancelable leases for premises and equipment with remaining terms of approximately 4 years. These leases provide for increased rental payments based upon increases in real estate taxes and operating costs.

Rental expense under operating leases for certain operating facilities, warehouses, and data processing and office equipment (including taxes, insurance and maintenance when included in rent), net of sublease rentals, was \$1 million for the years ended December 31, 2008 and 2007. Certain of the Bank's leases have options to renew.

Future minimum rental payments under noncancelable operating leases, net of sublease rentals, with remaining terms of one year or more, at December 31, 2008, are as follows (in thousands):

	Operating Lease	
2009	\$	559
2010		559
2011		559
2012		428
2013		-
Thereafter		_
Future minimum rental payments	\$	2,105

At December 31, 2008, there were no material unrecorded unconditional purchase commitments or long-term obligations in excess of one year.

Under the Insurance Agreement of the Federal Reserve Banks, each of the Reserve Banks has agreed to bear, on a per incident basis, a pro rata share of losses in excess of one percent of the capital paid-in of the claiming Reserve Bank, up to 50 percent of the total capital paid-in of all Reserve Banks. Losses are borne in the ratio of a Reserve Bank's capital paid-in to the total capital paid-in of all Reserve Banks at the beginning of the calendar year in which the loss is shared. No claims were outstanding under the agreement at December 31, 2008 or 2007.

The Bank is involved in certain legal actions and claims arising in the ordinary course of business. Although it is difficult to predict the ultimate outcome of these actions, in management's opinion, based on discussions with counsel, the aforementioned litigation and claims will be resolved without material adverse effect on the financial position or results of operations of the Bank.

#### 11. Retirement and Thrift Plans

#### Retirement Plans

The Bank currently offers three defined benefit retirement plans to its employees, based on length of service and level of compensation. Substantially all of the Bank's employees participate in the Retirement Plan for Employees of the Federal Reserve System ("System Plan"). Employees at certain compensation levels participate in the Benefit Equalization Retirement Plan ("BEP") and certain Reserve Bank officers participate in the Supplemental Employee Retirement Plan ("SERP").

The System Plan provides retirement benefits to employees of the Federal Reserve Banks, the Board of Governors, and the Office of Employee Benefits of the Federal Reserve Employee Benefits System. The FRBNY, on behalf of the System, recognizes the net asset or net liability and costs associated with the System Plan in its financial statements. Costs associated with the System Plan are not reimbursed by other participating employers.

The Bank's projected benefit obligation, funded status, and net pension expenses for the BEP and the SERP at December 31, 2008 and 2007, and for the years then ended, were not material.

#### Thrift Plan

Employees of the Bank may also participate in the defined contribution Thrift Plan for Employees of the Federal Reserve System ("Thrift Plan"). The Bank matches employee contributions based on a specified formula. For the years ended December 31, 2008 and 2007, the Bank matched 80 percent on the first 6 percent of employee contributions for employees with less than five years of service and 100 percent on the first 6 percent of employee contributions for employees with five or more years of service. The Bank's Thrift Plan contributions totaled \$4 million for each of the years ended December 31, 2008 and 2007, and are reported as a component of "Salaries and other benefits" in the Statements of Income and Comprehensive Income. Beginning in 2009, the Bank will match 100 percent of the first 6 percent of employee contributions from the date of hire and provide an automatic employer contribution of 1 percent of eligible pay.

# 12. Postretirement Benefits Other Than Pensions and Postemployment Benefits

#### Postretirement Benefits Other Than Pensions

In addition to the Bank's retirement plans, employees who have met certain age and length-of-service requirements are eligible for both medical benefits and life insurance coverage during retirement.

The Bank funds benefits payable under the medical and life insurance plans as due and, accordingly, has no plan assets.

Following is a reconciliation of the beginning and ending balances of the benefit obligation (in millions):

	2008	2007
Accumulated postretirement benefit obligation at January 1	\$ 56.4	\$ 58.6
Service cost-benefits earned during the period	1.5	1.8
Interest cost on accumulated benefit obligation	3.6	3.4
Net actuarial loss (gain)	6.0	(3.0)
Curtailment gain	(0.2)	(0.9)
Contributions by plan participants	1.5	1.4
Benefits paid	(5.6)	(5.1)
Medicare Part D subsidies	0.2	0.2
Accumulated postretirement benefit obligation at December 31	\$ 63.4	\$ 56.4

At December 31, 2008 and 2007, the weighted-average discount rate assumptions used in developing the postretirement benefit obligation were 6.0 percent and 6.25 percent, respectively.

Discount rates reflect yields available on high-quality corporate bonds that would generate the cash flows necessary to pay the plan's benefits when due.

Following is a reconciliation of the beginning and ending balance of the plan assets, the unfunded postretirement benefit obligation, and the accrued postretirement benefit costs (in millions):

		2008	2007
Fair value of plan assets at January 1	\$	-	\$ -
Contributions by the employer		3.9	3.5
Contributions by plan participants		1.5	1.4
Benefits Paid		(5.6)	(5.1)
Medicare Part D subsidies		0.2	0.2
Fair value of plan assets at December 31	\$	-	\$ 
Unfunded obligation and accrued postretirement benefit cost	\$_	63.4	\$ 56.4
Amounts included in accumulated other comprehensive loss are shown below:			
Prior service cost	\$	1.1	\$ 1.6
Net actuarial loss		(11.3)	(5.4)
Deferred curtailment gain		0.1	0.3
Total accumulated other comprehensive loss	\$	(10.1)	\$ (3.5)

Accrued postretirement benefit costs are reported as a component of "Accrued benefit costs" in the Statements of Condition.

For measurement purposes, the assumed health care cost trend rates at December 31 are as follows:

	2008	2007
Health care cost trend rate assumed for next year	7.50%	8.00%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	5.00%	5.00%
Year that the rate reaches the ultimate trend rate	2014	2013

Assumed health care cost trend rates have a significant effect on the amounts reported for health care plans. A one percentage point change in assumed health care cost trend rates would have the following effects for the year ended December 31, 2008 (in millions):

	One Perce	entage	One P	ercentage
	Point Inc	crease	Point	Decrease
Effect on aggregate of service and interest cost components of net periodic postretirement benefit costs	\$	0.7	\$	(0.6)
Effect on accumulated postretirement benefit obligation		7.3		(6.1)

The following is a summary of the components of net periodic postretirement benefit expense for the years ended December 31 (in millions):

2000

2007

	2008	2007
Service cost-benefits earned during the period	 1.5	\$ 1.8
Interest cost on accumulated benefit obligation	3.6	3.4
Amortization of prior service cost	(0.8)	(0.9)
Amortization of net actuarial loss	0.1	0.6
Total periodic expense	 4.4	4.9
Curtailment gain	(0.2)	-
Net periodic postretirement benefit expense	\$ 4.2	\$ 4.9
Estimated amounts that will be amortized from accumulated other comprehensive loss into net periodic postretirement benefit expense in 2009 are shown below:  Prior service cost	\$ (0.7)	
Net actuarial loss	 0.7	
Total	\$ _	

Net postretirement benefit costs are actuarially determined using a January 1 measurement date. At January 1, 2008 and 2007, the weighted-average discount rate assumptions used to determine net periodic postretirement benefit costs were 6.25 percent and 5.75 percent, respectively.

Net periodic postretirement benefit expense is reported as a component of "Salaries and other benefits" in the Statements of Income and Comprehensive Income.

A net curtailment gain was recognized in net income in the year ended December 31, 2008 related to employees who terminated employment during 2008. A deferred curtailment gain was recorded in 2007 as a component of accumulated other comprehensive loss; the gain will be recognized in net income in future years when the related employees terminate employment.

The Medicare Prescription Drug, Improvement and Modernization Act of 2003 established a prescription drug benefit under Medicare ("Medicare Part D") and a federal subsidy to sponsors of retiree health care benefit plans that provide benefits that are at least actuarially equivalent to Medicare Part D. The benefits provided under the Bank's plan to certain participants are at least actuarially equivalent to the Medicare Part D prescription drug benefit. The estimated effects of the subsidy are reflected in actuarial loss in the accumulated postretirement benefit obligation and net periodic postretirement benefit expense.

Federal Medicare Part D subsidy receipts were \$0.2 million and \$0.3 million in the years ended December 31, 2008 and 2007, respectively. Expected receipts in 2009, related to benefits paid in the years ended December 31, 2008 and 2007 are \$0.1 million.

Following is a summary of expected postretirement benefit payments (in millions):

	Without subsidy		With subsidy	
2009	\$	4.0	\$	3.8
2010		4.3		4.0
2011		4.6		4.3
2012		4.7		4.4
2013		4.9		4.5
2014 - 2018		25.8		23.5
Total	\$	48.3	\$	44.5

## Postemployment Benefits

The Bank offers benefits to former or inactive employees. Postemployment benefit costs are actuarially determined using a December 31 measurement date and include the cost of medical and dental insurance, survivor income, and disability benefits. The accrued postemployment benefit costs recognized by the Bank at December 31, 2008 and 2007, were \$5 million and \$6 million, respectively. This cost is included as a component of "Accrued benefit costs" in the Statements of Condition. Net periodic postemployment benefit (credit) expense included in 2008 and 2007 operating expenses were \$(92) thousand and \$269 thousand, respectively, and are recorded as a component of "Salaries and other benefits" in the Statements of Income and Comprehensive Income.

# 13. Accumulated Other Comprehensive Income and Other Comprehensive Income

Following is a reconciliation of beginning and ending balances of accumulated other comprehensive loss in (millions):

	Amount rela	ated to
	postretirement ben	
	other than pe	nsions
Balance at January 1, 2007	\$	(7)
Change in funded status of benefit plans:		
Net actuarial gain arising during the year		4
Amortization of prior service cost		(1)
Amortization of net actuarial loss		1
Change in funded status of benefit plans - other comprehensive income		4
Balance at December 31, 2007	\$	(3)
Change in funded status of benefit plans:		
Net actuarial loss arising during the year		(6)
Amortization of prior service cost		(1)
Change in funded status of benefit plans - other comprehensive loss		(7)
Balance at December 31, 2008	\$	(10)

Additional detail regarding the classification of accumulated other comprehensive loss is included in Note 12.

# 14. Business Restructuring Charges

## 2007 Restructuring Plans

In 2007, the Reserve Banks announced a restructuring initiative to align the check processing infrastructure and operations with declining check processing volumes.

Following is a summary of financial information related to the restructuring plans (in millions):

	2007 Restructuring plan	
Information related to restructuring plans as of December 31, 2008:		
Total expected costs related to restructuring activity	\$	2.3
Estimated future costs related to restructuring activity		0.1
Expected completion date		2009
Reconciliation of liability balances:		
Balance at January 1, 2007	\$	_
Employee separation costs		2.4
Balance at December 31, 2007	\$	2.4
Employee separation costs		0.3
Adjustments		(0.5)
Payments		(1.6)
Balance at December 31, 2008	\$	0.6

Employee separation costs are primarily severance costs for identified staff reductions associated with the announced restructuring plans. Separation costs that are provided under terms of ongoing benefit arrangements are recorded based on the accumulated benefit earned by the employee. Separation costs that are provided under the terms of one-time benefit arrangements are generally measured based on the expected benefit as of the termination date and recorded ratably over the period to termination. Restructuring costs related to employee separations are reported as a component of "Salaries and other benefits" in the Statements of Income and Comprehensive Income.

Adjustments to the accrued liability are primarily due to changes in the estimated restructuring costs and are shown as a component of the appropriate expense category in the Statements of Income and Comprehensive Income.

Restructuring costs associated with the impairment of certain Bank assets, including software, leasehold improvements, and equipment, are discussed in Note 9. Costs associated with enhanced pension benefits for all Reserve Banks are recorded on the books of the FRBNY as discussed in Note 11.

## 15. Subsequent Events

In February 2009, the System announced the extension through October 30, 2009, of liquidity programs that were previously scheduled to expire on April 30, 2009. The extension pertains to the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility and the Term Securities Lending Facility. In addition, the temporary reciprocal currency arrangements (swap lines) between the Federal Reserve and other central banks were extended to October 30, 2009.

In 2008, the Board of Governors engaged Deloitte & Touche LLP (D&T) for the audits of the individual and combined financial statements of the Reserve Banks. Fees for D&T's services are estimated to be \$10.2 million. Approximately \$2.7 million of the estimated total fees were for the audits of the limited liability companies (LLCs) that are associated with recent Federal Reserve actions to address the financial crisis, and are consolidated in the financial statements of the Federal Reserve Bank of New York. Each LLC will reimburse the Board of Governors for the fees related to the audit of its financial statements from the entity's available net assets. To ensure auditor independence, the Board of Governors requires that D&T be independent in all matters relating to the audit. Specifically, D&T may not perform services for the Reserve Banks or others that would place it in a position of auditing its own work, making management decisions on behalf of Reserve Banks, or in any other way impairing its audit independence. In 2008, the Bank did not engage D&T for any non-audit services.

# bank mission

As part of the nation's central bank, the Federal Reserve Bank of Boston promotes sound growth and financial stability in New England and the nation.

The Bank contributes to local communities, the region, and the nation through its high-quality research, regulatory oversight, and financial services, and through its commitment to leadership and innovation.

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