Not Fannie and F	reddie: Wall Street's Trillion-Dollar Fraud Machine
Inside the Machines	s of Mortgage Madness, Derivatives, and the CDS Time Bomb
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The author has no known conflict of interest to disclose.

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Abstract

This paper challenges the conventional narrative that government-sponsored enterprises (GSEs) and affordable housing policies caused the 2008 financial crisis. Through detailed analysis of the origination, securitization, and distribution chain, I demonstrate that private-label mortgage-backed securities and the unregulated credit default swap market were the primary drivers of the crisis. The evidence shows that toxic loan products—including no-documentation loans and hybrid adjustable-rate mortgages with payment shocks exceeding 70%—were deliberately engineered by private originators operating under perverse fee-based incentive structures. Investment banks securitized these loans while conducting inadequate due diligence, creating complex collateralized debt obligations that amplified systemic risk. The \$62 trillion credit default swap market, particularly AIG's \$500 billion in mortgage-related exposure, transformed a housing bubble into a global financial catastrophe through counterparty contagion. GSE participation in risky lending came late (2005-2007) and remained modest compared to private-sector dominance. Analysis of the 2023 Silicon Valley Bank and Credit Suisse failures reveals that fundamental vulnerabilities—liquidity mismatches, concentration risk, regulatory forbearance, and moral hazard—persist fifteen years later, suggesting regulatory reforms have addressed symptoms while leaving causal mechanisms largely intact.

Keywords: Financial Crisis, Securitization, Credit Default Swaps, Private-Label MBS, Shadow Banking, Subprime Mortgages, Collateralized Debt Obligations, Fannie Mae, Freddie Mac, Government-Sponsored Enterprises, Moral Hazard, Systemic Risk, AIG, Banking Regulation, Silicon Valley Bank

JEL Classification Codes: G01 (Financial Crises), G21 (Banks; Depository Institutions; Micro Finance Institutions; Mortgages), G23 (Non-bank Financial Institutions; Financial Instruments; Institutional Investors), G28 (Government Policy and Regulation), G32 (Financial Policy; Financial Risk and Risk Management; Capital and Ownership Structure), E44 (Financial Markets and the Macroeconomy)

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Introduction

The 2008 financial crisis remains the most severe disruption to global financial markets since the Great Depression, yet its causes continue to provoke intense debate in both academic and policy circles. A prominent narrative attributes primary responsibility to government-sponsored enterprises (GSEs)—Fannie Mae and Freddie Mac—and to affordable housing policies. According to this view, government mandates distorted mortgage markets by compelling financial institutions to extend credit to unqualified borrowers (Wallison, 2011; Pinto, 2010; Calomiris & Haber, 2014). This interpretation has achieved significant traction in policy discourse and continues to shape contemporary debates on regulatory reform.

However, this account overlooks key evidence concerning both the timing and magnitude of GSE participation in risky lending, while obscuring the decisive role of private-sector actors in originating, securitizing, and distributing high-risk mortgage products (Mian & Sufi, 2009). This paper argues that the subprime mortgage bubble and subsequent financial collapse were driven primarily by private-label securitization, not by GSE activity or government housing policy. The analysis reveals a system of misaligned incentives permeating the entire financial intermediation chain. Private mortgage originators, rewarded for loan volume rather than performance, designed products such as no-documentation loans and hybrid adjustable-rate mortgages that generated short-term profits but guaranteed long-term instability. Investment banks purchased these loans, conducted perfunctory due diligence that identified but routinely waived defects, and pooled them into mortgage-backed securities (MBS) and collateralized debt obligations (CDOs) (Segoviano et al., 2013).

Credit rating agencies, compensated by issuers rather than investors, assigned inflated ratings to securities backed by loans that failed to meet stated underwriting standards (Yale Program on Financial Stability, 2020). These securities were sold to global investors with limited visibility into the underlying loan quality. When housing prices stopped rising and refinancing became impossible, defaults surged and the entire edifice collapsed—magnified by a \$62 trillion credit default swap (CDS) market that created vast, unregulated exposures (McDonald & Paulson, 2015). The near-failure of American International Group, whose \$500 billion in mortgage-related CDS obligations necessitated a \$182 billion federal rescue, demonstrates the systemic fragility inherent in this architecture (McDonald & Paulson, 2015).

The GSE role, while not negligible, was both temporally and proportionally secondary. During the bubble's expansion phase, GSE market share declined from over 60 percent of mortgage securitization in 2003 to roughly 44 percent by 2006—precisely when private-label issuance surged. Fannie Mae and Freddie Mac's purchases of private-label securities and Alt-A loans occurred primarily between 2005 and 2007, after the private sector had already inflated the bubble (Pescatori & Sole, 2016; Segoviano et

al., 2013). These actions represented a late-cycle attempt to preserve market share rather than a causal driver of the crisis. Moreover, traditional agency mortgage-backed securities—those backed by conforming loans meeting GSE underwriting standards—performed far better than private-label securities throughout the downturn, underscoring the relative conservatism of GSE underwriting practices even at their loosest.

Beyond documenting the crisis's origins, this paper evaluates whether the structural vulnerabilities that enabled the 2008 collapse have been effectively addressed through subsequent regulatory reforms. Recent institutional failures—most notably Silicon Valley Bank and Credit Suisse in 2023—suggest they have not (Metrick, 2024). Both exhibited the same underlying pathologies evident in 2008: severe duration and liquidity mismatches between assets and liabilities, concentrated risk exposures, inadequate regulatory oversight, and moral hazard generated by implicit government backstops. These parallels indicate that post-crisis measures such as the Dodd-Frank Act and Basel III capital requirements have mitigated certain symptoms without resolving deeper incentive misalignments (Pescatori & Sole, 2016).

The financial system thus remains characterized by institutions that profit from originating and distributing risk rather than managing it, by shadow banking activities that migrate beyond formal regulation, and by compensation structures that prioritize short-term returns over long-term stability—incentive misalignments that remain largely unaddressed despite fifteen years of regulatory reform.

The paper proceeds as follows. It first examines the mortgage origination process and the erosion of underwriting standards under volume-based compensation, illustrating how incentive structures undermined credit quality. The next part analyzes the securitization machinery operated by investment banks to reveal how due diligence failures and the proliferation of collateralized debt obligations (CDOs) amplified systemic risk. The discussion then turns to the credit default swap (CDS) market, showing how it transformed localized housing losses into a systemic crisis, with particular attention to the collapse of AIG as a pivotal case study. The analysis continues by assessing the role of government-sponsored enterprises (GSEs) through market share dynamics, timing of risk exposure, and comparative performance between agency and private-label securities. It then traces the unfolding of the crisis and connects the 2008 collapse to more recent banking failures as evidence of persistent structural vulnerabilities within the financial system. Finally, the paper concludes with policy implications for regulatory design and long-term systemic resilience.

The Machine That Built the Bubble

Between 2000 and 2008, American financial markets constructed an elaborate machinery for transforming risky mortgages into seemingly safe securities. This transformation would ultimately trigger the worst financial crisis since the Great Depression, but its origins lay not in government policy or affordable housing mandates, but in the private sector's relentless pursuit of profit through securitization (Financial Crisis Inquiry Commission, 2011; Ashcraft & Schuermann, 2008).

The process began at the origination layer, where loans entered the financial system. Two distinct types of lenders competed for borrowers: traditional bank originators like Countrywide Financial, Washington Mutual, Wachovia, and IndyMac possessed banking licenses and could lend directly from balance sheets (Financial Crisis Inquiry Commission, 2011; Fligstein et al., 2017). Alongside them operated non-bank originators such as New Century, Ameriquest, Fremont, and Option One, along with thousands of smaller mortgage brokers who lacked banking licenses but compensated through sheer volume. These non-bank lenders faced a perverse incentive structure: their fees derived entirely from loan volume rather than loan quality, creating an irresistible temptation to approve as many mortgages as possible regardless of borrower creditworthiness (Jaffee, Lynch, Richardson, & Van Nieuwerburgh, 2009).

Non-bank originators relied on warehouse credit lines from major financial institutions like Merrill Lynch and Lehman Brothers to temporarily fund their operations (Fligstein et al., 2017). Under this arrangement, investment banks lent money secured by newly originated mortgages. Once originators accumulated sufficient loans, these same banks would purchase the entire pool and finance its transformation into mortgage-backed securities. This warehouse relationship created a direct pipeline from the riskiest borrowers to Wall Street's securitization machinery, with investment banks serving simultaneously as creditors to originators and ultimate buyers of their products (Financial Crisis Inquiry Commission, 2011; Ashcraft & Schuermann, 2008).

The Race to the Bottom: Underwriting Standards Collapse

The most fundamental cause of the crisis lay in the systematic abandonment of prudent lending standards. Between 2003 and 2007, the mortgage industry engineered a deliberate deterioration in loan quality driven by compensation structures that rewarded volume over sustainability. Loan officers, brokers, and branch managers received commissions and bonuses tied directly to the number and size of loans they originated, with no accountability for subsequent performance. A broker might earn \$10,000 to \$20,000 in fees for closing a single jumbo mortgage, regardless of whether the borrower ever made a payment (Financial Crisis Inquiry Commission, 2011, p. 89). This created overwhelming pressure to approve loans by any means necessary.

The industry responded with an alphabet soup of toxic products designed to qualify borrowers who had no realistic ability to repay. No-documentation loans—industry insiders cynically called them "liar loans"—allowed borrowers to state their income without providing pay stubs, tax returns, or any verification whatsoever. NINJA loans (No Income, No Job, No Assets) took this further, essentially granting mortgages based on little more than a credit score and a pulse. Alt-A products filled the space between prime and subprime, offering reduced documentation requirements to borrowers who could technically afford traditional mortgages but preferred to avoid scrutiny of their actual financial situation.

The most destructive innovations involved adjustable-rate mortgages engineered to fail. The infamous 2/28 and 3/27 hybrid ARMs offered initial "teaser" rates as low as 2 to 3 percent for the first two or three years, then reset to fully indexed rates calculated as the prevailing index rate (typically one-year

LIBOR, around 5 percent in 2005-2006) plus a margin of 2.5 to 3 percentage points. This meant rates would triple from around 2.5 percent to 7.5 percent or higher after the initial period expired. The payment shock was devastating: a borrower with a \$200,000 mortgage at 2.5 percent would face monthly payments of approximately \$790 that would surge to \$1,400 after reset—a 77 percent increase, or an additional \$610 per month that most subprime borrowers living paycheck-to-paycheck could never sustain.¹ Crucially, lenders qualified borrowers based solely on their ability to afford the initial teaser payment, not the post-reset payment they would inevitably face. Option ARMs went even further, allowing borrowers to make minimum payments below even the interest due, with the shortfall added to the principal balance, meaning borrowers could actually owe more after years of payments than when they started (Mian & Sufi, 2009; Keys et al., 2010).

Originators pushed these products aggressively because they generated higher fees and, crucially, because securitization demand made them easy to sell. Investment banks paid premiums for loans with higher interest rates, and adjustable-rate products carried higher rates than fixed-rate mortgages. The originator could book the fee immediately, the investment bank could securitize the loan within weeks, and neither retained any exposure to the inevitable reset shock. When brokers presented these loans to borrowers, they emphasized the low initial payment while glossing over or actively concealing the reset terms. Many borrowers were told they could simply refinance before the rate adjusted—a promise that depended on continued home price appreciation that would prove catastrophic when it reversed.

The industry's own internal data revealed the scheme's unsustainability. By 2006, roughly 45 percent of subprime loans were no-documentation or low-documentation products (Mian & Sufi, 2009, p. 1456). Studies of stated-income loans showed that borrowers overstated their income by an average of 50 percent or more (Keys et al., 2010). Payment shock from ARM resets was predictable and massive: industry models showed that default rates would spike sharply 24 to 36 months after origination for hybrid ARMs, precisely when resets occurred. Yet originators continued issuing these loans at accelerating rates because their business model depended on volume, not on borrowers' actual ability to repay.

Investment banks actively encouraged this deterioration by signaling their appetite for any loan product, no matter how risky, that could be securitized. They sent account representatives to originator offices with explicit guidance on what loans they would purchase and at what prices. When originators asked whether loans with certain risk characteristics would be acceptable, the answer was almost invariably yes—the securitization machine needed constant feeding, and due diligence failures meant defective loans could be waived into securities anyway. This created a classic moral hazard: those making the lending decisions bore none of the risk of default.

The compensation structures extended beyond individual brokers to corporate leadership. Executives at origination companies like Countrywide, New Century, and Ameriquest received enormous bonuses tied to loan volume and company growth, incentivizing them to maximize production rather than maintain quality. Angelo Mozilo, CEO of Countrywide, personally earned hundreds of millions of dollars while steering his company toward increasingly aggressive subprime lending that would

eventually lead to its collapse and acquisition by Bank of America under government pressure (Financial Crisis Inquiry Commission, 2011).

This race to the bottom in underwriting standards represents the true foundation of the financial crisis. Without the flood of loans granted to borrowers with no realistic ability to repay, there would have been no raw material for the securitization machine. The toxic loan products—no-doc loans, NINJA loans, and payment-shock ARMs—were not aberrations or failures of oversight. They were the deliberate product of an incentive system that rewarded short-term fee generation while distributing long-term risk to distant investors who lacked any visibility into what they were actually buying. When housing prices stopped rising and borrowers could no longer refinance their way out of unaffordable resets, the inevitable wave of defaults began, and the entire edifice built on this foundation of fraudulent lending came crashing down.

The Investment Banking Assembly Line

The true architects of the crisis were the investment banks that dominated the securitization process: Goldman Sachs, Lehman Brothers, Merrill Lynch, Bear Stearns, Morgan Stanley, Deutsche Bank, UBS, and Citigroup's investment banking division. These institutions possessed the specialized expertise that ordinary commercial banks lacked—sophisticated capital markets knowledge, established relationships with rating agencies, and legal structuring capabilities necessary to manufacture complex securities (U.S. Senate Permanent Subcommittee on Investigations, 2011).

Their business model operated like an industrial assembly line. First, they warehoused and aggregated large pools of mortgages purchased from multiple originators. Next, they securitized these loans by moving them into special purpose vehicles (SPVs) and issuing mortgage-backed securities divided into tranches with different risk profiles: AAA-rated senior tranches, mezzanine tranches, and equity tranches. The process didn't stop there. Investment banks then repackaged mezzanine tranches from multiple mortgage-backed securities into collateralized debt obligations (CDOs), using financial alchemy to transform mediocre-rated securities into new AAA-rated instruments. These CDOs created an additional layer of demand that supercharged the entire system—when one CDO absorbed the riskier tranches of ten different MBS deals, it created demand for ten times more subprime mortgages (Ellul, Logan, & Tookes, 2013; Barnett-Hart, 2009).

The CDO market experienced explosive growth that fundamentally altered the economics of subprime lending. Between 2000 and 2006, issuance of subprime asset-backed CDOs surged fivefold from approximately \$10 billion to over \$50 billion annually (Nier & Qureshi, 2011). This growth wasn't merely a response to existing mortgage production; it actively drove demand for subprime mortgages by creating an insatiable appetite for the subordinated MBS tranches that served as CDO collateral. The feedback loop proved catastrophic: more CDO issuance meant more demand for risky tranches, which meant investment banks needed more subprime mortgages to securitize, which meant originators received even stronger incentives to approve questionable loans.

Investment banks then distributed these securities to pension funds, insurance companies, mutual funds, and foreign banks hungry for yield. Some banks, most notably Goldman Sachs, hedged their exposures by purchasing credit default swap protection or even shorting the same assets they sold to clients, effectively betting against their own products (U.S. Senate Permanent Subcommittee on Investigations, 2011; Ellul, Logan, & Tookes, 2013).

The Illusion of Due Diligence

The securitization process included what appeared to be safeguards. Investment banks hired third-party firms like Clayton Holdings and Bohan Group to conduct due diligence by examining samples of typically five to twenty percent of loans in each pool. These firms graded defective loans using scales like EV1 through EV3, with EV3 representing loans that failed to meet stated underwriting standards. Yet this due diligence proved largely theatrical (Financial Crisis Inquiry Commission, 2011). Banks routinely "waived in" defective loans, accepting them into securities at a small discount or requesting repurchases that frequently never materialized. Internal bank documents later revealed that executives knew substantial percentages of loans in their securities violated underwriting standards, yet securitization proceeded regardless.

The offering memoranda and pooling and servicing agreements that accompanied these securities contained carefully worded disclosures that provided legal cover while obscuring the true extent of the problems. These documents disclosed exceptions in deliberately vague language, creating plausible deniability for issuers while ensuring that investors bore the actual risk. The prospectuses were often hundreds of pages long, filled with technical jargon that obscured rather than clarified the underlying loan quality.

What made this facade work was the complicity of the credit rating agencies. Moody's, Standard & Poor's, and Fitch assigned AAA ratings to securities that would later prove nearly worthless. These agencies faced a fundamental conflict of interest: they were paid by the issuers whose securities they rated, not by the investors who relied on those ratings. Their models typically evaluated pool-level statistics and made optimistic assumptions about housing prices while systematically ignoring loan-level defects that due diligence had already identified. The rating agencies essentially provided the stamp of approval that allowed the entire machine to function (Ellul, Logan, & Tookes, 2013).

The Investor Blind Spot

On the other side of these transactions sat investors who bore the ultimate risk but possessed minimal information. U.S. pension funds, insurance companies, European banks like UBS, Royal Bank of Scotland, and IKB, along with sovereign wealth funds all purchased these securities based on prospectuses, pool summaries, and most importantly, credit ratings. They never accessed the original mortgage documents and had no ability to assess individual loan quality. Their investment decisions rested entirely on faith in AAA ratings and trust in the investment banks that structured these products.

Several factors drove institutional demand beyond simple yield-seeking. Regulatory arbitrage played a crucial role, as capital requirements under Basel II rules allowed banks to hold significantly less capital against AAA-rated securities than against equivalent mortgages on their balance sheets. European

banks in particular exploited this arbitrage, accumulating massive exposures to American mortgage securities. Additionally, many investors operated under mandates requiring investment-grade securities, making AAA-rated MBS and CDOs among their only options for enhanced yield in a low-interest-rate environment (Ellul, Logan, & Tookes, 2013).

The Credit Default Swap Market: Insurance Without Reserves

By 2006, Goldman Sachs recognized that the system had become unsustainable. While continuing to create and sell mortgage securities to clients, the firm simultaneously purchased credit default swap protection on mortgage-backed securities and CDOs, and in some cases directly shorted assets it was marketing to investors. When the market collapsed, Goldman's hedges generated substantial profits while many of its counterparties and clients suffered catastrophic losses. This behavior later sparked intense controversy and investigations, raising fundamental questions about conflicts of interest and fiduciary responsibilities in investment banking (U.S. Senate Permanent Subcommittee on Investigations, 2011).

Goldman's hedging strategy, however, was merely one visible manifestation of a shadow market that had grown to staggering proportions largely outside public view or regulatory oversight. By mid-2008, the notional amount of outstanding credit default swaps stood at approximately \$62 trillion according to the Bank for International Settlements—a figure roughly equal to the entire global GDP of \$60 trillion (Bank for International Settlements, 2008). While notional exposure overstates actual economic risk since many positions offset each other, even a five to ten percent loss across the CDS market would have represented trillions in realized losses with devastating systemic effects.

Credit default swaps functioned as insurance contracts on debt, but operated in a parallel universe without the regulatory safeguards that govern traditional insurance. When a bond or mortgage-backed security defaulted, the seller of CDS protection would pay the buyer the face value of the instrument. In theory, this allowed institutions to hedge risk by purchasing protection against defaults. Goldman Sachs and other sophisticated banks used CDS exactly this way, buying protection on subprime mortgage-backed securities to offset their exposures. When defaults surged, these hedges generated profits even as the underlying mortgage securities lost value (Nier & Qureshi, 2011).

The market's explosive growth, however, came not from hedging but from speculation. Unlike traditional insurance where you must own a house to buy fire insurance on it, CDS contracts could be purchased by anyone betting on default regardless of whether they held the underlying security. This created a multiplier effect where multiple CDS contracts existed for every dollar of actual debt outstanding. Speculators could effectively place unlimited bets on whether mortgage securities would fail, amplifying both the profits from correct predictions and the losses from wrong ones. The distinction between hedging and speculation became hopelessly blurred, with the same institutions simultaneously holding long positions in mortgage securities and short positions via CDS protection, creating a complex web of interconnected bets (Nier & Qureshi, 2011).

What made this shadow insurance market particularly dangerous was its complete lack of capital requirements. Traditional insurance companies must hold reserves proportional to their exposure,

ensuring they can pay claims when losses occur. CDS sellers faced no such requirements. They could write billions in protection without setting aside capital to cover potential payouts, treating the premium income as pure profit until defaults materialized. This created the illusion of free money—selling insurance and collecting premiums while assuming that widespread defaults would never occur or that the counterparty would somehow avoid having to pay (U.S. Senate Permanent Subcommittee on Investigations, 2011).

AIG: The House of Cards Collapses

The vulnerability of this structure became catastrophically apparent with the near-collapse of American International Group (AIG), one of the world's largest and most respected insurance companies. AIG's London-based Financial Products division had written approximately \$440 to \$500 billion in notional CDS protection on mortgage-backed securities and collateralized debt obligations. The business appeared extraordinarily profitable: AIG collected steady premium income for years while mortgage defaults remained minimal, and the company's AAA credit rating meant counterparties trusted its ability to honor obligations without requiring substantial collateral (Nier & Qureshi, 2011).

The model depended entirely on housing prices continuing to rise or at least remaining stable. When mortgage defaults began surging in 2007 and accelerated through 2008, AIG faced a crisis on multiple fronts. First, the mortgage securities it had insured plummeted in value, creating massive theoretical liabilities. Second, and more immediately threatening, AIG's CDS contracts contained collateral posting requirements triggered when either the insured securities were downgraded or AIG's own credit rating fell. As rating agencies belatedly downgraded both mortgage securities and AIG itself, the company faced enormous margin calls from counterparties including Goldman Sachs, Merrill Lynch, Deutsche Bank, and Société Générale demanding billions in additional collateral (U.S. Senate Permanent Subcommittee on Investigations, 2011).

AIG had collected premiums for years but had not retained anywhere near sufficient capital to cover these collateral calls, let alone the ultimate liability if the insured securities defaulted. The company faced a classic liquidity crisis: its assets were tied up in long-term insurance policies and other investments that couldn't be quickly converted to cash, while its liabilities came due immediately. By September 2008, AIG required an emergency \$85 billion credit line from the Federal Reserve, later expanded to a total government commitment of \$182 billion—the largest bailout in American history.

The rationale for this unprecedented intervention revealed how thoroughly AIG's CDS exposure had become embedded in the global financial system. Major banks had purchased CDS protection from AIG precisely to reduce their reported risk and capital requirements. If AIG defaulted on these contracts, banks would suddenly face massive unhedged exposures to mortgage securities they believed protected. Goldman Sachs alone had roughly \$10 billion in CDS exposure to AIG. The failure of AIG would have triggered immediate write-downs at every major financial institution, potentially causing a cascade of failures as each bank's insolvency threatened its counterparties (Nier & Qureshi, 2011).

The contagion mechanism extended beyond direct exposure. The CDS market relied fundamentally on trust that counterparties would honor their obligations. AIG's near-failure shattered this confidence, raising questions about every other CDS seller. If a AAA-rated insurance giant couldn't meet its obligations, what about the hundreds of less-stable institutions writing protection? The market for credit default swaps essentially froze as participants questioned whether any protection they had purchased would actually pay out when needed. This freeze extended to the underlying mortgage securities themselves—if CDS markets weren't functioning, banks couldn't hedge positions, which meant they couldn't price securities, which meant they couldn't trade them. Liquidity evaporated across credit markets (U.S. Senate Permanent Subcommittee on Investigations, 2011).

Banks responded by hoarding cash and refusing to lend, even to each other. The overnight lending markets that banks rely on for daily operations seized up. Institutions that were fundamentally solvent suddenly couldn't fund routine operations because nobody trusted that their counterparties would survive. The failure of Lehman Brothers on September 15, 2008—just days before the AIG bailout—had demonstrated that major financial institutions could actually disappear, making every bank suspicious of every other bank. The financial system experienced the equivalent of a cardiac arrest (Nier & Qureshi, 2011).

The CDS market exemplified everything wrong with pre-crisis financial innovation. It was opaque, with no central clearinghouse or registry showing who owed what to whom. It was unregulated, operating outside the oversight applied to traditional insurance or securities markets. It was massively leveraged, allowing institutions to take on obligations far exceeding their capital. And it was interconnected in ways that made the failure of any large participant potentially systemic. The Dodd-Frank Act later mandated central clearing and exchange trading for standardized CDS contracts, but only after the damage had revealed the market's dangers. Even today, portions of the derivatives market remain opaque and interconnected in ways that regulators struggle to fully map or understand (U.S. Senate Permanent Subcommittee on Investigations, 2011).

The Misunderstood Role of Fannie Mae and Freddie Mac

Perhaps no aspect of the financial crisis has been more thoroughly misrepresented than the role of the government-sponsored enterprises, Fannie Mae and Freddie Mac. These institutions, created in 1938 and 1970 respectively to promote homeownership and provide liquidity to mortgage markets, have been blamed for causing or substantially contributing to the crisis. The evidence tells a different story (Nier & Qureshi, 2011; Financial Crisis Inquiry Commission, 2011).

Fannie and Freddie operated under a specific mandate: purchase or guarantee conforming, prime loans that met strict underwriting standards. They could not legally buy most subprime or Alt-A loans, and their traditional business involved mortgages with substantial down payments, verified incomes, and solid credit scores. Throughout the early 2000s, while private-label securitization exploded, GSE market share actually declined. In 2005 and 2006, private-label mortgage-backed securities exceeded agency MBS issuance, with private-label production more than 45 percent larger than GSE production

by 2006. The GSEs' share of all mortgage securitization fell from over 60 percent in 2003 to just 44 percent by 2006, precisely when the bubble reached its most dangerous phase (Ellul, Logan, & Tookes, 2013).

The GSEs did participate in riskier lending during 2005–2007, but their involvement came late and remained comparatively modest. They purchased some AAA-rated tranches of private-label securities and some Alt-A loans during this period. In 2007, for example, combined GSE purchases of private-label securities totaled \$114 billion, representing 38 percent of their total purchases that year. While this represented real exposure, it paled in comparison to the private sector's dominance of the subprime market, where securitization rates reached 75 percent of origination volume in 2005 and 2006 (Nier & Qureshi, 2011).

When the crisis erupted, the GSEs suffered losses primarily from their late-cycle purchases of private-label securities and riskier Alt-A loans, not from their traditional guaranteed loan portfolios. Traditional agency MBS—securities backed by conforming, prime loans that met GSE standards—performed vastly better than Wall Street's private-label securities throughout the crisis (Pescatori & Sole, 2016; Segoviano et al., 2013). The federal government placed Fannie and Freddie into conservatorship in September 2008 not because they caused the crisis, but because their participation in the bubble's final phase had weakened their capital position at precisely the moment when the broader system needed them most (U.S. Senate Permanent Subcommittee on Investigations, 2011; Metrick, 2024). To blame the GSEs for the crisis is to fundamentally misunderstand both timing and magnitude: private-label securitization of subprime loans drove the bubble, while the GSEs were late participants whose subsequent rescue reflected their systemic importance rather than their culpability (Pescatori & Sole, 2016; Segoviano et al., 2013).

Systemic Collapse and Global Contagion

The crisis followed an almost inevitable trajectory once housing prices stopped rising. In late 2006, home prices began falling in regions that had experienced the most dramatic appreciation. Subprime borrowers who had taken adjustable-rate mortgages expecting to refinance before rates reset found themselves unable to refinance as their home values declined. Default rates surged, and the cash flows supporting mortgage-backed securities evaporated. The mezzanine and equity tranches of MBS deals absorbed losses first, but as defaults accelerated, losses began affecting even AAA-rated senior tranches that investors had believed virtually risk-free (Mian & Sufi, 2009; Fligstein, Brundage, & Schultz, 2017).

European banks and institutional investors holding massive positions in these securities faced sudden, catastrophic losses. Unlike American institutions that at least had some visibility into mortgage markets, European investors had purchased securities based purely on ratings and prospectuses, with no ability to assess the underlying collateral as it deteriorated. The opacity that had facilitated the securities' initial sale now prevented any clear understanding of losses until it was too late.

The unraveling accelerated through 2007 and 2008. Bear Stearns collapsed in March 2008, requiring a Federal Reserve-facilitated acquisition by JPMorgan Chase. In September 2008, the crisis reached its apex: the government placed Fannie Mae and Freddie Mac into conservatorship on September 7th, Lehman Brothers filed for bankruptcy on September 15th, and American International Group received an emergency government bailout on September 16th (Financial Crisis Inquiry Commission, 2011; McDonald & Paulson, 2015). The financial system had experienced a near-total collapse of confidence, with institutions refusing to lend to each other for fear that counterparties might fail before loans could be repaid.

The System's Core Pathology

At its heart, the pre-2008 mortgage system suffered from a fundamental misalignment of incentives and information. Every participant in the securitization chain—from originator to investment bank to rating agency—profited from fees generated at the moment of transaction, long before borrowers made their first payments. Originators earned fees for creating loans, investment banks earned fees for structuring securities, rating agencies earned fees for assigning ratings, and servicers earned fees for collecting payments. None of these intermediaries retained meaningful risk (Ellul, Logan, & Tookes, 2013; Keys, Mukherjee, Seru, & Vig, 2010). When borrowers defaulted and housing prices fell, losses fell almost entirely on investors who had purchased securities based on inadequate information and misplaced trust (Mian & Sufi, 2009; Ashcraft & Schuermann, 2008).

Private-label subprime securitization drove the crisis. Lax due diligence, rating agency conflicts of interest, and investor blindness amplified it (Ellul, Logan, & Tookes, 2013). Freddie Mac and Fannie Mae were late participants and ultimately victims rather than architects. The house of cards collapsed not because of government housing mandates or GSE overreach, but because the private financial sector had constructed an elaborate machine for profiting from risk transfer while systematically obscuring that risk from those who ultimately bore it. Understanding this reality remains essential for preventing similar disasters in the future.

Did We Learn Anything? The 2023 Banking Failures and Persistent Vulnerabilities

Fifteen years after the 2008 collapse, the failures of Silicon Valley Bank in March 2023 and Credit Suisse's forced acquisition by UBS revealed that fundamental lessons about banking risk remain unlearned. While the specific mechanisms differed from 2008, the underlying pathologies—mismatched funding, concentrated risk, inadequate oversight, and moral hazard—persist in disturbingly familiar forms (Metrick, 2024).

Silicon Valley Bank's collapse replicated the core error of 2008: funding long-term, illiquid assets with short-term, flighty funding. Where pre-crisis banks funded thirty-year mortgages with overnight wholesale funding and deposits, SVB funded long-duration Treasury bonds and mortgage-backed securities with deposits from a highly concentrated base of venture-backed technology startups. When

the Federal Reserve rapidly raised interest rates in 2022–2023 to combat inflation, SVB's bond portfolio suffered massive unrealized losses—the same duration risk that devastated mortgage-backed securities holders in 2008, just with ostensibly "safer" government-backed assets (Board of Governors of the Federal Reserve System, 2023; Metrick, 2024).

The concentration risk proved fatal. SVB's deposit base was overwhelmingly drawn from a single sector—technology startups and the venture capital firms that funded them. When concerns about the bank's financial health emerged, this concentrated depositor base could coordinate via the same social media and communication networks that define the tech industry. A bank run that might have taken days or weeks in 2008 unfolded in hours, with \$42 billion in withdrawal requests on a single day (Metrick, 2024). The 2008 crisis taught that diversification matters for assets; SVB demonstrated it matters equally for liabilities.

Interest rate risk, supposedly a basic banking concept, caught both regulators and bank management unprepared. SVB held over \$120 billion in securities classified as "held-to-maturity," which under accounting rules did not require marking to market. This allowed the bank to avoid recognizing losses on its balance sheet even as the economic reality showed the portfolio had lost substantial value. When forced to sell \$21 billion in securities to meet liquidity needs, the bank crystallized \$1.8 billion in losses, triggering the crisis of confidence that led to its failure. The lesson from 2008—that accounting opacity can hide devastating risks until it's too late—apparently needed relearning (Board of Governors of the Federal Reserve System, 2023).

Credit Suisse's demise followed a different path but revealed similar oversight failures. The bank had survived the 2008 crisis but spent the subsequent fifteen years lurching from scandal to scandal: helping wealthy Americans evade taxes, money laundering concerns, exposure to the Archegos Capital collapse, and involvement with the fraudulent Greensill Capital. Each incident eroded confidence, yet regulators and the bank's leadership failed to fundamentally restructure risk management or corporate culture. When Credit Suisse reported a \$7.3 billion loss in 2022 and depositors began withdrawing funds, Swiss authorities orchestrated an emergency acquisition by UBS to prevent a broader crisis—demonstrating that "too big to fail" remains very much alive (Financial Stability Board, 2023).

The parallels to 2008 extend beyond individual bank failures to systemic vulnerabilities. Liquidity management remains inadequate across the banking sector. Just as pre-crisis banks relied on warehouse lines and overnight funding that evaporated when confidence cracked, modern banks continue to fund long-term assets with deposits that can vanish instantly, especially in an era of mobile banking apps and social media–accelerated runs (Metrick, 2024).

Transparency and oversight show minimal improvement despite Dodd-Frank reforms. SVB was subject to less stringent regulatory requirements after the 2018 rollback of enhanced prudential standards for banks under \$250 billion in assets—a threshold chosen largely through lobbying rather than risk analysis. The bank's concentrated deposit base, interest rate exposure, and rapid growth should have triggered heightened supervision, but regulators missed or ignored the warning signs until collapse was imminent. The rating agencies that failed so catastrophically in 2008 by blessing toxic mortgage

securities continued to rate SVB favorably until days before its failure (Federal Deposit Insurance Corporation, 2023).

Perhaps most troubling, moral hazard persists unaddressed. The Federal Reserve and Treasury moved swiftly to guarantee all SVB deposits, including those well above the \$250,000 FDIC insurance limit, arguing that failure to do so would trigger broader contagion. This decision protected depositors who had chosen to hold massive uninsured balances at a bank offering above-market interest rates—a choice that should have carried risk (Metrick, 2024). Similarly, Credit Suisse's rescue by UBS involved substantial government support and guarantees (Financial Stability Board, 2023). While these interventions may have prevented immediate crises, they reinforce the implicit guarantee that large financial institutions and their creditors will be protected from the consequences of excessive risk-taking.

The 2008 financial crisis and the 2023 banking failures share a common thread: the persistent gap between the complexity and interconnectedness of modern finance and the adequacy of risk management, oversight, and regulatory frameworks. Fifteen years and hundreds of pages of new regulations have addressed some symptoms while leaving core pathologies intact. Banks still mismatch duration, still concentrate risk, still operate with inadequate transparency, and still benefit from implicit government guarantees that encourage excessive risk-taking. Until regulators, legislators, and financial institution leaders address these fundamental issues rather than fighting the last war with incrementally stricter rules on yesterday's problems, the next crisis remains not a question of if, but when.

Conclusion

The evidence presented in this paper demonstrates strongly that the 2008 financial crisis originated in private-sector mortgage origination and securitization practices, not in government housing policy or GSE activities. The crisis required three essential elements working in combination: predatory loan origination driven by volume-based compensation, an investment banking securitization machine that transformed defective loans into highly-rated securities through inadequate due diligence and rating agency complicity, and a massive unregulated credit default swap market that amplified localized housing losses into systemic catastrophe.

Government-sponsored enterprises participated in the bubble's final phase but cannot be characterized as causal agents. Their market share declined precipitously during the bubble's expansion, their purchases of risky assets came late and remained proportionally modest, and their traditional conforming loan portfolios performed substantially better than private-label securities. To attribute the crisis to Fannie Mae and Freddie Mac requires ignoring the timing, magnitude, and performance evidence that demonstrates their secondary role.

The persistence of fundamental vulnerabilities fifteen years after the crisis suggests that regulatory reforms have proven inadequate. The 2023 failures of Silicon Valley Bank and Credit Suisse exhibited the same pathologies evident in 2008: duration and liquidity mismatches, concentrated exposures, regulatory forbearance, and moral hazard from implicit government guarantees. These recurring

patterns indicate that reforms have addressed specific mechanisms while leaving underlying incentive structures intact.

Effective reform requires confronting the core problem: financial intermediation structures that reward short-term fee generation while distributing long-term risk to parties with inadequate information. Until compensation aligns with long-term performance, capital requirements reflect actual rather than rated risk, and implicit government guarantees for systemically important institutions are eliminated or appropriately priced, the financial system will remain vulnerable to periodic crises driven by excessive risk-taking and inadequate transparency.

Footnotes

¹ Author's calculation using standard mortgage amortization formula: $M = P[r(1+r)^n]/[(1+r)^n-1]$, where M = monthly payment, P = principal, r = monthly interest rate, and n = number of payments.

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