Item 7A. Quantitative and Qualitative Disclosures about Market Risk[52]

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.

During 2018, the year of focus for this 10-K, US Economic growth remains robust, unemployment rates are at a fifty-year low, corporate and consumer delinquency and default rates are low, and financial conditions are broadly stable. Stock prices have increased over the past year. Prices for commercial and residential real estate have also increased albeit at a somewhat slower rate than in previous years. However, some uncertainty regarding future economic performance has emerged. This uncertainty prompted the Federal Reserve to shift to a more accommodative monetary policy stance over the past year. Overall, risks to US financial stability remain moderate. Much of the uncertainty in the economic outlook stems from events overseas. A slowdown in economic growth in the euro area and China may affect economic conditions in the US, though the effects on financial stability, if any, are likely to be modest. The potential for a disorderly withdrawal of the United Kingdom from the European Union (EU) remains. Post-crisis regulatory reforms have strengthened the ability of the financial system to withstand a shock or an economic downturn.

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 at AA+, Aaa, and AAA, respectively, during 2018, and each maintained a stable outlook for US Treasury securities at the end of 2018.[53]

There is the potential for an increasing federal government debt burden to negatively impact long-term financial stability. Government budgets (and thus the debt burden) were strained by the cyclical response of revenues and expenditures after the financial crisis as well as the fiscal actions taken to ease the recession and aid the recovery. US federal government debt held by the public was estimated to be 76% of GDP in 2018. The Congressional Budget Office projects that the debt burden could increase in an accelerating manner in the coming decades. Achieving long-term sustainability of the national budget is important to maintaining global market confidence in US Treasury securities and the financial stability of the US.

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.

Although US interest rates have increased from their historically low levels, key US asset prices appreciated further in 2018, in part reflecting the economy's strength, with valuations notably elevated in US equities, corporate debt, and some residential and commercial real estate markets. According to certain metrics, nonfinancial corporate debt and leverage have reached elevated levels. Downturns in these markets can occur with little warning and in response to a range of factors. The impact of corrections in these markets on financial stability will depend on the severity of the losses, spillovers across markets, and the ability of investors and intermediaries to manage the fallout. It is important that the relevant investors and intermediaries assess and reinforce their ability to manage a scenario of severe losses across these markets, to reduce the risks of such a scenario.

Over the past few years, regulators, benchmark administrators, and market participants have worked to improve the resilience of the London Interbank Offered Rate (LIBOR) and develop alternative reference rates. Regulators are concerned that LIBOR is not sustainable because it is based on a diminishing number of observable transactions. The weaknesses of LIBOR may undermine market integrity and the uncertainty surrounding its sustainability could threaten US financial institutions and the US financial system more broadly. The cessation or degradation of LIBOR as a reference rate for financial contracts is anticipated in the near future. As an alternative reference rate, the Secured Overnight Financing Rate (SOFR) has been introduced. Widespread failure of market participants to adequately adapt to this transition could result in a reduction in liquidity in markets for several types of financial contracts and could potentially adversely impact financial stability.

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.

After depreciating steadily for most of 2017, the US dollar has been gradually strengthening since early 2018, rising by 6% on a nominal trade-weighted basis from January to October 2018. The US dollar remained elevated from a long-term perspective, with the real trade-weighted dollar standing 9% above its 20-year average. The dollar has been supported by gradual interest rate increases from the Federal Reserve, continued strong growth in the US, and concerns about the growth outlook in some other large economies.

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.

Developed and emerging market equities were largely flat during 2018, increasingly 1% since the close of 2017. Equity prices across most other developed and emerging markets were generally weaker than one year earlier. Emerging markets saw the greatest pressure in 2018 due to trade concerns, a modest growth slowdown in China, a strengthening of the US dollar, and local financial stresses in some markets. US equity markets rose sharply in January 2018 before a sell-off in early February with the S&P 500 experiencing its first 10% decline since 2016. The sudden February 5 sell-off was largely attributed to non-fundamental factors. Market participants noted the speed and extent of the January rally in US equity prices had further stretched already elevated equity market valuations, potentially leaving the market vulnerable to a correction. US equity markets recovered in the second and third quarters of 2018 and reached all-time highs in the third quarter of 2018. However, equity markets sold off again in late 2018 as investors reassessed high valuations against weaker earnings guidance, expectations for slowing growth momentum in the US, and increased geopolitical risks. The technology sector outperformed broader US equity markets in the first half of 2018, supported by strong earnings growth and investor preference for "growth" stocks. However, US technology stocks depreciated in the latter half of 2018. The financial and industrial sectors outperformed the broad US equity market in 2017 but have lagged modestly in 2018.

Even after price depreciations in late 2018, US equity valuations remain elevated according to various metrics, particularly the cyclically-adjusted price-to-earnings ratio, which accounts for the long-term earnings of S&P 500 firms. Although US equity market volatility remained below the historical average for most of 2018, there were meaningful spikes early and late in the year.

Commodity

Commodities are generally traded goods such as oil, crops, and minerals for inputs towards the production of other goods or services. The prices 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 rise in the first half of 2018, before varying in the second half of the year. The overall S&P GSCI Spot Index decreased 15% in 2018, due to in part by a 13% decrease in the industrial metals, partially offset by increases in crude oil of 3% and natural gas of 44%.

Prices of Industrial metals rose sharply in 2017, before retracing roughly half of that gain in 2018, with the S&P GSCI Industrial Metals Index falling 13% in 2018 through October. In particular, copper prices fell over 20% in the summer of 2018 amid weakening emerging market demand and rising concerns over trade tensions.

Oil prices rose to multi-year highs in 2018, before falling sharply late in the year. In June 2018, the Organization of Petroleum Exporting Countries (OPEC) agreed to increase total production to compensate for the decline in Venezuelan oil production and the anticipated decline in Iranian exports related to the re-imposition of US sanctions. US production has increased steadily over the past two years, and the average spread between West Texas Intermediate (WTI) and Brent crude oil increased from $1.50 in October 2016 to nearly $10 two years later. WTI peaked at $77 per barrel in at the end of 2018, before falling sharply amid concerns regarding a slowdown in global economic growth, diminishing expectations of Iranian supply decline, and rising levels of non-OPEC supply. Crude oil prices fluctuated 30% in 2018 between $55 and $78 per barrel.