The Rise in Long-Term Unemployment
Potential Causes and Implications

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Jeffrey M. Lacker
President

The financial crisis and subsequent recession were periods of significant turmoil for financial markets and significant hardship for many Americans.

Thankfully, the economy is recovering, and I believe it will continue to strengthen over time—though, of course, this will depend on a variety of factors that are hard to forecast.

We are still learning about the causes of the recession of 2007–09. This process will be a lengthy endeavor, one that will occupy the attention of economists for years to come, just as it has been with the Great Depression of the 1930s. This is as it should be. Such a watershed event deserves close scrutiny so that policymakers can take steps to help avoid some of the problems we have recently witnessed.

While I am heartened to say that the economy is rebounding, there can be little doubt that many Americans are still struggling. This is especially true for those who lost work and continue to search for jobs. As the essay in this year's *Annual Report*, written by Richmond Fed economists Andreas Hornstein and Thomas Lubik, points out, the fraction of workers who are experiencing long-term unemployment—defined as being out of the workforce for 26 weeks or more—is significantly larger than it has been following recent recessions. This is true even compared to other "jobless recoveries," such as those of 1990–91 and 2001. As Hornstein and Lubik note, the prevalence of long-term unemployment is tied, in part, to lower exit rates from joblessness. This process becomes more difficult the longer someone is unemployed. There are many reasons for this phenomenon, but those reasons can be divided roughly into two groups.

The first set of reasons may account for what Hornstein and Lubik call "true duration dependence" in exit rates. They center on reductions in human capital. As people are out of work for longer and longer periods, they may lose skills that employers find desirable, including some largely intangible skills that one obtains simply by being in the workforce. This situation may be compounded by the fact that as the period of unemployment increases, the network of former colleagues and associates who might help someone find employment decreases.
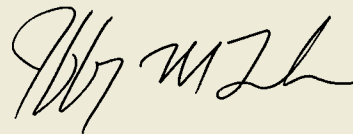
The second set of reasons is related to what Hornstein and Lubik dub "unobserved heterogeneity." Some job losses are due to factors that are idiosyncratic to the previous employer. In such cases, workers may be able to find work relatively quickly and thus may not suffer from prolonged unemployment. But some of those losses may be due to structural declines in certain sectors of the economy—for instance, areas of the manufacturing sector that have seen a marked decline in output for some time. Workers in those sectors might have rather specific sets of skills that can be hard to transfer to other industries. As a result, they could have significant difficulty finding future employment.

In their essay, Hornstein and Lubik attempt to carefully explain the driving forces behind long-term unemployment and which of those forces are of greatest quantitative importance. This is an important exercise that can help illuminate what is happening in the economy and the options policymakers may consider to assist people who desperately want to find work.

As Hornstein and Lubik note, a rise in long-term unemployment due to structural reasons could mean that the "natural rate" of unemployment—the lowest possible unemployment rate that is consistent with stable inflation—has increased. This would suggest that monetary stimulus may not be a particularly effective means of getting people back into the workforce. Instead, structural and labor market reforms might be more useful. And, indeed, there is some evidence from abroad that these types of reforms have helped reduce long-term unemployment. In my view, the best contribution monetary policy can make to creating more jobs for all Americans, including those who have been out of the workforce for some time, is to ensure that inflation remains low and stable.

Just as we do not fully know the causes of this recession, we also do not fully know which policies will be most beneficial in fostering the recovery. This may not be a particularly satisfactory response for those Americans who are still suffering from the economic downturn. But it's a response that I think reflects a necessary humility. Too often, I believe, policymakers have been tempted to solve problems only to find that the measures they implemented made little difference or, worse, actually exacerbated the situation they were trying to improve. Policymakers at the Federal Reserve and other institutions surely should work with all appropriate haste to find answers to tough problems, but should avoid the risk of believing we know more than we actually do about the fundamental sources of those problems. It is my hope that our essay in this year's *Annual Report* will make an important contribution to that effort.

Jeffrey M. Lacker
President

The Rise in Long-Term Unemployment
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By Andreas Hornstein and Thomas A. Lubik

The dramatic rise in long-term unemployment has been one of the most striking features of the Great Recession of 2007–09. The number of unemployed workers who have been out of a job for more than half a year has reached heights that the U.S. economy has not witnessed since the Great Depression.

The overall unemployment rate has been elevated for a substantial period of time, although it has not reached its post–World War II peak of 10.8 percent. Underlying this dire unemployment picture is the rise in long-term unemployment and an overall lengthening of the duration of unemployment spells, which are now far above their levels in previous recessions.

The U.S. labor market historically has been characterized by relatively short unemployment durations for an average worker. The high level of long-term unemployment we are currently seeing represents a sharp break with previous experiences. In the past, most job losses led to only short unemployment spells, as the labor market was able to quickly absorb newly unemployed workers into employment relationships. Although some workers, in particular older ones, experienced long periods of unemployment, the incidence of long-term unemployment in the United States was far less than in other OECD countries. Moreover, although recessions have always been characterized by

lengthening unemployment spells, a quick increase in hiring when coming out of a recession kept the incidence of long-term unemployment low. The Great Recession seems to be different in that respect.

The high level of unemployment, in combination with a high fraction of long-term unemployment, presents challenges for both monetary and fiscal policymakers. Many of the efforts of the Federal Reserve were aimed at halting the decline in output and employment in the wake of waves of adverse shocks. Arguably, the Fed's policies were successful in that respect. However, the U.S. economy has been operating under extremely low nominal interest rates for such an extended period that additional expansionary monetary actions, such as quantitative easing, are possibly only marginally effective.

In this article we discuss how long-term unemployment has become such a dominant feature of the labor market during the Great Recession. We first

summarize the data on aggregate unemployment and the duration distribution of unemployment for the United States since 1960. We then show that, in terms of pure accounting, the composition of the unemployment pool is determined by the inflow and outflow of workers, that is, by the rates at which workers lose and find jobs. We begin from an aggregate perspective and argue that the increase in long-term unemployment can largely be explained by a decline in the exit rate from unemployment. The severity of the recession led to high initial job losses, but the persistent and substantial increase in unemployment and unemployment duration is mainly due to a decline in job finding rates. In response to the increase in long-term unemployment, Congress extended the maximum duration of unemployment benefits from six months to close to two years. We discuss the effects of this extension on unemployment duration and argue that the effects have been limited.

We then proceed to a more disaggregate analysis and study how unemployment of different demographic groups was affected by the Great Recession. We show that unemployment rates and duration differ substantially across demographic groups, but that almost all groups were equally affected by the increase in unemployment rates and duration. We then discuss how negative duration dependence, that is, the apparent decline in job finding rates with the length of time unemployed, affects long-term unemployment. We find that accounting for duration dependence allows us to better model long-term unemployment in the U.S. labor market. This accounting framework also suggests that a significant part of the increase in long-term unemployment is indeed due to the inflow into unemployment of workers with relatively low job finding rates. We conclude by arguing that given the increased contribution to overall unemployment of unemployed workers with inherently low job finding rates, monetary policymakers may want to exercise caution in the use of policy to respond to the level of unemployment.

A Look at the Data

The standard measure of unemployment comes from the monthly Current Population Survey (CPS) conducted by the Census Bureau for the Bureau of Labor Statistics. This survey, commonly known as the household survey, is a randomly selected sample of about

60,000 households that report on their employment status and other characteristics.[1]

A respondent is classified as employed, unemployed, or out of the labor force. A respondent is classified as unemployed if he or she reports not being employed but is actively searching for a job. The labor force is defined as those respondents who are either employed or unemployed, and respondents who are neither employed nor actively searching for a job are classified as being out of the labor force. The unemployment rate is the ratio of the number of unemployed respondents to the number of workers in the labor force. Conditional on the employment state, there are follow-up questions that further characterize the employment state. Employed respondents are asked about the type of employment (part-time or full-time), their occupation, and the industry of employment, among other questions. Unemployed respondents are asked about the length of the ongoing unemployment spell and their previous occupation and industry. Basic demographic information is also collected, such as the sex, age, race, and education level of the respondent.[2]

There are two notable features to the pattern of the rise and fall of unemployment over the business cycle. First, unemployment rises rapidly at the onset of a recession, but it comes down only slowly over the course of the recovery. Second, long-term unemployment increases sharply with overall unemployment.

Figure 1 depicts the unemployment rate (dark orange line, left axis) and the share of total unemployment that is long-term unemployment (green line, right axis) for the U.S. economy from 1960 through 2010, with recessions highlighted in grey.[3] The average unemployment rate for this period is about 6 percent, but unemployment increases substantially in recessions. For example, in the 1981–82 recession the unemployment rate increased by about three percentage points within one and a half years to reach a peak of 10.8 percent in October 1982. In the expansion phase, the unemployment rate then usually declines slowly from its peak. This pattern is especially noticeable for the 1990–91 recession and the 2001 recession, and has given rise to the idea of a "jobless recovery," in which economic growth picks up, but employment gains are small and unemployment declines only slowly. This pattern seems to be repeating itself in the current recovery.

Figure 1: Long-Term Unemployment
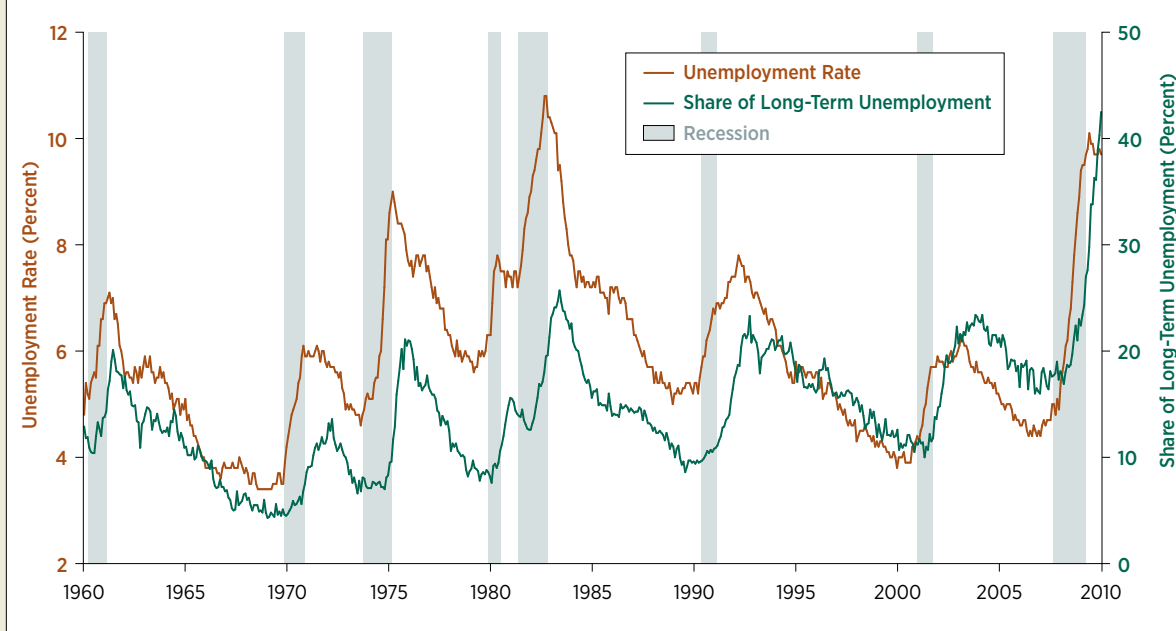
The share of long-term unemployment (more than 26 weeks) as a percent of total unemployment typically increases during recessions (the shaded areas). But following the most recent recession, the share is nearly double the previous peak after the 1981–82 recession.

Sources: Bureau of Labor Statistics, Haver Analytics, authors' calculations

Long-term unemployment is defined as being unemployed for more than 26 weeks. This is the conventional measure of long-term unemployment since unemployment benefits typically last for about half a year. In Figure 1 we see that the average share of long-term unemployment is quite low, about 15 percent from 1960 to 2010, but in every recession the share of long-term unemployment increases sharply with the unemployment rate. A similar observation applies to the mean duration of unemployment for all those who report job search durations in any month. From 1960 to 2010 the average mean duration of unemployment is about 14 weeks, but mean duration increases significantly in recessions.

The increase in unemployment during the Great Recession stands out for its severity, especially the substantial increase in long-term unemployment. Unemployment peaked at 10.1 percent in October 2009, about one quarter after the official end of the recession according to the National Bureau of Economic Research (NBER) dating scheme, and stayed close to this level

for almost one year. For the postwar period, this peak unemployment rate is second only to the 10.8 percent unemployment rate after the 1981–82 recession. The share of long-term unemployment peaked at 46 percent in the second quarter of 2010, and averaged a bit more than 43 percent for all of 2010. This peak value for the share of long-term unemployment is significantly higher than the previous peak of 26 percent that was attained following the 1981–82 recession. Finally, mean duration of unemployment had increased to about 35 weeks by the middle of 2010, again a substantial increase over the previous peak for mean unemployment duration of 21 weeks after the 1981–82 recession. Never before in the postwar period have unemployed workers been unemployed for such a long time.

Accounting for Unemployment

We now take a more systematic look at how total unemployment is related to unemployment duration. For this purpose we study how the inflows into unemployment

Figure 2: Duration Dependence in Exit Rates
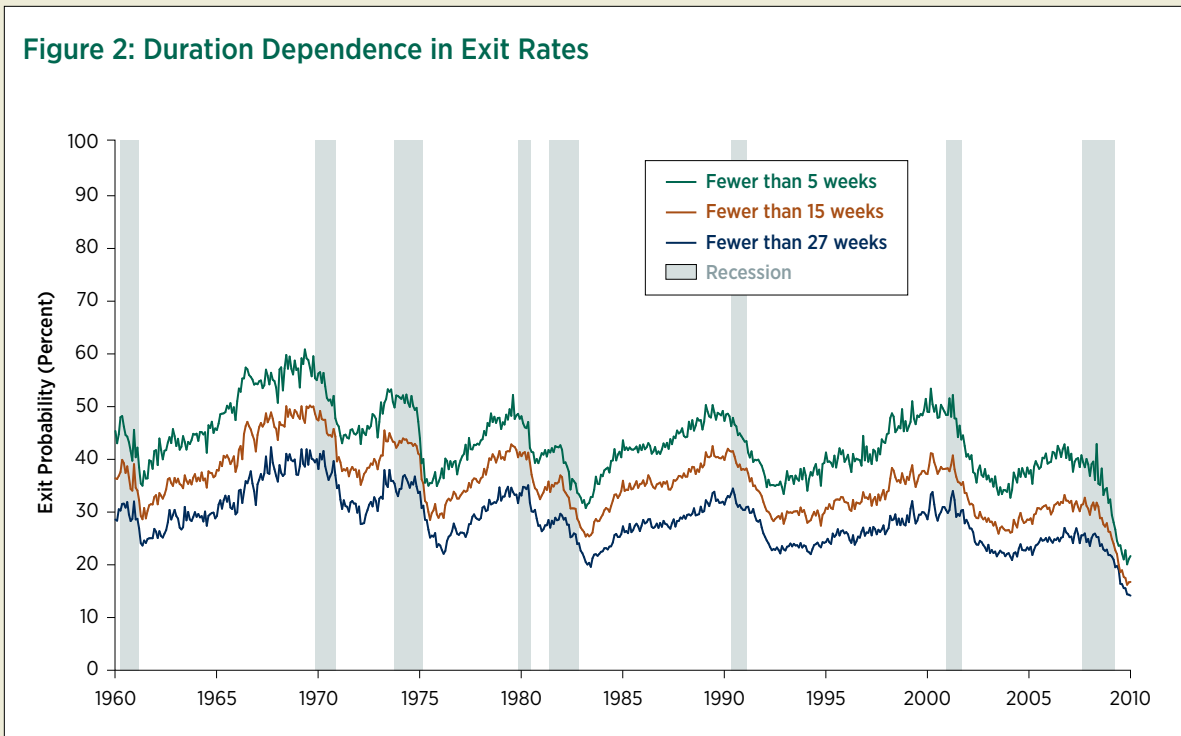
Workers who have been unemployed for fewer than five weeks have the highest probability of exiting unemployment within the next month. The likelihood of exit typically declines for all workers during recessions (the shaded areas), but it continued to decline well after the troughs of the last three recessions.

Sources: Bureau of Labor Statistics, Haver Analytics, authors' calculations

and the outflows from unemployment determine total unemployment. One can think of total unemployment as the water level in a bathtub, which is determined by the inflow of new water and the rate at which the water drains. The total number of unemployed workers is determined by the rate at which workers become newly unemployed and start looking for work (the entry rate) and the rate at which current unemployed workers find work (the exit rate).[4] Other things being equal, the more workers who become newly unemployed, that is, the higher the entry rate, then the higher the total number of unemployed workers. Similarly, at a given inflow rate of newly unemployed workers, the less likely it is that an unemployed worker finds a new job, then the higher the total number of unemployed workers will be eventually. For a slightly more formal representation of this model see Box 1.

While total unemployment depends on both the entry and exit rates, the average duration of unemployment depends mainly on the behavior of the exit rate. The

lower the exit rate, that is, the lower the chance that an unemployed worker becomes employed, then the longer the average unemployment duration and the larger the share of workers who have been unemployed for a long time.

Robert Shimer (2007) shows how one can recover measures of the entry and exit rate from data on total unemployment and data on short-term unemployment, that is, workers who have been unemployed for fewer than five weeks.[5] The maintained assumption of his accounting exercise is that all unemployed workers are homogeneous in the sense that they all have the same exit rate. This is a simplifying assumption that provides some valuable first insight into the dynamics of unemployment and the interpretation of long-term unemployment. We will relax that assumption below.

Since the increase in the unemployment rates during recessions is usually accompanied by a substantial lengthening of unemployment duration, a declining exit rate

A Simple Framework for Unemployment Accounting

We can formalize the bathtub model of unemployment described in the text as follows. The labor force consists of a fixed number of L workers who are either employed, E, or unemployed, U, and $L = E+U$. For simplicity assume that employed workers become unemployed at a constant rate σ and that unemployed workers become employed at a constant rate λ. Then the rate of change of unemployment, $\dot{U}$, is simply the difference between inflows and outflows,

$$\dot{U} = \sigma E - \lambda U.$$

Inflows and outflows and the change in unemployment are to be interpreted as occurring instantaneously. The unemployment rate is $u = U/L$ and the employment rate is $e = E/L = 1 - u$. The rate of change of the unemployment rate is

$$\dot{u} = \sigma(1-u) - \lambda u.$$

Inflow and outflow rates may change over time, but if these rates remain constant, unemployment will converge to a rest point or steady state, u^*. If inflows exceed (fall short of) outflows, the unemployment rate will increase (decline), $\dot{u} > 0$ ($\dot{u} < 0$), toward the steady state. In the steady state, inflows and outflows just balance such that the unemployment rate remains constant, $\dot{u} = 0$,

$$u^* = \frac{\sigma}{\sigma+\lambda}.$$

If the exit rate from unemployment is large relative to the inflow into unemployment, convergence to the steady state will be fast. In this case, not much is lost in thinking about unemployment in any given month as steady state unemployment corresponding to the inflow and outflow rates for that month, and ignoring the convergence to the steady state.

This simple model assumes that every unemployed worker faces the same chance of exiting the unemployment pool. In particular, this exit rate is independent of the time the worker has been unemployed. Again, assum-

ing that the inflow and outflow rates remain unchanged, we can calculate the implied duration distribution of unemployment in the steady state. The share of unemployed workers who have been unemployed for no more than duration T is then given by

$$\omega_T^* = 1 - e^{-\lambda T}.$$

Entry and exit rates in U.S. unemployment are indeed quite high, and we can interpret unemployment and the duration distribution of unemployment as being close to their steady states. In the text we use data on the duration distribution to recover estimates of the exit rate from unemployment. Given an estimate of the exit rate, we then use data on unemployment to obtain estimates of the entry rate into unemployment.

Another way to relate the exit rate from unemployment to observables is to consider its implications for the average duration of unemployment. Our description of the outflows from unemployment—that an unemployed worker becomes employed at the instantaneous rate λ independent of how long that worker has been unemployed—corresponds to a particular stochastic process, namely a Poisson process. For such a process the average duration that a worker is unemployed is simply the inverse of the exit rate,

$$\bar{T} = 1/\lambda.$$

The relationship between the exit rate from unemployment and the average duration of unemployment allows us to obtain a back of the envelope calculation of the effect of extended unemployment benefits on the unemployment rate. Suppose that an extension of the length of unemployment benefits increases the average duration of unemployment from T_0 to T_1. That implies a reduction in the exit rate from unemployment from $\lambda_0 = 1/T_0$ to $\lambda_1 = 1/T_1$. Everything else the same, that is, with no change in the separation rate, the steady state unemployment rate increases from $u_0 = \sigma/(\sigma+1/T_0)$ to $u_1 = \sigma/(\sigma+1/T_1)$.

must be an important source of high unemployment. In other words, it is hard to find a job during recessions. This observation also suggests that more long-term unemployment does not necessarily mean that the long-term unemployed are in any way different from the short-term unemployed. Even if all unemployed workers face the same exit rate, a decline in the exit rate will yield higher average unemployment duration and an increased share of long-term unemployment.

We follow Shimer's (2007) simple accounting framework and recover entry and exit rates of homogeneous unemployed workers. In Figure 2 we display the implied exit rates of workers who have been unemployed for fewer than 5 weeks, fewer than 15 weeks, and fewer than 27 weeks. The green line displays the exit rate from unemployment implied by data on short-term unemployment, that is, those workers who have been unemployed for fewer than 5 weeks.[6] Most of the time unemployed workers find a job quite quickly: the average probability that an unemployed worker finds work within a month is about 40 percent, and at the peak of an expansion this job finding probability can be as high as 60 percent. As we also can see, the exit rate from unemployment drops sharply in a recession, falling to about 35 percent in previous recessions. Furthermore, in the jobless recoveries after the 1990–91 recession and the 2001 recession, the exit rate from unemployment declined significantly even two years after the recessions' troughs. The 2007–09 recession again stands out in terms of the speed and magnitude of the decline in the exit rate from unemployment. One year after the trough, the probability of finding a job within a month declined to about 20 percent, about half the average exit rate from unemployment and substantially less than in previous recessions.

A model with homogeneous unemployment is consistent with the qualitative features of long-term unemployment in recessions, but it cannot account for the magnitude of long-term unemployment in recessions. Using the entry and exit rates from our unemployment accounting exercise, we can construct counterfactual duration distributions for unemployment. By construction, the parameters of the simple model exactly match total unemployment and the number of workers unemployed for fewer than 5 weeks. A model with homogeneous unemployed workers is not a good match for medium- and long-term unemployment, however. Consistent with the data on previous recessions, the model does predict a sharp rise in medium- to long-term unemployment in recessions. But the model significantly understates the magnitude of long-term unemployment: for almost all recessions the model predicts only one-third of those workers who are unemployed for more than 26 weeks.

The Effects of Unemployment Insurance on Unemployment

We use the share of unemployed workers who have been unemployed for more than 26 weeks as a measure of long-term unemployment. As noted above, the particular cutoff duration for this conventional definition of long-term unemployment is related to the maximum duration of unemployment benefits, usually 26 weeks. Unemployment compensation programs are administered at the state level, and the amount and duration of benefits may vary across states. The duration of unemployment compensation tends to increase in response to increased unemployment following a cyclical downturn. These changes occur at the state and federal level. In particular, in response to the increase in long-term unemployment in 2008, in June of that year Congress authorized an Emergency Unemployment Compensation (EUC) program that provided an additional 13 weeks of benefits for unemployed workers who were eligible under state programs. After various

additional authorizations, by early 2010 the maximum duration of unemployment benefits was 99 weeks, with some variation across states. For a description of the different programs, see Daniel Aaronson, Bhashkar Mazumder, and Shani Schechter (2010).

The duration of unemployment benefits is extended in order to lessen the negative impact of unemployment on long-term unemployed workers. A side effect of extended benefits can be to lengthen the average duration of unemployment. If we assume that unemployed workers make choices about whether to accept or reject job offers, then increasing or extending unemployment benefits will affect how these choices are made. On the one hand, unemployed workers who are currently eligible for unemployment benefits may be willing to hold out for longer until they receive what they think is a more acceptable offer. This will reduce the exit rate

from unemployment for these workers and thereby increase the average duration of unemployment. On the other hand, not every unemployed worker qualifies for unemployment benefits. In order to qualify, a worker must have had a job and must have been laid off. If a worker does not qualify for unemployment benefits, lengthening the duration of unemployment benefits does not mean much for the worker now, but it does make taking a job much more attractive since the worker then qualifies for the extended unemployment benefits should the worker become unemployed again. Thus one might expect that unemployed workers who are ineligible for unemployment benefits become more willing to accept job offers if unemployment benefits are extended.

There is a considerable amount of empirical work on the possible effects of extended unemployment benefits

Over time, people who are unemployed tend to lose human capital and attachment to networks that could help them find work.

on unemployment duration. Aaronson et al. (2010) and Michael Elsby, Bart Hobijn, and Ayşegül Şahin (2010) survey that work and provide some estimates on how the EUC program may have affected the duration of unemployment. They start with estimates that an extension of unemployment payments by one week tends to increase unemployment duration by 0.1 to 0.2 weeks. Considering that the duration of unemployment benefits has been increased by up to 73 weeks, and that only about 50 percent of unemployed workers are eligible for unemployment benefits, they estimate that the EUC program may have lengthened the average duration of unemployment by between 2 and 6 weeks. This is a significant lengthening, but much less than the actual 18-week increase of average unemployment duration from about 17 weeks in 2008 to 35 weeks in the middle of 2010. Furthermore, as Aaronson et al. (2010) and Elsby et al. (2010) point out, the lower bounds of their estimates are likely to be more relevant than the upper bounds. Finally, using the simple bathtub model of unemployment, one can translate the estimated increase in unemployment duration to an increase in the unemployment rate of between one and three percentage points.[7]

Different Unemployment Experiences

The previous discussion considers only the behavior of total unemployment in the economy. But the labor market experience in the United States is not the same for all members of the labor force. Unemployment rates differ vastly across demographic groups. For instance, as of December 2010 the unemployment rate among individuals who have not completed high school was more than three times the unemployment rate of those with a college degree. It is therefore tempting to hypothesize that some of the higher unemployment and the longer unemployment duration might be due to composition effects. This term describes the idea that during a recession the composition of newly unemployed workers shifts toward demographic groups characterized by lower exit rates and longer durations. In other words, the overall unemployment picture hides deeper dynamics in the labor market that affect specific groups, occupations, or industries in markedly different ways.

In Table 1 we show the average unemployment rate, mean duration of unemployment, and share of long-term unemployment for several demographic groups for the available sample after 1960 and for the year 2010. Three things are apparent: First, unemployment rates and unemployment durations differ significantly across demographic groups. Second, during the 2007–09 recession, unemployment tended to increase more in some groups that in the past were less susceptible to job loss in recessions. Third, for all demographic groups, unemployment rates, mean durations of unemployment, and long-term unemployment shares are significantly higher than their sample averages prior to the recession. While the first two observations point to the possibility that changes in the composition of unemployment inflows might contribute to the overall increase in unemployment, the third observation suggests that changes in composition cannot be a complete explanation for the overall increase in unemployment.

The average unemployment rate in 2010 was more than 50 percent higher than the average unemployment rate from 1960 through 2010. Although the unemployment rate of males tends to be somewhat lower than the unemployment rate of females, in 2010 the unemployment rate of males increased relative to that of females. Across age groups, the unemployment rate of younger workers (under 25) tends to be higher than that of older workers (over 55), but in 2010 the unemployment rate of older workers increased relative to that of younger workers.[8] Overall, the unemployment rate of

Table 1: Demographic Differences in Unemployment

	Unemployment Rate		Unemployment Duration		Share of Long-Term Unemployment	
	Sample Avg.*	2010 Avg.	Sample Avg.	2010 Avg.	Sample Avg.	2010 Avg.
Total	**6.1**	**9.6**	**14.9**	**33.1**	**15.0**	**43.3**
Gender						
Female	6.3	8.6	14.8	32.0	14.9	41.5
Male	5.9	10.5	17.6	33.9	18.9	44.7
Age						
24 and younger	12.4	18.4	11.8	23.3	10.6	29.7
25–54	4.8	8.6	18.7	35.5	19.9	46.9
55 and older	3.6	7.0	22.1	40.6	40.1	79.3
Race						
White	5.3	8.7	15.5	32.1	15.9	42.0
Black (1972–2010)	12.2	16.0	18.3	36.7	20.0	48.4
Asian (2000–2010)	4.9	7.5	22.0	36.9	26.1	48.5
Hispanic (1973–2010)	9.1	12.5	17.1	30.7	15.5	39.4
Occupation (2000–2010)						
Management, business, and financial operations	2.9	5.1	22.4	38.4	26.8	52.0
Professional and related occupations	2.9	4.5	19.9	32.6	22.6	43.3
Services	6.9	10.3	17.7	29.9	19.4	38.9
Production, transportation, and material moving	7.9	12.8	20.3	36.5	25.9	61.8
Industry (2000–2010)						
Construction	10.3	20.6	16.9	33.3	18.3	42.8
Manufacturing	6.3	10.6	22.3	39.8	26.8	53.8
Wholesale and retail trade	6.1	9.5	19.2	34.6	21.5	45.2
Transportation and utilities	5.2	8.4	20.4	37.9	23.6	49.2
Information	5.8	9.7	22.8	37.9	26.9	50.8
Financial activities	3.8	6.9	21.0	38.0	25.0	51.5
Professional and business services	7.2	10.9	19.5	33.7	22.4	45.1
Education and health services	3.6	5.8	18.3	30.1	20.0	39.4
Leisure and hospitality	8.6	12.2	16.6	29.5	17.8	37.5
Education (1992–2010)**						
Less than high school	9.0	14.9				
High school completed	5.4	10.3				
Some college	4.4	8.4				
College completed	2.6	4.7				

* Monthly observations from 1960 to 2010 unless otherwise noted.

** Data for unemployment duration and share of long-term unemployment are not readily available.

Unemployment rates and durations differ across demographic groups. In the 2007–09 recession, unemployment nearly doubled in groups that traditionally have lower unemployment rates, such as college-educated workers and those in management, business, and financial operations.

Sources: Bureau of Labor Statistics, Haver Analytics, authors' calculations

workers who have not completed high school is about three times as high as that of workers with a college degree, yet in 2010 the unemployment rate of college-educated workers increased slightly relative to that of workers without a high school degree. Workers in managerial occupations related to business and financial operations have some of the lowest unemployment rates among all occupations, certainly compared to service-oriented occupations and occupations in the production sector, but in 2010 the unemployment rate for managerial occupations increased somewhat relative to these other occupations.[9] Across industries, the average unemployment rate in construction in 2010 was nearly three times the rate in financial activities, but in both industries the rate almost doubled over the sample average. Since construction and financial services were at the heart of the 2007–09 recession, it should not be too surprising that workers affiliated with both industries experienced some of the biggest increases in unemployment rates.

The differences in unemployment rates across demographic groups are accompanied by similar differences in mean unemployment duration and long-term unemployment shares, although the relationship between these variables is not particularly tight. For example, on average the mean unemployment duration of older workers is more than twice the mean duration of younger workers, yet the unemployment rate of older workers is less than half that of younger workers. This observation highlights that there are two determinants of unemployment, inflows and outflows, as discussed previously.[10] The low unemployment rate for older workers, then, is mainly due to a very low inflow rate into unemployment—in other words, a very low probability of losing a job. On the other hand, once an older worker loses a job and becomes unemployed, the probability of finding a new job is very low compared to a younger worker. Nevertheless, it appears as if a general decline in job finding rates was an important driver of the increased unemployment rate in the 2007–09 recession. Across all demographic groups, there are comparable increases in mean unemployment duration and long-term unemployment shares in 2010.

We have documented differences in the way unemployment rates, mean duration, and long-term unemployment changed for different demographic groups, but we do not want to overemphasize these differences since essentially all groups experienced significant increases in unemployment. A more thorough analysis of the role of demographic changes and their contributions to the average duration of unemployment is provided by Aaronson et al. (2010). They compare average unemployment duration in (1) the expansion phases following the 1981–82 and the 2001 recessions, and in (2) the first six months following the 1981–82 and the 2007–09 recessions. To a first approximation, Aaronson et al. (2010) calculate the change in total unemployment that is attributable to two different factors. First, they calculate the change in unemployment duration that would have occurred given the change in the demographic composition of the labor force, but assuming that the unemployment durations within demographic groups do not change. Second, they calculate the change in unemployment duration that would have occurred assuming no change in the demographic composition of the labor force, but allowing for the observed change of unemployment durations within demographic groups.[11] They find that comparing the expansion phases after the 1981–82 and 2007–09 recessions, changes in the labor force composition account for less than half of the trend change in unemployment duration. Furthermore, comparing the periods immediately after the 1981–82 and 2007–09 recessions, changes in the labor force account for only one-fifth of the difference in unemployment duration.

Duration Dependence of Unemployment

People are different, and survey measures do not capture all the characteristics that are relevant to unemployment duration. Some characteristics that are relevant to the chances of an unemployed worker finding work can be quite persistent yet unobservable, and these characteristics might actually be related to the unemployment experience itself. For example, consider two equal pools of unemployed workers who at the beginning of the month share the same observable characteristics, except for the time that they have been unemployed already. On average, at the end of the month relatively more workers from the pool with the shorter unemployment duration will have found work. In other words, the longer a worker has been unemployed already, the less likely it is that he or she will find a job. This apparent decline in exit rates with the length of time unemployed is called "negative duration dependence."[12]
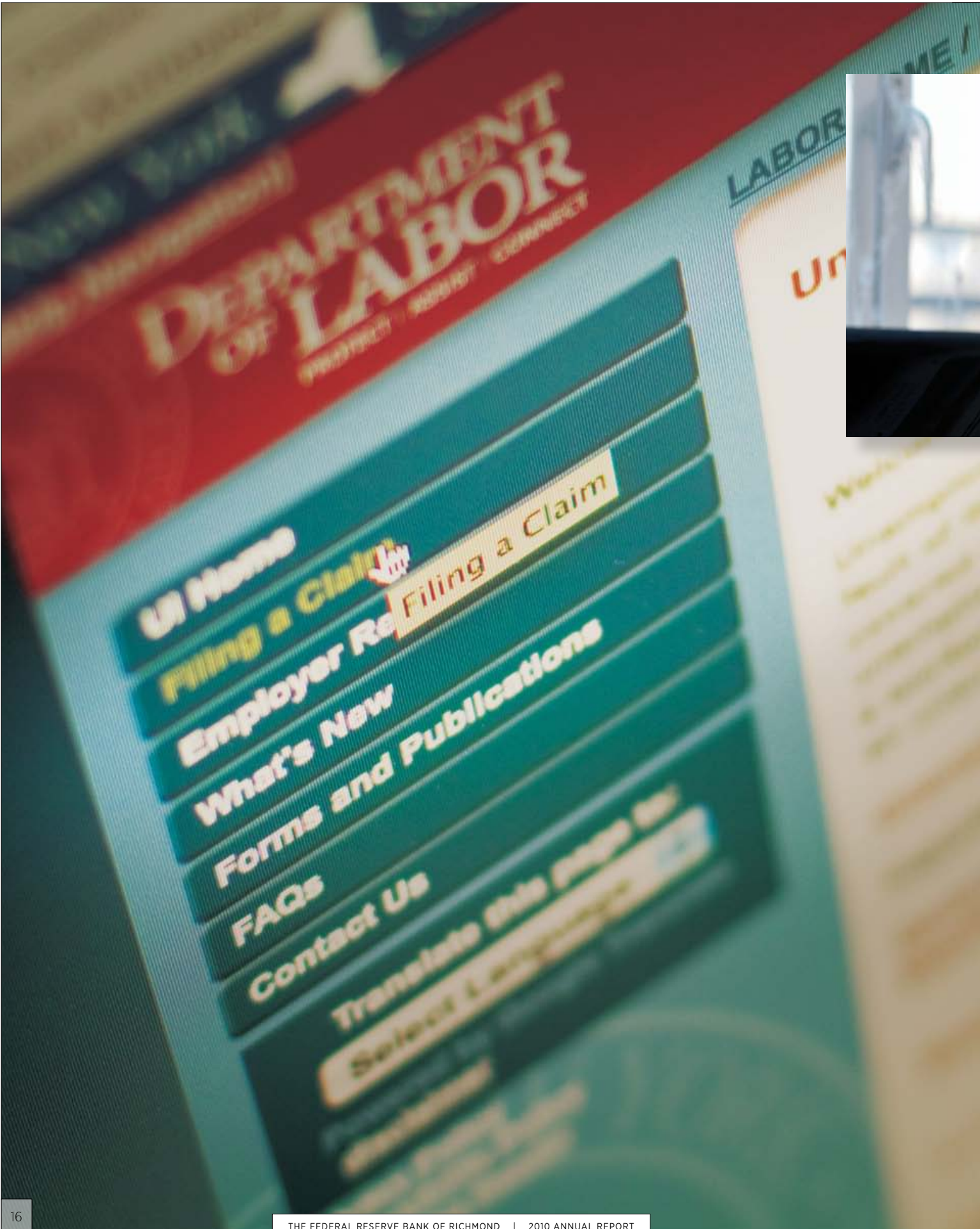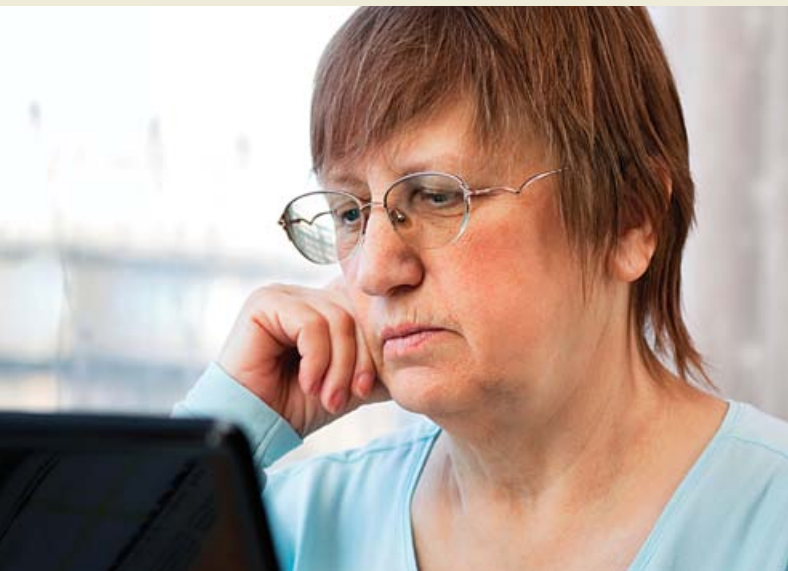
By early 2010, the maximum duration of unemployment benefits was 99 weeks.

Negative duration dependence is clearly inconsistent with the simple model of homogeneous unemployment that we discussed previously, since that model assumes that in any given month all unemployed workers have the same chance of finding work, independent of how long they already have been unemployed. This observation may account for the fact that the simple model understates the prevalence of long-term unemployment.

As noted previously, we can use the entry and exit rates from our unemployment accounting exercise to construct counterfactual duration distributions for unemployment. When we account for unemployment in the previous section, we use the share of workers who were unemployed for fewer than 5 weeks to calculate estimates of the exit rate from unemployment. Suppose we were instead to use the share of workers who were unemployed for fewer than 15 weeks to calculate the exit rate from unemployment. The simple model imposes the same exit rate on workers who were unemployed for fewer than 5 weeks and on workers who were unemployed for between 5 and 15 weeks. But if there is negative duration dependence, the exit rate we calculate when we use the share of workers who have been unemployed for fewer than 15 weeks should be less than the exit rate we calculate when we use the share of workers who have been unemployed for fewer than 5 weeks. In Figure 2 we display the exit rates from unemployment based on different segments of the duration distribution of unemployment: the share of workers who have been unemployed for fewer than 5 weeks, fewer than 15 weeks, and fewer than 27 weeks. In fact, consistent with negative duration dependence, the implied exit rates decline monotonically as unemployment duration increases.

Two explanations have been proposed for the observed negative duration dependence of exit rates from unemployment. The first explanation simply assumes that for each unemployed worker, the exit rate is a declining function of elapsed unemployment duration. Then the exit rate from the unemployment pool declines with the duration that the pool's members have been unemployed. This approach is called "true duration dependence." An alternative explanation is to assume that newly unemployed workers already differ according to their exit rates from unemployment. Even if the exit rate for an individual worker does not change over time, the composition of the pool will change over time, which implies a change in the average exit rate from the pool. In particular, over time workers with a high exit rate will make up a smaller and smaller share of the remaining pool of workers who have not yet found work, which implies a declining average exit rate from the pool. This approach is called "unobserved heterogeneity."

Various reasons can account for true duration dependence in exit rates. For one, over time unemployed workers tend to lose skills associated with actual work experience and work-related training. This decline in human capital implies that the average wage offer an unemployed worker could obtain probably also would decline over time. If the benefits of staying unemployed remain constant over time, for example via constant unemployment insurance payments, while the average wage offer is declining, then the likelihood that an unemployed worker accepts an offer probably also declines over time, and so would the exit rate. Additionally, over time unemployed workers lose attachment to networks that may aid in finding new jobs. Finally, potential employers might interpret a prolonged unemployment spell as a signal of ability, irrespective of the true, underlying characteristics of the unemployed worker. All of this means that exit rates from unemployment would decline over time.[13]

Unobserved heterogeneity does not need any particular story. Clearly surveys do not capture all the information that is relevant to the determination of exit rates from unemployment. For example, a worker who loses a job for reasons that are idiosyncratic to the previous employer may have skills that are valued by a wide range of employers, and may find work relatively quickly. On the other hand, if a worker loses a job in an industry or occupation that is in secular decline, the skills of that worker may not be easily transferable to a wide range of employers, and this worker may stay unemployed for a long time.

The two explanations of duration dependence potentially have different policy implications. If true duration dependence is widespread among unemployed workers, then current high levels of unemployment might imply high future unemployment because more unemployed workers make the transition to long-term unemployment. In this case, a reduction in current unemployment, if possible, would reduce future unemployment. On the other hand, if unobserved heterogeneity accounts for duration dependence and the increase in unemployment, and the duration of unemployment is mainly due to an influx of workers with low exit rates, it might be a signal that unemployment is due to a "mismatch" of skills. In this case, high unemployment may reflect structural change and may not be amenable to monetary policy actions.

Preliminary work by one of the authors of this essay indicates that a simple framework with two types of unemployed workers—short-term unemployed with a relatively high exit rate from unemployment and long-term unemployed with a relatively low exit rate—can account quite well for the observed variation in the duration distribution of unemployment (Hornstein 2011). This framework allows for two special cases. The first case consists only of true duration dependence: all unemployed workers are initially short-term unemployed with a high exit rate from unemployment, but during unemployment workers make a random transition from short-term to long-term unemployment. The second case consists only of unobserved heterogeneity: workers are from the beginning either short-term or long-term unemployed, and they never change types.

The two special cases of the framework provide different accounts of unemployment volatility. In the true duration dependence case, almost all of the unemployment rate fluctuations are attributed to exit rate fluctuations of the two types. Changes in entry rates of short-term unemployed workers and transition rates from short-term to long-term unemployment—that is, the true duration mechanism itself—have only a limited effect. In the unobserved heterogeneity case, on the other hand, a substantial portion of the unemployment rate fluctuation is attributable to changes in the entry rate of long-term unemployed workers. In this case, fluctuations in entry and exit rates of long-term unemployed workers account for about two-thirds of unemployment rate volatility. Of the two cases, the unobserved heterogeneity approach provides a better match to the unemployment duration distribution.

The more general framework that allows for both true duration dependence and unobserved heterogeneity yields results that are closer to the special case of only unobserved heterogeneity. In the general framework, unemployment volatility is about equally accounted for by changes in the entry rate of long-term unemployed workers and the exit rates of both types. Furthermore, it appears as if the observed increase in unemployment in the 2007–09 recession is mainly driven by the increased entry rate and reduced exit rate of long-term unemployed workers.[14] Given the above interpretation of long-term unemployment due to unobserved

Figure 3: Labor Market Turnover in Selected OECD Countries

Note: The number to the right of each country name is the average unemployment rate from 1968–2006.

Y-axis: Job Loss Probability (monthly)

X-axis: Job Finding Probability (monthly)

Canada 8.7
United States 5.9
Norway 4.2
New Zealand 6.3
Finland 10.4
Australia 7.4
Sweden 4.8
Japan 3.2
Switzerland 3.4
United Kingdom 7.8
Portugal 5.8
France 8.2
Ireland 11.3
Austria 4.1
Spain 15.5
Germany 7.9
Italy 10.3

U.S. workers on average are more likely to become unemployed than in other OECD countries, but they also find new work more quickly. In countries with low job turnover, such as Italy and Spain, the average unemployment rate is much higher than in the United States. The number to the right of each country is the country's average unemployment rate from 1968–2006.

Sources: Elsby, Hobijn, and Şahin (2011), OECD, authors' calculations

heterogeneity, one could then argue that most of the increase in unemployment in the 2007–09 recession represents an increase in structural unemployment.

Long-Term Unemployment and Monetary Policy

A simple view of the statistical relationship between unemployment and inflation—the Phillips curve—suggests that the choices for monetary policymakers who want to promote employment and price stability are clear. Unemployment is high and inflation is low, therefore monetary policy can and should be expansionary. Yet many modern macroeconomists argue that movements in real quantities matter for

inflation dynamics only to the extent that they depart from their natural level. Furthermore, the best way to attain low unemployment volatility in the long run is to follow policy rules that promote price stability. [17] In this view, the labor market situation in the wake of the Great Recession still presents a challenge to monetary policymakers.

Macroeconomic theory defines the natural rate of unemployment as the hypothetical level of unemployment that would obtain in the absence of any distortions, such as impediments to free adjustment of nominal prices and wages. The difference between actual and natural unemployment is often referred to as the "unemployment gap." It constitutes a measure of

the degree of slack, or under-utilization of resources, in the economy; a large and positive unemployment gap may constrain inflationary pressures. With a large pool of unemployed workers to hire from, wages are unlikely to increase, which therefore limits pricing pressures stemming from rising input costs. This scenario seemingly describes the recent economic climate, with unemployment persistently high and inflation trending gradually lower over the course of the recession. How useful this argument is for policy decisions depends on how easy it is for policymakers to discern the level of the natural rate. A main point of contention in the current policy debate is whether the natural rate has substantially shifted upward over the course of the Great Recession. The existence of very high long-term unemployment has implications for this debate.

We have shown that the prevalence of long-term unemployment is related to the fact that the exit rate out of unemployment declines with the duration of unemployment. Since a high fraction of long-term unemployed workers find it difficult to transition to employment, the pool of workers who can reasonably expect to be hired may be effectively smaller than it appears from the raw unemployment numbers alone. Thus the natural rate of unemployment would be higher, and the unemployment gap smaller, than what one might infer from the measured level of unemployment. Furthermore, a preliminary account of unemployment during the Great Recession seems to indicate that overall unemployment increased because of increased entry rates and reduced exit rates of long-term unemployed workers, suggesting that structural unemployment, and therefore the natural rate of unemployment, has increased.

How, then, should monetary policymakers respond to the increase in long-term unemployment? To the extent that the exceptionally large share of long-term unemployment reflects structural change and a higher natural rate of unemployment, policymakers should seriously consider the possibility that a high unemployment rate does not necessarily equate to a large unemployment gap. Furthermore, if higher long-term unemployment were to become a permanent feature of the U.S. labor market, then the level of unemployment would be even less likely to respond to short-term monetary stimulus. Any policy options to deal with permanent long-term unemployment would likely have to take the form of structural labor and product market reforms that increase the ability and willingness of the unemployed to find work, and reduce the costs of generating and maintaining employment relationships. Reforms of this kind arguably reduced the incidence of long-term unemployment in, for instance, the United Kingdom in the 1980s and Germany during the past decade. ■

ENDNOTES

1. The Bureau of Labor Statistics provides a detailed description of the CPS at http://www.bls.gov/cps/.

2. We can look at the household survey as providing information on the supply of labor. There are two other surveys that report on the state of the U.S. labor market from the demand side for labor.

   The Current Employment Statistics (CES) program, commonly known as the establishment survey, reports on the number of jobs from a sample of about 440,000 establishments in the U.S. nonfarm sector. By construction, the establishment survey provides information on employment only, not unemployment. Furthermore, the establishment survey provides information on jobs and not on household employment. For example, a household survey respondent who works two jobs is counted as employed once, but the establishment survey would count two jobs. Finally, the establishment survey does not cover unincorporated self-employment.

   Another recently introduced survey, the Job Openings and Labor Turnover Survey (JOLTS), tries to capture how establishments change their employment. JOLTS provides monthly data on job openings, hires, quits, layoffs, etc., for a sample of about 16,000 establishments.

   More detailed descriptions of the CES and JOLTS are provided at http://www.bls.gov/ces/home.htm and http://www.bls.gov/jlt/home.htm, respectively.

3. The recessions are dated using the business cycle peaks and troughs as announced by the National Bureau of Economic Research (NBER). NBER business cycle dates are a widely accepted definition of recessions in the United States. The NBER procedure to date the beginning and end of a recession is supposed to reflect a widespread and significant decline in economic activity. As such, the NBER procedure incorporates a large number of measures of economic activity, including production, sales, income, and employment. Unemployment tends to lag the NBER recession dates, in the sense that the unemployment rate peaks after the end of the recession. For more detailed information on the NBER business cycle program, see http://www.nber.org/cycles/main.html.

4. Given the definition of unemployment, workers may exit unemployment not only because they find work, but also because they stop searching, that is, the workers drop out of the labor force. Alternatively, they may enter unemployment not only because they lose a job, but also because they decide to (re)enter the labor force and search for a job. In the analysis we disregard the flows in and out of the labor force. For most purposes this is not a restrictive assumption (Shimer 2007).

5. Similar exercises have been performed by Elsby, Michaels, and Solon (2009) and Fujita and Ramey (2009). An important debate in this literature concerns the relative importance of variations in the job finding rates and the job separation rates in accounting for variations of the unemployment rate.

6. The exit rates displayed in Figure 2 are actually derived from the steady state relationship between unemployment duration shares and the exit rate as described in Box 1. We also calculate exit and entry rates using data on short-term unemployment while not imposing the steady state condition as in Shimer (2007). With a few exceptions the two procedures essentially yield the same series for the exit rate.

7. This estimate is based on the relationship between mean unemployment duration and the exit rate from unemployment described in Box 1. The calculations are conditional on an average monthly job separation rate of 3 percent per month (Shimer 2007). A similar exercise is performed by Mazumder (2011).

8. Across race groups, unemployment rates tend to be lower among whites, but relative to the whole sample unemployment rates among whites increased in 2010. One should be careful when comparing the unemployment rate changes of different race groups since the sample periods do not coincide.

9. The occupation and industry affiliation of an unemployed worker refer to the last job held by that worker. It is not uncommon for workers to change occupations or industries, even without an intervening unemployment spell. The classification of an unemployed worker by last known employment can be useful if it reflects on the human capital that an unemployed worker has acquired and that affects the job search decisions of that worker.

10. See also the discussion of unemployment in OECD countries in Box 2.

11. There is also a third effect, which captures any interactions between changes in the relative size of demographic groups and changes in durations within demographic groups.

12. See Machin and Manning (1999) for a survey on the role of duration dependence in the determination of long-term unemployment in Europe.

13. See Ljungqvist and Sargent (1998) for an example that studies the implications of duration dependence due to human capital depreciation. See Blanchard and Diamond (1994) for an example of duration dependence due to employer screening of long-term unemployed.

14. According to the more general framework, the behavior of unemployment in the 2007–09 recession is similar to its behavior in the 1981–82 recession. It is unlike the 1973–75 and 1990–91 recessions, where the increase in the unemployment rate was mainly driven by a general decline in exit rates.

15. For a survey, see Machin and Manning (1999).

16. Our procedure assumes (1) that the country data for unemployment rates and duration distributions reflect steady states, and (2) that there is no duration dependence in exit rates from unemployment. The steady state assumption is a good approximation for labor markets with relatively high job finding rates, such as the U.S. labor market. Since the job finding rates are much smaller for almost all other OECD countries, our procedure is potentially less reliable for these countries. It turns out that our estimates from the simple steady-state-based procedure are not that different from the estimates one obtains if transition dynamics are taken into account. Elsby et al. (2011) argue that for most of the continental European countries, there is no significant evidence for duration dependence in exit rates, but that there is evidence for duration dependence in most of the other countries.

17. For one exposition of this view, see Lacker and Weinberg (2006).

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Sarah G. Green
First Vice President and
Chief Operating Officer

CERTAINLY ONE OF THE SIGNATURE EVENTS OF 2010 WAS PASSAGE OF THE DODD-FRANK WALL STREET REFORM AND CONSUMER PROTECTION ACT.

This Act changed the responsibilities of the Federal Reserve System in some important ways. To name a few, the Act gave us more explicit responsibilities related to financial stability, added supervision of thrift holding companies to our plate, and shifted some of our consumer compliance responsibilities to the new Consumer Financial Protection Bureau. The Federal Reserve System has 256 work streams underway to address the Act's requirements for rule writing, research, and implementation of new responsibilities. In this year's management message, I would like to explore just one of these new responsibilities—implementation of the Offices of Minority and Women Inclusion.

The Act requires each of the 12 Reserve Banks and the Board of Governors, along with other financial regulatory agencies, to establish an Office of Minority and Women Inclusion. These Offices are expected to address workforce and supplier diversity issues within the Federal Reserve System and in financial institutions more broadly. Since the Dodd-Frank Act was promulgated specifically in response to the recent financial crisis, one might wonder why the Act would include this particular provision. I would argue, however, that diversity and inclusion are critical to the ability of the Federal Reserve System to perform its core responsibilities for America's economy.

The business case for diversity and inclusion rests, of course, on the fact that we need the most highly qualified people to accomplish our mission. To attract the best talent, we have to draw from broad and diverse talent pools. In addition, every individual in the Reserve Bank needs to feel comfortable and encouraged to bring forward their unique perspectives and ideas. These are some of the reasons why we began our diversity and inclusion journey a number of years ago. Along the way, we have learned that having a diverse and inclusive culture is not a "nice to have," it is a necessity, because optimal performance in each of our three core areas of responsibility requires us to value and embrace differences, seen and unseen.

During the financial crisis and ensuing deep recession, the Federal Reserve System took a number of bold actions. We reduced the federal funds rate to zero to one-quarter percent in 2008 and have maintained it there since. Our balance sheet has expanded from almost $900 billion in September 2008 to $2.4 trillion at the end of 2010, and since then we have implemented a program to buy another $600 billion in U.S. Treasury securities, the so-called second program of quantitative easing, or "QE2." These actions are controversial, and the media have often commented on the different views among the Reserve Bank Presidents and the Governors. We have been asked why we do not attempt to present a more united front.

In fact, it is the diversity of views that is one of the most important strengths underlying the Federal Reserve System's policymaking. There is never one obvious right answer. We need views from different geographic regions, from different economic schools of thought and areas of expertise, and from consumers and businesses in different circumstances to inform our judgments about the best course of action for the economy and the financial system. In the Fifth District, we regularly seek this type of information from our directors, local surveys, advisory councils, industry roundtables, and in-depth visits to various geographic areas in the region.

The other core services we provide are supervision of state member banks, bank holding companies, and now thrift holding companies, and the delivery of efficient, reliable, and accessible payments services. In 2010, the Federal Reserve System transferred an average of $3.9 trillion each day between financial institutions. The financial institutions we serve in our supervisory and payments roles in turn provide services to consumers and businesses in their communities. To ensure the safety and soundness of financial institutions and to provide effective payments and collections services, we have to understand the needs of the diverse end users of these services.

The demographics of these end users have changed dramatically in recent years, and more change is coming. We now have four generations in the workforce, with a large group of "baby boomers" poised to retire and the new generation of "millennials" entering the workforce. Minority populations are growing and may represent half of the total U.S. population in 30 years. The most significant growth is in the Hispanic community. The role of women is also changing, with more entering the workforce and pursuing careers that were traditionally occupied by men. Since 2008, 70 percent of new entrants into the workforce have been women and minorities. These are the end users of our services, and their behaviors and preferences will drive the services we deliver.

As we have pursued our diversity and inclusion journey in the Fifth District, the diversity of our workforce has broadened and the depth of our own talent pools has deepened, more closely reflecting the diversity of the pools from which we draw needed expertise. We have improved our ability to measure the diversity of our suppliers and to reach out to a broader group of businesses, including those that are minority- and women-owned, to ensure we have the best products, services, and talent possible to assist us with our business needs. We have six active Employee Resource Networks, organized by employees, which are helping us understand the unique histories and perspectives of different groups. And this year we won an award in Richmond for our diversity and inclusion program.

Our journey to embrace diversity and inclusion has gained speed and impetus but is far from complete. We have now formally established the Office of Diversity and Inclusion and look forward to reinforcing and strengthening our commitment to diversity and inclusion. Our success in fulfilling our mission depends on meeting this commitment.

Sally Green

Sarah G. Green
First Vice President and
Chief Operating Officer

The Federal Reserve is charged with promoting a healthy financial system and economy, but its monetary policy tools toward that goal can seem far removed from issues facing local communities.

That's why the local partnerships of Reserve Banks are a valuable complement to what are viewed as the Fed's more traditional functions. The Richmond Fed's role in outreach often involves convening stakeholders to deliver programming or to identify solutions to local economic challenges. By forming solid partnerships with experts on the ground—including nonprofits, businesses, financial institutions, local and state government agencies, educators, and civic organizations—the Richmond Fed can maximize its reach and best help local economies in what remains a challenging economic environment for many communities.

Long-Standing Partnerships

Many of the Richmond Fed's partnerships are long-standing, but are being used in new ways in response

to the financial crisis and recession. In few places is the need for outreach and information more apparent than in the realm of economic and personal finance education. Although the Fed has considerable expertise in this area, it could not reach the quantity or diversity of audiences that it does without partnering with educational organizations that have the resources to develop and deliver educational content on a wide scale. The Richmond Fed's partners include state Councils for Economic Education, the Jump$tart Coalition for Personal Financial Literacy, Junior Achievement, K–12 teachers, and local colleges.

In 2010 the Richmond Fed launched the Fed Experience, an interactive exhibit in the lobby of the Bank's main office. The Fed Experience is free and open to the public, and conveys the basics of the Federal Reserve's responsibilities through games, activities, and historical accounts from past Fed chairmen. The exhibit is a useful tool for engaging the community and the Bank's partners by, for example, combining exhibit tours with personal finance programming provided by local organizations ranging from the Richmond Ballet to the Virginia Council on Economic Education. These partnerships will continue to grow in 2011.

The Richmond Fed also lends its expertise to groups outside the educational community that have a direct interest in the economic health of their constituents. Along with the American Association of Retired Persons and the state of West Virginia, the Richmond Fed helped organize Money$mart week, a series of a dozen events throughout the state targeting children, adults, and senior citizens. Financial institutions, too, have become

PHOTO: MICHAEL BATTS

Students from Richmond-area middle schools experiment with the price stability game in the Fed Experience, the new interactive exhibit that opened in 2010 in the lobby of the Richmond Fed.

increasingly interested in conducting their own finan-cial education programs in schools. The Richmond Fed partnered with local bankers on a "Back to School at the Fed" series in which the Fed's on-staff economic education experts train local bankers on user-friendly personal finance curriculum materials and share tips for engaging grade school audiences. This program resulted in workshops in Charleston and Morgantown, W.Va., and Richmond, Va., co-hosted with the Bankers Associations of those states.

Such collaborations leverage what is perhaps the oldest of the Fed's important partnerships: its relationship with the banking industry. The Fifth District houses one of the most active and diverse banking communities in the Federal Reserve System. Through bank supervision, the Richmond Fed helps financial institutions operate more soundly, and in the process those institutions provide critical insight into the financial system and economic conditions on "Main Street." One of the mes-sages to emerge during the past year is that many of the nation's small businesses have had difficulty accessing capital during the economic recovery. Small businesses employ half of the nation's private sector workers, so their health is an important factor in overall economic growth. The Richmond Fed sponsored seven forums across the District bringing together lenders, small busi-ness owners, business development professionals, and elected officials to explore the roots of, and potential solutions to, credit access issues facing small businesses.

Partnerships to Support Local Economic Recovery

Though the regional Reserve Banks operate indepen-dently, they collaborate in each of the Fed's functional areas to develop best practices and to discuss and dis-cover factors potentially hindering economic recovery at the local level. The recent recession's roots in housing-related issues have focused the outreach efforts of many Reserve Banks on foreclosure prevention and neighbor-hood stabilization.

The Richmond Fed hosted foreclosure prevention workshops that connected hundreds of mortgage holders and lenders throughout the Fifth District to address delinquent loan situations. The Bank's part-ners ranged from local congressional offices and city governments to nonprofits. Additional foreclosure

events helped spur discussions between city leaders and nonprofits on how to address vacant and aban-doned properties.

The Reserve Banks collaborated on a System-wide Neighborhood Stabilization Summit held at the Board of Governors in September 2010 to discuss challenges and solutions relating to the problems that vacant

U.S. Rep. John Sarbanes (D-Md.), center, Mindy Lehman of the Maryland Bankers Association, and Richmond Fed Senior Vice President David Beck discuss credit conditions facing small business owners at a small business lending event in Baltimore in June 2010.

properties can pose for neighborhoods. These col-laborative efforts complemented the Richmond Fed's local work, and helped bring new solutions to localities that may otherwise have limited access to new models for neighborhood stabilization.

A stronger labor market will be a key component of economic recovery for many communities. High unem-ployment and structural decline in certain industries have required some workers to seek out new training or switch careers. The Richmond Fed hosted a forum with the Virginia Community College Workforce Alliance to discuss some of the steps workers (and prospective workers) are taking to improve their job prospects. Fed Chairman Ben Bernanke attended the forum, held in June 2010 in Richmond, and heard from students who attend local community colleges. Community colleges offer flexible, affordable education and training pro-grams to students, many of whom juggle full-time jobs and parental responsibilities.

Partnerships to Help Address New Economic Challenges

Looking forward, the Richmond Fed's partnerships will be critical to monitoring new and developing economic challenges. Like other Reserve Banks, the Richmond Fed relies on advisory councils that provide insight on some of the Fed's key operational areas. The Richmond Fed recently announced changes to the structure of

President Jeffrey Lacker, center, and First Vice President Sarah Green learn about physics experiments at Jefferson Lab at a regional forum in Hampton Roads, Virginia.

its advisory councils to better reflect the issues facing residents of the Fifth District. After many years of valuable contributions to the Bank and the region, two existing advisory councils—the Small Business and Agriculture Advisory Council and the Community Development Advisory Council—drew to a close in the fall of 2010 and will be replaced in 2011 with the Community Investment Council. This new council will inform Richmond Fed leadership about emerging economic issues and trends in communities within the District, including, but not limited to, low- and moderate-income neighborhoods. The information will be used to help shape Bank policy decisions and guide

the strategic direction of the Richmond Fed's efforts to engage and inform the community.

To track the economic recovery at the local level, the Richmond Fed will continue to interact directly with the business and community leaders of the Fifth District. Regional economic forums are a recently developed outreach tool. Through the forums, Bank leadership, including President Jeffrey Lacker and First Vice President Sarah Green, participate in a series of on-site meetings with local policymakers, business leaders, and community members over multiday visits to Fifth District regions. The forums are an effective mechanism for the Richmond Fed to provide information about changes in the economy and policy, as well as to hear firsthand about economic conditions at the local level and share that information across many functional areas of the Bank. The Richmond Fed visited three areas in 2010—Morgantown, W.Va., Hampton Roads, Va., and North Carolina's Research Triangle—and forums in Northern Virginia and the Eastern Shore of Maryland are slated for 2011.

At the policy level, economic recovery also calls for the Fed's ongoing collaboration with other policymaking bodies, especially in the area of regulatory reform. The Dodd-Frank financial reform legislation will require the Fifth District to work closely with the 11 other Reserve Banks, the Board of Governors, and other regulatory agencies to continue implementing changes in ways that are constructive and sound. The new law requires some new financial education strategies, the transfer of some responsibilities to the new Consumer Financial Protection Bureau, and increased regulatory responsibilities. This will require both close interagency collaboration and developing relationships with new organizations not previously supervised by the Federal Reserve.

The Richmond Fed's partnerships strengthen its contribution to local economic health in a multitude of ways. They also contribute to better policymaking by establishing an ongoing channel for a two-way flow of information between Fed officials and the private sector. For these reasons, the Richmond Fed's partnerships will always be critical to fulfilling its complementary missions. ∎

ALTHOUGH THE NATIONAL RECESSION ENDED IN THE SUMMER OF 2009, THE RECOVERY IN THE FIFTH DISTRICT DID NOT TRULY BEGIN UNTIL 2010.

The rebound was not as strong as might have been expected coming out of such a severe downturn, but the recovery that took hold in 2010 provided an overall expansion in jobs and a definite improvement in business conditions by the end of the year. Still, the District economy remained weak during the year, as labor markets struggled to regain the losses of the previous two years and the real estate sector continued to be a drag on the economic recovery.

Labor Market Conditions

Fifth District labor markets bottomed in 2009, and employment losses moderated throughout the second half of that year, but 2010 marked the beginning of solid job growth. By the end of December the District had added 65,100 net jobs to the economy. Most of the year-over-year job gains in the District were in the professional and business services sector, although the trade, transportation, and utilities sector and the education and health services sector also contributed notably to the employment gain. A number of industries reported net job losses in 2010, including manufacturing, information, financial activities, and natural resources and construction, but the sharpest absolute and percentage decline was in the government sector.

Despite the steady job growth, the Fifth District gained back only a fraction (8.6 percent) of the more than 750,000 jobs lost over the course of the economic downturn. The District performed slightly worse than the United States as a whole, which lost more than 8.5 million jobs during 2008 and 2009 and gained back approximately 1 million jobs (10.9 percent) in 2010. By December 2010, 1.2 million Fifth District residents were still unemployed. The District unemployment rate peaked at 9.4 percent in February and March 2010, though it fell to 8.6 percent by the end of the year. By this measure, the District outperformed the nation, which ended the year with 9.4 percent unemployment.

The recession was deep, but does not seem to have initiated any long-term structural change in District labor markets. Nonetheless, the downturn might have accelerated some existing structural trends. For example, employment in manufacturing fell from 8.9 percent as a share of all District employment in December 2007 to 7.8 percent in December 2010, but the decline continued an earlier trend; in December 2000, manufacturing accounted for 12.8 percent of employment. Conversely, education and health services rose from 10.5 percent of District employment in December 2000 to 12.6 percent in December 2007, and to almost 14 percent by December 2010. Overall, the District's goods-producing sector is steadily accounting for less and less of the region's employment and output.

One industry change was clearly brought on by the recession: the reduction in natural resources and construction employment. This industry grew in the early 2000s, but lost more than 200,000 jobs in 2008 and 2009, and another 16,000 jobs in 2010. From the end of 2007 to the end of 2010, the natural resources and construction industry's contribution to District employment fell from 6.1 percent to 4.7 percent, due at least in part to the recession's effect on housing and commercial real estate markets.

The recession played out differently in different areas of the Fifth District. The northern part—roughly

FIGURE 1
Fifth District Industry Share of Employment (Annual Averages)
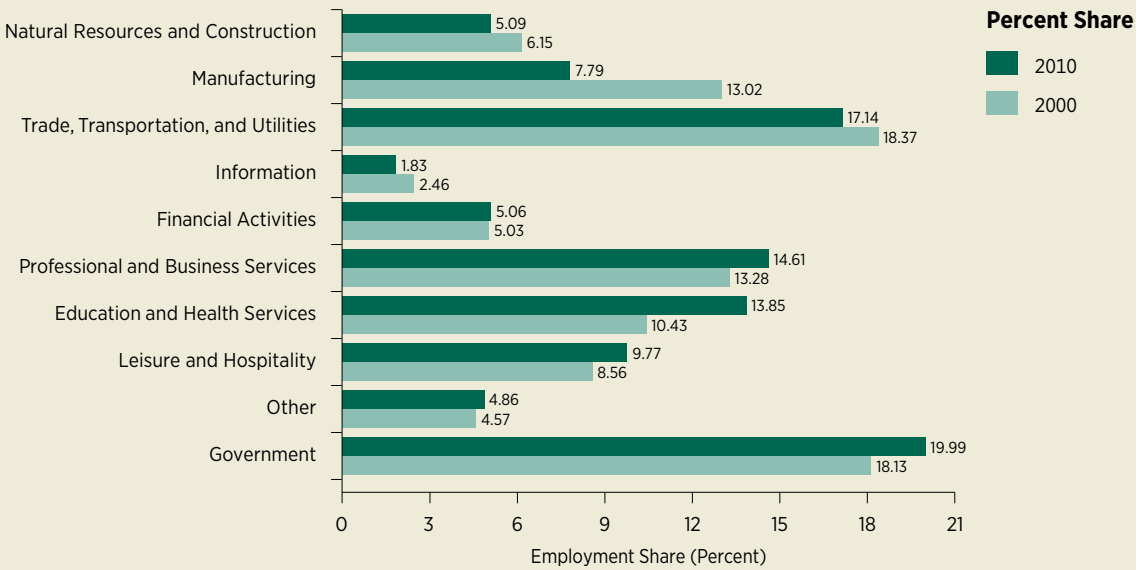
Sources: Bureau of Labor Statistics, Haver Analytics

the District of Columbia, Maryland, and much of Virginia—suffered a housing downturn that spilled into labor markets starting at the end of 2008 and continuing into 2009. In North and South Carolina, however, the labor market downturn generally preceded the decline in house prices and the rise in foreclosure activity, and employment conditions remain weaker in these states. Together, Maryland and Virginia lost around 260,000 jobs in 2008 and 2009, accounting for 34 percent of the jobs lost in the Fifth District, while North and South Carolina shed more than 480,000 jobs, or 63 percent of all District job losses. The District of Columbia economy actually added jobs, on net, during 2008 and 2009, and in 2010 it contributed more than 15 percent of Fifth District job gains. Maryland and Virginia together contributed 35 percent of the employment increase in 2010, while North and South Carolina accounted for about 44 percent of job gains. West Virginia, meanwhile, contributed about 2.5 percent of losses in 2008 and 2009 and 5 percent of the rise in 2010. In other words, while labor market conditions remain challenging across the Fifth District (and the nation), the southern part of the District seems to have a more difficult road ahead; by adding 29,000 jobs in 2010, North and South Carolina

have made only a small dent in replacing the jobs lost in 2008 and 2009.

Unemployment rates in District states remained high, but began to come down in 2010. The Virginia unemployment rate—which was the lowest in the District throughout 2010—ended the year at 6.6 percent, 0.6 percentage point below its December 2009 mark. The Maryland rate ended the year at 7.4 percent, a rate that held for more than half of 2010. In North Carolina, the jobless rate peaked at 11.4 percent in January and February, but fell to 9.8 percent by December. In South Carolina, the rate fell from a peak of 11.8 percent in December 2009 to 10.9 percent in December 2010, although it remained one of the highest rates in the country. West Virginia was the only Fifth District jurisdiction to see the unemployment rate rise in 2010—from 8.7 percent in January to 9.7 percent in December 2010.

Residential and Commercial Real Estate Conditions

The housing sector remained arguably the biggest drag on the Fifth District and national economies in 2010. The first-time homebuyer tax credit helped to spur sales

in the first part of the year, particularly for middle- or lower-priced homes. Sales fell again in the second half of the year, although there was some indication of firming housing conditions toward the very end of 2010. Foreclosure and short-sale activity expanded throughout the year, but at the other end of the spectrum, high-priced and luxury home sales remained extremely slow. According to the National Association of Realtors, existing home sales fell in the first quarter of 2010, expanded in the second, dropped again in the third, and rose again in the fourth quarter throughout the District. (The one exception was Virginia, where existing home sales fell further in the fourth quarter.) Despite the volatility of home sales, however, 2010 sales activity was at least somewhat improved from the steep decline that began in 2007.

The house price declines of recent years abated across Fifth District states in 2010, but house price movements were still volatile. Prices fell slightly in the first and second quarters of 2010, picked up—for the first time in years—in the third quarter, but then dropped again in the fourth quarter in every District state except West Virginia. Nonetheless, the moderating decline, or even slight improvement, in certain housing market indicators helped to stem the rise of distressed homeowners across the District. The number of homeowners with mortgage payments more than 90 days past due remained the same or fell in every quarter of the year in every District state, with the exception of a slight rise in 90-day-plus delinquencies in Maryland in the third quarter. The foreclosure news was a little more mixed. Although most states experienced some declines in foreclosure inventory rates, fourth quarter rates rose across the board, and foreclosure starts rose slightly in the District of Columbia, Maryland, and Virginia.

Despite spotty reports of improved vacancy rates or leasing activity, commercial real estate remained weak in 2010. Even those developers that reported improvement continued to cite generally soft conditions, little new construction, and persistent downward pressure on rental prices.

Business Conditions

In the early part of 2010, U.S. and Fifth District businesses faced economic and policy uncertainty, which, combined with an unexpectedly sluggish recovery in

consumer spending, made investment and expansion difficult to consider. As the year continued, however, optimism grew among both consumers and area businesses, and business conditions strengthened notably by the end of the year.

The steady pickup in both foreign and domestic demand throughout 2010 supported an improvement in conditions among District manufacturers. The Richmond Fed's survey of manufacturing indicated notable recovery in District shipments and new orders throughout the year, as well as improved employment conditions. Activity at District ports was stronger in 2010 than in 2009, and export activity continued to expand across much of the District throughout the year.

The service sector recovered at a more modest pace. Both retail and services firm activity was subdued by low consumer spending through much of 2010. Nonetheless, conditions improved over the year, and the Richmond Fed's survey on service sector activity revealed recovery in services firm revenues by the end of the year. Revenues among retail firms remained somewhat depressed, although declines in 2010 were considerably more moderate than in 2009. Both retail shopper traffic and sales of big-ticket items were slow throughout the year.

Banking Conditions

Banks nationwide and in the Fifth District remained challenged during 2010 as they continued to address problem assets. There were signs that the pace of deterioration slowed in 2010. A closer look at the data reveals a tale of two banks. With a diversified business, large banking organizations were able to recognize losses and restructure their balance sheets early in the credit cycle. In contrast, community banks (defined as having assets less than $1 billion) are experiencing a lag in problem assets nationwide and in the District. The lag is most noticeable at community banks with heavy concentrations in commercial real estate (CRE) and that are located in areas experiencing a slower economic recovery.

Given the slow recovery of the housing market, the closely related CRE category of construction and land development experienced particularly high default rates. On average, District community banks had taken

Change in Payroll Employment
December 2009 – December 2010

Percent Change
(year-over-year)

- -1.2 to 0.1
- 0.2 to 0.4
- 0.5 to 0.8
- 0.9 to 1.1
- 1.2 to 3.8
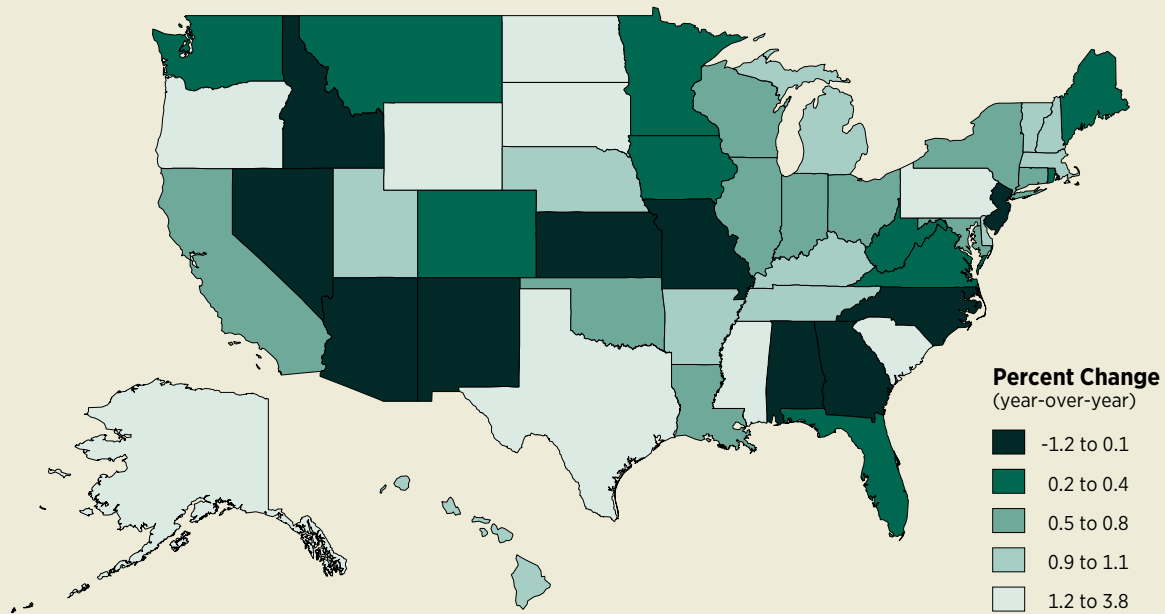
Sources: Bureau of Labor Statistics, Haver Analytics

on high relative exposures to CRE, resulting in overall poorer performance during this credit cycle relative to the nation. Credit quality statistics for Fifth District community banks continued to deteriorate during 2010 with median net charge-offs growing to 0.64 percent in the fourth quarter of 2010, up from 0.26 percent one year earlier. Nonperforming loans grew from 2.22 percent of total loans to 2.40 percent during 2010, ending the year 72 basis points above the national community bank median and almost 50 percent higher than the same ratio at year-end 1991.

Additions to reserves for future loan losses represented a falling share of the industry's net revenue in 2010, potentially suggesting that the rate of credit quality deterioration is slowing. Coverage ratios for Fifth District banks leveled off in 2010, with a median of 63 cents in reserves for every dollar in nonperforming loans. By comparison, the most recent trough was in the third quarter of 1991 at 88 cents. Bank capital positions, the other source of loan loss absorption, improved slightly in 2010 at the national level and among the District's larger institutions, while continuing to decline for District community banks. On the positive side, District banks' median net interest margins (that is,

net interest income relative to average earning assets) improved in 2010, closing in on the national statistic after a seven-quarter gap. Moreover, the share of unprofitable banks in the District declined year-over-year from 41 percent to 31 percent at year-end 2010.

Looking Ahead

Although the Fifth District economic recovery strengthened during the year, the rebound was tepid and conditions remained relatively weak throughout the District. The growth in U.S. GDP and national consumer spending toward the end of 2010, however, combined with some promising regional business and labor market indicators at the beginning of 2011, provides hope for a stronger recovery in 2011. Real estate activity—particularly residential real estate activity—is likely to remain subdued during the year, but increased optimism among District businesses and consumers should provide the momentum for growth that the region has been seeking. ∎

Note: Regional economic data are current as of March 10, 2011. Banking conditions data are current as of February 25, 2011.

BOARDS OF DIRECTORS, ADVISORY COUNCILS, AND OFFICERS

Federal Reserve Bank of Richmond Board of Directors

Our Richmond Board oversees the management of the Bank and its Fifth District offices, provides timely business and economic information, participates in the formulation of national monetary and credit policies, and serves as a link between the Federal Reserve System and the private sector. The board also appoints the Bank's president and first vice president, with approval from the Federal Reserve Board of Governors. Six directors are elected by banks in the Fifth District that are members of the Federal Reserve System, and three are appointed by the Board of Governors.

The Bank's board of directors annually appoints our District representative to the Federal Advisory Council, which consists of one member from each of the 12 Federal Reserve Districts. The council meets four times a year with the Board of Governors to consult on business conditions and issues related to the banking industry.

Baltimore and Charlotte Branches Boards of Directors

Our Baltimore and Charlotte branches have separate boards that oversee operations at their respective locations and, like our Richmond Board, contribute to policymaking and provide timely business and economic information about the District. Four directors on each of these boards are appointed by the Richmond directors, and three are appointed by the Board of Governors.

Community Development Advisory Council

Created in 1998 to enhance communication between the Bank and the public concerning community development issues, our Community Development Advisory Council advises the Bank president and other senior officers on community development concerns and related policy matters. The council's members are appointed by the Bank president.

Small Business and Agriculture Advisory Council

Established in 1985, the Small Business and Agriculture Advisory Council advises the Bank president and other senior officers on the impact of monetary, banking, and fiscal policies on the District's small business and agricultural sectors. The council's members are appointed by the Bank president.

Payments Advisory Council

The Payments Advisory Council was established by the Bank in 1978 to serve as a forum for communication with financial institutions about the Federal Reserve's financial services and to help the Bank respond to the evolving needs of our banking constituency. Council members are appointed by the Bank's first vice president.

In response to the changing needs of our customers and our region, the Bank has established a new Community Investment Council to help identify emerging issues and engage new stakeholders in communities throughout the Fifth District. The Community Investment Council, which had its first meeting in March 2011, expands upon the work of the Community Development and Small Business and Agriculture Advisory councils, which had their final meetings in the fall of 2010. We thank the members of these councils, past and present, for their many years of valuable service.

Listings as of December 31, 2010

THANK YOU

We are grateful to our boards of directors for their guidance, leadership, expertise, and integrity. Their insight into regional and national economic conditions is essential to our work as a policy leader, and their vision will help us continue to support the economic recovery in the Fifth District and across the nation.

Thank you to those directors who have completed their service on our boards: Robert H. Gilliam, Jr., of the Richmond Board; Lemuel E. Lewis, who served as chairman of the Richmond Board; William R. Roberts, who served as chairman of the Baltimore Board; and Barry L. Slider of the Charlotte Board.

We welcome our new directors: Alan L. Brill of the Richmond Board; Robert R. Hill, Jr., of the Charlotte Board; and Samuel L. Ross of the Baltimore Board.

Standing, left to right: Kelly S. King, Linda D. Rabbitt, Richard J. Morgan, Wilbur E. Johnson, Patrick C. Graney III, Robert H. Gilliam, Jr., Dana S. Boole
Seated, left to right: Lemuel E. Lewis, Margaret E. McDermid

CHAIRMAN

Lemuel E. Lewis
President
LocalWeather.com
Suffolk, Virginia

DEPUTY CHAIRMAN

Margaret E. McDermid
Senior Vice President and
Chief Information Officer
Dominion Resources, Inc.
Richmond, Virginia

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President and Chief Executive Officer
Community Affordable Housing
Equity Corporation
Raleigh, North Carolina

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President and Chief Executive Officer
First National Bank
Altavista, Virginia

Patrick C. Graney III
Maxum East Regional President
Maxum Petroleum
Belle, West Virginia

Wilbur E. Johnson
Managing Partner
Young Clement Rivers, LLP
Charleston, South Carolina

Kelly S. King
Chief Executive Officer
BB&T Corporation
Winston-Salem, North Carolina

Richard J. Morgan
President and Chief Executive Officer
CommerceFirst Bank
Annapolis, Maryland

Linda D. Rabbitt
Chairman and Chief Executive Officer
Rand Construction Corporation
Washington, D.C.

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Chairman and Chief Executive Officer
Capital One Financial Corporation
McLean, Virginia

Standing, left to right: Ronald Blackwell, Biana J. Arentz, William R. Roberts, James T. Brady, Jenny G. Morgan
Seated, left to right: William B. Grant, Anita G. Newcomb

Standing, left to right: Claude C. Lilly, Linda L. Dolny, James H. Speed, Jr., Barry L. Slider, David J. Zimmerman
Seated, left to right: John S. Kreighbaum, Lucia Z. Griffith

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Dean
Clemson University
College of Business and Behavioral Science
Clemson, South Carolina

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Former President
PML Associates, Inc.
Greenwood, South Carolina

Lucia Z. Griffith
Chief Executive Officer and Principal
METRO Landmarks
Charlotte, North Carolina

John S. Kreighbaum
President and Chief Executive Officer
Carolina Premier Bank
Charlotte, North Carolina

Barry L. Slider
President and Chief Executive Officer
First South Bancorp, Inc. and
First South Bank
Spartanburg, South Carolina

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President and Chief Executive Officer
North Carolina Mutual Life Insurance Company
Durham, North Carolina

David J. Zimmerman
President
Southern Shows, Inc.
Charlotte, North Carolina

Standing, left to right: Michael Stegman, Tammie Hoy, Clarence J. Snuggs, Marlo Scruggs
Seated, left to right: Jane Henderson, David H. Swinton

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President
Virginia Community Capital, Inc.
Christiansburg, Virginia

Tammie Hoy*
Executive Director
Lowcountry Housing Trust
Charleston, South Carolina

Marlo Scruggs
Vice President,
Community Development Specialist
BB&T Corporation
Charleston, West Virginia

Clarence J. Snuggs
Deputy Secretary
Maryland Department of Housing and
Community Development
Crownsville, Maryland

T.K. Somanath
President and Chief Executive Officer
Better Housing Coalition
Richmond, Virginia

Michael Stegman
Director, Policy and Housing
The John D. and Catherine T.
MacArthur Foundation
Chicago, Illinois

David H. Swinton
President
Benedict College
Columbia, South Carolina

*Ms. Hoy joined the Bank's staff in June 2010.

Standing, left to right: Connie G. Nyholm, David Arnold, William W. Ditman
Seated, left to right: S. Lake Cowart, Jr., Barbara B. Lang

ACTING CHAIRMAN, SPRING

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Owner
Clark's Elioak Farm
Ellicott City, Maryland

ACTING CHAIRMAN, FALL

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President and Chief Executive Officer
DC Chamber of Commerce
Washington, D.C.

David Arnold
President
Class VI River Runners, Inc.
Lansing, West Virginia

Ronnie L. Bryant
President and Chief Executive Officer
Charlotte Regional Partnership
Charlotte, North Carolina

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Vice President
Cowart Seafood Corporation
Lottsburg, Virginia

F. Guy Darby, Jr.
Owner and President
F. Guy Darby & Son Farm
Darby Oil, Inc.
Chester, South Carolina

William W. Ditman
Chairman Emeritus
Willow Construction, LLC
Easton, Maryland

Connie G. Nyholm
Co-owner/Managing Partner
VIRginia International Raceway
Alton, Virginia

Standing, left to right: Tim Dillow, John J. King, D. Gerald Sink, David Hines, Rick Rhoads, Rex Hockemeyer
Seated, left to right: Kenneth L. Greear, Valerie Curtis, Robert J. Gerth

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Senior Vice President, Banking Operations
SunTrust Banks
Richmond, Virginia

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*Executive Vice President and
Chief Operating Officer*
The South Financial Group
Lexington, South Carolina

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*Executive Vice President,
Enterprise Payments Strategy*
Wells Fargo & Company
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TowneBank
Suffolk, Virginia

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Union, South Carolina

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Coastal Federal Credit Union
Raleigh, North Carolina

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President and Chief Executive Officer
MainStreet Bank
Herndon, Virginia

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Fairmont, West Virginia

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Chief Operating Officer*
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Washington, D.C.

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Deposit Operations*
Capital One Bank
Richmond, Virginia

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RBC Centura Bank
Rocky Mount, North Carolina

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Group Vice President, Central Operations
M&T Bank
Baltimore, Maryland

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Senior Vice President
Sandy Spring Bank
Columbia, Maryland

Standing, left to right: R. Lee Clark, Martin W. Patterson, Gayle Youngblood, Rodney Epps
Seated, left to right: Susan Haschen, Leton Harding, Scott Jennings

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United Bank
Charleston, West Virginia

Leton Harding
Executive Vice President
The First Bank & Trust Company
Abingdon, Virginia

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Vice President, Operations
Easton Bancorp, Inc.
Easton, Maryland

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Senior Vice President and Cashier
Community Bank of Parkersburg
Parkersburg, West Virginia

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Director of Operations and IT
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Ruther Glen, Virginia

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Senior Vice President and
Chief Operating Officer
Summit Community Bank
Moorefield, West Virginia

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President
MACHA – Mid-Atlantic
Payments Association
Hanover, Maryland

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Senior Vice President
Bank of America
Charlotte, North Carolina

E. Stephen Lilly
Senior Vice President and
Chief Operating Officer
First Community Bancshares, Inc.
Bluefield, Virginia

Rick Rhoads
Senior Vice President, E-Services
State Employees' Credit Union
Raleigh, North Carolina

Kenneth L. Richey
Director, Corporate Cash Management
Synovus Financial Corporation
Columbia, South Carolina

John Russ
President and Chief Executive Officer
Community FirstBank of Charleston
Charleston, South Carolina

D. Gerald Sink
Senior Vice President
NewBridge Bank
Lexington, North Carolina

David Willis
Senior Vice President,
Debit Card and Funds Services
Navy Federal Credit Union
Vienna, Virginia

Gayle Youngblood
Senior Operations Manager
State Employees Credit Union of Maryland
Linthicum, Maryland

Standing, left to right: Roland Costa, Claudia N. MacSwain, Tammy H. Cummings, Victor M. Brugh II, Sarah G. Green, Jeffrey M. Lacker, Janice E. Clatterbuck, David E. Beck, John A. Weinberg, Robert E. Wetzel, Jr.
Seated, left to right: Michelle H. Gluck, Matthew A. Martin, Jennifer J. Burns

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*First Vice President and
Chief Operating Officer*

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*Senior Vice President and
Baltimore Regional Executive*

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Medical Director

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*Senior Vice President,
Supervision, Regulation and Credit*

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*Senior Vice President and
Chief Information Officer*

Roland Costa
*Senior Vice President,
Currency Technology Office*

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Human Resources*

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General Counsel*

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*Senior Vice President and
Charlotte Regional Executive*

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*Senior Vice President and
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*Senior Vice President and
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Vice President

Gregory A. Johnson
Vice President

Mary S. Johnson
Vice President

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Vice President

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Andrew S. McAllister
Vice President

Dennis G. McDonald
Vice President

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Deputy General Counsel

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Vice President

Michael L. Wilder
Vice President and Controller

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Assistant Vice President

Hattie R.C. Barley
Assistant Vice President

Granville Burruss
Assistant Vice President

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Assistant Vice President

Todd E. Dixon
Assistant Vice President

Adam M. Drimer
Assistant Vice President

Daniel E. Elder
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Joan T. Garton
Assistant Vice President

Anne C. Gossweiler
Assistant Vice President

Stephen J. Griffith
Assistant Vice President

James K. Hayes
Assistant Vice President

Samuel Hayes III
Assistant Vice President

Wendi Homza Hickman
Assistant Vice President

Kathleen R. Houghtaling
Assistant Vice President

Cathy I. Howdyshell
Assistant Vice President

James W. Lucas
Assistant Vice President

Steve V. Malone
Assistant Vice President

Randal C. Manspile
Assistant Vice President

Page W. Marchetti
Assistant Vice President and Secretary

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Assistant Vice President

William R. McCorvey, Jr.
Assistant General Counsel

Diane H. McDorman
Assistant Vice President

Robert J. Minteer
Assistant Vice President

Johnnie E. Moore
Assistant Vice President

Susan Q. Moore
Assistant Vice President

Barbara J. Moss
Assistant Vice President

C. Kim Nguyen
Assistant Vice President

Edward B. Norfleet
Assistant Vice President

James T. Nowlin
Assistant Vice President

Pamela S. Rabaino
Assistant Vice President

Arlene S. Saunders
Assistant Vice President

Dennis P. Smith
Assistant General Counsel

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Assistant Vice President

Jeffrey K. Thomas
Assistant Vice President

Sandra L. Tormoen
Assistant Vice President

Lauren E. Ware
Assistant Vice President

Karen J. Williams
Assistant Vice President

H. Julie Yoo
Assistant Vice President

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Steven T. Bareford
Assistant Vice President

Karen L. Brooks
*Assistant Vice President and
Baltimore Deputy Regional Executive*

Amy L. Eschman
Assistant Vice President

CHARLOTTE BRANCH

R. William Ahern
Vice President

Stacy L. Coleman
Vice President

Lisa A. White
Vice President

Terry J. Wright
*Vice President and Charlotte
Deputy Regional Executive*

John A. Beebe
Assistant Vice President

Margaretta C. Blackwell
Assistant Vice President

T. Stuart Desch
Assistant Vice President

Evangelos Sekeris
Assistant Vice President

Kelly J. Stewart
Assistant Vice President

Richard F. Westerkamp, Jr.
Assistant Vice President

Listings include officers who retired
or left the Bank during 2010.
We thank them for their service.

In 2010, the Board of Governors engaged Deloitte & Touche LLP (D&T) for the audits of the individual and combined financial statements of the Reserve Banks and the consolidated financial statements of the limited liability companies (LLCs) that are associated with Federal Reserve actions to address the financial crisis and are consolidated in the financial statements of the Federal Reserve Bank of New York. Fees for D&T's services are estimated to be $8.0 million, of which approximately $1.6 million were for the audits of the LLCs.[1] 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 2010, the Bank did not engage D&T for any non-audit services.

[1] 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.

Management's Report on Internal Control Over Financial Reporting
March 22, 2011

To the Board of Directors:

The management of the Federal Reserve Bank of Richmond (FRB Richmond) is responsible for the preparation and fair presentation of the Statements of Condition as of December 31, 2010 and 2009, and the Statements of Income and Comprehensive Income, and Statements of Changes in Capital for the years then ended (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 as set forth in the *Financial Accounting Manual for Federal Reserve Banks* (FAM), and, as such, include some amounts that 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 FAM and include all disclosures necessary for such fair presentation.

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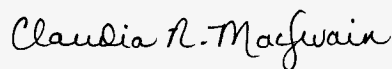
Federal Reserve Bank of Richmond

Jeffrey M. Lacker
President

Sarah G. Green
*First Vice President and
Chief Operating Officer*

Claudia N. MacSwain
*Senior Vice President and
Chief Financial Officer*

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

We have audited the accompanying Statements of Condition of the Federal Reserve Bank of
Richmond (FRB Richmond) as of December 31, 2010 and 2009 and the related Statements
of Income and Comprehensive Income, and of 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 the FRB Richmond as of December 31, 2010, based on criteria
established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring
Organizations of the Treadway Commission. The FRB Richmond'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 the FRB Richmond's internal control over financial reporting based on our audits.

   We conducted our audits in accordance with generally accepted auditing standards as
established by the Auditing Standards Board (United States) and in accordance with the
auditing 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.
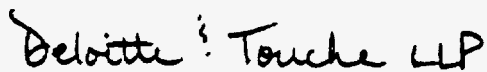
   The FRB Richmond's internal control over financial reporting is a process designed by,
or under the supervision of, the FRB Richmond's principal executive and principal financial
officers, or persons performing similar functions, and effected by the FRB Richmond's board
of directors, management, and 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. The FRB Richmond'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

the FRB Richmond; (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 the FRB Richmond are being made only in accordance with authorizations of management and directors of the FRB Richmond; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the FRB Richmond'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.

As described in Note 4 to the Financial Statements, the FRB Richmond 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, such Financial Statements present fairly, in all material respects, the financial position of the FRB Richmond as of December 31, 2010 and 2009, and the results of its operations for the years then ended, on the basis of accounting described in Note 4. Also, in our opinion, the FRB Richmond maintained, in all material respects, effective internal control over financial reporting as of December 31, 2010, based on the criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Deloitte & Touche LLP

Deloitte & Touche LLP
March 22, 2011
Richmond, Virginia

STATEMENTS OF CONDITION (in millions)

As of December 31,	2010	2009
Assets		
Gold certificates	$ 846	$ 882
Special drawing rights certificates	412	412
Coin	354	293
Items in process of collection	8	10
Loans:		
Depository institutions	61	1,097
System Open Market Account:		
Treasury securities, net	121,514	29,045
Government-sponsored enterprise debt securities, net	17,422	6,031
Federal agency and government-sponsored enterprise mortgage-backed securities, net	114,424	33,115
Foreign currency denominated assets, net	7,253	7,171
Central bank liquidity swaps	21	2,915
Accrued interest receivable	1,621	457
Bank premises and equipment, net	333	325
Deferred asset—interest on Federal Reserve notes	—	305
Interdistrict settlement account	—	111,074
Other assets	92	73
Total assets	**$ 264,361**	**$ 193,205**
Liabilities and capital		
Federal Reserve notes outstanding, net	$ 76,694	$ 72,384
System Open Market Account:		
Securities sold under agreements to repurchase	6,800	2,801
Other liabilities	—	22
Deposits:		
Depository institutions	105,026	103,288
Other deposits	74	71
Interest payable to depository institutions	15	20
Accrued benefit costs	217	215
Deferred credit items	74	73
Accrued interest on Federal Reserve notes	2,041	—
Interdistrict settlement account	62,497	—
Other liabilities	45	51
Total liabilities	**253,483**	**178,925**
Capital paid-in	5,439	7,140
Surplus (including accumulated other comprehensive loss of $31 million and $42 million at December 31, 2010 and 2009, respectively)	5,439	7,140
Total capital	**10,878**	**14,280**
Total liabilities and capital	**$ 264,361**	**$ 193,205**

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

STATEMENTS OF INCOME AND COMPREHENSIVE INCOME (in millions)

For the years ended December 31,	2010	2009
Interest income		
Loans:		
Depository institutions	$ —	$ 102
System Open Market Account:		
Securities purchased under agreements to resell	—	1
Treasury securities, net	2,420	1,082
Government-sponsored enterprise debt securities, net	318	87
Federal agency and government-sponsored enterprise mortgage-backed securities, net	4,096	812
Foreign currency denominated assets, net	62	84
Central bank liquidity swaps	3	608
Total interest income	**6,899**	**2,776**
Interest expense		
System Open Market Account:		
Securities sold under agreements to repurchase	10	6
Deposits:		
Depository institutions	446	407
Total interest expense	**456**	**413**
Net interest income	**6,443**	**2,363**
Non-interest income		
System Open Market Account:		
Federal agency and government-sponsored enterprise mortgage-backed securities gains, net	61	15
Foreign currency gains, net	154	60
Compensation received for service costs provided	20	33
Reimbursable services to government agencies	40	37
Other income	4	69
Total non-interest income	**279**	**214**
Operating expenses		
Salaries and benefits	312	306
Occupancy	43	41
Equipment	56	55
Assessments:		
Board of Governors operating expenses and currency costs	170	153
Bureau of Consumer Financial Protection and Office of Financial Research	10	—
Other	(110)	(98)
Total operating expenses	**481**	**457**
Net income prior to distribution	**6,241**	**2,120**
Change in funded status of benefit plans	11	5
Comprehensive income prior to distribution	**$ 6,252**	**$ 2,125**
Distribution of comprehensive income:		
Dividends paid to member banks	$ 349	$ 396
Transferred (from) to surplus and change in accumulated other comprehensive loss	(1,701)	1,160
Payments to Treasury as interest on Federal Reserve notes	7,604	569
Total distribution	**$ 6,252**	**$ 2,125**

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

For the years ended December 31, 2010 and December 31, 2009	Capital paid-in	Net income retained	Surplus Accumulated other comprehensive loss	Total surplus	Total capital
Balance at January 1, 2009 (119,603,084 shares)	$ 5,980	$ 6,027	$ (47)	$ 5,980	$ 11,960
Net change in capital stock issued (23,190,361 shares)	1,160	—	—	—	1,160
Transferred to surplus and change in accumulated other comprehensive loss	—	1,155	5	1,160	1,160
Balance at December 31, 2009 (142,793,445 shares)	$ 7,140	$ 7,182	$ (42)	$ 7,140	$ 14,280
Net change in capital stock redeemed (34,016,332 shares)	(1,701)	—	—	—	(1,701)
Transferred from surplus and change in accumulated other comprehensive loss	—	(1,712)	11	(1,701)	(1,701)
Balance at December 31, 2010 (108,777,113 shares)	**$ 5,439**	**$ 5,470**	**$ (31)**	**$ 5,439**	**$ 10,878**

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

1 Structure

The Federal Reserve Bank of Richmond (Bank) is part of the Federal Reserve System (System) and is one of the 12 Federal 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 Fifth Federal Reserve District, which includes Maryland, North Carolina, South Carolina, Virginia, District of Columbia, and portions of West Virginia.

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. 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.

In addition to the 12 Reserve Banks, 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. These functions include participating in formulating and conducting monetary policy; participating in the payment system, including large-dollar transfers of funds, automated clear-inghouse (ACH) operations, and check collection; distributing coin and currency; performing fiscal agency functions for the U.S. Department of the Treasury (Treasury), certain Federal agencies, and other entities; serving as the federal government's bank; providing short-term loans to depository institutions; providing loans to individuals, partnerships, and corporations in unusual and exigent circumstances; serving consumers and communities by providing educational materials and information regarding financial consumer protection rights and laws and information on community development programs and activities; and supervising 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 Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act), which was signed into law and became effective on July 21, 2010, changed the scope of some services performed by the Reserve Banks. Among other things, the Dodd-Frank Act establishes a Bureau of Consumer Financial Protection (Bureau) as an independent bureau within the Federal Reserve System that will have supervisory authority over some institutions previously supervised by the Reserve Banks under delegated authority from the Board of Governors in connection with those institutions' compliance with consumer protection statutes; limits the Reserve Banks' authority to provide loans in unusual and exigent circumstances to lending programs or facilities with broad-based eligibility; and vests the Board of Governors with all supervisory and rule-writing authority for savings and loan holding companies.

The FOMC, in conducting monetary policy, establishes policy regarding domestic open market operations, oversees these operations, and issues authorizations and directives to the FRBNY to execute transactions. The FOMC authorizes and directs the FRBNY to conduct operations in domestic markets, including the direct purchase and sale of Treasury securities, Federal agency and government-sponsored enterprise (GSE) debt securities, Federal agency and GSE mortgage-backed securities (MBS), the purchase of these securities under agreements to resell, and the sale of these securities under agreements to repurchase. The FRBNY holds the resulting securities and agreements in a portfolio known as the System Open Market Account (SOMA). The FRBNY is authorized to lend the Treasury securities and Federal agency and GSE debt securities that are held in the SOMA.

In addition to authorizing and directing operations in the domestic securities market, the FOMC authorizes the FRBNY

to conduct operations in foreign markets in order to counter disorderly conditions in exchange markets or to meet other needs specified by the FOMC to carry out the System's central bank responsibilities. Specifically, the FOMC authorizes and directs the FRBNY to hold balances of, and to execute spot and forward foreign exchange and securities contracts for, 14 foreign currencies and to invest such foreign currency holdings, while maintaining adequate liquidity. The FRBNY is authorized and directed by the FOMC to maintain reciprocal currency arrangements with the Bank of Canada and the Bank of Mexico and to "warehouse" foreign currencies for the Treasury and the Exchange Stabilization Fund.

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. 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 are reimbursed for costs incurred in providing services to other Reserve Banks. 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 Standard Cash Automation, Currency Technology Office, IT Transformation Initiatives, Enterprise-wide Security Projects, Enterprise Security Operations Coordination, the Payroll Central Business Administration Function, Daylight Overdraft Reporting and Pricing, and the National Procurement Office. Costs are, however, redistributed to the other Reserve Banks for computing and support services the Bank provides for the System. The Bank's total reimbursement for these services was $255 million and $261 million for the years ended December 31, 2010 and 2009, respectively, and is included in "Operating expenses: Other" on the Statements of Income and Comprehensive Income.

3 Financial Stability Activities

The Reserve Banks have implemented the following programs that support the liquidity of financial institutions and foster improved conditions in financial markets.

Large-Scale Asset Purchase Programs

The FOMC authorized and directed the FRBNY to purchase $300 billion of longer-term Treasury securities to help improve conditions in private credit markets. The FRBNY began the purchases of these Treasury securities in March 2009 and completed them in October 2009. On August 10, 2010, the FOMC announced that the Federal Reserve will maintain the level of domestic securities holdings in the SOMA portfolio by reinvesting principal payments from GSE debt securities and Federal agency and GSE MBS in longer-term Treasury securities. On November 3, 2010, the FOMC announced its intention to expand the SOMA portfolio holdings of longer-term Treasury securities by an additional $600 billion by June 2011. The FOMC will regularly review the pace of these securities purchases and the overall size of the asset purchase program and will adjust the program as needed to best foster maximum employment and price stability.

The FOMC authorized and directed the FRBNY to purchase GSE debt securities and Federal agency and GSE MBS, with a goal to provide support to mortgage and housing markets and to foster improved conditions in financial markets more generally. The FRBNY was authorized to purchase up to $175 billion in fixed-rate, non-callable GSE debt securities and $1.25 trillion in fixed-rate Federal agency and GSE MBS. Purchases of GSE debt securities began in November 2008, and purchases of Federal agency and GSE MBS began in January 2009. The FRBNY completed the purchases of GSE debt securities and Federal agency and GSE MBS in March 2010. The settlement of all Federal agency and GSE MBS transactions was completed by August 2010.

Central Bank Liquidity Swaps

The FOMC authorized and directed the FRBNY to establish central bank liquidity swap arrangements, which could be structured as either U.S. dollar liquidity or foreign currency liquidity swap arrangements. U.S. dollar liquidity swap arrangements were authorized with 14 foreign central banks to provide liquidity in U.S. dollars to overseas markets. The authorization for these swap arrangements expired on February 1, 2010. In May 2010, U.S. dollar liquidity swap arrangements were reestablished with the Bank of Canada, the Bank of England, the European Central Bank, the Bank of Japan, and the Swiss National Bank; these arrangements will expire on August 1, 2011.

Foreign currency liquidity swap arrangements provided the Reserve Banks with the capacity to offer foreign currency liquidity to U.S. depository institutions. The authorization for these swap arrangements expired on February 1, 2010.

Lending to Depository Institutions
The Term Auction Facility (TAF) promoted the efficient dissemination of liquidity by providing term funds to depository institutions. The last TAF auction was conducted on March 8, 2010, and the related loans matured on April 8, 2010.

Lending to Primary Dealers
The Term Securities Lending Facility (TSLF) promoted liquidity in the financing markets for Treasury securities. Under the TSLF, the FRBNY could lend up to an aggregate amount of $200 billion of Treasury securities held in the SOMA to primary dealers on a secured basis for a term of 28 days. The authorization for the TSLF expired on February 1, 2010.

The Term Securities Lending Facility Options Program (TOP) offered primary dealers the opportunity to purchase an option to draw upon short-term, fixed-rate TSLF loans in exchange for eligible collateral. The program was suspended effective with the maturity of the June 2009 TOP options, and authorization for the program expired on February 1, 2010.

Other Lending Facilities
The Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) provided funding to depository institutions and bank holding companies to finance the purchase of eligible high-quality asset-backed commercial paper (ABCP) from money market mutual funds. The Federal Reserve Bank of Boston administered the AMLF and was authorized to extend these loans to eligible borrowers on behalf of the other Reserve Banks. The authorization for the AMLF expired on February 1, 2010.

Bank of America Corporation
The Board of Governors, the Treasury, and the Federal Deposit Insurance Corporation (parties) jointly announced on January 15, 2009 that they would provide financial support to Bank of America Corporation (Bank of America). Under this arrangement, the Bank would have provided funding support for possible future principal losses relating to a designated pool of up to $118 billion of financial instruments. On September 21, 2009, the parties announced that they had reached an agreement with Bank of America to terminate the agreement. As part of the termination of the agreement, Bank of America paid $57 million in compensation for out-of-pocket expenses incurred by the Bank and for commitment fees required by the agreement.

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* (FAM), which is issued by the Board of Governors. 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.

Limited differences exist between the accounting principles and practices in the FAM and accounting principles generally accepted in the United States (GAAP), due to the unique nature of the Bank's powers and responsibilities as part of the nation's central bank and given the System's unique responsibility to conduct monetary policy. The primary differences are the presentation of all SOMA securities holdings at amortized cost and the recording of such securities on a settlement-date basis. The cost basis of Treasury securities, GSE debt securities, and foreign government debt instruments is adjusted for amortization of premiums or accretion of discounts on a straight-line basis, rather than using the interest method required by GAAP. Amortized cost, rather than the fair value presentation, more appropriately reflects the Bank's securities holdings given the System's unique responsibility to conduct monetary policy. Accounting for these securities on a settlement-date basis, rather than the trade-date basis required by GAAP, more appropriately reflects the timing of the transaction's effect on the quantity of reserves in the banking system. Although the application of fair value measurements to the securities holdings may result in values substantially greater or less than their

carrying values, these unrealized changes in value 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 before 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 gains or losses resulting from the sale of such securities and currencies are incidental to open market operations and do not motivate decisions related to policy or open market activities.

In addition, the Bank does not present a Statement of Cash Flows as required by GAAP 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. Unique accounts and significant accounting policies are explained below.

a. Consolidation

The Dodd-Frank Act established the Bureau as an independent bureau within the Federal Reserve System, and section 1017 of the Dodd-Frank Act provides that the financial statements of the Bureau are not to be consolidated with those of the Board of Governors or the Federal Reserve System. Section 152 of the Dodd-Frank Act established the Office of Financial Research (OFR) within the Treasury. The Board of Governors funds the Bureau and the OFR through assessments on the Reserve Banks as required by the Dodd-Frank Act. The Reserve Banks reviewed the law and evaluated the design of and their relationships to the Bureau and the OFR and determined that neither should be consolidated in the Reserve Banks' combined financial statements.

b. Gold and Special Drawing Rights Certificates

The Secretary of the Treasury is authorized to issue gold and special drawing rights (SDR) certificates to the Reserve Banks. Upon authorization, the Reserve Banks acquire gold certificates by crediting equivalent amounts in dollars to the account established for the Treasury. The gold certificates held by the Reserve Banks are required to be backed by the gold owned by the Treasury. The Treasury may reacquire the gold certificates at any time and the Reserve Banks must deliver them to the Treasury. At such time, the 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 per 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 at each Reserve Bank.

SDR certificates are issued by the International Monetary Fund (IMF) to its members in proportion to each member's quota in the IMF 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 Treasury is authorized to issue SDR certificates to the Reserve Banks. When SDR certificates are issued to the Reserve Banks, equivalent amounts in U.S. dollars are credited to the account established for the Treasury, and the Reserve Banks' SDR certificate accounts are increased. The Reserve Banks are required to purchase SDR certificates, at the direction of the 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. SDRs are recorded by the Bank at original cost. In 2009, the Treasury issued $3 billion in SDR certificates to the Reserve Banks, of which $265 million was allocated to the Bank. There were no SDR transactions in 2010.

c. Coin

The amount reported as coin in the Statements of Condition represents the face value of all United States coin held by the Bank. The Bank buys coin at face value from the U.S. Mint in order to fill depository institution orders.

d. Loans

Loans to depository institutions are reported at their outstanding principal balances, and interest income is recognized on an accrual basis.

Loans are impaired when current information and events indicate that it is probable that the Bank will not receive the principal and interest that is due in accordance with the contractual terms of the loan agreement. Impaired loans are evaluated to determine whether an allowance for loan loss is required. The Bank has developed procedures for assessing the adequacy of any allowance for loan losses using all available information to identify incurred losses. This assessment includes monitoring information obtained from banking supervisors, borrowers, and other sources to assess the credit condition of the borrowers and, as appropriate, evaluating collateral values. Generally, the Bank would discontinue recognizing interest income on impaired loans until the borrower's repayment performance demonstrates principal and interest would be received in accordance with the terms of the loan agreement. If the Bank discontinues recording interest on an impaired loan, cash payments are first applied to principal until the loan balance is reduced to zero; subsequent payments are applied as recoveries of amounts previously deemed uncollectible, if any, and then as interest income.

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

The FRBNY may engage in purchases of securities with primary dealers under agreements to resell (repurchase transactions). These repurchase transactions are settled through a tri-party arrangement. In a tri-party arrangement, two commercial custodial banks manage the collateral clearing, settlement, pricing, and pledging, and provide cash and securities custodial services for and on behalf of the Bank and counterparty. The collateral pledged must exceed the principal amount of the transaction by a margin determined by the FRBNY for each class and maturity of acceptable collateral. Collateral designated by the FRBNY as acceptable under repurchase transactions primarily includes Treasury securities (including TIPS and STRIP Treasury securities); direct obligations of several Federal agency and GSE-related agencies, including Fannie Mae and Freddie Mac; and pass-through MBS of Fannie Mae, Freddie Mac, and Ginnie Mae. The repurchase transactions are accounted for as financing transactions with the associated interest income recognized over the life of the transaction. Repurchase transactions are reported at their contractual amount as "System Open Market Account: Securities purchased under agreements to resell," and the related accrued interest receivable is reported as a component of "Accrued interest receivable" in the Statements of Condition.

The FRBNY may engage in sales of securities under agreements to repurchase (reverse repurchase transactions) with primary dealers and, beginning August 2010, with selected money market funds, as an open market operation. These reverse repurchase transactions may be executed through a tri-party arrangement, similar to repurchase transactions. Reverse repurchase transactions may also be executed with foreign official and international account holders as part of a service offering. Reverse repurchase agreements are collateralized by a pledge of an amount of Treasury securities, GSE debt securities, and Federal agency and GSE MBS that are held in the SOMA. Reverse repurchase transactions 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 as "System Open Market Account: Securities sold under agreements to repurchase" and the related accrued interest payable is reported as a component of "Other liabilities" in the Statements of Condition.

Treasury securities and GSE debt securities held in the SOMA may be lent to primary dealers to facilitate the effective functioning of the domestic securities markets. Overnight securities lending transactions are fully collateralized by Treasury securities that have fair values in excess of the securities lent. The FRBNY charges the primary dealer a fee for borrowing securities, and these fees are reported as a component of "Other income" in the Statements of Income and Comprehensive 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 that occurs in April each year.

f. Treasury Securities; Government-Sponsored Enterprise Debt Securities; Federal Agency and Government-Sponsored Enterprise Mortgage-Backed Securities; Foreign Currency Denominated Assets; and Warehousing Agreements

Interest income on Treasury securities, GSE debt securities, and foreign currency denominated assets comprising the SOMA is accrued on a straight-line basis. Interest income on Federal agency and GSE MBS is accrued using the interest method and

includes amortization of premiums, accretion of discounts, and gains or losses associated with principal paydowns. Premiums and discounts related to Federal agency and GSE MBS are amortized over the term of the security to stated maturity, and the amortization of premiums and accretion of discounts are accelerated when principal payments are received. Paydown gains and losses represent the difference between the principal amount paid and the amortized cost basis of the related security. Gains and losses resulting from sales of securities are determined by specific issue based on average cost. Treasury securities, GSE debt securities, and Federal agency and GSE MBS are reported net of premiums and discounts on the Statements of Condition, and interest income on those securities is reported net of the amortization of premiums and accretion of discounts on the Statements of Income and Comprehensive Income.

In addition to outright purchases of Federal agency and GSE MBS that are held in the SOMA, the FRBNY entered into dollar roll transactions (dollar rolls), which primarily involve an initial transaction to purchase or sell "to be announced" (TBA) MBS for delivery in the current month combined with a simultaneous agreement to sell or purchase TBA MBS on a specified future date. The FRBNY also executed a limited number of TBA MBS coupon swap transactions, which involve a simultaneous sale of a TBA MBS and purchase of another TBA MBS of a different coupon rate. The FRBNY's participation in the dollar roll and coupon swap markets furthers the MBS purchase program goal of providing support to the mortgage and housing markets and fostering improved conditions in financial markets more generally. The FRBNY accounts for outstanding commitments under dollar roll and coupon swaps on a settlement-date basis. Based on the terms of the FRBNY dollar roll and coupon swap transactions, transfers of MBS upon settlement of the initial TBA MBS transactions are accounted for as purchases or sales in accordance with FASB ASC Topic 860 (ASC 860), *Transfers and Servicing*, and the related outstanding commitments are accounted for as sales or purchases upon settlement. Net gains resulting from dollar roll and coupon swap transactions are reported as "Non-interest income: System Open Market Account: Federal agency and government-sponsored enterprise mortgage-backed securities gains, net" in the Statements of Income and Comprehensive Income.

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 foreign currency denominated assets are reported as "Non-interest income: System Open Market Account: Foreign currency gains, net" in the Statements of Income and Comprehensive Income.

Activity related to Treasury securities, GSE debt securities, and Federal agency and GSE MBS, 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. Activity related to foreign currency denominated assets, 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 has approved the exchange, at the request of the Treasury, of U.S. dollars for foreign currencies held by the Treasury over a limited period of time. The purpose of the warehousing facility is to supplement the U.S. dollar resources of the Treasury 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.

g. Central Bank Liquidity Swaps

Central bank liquidity swaps, which are transacted between the FRBNY and a foreign central bank, can be structured as either U.S. dollar liquidity or foreign currency liquidity swap arrangements.

Central bank liquidity swaps activity, including the related income and expense, 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. The foreign currency amounts associated with these central bank liquidity swap arrangements are revalued at current foreign currency market exchange rates.

U.S. dollar liquidity swaps

At the initiation of each U.S. dollar liquidity swap transaction, the foreign central bank transfers a specified amount of its currency to a restricted account for 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 as the initial transaction. The Bank's allocated portion of the foreign currency amounts that the FRBNY acquires is reported as "System Open Market Account: Central bank liquidity swaps" on the Statements of Condition. Because the swap transaction will be unwound at the same U.S. dollar amount and exchange rate that were 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 compensates the FRBNY based on the foreign currency amounts it holds for the FRBNY. The FRBNY recognizes compensation during the term of the swap transaction and reports it as "Interest income: System Open Market Account: Central bank liquidity swaps" in the Statements of Income and Comprehensive Income.

Foreign currency liquidity swaps

The structure of foreign currency liquidity swap transactions involves the transfer by the FRBNY, at the prevailing market exchange rate, of a specified amount of U.S. dollars to an account for the foreign central bank in exchange for its currency. The foreign currency amount received would be reported as a liability by the Bank.

h. 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.

i. 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 2 to 50 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 purchase cost and the cost of direct services and materials associated with design-ing, 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 generally 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.

j. Federal Reserve Notes

Federal Reserve notes are the circulating currency of the United States. These notes, which are identified as issued to a specific Reserve Bank, must be fully collateralized. All of the Bank's assets are eligible to be pledged as collateral. 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 sold under agreements to repurchase is deducted from the eligible collateral value.

The Board of Governors may, at any time, call upon a Reserve Bank for additional security to adequately collateralize 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.

"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 $12,999 million and $10,026 million at December 31, 2010 and 2009, respectively.

At December 31, 2010 and 2009, all Federal Reserve notes issued to the Reserve Banks were fully collateralized. At December 31, 2010, all gold certificates, all special drawing right certificates, and $925 billion of domestic securities held in the SOMA were pledged as collateral. At December 31, 2010, no investments denominated in foreign currencies were pledged as collateral.

k. Deposits

Depository institutions

Depository institutions deposits represent the reserve and service-related balances in the accounts that depository institutions hold at the Bank. The interest rates paid on required reserve balances and excess balances are determined by the Board of Governors, based on an FOMC-established target range for the federal funds rate. Interest payable is reported as "Interest payable to depository institutions" on the Statements of Condition.

The Term Deposit Facility (TDF) consists of deposits with specific maturities held by eligible institutions at the Reserve Banks. The Reserve Banks pay interest on these deposits at interest rates determined by auction. Interest payable is reported as "Interest payable to depository institutions" on the Statements of Condition. There were no deposits held by the Bank under the TDF at December 31, 2010.

Other deposits include foreign central bank and foreign government deposits held at the FRBNY that are allocated to the Bank.

l. Items in Process of Collection and Deferred Credit Items

"Items in process of collection" primarily represent 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. 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.

m. 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 meet 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.

n. 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. Accumulated other comprehensive income is reported as a component of "Surplus" in the Statements of Condition and the Statements of Changes in Capital. Additional information regarding the classifications of accumulated other comprehensive income is provided in Notes 12 and 13.

o. Interest on Federal Reserve Notes

The Board of Governors requires the Reserve Banks to transfer excess earnings to the 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 Treasury as interest on Federal Reserve notes" in the Statements of Income and Comprehensive Income. The amount due to the Treasury is reported as "Accrued interest on Federal Reserve notes" in the Statements of Condition.

If earnings during the year are not sufficient to provide for the costs of operations, payment of dividends, and equating surplus and capital paid-in, payments to the Treasury are suspended. A deferred asset is recorded that represents the amount of net earnings a Reserve Bank will need to realize before remittances to Treasury resume. This deferred asset is periodically reviewed for impairment. The deferred asset is reported as "Deferred asset—interest on Federal Reserve notes" on the Statements of Condition.

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 Treasury in the following year.

p. Income and Costs Related to Treasury Services

When directed by the Secretary of the Treasury, the Bank is required by the Federal Reserve Act to serve as fiscal agent and depositary of the United States Government. By statute, the Treasury has appropriations to pay for these services. During the years ended December 31, 2010 and 2009, the Bank was reimbursed for all services provided to the Treasury as its fiscal agent.

q. Compensation Received for Service Costs 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 services and recognizes total System revenue for these services on its Consolidated Statements of Income and Comprehensive Income. The FRBA and the FRBNY compensate the applicable Reserve Banks for the costs incurred to provide these services. The Bank reports this compensation as "Compensation received for service costs provided" in the Statements of Income and Comprehensive Income.

r. Assessments

The Board of Governors assesses the Reserve Banks to fund its operations and the operations of the Bureau and, for a two-year period, the OFR. These assessments are allocated to each Reserve Bank based on each Reserve Bank's capital and surplus balances as of December 31 of the prior year for the Board of Governors' operations, and as of the most recent quarter for the Bureau and OFR operations. The Board of Governors also assesses each Reserve Bank for the expenses incurred by the Treasury to produce 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.

During the period prior to the Bureau transfer date of July 21, 2011, there is no fixed limit on the funding that can be provided to the Bureau and that is assessed to the Reserve Banks; the Board of Governors must provide the amount estimated by the Secretary of the Treasury needed to carry out the authorities granted to the Bureau under the Dodd-Frank Act and other federal law. After the transfer date, the Dodd-Frank Act requires the Board of Governors to fund the Bureau an amount not to exceed a fixed percentage of the total operating expenses of the Federal Reserve System as reported in the Board of Governors' 2009 annual report. The fixed percentage of total operating expenses of the System is 10 percent for 2011, 11 percent for 2012, and 12 percent for 2013. After 2013, the amount will be adjusted in accordance with the provisions of the Dodd-Frank Act.

The Board of Governors assesses the Reserve Banks to fund the operations of the OFR for the two-year period following enactment of the Dodd-Frank Act; thereafter, the OFR will be funded by fees assessed on certain bank holding companies.

s. Taxes

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property. The Bank's real property taxes were $2 million for each of the years ended December 31, 2010 and 2009, respectively, and are reported as a component of "Operating expenses: Occupancy" in the Statements of Income and Comprehensive Income.

t. 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, contract terminations, 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. 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.

The Bank had no significant restructuring activities in 2010 and 2009.

u. Recently Issued Accounting Standards

In June 2009, FASB issued Statement of Financial Accounting Standards 166, *Accounting for Transfers of Financial Assets—an amendment to FASB Statement No. 140* (codified in ASC 860). The new standard revises the criteria for recognizing transfers of financial assets as sales and clarifies that the transferor must consider all arrangements when determining if the transferor has surrendered control. The adoption of this accounting guidance was effective for the Bank for the year beginning on January 1, 2010, and did not have a material effect on the Bank's financial statements.

In July 2010, the FASB issued Accounting Standards Update 2010–20, *Receivables* (Topic 310), which requires additional disclosures about the allowance for credit losses and the credit quality of loan portfolios. The additional disclosures include a roll forward of the allowance for credit losses on a disaggregated basis and more information, by type of receivable, on credit quality indicators, including the amount of certain past due receivables and troubled debt restructurings and significant purchases and sales. The adoption of this accounting guidance is effective for the Bank on December 31, 2011, and is not expected to have a material effect on the Bank's financial statements.

5 Loans

The remaining maturity distribution of loans outstanding at December 31, 2010, and total loans outstanding at December 31, 2009, were as follows (in millions):

	2010		2009
	Within 15 days	Total	Total
Primary, secondary, and seasonal credit	$ 61	$ 61	$ 102
TAF	—	—	995
Loans to depository institutions	**$ 61**	**$ 61**	**$ 1,097**

Loans to Depository Institutions

The Bank offers primary, secondary, and seasonal credit to eligible borrowers, and each program has its own interest rate. Interest is accrued using the applicable interest rate established at least every 14 days by the Bank's board of directors, subject to review and determination by the Board of Governors. Primary and secondary credit are extended on a short-term basis, typically overnight, whereas seasonal credit may be extended for a period of 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; Treasury securities; GSE debt securities; foreign sovereign debt; municipal, corporate, and state and local government obligations; asset-backed securities (ABS); corporate bonds; commercial paper; and bank-issued assets, such as certificates of deposit, bank notes, and deposit notes. Collateral is assigned a lending value that is deemed appropriate by the Bank, which is typically fair value reduced by a margin.

Depository institutions that are eligible to borrow under the Bank's primary credit program were eligible to participate in the TAF program. Under the TAF program, the Reserve Banks conducted auctions for a fixed amount of funds, with the interest rate determined by the auction process, subject to a minimum bid rate. TAF loans were extended on a short-term basis, with terms ranging from 28 to 84 days. All advances under the TAF program were collateralized to the satisfaction of the Bank. All TAF loan principal and accrued interest was fully repaid.

Loans to depository institutions are monitored daily 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, for primary or seasonal credit lending, 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.

At December 31, 2010 and 2009, the Bank did not have any impaired loans and no allowance for loan losses was required. There were no impaired loans during the years ended December 31, 2010 and 2009.

6 **Treasury Securities; Government-Sponsored Enterprise Debt Securities; Federal Agency and Government-Sponsored Enterprise Mortgage-Backed 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 11.389 percent and 3.604 percent at December 31, 2010 and 2009, respectively.

The Bank's allocated share of Treasury securities, GSE debt securities, and Federal agency and GSE MBS, excluding accrued interest, held in the SOMA at December 31 was as follows (in millions):

	2010				
	Par	Unamortized premiums	Unaccreted discounts	Total amortized cost	Fair value
Bills	$ 2,098	$ —	$ —	$ 2,098	$ 2,098
Notes	88,069	1,601	(87)	89,583	91,647
Bonds	26,170	3,728	(65)	29,833	33,000
Total Treasury securities	**$ 116,337**	**$ 5,329**	**$ (152)**	**$ 121,514**	**$ 126,745**
GSE debt securities	**$ 16,794**	**$ 630**	**$ (2)**	**$ 17,422**	**$ 17,856**
Federal agency and GSE MBS	**$ 112,994**	**$ 1,607**	**$ (177)**	**$ 114,424**	**$ 116,851**

	2009				
	Par	Unamortized premiums	Unaccreted discounts	Total amortized cost	Fair value
Bills	$ 664	$ —	$ —	$ 664	$ 664
Notes	20,481	236	(35)	20,682	21,011
Bonds	6,841	881	(23)	7,699	8,314
Total Treasury securities	**$ 27,986**	**$ 1,117**	**$ (58)**	**$ 29,045**	**$ 29,989**
GSE debt securities	**$ 5,761**	**$ 271**	**$ (1)**	**$ 6,031**	**$ 6,034**
Federal agency and GSE MBS	**$ 32,735**	**$ 436**	**$ (56)**	**$ 33,115**	**$ 32,948**

The total of the Treasury securities, GSE debt securities, and Federal agency and GSE MBS, net, excluding accrued interest, held in the SOMA at December 31 was as follows (in millions):

	2010		2009	
	Amortized cost	Fair value	Amortized cost	Fair value
Bills	$ 18,422	$ 18,422	$ 18,423	$ 18,422
Notes	786,575	804,703	573,876	583,041
Bonds	261,955	289,757	213,673	230,717
Total Treasury securities	**$ 1,066,952**	**$ 1,112,882**	**$ 805,972**	**$ 832,180**
GSE debt securities	**$ 152,972**	**$ 156,780**	**$ 167,362**	**$ 167,444**
Federal agency and GSE MBS	**$ 1,004,695**	**$ 1,026,003**	**$ 918,927**	**$ 914,290**

The fair value amounts in the above tables are presented solely for informational purposes. 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 the central bank, to meet their financial obligations and responsibilities. The fair value of Federal agency and GSE MBS was determined using a model-based approach that considers observable inputs for similar securities; fair value for all other SOMA security holdings was determined by reference to quoted prices for identical securities.

The fair value of the fixed-rate Treasury securities, GSE debt securities, and Federal agency and GSE MBS in the SOMA's holdings is subject to market risk, arising from movements in market variables, such as interest rates and securities prices. The fair value of Federal agency and GSE MBS is also affected by the rate of prepayments of mortgage loans underlying the securities.

The following table provides additional information on the amortized cost and fair values of the Federal agency and GSE MBS portfolio at December 31, 2010 and 2009 (in millions):

Distribution of MBS holdings by coupon rate	2010		2009	
	Amortized cost	Fair value	Amortized cost	Fair value
Allocated to the Bank:				
3.5%	$ 39	$ 40	$ 13	$ 13
4.0%	19,097	19,179	6,131	5,973
4.5%	56,680	57,947	15,653	15,555
5.0%	26,356	27,054	7,042	7,078
5.5%	10,605	10,919	3,725	3,769
6.0%	1,470	1,523	458	465
6.5%	177	189	93	95
Total	**$ 114,424**	**$ 116,851**	**$ 33,115**	**$ 32,948**
SOMA:				
3.5%	$ 341	$ 352	$ 363	$ 365
4.0%	167,675	168,403	170,119	165,740
4.5%	497,672	508,798	434,352	431,646
5.0%	231,420	237,545	195,418	196,411
5.5%	93,119	95,873	103,379	104,583
6.0%	12,910	13,376	12,710	12,901
6.5%	1,558	1,656	2,586	2,644
Total	**$ 1,004,695**	**$ 1,026,003**	**$ 918,927**	**$ 914,290**

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

	Securities purchased under agreements to resell		Securities sold under agreements to repurchase	
	2010	2009	2010	2009
Allocated to the Bank:				
Contract amount outstanding, end of year	$ —	$ —	$ 6,800	$ 2,801
Average daily amount outstanding, during the year	—	328	5,364	3,592
Maximum balance outstanding, during the year	—	7,254	7,673	8,118
Securities pledged (par value), end of year	—	—	4,970	2,806
SOMA:				
Contract amount outstanding, end of year	$ —	$ —	$ 59,703	$ 77,732
Average daily amount outstanding, during the year	—	3,616	58,476	67,837
Maximum balance outstanding, during the year	—	80,000	77,732	89,525
Securities pledged (par value), end of year	—	—	43,642	77,860

The contract amounts for securities purchased under agreements to resell and securities sold under agreements to repurchase approximate fair value. The FRBNY executes transactions for the purchase of securities under agreements to resell primarily to temporarily add reserve balances to the banking system. Conversely, transactions to sell securities under agreements to repurchase are executed primarily to temporarily drain reserve balances from the banking system.

The remaining maturity distribution of Treasury securities, GSE debt securities, Federal agency and GSE MBS bought outright, and securities sold under agreements to repurchase that were allocated to the Bank at December 31, 2010, was as follows (in millions):

	Within 15 days	16 days to 90 days	91 days to 1 year	Over 1 year to 5 years	Over 5 years to 10 years	Over 10 years	Total
Treasury securities (par value)	$ 1,116	$ 2,826	$ 6,179	$ 50,065	$ 38,034	$ 18,117	$ 116,337
GSE debt securities (par value)	128	1,576	3,246	8,092	3,485	267	16,794
Federal agency and GSE MBS (par value)	—	—	—	3	2	112,989	112,994
Securities sold under agreements to repurchase (contract amount)	6,800	—	—	—	—	—	6,800

Federal agency and GSE MBS are reported at stated maturity in the table above. The estimated weighted average life of these securities at December 31, 2010, which differs from the stated maturity primarily because the weighted average life factors in prepayment assumptions, is approximately 4.2 years.

The par value of Treasury and GSE debt securities that were loaned from the SOMA at December 31 was as follows (in millions):

	Allocated to the Bank		System total	
	2010	2009	2010	2009
Treasury securities	$ 2,515	$ 739	$ 22,081	$ 20,502
GSE debt securities	183	40	1,610	1,108

Other liabilities, which are related to purchases of Federal agency and GSE MBS, arise from the failure of a seller to deliver securities to the FRBNY on the settlement date. Although the Bank has ownership of and records its investments in the MBS as of the contractual settlement date, it is not obligated to make payment until the securities are delivered, and the amount reported as other liabilities represents the Bank's obligation to pay for the securities when delivered. The amount of other liabilities allocated to the Bank and held in the SOMA at December 31 was as follows (in millions):

	Allocated to the Bank		System total	
	2010	2009	2010	2009
Other liabilities	$ —	$ 22	$ —	$ 601

The FRBNY enters into commitments to buy Treasury and GSE debt securities and records the related securities on a settlement-date basis. There were no commitments to buy Treasury and GSE debt securities as of December 31, 2010.

The FRBNY enters into commitments to buy Federal agency and GSE MBS and records the related MBS on a settlement-date basis. There were no commitments to buy or sell Federal agency or GSE MBS as of December 31, 2010.

During the years ended December 31, 2010 and 2009, the Reserve Banks recorded net gains from dollar roll and coupon swap related transactions of $782 million and $879 million, respectively, of which $61 million and $15 million, respectively, was allocated to the Bank. These net gains are reported as "Non-interest income: System Open Market Account: Federal agency and government-sponsored enterprise mortgage-backed securities gains, net" in the Statements of Income and Comprehensive Income.

7 Foreign Currency Denominated Assets

The FRBNY holds foreign currency deposits with foreign central banks and the Bank for International Settlements and invests in foreign government debt instruments. These foreign government debt instruments are guaranteed as to principal and interest by the issuing foreign governments. In addition, the FRBNY enters into transactions to purchase euro-denominated government debt securities under agreements to resell for which the accepted collateral is the debt instruments issued by the governments of Belgium, France, Germany, Italy, the Netherlands, and Spain.

The Bank's allocated share of foreign currency denominated assets was approximately 27.845 percent and 28.374 percent at December 31, 2010 and 2009, respectively.

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

	2010	2009
Euro:		
Foreign currency deposits	$ 1,965	$ 2,098
Securities purchased under agreements to resell	687	735
Government debt instruments	1,281	1,401
Japanese yen:		
Foreign currency deposits	1,081	966
Government debt instruments	2,239	1,971
Total allocated to the Bank	**$ 7,253**	**$ 7,171**

At December 31, 2010 and 2009, the fair value of foreign currency denominated assets, including accrued interest, allocated to the Bank was $7,299 million and $7,230 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 Treasury securities, GSE debt securities, and Federal agency and GSE MBS discussed in Note 6, unrealized gains or losses have no effect on the ability of a Reserve Bank, as the central bank, to meet its financial obligations and responsibilities. The fair value is presented solely for informational purposes.

Total Reserve Bank foreign currency denominated assets were $26,049 million and $25,272 million at December 31, 2010 and 2009, respectively. At December 31, 2010 and 2009, the fair value of the total Reserve Bank foreign currency denominated assets, including accrued interest, was $26,213 million and $25,480 million, respectively.

The remaining maturity distribution of foreign currency denominated assets that were allocated to the Bank at December 31, 2010, was as follows (in millions):

	Within 15 days	16 days to 90 days	91 days to 1 year	Over 1 year to 5 years	Total allocated to the Bank
Euro	$ 1,510	$ 835	$ 563	$ 1,025	$ 3,933
Japanese yen	1,142	156	679	1,343	3,320
Total allocated to the Bank	**$ 2,652**	**$ 991**	**$ 1,242**	**$ 2,368**	**$ 7,253**

At December 31, 2010 and 2009, the authorized warehousing facility was $5 billion, with no balance outstanding.

There were no transactions related to the authorized reciprocal currency arrangements with the Bank of Canada and the Bank of Mexico during the years ended December 31, 2010 and 2009.

There were no foreign exchange contracts outstanding as of December 31, 2010.

The FRBNY enters into commitments to buy foreign government debt instruments and records the related securities on a settlement-date basis. As of December 31, 2010, there were $209 million of outstanding commitments to purchase euro-denominated government debt instruments, of which $58 million was allocated to the Bank. These securities settled on January 4, 2011, and replaced euro-denominated government debt instruments held in the SOMA that matured on that date.

In connection with its foreign currency activities, the FRBNY may enter into transactions that are subject to varying degrees of off-balance-sheet market risk and counterparty credit risk that result from their future settlement. The FRBNY controls these risks by obtaining credit approvals, establishing transaction limits, receiving collateral in some cases, and performing daily monitoring procedures.

8 Central Bank Liquidity Swaps

U.S. Dollar Liquidity Swaps

The Bank's allocated share of U.S. dollar liquidity swaps was approximately 27.845 percent and 28.374 percent at December 31, 2010 and 2009, respectively.

The total foreign currency held under U.S. dollar liquidity swaps in the SOMA at December 31, 2010 and 2009, was $75 million and $10,272 million, respectively, of which $21 million and $2,915 million, respectively, was allocated to the Bank. All of the U.S. dollar liquidity swaps outstanding at December 31, 2010, were transacted with the European Central Bank and had remaining maturity distributions of less than 15 days.

Foreign Currency Liquidity Swaps

There were no transactions related to the foreign currency liquidity swaps during the years ended December 31, 2010 and 2009.

9 Bank Premises, Equipment, and Software

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

	2010	2009
Bank premises and equipment:		
Land and land improvements	$ 48	$ 44
Buildings	231	225
Building machinery and equipment	76	73
Construction in progress	3	4
Furniture and equipment	276	263
Subtotal	**634**	**609**
Accumulated depreciation	(301)	(284)
Bank premises and equipment, net	**$ 333**	**$ 325**
Depreciation expense, for the years ended December 31	**$ 46**	**$ 46**

Bank premises and equipment at December 31 included the following amounts for capitalized leases (in millions):

	2010	2009
Leased premises and equipment under capital leases	$ 18	$ 9
Accumulated depreciation	(8)	(5)
Leased premises and equipment under capital leases, net	**$ 10**	**$ 4**
Depreciation expense related to leased premises and equipment under capital leases	**$ 3**	**$ 2**

The Bank leases space to outside tenants with remaining lease terms ranging from one to seven years. Rental income from such leases was $1 million for each of the years ended December 31, 2010 and 2009, respectively, and is reported as a component of "Other income" in the Statements of Income and Comprehensive Income. Future minimum lease payments that the Bank will receive under noncancelable lease agreements in existence at December 31, 2010, are as follows (in thousands):

2011	$ 1,211
2012	815
2013	751
2014	775
2015	684
Thereafter	1,097
Total	**$ 5,333**

The Bank had capitalized software assets, net of amortization, of $29 million and $23 million at December 31, 2010 and 2009, respectively. Amortization expense was $12 million and $14 million for the years ended December 31, 2010 and 2009, respectively. Capitalized software assets are reported as a component of "Other assets" in the Statements of Condition,

and the related amortization is reported as a component of "Operating expenses: Other" in the Statements of Income and Comprehensive Income.

The Bank disclosed a subsequent event in its 2009 financial statements related to the termination of a contract for software development. The Bank has determined that a portion of the software development program will not be used, and in 2010 reduced the carrying value of the assets by $1.0 million. The Bank was reimbursed in 2010 by the other Reserve Bank involved in the software development program.

10 Commitments and Contingencies

Conducting its operations, the Bank enters into contractual commitments, normally with fixed expiration dates or termination provisions, at specific rates and for specific purposes.

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 $256 thousand and $533 thousand for the years ended December 31, 2010 and 2009, respectively.

At December 31, 2010, there were no future minimum rental payments under noncancelable operating leases, net of sublease rentals, with remaining terms of one year or more.

At December 31, 2010, there were no material unrecorded unconditional purchase commitments or 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 share of certain losses in excess of 1 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, 2010 or 2009.

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 employees of the Reserve Banks, Board of Governors, and Office of Employee Benefits of the Federal Reserve System (OEB) participate in the Retirement Plan for Employees of the Federal Reserve System (System Plan). In addition, employees at certain compensation levels participate in the Benefit Equalization Retirement Plan (BEP), and certain Reserve Bank officers participate in the Supplemental Retirement Plan for Select Officers of the Federal Reserve Bank (SERP). In addition, under the Dodd-Frank Act, employees of the Bureau can elect to participate in the System Plan. There were no Bureau participants in the System Plan as of December 31, 2010.

The System Plan provides retirement benefits to employees of the Federal Reserve Banks, Board of Governors, and OEB, and in the future will provide retirement benefits to certain employees of the Bureau. The FRBNY, on behalf of the System, recognizes the net asset or net liability and costs associated with the System Plan in its consolidated financial statements. During the years ended December 31, 2010 and 2009, costs associated with the System Plan were 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, 2010 and 2009, and for the years then ended, were not material.

Thrift Plan

Employees of the Bank 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. Effective April 1, 2009, the Bank matches 100 percent of the first 6 percent of employee contributions from the date of hire and provides an automatic employer contribution of 1 percent of eligible pay. For the first three months of the year ended December 31, 2009, the Bank matched 80 percent of the first 6 percent of employee contributions for employees with fewer than five years of service and 100 percent of the first 6 percent of employee contributions for employees with five or more years of service. The Bank's Thrift Plan contributions totaled $13 million and $12 million for the years ended December 31, 2010 and 2009, respectively, and are reported as a component of "Operating expenses: Salaries and benefits" in the Statements of Income and Comprehensive Income.

12 Postretirement Benefits Other Than Retirement Plans and Postemployment Benefits

Postretirement Benefits Other Than Retirement Plans

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):

	2010	2009
Accumulated postretirement benefit obligation at January 1	$ 191.8	$ 182.0
Service cost benefits earned during the period	8.3	7.4
Interest cost on accumulated benefit obligation	11.3	11.2
Net actuarial loss	1.5	9.4
Contributions by plan participants	2.2	1.8
Benefits paid	(12.2)	(9.7)
Medicare Part D subsidies	0.6	0.6
Plan amendments	(10.5)	(10.9)
Accumulated postretirement benefit obligation at December 31	**$ 193.0**	**$ 191.8**

At December 31, 2010 and 2009, the weighted-average discount rate assumptions used in developing the postretirement benefit obligation were 5.25 percent and 5.75 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):

	2010	2009
Fair value of plan assets at January 1	$ —	$ —
Contributions by the employer	9.4	7.3
Contributions by plan participants	2.2	1.8
Benefits paid	(12.2)	(9.7)
Medicare Part D subsidies	0.6	0.6
Fair value of plan assets at December 31	$ —	$ —
Unfunded obligation and accrued postretirement benefit cost	$ 193.0	$ 191.8
Amounts included in accumulated other comprehensive loss are shown below:		
Prior service cost	$ 20.6	$ 13.5
Net actuarial loss	(52.4)	(56.1)
Total accumulated other comprehensive loss	$ (31.8)	$ (42.6)

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:

	2010	2009
Health care cost trend rate assumed for next year	8.00%	7.50%
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	2017	2015

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, 2010 (in millions):

	1 percentage point increase	1 percentage point decrease
Effect on aggregate of service and interest cost components of net periodic postretirement benefit costs	$ 3.4	$ (2.8)
Effect on accumulated postretirement benefit obligation	25.6	(21.3)

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

	2010	2009
Service cost benefits earned during the period	$ 8.3	$ 7.4
Interest cost on accumulated benefit obligation	11.3	11.2
Amortization of prior service cost	(3.4)	(1.6)
Amortization of net actuarial loss	5.2	5.0
Total periodic expense	**21.4**	**22.0**
Curtailment gain	—	(0.4)
Net periodic postretirement benefit expense	**$ 21.4**	**$ 21.6**
Estimated amounts that will be amortized from accumulated other comprehensive loss into net periodic postretirement benefit expense in 2011 are shown below:		
Prior service cost	$ (4.3)	
Net actuarial loss	4.1	
Total	**$ (0.2)**	

Net postretirement benefit costs are actuarially determined using a January 1 measurement date. At January 1, 2010 and 2009, the weighted-average discount rate assumptions used to determine net periodic postretirement benefit costs were 5.75 percent and 6.00 percent, respectively.

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

A deferred curtailment gain was recorded in 2007 as a component of accumulated other comprehensive loss; the gain was recognized in net income in 2009 when the related employees terminated 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 $0.5 million and $0.8 million in the years ended December 31, 2010 and 2009, respectively. Expected receipts in 2011, related to benefits paid in the years ended December 31, 2010 and 2009, are $0.3 million.

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

	Without subsidy	With subsidy
2011	$ 9.2	$ 8.5
2012	9.8	9.0
2013	10.4	9.5
2014	11.1	10.0
2015	11.8	10.7
2016–2020	71.4	63.4
Total	**$ 123.7**	**$ 111.1**

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, disability benefits, and self-insured workers' compensation expenses. The accrued postemployment benefit costs recognized by the Bank were $19 million for each of the years ended December 31, 2010 and 2009, respectively. This cost is included as a component of "Accrued benefit costs" in the Statements of Condition. Net periodic postemployment benefit expense included in 2010 and 2009 operating expenses were $2 million and $7 million, respectively, and are recorded as a component of "Operating expenses: Salaries and 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 related to postretirement benefits other than retirement plans
Balance at January 1, 2009	$ (47)
Change in funded status of benefit plans:	
Prior service costs arising during the year	11
Net actuarial loss arising during the year	(9)
Amortization of prior service cost	(2)
Amortization of net actuarial loss	5
Change in funded status of benefit plans—other comprehensive loss	5
Balance at December 31, 2009	**$ (42)**
Change in funded status of benefit plans:	
Prior service costs arising during the year	11
Net actuarial loss arising during the year	(2)
Amortization of prior service cost	(3)
Amortization of net actuarial loss	5
Change in funded status of benefit plans—other comprehensive income loss	11
Balance at December 31, 2010	**$ (31)**

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

14 Business Restructuring Charges

The Bank had no business restructuring charges in 2010 or 2009.

Before 2009, the Reserve Banks announced their check restructuring initiatives to align the check processing infra-structure and operations with declining check processing volumes. The new infrastructure consolidated operations into two regional Reserve Bank processing sites: one in Cleveland, for paper check processing, and one in Atlanta, for electronic check processing. Additional announcements prior to 2009 included restructuring plans associated with the U.S. Treasury's Collections and Cash Management Modernization (CCMM) initiative.

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

	2008 and prior restructuring plans
Information related to restructuring plans as of December 31, 2010:	
Total expected costs related to restructuring activity	$ 8.2
Estimated future costs related to restructuring activity	—
Expected completion date	2010
Reconciliation of liability balances:	
Balance at January 1, 2009	$ 7.0
Employee separation costs	0.2
Adjustments	(1.0)
Payments	(5.2)
Balance at December 31, 2009	$ 1.0
Adjustments	0.1
Payments	(0.9)
Balance at December 31, 2010	**$ 0.2**

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 "Operating expenses: Salaries and 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.

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

There were no subsequent events that require adjustments to or disclosures in the financial statements as of December 31, 2010. Subsequent events were evaluated through March 22, 2011, which is the date that the Bank issued the financial statements.

ABBREVIATIONS

ACH Automated Clearinghouse

AMLF Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility

ASC Accounting Standards Codification

BEP Benefit Equalization Retirement Plan

Bureau Bureau of Consumer Financial Protection

Dodd-Frank Act Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010

FAM *Financial Accounting Manual for Federal Reserve Banks*

FASB Financial Accounting Standards Board

Fannie Mae Federal National Mortgage Association

Freddie Mac Federal Home Loan Mortgage Corporation

FOMC Federal Open Market Committee

FRBA Federal Reserve Bank of Atlanta

FRBNY Federal Reserve Bank of New York

GAAP Accounting Principles Generally Accepted in the United States

GSE Government-Sponsored Enterprise

IMF International Monetary Fund

MBS Mortgage-Backed Securities

OEB Office of Employee Benefits of the Federal Reserve System

OFR Office of Financial Research

SDR Special Drawing Rights

SERP Supplemental Retirement Plan for Select Officers of the Federal Reserve Banks

SOMA System Open Market Account

STRIP Separate Trading of Registered Interest and Principal of Securities

TAF Term Auction Facility

TBA To Be Announced

TDF Term Deposit Facility

TIPS Treasury Inflation-Protected Securities

TSLF Term Securities Lending Facility

TOP Term Securities Lending Facility Options Program

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