Congressional Oversight Panel

December 9, 2009

Metrics for the Troubled Asset Relief Program

Excerpted from the Congressional Oversight Panel's December 2009 report, "Taking Stock: What Has the Troubled Asset Relief Program Achieved?"

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Relevant Macroeconomic Indicators

The TARP was created during a period of severe global financial disruption. In October 2009, the International Monetary Fund (IMF) projected worldwide losses of $3.4 trillion stemming from the crisis.[328] By way of comparison, that is more money than the entire federal government spent – $3.1 trillion – in fiscal year 2009.[329] The IMF estimates that $1.5 trillion in global bank write-downs have yet to be recognized, with most of the losses coming from U.S., UK, and Euro area banks.[330] The expected loss of wealth, though lower than earlier estimates, poses a challenge to governments seeking to reinvigorate their economies. The United States has sought to support its banking sector so that it is able to weather the downtown, and many banks have seen increasing success in raising capital since the stress test results were released. As of November 30, U.S. banks, including both those that did and did not receive government assistance, had raised $72.4 billion in common equity and $49.7 billion in preferred equity in 2009.[331]

While conditions in the banking sector have improved, the overall shape of the recovery remains unclear. Economic contractions that have their source in a banking crisis tend to be prolonged,[332] and the current experience is no exception. There is a risk that a new asset bubble will form, leading to another crash.[333] There are also risks that prices for homes and in the commercial real estate sector will fall further, which would reduce the value of assets held by banks. The economy has begun to expand once again, but unemployment remains high, and millions of American households continue to live with the prospect of imminent foreclosure and the loss of their homes.

i. Credit Risk

Credit spreads measure the differences in yields between different bonds. At the height of the financial crisis in the fall of 2008, spreads between the safest bonds and those that carried

[328] International Monetary Fund, *Global Financial System Shows Signs of Recovery, IMF Says* (Sept. 30, 2009) (online at www.imf.org/external/pubs/ft/survey/so/2009/RES093009A.htm).

[329] Office of Management and Budget, *Table S-1. Budget Totals* (online at www.whitehouse.gov/omb/rewrite/budget/fy2009/summarytables.html) (accessed Dec. 7, 2009).

[330] International Monetary Fund, *World Economic Outlook October 2009*, at 5 (online at www.imf.org/external/pubs/ft/weo/2009/02/pdf/text.pdf) (accessed Dec. 7, 2009).

[331] SNL Financial, *Bank and Thrift Capital Raises* (online at www.snl.com/InteractiveX/article.aspx?CDID=A-9619028-11615&KPLT=4) (accessed Dec. 7, 2009).

[332] *See* International Monetary Fund, *World Economic Outlook*, at 103-138 (Apr. 2009) (online at www.imf.org/external/pubs/ft/weo/2009/01/pdf/text.pdf) (finding that recessions that are associated with financial crises have historically been longer and deeper, and featured weak recoveries).

[333] *See, e.g.*, Congressional Oversight Panel, Written Testimony of MIT Sloan School of Management Professor Simon Johnson, *Taking Stock: Independent Views on TARP's Effectiveness* (Nov. 19, 2009) (online at cop.senate.gov/documents/testimony-111909-johnson.pdf) (hereinafter "Johnson COP Testimony").

greater risk skyrocketed, reflecting instability in the financial markets, as investors panicked and sought refuge in safer investments. Credit spreads have fallen significantly since the creation of the TARP. Treasury cites the improvement as a sign of TARP's success, noting that the largest declines occurred in markets receiving direct government support, such as asset-backed securities and debt by government-supported enterprises such as Fannie Mae and Freddie Mac.[334]

The closely watched LIBOR-OIS spread provides another example of how credit conditions have improved.[335] This spread measures the difference between the London Interbank Offered Rate (LIBOR), which shows quarterly borrowing costs for banks, and the Overnight Indexed Swaps rate (OIS), which measures the cost of extremely short-term borrowing by financial institutions. As the spread increases, market participants have greater fears about whether counterparties will be able to deliver on their obligations. After reaching a record high of 364 basis points, or 3.64 percent, in October 2008, the spread fell to around 100 basis points in early 2009. It stood at 13 basis points on Nov. 17, 2009.[336] The lower spread means that the banking sector now has a significantly lower cost of short-term capital than it did at the height of the crisis.

The TED spread, which is the difference between LIBOR and short-term Treasury bill interest rates, is another indicator of perceived credit risk. A high TED spread shows an unwillingness by investors to hold securities other than Treasury bills. After peaking in late 2008, the TED spread has fallen to pre-crisis levels, as Figure 30 illustrates. A report by the Government Accountability Office (GAO) found that the announcement of the Capital Purchase Program under the TARP had a statistically significant effect on the TED spread, although the decline was not due solely to the TARP.[337] The GAO analysis supports Treasury's claim that the TARP had a positive effect on credit markets.

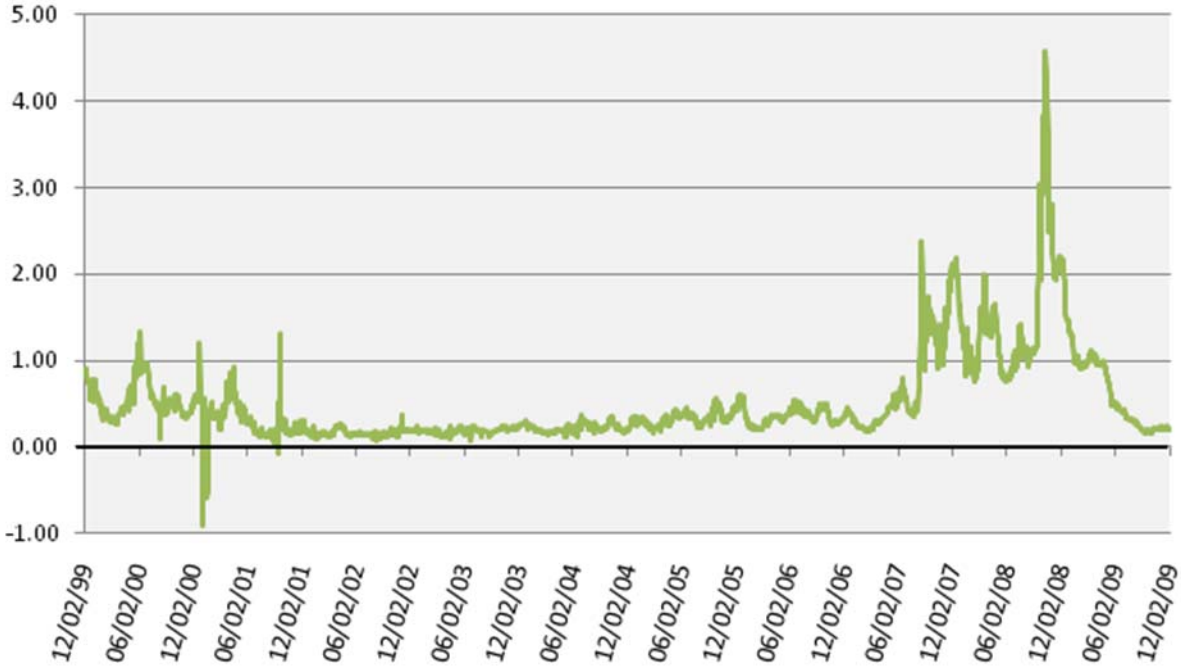
[334] Next Phase of Government Financial Stabilization, *supra* note 70, at 8.

[335] Next Phase of Government Financial Stabilization, *supra* note 70, at 8.

[336] Bloomberg, *Fed to Cut Maximum Maturity of Discount Window Loans* (Nov. 17, 2009) (online at www.bloomberg.com/apps/news?pid=20601068&sid=akC02cF4YHC4).

[337] GAO: TARP One Year, *supra* note 195, at 36.

Figure 30: TED Spread Since December 1999 (in basis points)[338]

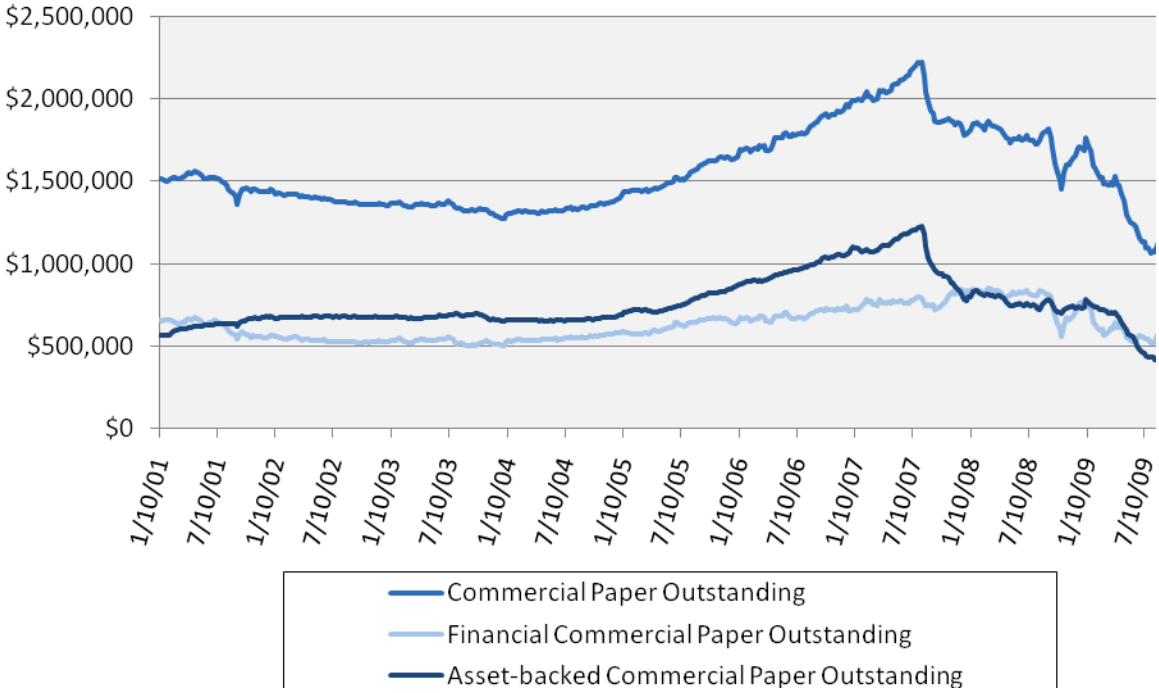


ii. Credit to Businesses

While banks now have a lower short-term cost of capital, putting them in a better position to lend, many borrowers have yet to see a return to pre-crisis levels of credit availability. Commercial paper is a form of debt that companies use to meet various short-term financial obligations, such as meeting their payrolls. Commercial paper outstanding, a rough measure of short-term business debt, is an indicator of the availability of credit for businesses. Since January 2007, total commercial paper outstanding has decreased by almost 37 percent, and it has fallen by more than 20 percent since the enactment of EESA. The value of commercial paper outstanding reached a peak of $2.22 trillion in August 2007, fell to $1.61 trillion by early October 2008, and fell further to $1.24 trillion in November 2009, as Figure 31 indicates. Figure 31 shows that the declines have happened not just in the overall market, but also in its various segments. These declines reflect not only a contraction of available credit to businesses, but also a drop in demand for loans due to poor economic conditions.

[338] SNL Financial, *Historical Yields – Instruments: 3-month LIBOR, 3-month Treasury Bills* (online at www.snl.com/interactivex/dividendyields.aspx?Refreshed=1&YieldViewType=1&Industry=0%2c18%2c3%2c1%2c2%2c8%2c7%2c22%2c10%2c21%2c5%2c4) (accessed Dec. 7, 2009).

Figure 31: Commercial Paper Outstanding[339]



iii. Housing Sector

The health of the residential real estate market is an important economic indicator, both because of the housing sector's vast size – U.S. households held real estate worth $18.3 trillion in the second quarter of 2009[340] – and because families often have a great deal of their wealth invested in their homes. It is important not to overstate the connection between the TARP and the state of the U.S. housing market. Other government policies aimed at supporting the housing sector, including historically low interest rates, the Federal Reserve's purchases of mortgage-related securities, the enactment of a tax credit for first-time homebuyers, and policies enacted at the Federal Housing Administration and at Fannie Mae and Freddie Mac, which are currently in government conservatorship, have a more direct link to the state of the housing market than the TARP does.

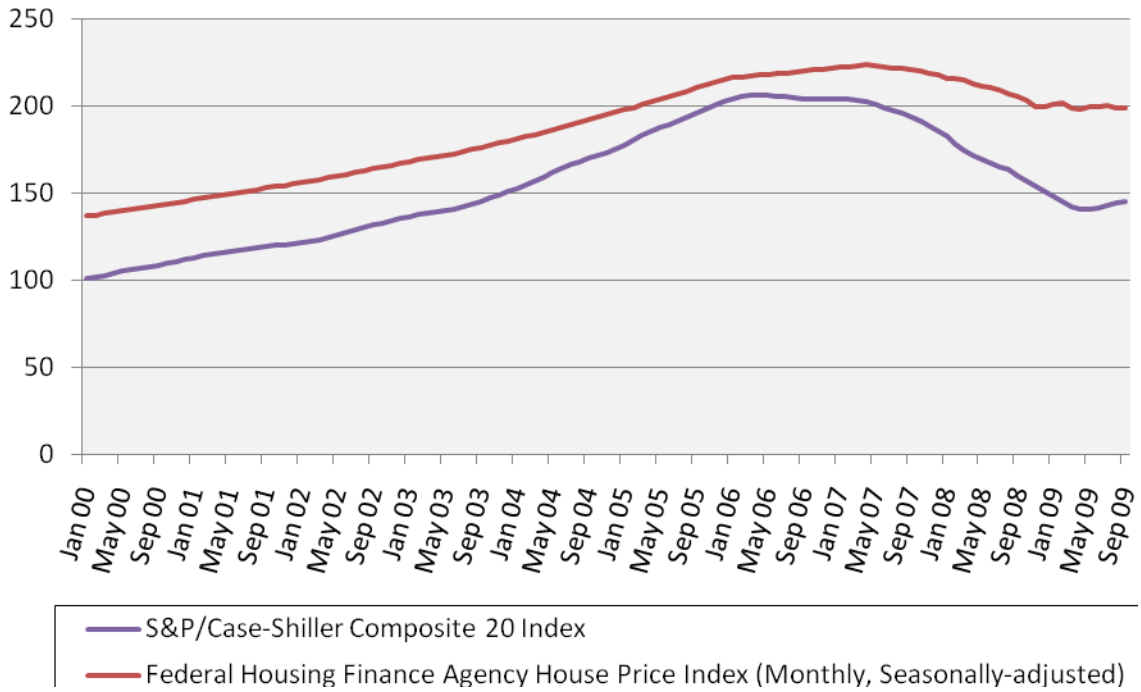
The financial crisis began in the U.S. housing sector, which has seen large nationwide declines in home values. There are two major indices of residential housing prices nationwide: the Federal Housing Finance Agency House Price Index and the S&P/Case-Shiller index. The 2009 data from both indices show signs of housing price stabilization, and prices are currently

[339] Board of Governors of the Federal Reserve System, *Commercial Paper – Instrument: Commercial Paper, Monthly Outstanding; seasonally adjusted* (online at www.federalreserve.gov/datadownload/Choose.aspx?rel=CP) (accessed Dec. 7, 2009).

[340] *See* Board of Governors of the Federal Reserve System, *B.100 Balance Sheet of Households and Nonprofit Organizations* (Sept. 17, 2009) (online at www.federalreserve.gov/releases/z1/Current/z1r-5.pdf).

near their 2004-2005 levels, as Figure 32 shows. However, Treasury recently cautioned that the residential real estate market had not reached a firm bottom.[341] To the extent the peak 2006 values were the result of a bubble, a return to those levels is neither desirable nor anticipated. However, the drop in housing prices represents a real loss in wealth to homeowners and investors.

Figure 32: Case Shiller and FHFA Home Price Indexes[342]

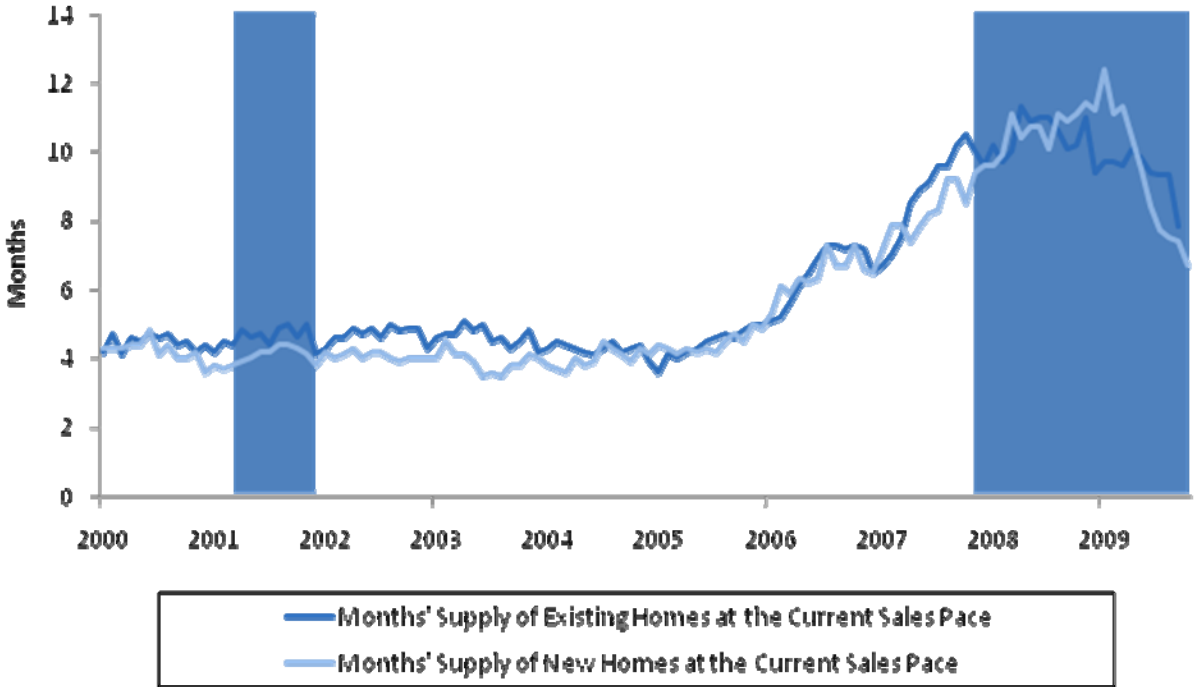


[341] Next Phase of Government Financial Stabilization, *supra* note 70, at 12.

[342] Standard & Poor's, *S&P/Case-Shiller Home Price Indices – Instrument: Seasonally Adjusted Composite20 Index* (online at www2.standardandpoors.com/spf/pdf/index/SA_CSHomePrice_History_102706.xls) (accessed Dec. 7, 2009); Federal Housing Finance Agency, *U.S. and Census Division Monthly Purchase Only Index* (Instrument: USA, Seasonally Adjusted) (online at www.fhfa.gov/Default.aspx?Page=87) (accessed Dec. 7, 2009). Most recent data available for both measures are from September 2009.

The current inventory of unsold homes offers another indicator of the housing sector's health. Too large an inventory puts downward pressure on prices; a six-month inventory is generally considered healthy. Inventories have been declining in recent months, as Figure 33 shows, the result of declining construction levels and improving sales, although inventory remains well above historic norms. At the end of October 2009, the inventory of unsold homes stood at 3.57 million homes, which constitutes a seven-month supply. This was the first time in more than two years that the inventory of unsold homes fell as low as a seven-month supply.[343]

Figure 33: Housing Inventory[344]



Mortgage interest rates are yet another indicator of the housing market's current state. Low rates make home purchases more affordable, and they allow homeowners to refinance their mortgages on favorable terms. Completely apart from the TARP, the federal government has undertaken various efforts aimed at keeping mortgage rates low. These actions include the Federal Reserve's decision to hold large volumes mortgage backed securities on its balance sheet and the government's decision to serve as a backstop for Fannie Mae and Freddie Mac. As Figure 34 shows, rates for 30-year conventional mortgages rose somewhat earlier this year, but are currently back to near historically low levels.

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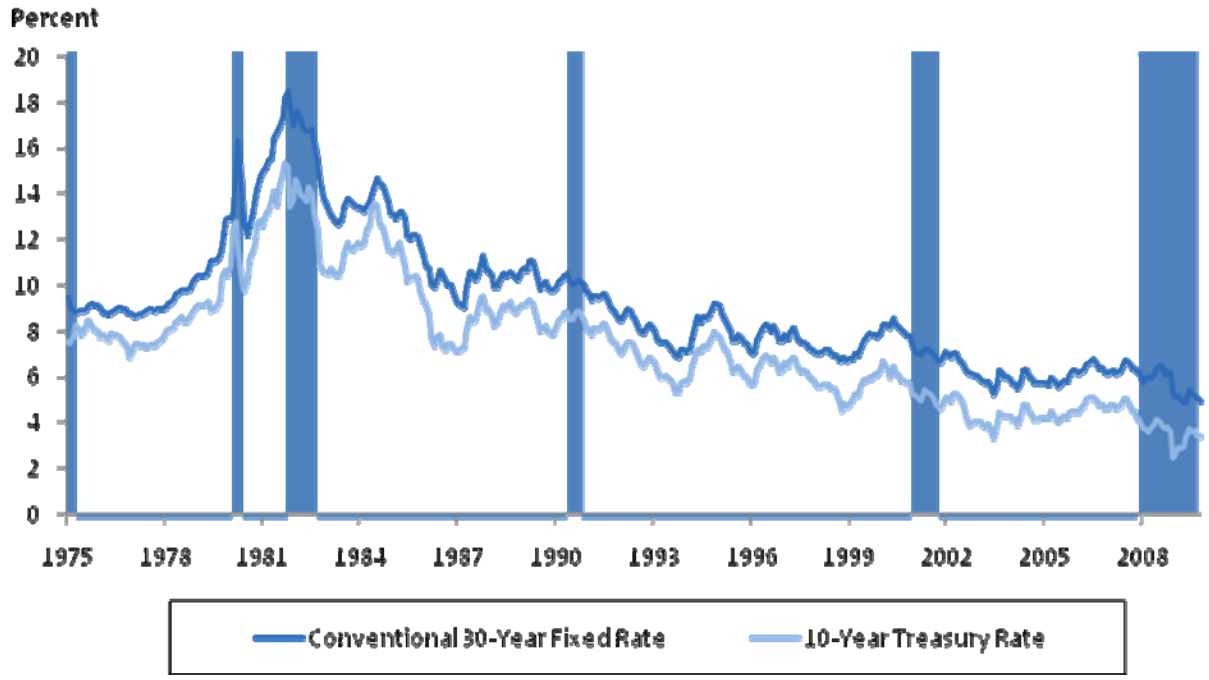
[343] National Association of Realtors, *Existing-Home Sales Record Another Big Gain, Inventories Contiune to Shrink* (Nov. 23, 2009) (online at http://www.realtor.org/press_room/news_releases/2009/11/record_big).

[344] National Association of Realtors, *Housing Inventory Data.* Information provided in response to Panel request. Shaded areas represent periods of recession.

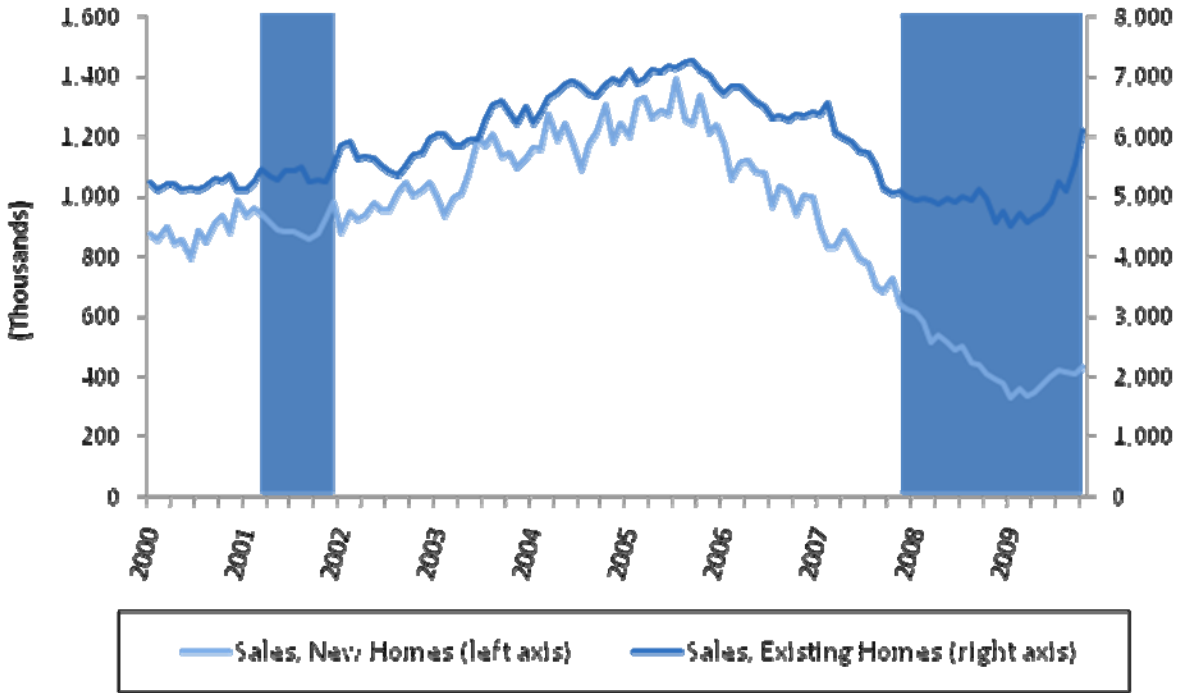
Figure 34: Mortgage Rates[345]



[345] Board of Governors of the Federal Reserve System, *Selected Interest Rates – Instruments: Contract Rate on 30-Year Fixed Rate Conventional Home Mortgage, Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity* (online at www.federalreserve.gov/datadownload/Choose.aspx?rel=H.15) (accessed Dec. 7, 2009). Shaded areas represent periods of recession.

Finally, as Figure 35 shows, home sales, of both new and existing homes, are beginning to recover, although new home sales remain well below historic averages.

Figure 35: New and Existing Home Sales[346]



While not directly tied to the TARP and its foreclosure mitigation programs, there is a relationship between foreclosures and key housing indicators. Foreclosures, especially on the scale of the 8 to 13 million projected over the next five years, can directly affect home prices and inventory. Foreclosures increase inventory by flooding the market with bank-owned properties and drive down home prices by an average of $7,200 per home.[347]

iv. Commercial Real Estate

The commercial real estate (CRE) sector is also an important indicator of economic health. Unfortunately, like the residential real estate sector, the CRE sector is faring poorly.

The Federal Reserve estimates that approximately $3.5 trillion of CRE debt is currently outstanding, and that nearly $500 billion of CRE loans will mature during each of the next few

[346] National Association of Realtors, *New and Existing Home Sales.* Information provided in response to Panel request. Shaded areas represent periods of recession.

[347] Center for Responsible Lending, *Soaring Spillover: Accelerating Foreclosures to Cost Neighbors $502 Billion in 2009 Alone; 69.5 Million Homes Lose $7,200 on Average* (May 7, 2009) (online at www.responsiblelending.org/mortgage-lending/research-analysis/soaring-spillover-3-09.pdf).

years.[348] For various reasons, however, commercial property values have declined sharply since 2007 and continue to fall.[349] Meanwhile, banks have become increasingly hesitant to extend new CRE credit or refinance existing debt,[350] while another major source of CRE financing – the market for commercial mortgage-backed securities – has largely shut down since the financial crisis began.[351] Given these trends, as well as high vacancy rates and weak rent growth, Deutsche Bank estimates that banks' aggregate losses on recent-vintage core CRE, construction, and multi-family loans could fall within the $200 billion to $300 billion range, with the biggest losses involving construction loans.[352]

As Figure 36 illustrates, smaller banks are disproportionately exposed to the CRE threat.

[348] *See* House Oversight and Government Reform, Subcommittee on Domestic Policy, Written Testimony of Jon D. Greenlee, Associate Director of the Division of Banking Supervision and Regulation for the Federal Reserve Board, *Residential and Commercial Real Estate* (Nov. 2, 2009) (online at federalreserve.gov/newsevents/testimony/greenlee20091102a.htm) (hereinafter "Residential and Commercial Real Estate").

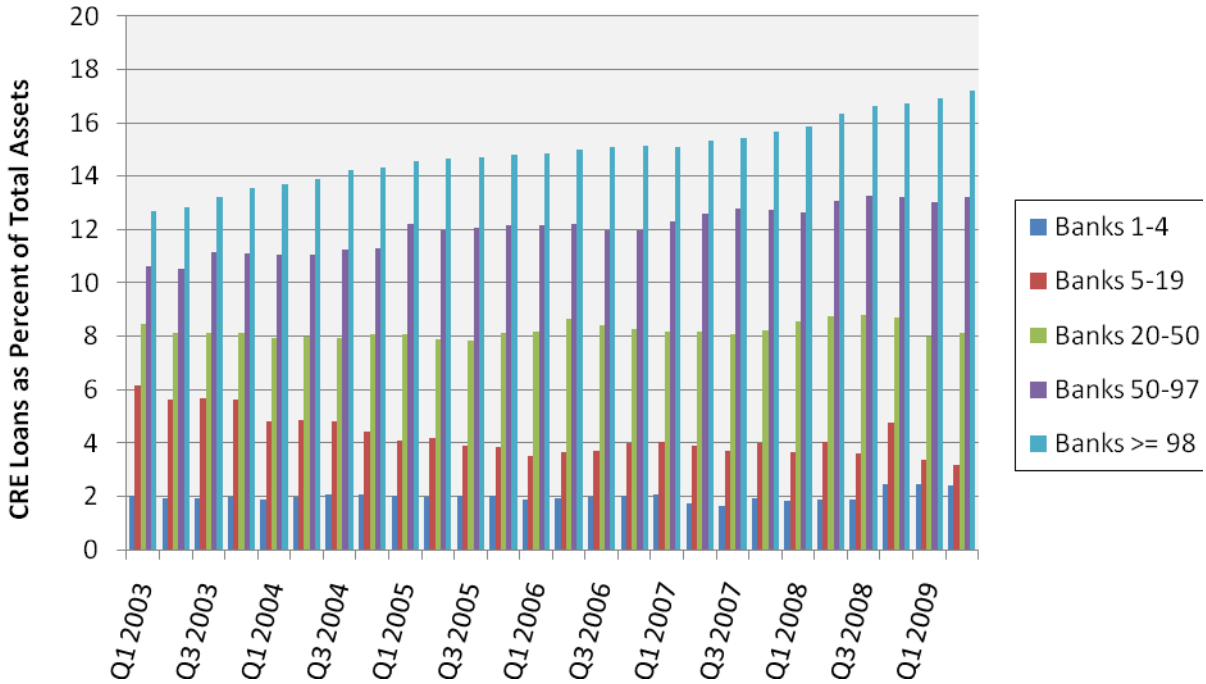
[349] *See* Deutsche Bank, *The Future Refinancing Crisis in Commercial Real Estate*, at 3 (Apr. 23, 2009) (online at cop.senate.gov/documents/report-042309-parkus.pdf) ("Purely as a result of the enormous changes in the available financing terms . . . , we estimate that commercial real estate prices have declined 25-30% from their 2007 peak. On top of this, the impact of the worst economic recession in decades on property cash flows will likely push them down [an] additional 15-20% . . .").

[350] *See* Congressional Oversight Panel, Written Testimony of Jeffrey DeBoer, Chief Executive Officer of the Real Estate Roundtable, *Congressional Oversight Panel Field Hearing in New York City on Corporate and Commercial Real Estate Lending*, at 2 (May 28, 2009) (online at cop.senate.gov/documents/testimony-052809-deboer.pdf).

[351] *See* Residential and Commercial Real Estate, *supra* note 348 ("The current fundamental weakness in CRE markets is exacerbated by the fact that the CMBS market, which previously had financed about 30 percent of originations and completed construction projects, has remained closed since the start of the crisis").

[352] Deutsche Bank, *Q4 2009 CRE Outlook: Searching for a Bottom* (Dec. 1, 2009); *see also* Goldman Sachs, *U.S. Commercial Real Estate Take III: Re-constructing Estimates for Losses, Timing*, at 11-13 (Sept. 29, 2009) (hereinafter "2009 CRE Outlook") (estimating $287 billion in losses from core CRE and construction loans); Congressional Oversight Panel, *August Oversight Report: The Continued Risk of Troubled Assets*, at 56 (Aug. 11, 2009) (noting that "the Panel's model of whole loan losses estimates potential core CRE and construction loan losses through 2010 of $81.1 billion at 701 banks with assets between $600 million and $80 billion").

Figure 36: Bank Exposure to Core CRE Loans[353]



[353]2009 CRE Outlook, *supra* note 352. The "Banks 1-4" group includes banks with total assets between $1.28 trillion and $2.25 trillion; the "Banks 5-19" group includes banks with total assets between $130 billion and $890 billion; the "Banks 20-50" group includes banks with total assets between $25 billion and $130 billion; the "Banks 50-97" group includes banks with total assets between $10 billion and $25 billion; and the "Banks >=98" group includes banks with total assets less than $10 billion. "Core" CRE does not include construction, multi-family, or farm loans. *See* June Oversight Report, *supra* note 77.