$60 per barrel. By last summer, they had reached nearly two-and-a-half times that level. With gasoline prices piercing the $4 per gallon level, the strain on household budgets was a second and more immediate blow to consumer confidence. Even though oil prices have retraced all of this rise, and gas is below $2 per gallon, the damage to confidence has not been repaired.

Finally, since September, the financial system has been hit by a seemingly endless series of body blows—clearly the most serious threat to that core sector of the economy since the 1930s. Major commercial and investment banks have failed or been forced into "shotgun" mergers. Fannie Mae and Freddie Mac, the primary conduits for mortgage financing, have been taken over by the government, as has the country's largest insurance firm (AIG). The Federal Reserve and the U.S. Treasury have been concocting scheme after scheme to inject liquidity into the financial system, including direct purchases of bank equity by the government. Even so, lending has slowed to a crawl, with direct effects on both consumer and business investment. And last but not least, values in both the stock and bond markets have cratered. All of this is a third blow to consumer (and business) confidence.

With consumers and businesses cautious about their spending, there are only two potential sources of forward momentum: government and the foreign sector. The former is constrained by budget deficits, while the latter is feeling the impact of the financial crisis right along with us.

In the face of all this, it is not surprising that the economy shifted into reverse gear in the third quarter. Unfortunately, we think the worst is still ahead.

- We expect output to decline through the first half of 2009. Growth will return in the second half of the year, leaving year-end output about flat at the end of 2008. During the recession, output will decline by more than 1 percent.
- Employment will decline by well over two million from the beginning of 2008 through the end of the recession. This will drive the unemployment rate above 7.5 percent, perhaps substantially.
- Inflation will decline from elevated levels during 2008, with an assist from much lower energy prices. Weak demand for both inputs and outputs will also cause price increases to moderate.
- The Federal Reserve, which lowered its target for the federal funds rate to 1 percent in October (down from 5.25 percent in fall of 2007), will reduce rates even more in 2009.

Given the series of blows that the economy has absorbed over the past six months, this is a relatively optimistic scenario. It rests on both the housing and financial markets stabilizing as the year proceeds. Neither of these outcomes is even close to a lock, and they are interconnected. The financial situation is hampering recovery in housing, and the continuing housing implosion is a root cause of the financial crisis.

As 2008 draws to an end, our hope is that we escape 2009 with only a moderate recession (similar in severity to those in 1990 and in 2001). However, we cannot rule out something worse that would compare to the severe recession in the early 1980s.

Financial Outlook for 2009

John A. Boquist: Edward E. Edwards Professor of Finance, Kelley School of Business, Indiana University Bloomington

Robert W. Neal: Associate Professor of Finance, Kelley School of Business, Indiana University Bloomington

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How times have changed. Last year at this time, we saw investment storm clouds on the horizon. But like other storms, we thought they would pass through and leave us unscathed in the end. Instead, like the Indiana storms of last spring, the damage has been substantial and it will take awhile to clean up. The origin of the storm was largely financial in nature in our view. In order to understand the prospects for next year, we must first understand the causes of the financial crisis.

How We Got Here

The origins of the crisis started in 2001. In the aftermath of the tech bubble, the Federal Reserve pursued a policy of keeping interest rates very low (under 2 percent) from December 2001 to November 2004. This policy proved successful at avoiding a prolonged recession, but it had another consequence: housing prices started to climb. Investors were nervous about stocks and the low rates made real estate very attractive. From January 2002 to June 2006, housing prices climbed rapidly, more than doubling in areas like Los Angeles and Miami.

At the same time, there was a shift toward lending to riskier borrowers. In comparison with traditional loans, Alt-A loans allowed borrowers with lower down payments and lower incomes to qualify for a mortgage. The price, however, was a higher interest rate and higher fees for the mortgage. Many of the Alt-A

mortgages were for second homes (investment properties) and it was common for borrowers to overstate their ability to repay the loan. These loans were often termed “liar loans” within the mortgage industry. The shift didn’t stop there. Subprime loans were available to borrowers who didn’t even meet the criteria for Alt-A loans. Both subprime and Alt-A loans expanded rapidly between 2002 and 2007.

During this period, Wall Street became creative with subprime finance. A simple structure would look like this. A group of 1,000 subprime mortgages would be pooled together. From this pool of assets, three classes of bonds would be issued and sold to investors. The different classes of these bonds are stratified by risk. When the monthly payments are paid to the mortgage pool, the Class A bonds receive their payment first. After they are paid, then the Class B bonds get paid, and then the Class C bonds. Since the Class A bonds get paid first, they have very low risk and generally get a AAA credit rating. The Class B bonds have much greater risk. To make them more attractive to investors, supplemental insurance is added from firms like AIG so they can get a rating of BBB.

As long as housing prices were rising, everything was fine. If you borrowed $200,000 to buy a house and the house appreciated by 10 percent, you were $20,000 richer. No borrower would default because they could always sell the house, repay the mortgage, and keep the $20,000 profit. While prices were rising, the mortgage bonds produced strong returns. In the summer of 2006, however, housing prices topped out and began to fall. Many of the subprime and Alt-A mortgages issued around this time became upside down—due to the decline in price, the cost of the mortgage exceeded the value of the house. Mortgage defaults soon followed and the price of mortgage-related bonds began to fall.

To understand why this grew into a crisis, we need to consider leverage, rating agencies, and the role of Fannie Mae and Freddie Mac. By itself, leverage is not complicated. Suppose you have $1,000 and invest it at 7 percent. In a year, you have $1,070. Now suppose you borrow $10,000 and pay 5 percent interest on it. If you invest it at the same 7 percent, you will get $700. Since you have to pay out $500 in interest, your net is $200 and your total earnings rise from $70 to $270. In this example, $1,000 represents your capital and the ratio of borrowing to capital represents the leverage ratio, 10–1 in this case. As long as nothing changes, leverage allows the 7 percent return to become a 27 percent return.

The problems start when the borrowing rate increases or the value of the investment declines. If the borrowing rate rises to 8 percent, your funding costs have risen from $500 to $800. Your $270 gain now becomes a $30 loss. The situation becomes worse if the value of your investment falls. If it declines 10 percent, your investment is worth $9,000, but you still owe $10,000 plus interest. Your capital can’t cover the loss, so you’re bankrupt.

The expansion of Alt-A and subprime lending required the active participation of Fannie Mae and Freddie Mac. These government agencies were willing to comply because they had evolved into gigantic hedge funds with very high leverage ratios. Their business plans were simple. Fannie and Freddie would buy loans originated by banks, pool them together, and sell them as mortgage-backed securities. After they sold the securities, Fannie and Freddie would then buy them back. This might strike you as odd, but they did this because the interest rate they received on the mortgage-backed securities was higher than their government-backed borrowing rate. To produce greater profits, they simply increased their leverage.

The rating agencies played an important role in the crisis because they seriously underestimated the risk of mortgage-related bonds. The data used by the ratings agencies were largely limited to a period of rising prices. They didn’t capture a national decline in real estate prices or adequately reflect the high correlation of defaults. The result was a projection that was far too optimistic and disastrous for investors who relied on the agency ratings.

Now we have the pieces in place for a financial explanation of the crisis. Many of the loans issued between 2005 and 2007 are underwater. This is especially true of the subprime and Alt-A loans because of their low down payments and their low initial interest rates. Mortgage lenders continued to make these loans—even when problems were emerging—because they knew that Freddie and Fannie would buy them. Fannie and Freddie were buying because of political pressure from Congress to expand their subprime operations to help make mortgages affordable for high-credit-risk borrowers.

When it became clear that the mortgage-related bonds were much riskier than expected, everyone wanted to sell them and no one wanted to buy them. Firms with high leverage and large exposure to mortgage loans such as Bear-Sterns, Lehman, Fannie, Freddie, Indymac, and Washington Mutual are now insolvent.

However, that was just the beginning. The price collapse left its footprints everywhere. Companies with large credit operations such as General Electric and Ford have seen their valuation cut in half. As firms have scaled back their willingness to extend credit, short-term rates have jumped. Some local governments

have seen their borrowing costs double or even triple.

The crisis has taken a large toll on the equity markets. In October 2007, the Dow Industrial was at 13,900 and the S&P 500 was 1,550. Since then, these benchmarks have declined 33 percent and 37 percent, respectively, including a 14 percent decline in October. This abysmal twelve-month performance—the worst in seventy-one years—has damaged college savings and retirement plans for virtually everyone. Consumer sentiment has fallen dramatically and spending from both consumers and businesses has fallen as purchases are deferred to the future. A typical recession involves a contraction in spending from both consumer and business sectors. The combination of the spending contraction and the financial crisis has prompted many to predict that this recession will last longer, perhaps until the fourth quarter of 2009.

The Big Questions

The big questions on many investors' minds include "Is the financial crisis over?" and "What will the market look like going forward?" We see some encouraging signs that the financial crisis has largely run its course. The liquidity crisis that drove up borrowing costs and reduced the availability of funds has abated. The benchmark one-month London InterBank Offered Rate (LIBOR),[1] which jumped from 2.5 percent in September to 4.5 percent in mid-October, has now returned to its September values. The issuance of commercial paper has increased as borrowers and lenders return to the market. Housing prices have shown small increases in about one-third of the regional markets. The aggressive response from Washington has helped to stabilize the banking system and enable banks to start lending again.

Economic cycles, however, tend to be longer than financial cycles. Our forecast is for gross domestic product growth to turn positive in mid-year 2009. Since the markets tend to anticipate economic recoveries, stock prices tend to start rising three to six months before the end of a recession. If our economic forecast is incorrect and the recession runs longer, any rebound in the market will be delayed.

The weak economic performance in 2008 and 2009 is reflected in the earnings estimates. For 2008, estimates for the S&P 500 are expected to decline 18 percent from 2007 levels. For 2009, the estimates are expected to decline an additional 9 percent. Following this declining period, we anticipate a rebound in earnings as the growth returns to the economy and the amount of credit-related charges to earnings dissipates.

A common benchmark for valuing the market is the price-earnings (P/E) ratio, which measures the price an investor needs to pay to acquire $1 of company earnings. Firms with high P/E ratios have strong growth prospects. A decrease in the P/E ratio means that investors are less optimistic about future growth or have become more risk averse about the stock market in general. As of October 31, 2008, the P/E was 18.2, based on the reported earnings for the past twelve months. This value is substantially lower than the 23.8 average over the last fifteen years. However, it is above 15.8, the average since 1936. By comparison, the P/E fell to 7 during the high inflation, high unemployment period around 1980. The P/E is 17.1 based on estimated earnings for all of 2008. Looking forward, the P/E will rise to 19.1 using 2009 estimated earnings.

Outlook for 2009

What is the outlook for 2009? We project that the stock market will provide a positive return, although less than the historical average of about 12 percent. Several factors lead us to this projection. On the positive side, we expect that short-term and long-term interest rates will remain low in 2009. The Fed recently cut interest rates to 1 percent. With the economic uncertainty, we expect rates to remain low for 2009. Inflationary pressures, at least over the short term, have diminished and this provides the Fed additional justification for keeping the rates low. Commodity prices, especially oil, have fallen dramatically since July and will moderate inflationary pressures.

On the earnings front, our view is that current stock prices have already incorporated the decline in 2009 earnings. If our forecast of an economic recovery in mid-year 2009 is correct, then we anticipate 2009 earnings should come in above expectations. Another positive factor is that current earnings have been reduced because of an unusually high frequency of one-time charges. Operating earnings, which exclude these charges, show a more positive outlook and the estimates for 2009 are above the 2008 levels.

Prudent investors should always diversify their investments. For 2009, many analysts are recommending an asset mix that contains slightly fewer stocks and slightly more bonds than the average recommendation. We expect the stock market performance in 2009 to be volatile, with a high likelihood of large gains and large losses. Despite the volatility, we expect stock prices to be higher a year from now. One important step investors can take to improve investment performance is to monitor the total fees paid to mutual funds and investment advisors. Fund expenses, management fees, and inefficient trading for taxable accounts can reduce total returns by 3 percent per year. Over time, this will make a surprisingly large difference in the size of your portfolio.

Note

1. The LIBOR rate is the most widely used benchmark rate for short-term interest rates worldwide.