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A biannual update of the risks to financial stability

Risks to U.S. Financial Stability Remain in the Medium Range

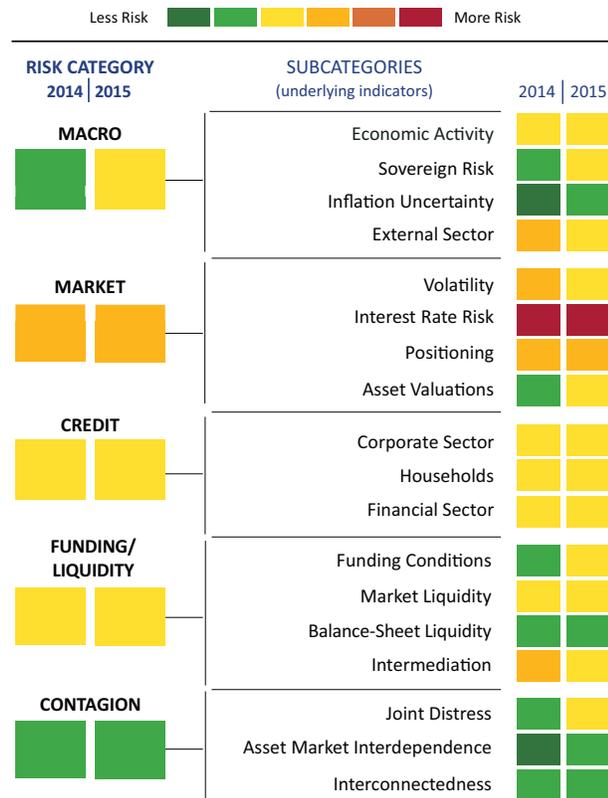
Overall, threats to U.S. financial stability remain in the medium range, but they have edged higher within that range over the past year. Three major themes stand out: elevated and rising credit risks, the effects of persistently low interest rates, and the uneven resilience of the financial system.

This document summarizes our current assessment of U.S. financial stability, which is covered in full depth in the OFR’s 2015 Financial Stability Report. Our assessment is informed by the OFR’s Financial Stability Monitor — a heat map of financial system vulnerability indicators summarized in Figure 1 below — as well as our broader financial system surveillance, research, and data analysis.

The OFR has a mandate to assess, monitor, and report on financial stability risks. A key tool for summarizing and analyzing those threats is the OFR Financial Stability Monitor (Figure 1). The monitor provides a high-level summary of five functional areas of risk: macroeconomic, market, credit, funding and liquidity, and contagion. These risk categories align with the core activities of a well-functioning financial system. Each risk category incorporates model-, market-, and survey-based indicators that cut across jurisdictions, and industry and institutional lines.

Figure 1: OFR Financial Stability Monitor

Overall financial stability risks remain in the medium range



Note: Green signifies lower financial stability risks; red signifies elevated risks. The figure represents a series of underlying indicators based on ranges prevailing from January 1, 1990 (if available) to the present. Each subcategory is constructed as a weighted average across the prevailing risk levels, with weights assigned based on the back-test performance of each of the indicators in the underlying categories. Each risk category is an equal-weighted average of the subcategories. Data are as of September 30, 2015 (or June 30, 2015, if September data are unavailable), and September 30, 2014. Some risk subcategories were revised to include indicators recently added to the Financial Stability Monitor.

Sources: Bloomberg L.P., Haver Analytics, SNL Financial, OFR analysis

The monitor is based on approximately 60 indicators; the measurement of risk is derived from an indicator's deviation from its historical average. The monitor is organized as a heat map. The closer an indicator is to the red end of the spectrum, the more elevated the risks are relative to the historical trend, while the closer an indicator is to the green end of the spectrum, the more benign the risks. Figure 1 summarizes current overall risks compared to those observed in our previous Financial Stability Monitor, approximately one year ago.

The monitor is not intended to predict the timing or severity of financial crises, but rather to identify underlying vulnerabilities that may predispose the system to instability. This note provides a brief analysis of trends in the five risk categories in the monitor and in the underlying indicators incorporating market intelligence. We provide a comprehensive analysis of financial stability risks in our *2015 Financial Stability Report*.

Summary Financial Stability Assessment

Macroeconomic risks. Overall, macroeconomic risks have increased since our *2014 Annual Report*, with the deterioration concentrated in emerging markets. In China and other emerging markets, economic growth has slowed, market sentiment has deteriorated, and authorities have intervened to defend their currencies amid capital outflows.

- China's economy has decelerated significantly, with spillovers to global growth, inflation, and commodity prices. China's financial excesses — most importantly, its large and rapidly expanded private-sector debt — constitute persistent vulnerabilities and make effective policy responses more challenging than in the past. Further deterioration in Chinese growth or financial conditions would likely have global reverberations.
- Other large emerging market economies have also faced growth slowdowns, capital outflows, shocks from commodity price declines, and spillover from China. Many of them face financial excesses after years of rapid private-debt growth.
- U.S. economic and labor market expansion have remained resilient to the global growth slowdown. Consumer price inflation is low, but consumer inflation expectations appear well anchored in their long-term range. However, U.S. growth and financial stability could be vulnerable in the case of instability in China and other emerging markets.

Market risks. A number of market risks — the risk of outsized losses as a result of adverse movements in asset prices — remain elevated and important.

- U.S. Treasury term premiums remain close to zero by leading estimates, despite the conclusion of Federal Reserve Treasury purchases in 2014 and the expected approach of U.S. monetary tightening. Such low term premiums mean that long-term Treasury yields are scarcely pricing the interest rate and liquidity risk in these instruments, demonstrated most recently by the Treasury market sell-off in 2013 and liquidity stress on October 15, 2014. The underpricing of these risks also applies to the large universe of U.S.-dollar-denominated bonds that are priced based on U.S. Treasury yields. Furthermore, the factors now suppressing term premiums may persist even when the Federal Reserve tightens monetary policy, as occurred during the previous tightening cycle.
- Duration risk in U.S. bond portfolios remains at the upper end of its historical range, leaving investors vulnerable to losses from large changes in interest rates, whether caused by surprises in Federal Reserve monetary policy or other shocks.
- U.S. equity valuations appear high by a number of metrics, as discussed in a *recent OFR Brief*. Those metrics include the cyclically adjusted price-to-earnings ratio, which has only reached its recent levels prior to major equity market declines. In isolation, high equity valuations for U.S. firms have not caused financial instability. However, U.S. firms have significantly increased their financial leverage in recent years by issuing debt and retiring equity, which leaves them more vulnerable to shocks. This leveraging of the corporate capital structure has boosted returns on equity and contributed to a rise in equity prices and valuations. It has also increased credit risks.
- Volatility in some major asset classes has risen from previously low levels. Although low volatility had contributed to excessive risk taking in past years, the risk of more frequently occurring volatility spikes persists, with downside risks to entities that sell protection against such events.

Credit risks. As noted, credit risk in the U.S. nonfinancial business sector is elevated and rising. The evidence is broad. Credit growth to the sector has been rapid for years, pushing the ratio of nonfinancial business debt to GDP to a historically high level. Firm leverage is also at elevated

levels. Creditor protections remain weak in debt contracts below investment grade. These factors are consistent with the late stage of the credit cycle, which typically precedes a rise in default rates. Meanwhile, debt-service capacity for energy, commodity, and multinational firms has been eroded by the collapse of energy and other commodity prices and slowing global growth. In response, corporate credit spreads have risen to their highest levels in several years, pricing in some of the increased credit risk, but not mitigating it.

Funding and liquidity risks. Funding conditions remain broadly stable, though market liquidity continues to appear fragile — an amplifier of financial stress. This fragility is evident in the 2010 U.S. equity flash crash, the 2013 U.S. Treasury market sell-offs, the October 2014 Treasury “flash rally,” and other episodes. Although this weakness is difficult to directly measure and quantify with time-series data and many measures of steady-state liquidity appear ample, studies of these stress episodes revealed sharp reductions in liquidity that amplified the shocks. In the event of much larger shocks, such reductions in liquidity could be destabilizing.

Contagion risks. Overall contagion risk measured by the available indicators has increased since our last annual report. Measures of joint distress among the largest U.S. bank holding companies and asset market interdependence have increased since the OFR’s *2014 Annual Report* due to pronounced financial market volatility in the third quarter. Overall, the risk reported by our contagion indicators is low, reflecting historically high capital and liquidity buffers among large U.S. financial institutions, as well as reduced market-implied expectations for a chain of defaults across firms. However, contagion risk is difficult to measure in a forward-looking way, particularly across the entire financial system. In our assessment, the financial system remains highly interconnected and the risks of cross-asset and cross-firm stress transmission are higher than the aggregate of available measures suggests.

Endnote

¹ For an explanation of the basic tasks of the financial system, see section 2.1.1 in Office of Financial Research, *2012 Annual Report*, Washington.