Note 8. Investments in Government-Sponsored Enterprises

Congress established Fannie Mae and Freddie Mac as GSEs to support mortgage lending. A key function of the GSEs is to purchase mortgages, package those mortgages into securities, which are subsequently sold to investors, and guarantee the timely payment of principal and interest on these securities.

Leading up to the financial crisis, increasingly difficult conditions in the housing market challenged the soundness and profitability of the GSEs, thereby threatening to undermine the entire housing market. In response Congress passed HERA (P.L.110-289) in July 2008. This act created FHFA, with enhanced regulatory authority over the GSEs, and provided the Secretary of the Treasury with certain authorities intended to ensure the financial stability of the GSEs, if necessary. In September 2008, FHFA placed the GSEs under conservatorship and Treasury invested in the GSEs by entering into a SPSPA with each GSE. These actions were taken to preserve the GSEs' assets, ensure a sound and solvent financial condition, and mitigate systemic risks that contributed to market instability.

The purpose of such actions is to maintain the solvency of the GSEs so they can continue to fulfill their vital roles in the home mortgage market while the Administration and Congress determine what structural changes should be made to the housing finance system. Draws under the SPSPAs result in an increased investment in the GSEs as further discussed below. Per SFFAC No. 2, *Entity and Display*, these entities meet the criteria of "bailed out" entities. Accordingly, the government has not consolidated them into the financial statements, but included disclosure of the relationship(s) with the bailed out entities and any actual or potential material costs or liabilities in the consolidated financial statements.

Senior Preferred Stock Purchase Agreements

Under the SPSPAs, Treasury initially received from each GSE: 1) 1,000,000 shares of non-voting variable liquidation preference senior preferred stock with a liquidation preference value of $1,000 per share and 2) a non-transferable warrant for the purchase, at a nominal cost, of 79.9 percent of common stock on a fully-diluted basis. The warrants expire on September 7, 2028. Under the amended SPSPAs, the quarterly dividend payment changed from a 10.0 percent per annum fixed rate dividend on the total liquidation preference to an amount equivalent to the GSE's positive net worth above a capital reserve amount. The capital reserve amount, which was initially set at $3.0 billion for calendar year 2013, declines by $600 million at the beginning of each calendar year thereafter until it reaches zero by calendar year 2018. On January 1, 2017, and 2016, the capital reserve amount had declined to $600 million and $1.2 billion for calendar years 2017 and 2016, respectively. The GSEs will not pay a quarterly dividend if their positive net worth is below the required capital reserve threshold. Cash dividends of $25.3 billion and $11.5 billion were received during fiscal years ended September 30, 2017, and 2016, respectively.

The SPSPAs, which have no expiration date, provide that Treasury will disburse funds to the GSEs if at the end of any quarter, the FHFA determines that the liabilities of either GSE exceed its assets. Draws from Treasury under the SPSPAs are designed to ensure that the GSEs maintain positive net worth, with a fixed maximum amount available to each GSE under this agreement established as of December 31, 2012 (refer to the "Contingent Liability to GSEs" section below). Draws against the funding commitment of the SPSPAs do not result in the issuance of additional shares of senior preferred stock; instead, it increases the liquidation preference of the initial 1,000,000 shares by the amount of the draw. The combined cumulative liquidation preference totaled $189 billion as of September 30, 2017 and 2016. There were no payments to the GSEs for the fiscal years ended September 30, 2017 and 2016. Refer to Note 25—Subsequent Events for additional information.

Senior Preferred Stock and Warrants for Common Stock

In determining the fair value of the senior preferred stock and warrants for common stock, Treasury relied on the GSEs' public filings and press releases concerning their financial statements, as well as non-public, long-term financial forecasts, monthly summaries, quarterly credit supplements, independent research regarding preferred stock trading, independent research regarding the GSEs' common stock trading on the OTC Bulletin Board, discussions with each of the GSEs and FHFA, and other information pertinent to the valuations. Because the instruments are not publicly traded, there is no comparable trading information available. The fair valuations rely on significant unobservable inputs that reflect assumptions about the expectations that market participants would use in pricing.

The fair value of the senior preferred stock considers the amount of forecasted dividend payments. The fair valuations assume that a hypothetical buyer would acquire the discounted dividend stream as of the transaction date. The fair value of the senior preferred stock decreased as of September 30, 2017 when compared to September 30, 2016, primarily reflecting a higher discount rate which was driven by a higher long-term Treasury rate (or risk-free rate), as well as an increase in the market value of the GSEs' other equity securities that comprise their total equity.

Factors impacting the fair value of the warrants include the nominal exercise price and the large number of potential exercise shares, the market trading of the common stock that underlies the warrants as of September 30, the principal market, and the market participants. Other factors impacting the fair value include, among other things, the holding period risk related directly to the assumption of the amount of time that it will take to sell the exercised shares without depressing the market. The fair value of the warrants increased at the end of fiscal year 2017, when compared to 2016, primarily due to increases in the market price of the underlying common stock of each GSE.

Contingent Liability to GSEs

As part of the annual process undertaken by Treasury, a series of long-term financial forecasts are prepared to assess, as of September 30, the likelihood and magnitude of future draws to be required by the GSEs under the SPSPAs within the forecast time horizon. Treasury used 25-year financial forecasts prepared through years 2042 and 2041 in assessing if a contingent liability was required as of September 30, 2017 and 2016, respectively. If future payments under the SPSPAs are deemed to be probable within the forecast horizon, Treasury will estimate and accrue a contingent liability to the GSEs to reflect the forecasted equity deficits of the GSEs. This accrued contingent liability will be undiscounted and will not take into account any of the offsetting dividends that could be received, as the dividends, if any, would be owed directly to the General Fund. Such recorded accruals will be adjusted in subsequent years as new information develops or circumstances change.

Based on the annual forecasts as of September 30, 2017 and 2016, Treasury estimated there was no probable future funding draws. However, the reduction in the U.S. corporate income tax rate resulting from the enactment of the *Tax Cuts and Job Act* on December 22, 2017, required that each of Fannie Mae and Freddie Mac record a reduction in the value of their deferred tax assets in the quarter in which the legislation was enacted, impacting potential future funding draws. The funding draws and the associated amounts are expected to be realized in March 2018. Management believes the amounts of such draws will not be material to the consolidated financial statements. At September 30, 2017 and 2016, the maximum remaining contractual commitment to the GSEs for the remaining life of the SPSPAs was $258.1 billion. Subsequent funding draws will reduce the remaining commitments. Refer to Note 19—Commitments for a full description of other commitments and risks.

In assessing the need for an estimated contingent liability, Treasury relied on the GSEs' public filings and press releases concerning their financial statements, monthly summaries, and quarterly credit supplements, as well as non-public, long-term financial forecasts, the FHFA House Price Index, discussions with each of the GSEs and FHFA, and other information pertinent to the liability estimates. The forecasts prepared in assessing the need for an estimated contingent liability as of September 30, 2017 include three potential wind-down scenarios, with varying assumptions regarding the timing as to when the GSEs would cease issuing new guaranteed mortgage-backed securities. The forecasts also assume a continued gradual wind-down of the retained portfolios (and corresponding net interest income) through 2018, as directed under the amended SPSPAs for each GSE to reduce the maximum balance of its retained mortgage portfolio by 15.0 percent per annum beginning December 31, 2013. The maximum balance of the GSEs' retained mortgage portfolio was initially set at $650 billion as of December 31, 2012, and the amended SPSPAs requires that GSEs reduce this maximum balance to $250 billion by December 31, 2018.

Estimation Factors

Treasury's forecasts concerning the GSEs may differ from actual experience. Estimated senior preferred values and future draw amounts will depend on numerous factors that are difficult to predict including, but not limited to, changes in government policy with respect to the GSEs, the business cycle, inflation, home prices, unemployment rates, interest rates, changes in housing preferences, home financing alternatives, availability of debt financing, market rates of guarantee fees, outcomes of loan refinancings and modifications, new housing programs, and other applicable factors.

Regulatory Environment

To date, Congress has not approved a plan to address the future of the GSEs, thus the GSEs continue to operate under the direction of their conservator, the FHFA, whose stated strategic goals for the GSEs are to: (1) maintain foreclosure prevention activities and credit availability to foster liquid, efficient, competitive, and resilient national housing finance markets; (2) reduce taxpayer risk through increasing the role of private capital in the mortgage market, and (3) build a new single-family securitization infrastructure.

The *Temporary Payroll Tax Cut Continuation Act of 2011(P.L. 112-78)* was funded by an increase of 10-basis points in the GSEs' guarantee fees (referred to as "the incremental fees") which began in April 2012, and is effective through October 1, 2021. The incremental fees are to be remitted to Treasury and not retained by the GSEs and, thus, do not affect the profitability of the GSEs. For fiscal years 2017 and 2016, the GSEs remitted to Treasury the incremental fees totaling $3.2 billion and $2.8 billion, respectively.

As of September 30, 2017, and 2016, GSEs investments consisted of the following:

Investments in GSEs as of September 30, 2017

(In billions of dollars)	Gross Investments	Cumulative Valuation Gain/(Loss)	Fair Value
Fannie Mae senior preferred stock	117.0	(74.5)	42.5
Freddie Mac senior preferred stock	72.1	(41.0)	31.1
Fannie Mae warrants common stock	3.1	9.2	12.3
Freddie Mac warrants common stock	2.3	4.4	6.7
Total investments in GSEs	194.5	(101.9)	92.6

Investments in GSEs as of September 30, 2016

(In billions of dollars)	Gross Investments	Cumulative Valuation Gain/(Loss)	Fair Value
Fannie Mae senior preferred stock	117.0	(58.9)	58.1
Freddie Mac senior preferred stock	72.1	(32.5)	39.6
Fannie Mae warrants common stock	3.1	4.0	7.1
Freddie Mac warrants common stock	2.3	1.5	3.8
Total investments in GSEs	194.5	(85.9)	108.6