

**PART II. STATUS QUO**

**1. United States**

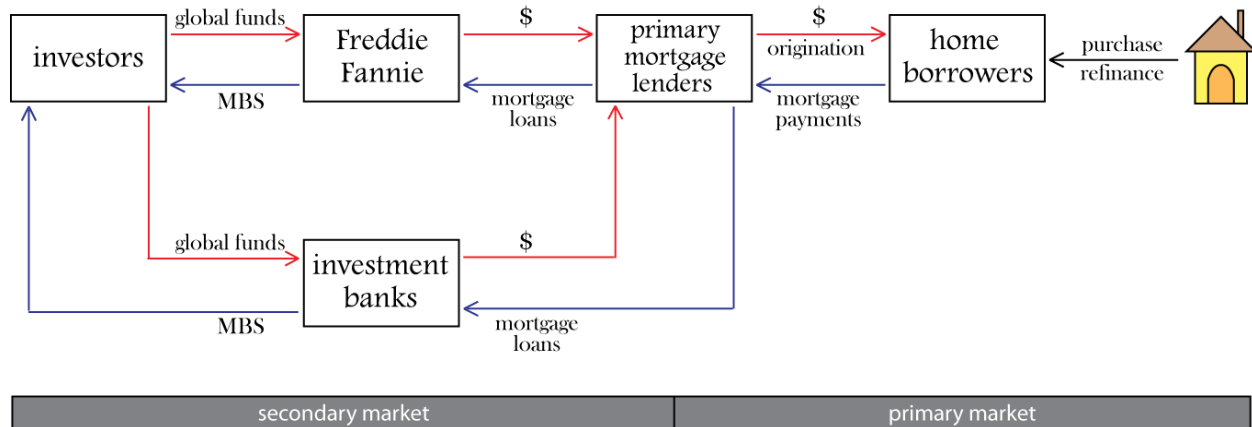
**B. Financial Crisis and Recession in the US**

**(1) Freddie Mac and Fannie Mae**

## (1) Freddie Mac and Fannie Mae

Freddie Mac (Federal Home Loan Mortgage Corporation) and Fannie Mae (Federal National Mortgage Association) were founded by the US Congress in 1970 and 1938 respectively. The statutory mission of the two GSEs (Government-Sponsored Enterprises) is to provide liquidity, affordability, and stability to the US housing market.

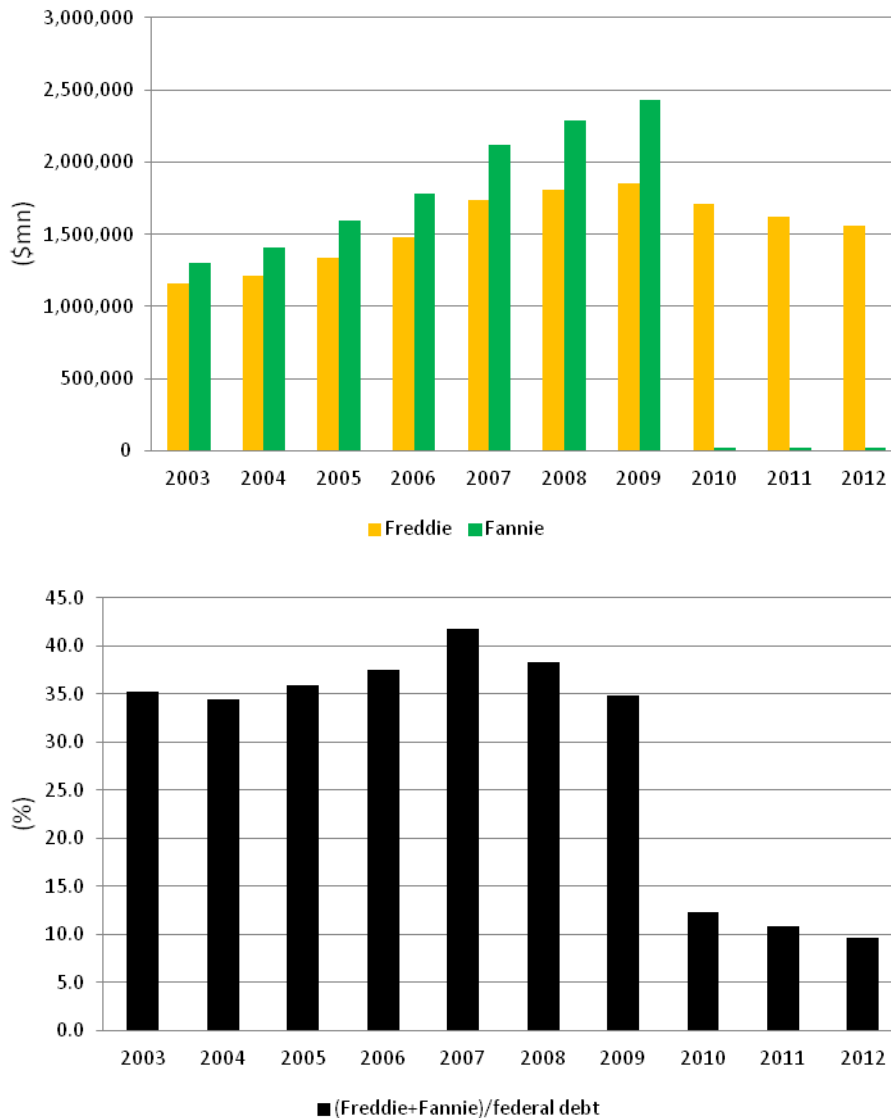
**Figure 2.22 Freddie/Fannie and the US Housing Market<sup>1</sup>**



In Figure 2.22 above, home borrowers borrow from the primary mortgage lenders to purchase or refinance their houses. Freddie and Fannie buy mortgage loans from the primary mortgage lenders such as commercial banks, mortgage companies, savings institutions, and credit unions. The two GSEs pool and securitize mortgage loans and sell MBSs with the guarantee of payments to the investors globally. Red arrows show not only Freddie and Fannie but also investment banks funneled the global funds to the US housing market as a quid pro quo of the issuance of MBSs. The infusion of the global funds to the US housing market was the exogenous factor to keep the long-term interest rate low, working in tandem with the Fed's monetary policy endogenously.

<sup>1</sup> MBS: Mortgage-Backed Security

**Figure 2.23 MBSs issued by Freddie and Fannie (2003-2012)<sup>2</sup>**



The upper graph of Figure 2.23 above illustrates the issuance of MBSs by Freddie and Fannie had increased throughout the 2000s. And the lower graph demonstrates the sum of MBSs issued by two GSEs accounted for over 40% in comparison to the US federal debt in 2007 and marked over \$4 trillion in 2008 and 2009. Freddie and Fannie not only sold an abundance of MBSs but also bought a great deal of securities for investment and mortgage loans for securitization in the secondary mortgage market. In Figure 2.24 below, securities and mortgage loans have dominated

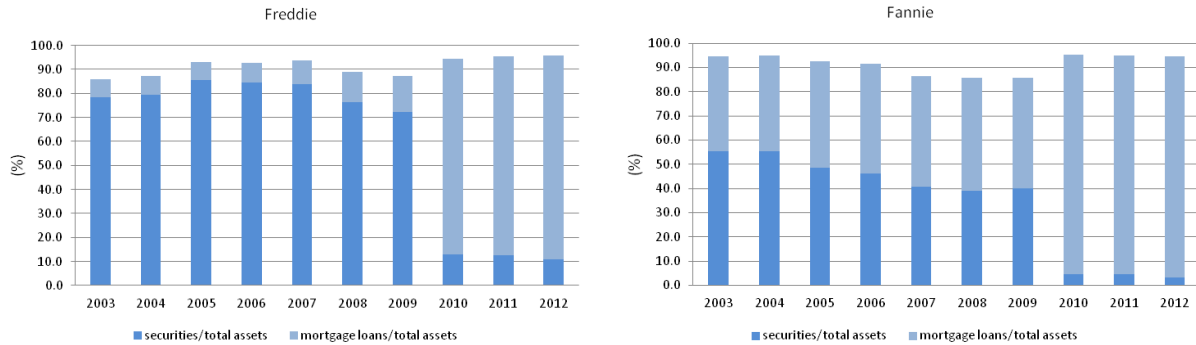
<sup>2</sup> Source: annual reports of Freddie and Fannie, Bureau of the Public Debt

For Freddie, amounts are based on UPB (Unpaid Principal Balance) of the securities and exclude mortgage-related securities traded, but not yet settled.

For Fannie, amounts reflect UPB of unconsolidated Fannie Mae MBS, held by third-party investors. The principal balance of resecured Fannie Mae MBS is included only once in the reported amount.

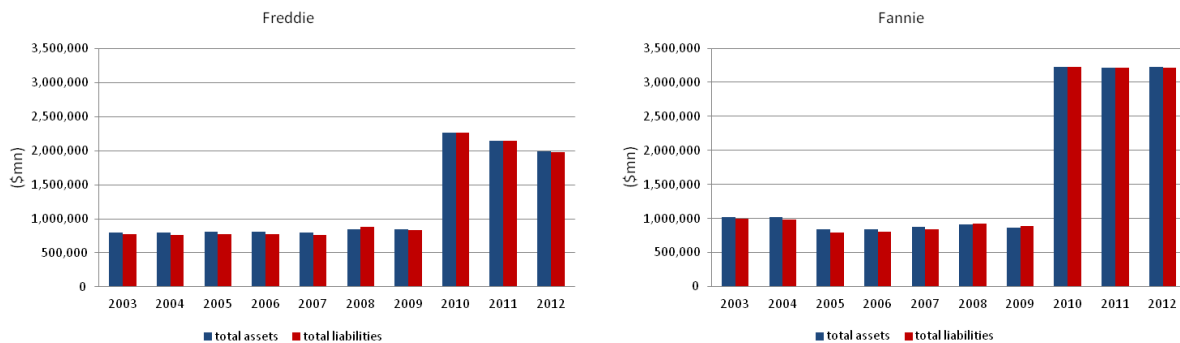
the assets of Freddie and Fannie throughout the years, recording over 80% in the total assets of the balance sheets.

**Figure 2.24 Total Assets of Freddie and Fannie (2003-2012)<sup>3</sup>**



By purchase of mortgage loans from primary mortgage lenders and issuance/sale of MBSs to the global investors, Freddie and Fannie contributed to provide liquidity and affordability to the US housing market. However, blight was cast on their statutory mission esp. in terms of stability, because their corporate operations banked on borrowing. In the top graphs of Figure 2.25 below, pitting total assets against total liabilities gives difference by a whisker throughout the years. Accordingly, shareholders' equity looks infinitesimal against total liabilities in the middle graphs. To make it worse, the bottom graphs identify the fact that from 2008-2009 on even the shareholders' equity has been buttressed by senior preferred stocks, an euphemistic version of debt security, issued to the US Department of the Treasury. Pivotal role of Freddie and Fannie in the US housing market was funded by nothing but debt. Not only home borrowers but also Freddie and Fannie, federally-chartered corporations, were inclined for borrowing in the leading up to the US housing bubble burst.

**Figure 2.25 Assets, Liabilities, and Shareholders' Equity of Freddie and Fannie (2003-2012)<sup>4</sup>**



<sup>3</sup> Source: annual reports of Freddie and Fannie

New accounting standards were applied as of January 1, 2010. This is the reason why there is a big shift in the ratio of securities and mortgage loans in the total assets of Freddie and Fannie.

<sup>4</sup> Source: annual reports of Freddie and Fannie

Two bottom graphs decompose the shareholders' equity of Freddie and Fannie in the middle graphs. AOCI: Accumulated Other Comprehensive Income

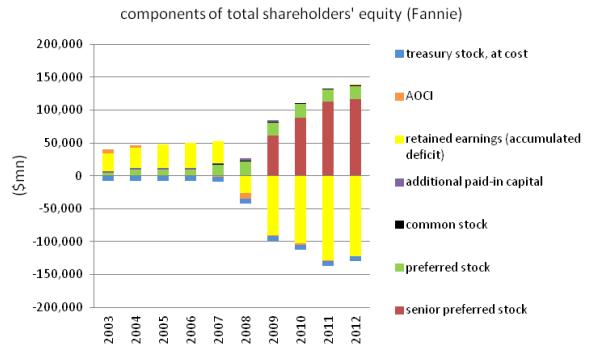
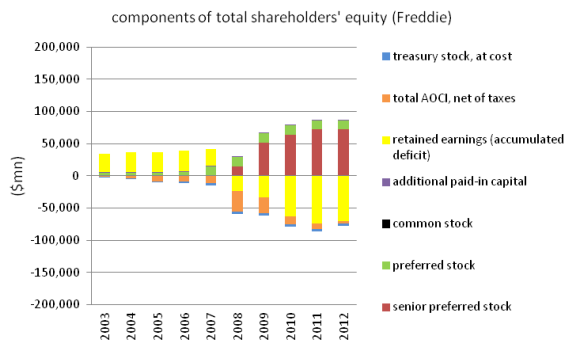
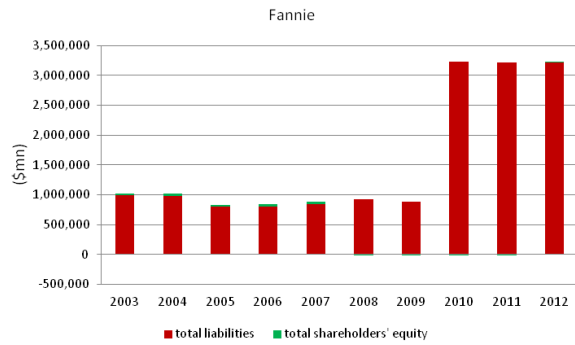
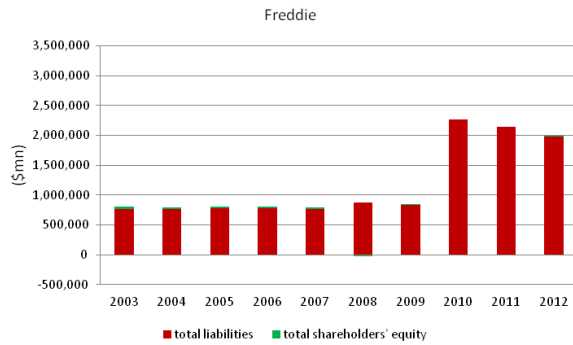
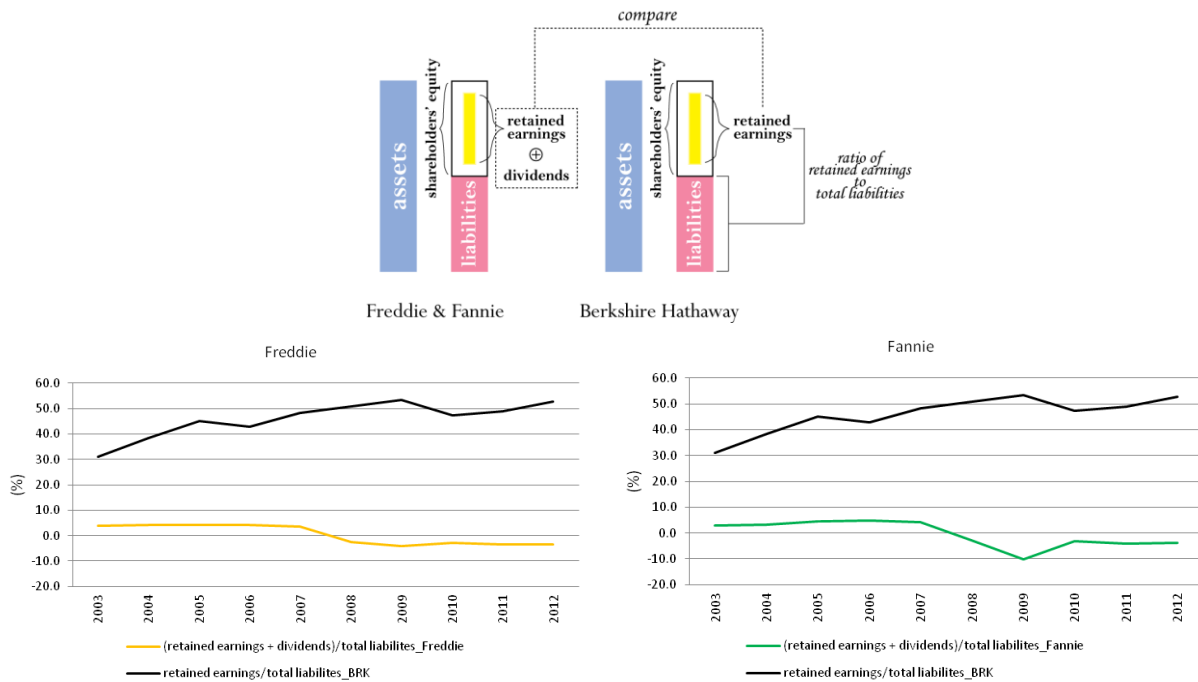


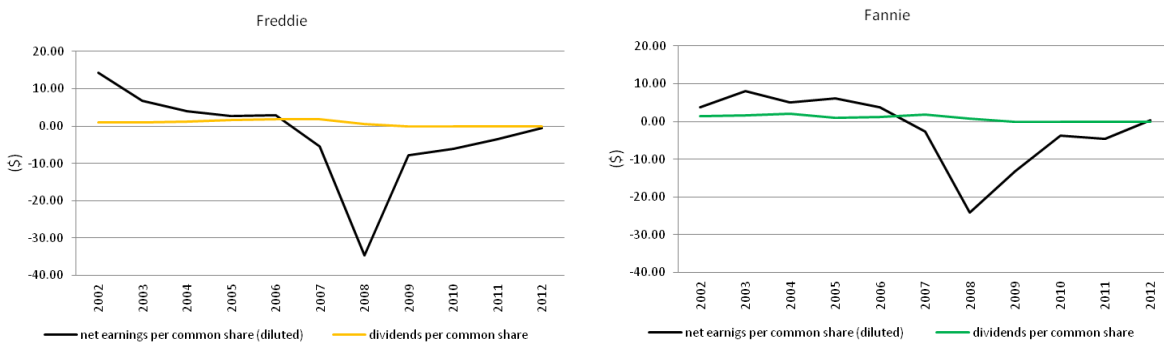
Figure 2.26 Freddie/Fannie and Berkshire Hathaway (2003-2012)<sup>5</sup>



<sup>5</sup> BRK: Berkshire Hathaway  
Source: annual reports of Freddie, Fannie, BRK

To fathom out the status of liabilities of Freddie and Fannie, Berkshire Hathaway is introduced as a bench mark. Berkshire Hathaway has not provided dividends since 1967 and earnings (income), the difference between revenues and costs/expenses, are retained in the Berkshire Hathaway shareholders' equity. For the purpose of comparison, dividends are added to retained earnings of Freddie and Fannie, as laid out in the upper graph of Figure 2.26 above. The lower graphs polarize Freddie/Fannie and Berkshire Hathaway regarding the *ratio of retained earnings to total liabilities*. Retained earnings of Berkshire Hathaway has snowballed throughout the years and passed a half of total liabilities at the end of 2012. In contrast, those of Freddie and Fannie were just 4% of total liabilities on average from 2003 to 2007 and retained earnings (the sum of retained earnings and dividends in exact terms) have turned deficit from 2008 on. We can suss why Berkshire Hathaway sold nearly all of Freddie Mac and Fannie Mae shares in 2000. Corporate operations hell-bent on borrowing are not sustainable. How could those GSEs provide liquidity to the US housing market with the next-to-nothing equity capital? Securities (MBSs and debt securities) issued by Freddie and Fannie are not guaranteed by the US government. However, market had a perception of government backing because of the ambiguities in their Congressional charters. This illusion was one of the reasons for the popularity of MBSs and humongous holdings of debt. It was a dead cert that Freddie and Fannie would metamorphose into an epicenter of the financial crisis with the US housing bubble burst.

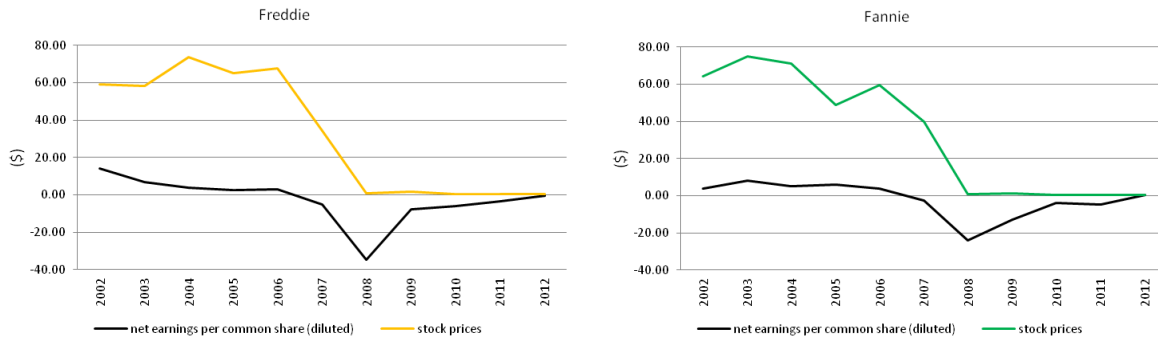
**Figure 2.27 Net Earnings and Dividends of Freddie and Fannie (2002-2012)<sup>6</sup>**



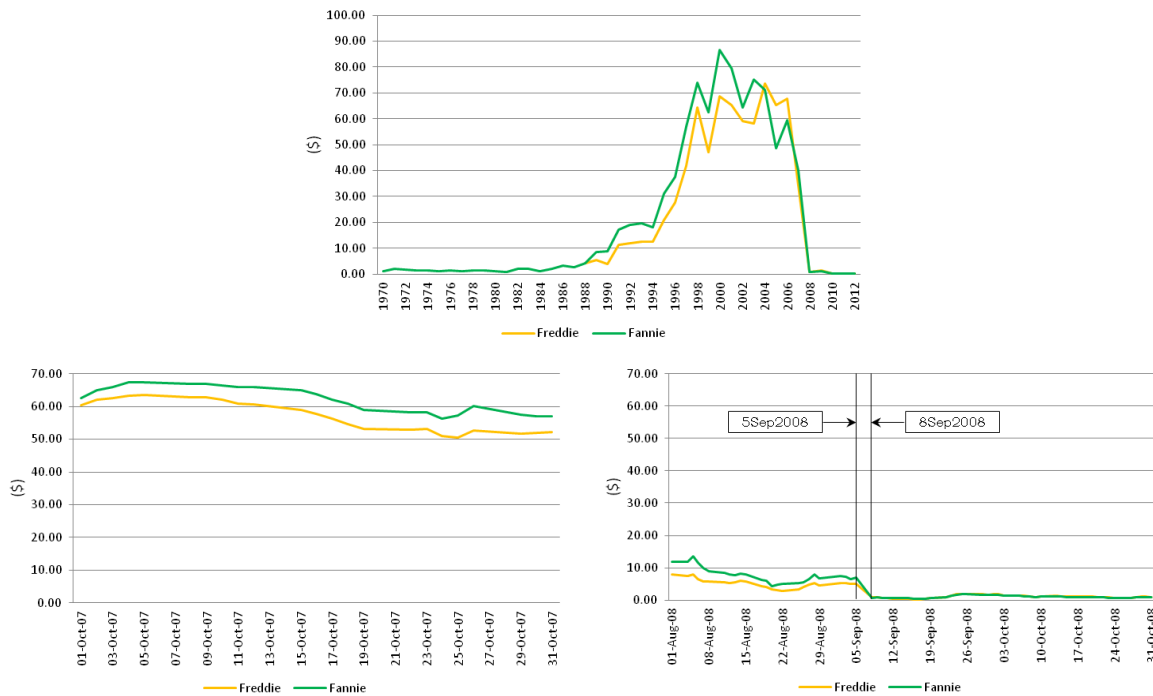
In Figure 2.27 above, *net earnings per common share* of Freddie and Fannie had declined and recorded losses in 2007, while dividends had been paid until 2008. With the fall of net earnings, stock prices also tumbled in Figure 2.28 below.

<sup>6</sup> Source: annual reports of Freddie and Fannie

**Figure 2.28 Net Earnings and Stock Prices of Freddie and Fannie (2002-2012)<sup>7</sup>**



**Figure 2.29 Stock Prices of Freddie and Fannie<sup>8</sup>**



Two lower graphs of Figure 2.29 above portray stock prices of Freddie and Fannie were around \$60 on average in October 2007 but tumbled to \$5.10 and \$7.04 on September 5, 2008 respectively. The precipitous drop of the stock prices denotes Freddie and Fannie chafed under

<sup>7</sup> Source: annual reports of Freddie and Fannie for net earnings, websites of Freddie and Fannie for stock prices (Stock prices of Freddie and Fannie are the values at the end of the year.)

<sup>8</sup> Source: websites of Freddie and Fannie  
Upper graphs: 1988-2012 for Freddie, 1970-2012 for Fannie, year-end data  
Lower graphs: 1Oct2007-31Oct2007 for the left, 1Aug2008-31Oct2008 for the right, daily data

the shrinkage of market capitalization and connotes market was feeling high risk in lending to the GSEs. The latter was a menace to the functioning of Freddie and Fannie, taking into account the debt-financed corporate governance. In the end, the US government had no option but to meddle in. On Sunday, September 7, 2008, FHFA (Federal Housing Finance Agency) placed Freddie and Fannie into conservatorship with the agreement of the Federal Reserve and the Department of the Treasury. On Monday, September 8, 2008, stock prices of Freddie and Fannie dropped below \$1.

Under the senior preferred stock purchase agreement on September 7, 2008, the Department of the Treasury received warrants and senior preferred stocks. The former grants the Treasury the purchase of 79.9% of the common stock of each GSE and the Treasury purchased the latter worth \$72.3 billion and \$117.1 billion from Freddie and Fannie respectively in the value at the end of 2012. No dividends for the common stocks have been paid since 2009, as seen in Figure 2.27. Not only the injection of capital by the Treasury but also the purchase of MBSs by the Fed was drawn on to support Freddie/Fannie and the US housing market. The Fed's holdings of MBSs guaranteed by Ginnie Mae as well as Freddie and Fannie totaled \$926.6 billion at the end of 2012. In Figure 2.23, we saw MBSs issued by Freddie and Fannie combined to make \$4,287.6 billion in 2009. In 2012, the Fed bought a fifth of MBSs Freddie and Fannie issued in times of the US housing market boom<sup>9</sup>.

Quoting the view of Warren Buffett in his letter to the Berkshire Hathaway shareholders in the 2007 annual report<sup>10</sup>, the US housing bubble burst revealed Freddie/Fannie and home borrowers had swum naked. Primary mortgage lenders, as intermediaries between Freddie/Fannie and home borrowers, lent money regardless of a home borrower's income and cash equity. They had a conviction that home price appreciation would cure all problems. However, as the house prices fell, their wish turned out forlorn hope and a wide range of financial institutions suffered from the same cataclysm as Freddie and Fannie did. The vagaries of ordeals started from 2007 and will be described in PART II.1.B.(2) and (3).

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<sup>9</sup> In absolute terms, \$926.6 billion and \$4,287.6 billion cannot be compared on a par. The former includes MBSs issued by Ginnie as well as Freddie and Fannie and measures current face value of the securities, which is the remaining principal balance of the underlying mortgages. The latter measures unpaid principal balance of securities. But the comparison makes us sense the size of the Fed's purchase of MBSs after the US housing bubble burst.

<sup>10</sup> 4<sup>th</sup> paragraph