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THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

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The Economy and Employment in North Carolina: Is the Worst Over?

By Karl W. Smith

Introduction

By the summer of 2008 it was clear that the United States economy was faltering. The economy was shedding jobs. Unemployment was rising. The stock market had declined. Gasoline prices had climbed above $4 a gallon in some areas. Yet, a handful of economists warned that the worst was yet to come. The global financial system, they argued, was teetering on the edge of collapse and the entire world could be plunged into recession.

On September 18, 2008, those dire predictions nearly came true. Four days earlier Lehman Brothers, a U.S. investment bank that had survived the Great Depression, declared bankruptcy. Lehman Brothers had borrowed hundreds of billions of dollars to finance its investment and trading operations, and a declaration of bankruptcy meant that some of those who loaned Lehman money would not be paid back.

Shock waves turned to panic when it was revealed that major U.S. money market funds had been among those who lent Lehman money. Some of those money market funds were not going to be paid back, and hence the funds would not have the resources to repay their investors. Within hours U.S. investors withdrew hundreds of trillions of dollars from money market funds—the modern-day equivalent of a bank run.

As the money market funds ran dry, the banks and corporations that depended on them for short-term loans could no longer find the funds to manage cash flow. Businesses panicked, worried that they might not be able to make the week's payroll or pay suppliers on time. Financial institutions panicked, in some cases worried that they would run out of cash. The U.S. business and financial sectors pulled back, reducing expenditures and slashing costs wherever possible, in an effort to conserve short-term cash.

As a result of the above factors, the United States and the world experienced the deepest recession since the Great Depression. This bulletin examines the outlook for the job market in North Carolina as well as the larger economic factors affecting growth in North Carolina.

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Jobs, Jobs, Jobs

For most families, maintaining a well-paying job is among their highest priorities. Accordingly, state and local governments, concerned with the well-being of their residents, are interested in promoting job growth. For the last eleven months job growth in North Carolina has been negative, and the state's job market is likely to remain weak throughout 2009.

There are three ways we can measure the strength of the local job market: (1) initial claims for unemployment insurance, (2) the unemployment rate, and (3) payroll growth, also known as "jobs created." Currently, all three of these measures are telling the same story: This is, in many ways, a period of unprecedented hardship for North Carolina.

Newly Unemployed Workers

Initial claims for unemployment insurance, also called "new claims," is the fastest and, as explained below, one of the most reliable measures of the health of the job market. Each week the Department of Labor releases the number of applications for unemployment benefits that it receives. The Department of Labor compares the Social Security numbers of applicants each week with the Social Security numbers of applicants from the prior week. Applications from persons who didn't apply during the previous week are filed as new claims.

Because all of the applications are counted and the data is cross-checked against Social Security numbers, this is one of the most accurate sources available. However, it only gives a snapshot of the current situation. For example, we don't know how many people have had their unemployment insurance run out and are still unemployed. We don't know how many of the newly unemployed failed to file because they didn't understand the system or because of a personal distaste for receiving government assistance. We don't know how many newly unemployed workers are still receiving severance pay and are therefore ineligible for unemployment benefits. Furthermore, the data tells us nothing about how many new people were hired.

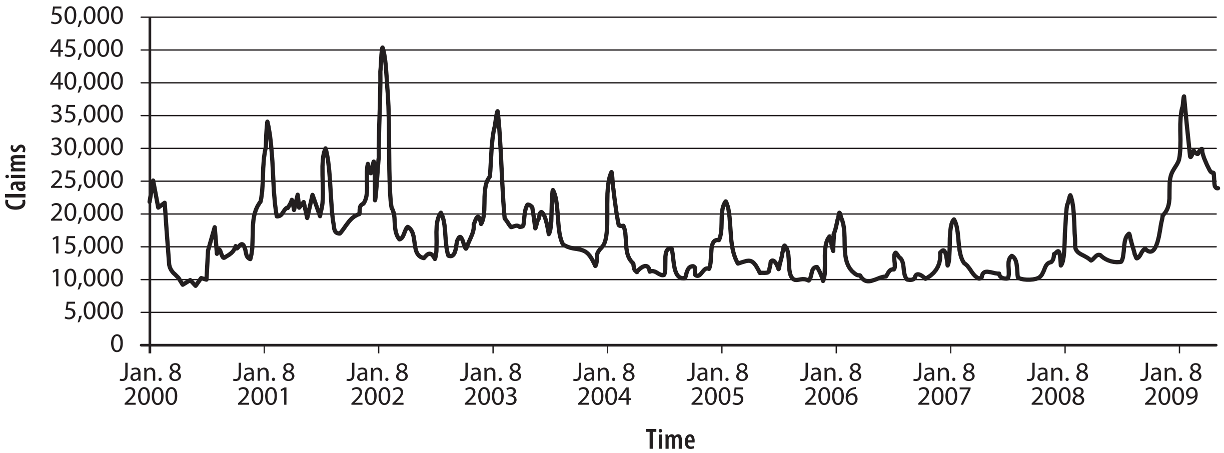
Nonetheless, when looking at the data over time, a drop in new claims is one of the first signs we have that the economy may be improving. Typically, new claims begin to decline roughly two to four months before an economy exits a recession. The dynamics of recessions can be complex, but one of the key features is that more and more workers are laid off. The economy has a natural tendency to produce jobs and to expand employment. For a recession to linger, that tendency must be counteracted by a continuous flow of newly unemployed workers. When the economy begins to lay off workers at a slower rate, the natural forces of growth can begin to take hold.

Figure 1 shows new claims in North Carolina. We can see two key features. First, there is a seasonal pattern. New claims tend to spike in July and again in January. Fiscal years commonly begin in January and July, and workers are often laid off at this time. To examine the condition of North Carolina's economy, we need to ignore these seasonal spikes.

Second, we can see that prior to 2008, new claims tended to hover around 10,000. That is, 10,000 workers were laid off and filed for unemployment insurance each month. Around the end of 2007 or the beginning of 2008, layoffs began to accelerate. It's hard to tell exactly when the acceleration began because of the seasonal spike that would have occurred anyway.

In any case this increase coincides with the beginning of the current recession. The recession, however, was relatively mild until September of 2008. At that time panic spread through the financial system, and businesses began to cut back on costs to conserve cash. The state's economy began to deteriorate rapidly, and tax revenues began to fall sharply.

Figure 1. Initial Claims for Unemployment Insurance (New Claims) in North Carolina



Source: Bureau of Economic Analysis

We can see some glimmers of hope, however. Since March of 2009, new claims have begun to fall. They are still at a high level, but they are moving in the right direction. This suggests that North Carolina may begin to emerge from the recession as early as fall of 2009.

Jobs Created or Lost

Fewer layoffs, though, don't tell the whole story. For the state's economy to grow, North Carolina must create more jobs than it loses. Even if layoffs are decreasing, total jobs can continue to decline if hiring is still depressed.

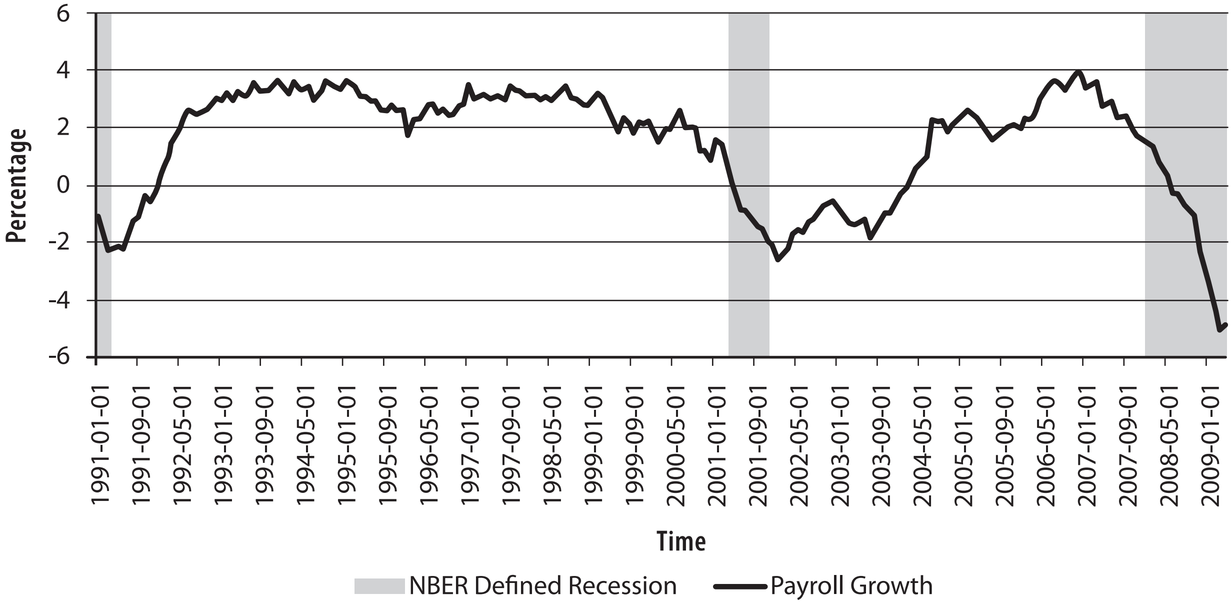
Job creation is measured by the federal government's payroll survey. The federal government asks thousands of companies around the country to report how many workers they employ each month in each state. This total payroll figure will capture changes not only from layoffs, but also from retirements, firings, voluntary exits, and new hires. It paints a far more complete picture of the job market.

This data, however, is available only once per month and is less timely and more prone to statistical errors than the new claims data. In particular the government must estimate each month how many new businesses opened. As new businesses, they will not yet be included in the survey. The government must also estimate how many businesses failed to respond to the survey because they closed. This is called the "birth/death adjustment," because it estimates businesses that were recently formed or "born" and businesses that recently closed or "died."

The birth/death adjustment is the subject of some degree of controversy. Commentators have alleged that the government uses this adjustment to manipulate its job creation numbers for political purposes. There is little evidence of manipulation, however. Instead, the mechanics of the birth/death adjustment cause the government to underestimate job losses when a recession is beginning and to overestimate job losses when a recession is ending.

For this reason, it is more difficult to look to the payroll numbers to determine when a recession is about to end. It does, however, give us a more complete picture of the overall job market and how much improvement is needed for the economy to return to normal.

Figure 2. North Carolina Percentage Year-Over-Year Payroll Growth



Source: Federal Reserve Economic Data

Figure 2 shows that job losses have been much steeper in this recession than in either of the previous two, and that it would take some time before the job market returned to its long-term growth even if the recession ended tomorrow.

We also see one major source of concern. After the 2001 recession ended, job losses in North Carolina continued. This continued weakness was caused by North Carolina's dependence on manufacturing and technology. Both sectors remained weak even as the national recession came to a close. There is some concern that this pattern could play out again as the financial sector is likely to remain weak even as the rest of the economy recovers.

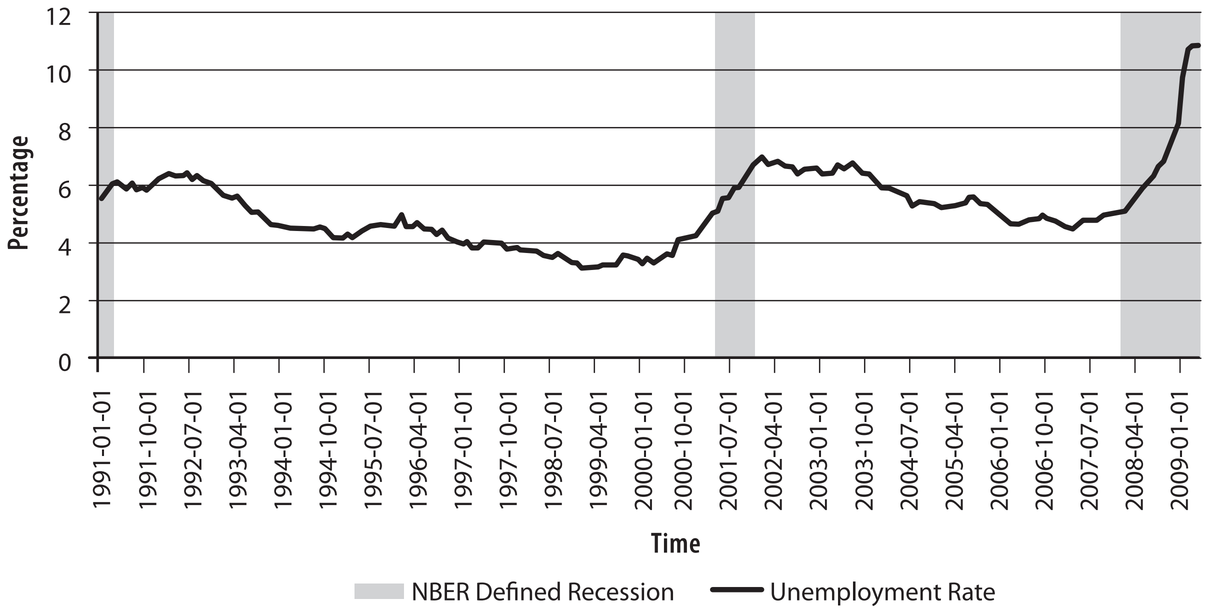
The Overall Unemployment Rate

The most common measure of the health of the job market is the unemployment rate. Like job creation, the unemployment rate is measured by way of a survey. The unemployment rate, however, comes from a survey of 60,000 households. The federal government does not use unemployment claims data, because this would exclude people who remained unemployed after their unemployment insurance had run out.

The survey asks a number of questions, two of which are used in determining the traditional unemployment rate. The first question is, "Are you currently employed?" The second is, "Are you looking for and available for work?"

To be classified as unemployed, a person must not only be out of work but also must be looking for work. If the individual is not looking for work, he or she is classified as "out of the labor market." This feature has an interesting effect on the measured unemployment rate. It is often the case that the unemployment rate continues to rise even after layoffs have ended and job

Figure 3. North Carolina Unemployment Rate



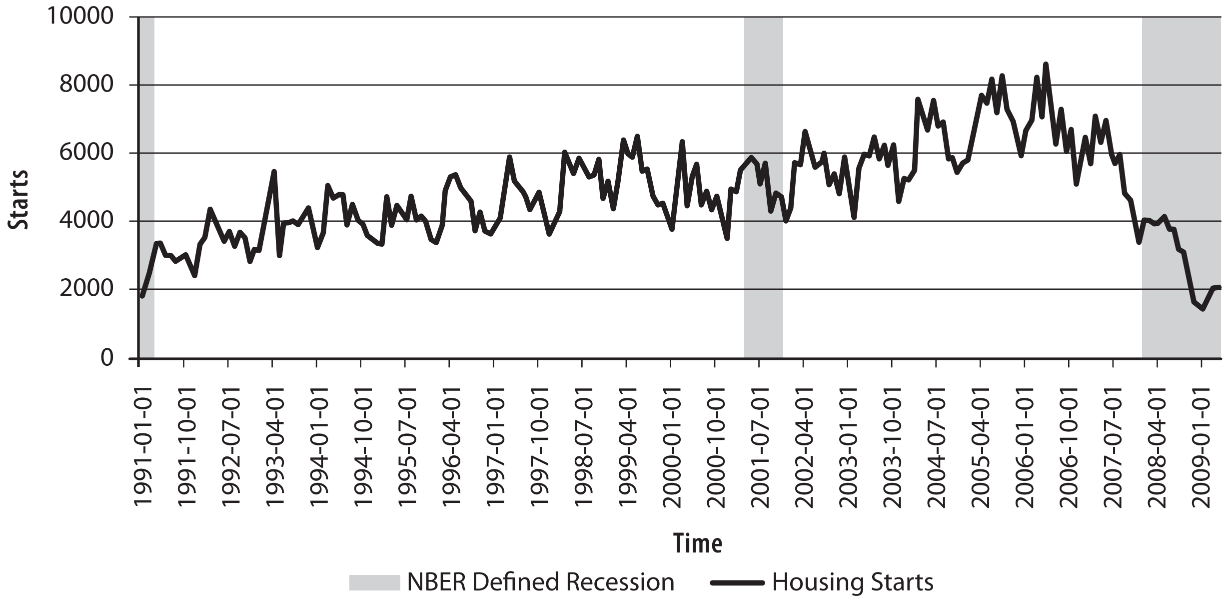
Source: Federal Reserve Economic Data

creation has restarted. This is because as the labor market gets better, more and more people begin looking for jobs. Teenagers, senior citizens, and second earners with children at home will often stop looking for work as the job market worsens. At this point they are no longer classified as unemployed but as "out of the labor market." As the job market picks up, they begin to look for work again and enter the ranks of the unemployed.

Unemployment is, therefore, sometimes referred to as a "lagging indicator." That is, it rarely tells us where the economy is headed but instead tells us where it has been. Still, it is the most widely used measure of the job market for several reasons. First, unemployment data has been collected for a long time, so we can compare present unemployment rates with those going back to the Great Depression. Second, the unemployment rate tends to match fairly well with how people feel about the job market. Surveys show that people feel best about the job market when the unemployment rate is the lowest. Low levels of unemployment correspond to times when jobs are easy to find. Low levels of unemployment imply that even though teenagers, senior citizens, and second earners are out looking for jobs, there are still enough jobs available for everyone. Finally, low levels of unemployment correspond to rising wages and salaries. If jobs are relatively easy to find, then the converse is that employees are relatively hard to find. This implies that employers will have to raise salaries to keep and attract good workers.

Figure 3 shows that the unemployment rate in North Carolina has risen to 10.4 percent, well above the levels seen in the last two recessions. Unemployment is a lagging indicator, and we do not expect it to turn around soon. Unemployment levels will likely remain at least in the high single digits for North Carolina throughout 2010. This means that residents are not likely to feel good about the job market until early 2011 and that salary raises will be hard come by until that time as well.

Figure 4. North Carolina Housing Starts



Source: Federal Reserve Economic Data

New Home Starts

Each month the Census Bureau estimates how many new homes were started in North Carolina. New home starts are typically one of the first economic indicators to turn around when a recession is about to end.

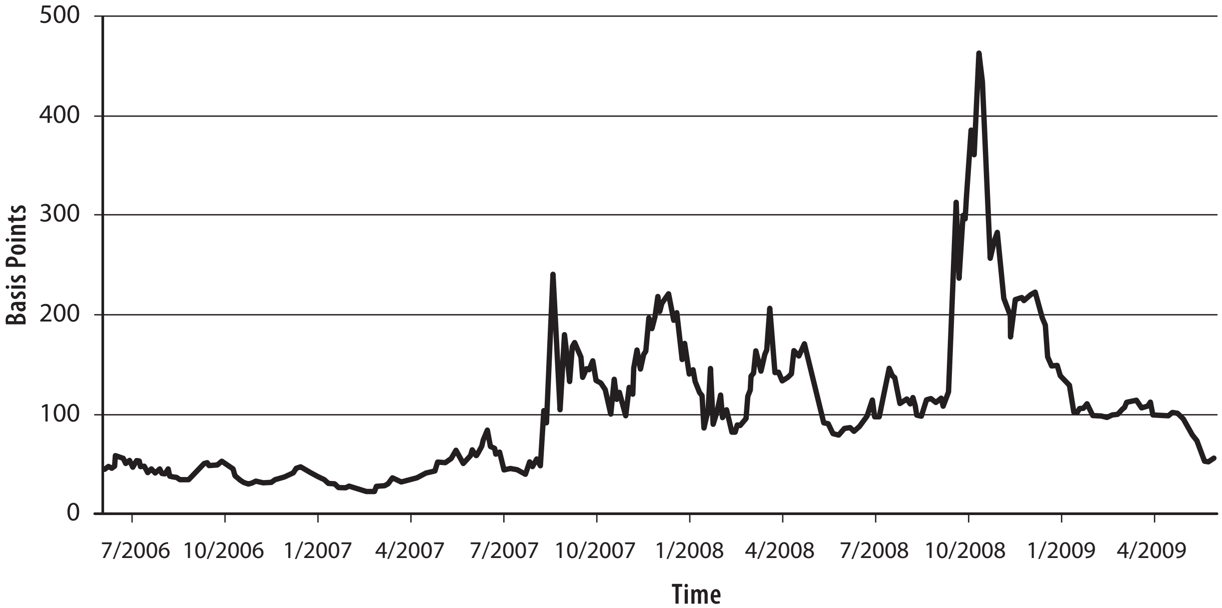
For North Carolina, new home starts may be a particularly valuable source of information in forecasting the end of this recession. First, North Carolina did not see the same type of home price bubble as other areas of the country, so new home starts are not depressed because of rapidly declining home values. Second, new construction has been a particularly strong source of growth for North Carolina over the last few decades, so a rebound in home construction has the potential to have a major impact on North Carolina's economy. Finally, new homes starts are very sensitive to credit market conditions, so a turnaround in new home starts may indicate that credit conditions are easing for North Carolina residents.

Figure 4 shows that since February there has been some turnaround in new home starts. This is consistent with the forecast that North Carolina will exit the recession around the fall of 2009. Housing data, however, is particularly volatile. That is, there are large swings from month to month. Therefore, it may take a few more months before we can say for sure that housing starts have turned around in North Carolina. Nonetheless, there is reason to be optimistic.

The Financial Markets

The last piece of evidence that we have for a recovery is the performance of the overall financial markets. The trigger for the recession was the credit crisis, and a resolution of the crisis is necessary for recovery to take place. We can look at various measures of the temperature of the credit markets. Two in particular are useful: the Treasury-Eurodollar spread, or TED spread, which

Figure 5. Treasury Eurodollar Spread (Banking Temperature)



Source: www.bloomberg.com

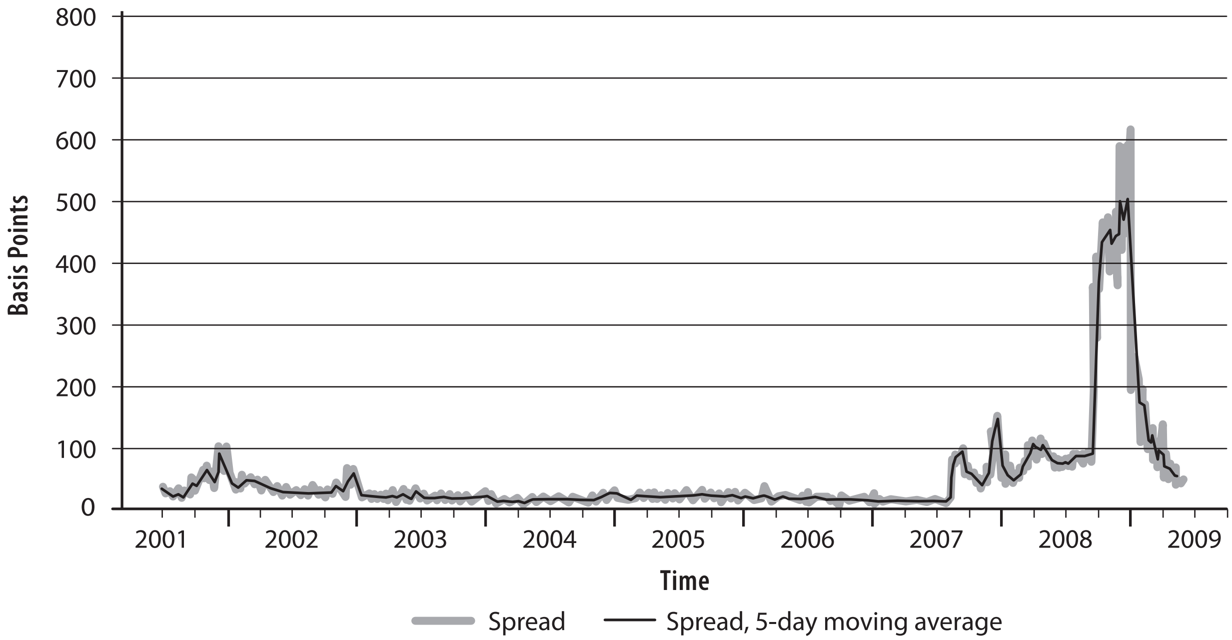
measures the temperature of the banking industry (see figure 5), and the Commercial Paper spread, which measures the temperature of short-term business credit.

Looking at the banking temperature, we see the major events that affected the credit crisis and the overall economy. The TED spread began 2007 at around 25 (a healthy level is below 50). In August of 2007 it shot up suddenly, indicating that the banking sector was undergoing major stress. This corresponded to the announcement by Bear Stearns that two of its hedge funds had lost billions of dollars investing in subprime mortgages. A panic ensued as investors in the United States and abroad became concerned that their financial institutions might have also lost money in subprime mortgages. As it turned out, these concerns were well founded. However, the crisis briefly subsided as the Federal Reserve assured financial markets that it would take whatever action necessary to preserve stability.

There were two smaller flare-ups in temperature. One occurred at the end of 2007 when many investors worried that banks would not be able to roll over loans for the new year. A second occurred in March of 2008 when Bear Stearns finally collapsed. The largest flare-up occurred in September of 2008 when Lehman declared bankruptcy. The Lehman bankruptcy was the largest in U.S. history and sent shockwaves through the market. Until this point, the crisis had been mostly about fear: that is, fear that some investors would not be repaid as the loan losses piled up at U.S. banks. With the bankruptcy of Lehman, that fear turned into reality. Some investors were not repaid. There was wide-spread fear that this would mean these investors would not be able to repay their loans or honor their financial obligations to other investors. The banking temperature shot up as there was widespread concern that other banks would follow Lehman.

At the same time the banking temperature was flaring due to the Lehman crisis, the business temperature, shown in figure 6, shot up as well. Until this time the business temperature had tracked the banking temperature but with smaller peaks. After Lehman, the business peak was even higher.

Figure 6. Commercial Paper Spread (Business Temperature)



Source: The Depository Trust and Clearing Corporation

Businesses depend on short-term loans to meet payroll and pay suppliers. These short-term loans are funded by the same type of investors who lost money with Lehman. As those investors pulled back, the availability of short-term loans collapsed. Businesses were unsure about whether they could meet payroll and so they began a massive round of layoffs. Employees became concerned that they would be among those laid off and so they slowed their spending. This left businesses even more cash-strapped and therefore businesses increased layoffs, which further depressed consumer spending—and so began the cycle that is typical of massive financial collapses.

Massive intervention by the U.S. government, including a $700 billion bank bailout plan, a $787 billion stimulus package, and nearly $6 trillion in loans and loan guarantees seems to have arrested this cycle.

By late March the banking temperature had declined back to within the normal range. Around the same time the business temperature had fallen to levels that are consistent with a normal recession. As of this writing, it appears that the historic financial collapse portion of the recession has been cured and that now the economy is facing a relatively routine or typical recession.

Because routine recessions typically last less than a year, this is another reason to believe that recovery could begin to take place by the end of 2009.

Conclusion

The North Carolina economy has been deeply affected by a worldwide recession that resulted from the largest financial crisis since the Great Depression. Despite the historic nature of this crisis, there is strong evidence that the financial sector is healing and the job market in North Carolina is nearing recovery. Layoffs in North Carolina appear to be moderating, new home sales are starting to creep up, and there is some reason to believe that North Carolina will start creating jobs by the end of 2009.

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