

Item 7A. Quantitative and Qualitative Disclosures about Market Risk³⁹

The US is exposed to economic risk from its sovereign credit rating, interest rates, foreign exchange rates, equity prices, and commodity prices. These risks may impact our Government's combined financial statements as well as the overall US economic health and our Government's ability to achieve its objectives.

In 2015, concerns about slowing global growth, supply gluts in commodities markets, and shifts in exchange rate and monetary policies abroad led to significant price swings across a range of financial assets as U.S. interest rates remained low. Although these developments have created challenges for particular firms and sectors, financial regulatory reforms and a strengthening of market discipline since the global financial crisis have made the U.S. financial system more resilient, as vulnerabilities remained moderate.

Sovereign credit rating

A sovereign credit rating is the credit rating of a country. Sovereign credit ratings give investors insight into the level of economic and political risk associated with investing in a country. The sovereign credit rating usually influences a country's access to international funding and interest rates. A poor US credit rating could have significant impact on global financial markets.

The three major credit rating agencies, Standard & Poor's, Moody's, and Fitch, left overall ratings of US sovereign debt unchanged AA+, Aaa, and AAA, respectively, during 2015, and each maintained a stable outlook for Treasury securities at the end of 2015.⁴⁰

Interest rate

The federal funds rate is maintained by the Federal Reserve and is generally viewed as the base rate for all other interest rates in the US economy. The higher the federal funds rate, the more expensive it is to borrow money. The US federal funds rate can influence domestic and international monetary and financial conditions. See more about the federal funds rate at *Part I, Item I. Purpose and Function of Our Government, Other related entities, The Federal Reserve* within this report.

The historically low-yield environment continues to encourage greater risk-taking across the financial system. Investors may seek incremental gains in yield for disproportionate amounts of risk. A sharp increase in interest rates or credit spreads could generate losses on longer-term assets, including less liquid assets such as high-yield and emerging market bonds. If such losses are borne by leveraged investors, they could lead to fire sales and further declines in asset prices.

Post-crisis reforms by the official sector and market participants have improved the resilience of the London Interbank Offered Rate (LIBOR) by subjecting the rate and its administrator to more direct oversight, eliminating many little-used currency/tenor pairings, and embargoing the submissions of individual banks for a three-month period. However, because the volume of unsecured wholesale lending has declined markedly, it is difficult to firmly root LIBOR submissions in a sufficient number of observable transactions. This development makes LIBOR more reliant on the judgment of submitting banks and poses the risk that it may not be possible to publish the benchmark on an ongoing basis if transactions decline further. Regulators and market participants should continue their efforts to develop alternative rates and implementation plans to achieve a smooth transition to these new rates.

Foreign currency

The currencies of most developed countries are valued based on the demand and supply of the currency. The value of currency can impact economic factors such as trade balance, GDP, and employment.

The dollar has appreciated significantly on a trade-weighted basis since mid-2014, driven by slower foreign growth relative to the U.S. economy, increased concerns about the global outlook, continued monetary accommodation relative to the United States, and a fall in commodity prices. After depreciating rapidly against the dollar from mid-2014 to March 2015, the euro and the Japanese yen were largely stable for the remainder of 2015. Emerging market currencies, particularly the Brazilian real, the Mexican peso, and the South African rand, have continued to face significant pressure, weakening considerably against the dollar over the past year, as did the currencies of oil exporters.

Equity

Generally, rising stock prices for companies from a particular country indicate a healthy, growing market, while a downward trend in stocks may reflect weakening fundamentals in a country's economy. Rising stock prices usually indicate net investment in the future health and growth of the economy. An equity index represents a portfolio of securities of a certain market or sector. Global equity indices represent the overall health of the equity market.

Both developed and emerging market equities saw weak performances during 2015. Heightened concerns about global growth, including a slowdown in China and declining commodities prices, influenced U.S. markets. Overall, U.S.-listed companies saw a contraction in revenues over 2015 and a contraction in earnings in the second half of the year. These were the first such extended contractions in revenues and earnings since 2008 and were driven primarily by considerable stress among resource sector companies affected by the global decline in energy and metals prices. The S&P 500 fell 0.8% over 2015 while the index's composite trailing price-to-earnings (P/E) ratio rose just above its 20-year average of 18.0.

US equity market implied volatility, as measured by the Chicago Board Options Exchange Volatility Index (VIX), averaged 17% during 2015 which is below its historical average. Volatility levels declined through the first half of the year but spiked in August to highs last seen during the European sovereign debt stress of 2011 amid an unexpected devaluation in the Chinese RMB.

Commodity

Commodities are generally traded goods such as oil, crops, and minerals for inputs towards the production of other goods or services. The price of most commodities are generally valued based on the demand and supply of the commodity. Volatility in global price can have extensive implications for both commodity importers and exporters.

Commodity prices continued to decline in 2015, led by a 37% drop in oil during the second half of the year as persistent global oversupply, lower global demand, and dollar appreciation weighed on the energy market. Weakness in oil was mirrored across the broader commodity complex, with the overall S&P GSCI decreasing over 25% during the course of the year. Prices of industrial metals fell in 2015, due primarily to growing concerns over slowing demand in China. Prices of agricultural commodities also declined last year, but much less so than energy prices, amid ample agricultural supply conditions. The S&P GSCI Industrial Metals Index and Agricultural Commodities Index fell 23% and 12% in 2015, respectively. Oil prices continued to be volatile in 2016 and are now down 62% from 2014 highs, as key producers in the Gulf and the United States maintain high production levels despite lower prices.

The International Monetary Fund (IMF) estimated in 2014 that the recent further decline in oil prices, as well as in prices of other commodities, should support demand in the majority of advanced economies that are net commodity importers. In contrast, the IMF estimates that average commodity exporter growth rates will be almost 1% point lower in 2015–2017 than in 2012–2014.