

Congressional Oversight Panel

# January 13, 2011

# Metrics for the Troubled Asset Relief Program

Excerpted from the Congressional Oversight Panel's January 2011 report, "An Update on TARP Support for the Domestic Automotive Industry."

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# **TARP Metrics**

Each month, the Panel's report highlights a number of metrics that the Panel and others, including Treasury, the Government Accountability Office (GAO), the Special Inspector General for the Troubled Asset Relief Program (SIGTARP), and the Financial Stability Oversight Board, consider useful in assessing the effectiveness of the Administration's efforts to restore financial stability and accomplish the goals of EESA. This section discusses changes that have occurred in several indicators since the release of the Panel's December 2010 report.

## 1. Financial Indices

**Financial Stress.** The St. Louis Financial Stress Index, a proxy for financial stress in the U.S. economy, has decreased by more than half since the Panel's December 2010 report. The index has decreased more than 80 percent since its post-crisis peak in June 2010. Furthermore, the recent trend in the index suggests that financial stress continues moving toward its long-run norm. The index has decreased by more than four standard deviations since EESA was enacted in October 2008.





<sup>437</sup> Federal Reserve Bank of St. Louis, Series STLFSI: Business/Fiscal: Other Economic Indicators (Instrument: St. Louis Financial Stress Index, Frequency: Weekly) (online at research.stlouisfed.org/fred2/series/STLFSI) (accessed Jan. 3, 2011). The index includes 18 weekly data series, beginning in December 1993 to the present. The series are: effective federal funds rate, 2-year Treasury, 10-year Treasury, 30-year Treasury, Baa-rated corporate, Merrill Lynch High Yield Corporate Master II Index, Merrill Lynch Asset-Backed Master BBB-rated, 10-year Treasury minus 3-month Treasury, Corporate Baa-rated bond minus 10-year Treasury, Merrill Lynch High Yield Corporate Master II Index minus 10-year Treasury, 3-month LIBOR-OIS spread, 3-month TED spread, 3-month commercial paper minus 3-month Treasury, the J.P. Morgan Emerging Markets Bond Index Plus, Chicago Board Options Exchange Market Volatility Index, Merrill Lynch Bond Market Volatility Index (1-month), 10-year nominal Treasury yield minus 10-year Treasury Inflation Protected Security yield, and Vanguard Financials Exchange-Traded Fund (equities). The index is constructed using principal components analysis after the data series are de-meaned and divided by their respective standard deviations to make them comparable units. The standard deviation of the index is set to 1. For more details on the construction of this index, see Federal Reserve Bank of St. Louis, National Economic Trends Appendix: The St. Louis Fed's Financial Stress Index (Jan. 2010) (online at research.stlouisfed.org/publications/net/NETJan2010Appendix.pdf).

**Stock Market Volatility.** Stock market volatility, as measured by the Chicago Board Options Exchange Volatility Index (VIX), continues to decrease. The VIX has fallen by more than half since its post-crisis peak in May 2010 and has declined 18 percent since the Panel's December 2010 report. As of January 3, 2011, volatility was 13 percent higher than its post-crisis low on April 12, 2010.



Figure 28: Chicago Board Options Exchange Volatility Index<sup>438</sup>

**Interest Rates.** As of January 3, 2011, the 3-month and 1-month London Interbank Offer Rates (LIBOR), the prices at which banks lend and borrow from each other, were 0.30 and 0.26, respectively.<sup>439</sup> Both rates have decreased slightly since the Panel's December 2010 report. The 3-month and 1-month LIBOR remain below their post-crisis highs in June 2010. Over the longer term, interest rates remain extremely low relative to pre-crisis levels, reflecting the impact of the actions of central banks and institutions' perceptions of reduced risk in lending to other banks.

<sup>&</sup>lt;sup>438</sup> Data accessed through Bloomberg Data Service (Jan. 3, 2011). The CBOE VIX is a key measure of market expectations of near-term volatility. Chicago Board Options Exchange, *The CBOE Volatility Index – VIX*, 2009 (online at www.cboe.com/micro/vix/vixwhite.pdf) (accessed Jan. 3, 2011).

<sup>&</sup>lt;sup>439</sup> Data accessed through Bloomberg Data Service (Jan. 3, 2011).

Indiaston	Comment Dates	Percent Change from Data Available at Time of Last
Indicator	Current Rates	Report (12/1/2010)
3-Month LIBOR <sup>440</sup>	0.30	(0.2)%
1-Month LIBOR <sup>441</sup>	0.26	(1.8)%

### Figure 29: 3-Month and 1-Month LIBOR Rates (as of January 3, 2011)

**Interest Rate Spreads.** As of January 3, 2011, the conventional mortgage rate spread, which measures the difference between 30-year mortgage rates and 10-year Treasury bond yields, decreased by 8 percent since the Panel's December 2010 report.<sup>442</sup> The TED spread, which captures the difference between the 3-month LIBOR and the 3-month Treasury bill rates, serves as an indicator for perceived risk in the financial markets.<sup>443</sup> As of January 3, 2011, the spread was 18.3 basis points, increasing almost 30 percent in December.

The LIBOR-OIS (Overnight Index Swap) spread serves as a metric for the health of the banking system, reflecting what banks believe to be the risk of default associated with interbank lending.<sup>444</sup> The spread increased over threefold from early April to July 2010, before falling in mid-July.<sup>445</sup> The LIBOR-OIS spread grew approximately 13 percent since the Panel's December 2010 report. The decrease in both the LIBOR-OIS spread and the TED spread from the middle of 2010 suggests that hesitation among banks to lend to counterparties has receded. As shown in Figures 30 and 31 below, these spreads remain below pre-crisis levels.

<sup>443</sup> Federal Reserve Bank of Minneapolis, *Measuring Perceived Risk – The TED Spread* (Dec. 2008) (online at www.minneapolisfed.org/publications\_papers/pub\_display.cfm?id=4120).

<sup>444</sup> Federal Reserve Bank of St. Louis, *What the LIBOR-OIS Spread Says* (May 11, 2009) (online at research.stlouisfed.org/publications/es/09/ES0924.pdf).

<sup>&</sup>lt;sup>440</sup> Data accessed through Bloomberg Data Service (Jan. 3, 2011).

<sup>&</sup>lt;sup>441</sup> Data accessed through Bloomberg Data Service (Jan. 3, 2011).

<sup>&</sup>lt;sup>442</sup> Board of Governors of the Federal Reserve System, *Federal Reserve Statistical Release H.15: Selected Interest Rates: Historical Data* (Instrument: Conventional Mortgages, Frequency: Weekly) (online at www.federalreserve.gov/releases/h15/data/Weekly\_Thursday\_/H15\_MORTG\_NA.txt) (accessed Jan. 3, 2011) (hereinafter "Federal Reserve Statistical Release H.15"); Federal Reserve Bank of St. Louis, *Series DGS10: Interest Rates: Treasury Constant Maturity* (Instrument: 10-Year Treasury Constant Maturity Rate, Frequency: Daily) (online at research.stlouisfed.org/fred2/series/DGS10) (accessed Jan. 3, 2011).

<sup>&</sup>lt;sup>445</sup> Data accessed through Bloomberg Data Service (Jan. 3, 2011).

**Figure 37: TED Spread**<sup>446</sup>



Figure 38: LIBOR-OIS Spread<sup>447</sup>



<sup>&</sup>lt;sup>446</sup> Data accessed through Bloomberg Data Service (Jan. 3, 2011).

<sup>&</sup>lt;sup>447</sup> Data accessed through Bloomberg Data Service (Jan. 3, 2011).

The interest rate spread on AA asset-backed commercial paper, which is considered midinvestment grade, decreased by almost 20 percent since the Panel's December 2010 report. The interest rate spread on A2/P2 commercial paper, a lower grade investment than AA asset-backed commercial paper, increased by approximately 10 percent. Both interest rate spreads remain below pre-crisis levels.

Indicator	Current Spread	Percent Change Since Last Report (12/1/2010)
Conventional mortgage rate spread <sup>448</sup>	1.44	(7.7)%
TED Spread (basis points)	18.28	27.5%
Overnight AA asset-backed commercial paper interest rate spread <sup>449</sup>	0.06	(19.4)%
Overnight A2/P2 nonfinancial commercial paper interest rate spread <sup>450</sup>	0.14	9.7%

#### Figure 32: Interest Rate Spreads (as of January 3, 2011)

**Corporate Bonds.** The spread between Moody's Baa Corporate Bond Yield Index and 30-year constant maturity U.S. Treasury Bond, which indicates the difference in perceived risk between corporate and government bonds, doubled from late April to mid-June 2010. During December, the spread declined approximately 10 percent, and has fallen almost 30 percent since its post-crisis peak in mid-June. The declining spread could indicate waning concerns about the riskiness of corporate bonds.

<sup>450</sup> The overnight A2/P2 nonfinancial commercial paper interest rate spread reflects the difference between the A2/P2 nonfinancial commercial paper discount rate and the AA nonfinancial commercial paper discount rate. Board of Governors of the Federal Reserve System, *Federal Reserve Statistical Release: Commercial Paper Rates and Outstandings: Data Download Program* (Instrument: A2/P2 Nonfinancial Discount Rate, Frequency: Daily) (online at www.federalreserve.gov/DataDownload/Choose.aspx?rel=CP) (accessed Jan. 3, 2011); Board of Governors of the Federal Reserve System, *Federal Reserve Statistical Release: Commercial Paper Rates and Outstandings: Data Download Program* (Instrument: AA Nonfinancial Discount Rate, Frequency: Daily) (online at www.federalreserve.gov/DataDownload/Choose.aspx?rel=CP) (accessed Jan. 3, 2011). In order to provide a more complete comparison, this metric utilizes the average of the interest rate spread for the last five days of December.

<sup>&</sup>lt;sup>448</sup> Federal Reserve Statistical Release H.15, *supra* note 442; Board of Governors of the Federal Reserve System, *Federal Reserve Statistical Release H.15: Selected Interest Rates: Historical Data* (Instrument: U.S. Government Securities/Treasury Constant Maturities/Nominal 10-Year, Frequency: Weekly) (online at www.federalreserve.gov/releases/h15/data/Weekly\_Friday\_/H15\_TCMNOM\_Y10.txt) (accessed Jan. 3, 2011).

<sup>&</sup>lt;sup>449</sup> The overnight AA asset-backed commercial paper interest rate spread reflects the difference between the AA asset-backed commercial paper discount rate and the AA nonfinancial commercial paper discount rate. Board of Governors of the Federal Reserve System, *Federal Reserve Statistical Release: Commercial Paper Rates and Outstandings: Data Download Program* (Instrument: AA Asset-Backed Discount Rate, Frequency: Daily) (online at www.federalreserve.gov/DataDownload/Choose.aspx?rel=CP) (accessed Jan. 3, 2011); Board of Governors of the Federal Reserve System, *Federal Reserve Statistical Release: Commercial Paper Rates and Outstandings: Data Download Program* (Instrument: AA Nonfinancial Discount Rate, Frequency: Daily) (online at www.federalreserve.gov/DataDownload/Choose.aspx?rel=CP) (accessed Jan. 3, 2011). In order to provide a more complete comparison, this metric utilizes the average of the interest rate spread for the last five days of December.



Figure 40: Moody's Baa Corporate Bond Index and 30-Year U.S. Treasury Yield<sup>451</sup>

#### 2. Bank Conditions

**Net Charge-Offs and Nonperforming Loan Rates.** Data on net charge-offs and nonperforming loans are beginning to reflect stabilizing loan quality in domestic banks. Net loan charge-offs represented 2.8 percent of all loans at the end of the third quarter of 2010, falling 10 percent from the first quarter of 2010. Nonperforming loans as a percentage of all commercial bank loans have also declined. Nonperforming loans include loans that are in default for 90 or more days and nonaccrual loans.<sup>452</sup> Since the beginning of 2010, this percentage has fallen from 5.6 percent to 5.2 percent at the end of the third quarter of 2010.

<sup>&</sup>lt;sup>451</sup> Federal Reserve Bank of St. Louis, *Series DGS30: Selected Interest Rates* (Instrument: 30-Year Treasury Constant Maturity Rate, Frequency: Daily) (online at research.stlouisfed.org/fred2/release?rid=18) (accessed Jan. 3, 2011). Corporate Baa rate data accessed through Bloomberg data service (Jan. 3, 2011).

 $<sup>^{452}</sup>$  Loans in nonaccrual status include those that are: (a) maintained on a cash basis because of deterioration in the financial condition of the borrower; (b) full payment of principal or interest is not expected; or (c) principal or interest has been in default for 90 or more days. Federal Deposit Insurance Corporation, *Schedule RC-N – Past Due and Nonaccrual Loans, Leases, and Other Assets*, at 2 (online at www.fdic.gov/regulations/resources/call/crinst/2008-03/308RC-N032808.pdf).

Despite the recent decline, these two percentages remain well above their respective levels in October 2008. At the time, total net loan charge-offs accounted for only 1.2 percent of all loans, and nonperforming loans represented 2.3 percent of all loans.



Figure 34: Net Loan Charge-Offs as a Percentage of Total Loans (as of Q3 2010)<sup>453</sup>

<sup>&</sup>lt;sup>453</sup> Federal Reserve Bank of St. Louis, *Condition of Banking: Total Net Loan Charge-offs* (online at research.stlouisfed.org/fred2/series/NCOTOT/downloaddata?cid=93) (accessed Jan. 3, 2011).



Figure 35: Nonperforming Loans as a Percentage of Total Loans (as of Q3 2010)<sup>454</sup>

<sup>&</sup>lt;sup>454</sup> Federal Reserve Bank of St. Louis, *Condition of Banking: Nonperforming Loans (Past Due 90+ Days Plus Nonaccrual)/Total Loans for All U.S. Banks* (online at research.stlouisfed.org/fred2/series/USNPTL?cid=93) (accessed Jan. 3, 2011).

**Bank Failures.** In 2010, a total of 157 banks failed and were placed into receivership, with eight institutions failing in December. Despite exceeding the total number of bank failures for 2009, banks that failed in 2010 had \$92.1 billion in total assets, which represents approximately half of the total assets of failed institutions in 2009.<sup>455</sup> Most failures in 2010 involved institutions that held less than \$10 billion in assets.





### 3. Housing Indices

**Home Sales.** Both new and existing home sales saw a month-over-month increase in November 2010, increasing 2 percent during the month. New home sales, as measured by the

<sup>&</sup>lt;sup>455</sup> Federal Deposit Insurance Corporation, *Failures & Assistance Transactions* (online at www2.fdic.gov/hsob/SelectRpt.asp?EntryTyp=30) (accessed Jan. 3, 2011) (hereinafter "FDIC Failures & Assistance Transactions").

<sup>&</sup>lt;sup>456</sup> The disparity between the number of and total assets of failed banks in 2008 is driven primarily by the failure of Washington Mutual Bank, which held \$307 billion in assets. The 2010 year-to-date percentage of bank failures includes failures through December. The total number of FDIC-insured institutions as of September 30, 2010 is 7,760 commercial banks and savings institutions, which represents a quarter-over-quarter decline of 70 institutions and a decrease of 624 institutions since the end of the third quarter of 2008. Furthermore, there are currently 860 institutions on the FDIC's "Problem List." FDIC Failures & Assistance Transactions, *supra* note 455; Federal Deposit Insurance Corporation, *Quarterly Banking Profile, Third Quarter 2010: Statistics At A Glance*, at 5 (online at www.fdic.gov/bank/statistical/stats/2010sep/industry.pdf) (accessed Jan. 3, 2011). Asset totals have been converted into 2005 dollars using the GDP implicit price deflator. The quarterly values were averaged into a yearly value. FDIC Failures & Assistance Transactions, *supra* note 455.

U.S. Census Bureau, increased 2 percent to 290,000 during the month. With respect to existing home sales, the National Association of Realtors estimates a 6 percent month-over-month increase in November, to an annual rate of 4.4 million homes sold. Although existing home sales in November remain below the ten-year historical average, current levels are above the July 2010 level, when existing home sales reached their lowest point in more than a decade.



Figure 37: New and Existing Home Sales (2000-2010)<sup>457</sup>

**Foreclosures.** Foreclosure actions, which consist of default notices, scheduled auctions, and bank repossessions, decreased 21 percent in November 2010 to 262,339, marking the first month since February 2009 that foreclosure filings have been below 300,000.<sup>458</sup> However, it is important to note that much of the decline could be attributed to a number of loan servicers suspending foreclosures in the fall of 2010 as they conducted internal reviews of their

<sup>&</sup>lt;sup>457</sup> Data accessed through Bloomberg Data Service (Jan. 3, 2011). Spikes in both new and existing home sales in January 2009 and November 2009 correlate with the tax credits extended to first-time and repeat home buyers during these periods. After both tax credits were extinguished on April 30, 2010, existing home sales dropped to 3.8 million homes in July, their lowest level in a decade. National Association of Realtors, *July Existing-Home Sales Fall as Expected but Prices Rise* (Aug. 24, 2010) (online at www.realtor.org/press room/news releases/2010/08/ehs fall).

<sup>&</sup>lt;sup>458</sup> RealtyTrac, *Foreclosure Activity Decreases 21 Percent in November* (Dec. 16, 2010) (online at www.realtytrac.com/content/press-releases/foreclosure-activity-decreases-21-percent-in-november-6251) (hereinafter "RealtyTrac – Foreclosure Activity Decreases").

foreclosure procedures.<sup>459</sup> Since the enactment of EESA, there have been approximately 8.4 million foreclosure filings.<sup>460</sup>

**Home Prices.** With respect to housing price indices, the Case-Shiller Composite 20-City Composite Home Price Index decreased by less than 1 percent, while the FHFA Housing Price Index increased by less than 1 percent in October 2010. The Case-Shiller and FHFA indices are approximately 8 percent and 5 percent below their respective October 2008 levels.<sup>461</sup>

Case-Shiller futures prices indicate a market expectation that home-price values for the major Metropolitan Statistical Areas (MSAs) will decrease through 2011.<sup>462</sup> These futures are cash-settled to a weighted composite index of U.S. housing prices in the top ten MSAs, as well as to those specific markets. They are used to hedge by businesses whose profits and losses are related to a specific area of the housing industry, and to balance portfolios by businesses seeking exposure to an uncorrelated asset class. As such, futures prices are a composite indicator of market information known to date and can be used to indicate market expectations for home prices.

<sup>461</sup> The most recent data available are for September 2010. *See* Standard and Poor's, *S&P/Case-Shiller Home Price Indices* (Instrument: Case-Shiller 20-City Composite Seasonally Adjusted, Frequency: Monthly) (online at www.standardandpoors.com/indices/sp-case-shiller-home-price-indices/en/us/?indexId=spusa-cashpidff--p-us----) (accessed Jan. 3, 2011) (hereinafter "S&P/Case-Shiller Home Price Indices"); 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 Jan. 3, 2011) (hereinafter "FHFA Monthly Purchase Only Index"). S&P has cautioned that the seasonal adjustment is probably being distorted by irregular factors. These factors could include distressed sales and the various government programs. *See* Standard and Poor's, *S&P/Case-Shiller Home Price Indices and Seasonal Adjustment* (Apr. 2010) (online at

www.standardandpoors.com/servlet/BlobServer?blobheadername3=MDT-

Type&blobcol=urldata&blobtable=MungoBlobs&blobheadervalue2=inline;+filename%3DCaseShiller\_SeasonalAdj ustment2,0.pdf&blobheadername2=Content-

Disposition&blobheadervalue1=application/pdf&blobkey=id&blobheadername1=content-

type&blobwhere=1243679046081&blobheadervalue3=UTF-8). For a discussion of the differences between the Case-Shiller Index and the FHFA Index, *see* Congressional Oversight Panel, *April Oversight Report: Evaluating Progress on TARP Foreclosure Mitigation Programs*, at 98 (Apr. 14, 2010) (online at cop.senate.gov/documents/cop-041410-report.pdf).

<sup>462</sup> Data accessed through Bloomberg Data Service (Jan. 3, 2011). The Case-Shiller Futures contract is traded on the Chicago Mercantile Exchange (CME) and is settled to the Case-Shiller Index two months after the previous calendar quarter. For example, the February contract will be settled against the spot value of the S&P Case-Shiller Home Price Index values representing the fourth calendar quarter of the previous year, which is released in February one day after the settlement of the contract. Note that most close observers believe that the accuracy of these futures contracts as forecasts diminishes the farther out one looks.

A Metropolitan Statistical Area is defined as a core area containing a substantial population nucleus, together with adjacent communities having a high degree of economic and social integration with the core. U.S. Census Bureau, *About Metropolitan and Micropolitan Statistical Areas* (online at www.census.gov/population/www/metroareas/aboutmetro.html) (accessed Dec. 10, 2010).

<sup>&</sup>lt;sup>459</sup> For more information on foreclosure irregularities, *see* November 2010 Oversight Report, *supra* note 369.

<sup>&</sup>lt;sup>460</sup> Data accessed through Bloomberg Data Service (Jan. 3, 2011).

#### **Figure 38: Housing Indicators**

Indicator	Most Recent Monthly Data	Percent Change from Data Available at Time of Last Report	Percent Change Since October 2008
Monthly foreclosure actions <sup>463</sup>	262,339	(21.0)%	(6.2)%
S&P/Case-Shiller Composite 20 Index <sup>464</sup>	143.52	(0.1)%	(8.2)%
FHFA Housing Price Index <sup>465</sup>	190.83	0.2%	(5.4)%

**Figure 39: Case-Shiller Home Price Index and Futures Values**<sup>466</sup>



 $<sup>^{463}</sup>$  RealtyTrac – Foreclosure Activity Decreases, *supra* note 458. The most recent data available are for November 2010.

<sup>&</sup>lt;sup>464</sup> S&P/Case-Shiller Home Price Indices, *supra* note 461. The most recent data available are for October 2010.

<sup>&</sup>lt;sup>465</sup> FHFA Monthly Purchase Only Index, *supra* note 461. The most recent data available are for October 2010.

<sup>&</sup>lt;sup>466</sup> All data normalized to 100 in January 2000. Futures data accessed through Bloomberg Data Service (Jan. 3, 2011). S&P/Case-Shiller Home Price Indices, *supra* note 461.