

Federal Reserve Bank of Minneapolis  
Research Department

## **Facts and Myths about the Financial Crisis of 2008\***

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### ABSTRACT

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The United States is indisputably undergoing a financial crisis. Here we examine four claims about the way the financial crisis is affecting the economy as a whole and argue that all four claims are myths. Conventional analyses of the financial crisis focus on interest rate spreads. We argue that such analyses may lead to mistaken inferences about the real costs of borrowing and argue that, during financial crises, variations in the levels of nominal interest rates might lead to better inferences about variations in the real costs of borrowing.

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Clearly, the United States and the world economy are undergoing a major financial crisis. Here we examine several pieces of evidence on the nature of the financial crisis and the mechanisms by which the financial crisis is thought to affect the nonfinancial sector of the economy.

That the United States is undergoing a financial crisis cannot be disputed. Evidence of the financial crisis consists of the following: First, several major financial institutions have failed. Second, various stock markets have fallen dramatically, especially in the week after the bailout plan was passed. Third, spreads on a variety of different types of loans over comparable U.S. Treasury securities have widened dramatically.

Here we examine four claims about the way the financial crisis is affecting the economy as a whole and argue that all four claims are myths. Conventional analyses of the financial crisis focus on interest rate spreads. We argue that such analyses may lead to mistaken inferences about the real costs of borrowing and argue that, during financial crises, variations in the levels of nominal interest rates might lead to better inferences about variations in the real costs of borrowing.

## **1. Four Myths about Quantities**

The financial crisis has also been associated with four widely held claims about the nature of the crisis and the associated spillovers to the rest of the economy. The financial press and policymakers have made the following four claims about the nature of the crisis.

1. Bank lending to nonfinancial corporations and individuals has declined sharply.
2. Interbank lending is essentially nonexistent.
3. Commercial paper issuance by nonfinancial corporations has declined sharply, and

rates have risen to unprecedented levels.

4. Banks play a large role in channeling funds from savers to borrowers.

Here we examine these claims using data from the Federal Reserve Board. Our argument that all four claims are false is based on data up until October 8, 2008.<sup>1</sup>

Figure 1A displays weekly data on the total amount of bank credit for all U.S. commercial banks from 2001 onward. Figure 1B displays the same data from the beginning of 2008 onward. Bank credit consists of the aggregate amount of assets held by these banks excluding vault cash. As is clear from these figures, bank credit has not declined during the financial crisis. Indeed, bank credit appears to have risen relative to trend in the month of September. Figures 2A and 2B display analogous data for loans and leases made by U.S. commercial banks. Again, we see no evidence of any decline during the financial crisis. Figures 3A and 3B display data for commercial and industrial loans. Again, we see no evidence that the financial crisis has affected lending to nonfinancial businesses. Figures 4A and 4B display data for consumer loans and show no evidence that the financial crisis has affected consumer lending.<sup>2</sup>

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<sup>1</sup>We use data available on October 17, 2008. We use data for the last four weeks from the current release version of the relevant Federal Reserve document. and we use the historical release version for data before this time.

The quantity data reported here are from the Federal Reserve Board's release on Assets and Liabilities of U.S. Commercial Banks, available at <http://federalreserve.gov/releases/h8/>. The Federal Reserve obtains these data from 30 of the largest commercial banks and a sample of smaller banks. Details of the sampling methodology are at <http://federalreserve.gov/releases/h8/about.htm>.

Total assets of the banking system consist of Bank Credit, Cash Assets, and Other Assets. Bank Credit, in turn, consists of securities held by banks and loans made by banks. Loans made by banks are subdivided into Commercial and Industrial Loans, Real Estate Loans, Consumer Loans, Fed Funds and Repurchase Agreements with brokers and other loans.

The price data are from Bloomberg and the Federal Reserve Board, available at <http://federalreserve.gov/releases/>.

<sup>2</sup>For the week ending October 1, 2008, the current release data contain a footnote that states:

“Large domestically chartered commercial banks acquired \$259.2 billion in assets and liabilities of nonbank

These figures show that the first claim, that banks have essentially stopped lending to nonbank entities and individuals, is false, at least in the aggregate as of October 8.

Figures 5A and 5B display data for interbank loans made by all U.S. commercial banks. These figures show that, at least in the aggregate, interbank lending is healthy. The second claim, that the volume of interbank lending has fallen sharply, is false, at least as of October 8.

Figures 6A and 6B display data for the stock of commercial paper outstanding for financial and nonfinancial corporations. These figures show that, while commercial paper issued by financial institutions has declined, commercial paper issued by nonfinancial institutions is essentially unchanged during the financial crisis.

Figures 7A and 7B display data for the interest rate on commercial paper with a maturity of 90 days for financial and nonfinancial corporations. These figures show that, during the financial crisis, this interest rate has risen for financial institutions and has barely budged for nonfinancial institutions. Note that, even though the interest rate for financial institutions has risen recently, it is still well below the levels that prevailed from the beginning of 2006 to the middle of 2007. These figures show that the financial crisis has not led commercial paper rates to rise to levels well beyond historical levels. Taken together, Figures 6A through 7B show that the third claim is false, at least as of October 8.

We now turn to data from the Federal Reserve Board's Flow of Funds Accounts. These data allow us to analyze the claim that bank lending to nonfinancial corporate businesses

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institutions in the week ending October 1, 2008.”

The footnote also provides details on these acquisitions-affected subcategories. Since these acquisitions do not represent new loans or new deposits but rather a reclassification of existing ones, we subtracted the associated amounts from associated totals reported in the release in constructing our series.

constitutes the bulk of borrowing of these businesses. Banks lend directly to such businesses and indirectly by holding publicly traded bonds to these businesses. In the second quarter of 2008, an upper bound for such bank lending is approximately \$1 trillion. Nonfinancial corporate businesses obtain funds from banks and by issuing publicly traded bonds that are held by nonbank financial institutions such as life insurance companies as well as directly by households. The total amount of such funds is approximately \$4.5 trillion. Thus, roughly 80 percent of such business borrowing is done outside of the banking system. The claim that disruptions to the banking system necessarily destroy the ability of nonfinancial businesses to borrow from households is highly questionable.

One question that arises from our figures is: Where are banks obtaining the funds to increase bank credit? Figures 8A and 8B display data for deposits in commercial banks. The large recent rise in deposits indicates that a substantial amount of these funds is being raised from deposits. One possibility is that banks are reducing their borrowings from the commercial paper market and substituting deposits for these borrowings. That is, it is possible that households have substituted direct lending to banks for indirect lending to financial institutions through the commercial paper market. If so, it is difficult to see why this substitution should create major problems for either the financial sector or the rest of the economy.

We have documented that commercial and industrial loans made by banks have risen dramatically during the period of the financial crisis. One story we have heard is the following. The rise in loans is in large part due to nonfinancial firms drawing on their loan commitments and lines of credit and that loans to nonfinancial firms without such commitments have declined. Furthermore, this decline in loans to nonfinancial firms without commitments signals a dramatic future decline in bank lending. Data that support this story, especially

data that support the signaling view, would be extremely useful. We have seen no data from the current crisis that support this story, especially the signaling view component of it.

## **2. Spreads versus Levels**

Conventional analyses of interest rate data focus heavily on the spreads between interest rates on various types of loans and interest rates on Treasury securities with similar maturities and pay much less attention to the levels of interest rates on various types of loans. One rationale for the focus on spreads is that the relevant interest rate that matters for economic decisions is the real rate, that is, the nominal rate less expected inflation. If one believes that the real rate on Treasury securities does not fluctuate very much, then variations in the spread are a good measure of variations in the real interest rate on various types of loans.

While this rationale may be compelling in normal times, we think that a focus on spreads can lead to misleading inferences during financial crises. Financial crises are often accompanied by a flight to quality during which the real return to Treasury securities falls dramatically, that is, the nominal return falls dramatically for reasons other than changes in expected inflation. If these arguments are correct, then a researcher who infers that the increase in spreads reflects an increase in the real cost of borrowing would be making an incorrect inference. The increase in the spread is due to the drop in the real return to Treasury securities as a result of the flight to quality and does not constitute an increase in the real cost of borrowing.

Macroeconomic research suggests that inflation rates are not highly variable in the short run, so that the recent experience of inflation is a good predictor of inflation in the near

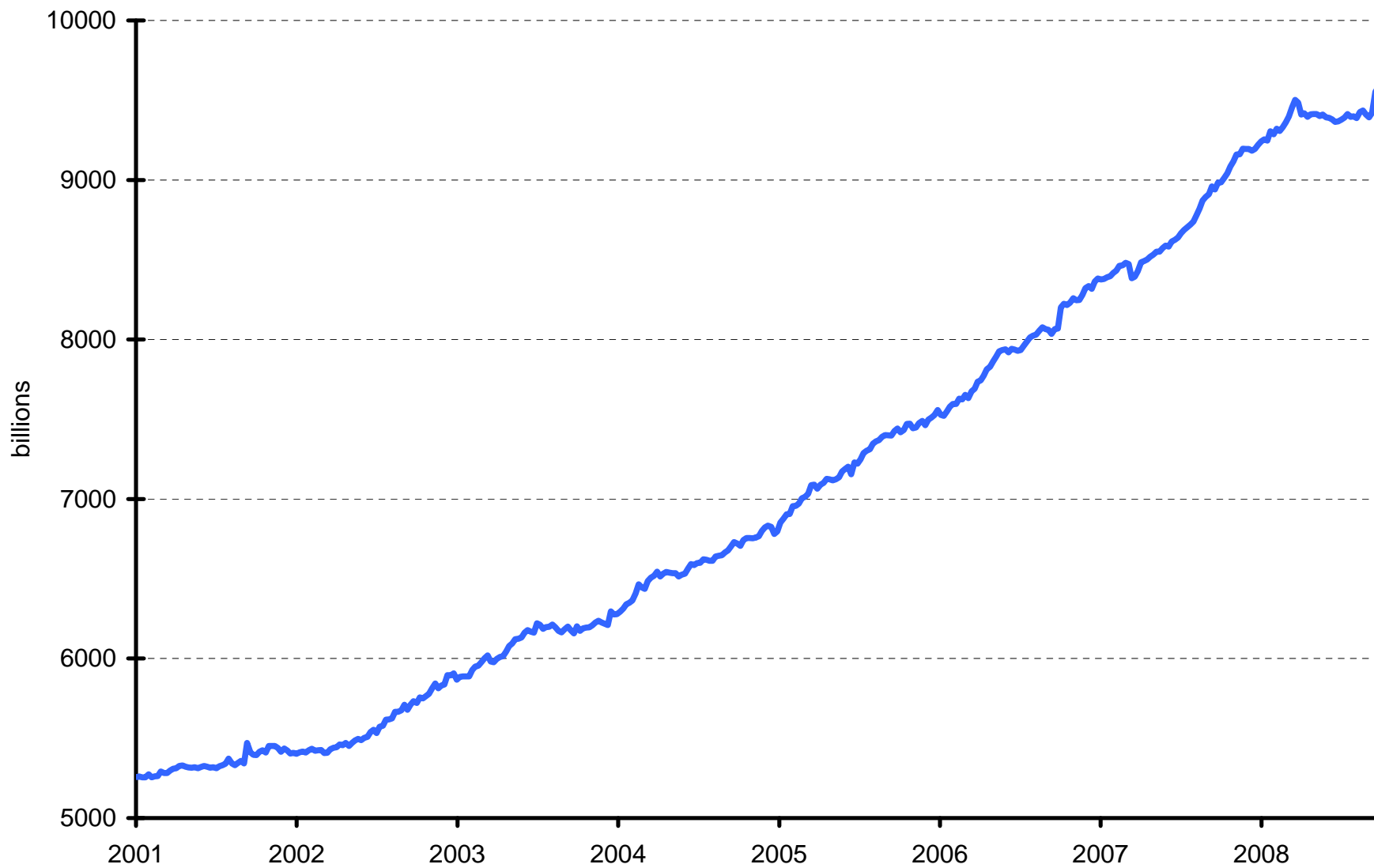
future. If this research is correct, then during financial crises variations in the level of the nominal rate on borrowing is a good measure of the variation of the real rate of borrowing.

In Figures 9A through 13B we plot the analogs of earlier figures for a variety of types of interest rate data. These figures show that while spreads have certainly widened, the level of interest rates of various types of borrowing are well below levels in recent non-crisis years. For example, Figures 9A and 9B display the interest rate on BBB rated corporate bonds and that on Treasury bills with similar maturities. While the levels have recently risen modestly, they are well below the levels in, say, 2006.

### **3. Conclusion**

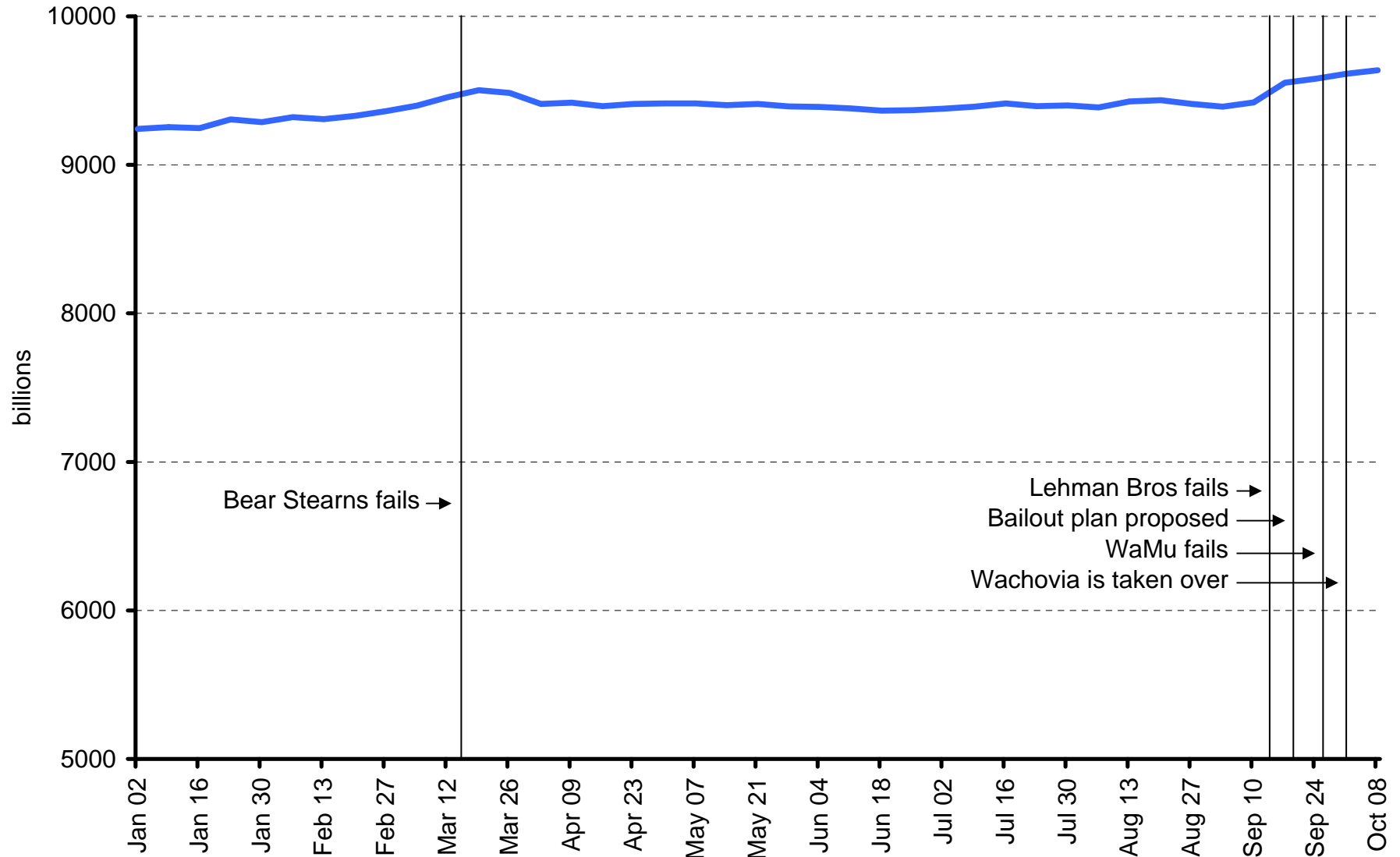
Our analysis has raised questions about the claims made for the mechanism whereby the financial crisis is affecting the overall economy. We emphasize that we do not dispute that the United States is undergoing a financial crisis and that the United States economy may be in a recession or may experience one in the near future. Our analysis is based on publicly available data. Policymakers have access to other sources of data as well. Policymakers could well believe that bold action is necessary based on data that are different from that considered here. If so, responsible policymaking requires that they share both the data and the analysis that underlies the need for bold policy with the public.

Figure 1A: Bank Credit



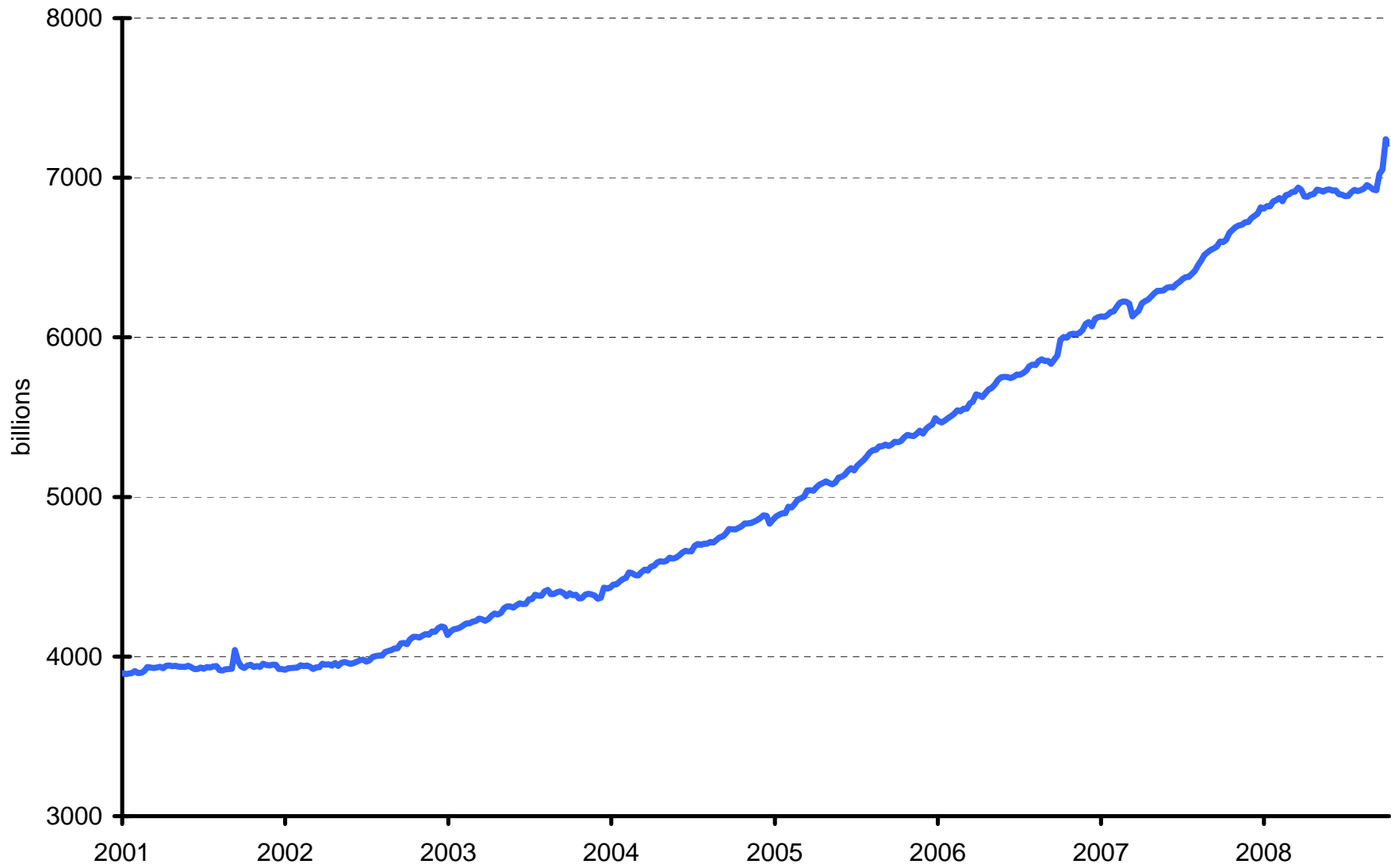
Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/h8/>

Figure 1B: Bank Credit in 2008



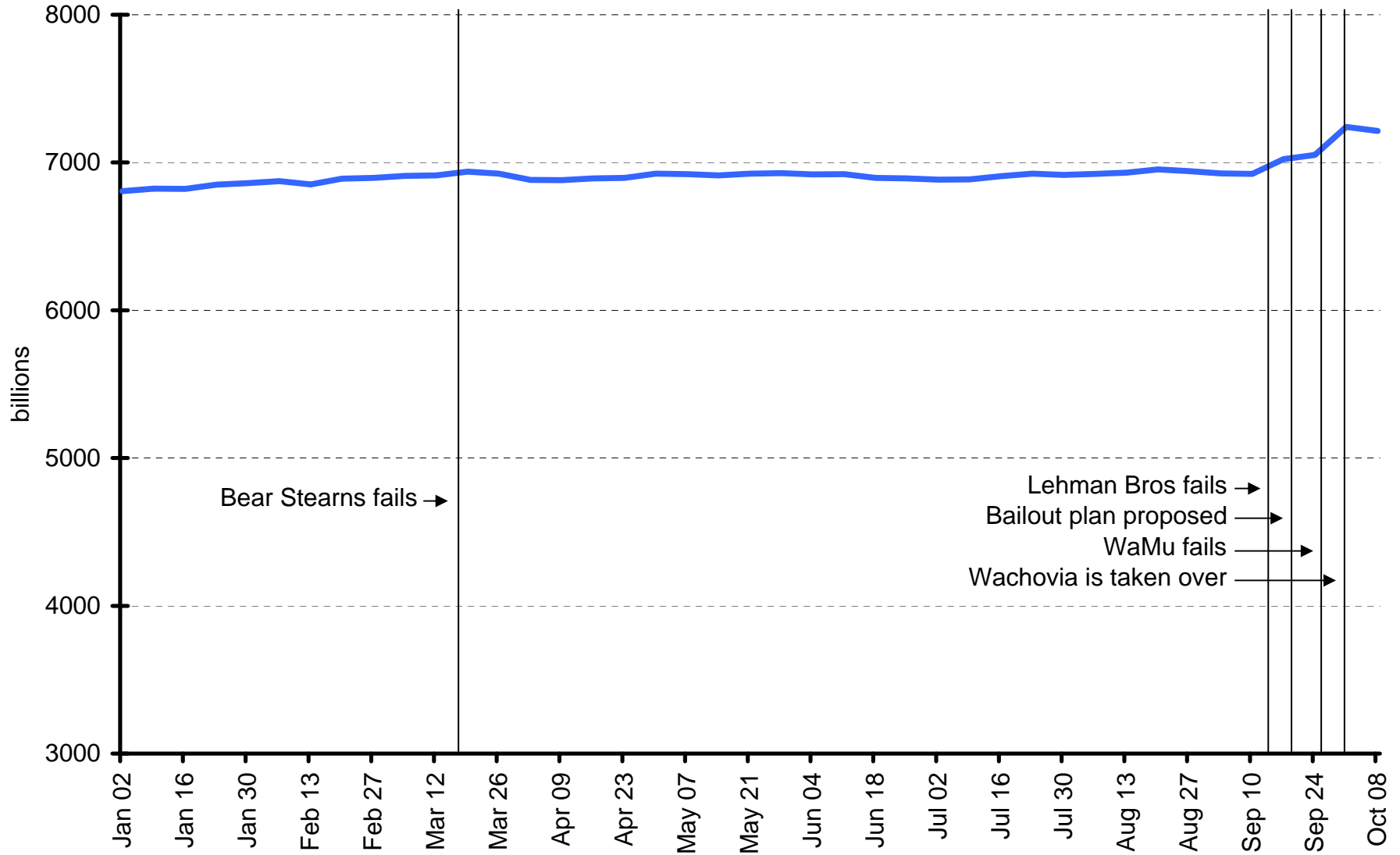
Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/h8/>

Figure 2A: Loans and Leases



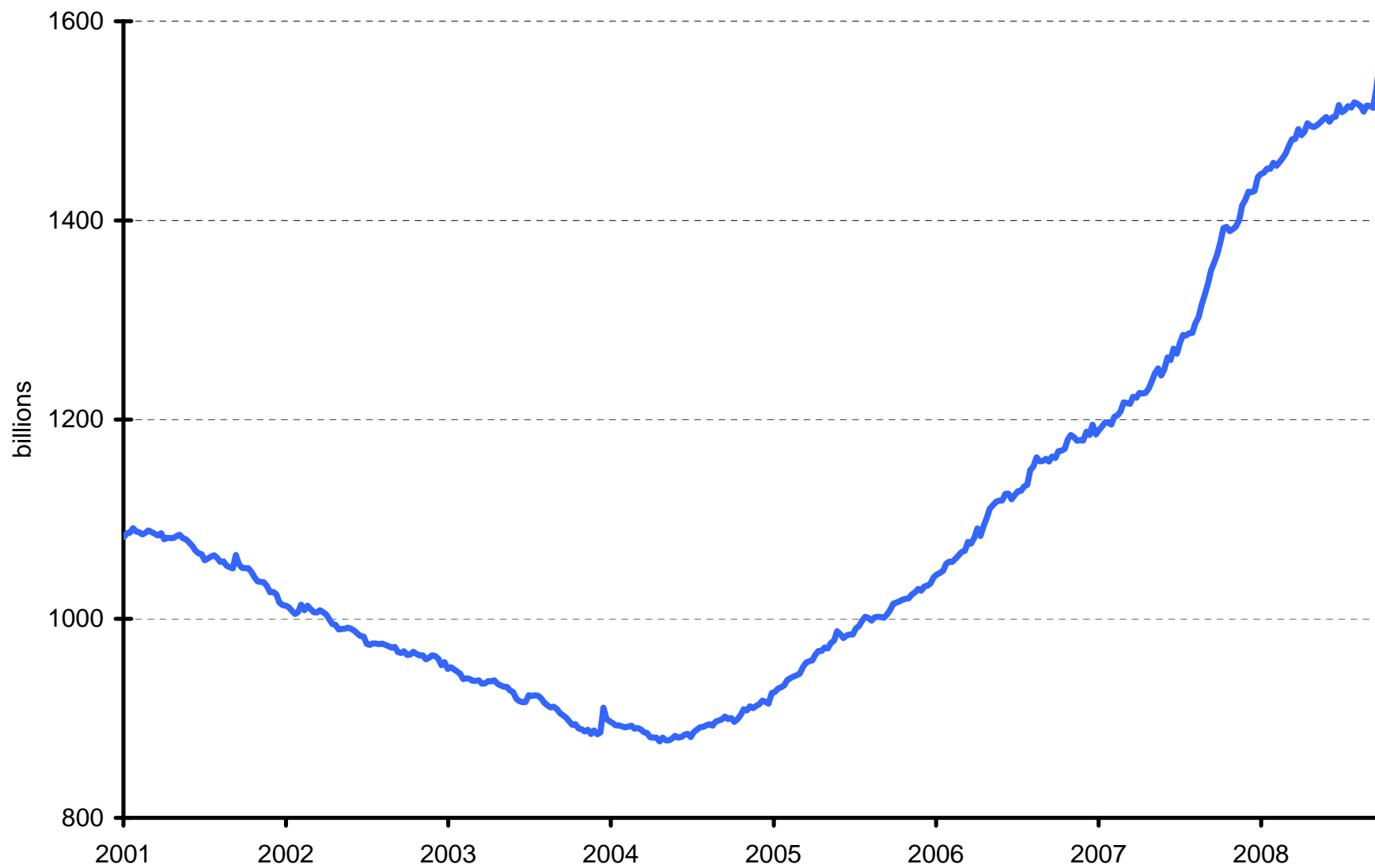
Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/h8/>

Figure 2B: Loans and Leases in 2008



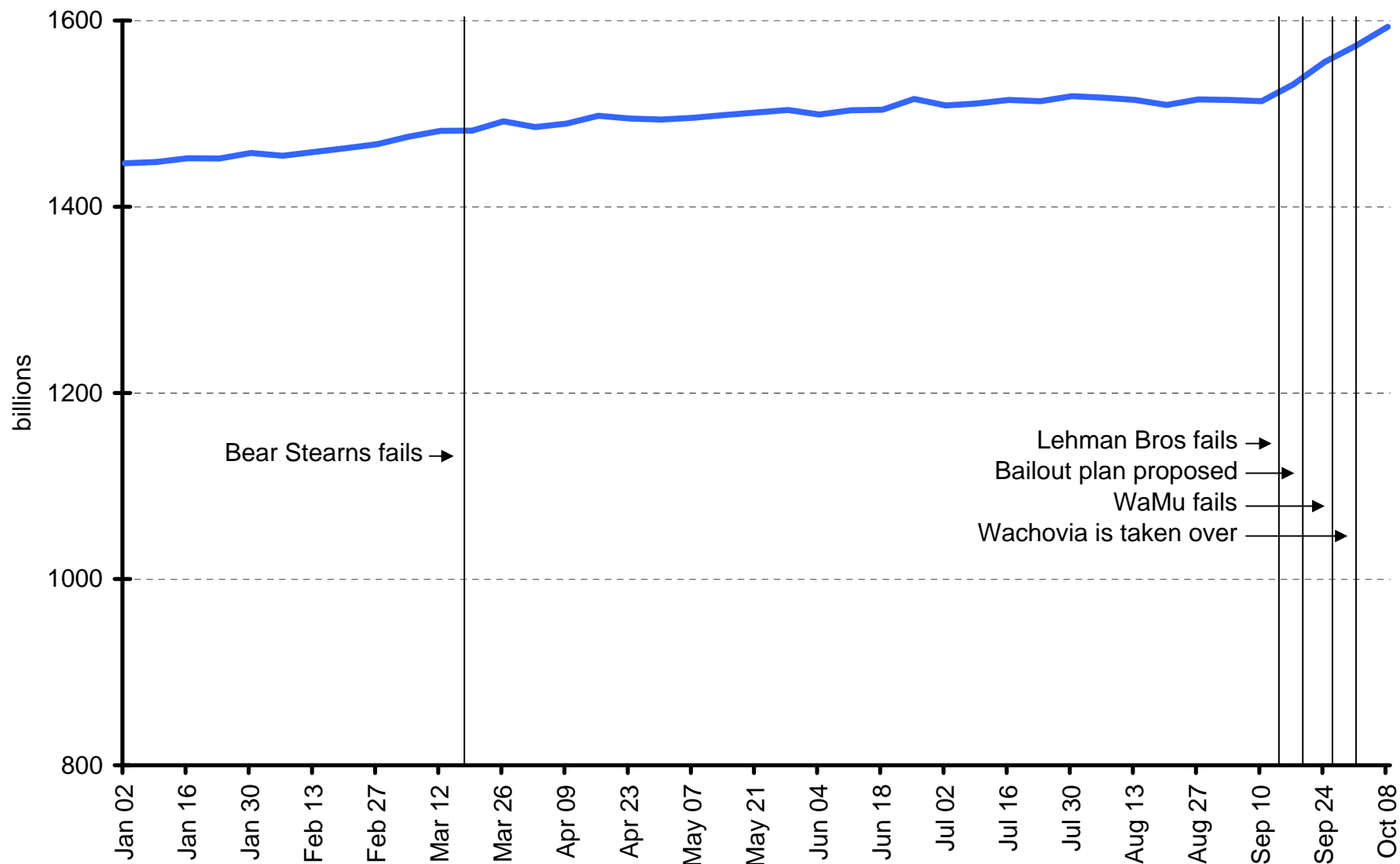
Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/h8/>

Figure 3A: Commercial and Industrial Loans



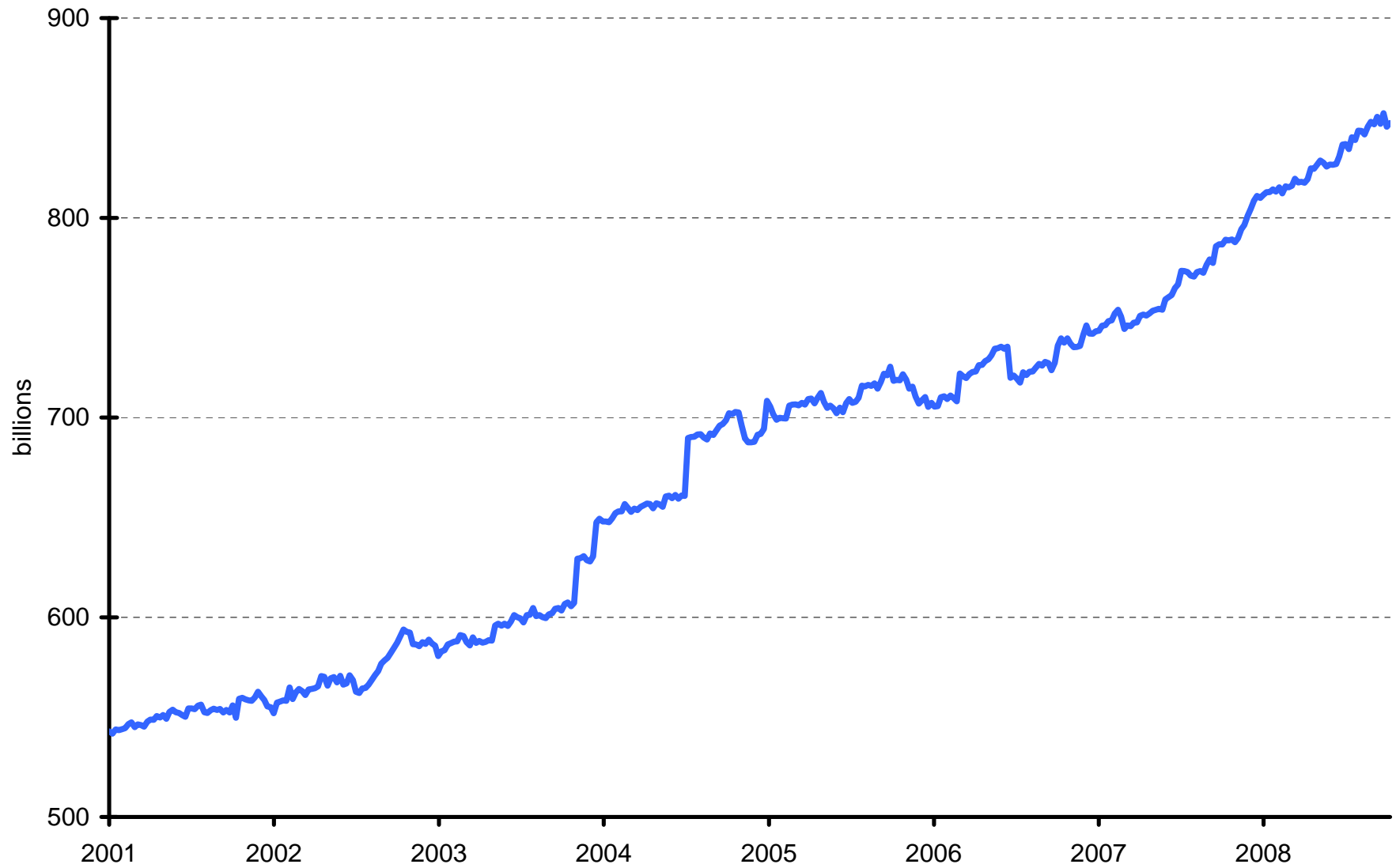
Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/h8/>

Figure 3B: Commercial and Industrial Loans in 2008



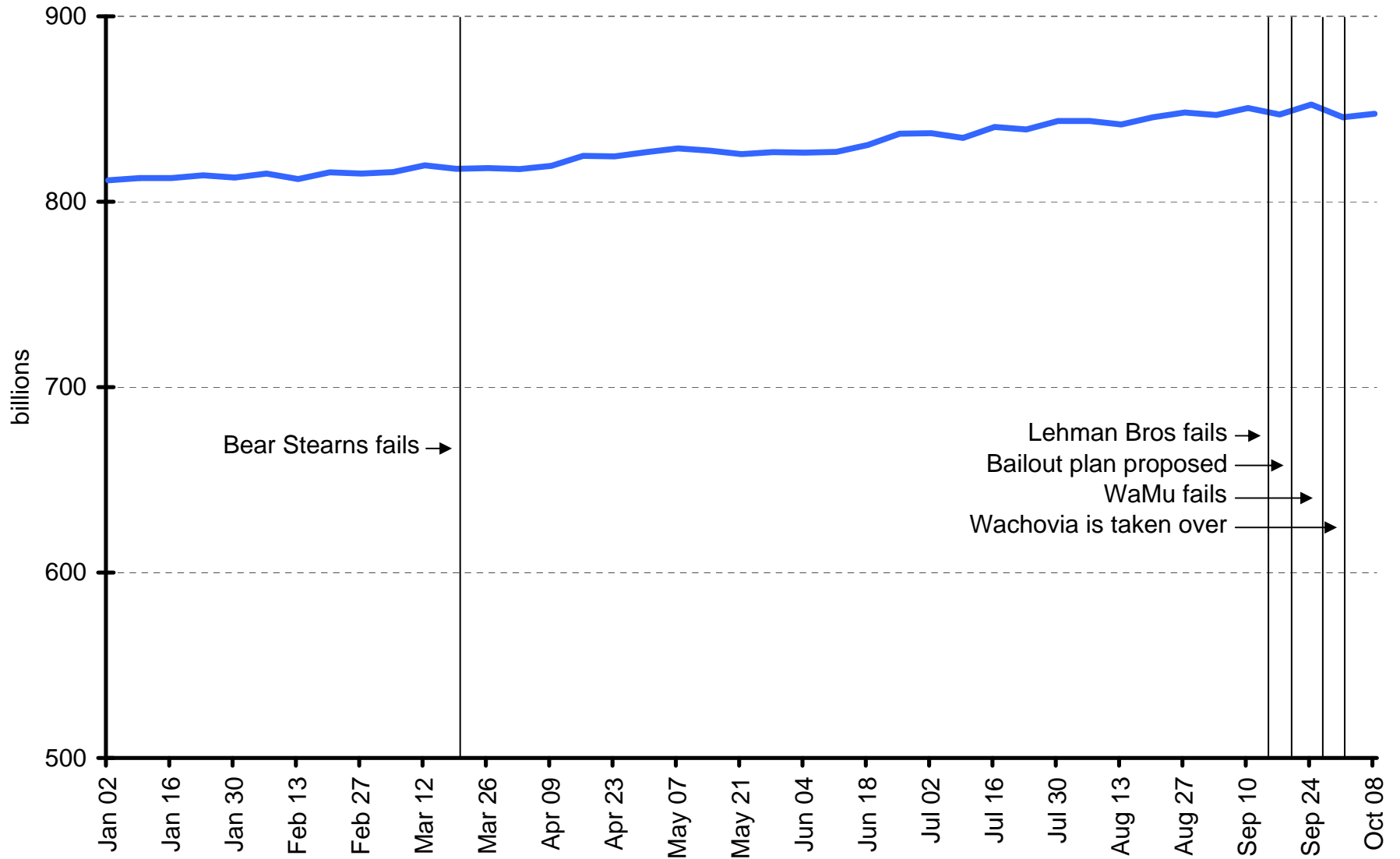
Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/h8/>

Figure 4A: Consumer Loans



Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/h8/>

Figure 4B: Consumer Loans in 2008



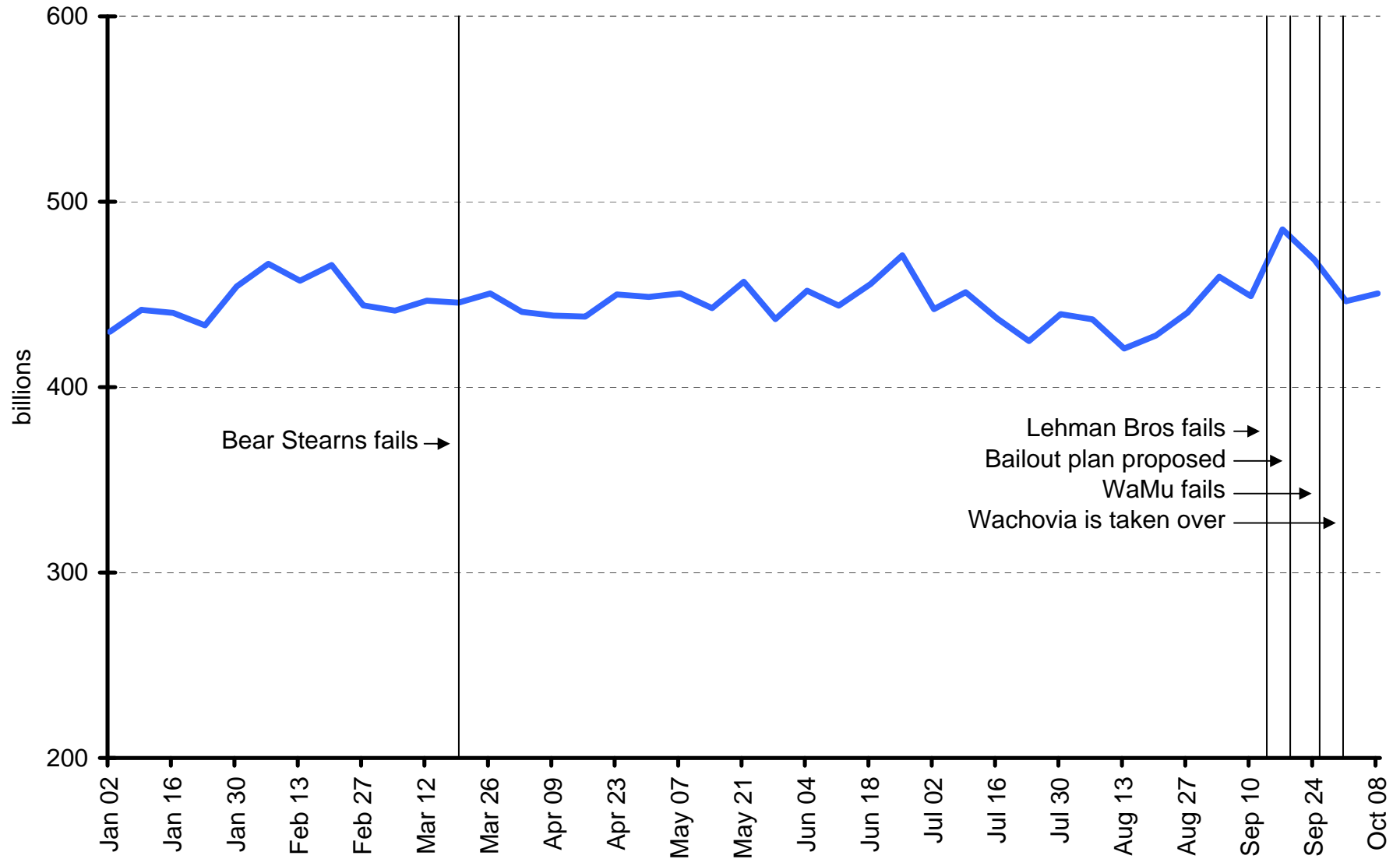
Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/h8/>

Figure 5A: Interbank Loans



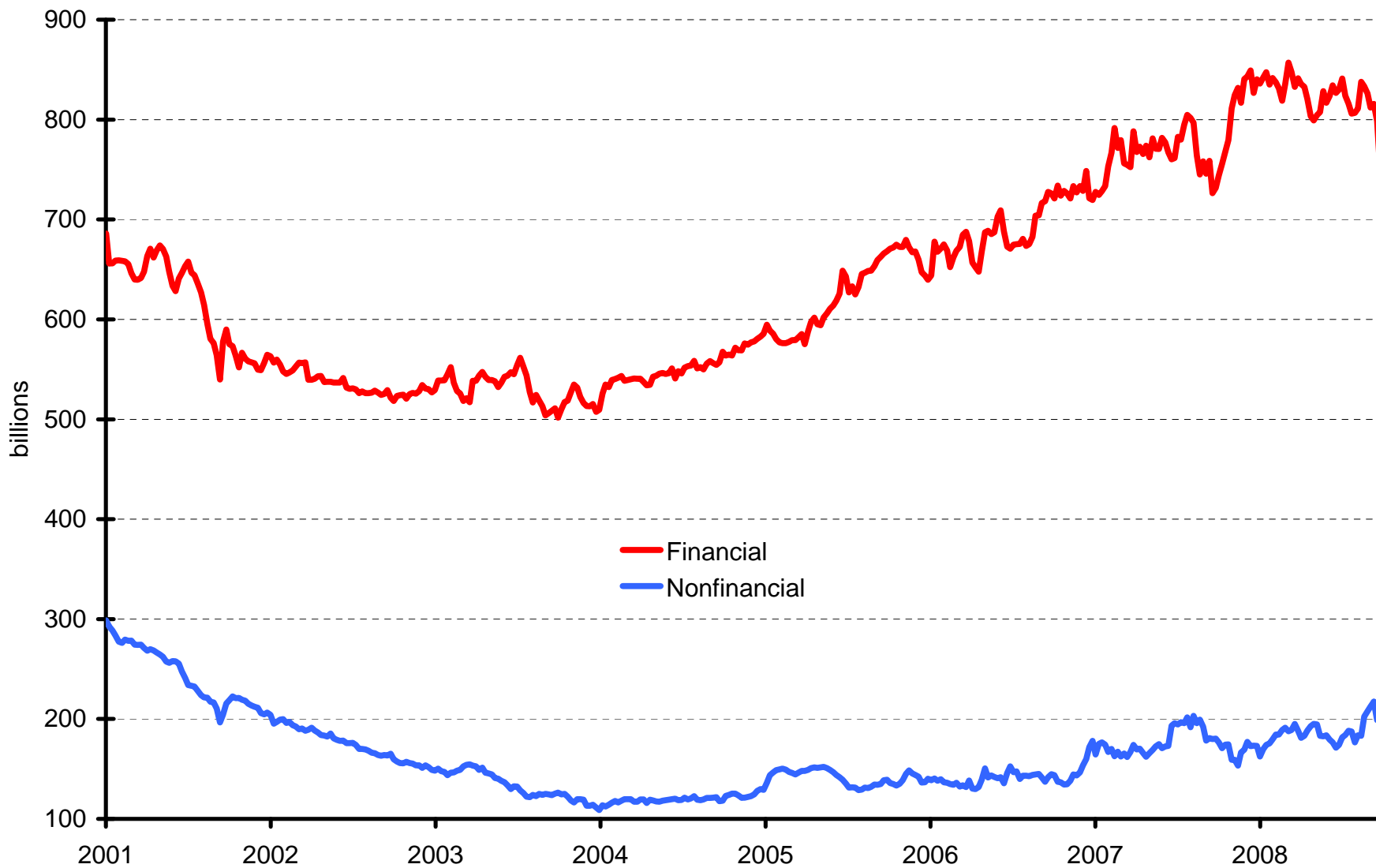
Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/h8/>

Figure 5B: Interbank Loans in 2008



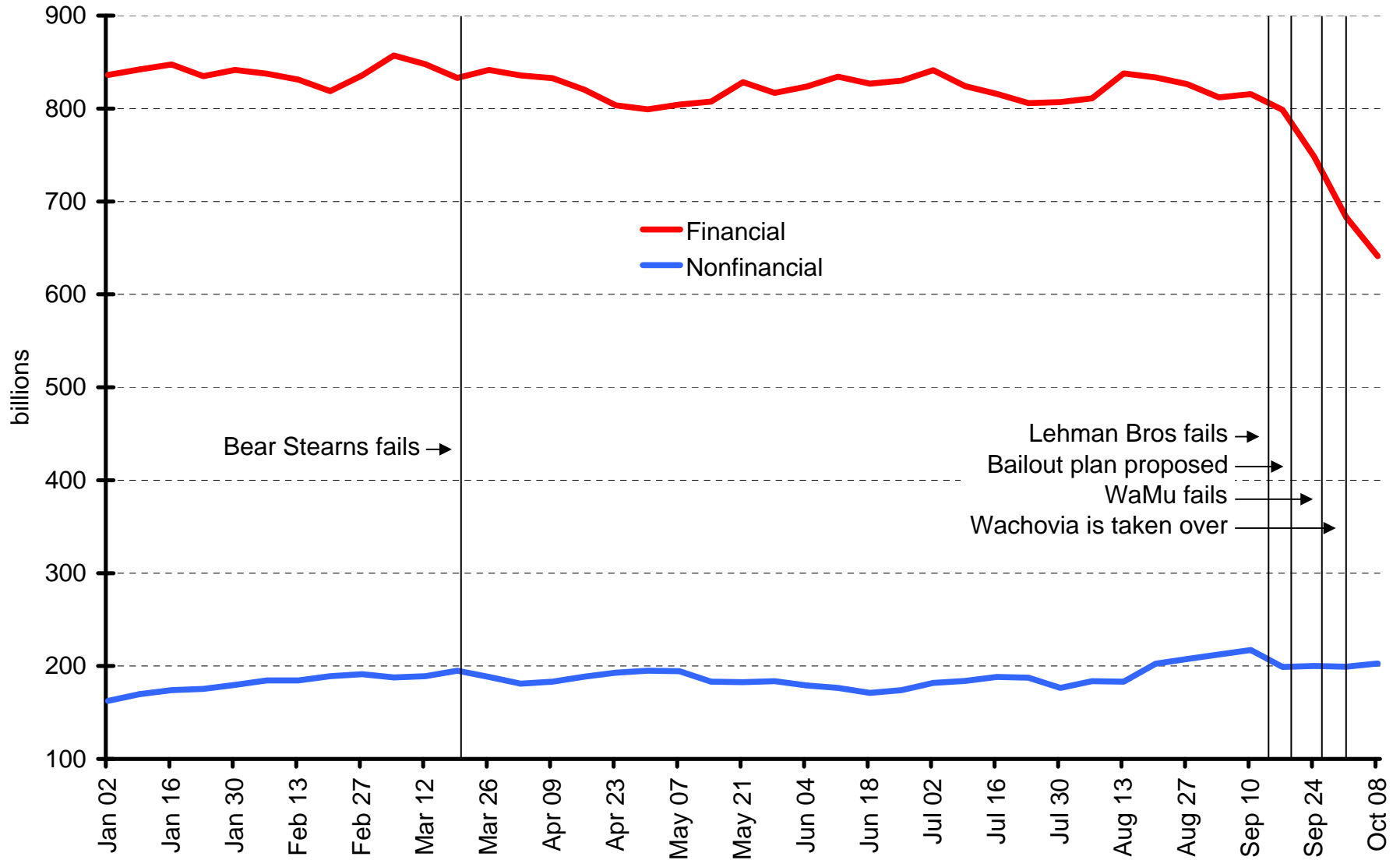
Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/h8/>

Figure 6A: Commercial Paper Outstanding



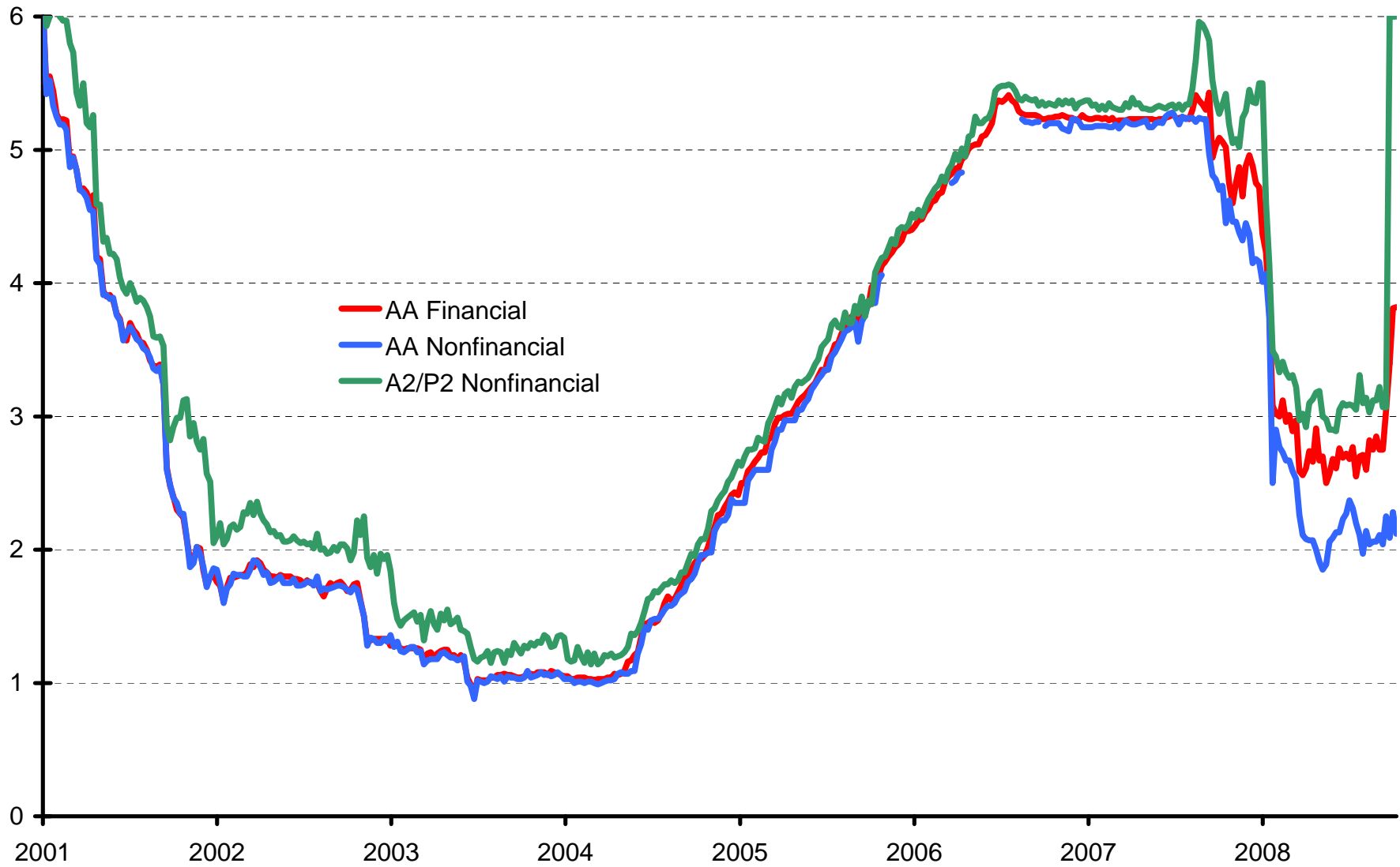
Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/cp/>

Figure 6B: Commercial Paper Outstanding in 2008



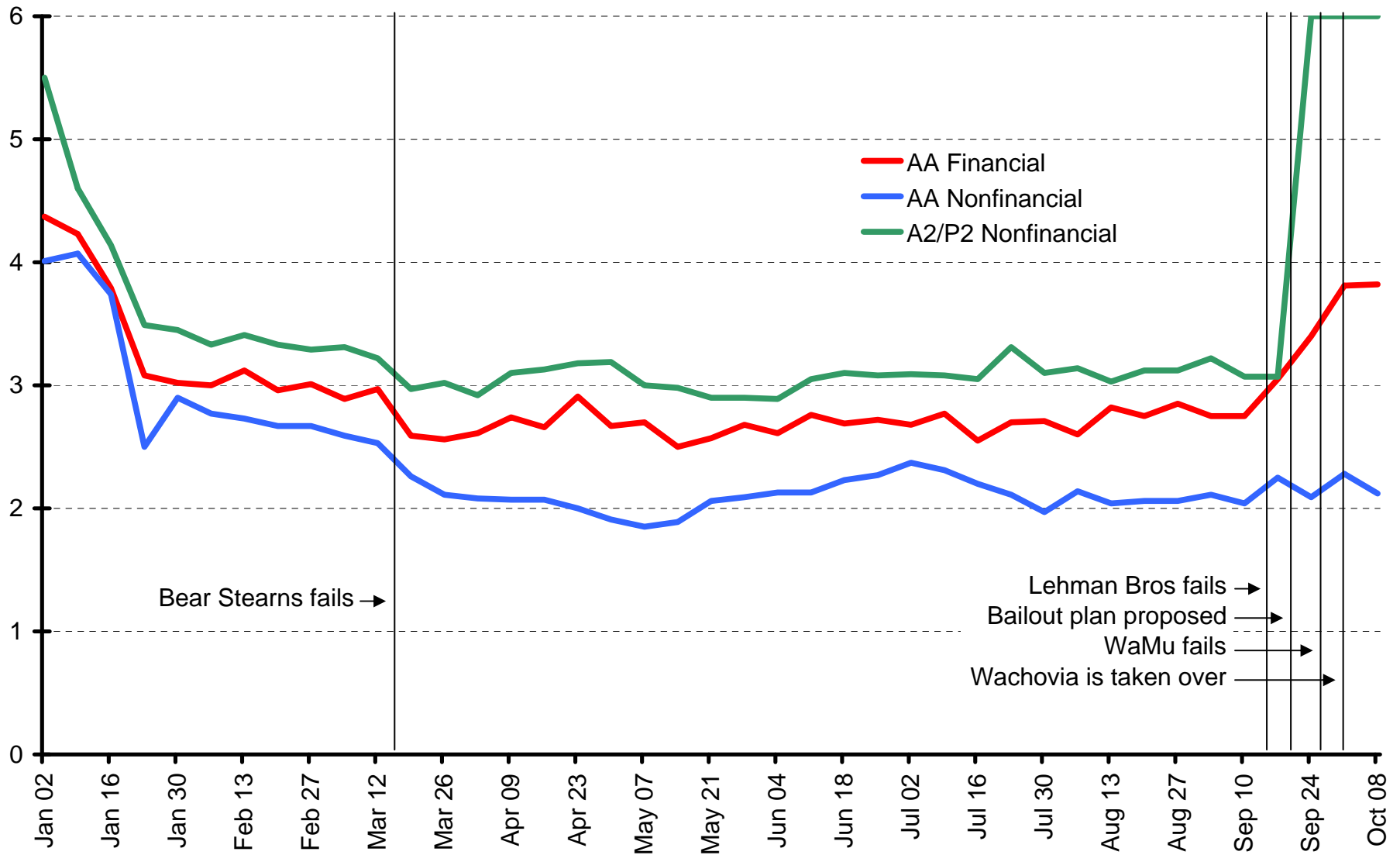
Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/cp/>

Figure 7A: Commercial Paper 90 Day Rate



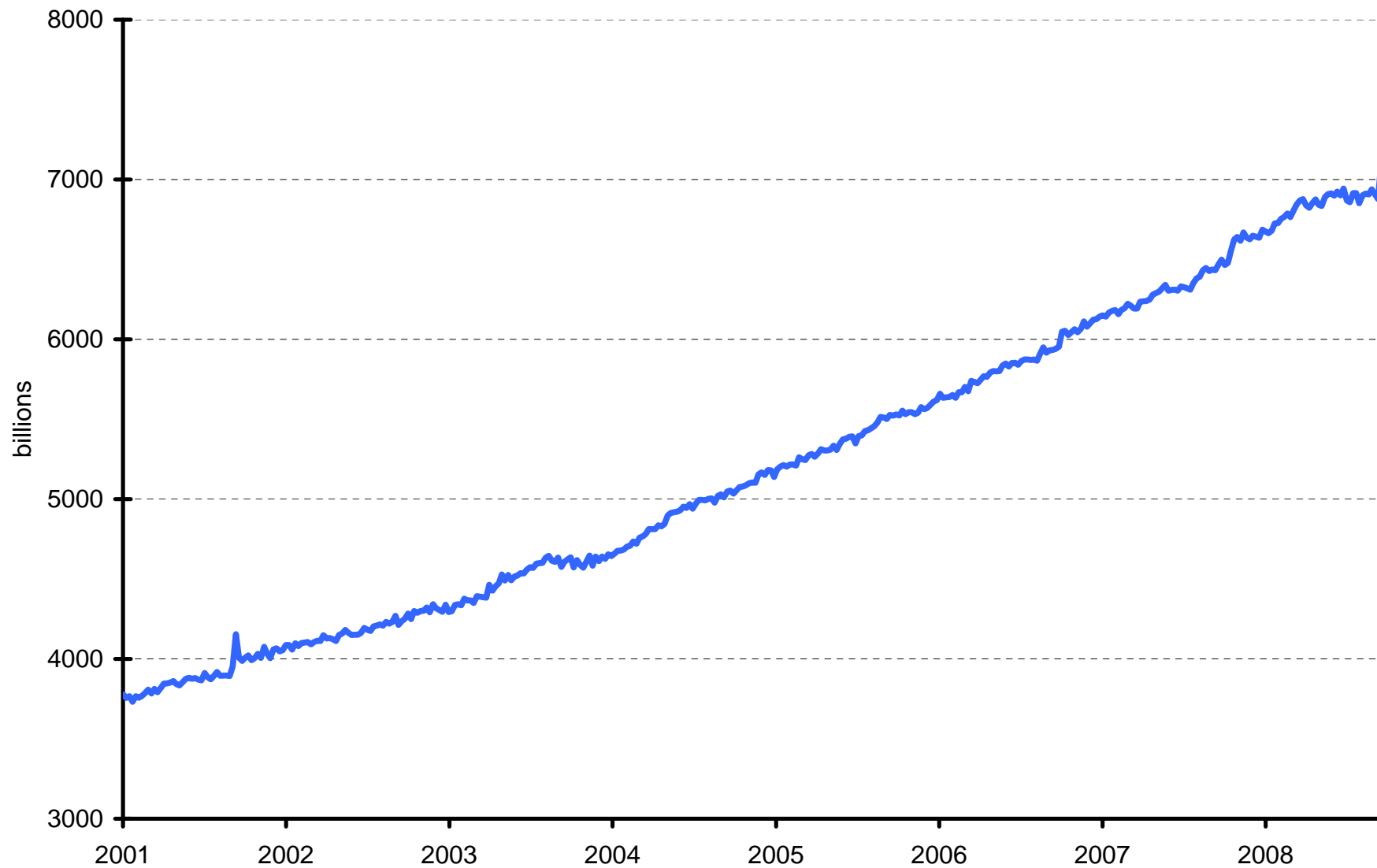
Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/cp/>

Figure 7B: Commercial Paper 90 Day Rate in 2008



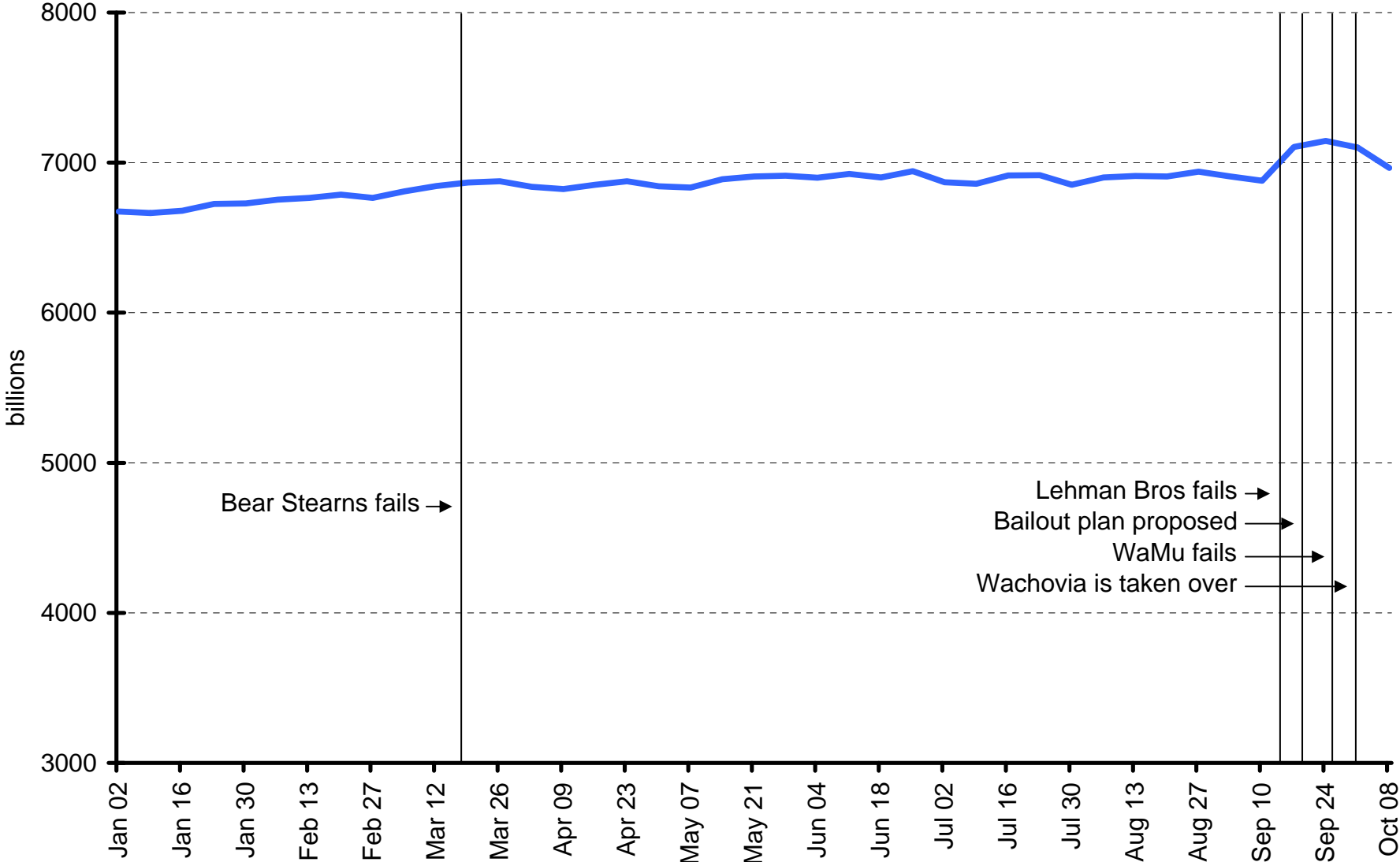
Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/cp/>

Figure 8A: Deposits



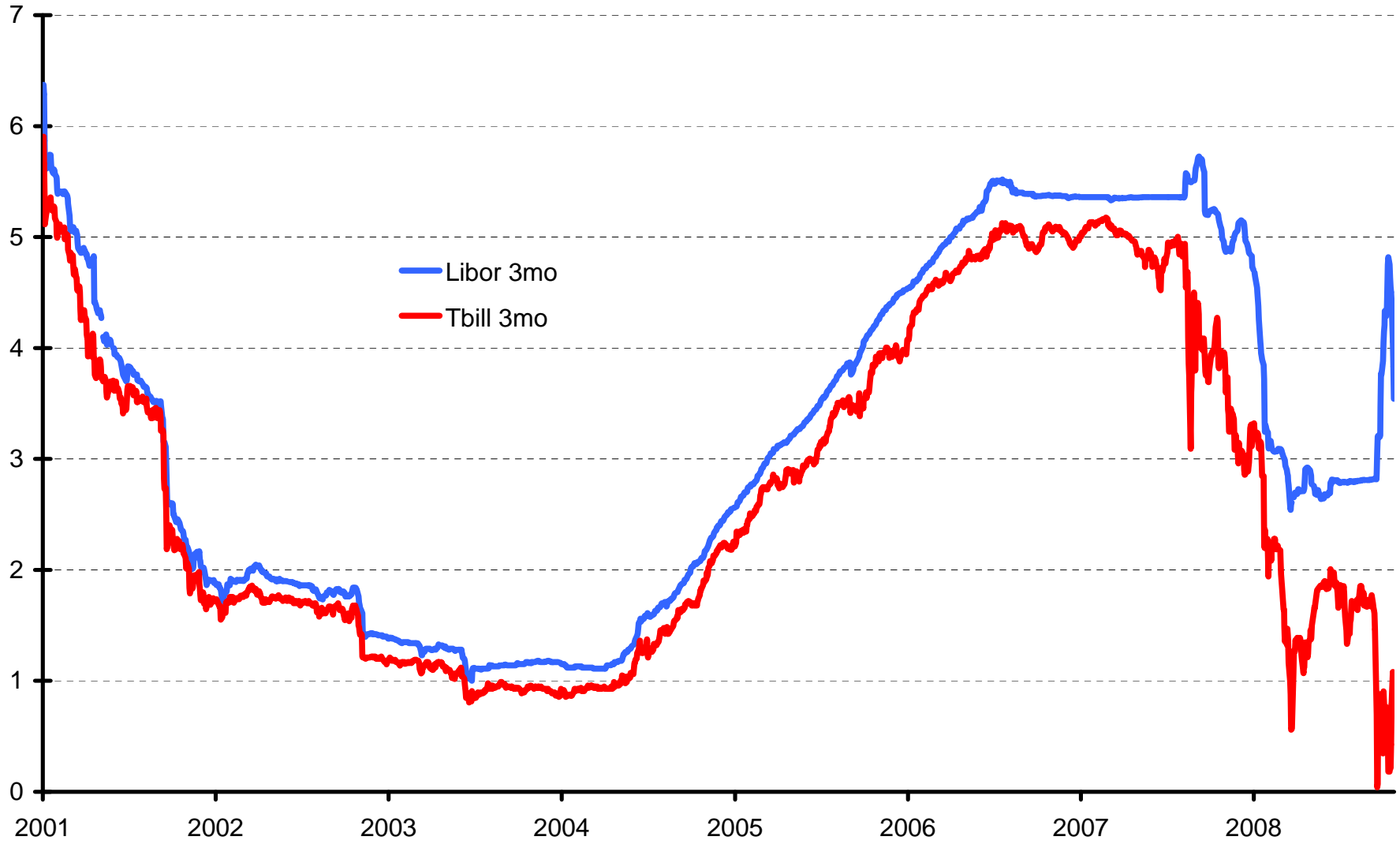
Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/h8/>

Figure 8B: Deposits in 2008



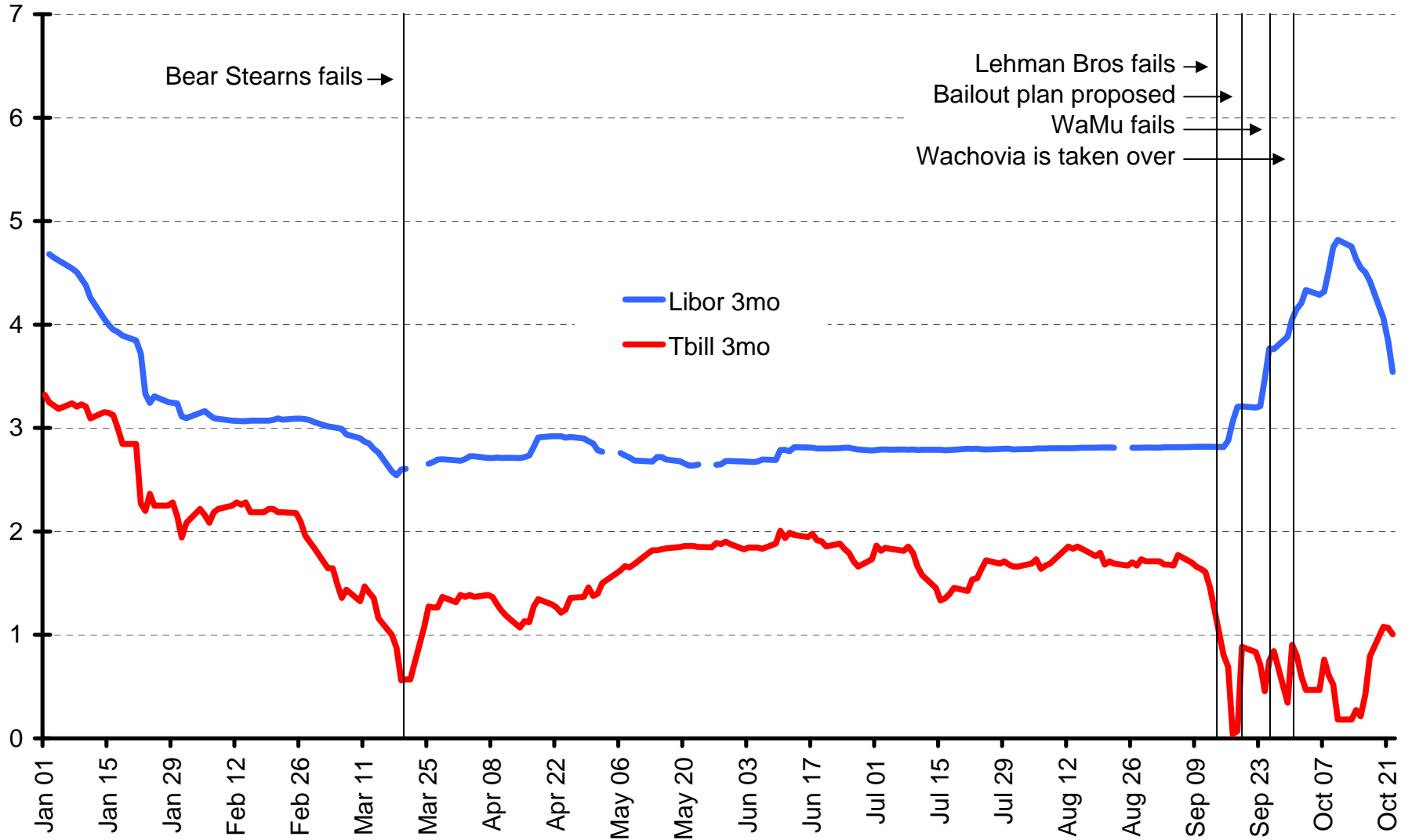
Source: Federal Reserve Board, <http://www.federalreserve.gov/releases/h8/>

Figure 9A: Libor and Tbill Rates



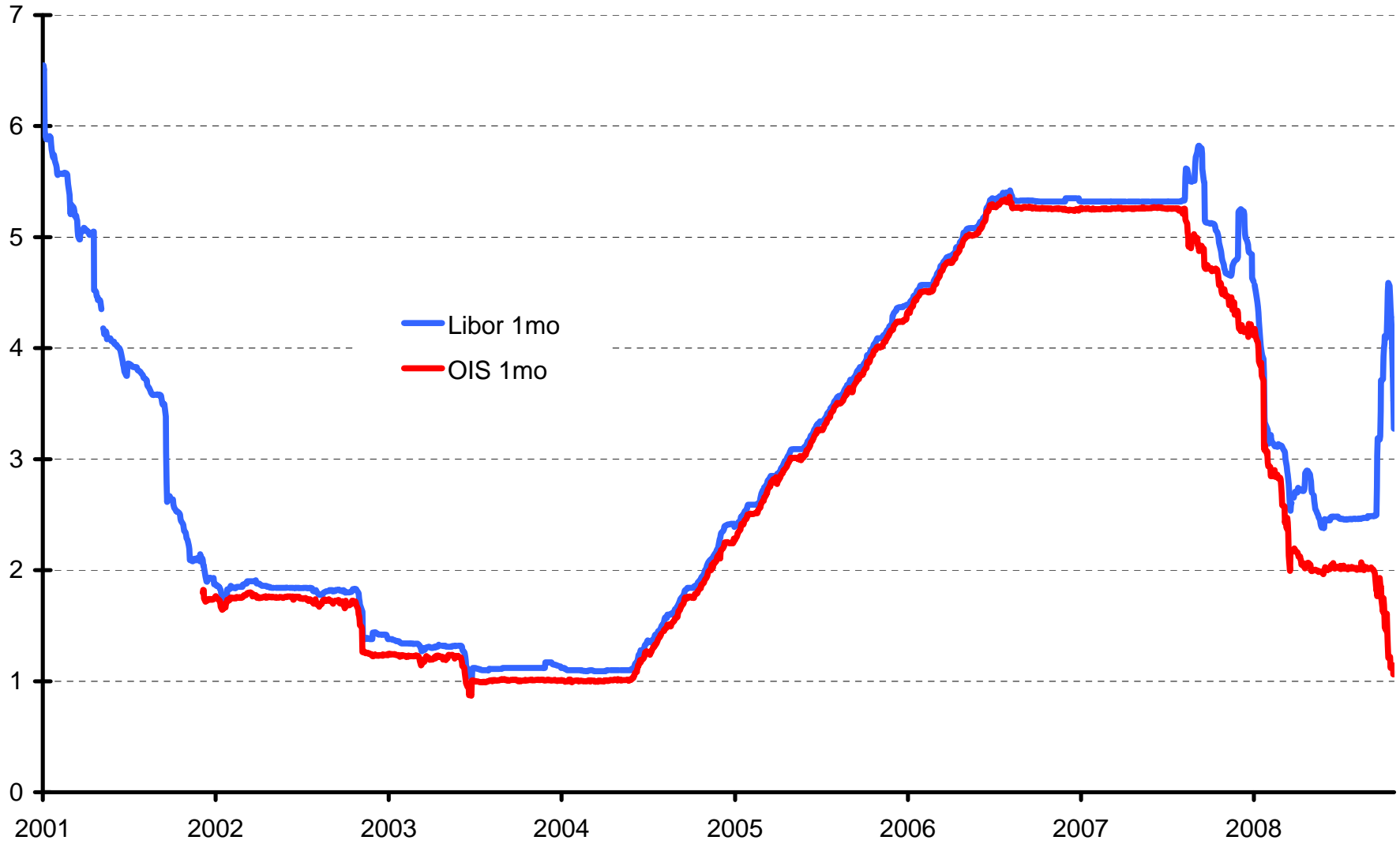
Source: Bloomberg

Figure 9B: Libor and Tbill Rates in 2008



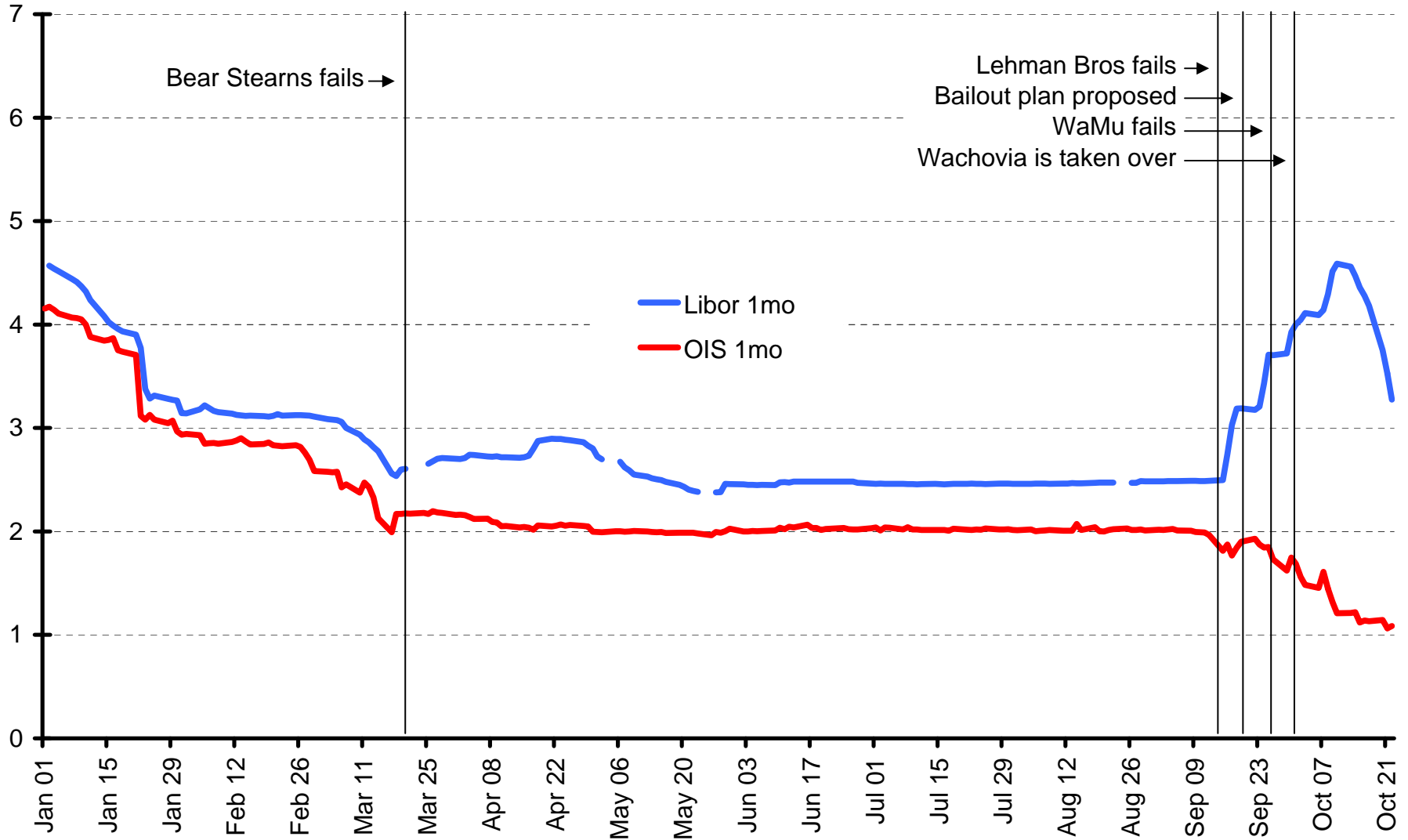
Source: Bloomberg

Figure 10A: Libor and OIS One Month Rates



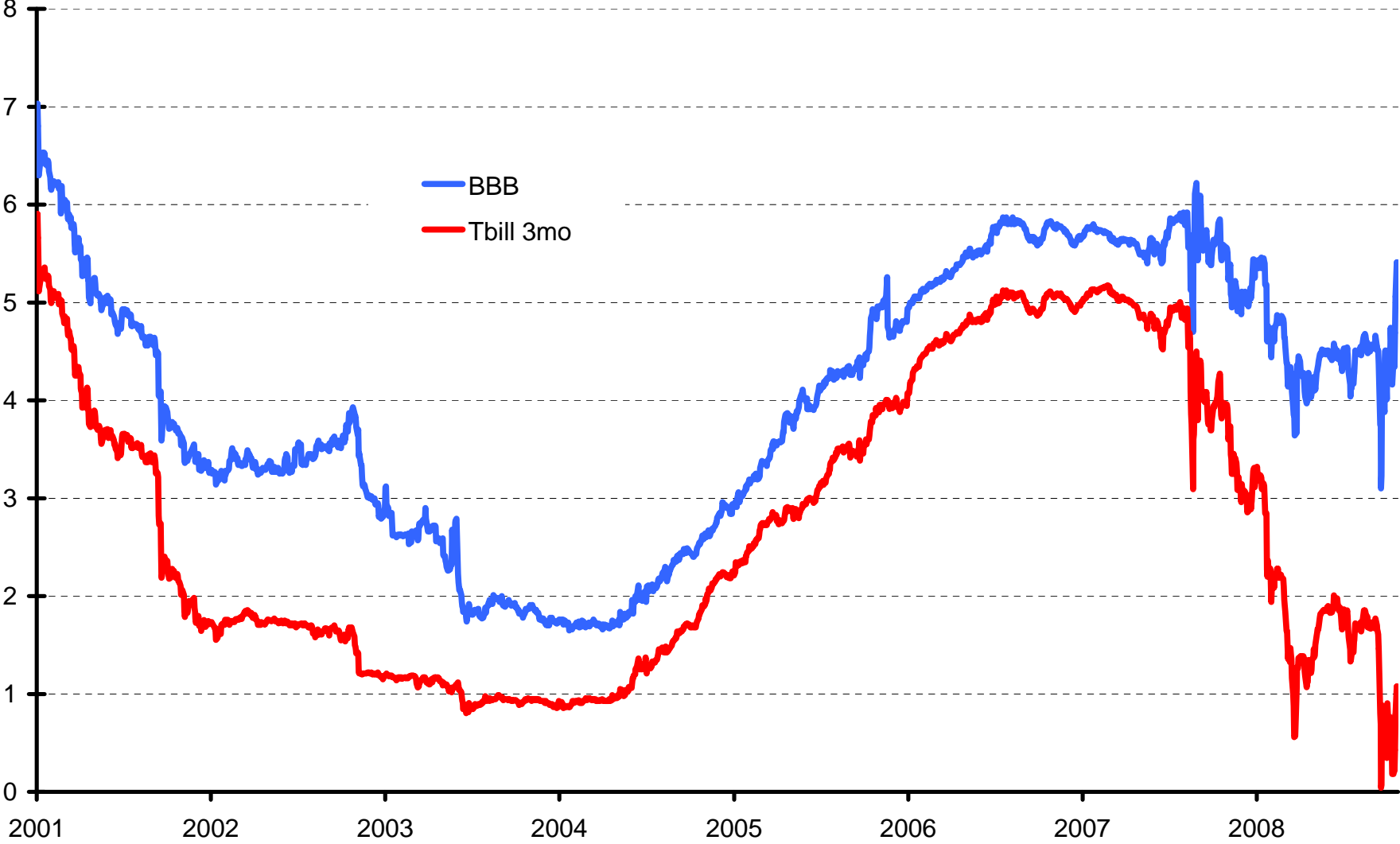
Source: Bloomberg

Figure 10B: Libor and OIS One Month Rates in 2008



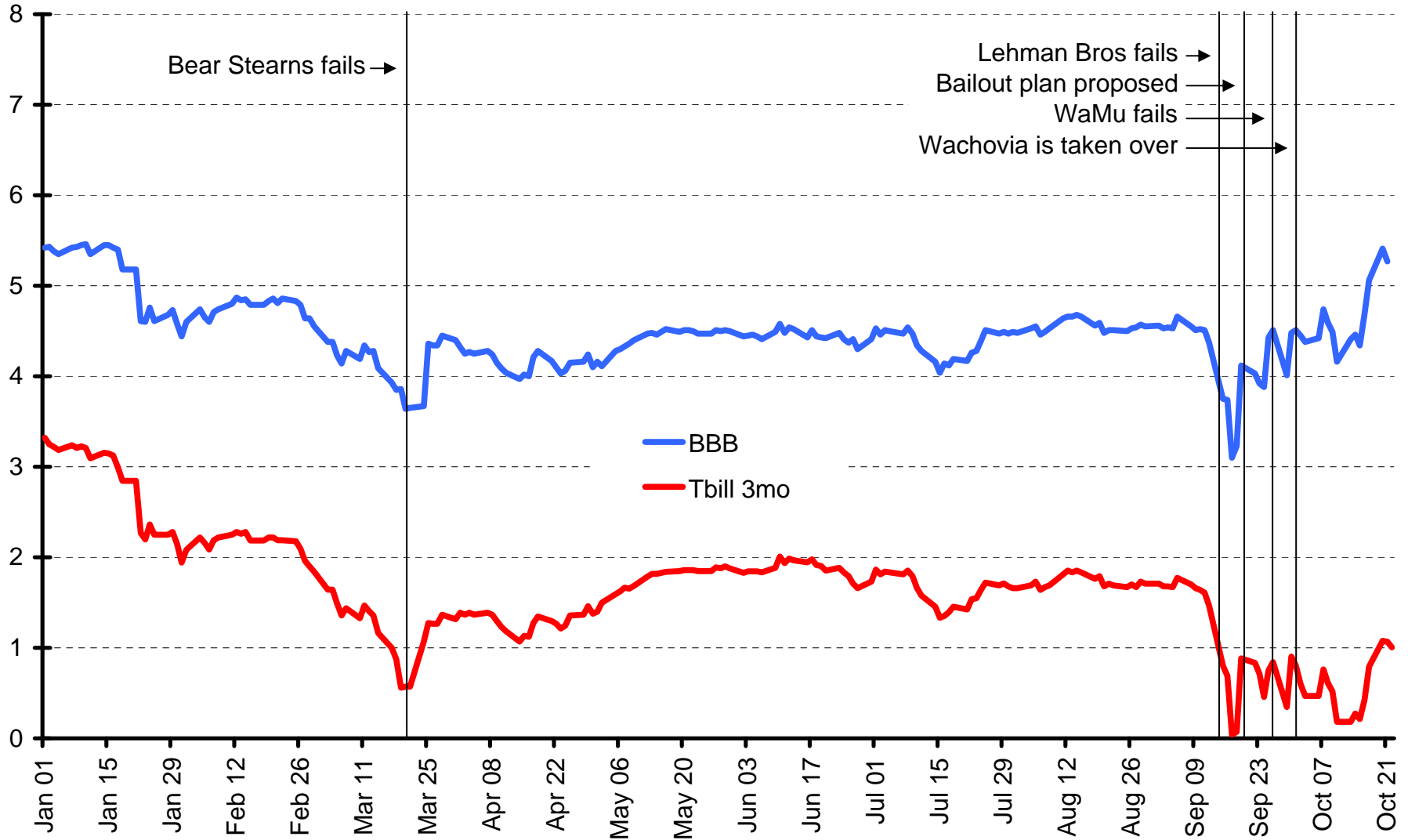
Source: Bloomberg

Figure 11A: BBB and Tbill Rates



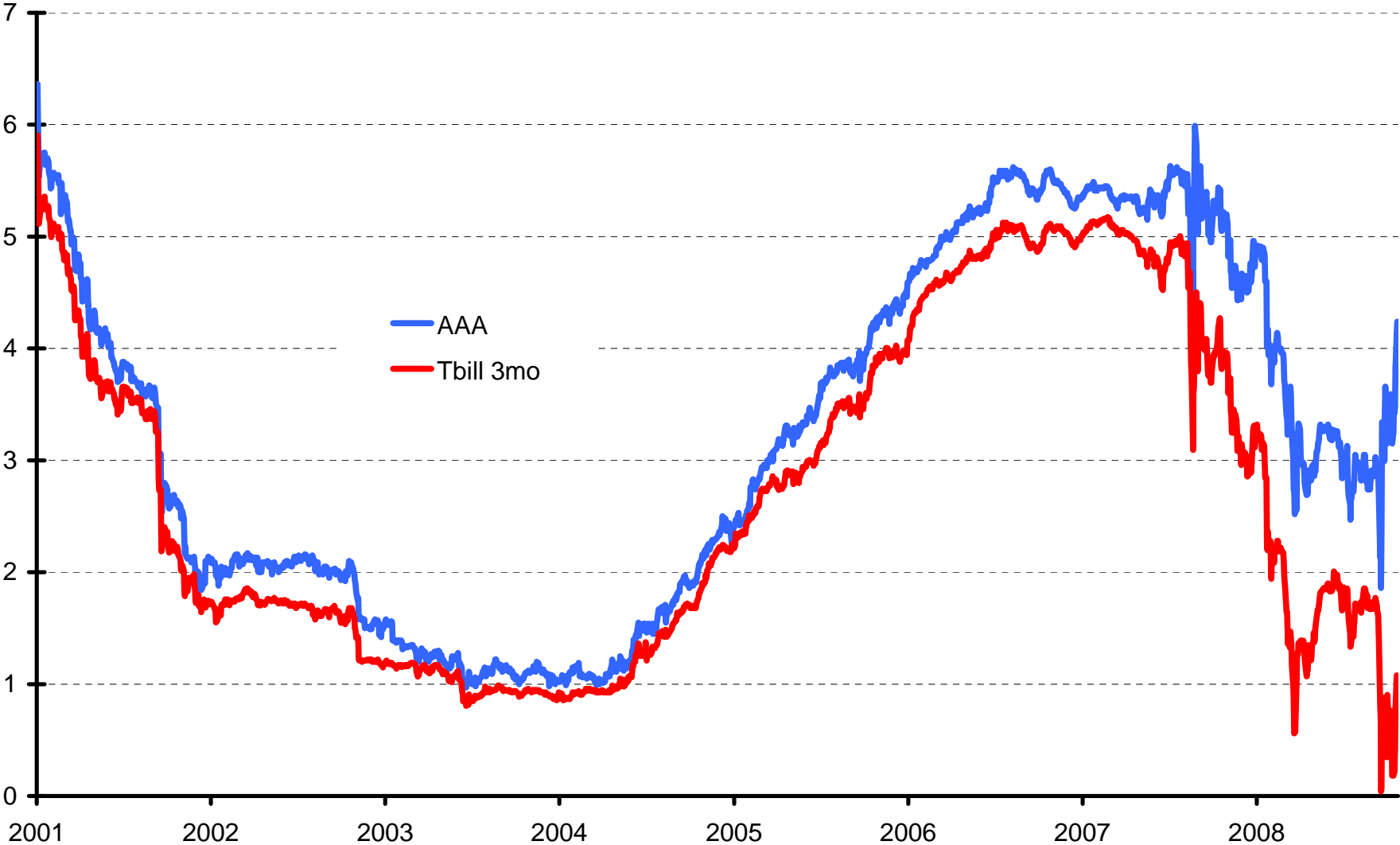
Source: Bloomberg

Figure 11B: BBB and Tbill Rates in 2008



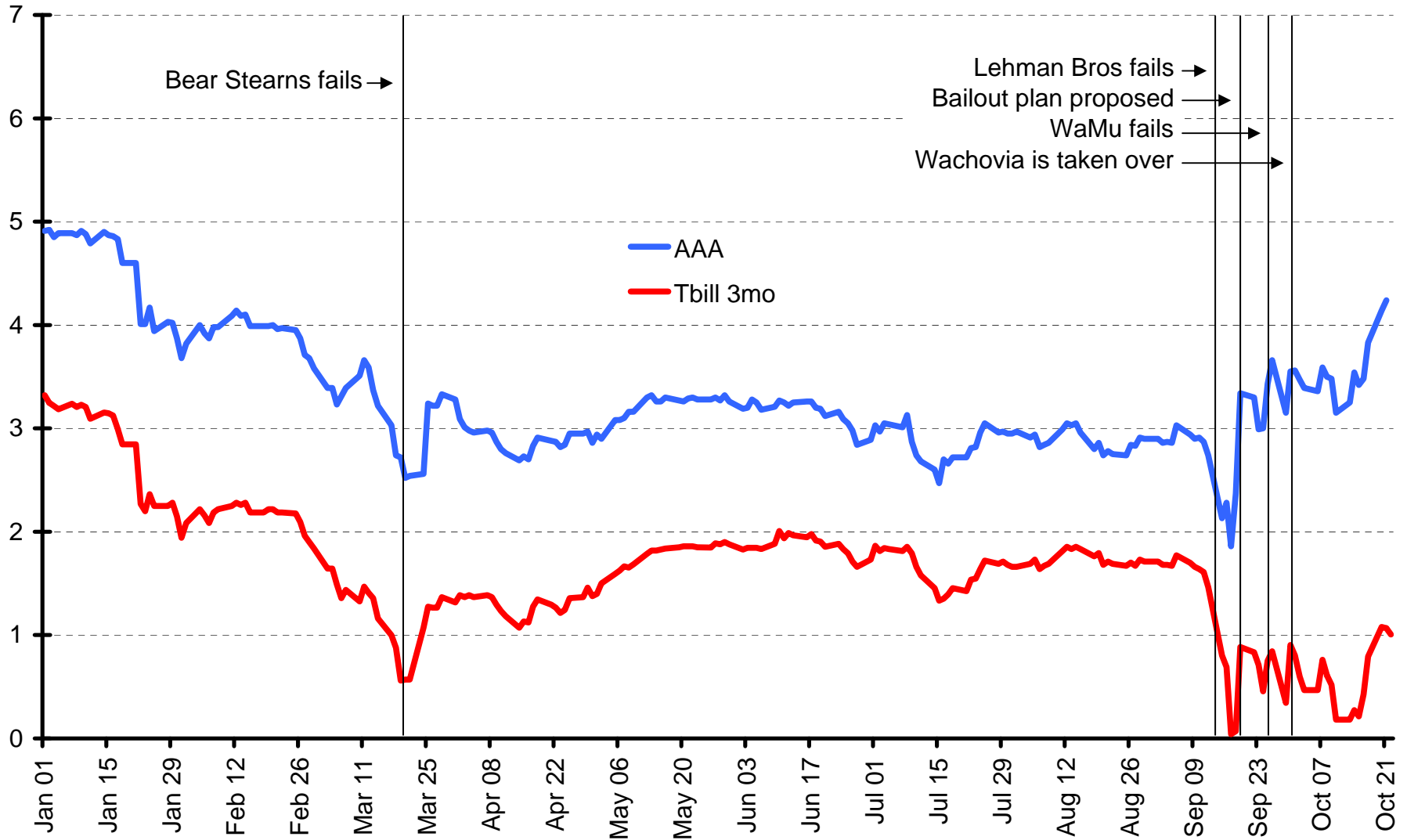
Source: Bloomberg

Figure 12A: AAA and Tbill Rates



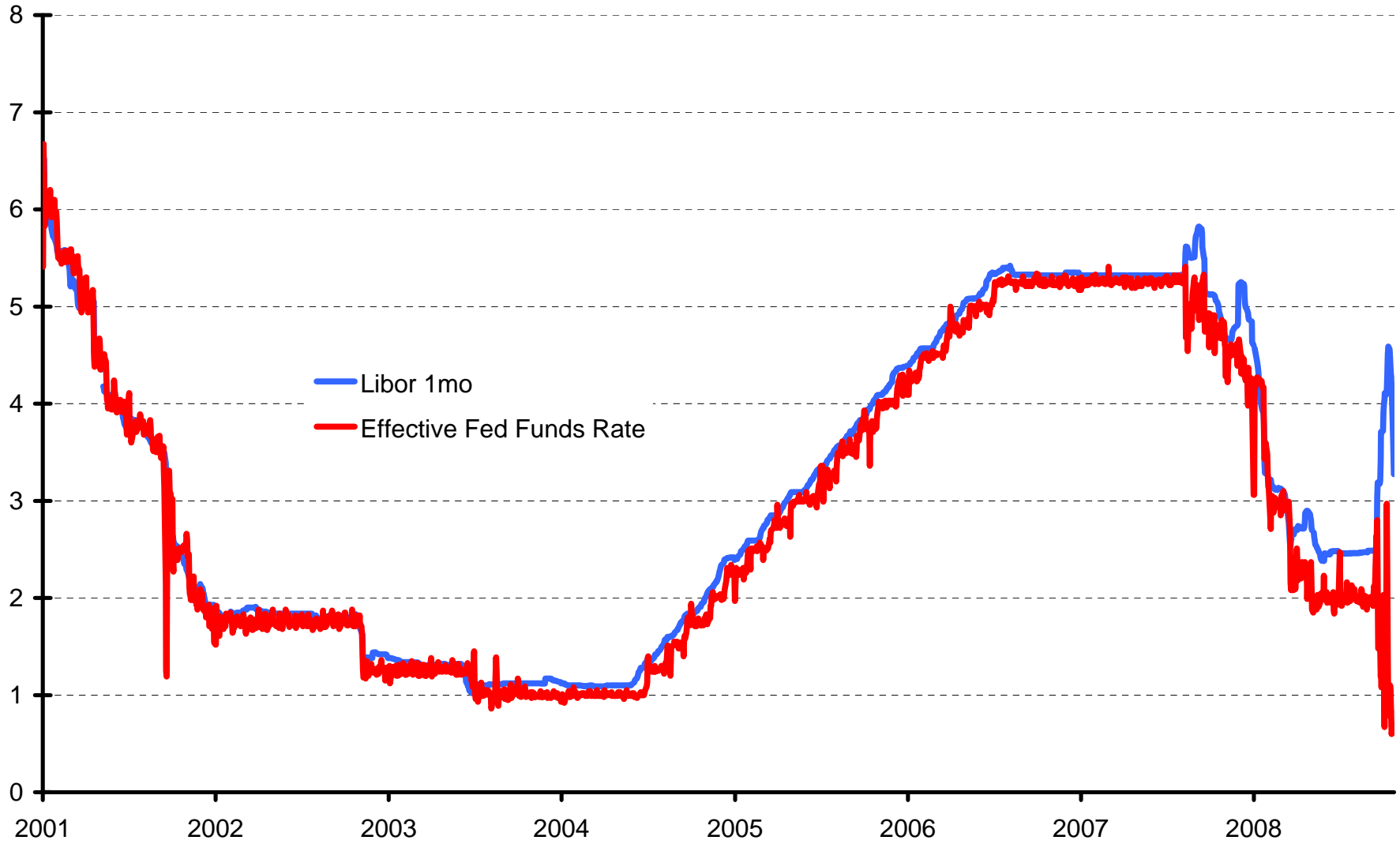
Source: Bloomberg

Figure 12B: AAA and Tbill Rates in 2008



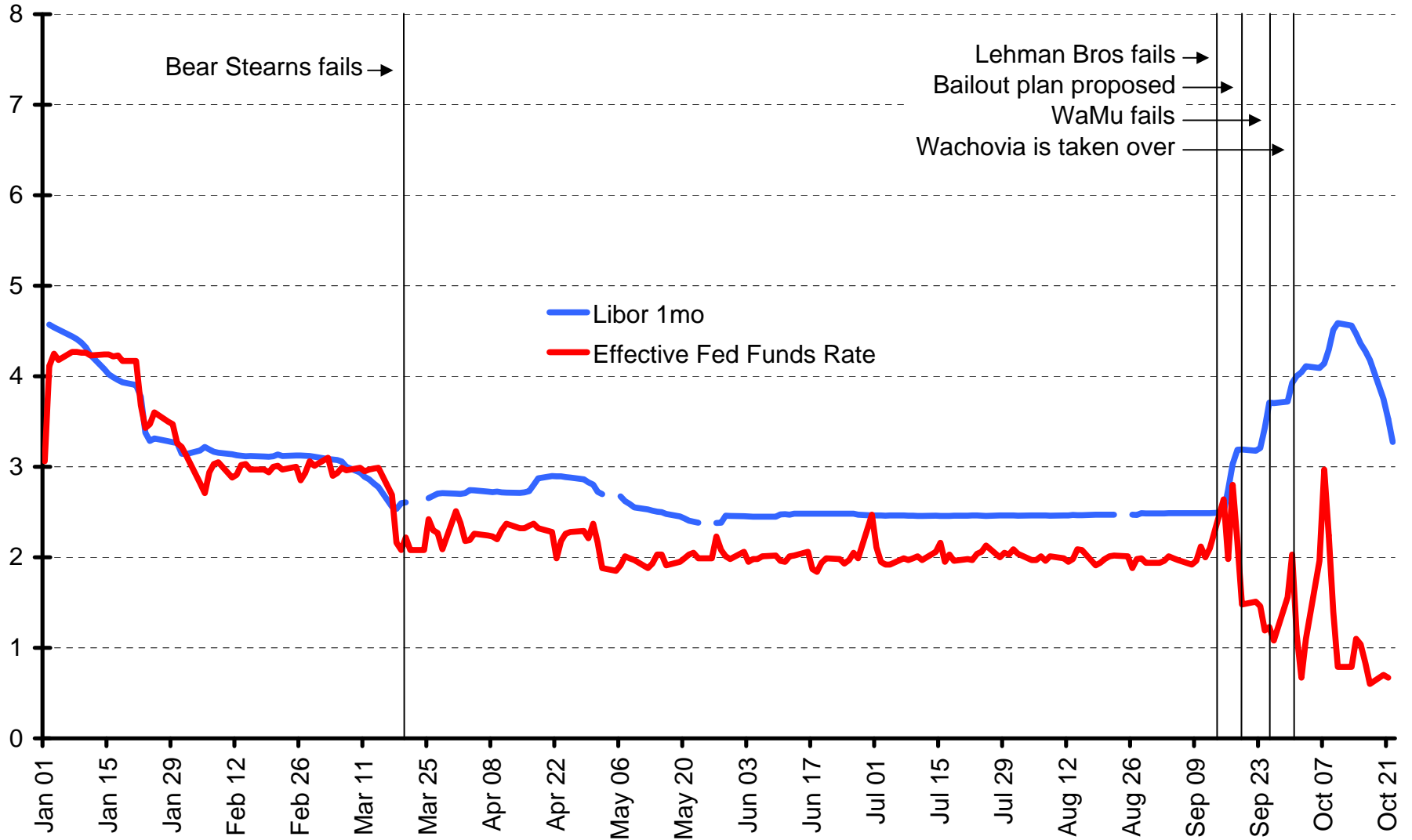
Source: Bloomberg

Figure 13A: Libor and Fed Funds Rates



Source: Bloomberg

Figure 13B: Libor and Fed Funds Rates in 2008



Source: Bloomberg