

# The 2007 to 2011 financial crisis causes, effects and lessons

[History](#)



## **Abstract**

This paper provides a brief examination of the immediate causes and effects of the 2007 financial crisis, as well as an overview of lessons learned from it. I conclude that failure to properly regulate and supervise financial institutions set the stage for the crisis, while the US residential mortgage boom and bust triggered it. A credit freeze, bankruptcies, and hundreds of billions in government rescue ensued, resulting in a general economic downturn. The legacy of the crisis should be seen as an opportunity to revise the financial system as a whole.

## **Introduction**

The financial crisis that started in 2007 is the result of complex, interconnected, and simultaneous developments[1]. As such, I focus my analysis on the United States[2] and two distinct direct causes: (1) erroneous bank regulation - which destabilized the financial system - and (2) the pre-crisis real estate boom and bust. Whereas the former conditioned the crisis, the latter was its catalyst. In this brief essay, I discuss only the most important and immediate effects of the crisis - those that emerged between 2007 and 2012 - and discuss the conclusions that can be drawn accordingly.

### **Regulation destabilized the financial system**

Regulation of US banks by the Fed, SEC, and FDIC,[3] as well as other regulatory agencies, contributed significantly to the erosion of financial system stability (Barth, Caprio and Levine, 2012, p. 86). For example, in 1996, the Fed legitimized the use of Credit Default Swaps (CDS) as risk-hedging instruments (Levine 2010, p. 202, Appendix 1) and as a result many

banks developed massive exposures (Figure 1) - AIG held over \$500 billion in 2007 - while others were able to reduce their capital reserves by up to half in percentage terms (Barth, Caprio and Levine, 2012, p. 92).

Figure 1: CDS market volume Q1 2001 to Q2 2007, trillion US\$

(International Securities and Derivatives Association cited in Baily, Litan and Johnson, 2008)

Another example is the SEC's use of the "NRSRO" designation,[4] which led to a serious misalignment of credit rating agencies' business incentives and resulted in inflationary provisions of investment-grade ratings for risky securities. This further deteriorated the viability of banks' balance sheets (see Appendix 2).

### **Residential mortgage boom and bust**

Simultaneously, the US residential real estate bubble (inspired by the assumption that housing prices would only go up) fueled excessive issuance of home mortgages (Figure 2). In turn, unsound lending practices, especially in sub-prime mortgage lending, bolstered housing prices by pushing demand, while filling institutions' balance sheets with unrecognized risk (Barth 2009, p. 92). The attractiveness of mortgages as "fail-safe" investments prompted many banks to shift their business model from "originate-to-hold" to "originate-to-sell"; instead of buying mortgages as an investment that generated a steady cash flow, banks securitized and sold them (Barth 2009, p. 22). This effectively removed any incentive to analyze and control risk. However, this "out-of-sight-out-of-mind" mentality did not account for the fact that banks that securitized mortgages and invested in <https://assignbuster.com/the-2007-to-2011-financial-crisis-causes-effects-and-lessons/>

mortgage-backed securities (MBS) were often identical. Thus, risk was absent from balance sheets, but implicitly present in securities holdings (Appendix 3).

Figure 2: S&P-Shiller housing prices index (monthly), January 2001 to August 2012

(Standard & Poor's Financial Services LLC, 2012)

The convoluted system of securitization faltered when housing prices started to decline and mortgage borrowers defaulted (Figure 3). This dried up the cash flow of mortgage-backed securities and made them virtually worthless; banks that relied on them to meet their obligations encountered trouble. Moreover, complex securitization practices made the extent of any one institution's exposure anyone's guess. Since, no one could be certain which banks would live to see another day, interbank lending froze. In short, not only did financial institutions possess worthless assets, but they were also unable to bridge shortages in cash (Figure 4).[5] In addition, mass defaults activated billions of dollars in CDS obligations and bankrupted all who were over-exposed.

Figure 3: Increase of delinquency rates (percent) of subprime loans between 2003 and 2007

(Arentsen, Mauer, Rosenlund, Zhang and Zhao, 2012, p. 39)

Figure 4: Increase of the Federal Funds rate (percent, monthly) indicates interbank lending crisis

(Federal Reserve Bank of St. Louis, 2012)

### **Financial collapse and economic downturn**

The immediate effects of the crisis are well known. Banks previously considered untouchable filed for bankruptcy (e. g. Lehmann Brothers), while others were acquired (Merrill Lynch by Bank of America), bailed-out, or taken over by the government (AIG and the GSEs Fannie Mae and Freddie Mac). Soon, the credit freeze affected the remaining economy as financing investments and borrowing became increasingly difficult. For example, between 2007 and 2009, approximately 8.8 million American jobs disappeared, U. S. GDP fell by more than five percent from its pre-recession peak (Treasury 2012), and the S&P 500 lost about 57 percent of its value (Lleo and Ziemba, 2011). Perhaps most famously, without governmental assistance, American automobile manufacturers GM and Chrysler would have become insolvent (Stewart 2012). Yet another legacy cost is the enormous government debt that resulted from rescues and other economic resuscitation programs (Barth 2009).

The crisis spread internationally (and most damagingly to Europe) because substantial loan derivatives were sold abroad. This does not imply that the U. S. is to blame for the crisis; every government had access to the same information as Fed, SEC, and FDIC, yet nearly all failed to recognize and address the systemic problem (Cox, Faucette and Lickstein, 2010).

### **Lessons**

Mostly importantly, the crisis exposed the colossal failure of bank regulators, [6] and prompted a fundamental restructuring of banking regulation (such as

the 2010 Dodd-Frank Act). In addition, the excessive complexity and behemoth size of the financial system have come under intense scrutiny. An important question has emerged from this examination, which asks, considering TARP[7], are some financial institutions “too big to fail?” (Greeley 2012). Moreover, the crisis has spawned a reexamination of the desirability of “laissez-faire” within the financial markets – that is, to what degree can market forces be relied upon to avert crises (Barth, Caprio and Levine, 2012, p. 90)?

## **Conclusion**

The financial crisis that began in 2007 still troubles us today. While some financial institutions have collapsed, those that remain have had to fundamentally rethink their role as credit providers. Governments were left with tremendous financial commitments, tasked with deconstructing the moral hazard of bank bailouts, and with regulating and supervising the financial system more efficiently. History has shown us that financial crises are a cyclical occurrence. Thus the question must be, can the cycle be broken, or is the next crisis waiting in the wings?

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## **Appendix**

### **Appendix 1**

A CDS is a derivative that enables the buyer to claim compensation from the seller if the underlying asset (such as a Mortgage Backed Securities or MBS) defaults. While useful for hedging purposes and as assessment tool for credit risk (a rising CDS premium indicates increasing risk for the underlying asset), it can be misused for speculative investing, as it does not require the buyer (or the seller) to actually hold the underlying asset.

### **Appendix 2**

The SEC required every issuer of a new security to acquire a risk rating from a NRSRO in order to enable potential buyers to assess its risk and allow regulators to determine capital requirements (which were based on risk-adjusted assets). Those credit rating agencies privileged enough to have received NRSRO designation (namely the big three, S&P, Moody's, and Fitch) slowly realigned their business models to accommodate issuers' needs to purchase ratings by incentivizing employees to issue AAA ratings in order to grow the customer base. As a result, 56 percent of MBS issued between 2005 and 2007 and rated by S&P were eventually downgraded (Barth 2009, p. 156).

### **Appendix 3**

A common practice in the precursor to the crisis was to package mortgage loans into asset-backed securities (ABS, most notoriously, collateralized debt obligations or CDOs) and other securities according to tranches. These tranches were associated with different degrees of risk in order to cater to different investors. Oftentimes, ABS were re-packaged into CDOs squared

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and cubed. The common misconception prevailed that this would reduce risk by spreading it. In the wake of the crisis, with default rates skyrocketing, it became apparent that this system had become too complex for anyone to unravel, thus making any exposure assessment impossib

1. Rapid economic growth in BRIC countries, and the resulting flood of rent-seeking financial assets, mishaps in bank regulation and supervision, immoral business conduct of key-stakeholders, or the general failure to recognize the emergence of a bubble all conditioned each other and shaped the environment that resulted in the most severe meltdown since the Great Depression.
2. Though the financial crisis was markedly a global phenomenon, the United States were at the epicenter in terms of both causes and effects (Jickling 2009).
3. Federal Reserve Bank, Securities Exchange Commission, and Federal Deposit Insurance Corporation, respectively all regulate and supervise different (but sometimes overlapping) aspects of the US banking system (Barth, Caprio and Levine, 2012).
4. NRSRO - Nationally Recognized Statistical Rating Organizations.
5. To put the extent of the liquidity crunch into perspective, the Federal Reserve reacted by purchasing approximately US\$1.25 trillion worth of securities (including Treasuries) between 2007 and 2010, compared to US\$15 billion over the years prior (Kohn, 2010).
6. This is not to put blame solely on government agencies: Regulators and supervisors were heavily influenced by financial services lobbies (Pagliari and Young, 2012).

7. The Troubled Assets Relieve Program (TARP) is a government program that disbursed approximately US\$431 billion to save financial institutions and other business from bankruptcy (CBO 2012, p. 1).