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Superhero or Foe: Securitization as a Means of Rebuilding the American Housing Market

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I. Introduction

The past decade has experienced both an incredible housing boom and bust within a span of ten years. At the center of attention is securitization. Securitization involves the practice of pooling together non-liquid assets that share homogenous performance and similar expected cash flows and packaging them together into a tradable security.[1] With regard to securitization, the story of the creation of Government Sponsored Enterprises stems from attempts from the federal government to infuse "liquidity to a fragmented credit market."[2] Government sponsored enterprises are "federally chartered, privately owned, privately manger financial institution that has only specialized lending and guarantee powers and that bond market investors perceive as implicitly backed by the federal government."[3] Additionally it should be noted that GSEs are accorded special privileges by the federal government, thereby unofficially continuing the government practice of infringing on private investment and free market by granting these quasi-monopoly power to the GSE to push into the market much needed capital. For instance, a government can grant a monopoly to a company via a trade charter on a specific aspect of trade. This is the case in Britain under the rule of Queen Elizabeth I, when she granted a monopoly to the English East India Company in 1600 in an attempt to increase trade between England and Asia.[4] The history of securitization and the story of its dramatic rise in American capital markets is directly connected with the creation of government sponsored enterprises. Therefore, it is necessary to develop and understanding of the creation of GSEs in the American capital markets system in order to fully comprehend the magnitude and impact of securitization

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[1] A Jobst, 'What is Securitization? (2008) Finance and Development. 10, 48-49

[2] D Reiss, 'The Role of the Fannie Mae/Freddie Mac Duopoly in the American Housing Market' (2009) J.F.R. & C

[3] Id.

[4] Id.

since its beginning. This section will paper the creation of both the securitization concept and the rise of GSEs in the American mortgage market. This paper will then explore whether or not securitization is indeed the villain who created this housing disaster or the hero who will save it.

II. Creation of Securitization and GSEs

Contrary to popular belief, securitization was first introduced to America during the early 1920s before World War II and the baby boom generation, when companies issuing mortgage insurance traded "guaranteed mortgage participation certificates" for pools of mortgage loans.[5] The trading of these guaranteed certificates was consistent among investors and was a legitimate market for nearly a decade until the market collapsed in 1929 directly leading to the Great Depression.[6] The securitization of mortgages seemed to disappear for nearly four decades following the Great Depression and World War II. However despite a failure to reignite securitization in the post war period, America began a housing boom shortly after the war, creating more mortgages than ever. For instance, it should be first noted that between the years of 1949 and 2000 alone, the US mortgage debt relative to the total income of the average American household assets grew dramatically from 20% to 73%.[7] This same mortgage debt also expanded from 15% to 41% in relation to average American household assets.[8] Besides the dramatic growth of the residential mortgage industry in America, mortgages underwent an evolution as the domestic interventions of US government sought to offer various options that

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[5] A Jobst, 'What is Securitization? (2008) Finance and Development. 10, 48-49

[6] Id.

[7] A Ashcraft and T Schuermann, 'Understanding the Securitization of Subprime Mortgage Credit' (2008) Federal Reserve Bank of New York Staff Reports. 3

[8] A Ashcraft and T Schuermann, 'Understanding the Securitization of Subprime Mortgage Credit' (2008) Federal Reserve Bank of New York Staff Reports. 3

was vastly different than anything seen in other advanced and Western nations. Indeed the social and housing programs set up by the American government following World War II was unlike anything the rest of the world had seen at the time. At this point it should be clarified that the United States was able to engage in focusing on the housing of its returning soldiers and reigniting its economy because unlike is European counterparts, the US did not have to devote its energy to physically rebuilding a nation crumbled by war. Indeed aside from Pearl Harbor, World War II was not fought on American soil and therefore the nation did not have to prioritize much of its energy to rebuilding national infrastructure over the needs of returning soldiers in need of housing. Following the postwar period in 1949, mortgages began to dramatically increase with the influx o the baby boom generation and the nation-wide need for assisted housing. Authors Richard K Green and Susan M Watcher briefly provide a background for America's response to the housing need in the postwar period

> By the early 1900s, mortgages "featured variable interest rates, high down payments, and short maturities. [And b] before the Great Depression, homeowners typically renegotiated their loans every year" (Green and Wachter 2005). Mortgages began to take more modern shape as a result of the intervention of the federal government during the Great Depression. The most important institutions that resulted were the Home Owner's Loan Corporation (1933), the Federal Housing Administration (1936), and the Federal National Mortgage Association (1938) later known as Fannie Mae. Property values had plummeted during the Depression and mortgages were destabilized. Holders "refused to refinance loans…[and] as a result, borrowers defaulted" (Green and Wachter 2005). Nearly a tenth of all homes at the Depression's lowest point were in foreclosure and further downward pressure ensued with the attempted resale of repossessed property. The Depression-era institutions were designed to

> provide government-sponsored bonds to reinstate mortgages in default by extending terms and fixing rates to create self-amortizing loans for the borrower. Other provisions were for mortgage insurance and investing confidence, especially to stabilize mortgages in less-affluent communities.
>
> Among the many provisions in the G.I. Bill created for veterans of World War II was the formation of the Veterans Administration mortgage insurance program. The program provided excellent rates on mortgages for veterans and was designed as part of the total deferred compensation package for service in the armed forces, as well to stimulate the housing market. Loan-to-value ratios rose to 95 percent and the maximum mortgage term was extended to 30 years.[9]

Despite this huge demand for mortgages, public securitization still remained nonexistent for nearly four decades. It is actually quite interesting considering the massive production of mortgages given to homeowners in the post war period, in retrospect it does seem as though America missed out on a great opportunity to massively securitize such a huge amount of loans in such a short period.   A move to securitization would have most certainly provided an opportunity to create more liquidity and tangible capital in the market and allow lenders to create and disburse even more loans.

The Federal Housing Administration (FHA) was created by FDR in 1934 to provide insurance to mortgage lenders against any losses in the event of default by borrowers. By providing this guarantee and in effect removing any risk of loss from default, lenders were much

[9] A Levitin and A Pavlov and S Wachter, 'Securitization: Cause or Remedy of the Financial Crisis' (2009) Georgetown University Law Center, Business, Economic and Regulatory Policy Working Paper Series. http://ssrn.com/abstract=1462895

more willing to create and disbursemortgage loans with the resources and capital that it had. In addition, the FHA also create a 30 year fixed rate program for its mortgages. [10] The fixed rate over such a long period provided homeowners with an opportunity to have lower payments and more stability. Despite the effectiveness of this fixed rate, lenders were not able to keep up with the demand or mortgages by consumers. As a result, in 1938 the government created the federal National Mortgage Association. More commonly known as Fannie Mae, this organization was one of the earliergovernmentsponsoredenterprises (GSEs) of the decade. Created under the National Housing Act of 1934 which authorized

"The establishment of National mortgage associations … (1) to purchase and sell first mortgages … and (2) to borrow Money for such purposes through the issuance of notes, bonds, debentures, or other such Obligations.[11]

Fannie Mae purchased loans insured by the FHA and sold them as securities on the actual financial markets. In fact, Fannie Mae was initially limited to FHA loans and was responsible fro increasing the supply beyond that of depositoryinstitutions. This quickly circulated the loans throughout the system and through securitization allowed them to generate more capital or lenders, thereby allowing them to create even more loans.Fannie Mae also introduced more fair and effect mortgage lending standards.[12] Indeed Fannie Mae was able to

[10] D Reiss, 'The Role of the Fannie Mae/Freddie Mac Duopoly in the American Housing Market' (2009) J.F.R. & C

[11] Fannie Mae Foundation

[12] D Reiss, 'The Role of the Fannie Mae/Freddie Mac Duopoly in the American Housing Market' (2009) J.F.R. & C

impose this upon any lenders who sought to have their loans securitized, and thereby could enforce their interest rates, loan terms, and underwriting guidelines.[13]

In 1944, the VeteransAdministration was also given the right to guarantee mortgages created by private lenders and disbursed to veterans. The VA program provided an opportunity or veterans and active military personnel to purchase homes without making down payments. This led to a huge economic expansion in the housing market.

Indeed it seemed that massive securitization from lenders not associated with government the was gone forever, until it made a ground-breaking return in the early 1970s to American mortgage markets. At the time, the market for loans not issued by a government sponsored enterprise (GSE) in America was very illiquid and finding capital to finance more mortgages was not an easy task. Despite the investment grade caliber of the loans; lenders had no choice but to hold the loans in their portfolios due to the fact that there was no GSE that would securitize a loan that was not issued by another GSE. The lack of capital circulating in the mortgage market meant that lenders had to endure much difficulty and hardship in finding investors if they ever needed to sell the mortgages on their balance sheets. Indeed holding these mortgage loans on their balance sheets exposed lenders to the risk of higher interest costs than their interest actual income if interest rates rose. It should also be noted that at the time, merely trading loans as a whole meant dealing with costly details and paperwork. Soon the government realized that securitizing the mortgages was an efficient and economical way of creating capital and passing through mortgage payments to the new investors. Indeed the federal government was very much interested in pushing for a secondary market for mortgages to allow for more accessibility of capital within the system. Such pass-through securities would shift all principal and interest risks and claims from the mortgages on to the new investors. Indeed the government knew that lenders would be attracted to this new low-cost innovation

[13] Id.

which would give them an opportunity to shift mortgage interest rate risk from their balance sheets and also create quick capital enabling them to produce more loans.

In February 1970, securitization was introduced to capital markets in its present day form when the Government National Mortgage Association also known as Ginnie Mae, began to buy mortgages and convert them into guaranteed mortgage backed securities. Created by the United States Department of Housing and Urban Development, Ginnie Mae was formed as a result of the partitioning of Fannie Mae in 1968 and seeks to use capital markets as a means to extending affordable housing throughout the United States.[14] Until then Fannie Mae had been the only organization that purchased mortgages from banks that held the mortgages in their portfolios, many banks which were of a depository format such as savings and loan institutions.[15] Fannie Mae purchased these mortgages and provided insurance or their value by the federal government. The partitioning was created in the Housing and Urban Development Act of 1968 and was a result of President Lyndon B. Johnson’s desire to remove Fannie Mae from the federal budget and make it a stockholder owned government sponsored enterprise. The federal funds once used to support Fannie Mae were reappropriated to the American war effort in Vietnam. During the 1968 partitioning of Fannie Mae, the organization was split into two halves; a public half and a private half. The private half was still referred to as Fannie Mae and continued to purchase mortgages from financial institutions, but with this time without a policy specifying a federal government guarantee on the mortgages. Ginnie Mae became the public half of the former Fannie Mae structure. Ginnie Mae is a wholly owned government corporation and offers mortgage lenders an opportunity to find a higher price when trading their loans in the capital markets.[16] In its mission statement, it states that Ginnie Mae seeks to “to expand affordable housing in America by linking global capital markets to the nation's housing

[14] Id.
[15] Id.
[16] Id.

markets."[17] The Ginnie Mae organization is responsible for promoting mortgages that are originated by private institutions and insured by FHA, the Housing and Urban Development's Office Public and Indian Housing, the Veteran Administration's Home Loan program for Veterans, or the US Department of Agriculture's Rural Development Housing Community Facilities Program.[18] It should also be noted that Ginnie Mae is the only organization that offers the securities that carry the full faith and credit guarantee from the US Federal government which promises timely payment of principal and interested for the securities. This is very attractive to investors because it allows the government to be the underwriter and issuer's safety even in difficult times. Ginnie Mae charges lenders an annual guaranty fee for the securitization itself and the accompanying government guarantee provision. The annual guaranty fee is 0.6 percent of the "aggregate outstanding balance of the non-defaulted portion of the issuer portfolio."[19] Since its inception in 2008, Ginnie Mae has guaranteed roughly $2.9 trillion mortgage backed securities.[20]

Very soon other US government agencies joined in on the securitization movement including the FNMA and Freddie Mac years later. Indeed the energy crises that plagued the decade during the 1970s caused heavy panic and stress upon banks and other financial institutions. The Federal Home Loan Mortgage Corporation, also known as Freddie Mac began to take seek ways to improve the situation by pushing for more liquidity in the secondary market of mortgage loans. Created in 1970, Freddie Mac is one of many government sponsored enterprises more commonly known as GSEs. Congress created this organization through the Emergency Home Finance Act of 1970. Freddie Mac is a private corporation and was created

[17] Ginnie Mae Foundation
[18] K Ingram, 'If Securitization is Dead, Why do so many Government Schemes use it?' (2009) C.M.L.J. 4(4), 462-476

[19] Id.
[20] Id.

with the intention to increase the secondary market for mortgages. As a result, the objective behind creating Freddie Mac was to create competition in the market against the newly formed Fannie Mae organization which was now private.[21] In fact its chart is very much similar to that of the reformed charter of Fannie Mae upon its privatization. Freddie Mac's charter states the following

> Freddie Mac was chartered by Congress in 1970 with a public mission to stabilize the nation's residential mortgage markets and expand opportunities for homeownership and affordable rental housing. Our statutory mission is to provide liquidity, stability and affordability to the U.S. housing market.
>
> We participate in the secondary mortgage market by purchasing mortgage loans and mortgage-related securities for investment and by issuing guaranteed mortgage-related securities, principally those we call PCs. The secondary mortgage market consists of institutions engaged in buying and selling mortgages in the form of whole loans (i.e., mortgages that have not been securitized) and mortgage-related securities. We do not lend money directly to homeowners.[22]

Both the Freddie Mac and Fannie Mae institutions sought to increase market liquidity through the securitization of mortgage backed securities purchased from depository financial institutions. Indeed the intention behind Freddie Mac was to free the secondary market from its dependence on FHA's decreasing primary market activity and accommodate any housing shortage.[23] Until

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[21] J Olinger, 'Fannie, Freddie, and the Future of Fair Housing' (2009) Kirwan Institute for the Study of Race and Ethnicity, The Ohio State University

[22] Freddie Mac Foundation

[23] J Olinger, 'Fannie, Freddie, and the Future of Fair Housing' (2009) Kirwan Institute for the Study of Race and Ethnicity, The Ohio State University

recently under its nationalization, both Fannie Mae and Freddie Mac were stockholder owned governmentsponsored entities.[24]

Under the FinancialInstitutions Reform Recovery and Enforcement Act of 1989 (FIRREA), the corporategovernance structure of Freddie Mac was altered. The Act replaced the organization's three member board of directors, which worked with the Federal Home Loan Bank Board and was in turn replaced with a board of directorscomprised of eighteen members.[25] Additionally, FIRREA "transformed Freddie Mac's 60 million shares of non-voting, senior participating preferred stock, into voting common stock."[26]

The federal government believed that this competition would boost liquidity and in turn increase opportunities to finance more mortgages. They believed that increased liquidity would in fact create more resources and capital for financial investments in housing. Freddie Mac began to purchase mortgages on the secondary market and place them in a pool and through securitization sold them as new mortgage-backed securities. This in turn, increased the liquidity and financing available for mortgage lending and also increased the availability of financing for purchasing new homes. The popularity of securitization began to rapidly increase in the next decade. This popularity was largely attributed to its ability to provide quick liquidity and financing for investors and mortgage lenders. Indeed the innovation of these pass-through mortgages expanded rapidly into other markets. In 1983, Fannie Mae responded to lenders' calls for a more expansive mortgage backed security investor pool and therefore the institution created the first collateralized mortgage obligations.[27] Known to the industry as CMOs,

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[24] Id.
[25] Id.
[26] Id.
[27] A Ashcraft and T Schuermann, 'Understanding the Securitization of Subprime Mortgage Credit' (2008)

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collateralized mortgage obligations are a more specialized type of pass- throughs, and essentially rearranges the cash flows of trusts with the objective of creating more securities with different payment opportunities.[28] The intention behind Fannie Mae's creation of CMOs was to attempt to tackle the issue of prepayment risk which until that time was a major impediment to the ever increasing mortgage backed securities demand.[29] The prepayment risk hindrance plaguing the industry was the issue of the unanticipated return from payment of principal occurring when consumers refinanced mortgages that backed the securities.[30] Many consumers elect to refinance their home mortgages when interest rates are down, thereby leading to prepayment of the principle in their mortgage backed security. [31] This in turn forces investors to reinvest the returned principle at the cost of a lower yield. Fannie Mae's intention behind the creation of CMOs was to tackle this issue of prepayment risk which was plaguing the concerns of investors.[32] Essentially the creation of CMOs allowed investors to lower prepayment risk by developing securities that allocates for principal prepayment at various rates.[33] This led to the creation of tranches which are the various bond classes that absorb the loss in the CMOs. Tranches will be explored later in the next section of this paper, but for the purposes of the discussion at hand, it should be understood that tranches are different slices of a securitization pool. Indeed if the mortgageloans in the securitization pool fall into default, then the investors in the tranches will have to absorb the loss according to their hierarchal level in the tranches of the pool. In 1986, Congress with the intention of monitoring the new innovation of CMOs, created the Real Estate Mortgage Investment Conduit (REMIC). The creation of the REMIC system allowed CMOs to be issued with varying risk attributes.[34] Indeed under REMIC,

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[28] Id.
[29] Id.
[30] Id.
[31] Id.
[32] Id.
[33] Id.
[34] Id.

investors can elect to take on a higher credit risk in exchange for a higher coupon fee. Indeed REMIC proved to be very popular among investors as now almost all CMOS issued are formatted under the REMIC system.[35] Additionally, it should be noted that REMIC offers a much more agreeable tax treatment, thereby increasing its popularity on the mortgage backed securities market.[36]

As the securitization of mortgage backed securities continued to grow dramatically, soon various other income producing assets began to explore securitization as well. Securitization expanded to other sectors of credit by the late 1980s. Indeed asset-backed securities were first introduced onto the financial scene in 1985, when the Sperry Lease Finance Corporation pooled their computer equipmentleases and converted them into securities.[37] With their expected cash flows from the monthly payments from lessees, a new market was created and it quickly led to the securitization of various assets industries. Credit industries such as car loans, credit card receivables and even student loans were beginning to be securitized in their respective markets. By the mid 1990s, securitization had reached even more industriesincluding healthcare receivables, licensing and franchise fees, royalties from intellectual property and lease-rental payments.

III. What is Securitization?

In order to understand the accusations against securitization and its role in the recent subprime mortgage crisis as well as suggestions for its reform, it is necessary to clarify exactly what securitization is and how it works. As noted earlier, securitization is the process by which

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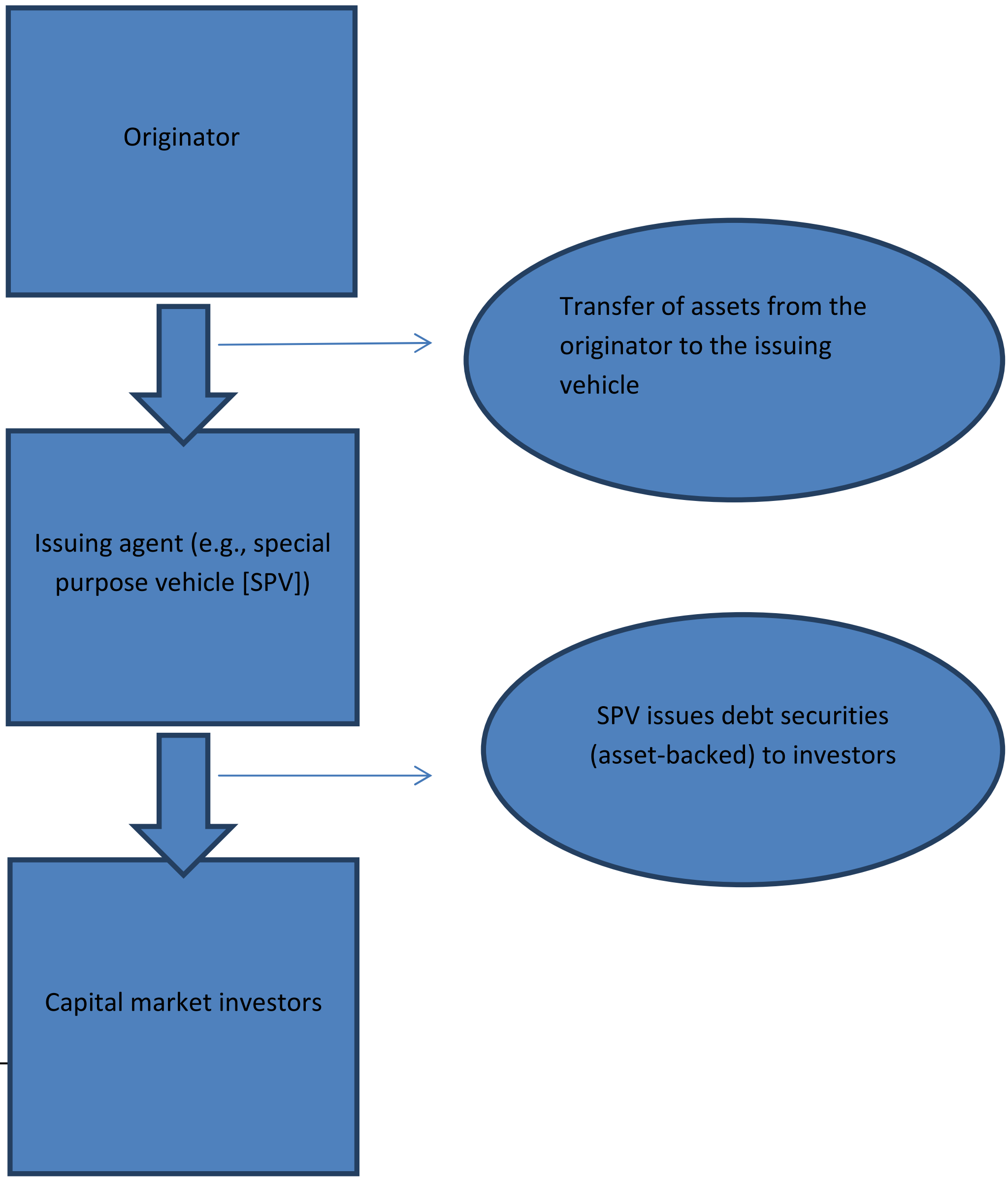
[35] Id.
[36] Id.
[37] A Jobst, 'What is Securitization? (2008) Finance and Development. 10, 48-49

assets that which are liquid but have predictable cash-flows are pooled together and sold in the form of a security, in turn passing through the principal and interest cash-flow to the investors. Essentially, the process of securitization represents "an alternative and diversified source of finance based on the transfer of credit risk (and possibly also interest rate and currency risk) from issuers to investors."[38]

Figure 1. True sale: How securitization works[39]



[38] Id.
[39] Id.

a. Origination to "True Sale"

Fundamentally, the securitization process first begins when an originator desires financing and has assets on their balance sheets that they would like to remove. The initial owner of these assets is known as the originator because they initiate the securitization process. The originator may also consider securitization to restructure their debt. Generally these assets are illiquid but have predictable cash-flows. In fact, any type of asset can be structured to support securitized debt so long as it has a predictable cash flow. Therefore, whenever an originator disburses a loan or obtains any type of cash flow producing asset, they are actually holding assets which can be securitized. As noted earlier, mortgages are not the only type of assets that can be used to back up securities. Other assets that are often used in the securitization process include consumer credit, corporate and sovereign loans, project finance, lease trade receivables and other individualized lending instruments. Securities backed by these types of assets are known as asset-backed securities, or ABS; while those securities backed by either residential or commercial mortgages are known as mortgage-backed securities or MBS. It should be noted however, that there is another securitized innovation which is the collateralized debt obligation, this type of security which is structured in a similar manner as asset backed securities but offers a more extensive and diversified option of assets.[40] For the purposes of this paper, we will discuss those securities which are backed by mortgage loans.

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[40] A Ashcraft and T Schuermann, 'Understanding the Securitization of Subprime Mortgage Credit' (2008) Federal Reserve Bank of New York Staff Reports. 3

The originator essentially takes these loans and pools them into a referenceportfolioand sells the pool to an issuer, typically a Special Purpose Vehicle. A Special Purpose Vehicle or SPV is created exclusively for the purpose of buying and removing the pooled loans from the originator's balance sheets. Typically tax-exempt, the SPV can come in various forms such as a trust, corporation or partnership created to buy the assets from the originator and serve as a conduit in retrieving the cash flows stemming from payments. In some securitization transactions depending on the agreement, the issuing SPV exists only to serve as an intermediary with who has the responsibility of collecting the assets and transferring them to a trust and pool the assets into a security.[41] Oftentimes, it is individuals who are entrusted with supervising the issuing SPV entity or trust and protect the interests of the investors.[42]

The sale of assets to an issuer essentially detaches the risk associated with the originator's involvement with the loans from the risk associated with future collection.[43] When correctly performed, essentially what materializes is that the loans under the new ownership of the SPV effectively becomes bankruptcy remote and beyond the reach of creditors. [44] This means therefore, that in the event of the originator going into bankruptcy, the creditors cannot attempt to reach the assets of the issuer. Legally, it is in the best interest of the issuer to ensure that the governing documents explicitly limit its activities to only those related to performing issuance of the securities.[45] The acquisitions of these pooled loans by the SPV are financed by the issuing of tradable securities that will be sold to investors in the capital markets in a private

[41] Id.
[42] Id.
[43] A Jobst, 'What is Securitization? (2008) Finance and Development. 10, 48-49

[44] Id.
[45] A Ashcraft and T Schuermann, 'Understanding the Securitization of Subprime Mortgage Credit' (2008)

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placement or public offering. The SPV also ensures that these new tradable securities are structured to provide utmost protection from any projected losses by including credit enhancement such as over-collateralization, letters of credit, cash funding, internal credit support, third-party insurance, back up servicer for loans as well as reserve or spread accounts.[46] Additionally, the SPV ensures that the securities are extensively analyzed by credit agencies with regard to their debt experiences, expected cash flows and rates of default. These credit agencies will then also provide a rating for the securities usually in the fashion of mid-term notes covering a term or three to ten years; effectively now making them ready for sale. [47]

It should be noted that within a securitization transaction, it is of the upmost importance that the transfer of assets between the originator and the SPV is viewed legally as a “true sale.” Within a true sale, the originator receives the remittances from the proceeds of the securities as payment of the initial purchase of the assets. [48] Therefore it is crucial that the transfer of assets has validity as a true sale to ensure that the new investors are not vulnerable to any possible future claims initiated by the originator. In litigation the mere existence of a possibility that the sale is not valid could lead to any cash flows stemming from the securities or the assets themselves being possibly ordered by the court as part of the originator’s estate. [49] At the same time, it is in the originator’s best interest to legally separate the assets. This is because investors can only reach the SPV for any of the payments that are due on the securities, but they do not any rights to reach the other revenues of the originator.[50]

[46] A Ashcraft and T Schuermann, ‘Understanding the Securitization of Subprime Mortgage Credit’ (2008) Federal Reserve Bank of New York Staff Reports. 3

[47] Id.

[48] A Jobst, ‘What is Securitization? (2008) Finance and Development. 10, 48-49

[49] Id.

[50] Id.

It should be noted that sometimes originators will not sell the securities to the SPV as they normally do in a true sale but will instead merely sell the credit risk attached with the assets exclusive of any transfer of legal title. This time of transfer is known as synthetic securitization.[51] In this type of transfer is helpful to an SPV looking to exploit any price disparities between the acquired assets and the price investors are actually prepared to pay for them when pooled in a group of assets.[52]

The investors will now receive the cash flows stemming from payments of principle and from either the floating or fixed rate interests from each of the loans in the pool. Periodically, floating interest rates will shift higher or lower according to the pre- specified index that the security is following. LIBOR (The London Interbank Offered Rate) as well as the United States Treasury Rate are generally the most common indexes followed.[53]

b. Underwriters

In order to fully comprehend the effectiveness in the course of converting liquid assets into securities, it is necessary briefly cover the function of underwriters and their role as an intermediary in the securitization process. Oftentimes underwriters are actually investment banks who serve as intermediaries between the SPV or other issuer and the investors. The underwriter advises according to they believe to be current investor demand and will advise the issuer on who to structure the security according to the recent trends and demands.[54] For instance, one duty by which the underwriters will advise the issuer is with regard to the various

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[51] Id.
[52] Id.
[53] A Ashcraft and T Schuermann, 'Understanding the Securitization of Subprime Mortgage Credit' (2008) Federal Reserve Bank of New York Staff Reports. 3

[54] A Jobst, 'What is Securitization? (2008) Finance and Development. 10, 48-49

tranches within the security's portfolio. The underwriter will advise the issuer on precise characteristics of each of the tranches to ensure that the tranches are attractive to investors with consideration to current demands and trends.[55] One of the most important duties of underwriters is their assumption of the risk connected to the buying a whole issue of assets and reselling it to investors themselves. [56] Underwriters also advise issuers whether or not to assist with the marketing of their securities by using their sales set of connections to offer the securities to the public or to seek a private placement of the securities.[57]

c. Servicing

As previously discussed, the monthly payments made by the borrower of the loans are indeed the actual cash flows or revenue that the investors receive. The actual process by which the payments monitored and are physically moved from the borrower to the SPV is known as service.[58] Therefore, because the payments on these loans are the streams of future income, typically a Pooling and ServicingAgreement will be produced to document and formally establish a servicing agent and their duties towards the holder of the security.[59] In most cases, the originator will maintain a connection to these assets, when they agree to act as servicers for the loans. Generally, the originator will continue to service the loans and mail monthly statements collect the monthly payments from the borrowers and pass through the funds to the investor or SPV, investor reporting, accounting, collecting delinquent accounts as well as formally engaging in repossession and foreclosure proceedings.[60] Oftentimes the originator will charge a service fee for these duties and other continued maintance on the upkeep of the loan since it already

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[55] Id.
[56] Id.
[57] Id.
[58] Id.
[59] Id.
[60] Id.

has its own arrangements in place to handle the loan. It should be noted however, that some originators elect to outsource the servicing duties to third party organizations and have them contractually perform as a servicer or sell the servicing rights.[61]

d. Credit Enhancement

In order to fully understand the power of transformation that securitization can provide to illiquid assets, it should be noted that securities that are created in a securitization transaction are "credit enhanced."[62] Credit enhancement offers support to improve the attractiveness of the pool of securitized assets to potential investors. Credit enhanced means that the credit quality of the assets is taken higher above any credit quality of the originator's unsecured debt and balance sheets.[63] This is crucial as it increases the possibility that investors will receive their cash flows and therefore in turn cause the securities to take a higher credit rating than that of the originator. It should be noted that credit enhancements can come in various forms, sometimes as an internal support mechanism within the portfolio itself or a third-party externalenhancement. For instance, a portfolio can be internally enhanced by the subordination of a tranche or a portion of the securities issued. This internal maneuver will essentially place the payment claims of some trances above the others, in turn improving the attractiveness of the tranches and meeting the varying interests of different investors.[64] Investors will clearly notice that any potential defaults within the securities will first be absorbed by the subordinate tranches before a senior tranches is disturbed.[65] Another internal credit enhancementmaneuver is over-collateralization of assets within a security pool. Over-collateralization of assets within a security pool involves ensuring that the amount of assets within the pool exceeds the amount of

[61] Id.
[62] Id.
[63] Id.
[64] Id.
[65] Id.

bonds issued, thereby enhancing the credit of the security.[66] Althoughthird party external credit enhancement is optional, some issuers will seek such external enhancement from letters of credit, surety bonds and parental guarantees.[67] Such external enhancements serve as assurance to potential investors that the payments associated with the loans will be guaranteed. Additionally it should be noted the effect credit enhancements have on the credit risks of securities. This is due to the level of protection the enhancements provide for predicted cash flows within the security.[68] As a result, credit enhancements offering more protection will cause a security to obtain a higher rating. At the same time, if a credit enhancement offers less protection, then it can lead to the creation of new securities with varying desired risks, thereby allowing varying protections which can make the security attractive to various investors.

e. Tranching

The portfolio holding the pool of loans is cut into various slices, known as tranches. These various tranches are arranged in subordinating tiers according to the risk associated with the loans. Each of the varying tranches represents a specific degree of credit protection or risk exposure. As a result, the each of the tranches are sold separately on the capital markets. When a borrower makes a payment on their loan, the payment is generally comprised of both principal and interest, all of which will be returned to the investor. This investment return is then distributed among the different tranches according to their seniority within the portfolio. For instance, the tranche with the least amount of risk will be apportioned their claim on the income first. Meanwhile, the tranche containing the highest amount of risk will have the last claim on the

[66] Id.
[67] Id.
[68] A Ashcraft and T Schuermann, 'Understanding the Securitization of Subprime Mortgage Credit' (2008) Federal Reserve Bank of New York Staff Reports. 3

investment returns. Today many issuing agents structure the tranches in a portfolio in a three tier hierarchy in the arrangement of junior, mezzanine and senior tranches. Essentially, the junior tranche is the first lost position and contains any expected losses among the loans in the portfolio. The junior tranche is typically the smallest of the tranches, yet it endures the most of the portfolio's credit exposure and payment risk. Indeed it is the junior tranche which only receives the residual cash flow, and this is only after the superior tranches have been paid first. Therefore, the senior tranche has the first claim to payments received by the SPV. The senior tranches have the first claim to payments because of their lower risk as opposed to the more junior tranches who are associated with higher risk. The system by which payments are allocated within the various levels of this hierarchaltrench system is known as the cash flow waterfall.[69] This cash flow waterfall system is created to ensure that in the event that loans are defaulted within the security's portfolio, subordinate tranches such as the junior trench will absorb the losses first; while at the same time the more senior tranches will remain unaffected to the extent that the losses do not exceed the full amount of the subordinate tranches.[70] Within the senior tranche, there is little expectation of losses due to the fact that typically when investors finance their purchases of securities by borrowing and therefore they are sensitive to fluctuations in the value of the underlying assets.[71] It should be noted that this same sensitivity was a major catalyst in 2008 at the start of the financial crisis. Indeed when the riskiest tranches began to experience repayment issues from borrowers, an epidemic started by lack of confidence began to spread among the investors holding securities in the senior tranches. [72]Additionally it should be noted that it led to a complete panic among all holders who fled to more reliable and safe assets. This panic led to a quick and rapid sale of securitized debt.

[69] Id.
[70] Id.
[71] Id.
[72] Id.

IV. Advantages of Securitization

Over the past two decades, securitization dramatically swept in took over income producing asset markets. It soon became the primary means of accessing quick capital and efficiently moving assets within the markets. The attractiveness of this financial innovation still continues to challenge economists who ask just what exactly is the allure of securitization and why do so many people believe it is the only way to financially structure assets and make them liquid, as though no other financial innovations are available? This chapter is devoted to exploring the vast advantages of securitization that not only actually provide liquidity to the markets, but also has captivated originators and investors alike to believe that it is the only way to make illiquid assets produce quick capital.

i. Benefits to the General Public

We will first analyze the advantages that securitization offers the general public. Perhaps the most important benefit that securitization provides is the opportunity to have a secondary market for these assets. This secondary market provides liquidity and capital that the primary market cannot readily provide. Therefore, as a result of the creation of a liquid secondary market, the influx of new capital provides more opportunities for originators to create more loans and also in turn lower the borrowing costs for consumers. Indeed securitizing assets is one of the major ways that financial institutions raise capital due to the efficiency and painless effort that is required in originating their loans. In this regard, securitization provides benefits to all parties involved by providing liquidity in a secondary market and in turn providing obvious savings to consumers of the loans.

Securitization also benefits consumers with regards to lower interest rates on the loans. For instance, financial institutions spend less on the financing costs of disbursing loans under securitization. This is because once securitized, both mortgage-backed securities and asset-backed securities offer higher credit ratings than the originating lend would have under other alternative types of bonds. As a result of the higher credit rating on the security, within the market the security is deemed less risky and thereby a good investment. A security that is considered less risky will in fact provide a lower interest rate for the originator because investors will not demand the same risk premium level.[73] The savings generated by the originator will pass on to the consumer through the lower interest rates they will now offer.

ii. **Benefits to Investors**

Although they do not initiate the securitization process themselves, investors experience a degree of advantages from securitization as well. As noted earlier, when this separation of assets is considered effective and legally a valid true sale, then both the investor and the payment stream from the security is shielded from bankruptcy or any form of collection placed upon the originating institution.[74] Additionally, in terms of returns, it is in the investor's best interest to assume higher ratedsecurities as they typically will provide higher yields. The tangible value of this yield premium depends on the credit rating of the assets and the structure of the transaction in question.[75] This yield premium is very attractive to hedge or pension funds because they specifically seek out various financial products holding safe fixed incomes attached to alluring yields.[76] Financial groups such as hedge funds or pension funds heavily seek portfolio diversification and therefore are attracted to such compelling yields. Indeed for the past decade, pension funds have been a substantial investor in the securitization market due to

[73] A Ashcraft and T Schuermann, 'Understanding the Securitization of Subprime Mortgage Credit' (2008) Federal Reserve Bank of New York Staff Reports. 3

[74] A Jobst, 'What is Securitization? (2008) Finance and Development. 10, 48-49

[75] Id.

[76] Id.

their attraction to these fixed income securities.[77] Other financial groups involved heavily in the mortgage baked securities and asset backed securities market due to their attraction to thesepremiums include insurance companies, money managers and other investors seeking fixed income securities.[78]

Another attraction to investors is the capacity of the issuers to change the conditions of the securities stemming from the same pool of assets by using various securitization structuring techniques to reach the various needs and desires of different investors. For instance, the SPV can specifically modify both the maturity and seniority of a security to reach the demand of a particular investor. This ability to modify makes the market system much more flexible and maintains a high interest among various investors in the securities. It also increases efficiency within the capital market system by ensuring that investors can readily and quickly find securities that are appropriate and tailored to their needs.

iii. Benefits to Originators

Securitization offers many advantages for originators due to the influx of new capital and increasing loan opportunities. It provides capital readily in places that under traditional circumstances, would not be able to enjoy such credit options. For instance, under traditional primary mortgage loan markets, depository institutions were generally restricted with regards to the locations by which they could provide credit. Traditionally these lending institutions provided credit only in the places by which they actually accepted deposits. However under securitization, these same originators now have an opportunity to receive capital from other locations. Indeed the ability of originators to receive capital from other locations also helps them to expand the territory by which they are able to supply credit to those normally outside of their consumer terrorist or region.

[77] Id.
[78] Id.

Securitization also stresses for efficiency in the allocation of capital by forcing all the lending decisions of financial instructions to be subjected to valuation within the markets. Securitizations realize that financialinstitutions including originators and anyone who participates in securitization process of their assets will heavily depend on investors and their demand. They also realize that investors anticipate their potential cash flows based on the level of risk associated with the security. Therefore as a result, if the assets within the security are not considered good value and the investor is still interested in the security, then they will demand a higher interest rate. One must remember that securitization focuses on the isolating of risk of assets and then repackaging this pool of assets into a security to be sold to investors. In turn the market is made more efficient by the removal of any intermediary steps between the investors and any unwanted risk they have to absorb. Therefore both financial institutions and investors benefit from legal separation between the securitized assets and the originator.[79] Indeed the reallocation of risk is a major benefit of securitization and its makes the pool of assets highly sought after through its cash flow waterfall and shifting of risk.[80] When a financial institution shifts the credit risk of their pool of assets to investors now as a security, they are in fact reducing their own risk.[81] As a result, whenever the risk level of a financial institution is reduced, the systemic risk of the whole financial maker is reduced as well.

As we briefly mentioned earlier, securitization also provides many benefits to the originator. Indeed it is the originator who decides to remove the mortgages or assets from their balance sheets and commence with the securitization process. Without a doubt, the originator is the most important party in the securitization process as they control the decision to undergo converting the liquid assets into securities. Therefore, the originator has the power to control the lifespan of the market and amount of capital circulating in the credit industry. Therefore to

[79] Id.
[80] Id.
[81] Id.

understand why originators so readily decide to undergo the securitization process of their mortgages and assets, we need to uncover what benefits and advantages does securitization offer to these financial institutions to motivate them choose securitization. One major benefit of securitization upon the originator, is that it allows the originator to experience quick capital from a pool of their loans without having to wait depend on its revenue from monthly payments of loans on their balance sheets. Indeed aside from securitizing these loans, the other major alternative to an originator would be to individually sell the entire loan to other financial institution, but this proves to be inefficient due to the size of the loans. Securitization however allows originators to even move illiquid assets of their balance sheets to create more credit and in turn lend more.

Anotherbenefit to originators is that when they transfer the pool of assets to the SPV, they are effectively removing the assets from their balance sheets and in turn they have the opportunity to improve a degree of their financial performance on various assessments. For instance, the Return on Assets (ROA) assessment measures a financial institution's efficient, and tells exactly how many dollars are earned for every dollar of assets.[82] When an originator is able to move even just one asset off its balance sheet and at the same time increase their income, then the ROA improves and shows potential investors that the originator knows how to both create and use additional capital more efficiently.[83] Additionally it should be noted that the removal of assets from their balance sheets also lower the regulatory capital requirements or the requisite amount and type of capital that a financial institution must maintain in relation to the size of their portfolio, to show lowered risk.[84] This is pursuant to legal and regulatory laws governing the amount of leverage a financial institution is allowed to have. However if the

[82] A Ashcraft and T Schuermann, 'Understanding the Securitization of Subprime Mortgage Credit' (2008) Federal Reserve Bank of New York Staff Reports. 3

[83] Id.

[84] Id.

institution actually securitizes some of the assets off their balance sheet, and the transaction is considered a valid true sale, then they will be able to both remove the assets from their balance sheets and at the same time enjoy the earning power from those same assets.[85]

An additional benefit to the originating financial institution is that the securitization of assets can also lower the financing costs because on some occasions the SPV may issue the securities at a lower interest rate than the originator actually pays on its debt. Therefore, as the originator receives revenue from the securitization itself, they are also saving money that would have probably been used if they had to rely solely on their credit rating. To clarify, when the assets are removed from the originator's balance sheets and in turn their credit rating as well, the SPV will be able to attract capital to finance the purchase of the pool of assets at a lower cost then would have been possible if the SPV had relied solely on the credit rating of the originator's balance sheet alone.[86] For example, if a financial institution has an overall rating of "B" yet has "AAA" rated loans and assets on its balance sheets, they will still be able to find financing at an "AAA" rating instead of the "B" rating by securitizing those assets. [87] Notably unlike traditional concepts of debt, the securitization innovation will not inflate the liabilities of a company, but will instead actually produce capital for future investments ventures and balance sheet growth will not be necessary.

One problem for financial institution is when they have certain assets on their balance sheets that do not necessarily show their future earning potential; securitization allows them to represent those future cash flows by representing them as sold cash assets through at true

[85] Id.
[86] Id.
[87] A Jobst, 'What is Securitization? (2008) Finance and Development. 10, 48-49

sale.[88] This occurs when a financial institution decides to securitize their assets; they are able to record the boost in their earnings without any actual tangiblemonetary gain at that time. This is because once a true sale is produced, the true sale will show the market value of the originator's underlying assets which is therefore now reflected on the originator's balance sheet thereby boosting their earnings for that quarter despite not necessarily having these funds at the time.[89]

One more benefit for an originator is the ability to lock in their profits.[90] When a financial institution decides to securitize a pool of assets, their amount in profits has now been locked in and is liquid, therefore there is no risk of not obtaining a profit due to loan default which has now been passed on to the investor.[91] Indeed there is a general transfer of risks from the originator to the investor with regard to any credit, liquidity, prepayment, reinvestment and asset concentration risks associated with the assets.[92] What we have learned in the past three years is that although this greatly benefits the originator, this lack of "skin in the game" is a major risk set upon the market and in affect greatly affects investor's trust in the market.[93]

Figure 2. Issuance of non-GSE Mortgage- Backed Security (MBS) between year 2000 and 2009.[94]

[88] J Grundfest and E Petrova, 'Restoring Confidence' (2010) J.I.B.L.R

[89] Id.

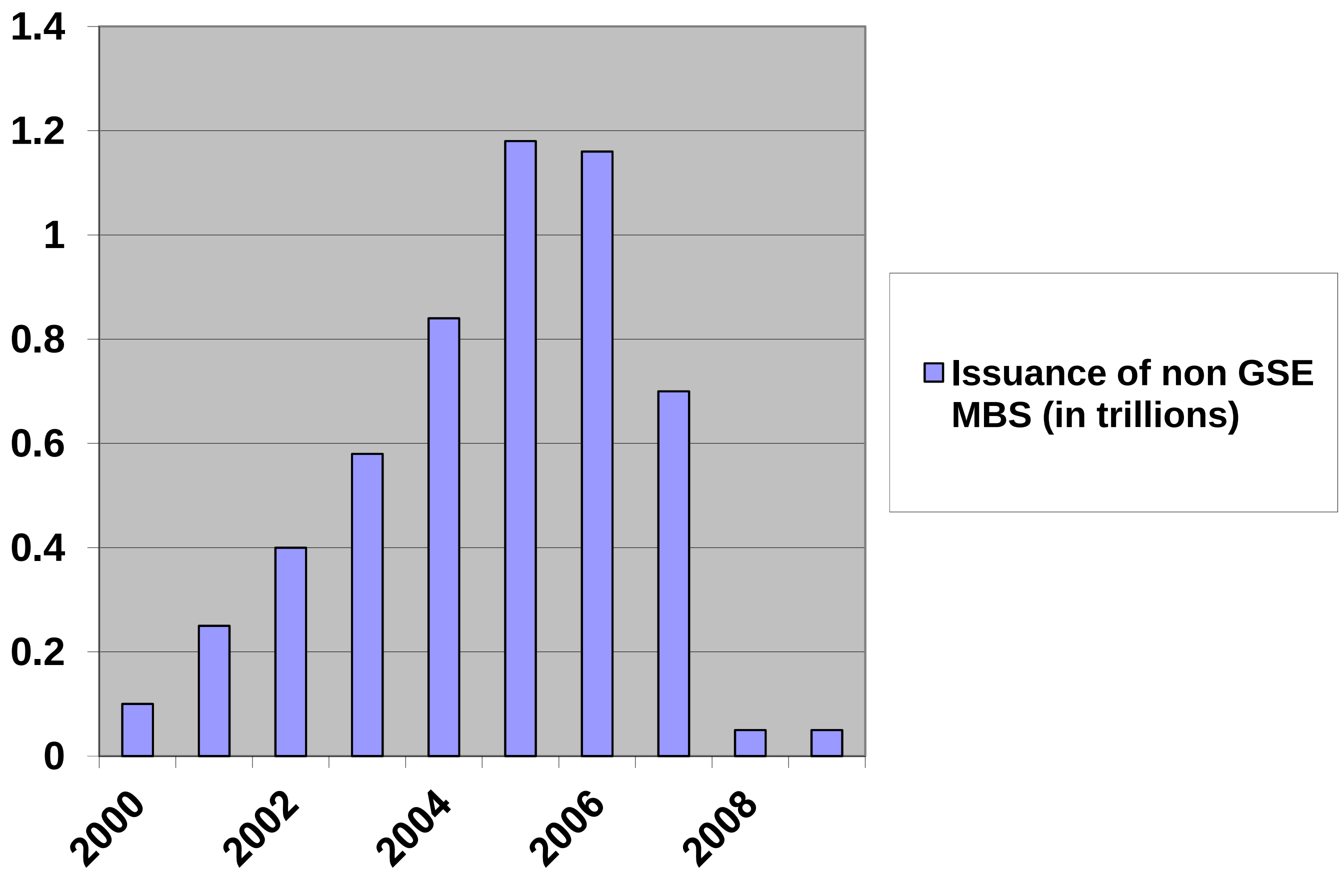
[90] A Jobst, 'What is Securitization? (2008) Finance and Development. 10, 48-49

[91] Id.

[92] Id.

[93] Id.

[94] A Ashcraft and T Schuermann, 'Understanding the Securitization of Subprime Mortgage Credit' (2008) Federal Reserve Bank of New York Staff Reports. 3



Source: Wall Street Journal- Data from: Inside MBS and ABS

V. Housing Boom

The previous sections explained the benefits of securitization and its attractiveness to market participants. I chose to discuss these issues prior to giving a brief synopsis of the housing boom and bust of the past decade as I felt it necessary to explain how these facts led to the most severe economic unraveling since the Great Depression. In order to understand the fast and dramatic fall of the American mortgage industry, we must first explore the setting of boom and excess prior to the explosion. This chapter will explore the housing boom and the financial products and innovations that developed during that period which in turn actually caused its downfall.

American financial markets took great advantage of the highly accessible credit conditions between 1997 and 2006. During this brief period, low interest rates and a huge influx of foreign capital produce an enormous credit boom in various markets. Indeed because of securitization, the housing market in particular readily enjoyed the influx of capital and low interest rates, thereby causing lenders to create and disburse even more loans. Indeed the ease by which lenders were able to produce loans brought America into a period of pure debt-financedconsumption. This was especially evident in its largest credit market, home mortgages. The large avalability of home mortgages led to an increased demand for homes, thereby driving home prices up. In fact, the average price of an American home increased by 124% between 1997 and 2006.[95] Indeed in 2004, American home ownership reached an all time high of 69.2% of American families owning homes.[96] Despite national wage averages remaining stagnant and average income not increasing, the American mortgage debt per household increased over 63%, rising from $91,500 in 2201 to $149,500 in 2007. [97] Also during this time, home owners who previously already owned mortgages readily began to refinance their homes, taking advantage of the very low interests that had emerged. Another reason why many home owners sought to refinance their homes was to have tangible cash and financing their consumer spendingdesires by acquiring a second mortgage, relying on the assurance of the price appreciation trend of that period.[98] In fact, consumer spending began to sore with tangible cash

[95] Id.
[96] Id.
[97] Id.
[98] J Grundfest and E Petrova, 'Restoring Confidence' (2010) J.I.B.L.R

coming from home equity extraction doubling from $627 billion in 2001 to $1,428 billion in 2005 and during the housing boom totaling to over $5 trillion dollars.[99]

Simultaneously during the increase of housing prices, Americans began to both spend and borrow more and save less. Borrowing on credit soared due to its abundant availability. Total household debt nearly doubled between in an eight year period; starting at $7.4 trillion in 2000 and soaring to $14.5 trillion in 2008 representing 134% of consumer disposablepersonal income. [100] The reliance of credit and the hasty tendency to borrow more continued to increase. By 2008, the average American household owned 13 credit cards, with 40% of them retaining a balance on these cards.[101]

Indeed between 2000 and 2006, housing prices nearly doubled, much of this was also due to the increase in speculative borrowing for homes.[102] As a matter of fact, homes were increasingly being considered as investments. A major contributor to this increase perception o homes as investments, was the influx of “flipping homes.” This practice of “flipping” involved purchasing homes while they were under construction or in dire need of repair and then once the home is completed, selling the home for a profit without the seller ever having lived there.[103] In fact in 2006, it was estimated that of the homes purchased that year, 22% of them were for investments purposes.[104] Additionally 14% of the homes purchased that year were bought to serve as holiday homes. [105] Therefore in 2006, almost 40% of homes bought that year were not

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[99] A Ashcraft and T Schuermann, ‘Understanding the Securitization of Subprime Mortgage Credit’ (2008) Federal Reserve Bank of New York Staff Reports. 3
[100] Id.
[101] Id.
[102] J Grundfest and E Petrova, ‘Restoring Confidence’ (2010) J.I.B.L.R

[103] Id.
[104] Id.
[105] Id.

purchased with the intention of making them primary residences.[106] Economist Robert Shiller described the speculative housing market as being encouraged by "contagious optimism, seeming impervious to facts that often take hold when prices are rising."[107]

VI. Influx of Private-Label Mortgage-Backed Securities

Before the 1990s, financial institutions such as savings and loans and commercial banks dominated the US mortgages markets. At that time, all of their loans were either held in on their balance sheets or securitized by the US government sponsored entities; Fannie Mae, Freddie Mac and Ginnie Mae. However, the GSEs were only permitted to securitized "investment-grade" mortgages due to the fact that they provided a government guarantee of timely payment of principal and interest on mortgage loans that they securitized. As a result, many lenders were compelled to hold the mortgages and their attached credit risk on their balance sheets and also became very hesitant to create unfavorable risky loans. However around 1995, a shift occurred when lenders realized that they could securitize mortgages outside the GSEs through unregulated and private instruments administered by investment banks. Known as private-label securitization, this technique provided a way for riskier loan to be securitized. However, private label securitization did not provide the guarantee of timely payment of principal and interest as the GSEs offered; as a result, investors were forced to assume any credit risks associated with these mortgage backed securities.

Lacking the timely principal and interest payment guarantee, private label securities were structured with other types of credit enhancements to attract investors. One of the major types of credit enhancement associated with private label securities was the division of the securities into hierarchal tranches thereby creating a cash flow waterfall. The use of Tranching within the securities led to the creation of grade AAA securities stemming from risky mortgages

[106] Id.
[107] Id.

and originators.[108] Within this waterfall, the tranches with the highest risk received the lowest credit ratings from credit rating agencies and as a result received the highest yields. Additionally these risky tranches were first to absorb any losses in the case of default by the borrowers. It should be noted that financial institutions leveraged private label mortgage backed securities as collateral in exchange for additional debt through the use of collateralized debt obligations.[109] This leveraging system frequently caused financial institutions to create CDOs simply by dividing into tranches the other CDOs.[110] This leveraging within leveraging made the private label market very susceptible to any weakening in prices or increase in defaults.[111]

A point should be noted that earlier on in the beginning of the private label market, the ease by which they were able to collateralize their mortgages was based on the reckless assumptions on the part of the credit rating agencies. Indeed these agencies did not take into thorough consideration the actual underlying collateral and carefully predict the probability of default. Instead of doing a thorough analysis of these mortgages the credit rating agencies chose to assume that the prices of homes would not decline altogether. This assumption also stems from the fact that there had never been a nation-wide decline in the price of homes exceeding 1%.[112] Taking advantage of the credit ratings assumptions, private label originators assumed that diversifying into loans not necessarily investment grade would not generate a loss.

In response to the new innovation of private-label securitization and its welcoming of non-investment grade mortgages; mortgage lenders began to seek private label mortgage backed securities for their opportunities for mortgages that the GSEs would not accept.

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[108] A Jobst, ‘What is Securitization? (2008) Finance and Development. 10, 48-49

[109] Id.

[110] J Grundfest and E Petrova, ‘Restoring Confidence’ (2010) J.I.B.L.R

[111] Id.

[112] Id.

Lenders no longer had to be forced to keep unfavorable loans on their balance sheets. Despite the lack of guarantee of payment that the GSEs offered, private label securities appealed to lenders through its high yields which were greater than those offered by GSEs.[113] Very soon the market for non-investment grade mortgages took off and expanded at a rapid pace. Indeed from 1995 to 2006, these “nonprime” mortgage backed securities developed and soon took over almost 50% of all securitized originations.[114] These nonprime mortgage backed securities also introduced a new group of borrowers who before the creation of private label securitization, could not have qualified for a home mortgage loan. Typically these borrowers did not qualify due to their poor credit or low incomes. As a result, many of the new non-prime mortgages were driven to borrowers who were not qualified to receive an investment grade mortgage. Eventually what developed was many originators began to solely originate mortgages without the intention of ever holding any of the loans on their balance sheets. These lenders originated loans solely to distribute through the private-label securitization process. The capital received following each security allowed these lends to create more loans and in turn originate thereby starting the process all over again.

It should be noted that during this period, the quality of these private label securities was very difficult to monitor and supervise, and over time the overall quality of these securities declined. [115] These securities hardly ever traded due to the fact that they were liquid and not backed by standardized assets unlike those issued by the GSEs. The growing risk associated with nonprime securities continued to be ignored due to the loosening of standards which sustained housing prices for the short term. [116] Additionally with this decline in lending standards became difficult to identify and monitor due to the fact that the mortgages were non-

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[113] Id.
[114] Id.
[115] Id.
[116] Id.

standardized and homogenous.[117] Therefore it was very difficult to observe any change in the mortgage itself or its accumulating risk. These issues combined with the fact that these nonprime mortgage backed securities were not traded, there was no way to scrutinized and identify that the credit standards were significantly dropping in the housing market.[118] As the price of housing literally began to expand into a bubble stimulated by inadequate underwriting leading to increased risk exposure within the whole system given the eventual disintegration of inflated prices.[119] This will be explored further in the chapters regarding the bursting of the housing bubble.

VII. Fallout and Causes for the Financial Crash

All of the factors described above provide the setting for the housing bust that would spread a massive recession across the globe in epidemic-like proportions. In fact in 2008, leaders at the Group of Eight conference made a "Declaration of the Summit on FinancialMarkets and the World Economy," whereby they identified the causes of the financial bust:

> During a period of strong global growth, growing capital flows, and prolonged stability earlier this decade, market participants sought higher yields without an adequate appreciation of the risks and failed to exercise proper due diligence. At the same time, weak underwriting standards, unsound risk management practices, increasingly complex and opaque financial products, and consequent excessive leverage combined to create vulnerabilities in the system. Policy-makers, regulators and supervisors, in some advanced countries, did not adequately appreciate and address the risks building up in

[117] Id.
[118] Id.
[119] Id.

financial markets, keep pace with financial innovation, or take into account the systemic ramifications of domestic regulatory actions[120]

Indeed all of these factors identified by the Group of Eight conference are correct and combined they validly exhibit factors that greatly contributed to the housing market collapse. I however believe the proximate cause of the crisis to be fairly simple. The housing collapse was proximately caused by an influx of new private-label lenders who were eager to take advantage of the unrestricted opportunities that the private sector afforded them and who hastily engaged in constant originate-to-distribute models, aggressively gave loans to unqualified first-time borrowers enticing them with low upfront costs.[121] Additionally I believe poor underwriting standards to also be a major catalyst, as well as grossly inaccurate ratings on the part of credit rating agencies.[122] We will now explore these issues more in depth and carefully analyze the events that triggered the housing crisis.

As the market was in the process of deregulating, the demand for risky private-label mortgages was ever increasing. Optimism and a "too big to fail" attitude about the housing market led private-label lenders to hastily seek more and more riskymortgages. For over fifty years, US mortgages followed a traditional unspoken format whereby the mortgages were set at a fixed interests rate for the loan's thirty year life. The borrower's terms and monthly payments never changed and therefore made payments easy on the borrower and their income. Indeed the borrower's income followed the tide of inflation. However as securitization of mortgage

[120] J Goddard and P Molyneux and J Wilson, 'The Financial Crisis in Europe: Evolution, Policy responses and Lessons for the Future' (2009) J.F.R. & C.

[121] A Levitin and A Pavlov and S Wachter, 'Securitization: Cause or Remedy of the Financial Crisis' (2009) Georgetown University Law Center, Business, Economic and Regulatory Policy Working Paper Series. http://ssrn.com/abstract=1462895

[122] Id.

backed securities began to become heavily demanded alongside the growth of private-label securities; the demand was met through the influx of aggressive and poorly underwritten loans holding risks that were far from the conventional loans accepted by the GSEs. Indeed private-label lenders entered the housing market seeking to securitize pools of risky non-primes loans that the GSEs were not permitted to accept. In fact, before 2003, only 16% of mortgage backed securities were non-prime.[123] By 2006, non-prime mortgages had reached 46% of all mortgage backed securities.[124] In addition to these non-prime mortgages, other types of mortgages began to emerge including non-amortizing; interest-only loans whereby the borrower did not make any principal payments; low doc or no doc loans whereby the borrower had to make little to no down payment nor documentation, nor proof of income; as well as pay optionadjustable rate mortgages known as ARMS whereby the borrower is allowed to choose their monthly payment level with the option of making it interest only or negative amortizing payments.[125] Additionally, the nonprime market introduce a new product of hybrid ARMs whereby the borrower agreed to thirty year mortgage with an initial fixed rate for a short period of two to three years, then annually adjusted rates in the following years.[126] These hybrid ARMs also carried prepayment penalties thereby discouraging borrowers to pay early.[127] A major problem with these hybrid ARMs also was the fact that borrowers qualified for these mortgages based on the low initial rate, despite the fact that their incomes might not be able to accommodate the new annually adjusted rates if they increased.[128]

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[123] Id.
[124] Id.
[125] A Levitin and A Pavlov and S Wachter, 'Securitization: Cause or Remedy of the Financial Crisis' (2009) Georgetown University Law Center, Business, Economic and Regulatory Policy Working Paper Series. http://ssrn.com/abstract=1462895
[126] Id.
[127] Id.
[128] Id.

Table 1. Deterioration of Lending Standards, 2002-2006

Mortgage Information	All Loans		
Year of Origination	1999	2003	2006
Number of Loans (All Loans)	596,710	1,840,040	3,251,355
Subprime Loans	512,476	1,426,503	2,376,949
Alt A Loans	84,233	413,494	872,208
Low Doc Loans	120,682	678,810	1,635,176

Interest Only Loans	1,169	95,870	725,317
Second Loans	86,482	192,337	708,343
ARM Teaser Loans	172,579	361,811	1,639,509
MARGIN (Adjustable Rate)	6	6	5

Source: Loan Performance, Anthony Pennington-Cross, et al., WREC WRC

The development of these nonprime mortgage innovations represents the race by private-lenders to receive a market share of the opportunities for risky loans. Indeed these lenders developed an obsession with the originate-to- distribute model and aggressively piled loans on unqualified borrowers who previously could not qualify for GSE investment-grade mortgages. Whether or not these borrowers defaulted was not an issue in the minds of the private-label lenders. Any type of risk fed the hunger of the capital markets so long as the participants received high incentives and fees for selling. As these mortgages did not remain on their balance sheets, the lenders were focused solely on the short-term profits of the sale and not the calibration of risk and long-term performance by the loans themselves. Indeed the compensation structures at Wall Street contained incentives with year-end bonuses required managers merely to show that they need to produce large volume profits by December 31 with no regard to long term sustainability of the loans.[129] To them once the true sale was completed, all risk of defaults in the security was washed from their hands and now upon the shoulders of investors holding pools of possibly defaulted loans.[130] Indeed these lenders had no more skin in the game to warrant them to take cautionary measures when disbursing loans to unqualified parties. Relying on the transfer of credit of the securities away from their own ratings and the credit ratings misguided belief that the housing boom was too big to fail, set the economy on the path for disaster.

VIII. How Securitization Can Save the American Housing Market

The decision regarding the future of the housing market and the debate regarding GSE verses private label securitization has dominated the partisan discussions within the United States Congress for the past three years. It is of my opinion that the economy will improve significantly through a gradual withdrawal of the GSEs and the return of a more strictly regulated private label securitization structure combined with a risk retention policy for originators, high underwriting standards and an emergency guarantee by the federal government. To support my argument, I will first explain why contrary to many economists, full nationalization of the GSEs will not save the American housing market but rather drain the federal government of its resources in an effort to simply play it safe and just keep the market afloat.

Currently the government sponsored enterprises of Fannie Mae and Freddie Mac have been nationalized under conservatorship under the supervision of the Federal Housing Finance Agency. Indeed September 6, 2008, the Director of FHFA James B. Lockhart announced that

[129] Id.
[130] Id.

both Fannie Mae and Freddie Mac would be placed under government conservatorship. The bailout of Fannie Mae and Freddie Mac proved to be unavoidable as both organizations reached negative net worth in the third quarter in 2008.[131] Freddie Mac's negative net worth was $50.7 billion during this period, requiring a capital draw from the United States Treasury to stabilize.[132] At the same time, Fannie Mae required $60 billion in capital draws to get back into a positive network position.[133] As of this year, the US treasury has directed over $110 billion in an attempt to stabilize both of these government sponsored enterprises.[134] Additionally in 2009, the Federal Housing Finance Agency (FHFA) which regulates both of these GSEs, shelved the capital requirements and guidelines which are normally enforced upon these organizations. Had these capital requirements remained in place, both Fannie Mae and Freddie Mac would have been required to have a total capital of at least $56 billion in the third quarter in 2009.[135] Despite all this both GSEs have effectively been able to take the leading role in the effort to resolve and prevent a larger foreclosure epidemic. Indeed following the crisis the private label market became effectively impotent causing the GSEs to assume the mortgage backed security market. Together, both of the GSEs currently are securitizing the majority of all mortgage loans. In fact , the Congressional Research service reports that as of the middle of 2009, the Treasury and Federal Reserve had purchased $883.3 billion of mortgage-backed securities, $82.8 billion of debt, and $92 billion of senior preferred stock from Fannie Mae and Freddie Mac.[136] Although the benefits of the conservatorship is keeping the housing industry afloat, it is not without its costs. Indeed since 2009; 90 percent of all mortgages have been underwritten by either Fannie

[131] D Reiss, 'The Role of the Fannie Mae/Freddie Mac Duopoly in the American Housing Market' (2009) J.F.R. & C

[132] Id.

[133] Id.

[134]Id.

[135] D Jaffee, 'The Future of Fannie Mae and Freddie Mac in the U.S Mortgage Market' (2009)

[136] Id.

Mae or Freddie Mac. [137] Currently neither GSE is generating a profit. As of February 2011, Fannie Mae asks the government for an additional $2.6 billion to stay afloat themselves.[138] This thereby totals the taxpayer bailout to $90.2 billion for this GSE alone. [139] Additionally, in 2010 Fannie Mae reported a loss of 14 billion in one year, attributing the loss to dividends on preferred stock paid to the US Treasury as part of its conservatorship agreement. [140] Also it should be noted that the guaranty fees charged by the GSEs is meager in comparison to the amount of money it has required of the US government since the conservatorship was first initiated. The FHFA reports that both GSEs are still plagued by "credit risk, operational risk, modeling risks and retention of qualified leadership and personnel."[141] To be clear, neither of the GSEs is generating a profit and the continuous bailouts is proving very costly on the US government.

It is of my opinion that the costly maintenance of both Fannie Mae and Freddie Mac is essentially a costly duopoly robbing the United States government of using those funds on more critical social issues and military spending. Although the conservatorship has been able to keep the housing market from completely collapsing, I believe is draining federal resources from other government operations that also need the resources. Additionally the federal government's implicit duopoly given to these two GSEs of the mortgage backed security market is effectively preventing the economy from once again returning to a free market enterprise. This is because the private sector cannot compete with the guarantee provided by the government. Indeed after such a financial crisis, a guarantee of timely payment of principal and interest is a very attractive selling point to anyone looking to securitize. However, for the sake of the US economy, it is simply not feasible to continue with a duopoly being buoyed by billions from the US government.

[137] Id.
[138] Id.
[139] Id.
[140] Id.
[141] Id.

Earlier this year, realizing that the government cannot continue to financially support nationalization of the GSEs, the Obama administration released three proposals for the gradual withdrawal of the conservatorship. The first option proposes privatizing home mortgage finance with the government's role being limited to providing assistance to narrowly tailored borrowers from organizations such as the FHA, US Department of Agriculture, and the Veterans Administration.[142] Although this option is very attractive, I believe that a guarantee of some sort of government protection is necessary to rebuild investor confidence. Therefore, I believe that the second option provided by the Obama administration is the most reasonable way to reintroduce privatization to the home mortgages market. The second option is the same as the first option except that it provides that government assistance would be scaled up during times of crisis.[143] I believe that this option is most effective at dealing with the needs of unqualified or first time buyers who will be considered for loans by the government organizations. Therefore as a result, the private market will not be so inclined to try to create so many nonprime mortgages. I believe that although it may prove to be costly, strong underwriting standards must be imposed upon the private label lenders. Additionally as suggested in the Dodd-Frank Reform bill, it is absolutely necessary that there is a risk retention regulation imposed on all private originator to ensure that they are not able to remove all risk from their balance sheets following a true sale. It is absolutely imperative the risk is retained on the part of the originator to ensure history does not repeat itself and originators are not simply creating loans for short term profits with no regard to the long term performance of the loan itself. By requiring these originators to keep some "skin in the game," they will be a lot more inclined not to create such risk nonprime loans and disburse loans to unqualified individuals. Also it should be noted that

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[142] J Olinger, 'Fannie, Freddie, and the Future of Fair Housing' (2009) Kirwan Institute for the Study of Race and Ethnicity, The Ohio State University

[143] Id.

by requiring originators to have more skin in the game, they will be scared to create so many loans that are not at traditional standardized fixed rates, due to their fear of defaulting. Additionally risk retention and these other reforms will indeed improve investor confidence in the home mortgage market and thereby increase the demand for mortgage backed securities once again.

IX. Conclusion

In general the American subprime mortgage crisis has been largely attributed to securitization in general. However, securitization is not the villain in this case. It was actually the reckless misuse of securitization by market participants and the public at large who believed that the housing bubble was too big too fail. Additionally private-label lenders took advantage of the poorly regulated environment and credit rating standards and imposed very reckless nonprime loans with under the originate to distribute model. They were focused solely on short term gains and not the long term performance of these loans. Therefore it was not securitization that was the proximate cause of the housing crisis. As to solutions to reignite privatization in the housing market and diminish the conservatorship, privatization with a government guaranty in times of emergency is the best solution. This privatization however must be accompanied by strict underwriting standards and a risk retention policy upon originators to ensure that a bubble like this will be averted in the future.

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