

## **Congressional Oversight Panel**

### August 12, 2010

# Metrics for the Troubled Asset Relief Program

Excerpted from the Congressional Oversight Panel's August 2010 report, "The Global Context and International Effects of the TARP."

#### **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), 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 July report and includes two additional indicators that aid in understanding the international aspects of the financial crisis.

• **Financial Indices.** Since its post-crisis trough in April 2010, the St. Louis Financial Stress Index has increased over elevenfold, although it has fallen by a third since the Panel's July report. The recent trend suggests that financial stress continues moving towards its long-run norm. The index has decreased over three standard deviations from the starting date of EESA in October 2008, indicating better overall financial health since the initiation of TARP.

<sup>&</sup>lt;sup>488</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/categories/98) (accessed Aug. 5, 2010). 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) (accessed Aug. 5, 2010).

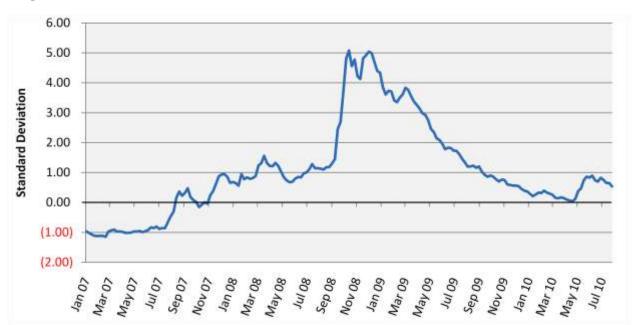
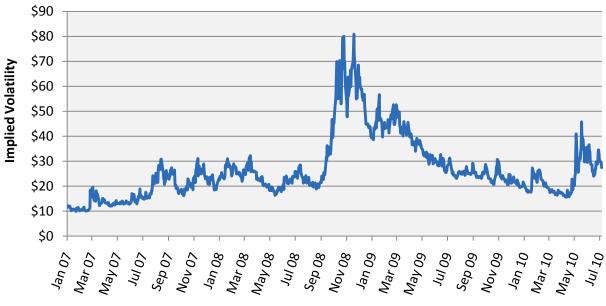


Figure 25: St. Louis Federal Reserve Financial Stress Index

Volatility has decreased of late. The Chicago Board Options Exchange Volatility Index (VIX) has fallen about 25 percent since the COP July report, although the level is still higher than its post-crisis low on April 12, 2010.





 $<sup>^{\</sup>rm 489}$  Data accessed through Bloomberg data service on August 5, 2010.

### **Interest Rates and Spreads**

• **LIBOR Rates.** As of August 6, 2010, the 3-month and 1-month London Interbank Offer Rates (LIBOR), the prices at which banks lend and borrow from each other, were 0.411 and 0.293, respectively. Although they had increased significantly in the three preceding months, there has been a slight easing in these rates since the Panel's July Report. This may reflect the results of the European bank stress test. Over the longer term, rates remain heightened relative to pre-crisis levels.<sup>490</sup>

Figure 27: 3-Month and 1-Month LIBOR Rates (as of August 6, 2010)

Indicator	Current Rates (as of 8/6/2010)	Percent Change from Data Available at Time of Last Report (6/24/2010)
3-Month LIBOR <sup>491</sup>	.411	(15.5)%
1-Month LIBOR <sup>492</sup>	.293	(23.4)%

Since the Panel's July report, interest rate spreads have generally fallen slightly. Thirty-year mortgage interest rates and 10-year Treasury bond yields have both declined recently and the conventional mortgage spread, which measures the 30-year mortgage rate over 10-year Treasury bond yields, has fallen very slightly since late June as well.<sup>493</sup>

The TED spread, which serves as an indicator for perceived risk in the financial markets, fell slightly since June as compared to nearly doubling over the month of May. <sup>494</sup> The LIBOR-OIS spread reflects the health of the banking system. While it increased over threefold from early April to July, it has fallen by almost a third since peaking in mid-July. <sup>495</sup> Decreases in the LIBOR-OIS spread and the TED spread suggest that hesitation among banks to lend to counterparties is receding.

The interest rate spread for AA asset-backed commercial paper, which is considered midinvestment grade, has fallen by about fourteen percent since the Panel's July report. The interest

<sup>&</sup>lt;sup>490</sup> Data accessed through Bloomberg data service on August 3, 2010.

<sup>&</sup>lt;sup>491</sup> Data accessed through Bloomberg data service on August 3, 2010.

<sup>&</sup>lt;sup>492</sup> Data accessed through Bloomberg data service on August 3, 2010.

<sup>&</sup>lt;sup>493</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) (hereinafter "Federal Reserve Statistical Release H.15") (accessed Aug. 5, 2010).

<sup>&</sup>lt;sup>494</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>&</sup>lt;sup>495</sup> Data accessed through Bloomberg data service on Aug. 5, 2010.

rate spread on A2/P2 commercial paper, a lower grade investment than AA asset-backed commercial paper, has fallen by over a quarter since the Panel's July report.

Figure 28: Interest Rate Spreads

Indicator	Current Spread (as of 7/31/2010)	Percent Change Since Last Report (7/1/2010)
Conventional mortgage rate spread <sup>496</sup>	1.52	(1.9)%
TED Spread (basis points)	26.41	(27.3)%
Overnight AA asset-backed commercial paper interest rate spread <sup>497</sup>	0.11	(14.1)%
Overnight A2/P2 nonfinancial commercial paper interest rate spread <sup>498</sup>	0.19	(28.1)%

<sup>&</sup>lt;sup>496</sup> Federal Reserve Statistical Release H.15, *supra* note 493; 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 Aug. 5, 2010).

<sup>&</sup>lt;sup>497</sup> 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 Aug. 5, 2010); 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 Aug. 5, 2010). In order to provide a more complete comparison, this metric utilizes the average of the interest rate spread for the last five days of the month.

<sup>&</sup>lt;sup>498</sup> 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 Aug. 5, 2010). In order to provide a more complete comparison, this metric utilizes the average of the interest rate spread for the last five days of the month.

Figure 29: TED Spread<sup>499</sup>

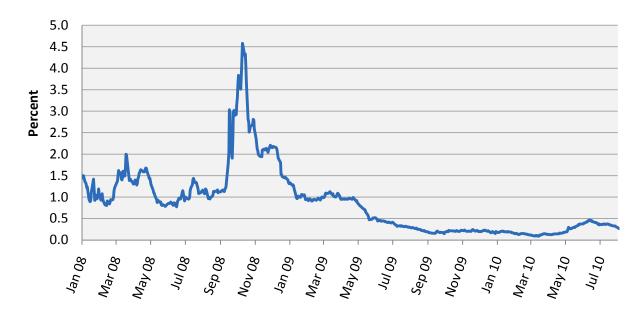
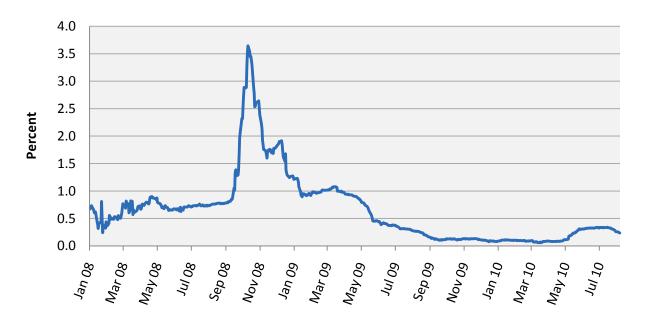


Figure 30: LIBOR-OIS Spread<sup>500</sup>

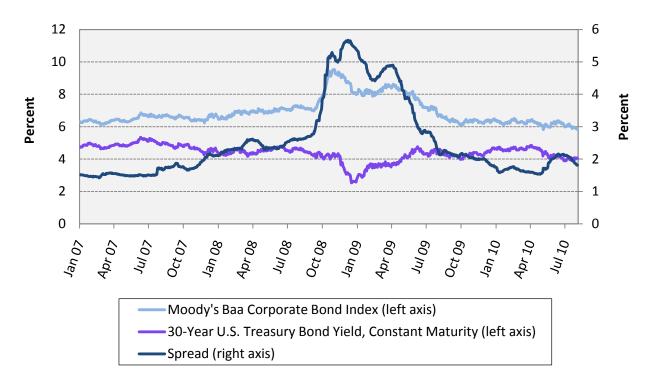


<sup>&</sup>lt;sup>499</sup> Data accessed through Bloomberg data service on Aug. 3, 2010.

<sup>&</sup>lt;sup>500</sup> Data accessed through Bloomberg data service on Aug. 6, 2010.

• Corporate Bond Spread. The spread between Moody's Baa Corporate Bond Yield Index and 30-year constant maturity U.S. Treasury Bond yields doubled from late April to mid-June. However, since mid-June, the trend has reversed and the spread has fallen about fifteen percent. This spread indicates the difference in perceived risk between corporate and government bonds, and a declining spread could indicate waning concerns about the riskiness of corporate bonds.





• **Housing Indicators.** Foreclosure actions, which consist of default notices, scheduled auctions, and bank repossessions, dropped 2 percent in May to 313,841. This metric is over 12 percent above the foreclosure action level at the time of the EESA enactment. Foreclosure sales accounted for 31 percent of all residential sales in the first quarter of 2010. Sales of new homes rose slightly to 330,000, but remain extremely low. Both

<sup>&</sup>lt;sup>501</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/) (accessed June 28, 2010). Corporate Baa rate data accessed through Bloomberg data service on June 25, 2010.

<sup>&</sup>lt;sup>502</sup> RealtyTrac, *Foreclosure Activity Press Releases* (Nov. 13 2008) (online at www.realtytrac.com/contentmanagement/pressrelease.aspx?channelid=9&itemid=5420).

<sup>&</sup>lt;sup>503</sup> RealtyTrac, *Foreclosure Activity Press Releases* (June 30, 2010) (online at www.realtytrac.com/contentmanagement/pressrelease.aspx?channelid=9&itemid=9438).

the Case-Shiller Composite 20-City Composite as well as the FHFA Housing Price Index increased slightly in May 2010. The Case-Shiller and FHFA indices are 6 percent and 3 percent, respectively, below their levels of October 2008. 505

Additionally, Case-Shiller futures prices indicate a market expectation that home-price values will stay constant or decrease through the end of 2010. These futures are cash-settled to a weighted composite index of U.S. housing prices, as well as to specific markets in 10 major U.S. cities, and are used both to hedge, by businesses whose profits and losses are related to any 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.

Figure 32: 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>507</sup>	313,841	(1.9)%	12.3%
S&P/Case-Shiller Composite 20 Index <sup>508</sup>	147.3	1.1%	(5.7)%
FHFA Housing Price Index <sup>509</sup>	196.0	0.5%	(3.0)%

<sup>&</sup>lt;sup>504</sup> Sales of new homes in May were 276,000, the lowest rate since 1963. U.S. Census Bureau and U.S. Department of Housing and Urban Development, *New Residential Sales in June 2010* (July 26, 2010) (online at www.census.gov/const/newressales.pdf); U.S. Census Bureau, *New Residential Sales – New One-Family Houses Sold* (online at www.census.gov/ftp/pub/const/sold\_cust.xls) (accessed Aug. 10, 2010).

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---) (hereinafter "S&P/Case-Shiller Home Price Indices") (accessed Aug. 5, 2010); Federal Housing Finance Agency, U.S. and Census Division Monthly Purchase Only Index (Instrument: USA, Seasonally Adjusted) (online at www.fhfa.gov/webfiles/15669/MonthlyIndex\_Jan1991\_to\_Latest.xls) (accessed Aug. 5, 2010) (hereinafter "FHFA Housing Price Index Data"). S&P has cautioned that the seasonal adjustment is probably being distorted by irregular factors. These distortions could include distressed sales and the various government programs. See Standard and Poor's, S&P/Case-Shiller Home Price Indices and Seasonal Adjustment, S&P Indices: Index Analysis (Apr. 2010).

<sup>506</sup> Data accessed through Bloomberg data service on Aug. 5, 2010. The Case-Shiller Futures contract is traded on the 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.

 $<sup>^{507}</sup>$  RealtyTrac, *Foreclosures* (online at www.realtytrac.com/home/) (accessed Aug. 6, 2010). Most recent data available for June 2010.

<sup>&</sup>lt;sup>508</sup> S&P/Case-Shiller Home Price Indices, *supra* note 505. Most recent data available for May 2010.

<sup>&</sup>lt;sup>509</sup> FHFA Housing Price Index Data, *supra* note 505. Most recent data available for May 2010.

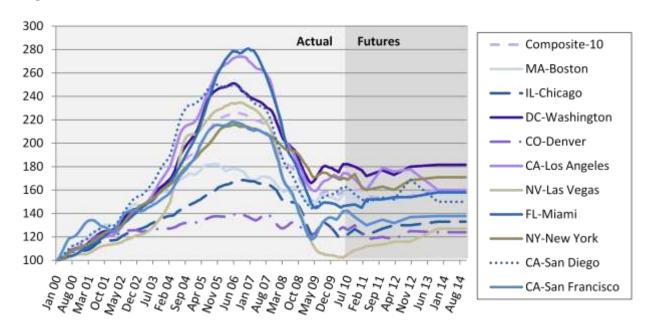
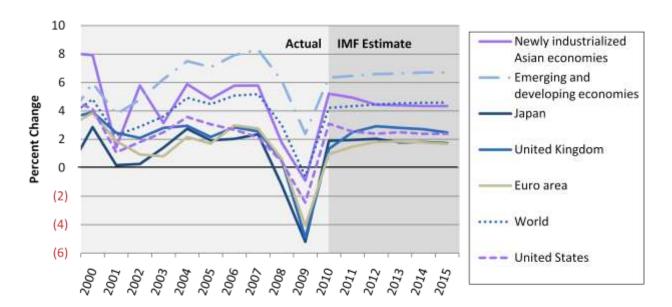


Figure 33: Case-Shiller Home Price Index and Futures Values<sup>510</sup>

• **International Indicators.** The crisis, while originating in the U.S. housing market, spread rapidly through the international financial system and resulted in recessions of varying degrees worldwide. While developing countries' growth rates fell steeply but never dropped below zero, the U.S. contraction was of less depth and less duration than those of the Euro area, United Kingdom, and Japan.

<sup>&</sup>lt;sup>510</sup> All data normalized to 100 at January 2000. Futures data accessed through Bloomberg data service on August 6, 2010. S&P/Case-Shiller Home Price Indices, *supra* note 505.

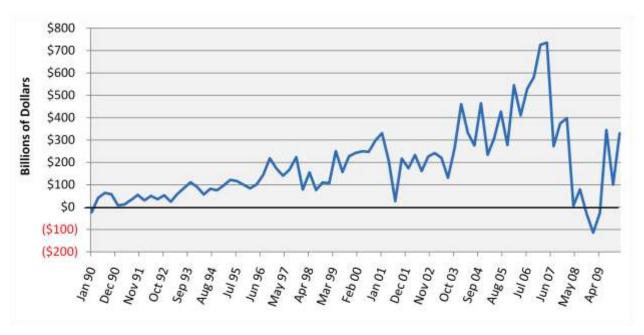
Figure 34: Percent Change in GDP, Constant Prices<sup>511</sup>



Foreign investment in the United States was at historically high levels pre-crisis. However, as the risk associated with U.S. subprime assets became known in the summer of 2007, this reversed drastically, with record outflow numbers being reached in Q1 2009.

<sup>&</sup>lt;sup>511</sup> International Monetary Fund, *WEO Database: April 2010* (Instrument: Gross Domestic Product, Constant Prices, Percent Change, Frequency: Annual) (online at www.imf.org/external/pubs/ft/weo/2010/01/weodata/index.aspx) (accessed Aug. 10, 2010).





<sup>&</sup>lt;sup>512</sup> Federal Reserve Bank of St. Louis, *Series BOPIN: Foreign Assets in the U.S.: Net, Capital Inflow* {+} (Instrument: U.S. International Transactions, Frequency: Quarterly) (online at www.research.stlouisfed.org) (accessed Aug. 10, 2010).