NATIONAL CENTER FOR POLICY ANALYSIS

Causes of the 2008 Financial Crisis

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Experts point to a variety of issues that likely caused the 2008 financial crisis, such as modern banking practices, unethical behavior or government policy. The available evidence suggests, however, that a convoluted interaction between the public sector and private sector business was the primary culprit.



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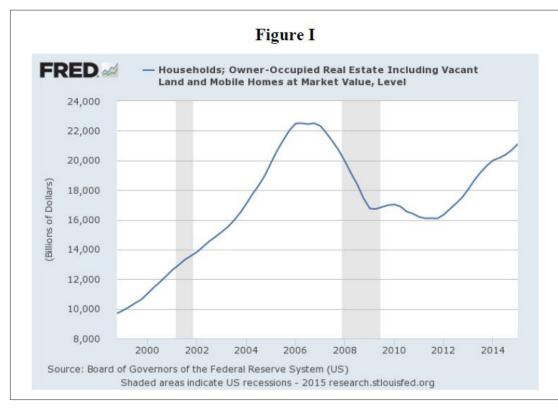


This relationship created the subprime mortgage crisis, which caused the 2008 meltdown. Why is this crisis any different, though? After all, government action in private finance is not a new phenomenon.

Evolution of the Financial Industry. In response to a shortage of credit available to residents in low-income communities, Congress passed and President Jimmy Carter signed the 1977 Community Reinvestment Act (CRA). The CRA promoted standardized lending practices for borrowers regardless of race, income or location and mandated that federally insured banks not engage in redlining, the refusal to extend credit to people living in particular locations. Government regulators used CRA as its authority to evaluate banks' lending practices to ensure financial institutions did not deny credit to the areas they serve. The CRA proved to be a precursor for other future government intervention in the housing market.

In the late 1980s and early 1990s, the savings and loans crisis prompted further changes in regulation, government policy and banking procedures. Savings and loans associations (S&Ls), known as thrifts, served as a type of local financial institution specializing in savings deposits and consumer loans. The government also insured these associations to encourage investment and savings among fixed-income families and individuals. However, between rising inflation, government spending, and other economic factors in the 1970s and early 1980s, S&Ls found themselves with increased debt and decreased capital. Despite federal deposit insurance, many associations went under. And government deregulation policies that followed did little to recover investor money from the failed S&Ls. Federal guarantees for these institutions could not overcome the consequences of their collapse.

Meanwhile, the failure of these smaller, government-backed S&Ls precipitated a growth in larger financial institutions. The Gramm–Leach–Bliley Act (GLBA), also known as the Financial Services Modernization Act, passed Congress in November 1999. It legalized mergers between banks, insurance companies and securities firms previously outlawed by the Glass-Steagall Act of 1933. After GLBA, large investment institutions grew into even larger corporate institutions. Several instances of corporate corruption at large, publically-held companies like Enron — an American energy and commodities company found to have engaged in systemic



accounting fraud in 2001 — inspired regulatory action. In response, the federal government passed the Sarbanes-Oxley Act of 2002, which gave the Securities and Exchange Commission (SEC) — the chief federal financial regulator — new authority to detect and prevent systemic fraud at these massive financial institutions. These government regulatory powers were intended to prevent future fraudulent activity, protect the investor and ultimately promote the market's financial stability.

Government Policy

The federal government's increased intervention in the marketplace in the years before and after the 2008 financial crisis contributed to and then deepened the crisis.

Cause: Tax Policy Fueled the Housing Bubble.

The tax deduction for home mortgage interest remains one of the most popular item for taxpayers. Though the government phased out deductions for interest on car loans and credit cards in the early 1990s, the home mortgage interest deduction remained. This policy led to an increase in the number of financial institutions offering home equity loans, advertised as an option for paying off expensive, nondeductible consumer debt. The Clinton administration followed that in 1997 by passing a tax bill which gave homeowners the right to take up to \$500,000 in profits on their home tax free.\(^1\) The policy fueled the housing bubble and caused a significant increase in home

values [see Figure I].

Cause: Land Use Regulation Drove an Artificial Rise in Home Prices. During the 1970s and 1980s, cities and counties throughout California enacted zoning regulations that limited new home permits. Naturally, these policies drove up the price of existing land and, thus, led to a significant increase in home prices throughout the state. For example, a medianpriced home in San Jose cost about 40 percent more than a median home in Atlanta in 1976, partly due to higher incomes. By 2008, the same home in San Jose cost nearly five times that of an Atlanta home. To date, other than Nevada, 90 percent of which is owned by the federal

government, Florida is the only state "hot" market to have revised its state or local growth-management laws.

Cause: Low-quality Loans at Fannie Mae and Freddie Mac. The U.S. government constantly urged Fannie Mae and Freddie Mac, both government-sponsored enterprises (GSEs) — private financial institutions created by Congress — to increase access to credit for borrowers by buying and guaranteeing low-quality loans. In September 2009, Fannie Mae eased credit to aid mortgage lending in an effort to increase homeownership among those who generally did not qualify for a conventional loan.

Franklin D. Raines, then chairman and CEO of Fannie Mae, said the company had "expanded homeownership for millions of families in the 1990s by reducing down payment requirements." He added, however, that "too many borrowers whose credit [was] just a notch below... our underwriting [standards]... have been relegated to paying significantly higher mortgage rates in the so-called subprime market." Thus, Fannie Mae helped lenders extend loans for which people did not qualify at interest rates they could not afford.

Cause: Government Policy Encouraged Poor Mortgage Underwriting Standards. Beginning in the 1990s, Henry Cisneros, a former head of the Department



of Housing and Urban Development (HUD), loosened mortgage restrictions to make it easier for first-time buyers to purchase a home.³ Then, in 1994, Nehemiah Corporation of America, a California-based nonprofit, began a program to "boost homeownership for the less affluent."⁴ To do this, Nehemiah Corp and other notfor-profit groups, such as Ameridream Charity, Inc., Neighborhood Gold and Partners in Charity, provided down payments with money received from the builder to individuals otherwise unable to purchase a home.

Recognizing these buyers as default risks, the Federal Housing Administration (FHA) initially refused to guarantee those mortgages; but the policy changed by mid-1990s, and the FHA began accepting the loans. By September 2002, almost 20 percent of borrowers participating in nonprofit mortgage programs were at least 90 days behind on payments, according to a HUD report. By October 2007, the FHA published a new rule stating they would no longer accept loans with a down payment that came from a charity. Former Treasury Secretary George Shultz explained that "People and institutions behave more responsibly when they have some of their own equity at stake, some 'skin in the game.' The current financial crisis emerged after this principle became virtually inoperative." Substandard lending requirements affected other sectors as well.

Forty percent of all home loans issued in 2006 were either subprime or Alt-A, loan-types reserved for highrisk borrowers. In addition, banks issued \$750 billion of option adjustable-rate mortgages, or option ARMs, from 2004 to 2007.⁶ Lenders typically provided these mortgages to borrowers with higher credit scores than those only eligible for subprime mortgages. The rise in interest rates leading up to 2008 triggered rate adjustments to the ARMs and subprime mortgages. Both ARMs and subprime borrowers began defaulting as home prices declined and interest payments increased. By the end of 2006, the total U.S. residential mortgage debt was \$10.3 trillion, almost double the level six years earlier.

By December 2008, 28 percent of option ARMs were delinquent or in foreclosure. This breakdown in the mortgage market had far-reaching consequences since banks shared these subprime and ARM mortgages as complicated investments.

Cause: Derivatives Spread Bad Loans Across the Marketplace. The innovative market techniques that encouraged subprime lending, such as credit default swaps and other derivatives, represented another layer of lenders' interconnectedness. Derivatives [see the sidebar "Derivatives"] operated as parts of other complex and tightly coupled products shared between financial institutions. Therefore, one firm's problems negatively impact other firms. In response to the complex securities, Warren Buffett warned in 2008, "All I can say is beware of geeks . . . bearing formulas." However, derivatives remained popular:

- At the end of 2007, derivatives, including interest rate swaps, had a gross value of \$393 trillion.
- The derivatives market as of November 17, 2008, had reached \$531 trillion, up from \$106 trillion in 2002 and even smaller numbers 20 years ago.

Some defended the products and procedures. Robert Pickle, head of the International Swaps and Derivatives Association (ISDA), argued that bad mortgage lending, not derivatives, caused the crisis. Nevertheless, if credit default swaps were not the primary cause of the problem, they certainly accelerated the problem.

Cause: Existing Regulation Missed the Crisis and Inspired Regulatory Overcorrection. Under the Bush administration, regulatory spending increased 68 percent, the largest increase in decades. In 2003 alone, regulatory spending jumped 24 percent, the largest in 50 years. In the wake of the crisis, however, some government reports identified supposed weaknesses in government regulation of large financial institutions, noting that regulators failed to take strong action against violators until after the financial crisis became apparent.

Derivatives

A derivative is merely a dependent investment vehicle, which can be comprised of a variety of assets, such as stocks, bonds, commodities and currencies. The derivative acts as a contract between two or more parties and its value is determined by fluctuations in the asset. The derivative can be used to hedge risk, or for speculative purposes. Hedging essentially insures against a default by a party to a contract or a fall in the value of an asset. Therefore, the nominal dollar value associated with the derivatives market can be much greater than physical capital or cash reserves.

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Since the government deemed previous regulations ineffective, the U.S. Treasury submitted an unprecedented level of new regulations, which included strengthening capital and risk-management standards, requirements for hedge-fund registration, comprehensive oversight of derivative exchange and greater oversight of money-market funds. The Treasury also called for the establishment of a systemic-risk overseer and the creation of a new resolution authority.

Some financial experts refused to accept the government's response to the crisis as a regulatory problem. For example, Martin Crutsinger of the Associated Press and Bill Fleckenstein, a Seattle-based hedge fund manager, said the U.S. government simply needed "to enforce the rules" already in place, calling the crisis a "complete breakdown by all our regulators." In addition, University of Pennsylvania professors Francis Dibold and David Skeel warned that regulatory reforms giving the U.S. government authority to take control of troubled investment banks were an overreach and "a big mistake." ¹¹⁰

Cause: Federal Reserve Policies. The Federal Reserve has taken a more active role in the U.S. economy since the government dropped the gold standard in 1973. In years immediately leading up to the 2008 crisis, the Federal Reserve regularly, arbitrarily injected credit into the system, giving false assurances of economic growth. The economic boom pushed interest rates to their lowest point since the 1970s. Low interest rates attracted more borrowers and debt increased among homeowners. But the Fed's monetary inflation policies were unsustainable, leading to a bust. Interest rates on adjustable rate mortgages jumped, causing widespread defaults.¹¹

Banking Strategies

Major adjustments to banking practices in the financial sector leading up to 2008 and the growth of large institutions represent a second category of potential causes behind the financial crisis.

Cause: Structural Changes in the Banking Industry. In 2002, Donald D. Hester, professor of economics at the University of Wisconsin, said that banks had increasingly discarded their "traditional mode of financing loans and investments with deposits they collect," and had become brokers for loan origination. These bankers-turned-brokers used "securitization to lodge" mortgages with less-informed investors, which made the products more "vulnerable to losses." These products only became more complicated as vehicles for investments.

Banks began setting up fee-based conduits — pools of loan investment options — to issue commercial paper

(short-term unsecured promissory notes) to investors and companies seeking relatively safe, short-term investments.¹³ These conduits, originally assets from one company or bank, increasingly consisted of subprime mortgages and subprime mortgage securities. By 2007, these conduits accounted for approximately half of the \$3 trillion global commercial paper market. Unlike other structured investment vehicles (SIV), however, these conduits were off-the-balance sheet assets and therefore went unreported. The undisclosed SIVs began to collapse when the subprime-mortgage crisis hit. The "Shadow Banking System," or off-the-balance sheet process outside of the regular banking system, contributed to the ensuing recession.

Cause: Securitization Obscured Investment Vulnerabilities. On December 3, 2007, Bill Gross, chief investment officer and founder of Pacific Investment Management Company, termed the emerging mortgage crisis as "too securitized to fail." Gross called the securitization process "garbage in, garbage out." On August 29, 2007, Christopher Wood, equity strategist and banker, added that securitization was the chief culprit of the mortgage crisis.

Securitization — the process of marketing a financial instrument made up of different financial assets — hid the risk from investors within mortgage-based collateralized debt obligations (CDO), or securities that repackage income from a pool of bonds, derivatives or investments. Many of these mortgage CDOs owned pieces of bonds, each containing thousands of individual mortgages. A CDO then issued a new set of securities, each bearing a different degree of risk. Securitization created an "agency problem," whereby managers of these assets did not have the incentive to provide investors with the truth regarding underlying economic risk.

Many different Wall Street firms, such as Lehman Brothers Holdings, Inc., transformed the subprime mortgage-securities market by guaranteeing bad loans, laying the groundwork for the 2008 crisis. For example, in 1995, Lehman sent a representative to California to review First Alliance Mortgage Company for possible funding. The vice president of Lehman called the California-based mortgage company a "financial sweatshop" specializing in "high pressure sales for people who were in a weak state." At First Alliance, he concluded, "employees leave their ethics at the door." Nevertheless, Lehman lent the mortgage company \$500 million and helped sell more than \$700 million in bonds backed by First Alliance customers' loans. First Alliance later collapsed and Lehman found itself in court, where a federal jury found Lehman guilty for helping First



Alliance defraud customers. Thus, in 2003, a federal jury in California issued a "\$50.1 million verdict in a class action against First Alliance, attributing 10 percent of the damages — \$5.1 million — to Lehman." 15

In a related lawsuit in Florida, local authorities found Lehman complicit in First Alliance's frauds and although it admitted no wrongdoing, Lehman agreed to pay \$400,000 in damages. Lehman representatives said they were proud for their role in "helping provide credit to consumers who might otherwise have been unable to buy a home." ¹⁶

Cause: Escalation in Home Prices and Interest on Loans Sparked Foreclosures.

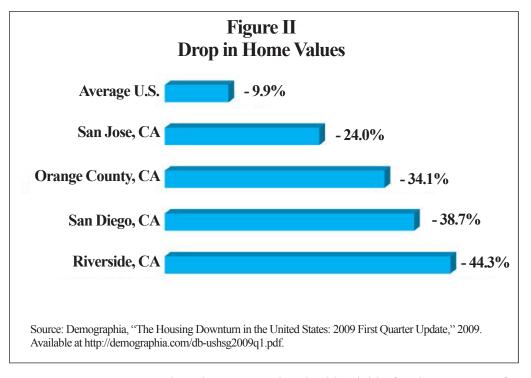
According to Professor of Managerial Economics Stan Liebowitz of the University of Texas at Dallas, the end in the rise of home prices triggered foreclosure problems beginning around mid-2006.¹⁷ Liebowitz argues these problems originated with the home loans with adjustable rate mortgage (ARM) options. He points out that the availability of these mortgage types encouraged home purchases, which caused home prices to escalate. Starting in 2006, foreclosures jumped sharply for both prime and subprime ARMs, whereas fixed rate mortgages of any kind, including subprime, did not. The drop in home prices from 2007 to 2008 was dramatic in some markets. [See Figure II.]

The Basel Committee on Banking Supervision changed international bank capital rules in 2004, known as the Basel accords, requiring banks to increase capital held against loans on their books and lowering the amount of

Cause: Change in Bank Capital Requirements.

against loans on their books and lowering the amount of capital banks needed to hold for securities. Banks reacted by changing their real estate loans into real estate-backed securities, which required them to carry less capital and allowed them to leverage their paper assets more easily.

Cause: Large Amount of Loans to Investors not Homeowners. In 2007, the Mortgage Bankers Association found that 21 percent to 32 percent of all the defaults on prime quality home loans in Arizona, California, Florida and Nevada involved homes not occupied by the owner. The homes were investments,



bought, renovated and sold quickly for short-term profits. Many of these investors put down 2 percent to 3 percent on the loans and took option ARM mortgages. One woman in Las Vegas bought 16 houses in the same subdivision.

Cause: Financial Institutions Allowed to Hold Much More Debt than Capital. A leverage ratio is a financial measure of a company's debt-to-capital inflow, formulated as Average of Total Assets / Average of Total Equity. At the close of 2007, the leverage ratio on the reported assets of Morgan Stanley was 32.6 to 1. Others found themselves in a similar situation: Bear Stearns had a 32.8 to 1 ratio; Lehman, 30.7 to 1; Merrill Lynch, 27.8 to 1; and Goldman Sachs, 26.2 to 1. The problem of holding more debt than capital stemmed from an April 2004 meeting between bank executives (including future U.S. Treasury Secretary Henry M. Paulson, Jr., then Chairman of Goldman Sachs) and U.S. government officials. During the meeting, SEC chairman William Donaldson agreed to allow five of the largest investment banks to increase their leverage ratios and, in return, they agreed to additional SEC monitoring of their financial companies. Under the next SEC Chairman, Christopher Cox (August 2005 through January 2009), there was virtually no oversight.

On March 11, 2008, Christopher Cox tried to reassure observers by announcing that the federal government had a "good deal of comfort about the capital cushions at these firms at the moment," referring to Goldman Sachs

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and others.¹⁸ Others remained unconvinced. George Shultz wrote in January 2009 that financial intermediaries had packaged poorly underwritten, subprime mortgages and "traded in them, in all too many cases with very high (30 or more to 1) leverage." There was simply very "little equity in these deals," he concluded.¹⁹

Cause: Mark-to-market Accounting Created False Asset Values. In 2008, after information surfaced that financial institutions carried assets that did not have readily available market values, the Financial Accounting Standards Board (FASB) — a private organization recognized by federal law as the official standards-selling organization for accounting, auditing and financial reporting — passed Status of Statement 157, which addressed mark-to-market accounting, or fair value measurements. The statement concluded that companies should carry assets and liabilities at market value, if that was less than the historical cost. [See the "Mark-to-market Accounting" sidebar.] The FASB later added amendments in April 2009 to provide banks more flexibility in how they treated assets that produced cash flows but had limited marketability. Yet, the procedural change came too late for some.

Moral Hazards

The final category of causes for the financial crisis involves public and private sector corruption leading up to and during the 2008 meltdown.

Cause: Appraisal Fraud. The FBI received reports of more than 35,000 cases of mortgage fraud totaling almost \$1 billion in losses in 2006, up from 7,000 reports in 2003.²¹ One fraud technique, called the "foreclosure rescue," involved companies that targeted homeowners facing foreclosure with a temporary refinancing or sale plan. In short, the homeowner remained in the home and made larger monthly payments to the refinancers. But if the owner defaulted, he or she lost their home entirely, and the scam artist then sold the home and kept the equity.

A September 2004 FBI report said the current "epidemic of mortgage fraud" could plunge the country

into financial collapse."²² Chris Swecker, an assistant director at the FBI, testifying two months later before a House Banking subcommittee, called the problem "pervasive and growing."²³ By 2007, the FBI had opened 1,200 mortgage fraud investigations, up from 436 in 2003. Despite the investigations and previous testimony, Attorney General Eric Holder told the Financial Crisis Inquiry Commission that he knew nothing of the September memo in January 2010.

Cause: Fraud by the Borrower. Some borrowers employed a technique known as "silent seconds," or not disclosing to the first lien holder that the alleged down payment was borrowed from another lender. In 2006, this fraudulent practice accounted for 25 percent of subprime mortgages and 40 percent of Alt-A mortgages. Other less pervasive fraud included predatory lending, liar loans — loans with overstated income — and so-called Ninja loans, or low-quality, subprime loans.

Cause: Fraud and Greed in the Lending Process. Mortgage brokers and nonbank mortgage companies such as Ameriquest routinely lied on mortgage loan applications, misstating the income of borrowers. Meanwhile, an emphasis on fee-based commissions became a new business model, according to one observer, which debased the process from drafting quality loans to collecting fees for processing products or inventory. These business practices encouraged lenders to increase the volume of sales at almost any cost. In fact, former employees of Countrywide Financial Corporation told the *Wall Street Journal* in August 2007 that finding the borrower the best loan possible was not the goal. Profit remained the sole prize. The company made as much as 15 percent profit from specialized or subprime mortgages:

■ In 2004, Countrywide's gains from subprime loans jumped to 3.64 percent, whereas earnings dropped to 0.93 percent for prime loans. During this lending period, Countrywide's profit margins generally came in around 3 percent to 5 percent on loans from \$100,000 to \$500,000.

"Mark-to-market Accounting"

Mark-to-market accounting forces firms to revalue their assets to current market prices, such as a stock's price at the close of business. According to Milton Friedman, mark-to-market accounting was responsible for many banks failing during the Great Depression. In fact, President Roosevelt suspended it in 1938. The practice reappeared in the mid-1970s and was formally reintroduced in the early 1990s. In 2008, mark-to-market accounting rules, enforced by regulators, forced the drastic write-down in the value of mortgage-backed securities (MBS). As a result, subprime mortgages in these MBS pools began defaulting at a higher rate and the market for MBSs dried up.²⁰



■ In 2006, Countrywide earned \$11.4 billion in revenue. Of that revenue, subprime loans generated 1.84 percent profit versus only 1.07 percent earnings from prime or regular loans.

The enforcement and oversight wing of the federal government failed to react. Harry Markopolos, an independent financial fraud investigator, appeared before Representative Paul Kanjorski (D-Penn.) and the House Committee on Financial Services in January 2009 concerning Bernie Madoff — a former stockbroker and financial adviser arrested for securities fraud in December 2008. The Committee asked Markopolos to compare the SEC and the Financial Industry Regulatory Authority (FINRA) — a private, regulatory organization for the U.S. banking industry — to which he replied, "The SEC is incompetent, FINRA is corrupt." Interestingly, Mary Schapiro, then head of the SEC, was formerly the head of FINRA. She was paid about \$3 million a year with a multimillion dollar FINRA exit package. While corruption existed on the government level, greedy lending practices could be found throughout the private sector.

Cause: Corruption and Poor Performance at Bond **Rating Agencies.** The three largest bond rating agencies, Standard & Poor's, Fitch and Moody's, took significant payments from firms that packaged and sold risky mortgage-based securities leading up to the 2008 financial crisis. As a result, these agencies gave AAA ratings to many low-quality assets, which enabled financial institutions to sell them at a good price in the global market. In fact, American Insurance Group (AIG) — a U.S.-based, multinational insurance corporation — itself had an AAA credit rating until 2005. Standard & Poor's board of directors would go on to fire their president on August 31, 2007, as news emerged about the corrupted rating process. Stephen Schwarzman, chairman and CEO at the American-based financial services firm Blackstone Group, called credit-rating firms the "number one culprit" in the 2008 financial crisis.²⁴

Cause: Increase in Lobbying. From 1992 to 2009 the top 25 subprime mortgage originators spent \$380 million on lobbying and campaign contributions. Financial institutions like Citigroup, Wells Fargo, Countrywide and the Mortgage Bankers Association spent heavily on lobbying and gave millions in political donations in their fight against state lending restrictions. Ameriquest Mortgage Company, one of the America's largest lenders at the time, gave more than \$20 million in political donations. President Bush accepted \$200,000 from Ameriquest founder Roland Arnall and his wife, while members of Congress received donations totaling

\$645,000 from Ameriquest and other big subprime lenders. Ameriquest closed in September 2007 and Arnall died in 2008, but not before being named Ambassador to the Netherlands — likely a political payoff for the donations.

Cause: Lack of Trust in the Market. Anna Schwartz, a veteran American economist, said in 2008 that the United States suffered from lack of trust in the system rather than a shortage of liquidity, as the Federal Reserve had claimed. The crisis emerged because of "a lack of faith in the ability of borrowers to repay their debts." She argued the basic problem for the markets involved the "uncertainty that the balance sheets of financial firms [were] credible."25 Similarly, the Chairman of the Financial and Banking Services Subcommittee, Representative Paul Kanjorski (D-Penn.), pointed to the \$550 billion electronic run on the banks on September 5, 2008, as the primary event triggering the financial crisis. This run on banks occurred around the same time that the Reserve Primary Fund — a money market mutual fund -"broke the buck," meaning the fund closed with less than a \$1 per share net asset value. People panicked and began withdrawing from money market funds.

Conclusion

There is no shortage of alleged causes for the 2008 financial crisis. From government interference and public sector mismanagement to instances of corruption in both the private and public sectors, the list of explanations goes on without end. Yet, the exact origins of the crisis are not elusive. By grouping the major and reasonable arguments into three digestible categories, the roots of the financial crisis become clearer: increased government intervention in the marketplace, particularly the mortgage business, and changes in banking strategies together planted the seeds for financial ruin and created an environment ripe for corruption. Although the blame seems widespread, we can isolate the root causes. The priority now is to use this evidence to ensure history does not repeat itself.

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Notes

- 1. "Taxpayer Relief Act of 1997," Government Printing Office. Available at https://www.gpo.gov/fdsys/pkg/PLAW-105publ34/html/PLAW-105publ34.htm.
- 2. Stephen A. Holmes, "Fannie Mae Eases Credit To Aid Mortgage Lending," *New York Times*, September 29, 1999. Available at http://www.nytimes.com/1999/09/30/business/fannie-mae-eases-credit-to-aid-mortgage-lending.html.
- 3. David Streitfeld and Gretchen Morgenson, "Building Flawed American Dreams," *New York Times*, October 18, 2008. Available at http://www.nytimes.com/2008/10/19/business/19cisneros.html.
- 4. Patrick Barta and Queena Sook Kim. "Home Buyers' Down Payments Are Now Paid by Some Builders," *Wall Street Journal*, December 10, 2002 and available at http://www.wsj.com/articles/SB1039474754164344953; Patrick Barta and Queena Sook Kim, "How Much Does 'free' Cost?" *Chicago Tribune*, December 22, 2002, available at http://articles.chicagotribune.com/2002-12-22/business/0212220182_1_scott-syphax-down-payment-gift-nehemiah.
- 5. George Shultz, ",Think Long' to Solve the Crisis," *Wall Street Journal*, January 30, 2009. Available at http://www.wsj.com/articles/SB123327859990131639.
- 6. Ruth Simon, "Option Arms See Rising Defaults," *Wall Street Journal*, January 30, 2009. Available at http://www.wsj.com/articles/SB123327627377631359.
- 7. Carrick Mollenkamp, Serena Ng, Liam Pleven and Randall Smith, "Behind AIG's Fall, Risk Models Failed to Pass Real-World Test," *Wall Street Journal*, October 31, 2008. Available at http://www.wsj.com/articles/SB122538449722784635.
- 8. "Bush Regulatory Spending Breaks Records," Newsroom, University of St. Louis, August 8, 2008. Available at http://news.wustl.edu/news/Pages/12114. aspx.
- 9. "White House Proposes Tough Financial Rules." *Herald-Dispatch*, March 27, 2009. Available at http://www.herald-dispatch.com/news/x1354049936/White-House-proposes-tough-financial-rules.
- 10. Francis Dibold and David Skeel, "Geithner Is Overreaching on Regulatory Power," *Wall Street Journal*, March 27, 2009. Available at http://www.wsj.com/articles/SB123811070760052941.
- 11. Matt Kibbe, "The Federal Reserve Deserves Blame for the 2008 Financial Crisis," *Forbes*, June

- 7, 2011. Available at http://www.forbes.com/sites/mattkibbe/2011/06/07/the-federal-reserve-deserves-blame-for-the-financial-crisis/#2715e4857a0b2885d445 6ae4.
- 12. Donald Hester, "U.S. Banking In The Last Fifty Years: Growth And Adaptation," 2012, Working Paper No. 37, Social Sciences Computing Cooperative, University of Wisconsin Madison. Available at http://www.ssc.wisc.edu/econ/archive/wp2002-19.pdf.
- 13. This is the classic use of short-term funds to finance long-term assets.
- 14. Carolyn Cui, "Lessons Learned From a Wild Year," *Wall Street Journal*, December 3, 2007. Available at. http://www.wsj.com/articles/SB119646127811809899.
- 15. Michael Hudson, "How Wall Street Stoked The Mortgage Meltdown," *Wall Street Journal*, June 27, 2007. Available at http://www.wsj.com/articles/SB118288752469648903.
- 16. Ibid.
- 17. Stan Liebowitz, "Anatomy of a Train Wreck," Policy Report No. 29, 2008, Independent Institute. Available at http://www.independent.org/pdf/policy_reports/2008-10-03-trainwreck.pdf.
- 18. Stephen Labaton, "Agency's '04 Rule Let Banks Pile Up New Debt," *New York Times*, October 2, 2008. Available at http://www.nytimes.com/2008/10/03/business/03sec.html?pagewanted=all&_r=0.
- 19. George Shultz, "'Think Long' to Solve the Crisis."
- 20. Bob McTeer, "Mark to Market Accounting: Shooting Ourselves in the Foot," National Center for Policy Analysis, Brief Analysis No. 648, March 24, 2009. Available at http://www.ncpa.org/pub/ba648.
- 21. Paul Davies, "Mortgage Fraud is Prime," *Wall Street Journal*, August 18, 2007. Available at http://www.wsj.com/articles/SB118738294512001287.
- 22. Daniel Wagner, "AG Holder Pressed on FBI's Mortgage Fraud Focus," *Boston.com*, January 14, 2010. Available at http://www.boston.com/business/articles/2010/01/14/ag_holder_pressed_on_fbis_mortgage fraud focus.
- 23. Ibid.
- 24. "Overheard." *Wall Street Journal*, March 11, 2009. Available at http://www.wsj.com/articles/SB123673441245690581.
- 25. Brian Carney, "Bernanke Is Fighting the Last War." *Wall Street Journal*, October 18, 2008. Available at http://www.wsj.com/articles/SB122428279231046053.