## The Role Played by Mortgage Financing in the 2008 Residential Property Asset Bubble: An Insider's Reflections

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ABSTRACT: This paper describes the response by the mortgage finance sector to the declining affordability of residential properties that began in the early 1990s and culminated in the 2008 bursting of the property market asset bubble. I discuss changes in program criteria and borrower qualifications introduced at Fannie Mae, the nation's largest investor in residential mortgage loans, where from 1984 to early 2005 I held several management and analyst positions. I offer a number of recommendations to minimize the potential for a repeat of the 2008 financial crisis.

For twenty years, from the end of 1984 to early in 2005, I was employed by Fannie Mae, working in the company's Northeast Regional Office located in Philadelphia. For the first ten years I managed a team of review credit underwriters responsible for monitoring the eligibility and creditworthiness of first mortgage loans sold to us or pooled as collateral for mortgage-backed securities. Then, in 1995 I transferred into the company's Housing & Community Development group, with responsibilities for increasing the volume of our business with what were defined as *underserved communities*. An additional part of my responsibilities was to prepare analyses of geographical markets to identify specific housing needs and evaluate general economic conditions. Needless to say, the cyclical character of the nation's residential property markets (and the economy, generally) was an ever-present dynamic impacting our business objectives as well as my own analytical work. Rarely discussed, however, was the insight that the credit-fueled and speculation-driven character of the nation's land markets drove these cycles.[1]

A brief reminder of the general economic situation existing in the early 1980s and how this affected the financial sector will help put what follows in useful context.

In response to stagflation and the growing threat of runaway inflation, Fed Chairman Paul Volcker allowed interest rates to rise and rise dramatically beginning in 1980. The expected outcome was, of course, a recession, which Volcker argued was a price the nation had to pay to tame inflation. The effect on financial institutions, including Fannie Mae, was a dramatic increase in the cost of funds while portfolios of fixed-rate loans generated increasing losses.

The Federal Reserve's changes in monetary policy occurred during the first significant period of consolidations in the financial sector. From the late 1970s until leaving for Fannie Mae, I managed the residential mortgage loan program for a mid-size commercial bank. In 1984 our bank merged with a larger commercial bank, and our residential mortgage lending activity was transferred to the parent bank's mortgage banking subsidiary. Ours was one of roughly 9,000 banks existing in the mid-1980s that closed, merged or was acquired over the next three decades.

With the recession not yet bottomed out in 1982, Fannie Mae was losing roughly \$1 million a day. To be sure, for mortgage loan investors the problem of interest rate risk always existed. During periods of price instability, borrowing short and lending long was a prescription for insolvency. Taking in revenue from loan originations and from loan servicing while passing on the interest rate risk to Fannie Mae, Freddie Mac or other institutional investors solved the long-standing balance sheet problem for mortgage loan originators. The secondary market participants then had to manage these and other risks associated with a concentration in one business line. For Fannie Mae (and Freddie Mac) this concentration was Congressionally-mandated.

Financial sector lobbyists pressed state and federal legislators for deregulations that would enable them to counter exposure to the most consistent and serious business risks. In response, the U.S. Supreme Court opened the door to elimination of state usury laws with its decision in *Marquette National Bank v*. *First of Omaha Service Corp*. This helped nationally-chartered banks expand their business across state lines. In 1980 President Carter signed the Depository Institutions Deregulation and Monetary Control Act phasing out interest rate ceilings. Unfortunately for the nation's thrifts (i.e., savings banks and savings associations), passage of this act and the Garn-St. Germain Depository Institutions Act of 1982 came too late to overcome the massive outflow of deposits to the money market mutual funds. Between 1986 and 1995 nearly one out of three thrifts failed.

Fannie Mae in 1982 was itself essentially a very large savings institution. David Maxwell, the then Chairman, solved one of the company's major revenue problems by requiring lenders to enter into mandatory commitments to deliver loans, the lenders subjected to penalties if they failed to do so. Regulators finally helped mitigate the interest rate risk by allowing mortgage loans to carry adjustable rates of interest. Despite these changes losses continued to mount.

The effect of increased interest rate charges stabilized, then pulled down property prices. Satisfied that inflation had been culled from the economy, the Federal Reserve orchestrated a gradual lowering of interest rates. The financial position of the surviving thrifts, many commercial banks, as well as Fannie Mae and Freddie Mac gradually improved. In addition to the introduction of adjustable rate mortgage terms, mortgage loans were now being pooled together as collateral

for a new form of bond, the mortgage-backed security. These securities provided financial institutions with a liquid asset that could be easily bought and sold. The stage was set for a resurgence in the residential property markets and of prices. In 1980 the median property price was \$47,200. Ten years later the figure had climbed to \$79,100.

For most of Fannie Mae's history, all loans purchased had to be prior approved by Fannie Mae's underwriting staff. By the time I joined Fannie Mae, there was neither the staff nor the systems required to continue this function given the increasing transaction volume. Lenders made representations and warranties to Fannie Mae that the mortgage loans originated met Fannie Mae's eligibility and creditworthiness criteria. Any variances to terms stated in Fannie Mae's Selling guide required a negotiated contract and risk-based pricing. A small percentage of loans was always selected for what was called a "post-purchase review" to determine not simply that the individual loans met our requirements but that the lender consistently produced loans that did so. It was some years before Fannie Mae's internal systems were sufficiently upgraded to perform this post-purchase review function efficiently and effectively. As an additional safeguard, any loan that became 90 days delinquent within the first twelve months was subjected to a thorough process of income and credit re-underwriting. A new appraisal would also be performed on the subject property.

What we learned was that few of our lenders were able to consistently generate loans in which the creditworthiness and default risk were accurately determined. There were simply not enough highly trained underwriters available to meet the increasing transaction volume. The result was a steady stream of communications requiring lenders to repurchase loans or agree to do so should the borrower become delinquent. Although we required lenders to perform their own internal quality control reviews, lender managements rarely gave this function the appropriate level of independence, support and expertise to perform well. All of these dynamics, as well as outright misrepresentation of borrower characteristics and unsupported property values, eventually combined to create a perfect storm of non-performing loan problems.

Fannie Mae issued tightened underwriting standards in 1985, but this had little effect on mounting credit losses until 1988. Fortunately, overall market conditions improved. Falling unemployment and increasing property values combined to reduce delinquencies as well as lower losses associated with the resale of properties acquired by foreclosure sale. In 2014, Tim Howard (Fannie Mae's former C.F.O.) recalled:

"Our underwriting was solid, our guaranty fee pricing was comfortably covering our credit losses, and the capital we held to back our credit guarantee business was growing rapidly. ...Fannie Mae was poised to earn a billion dollars in 1990.[2]

For thousands of thrifts the upturn in market conditions came too late. All across the United States, newly-constructed condominium buildings and second home developments sat unsold. A collapse of residential land prices in the nation's *oil belt* also created wide swaths of empty properties. Faced with this crisis, the U.S. Congress created the Resolution Trust Company charged with liquidating the assets of failed thrifts. I was transferred temporarily to a group charged with examining the quality of non-conforming mortgage loans originated by the failed institutions. Most were performing satisfactorily but were characterized by both non-standard documentation and underwriting. With disclosure of how the loans were documented and performing, investors bid for the assets based on the weighted-average yield of these portfolios. The General Accounting Office estimated that taxpayers absorbed \$132 billion in losses on portfolios with a book value of over \$400 billion.

In 1992 a new regulator, the Office of Federal Housing Enterprises Oversight was established. From this point on Fannie Mae would have a housing goal of purchasing or securitizing nearly one-third of the company's mortgage loan volume with loans made to low- and moderate-income households. New risk -based capital standards were imposed on Fannie Mae, which actually had the effect of making the company's bonds far more attractive than previously. The financial assets required to feed the growing demand for mortgage financing now attracted international investors.

Jim Johnson, who was brought in by David Maxwell as vice chairman at the beginning of 1990, succeeded Maxwell as chairman in 1994. Under Johnson's leadership the mission to expand access of financing to underserved communities was combined with efforts in increase the supply of affordable housing. These initiatives were given nearly equal emphasis with the purely financial goals. Beginning that year, Fannie Mae began to open what were called Partnership Offices, staffed by two or three people with important political connections and/or advocacy credentials. Backed by a pledge to allocate \$1 trillion to previously underserved communities, the new offices would work with lenders, public officials, housing advocates, and others to expand the company's involvement at the local level. One of my responsibilities was to support the Partnership Offices in efforts to develop new public/private initiatives to fund the construction of new affordable housing units. Toward this end, we cultivated relationships with foundations, local and state governments, housing advocacy groups and even colleges and universities.

Ongoing deregulation of the financial sector also resulted in consolidations among even the largest commercial banks, transforming the mortgage loan origination sector in a way that had unfortunate consequences. With each passing year, the number of firms accessing Fannie Mae and the secondary mortgage loan market, generally, declined. Such a concentration of market share in just a handful of financial institutions changed the dynamics of the relationship with Fannie Mae. Were the banks dependent on us as a primary

means of securitizing the loans they originated? Or, were we now dependent upon them, agreeing to accommodations that jeopardized what were well-measured risks associated with Fannie Mae's congressionally-mandated mission? Internally, this created a degree of conflict between our marketing and risk management staffs.

A fundamental change was occurring in residential property markets across much of the United States. While owning a residential property had always contributed a high portion of household net worth, by the mid-1980s the buying and selling of these properties was embraced as a core investment activity. These were not investments in *housing* (a depreciating asset), but in land parcels, the supply of which is fixed by nature. In almost any regional market a significant percentage of the land is unsuitable for development. Even more land is made unavailable because of roads, highways and public transit systems. Additional land is developed publicly by government for all the public goods and services communities need and press for. As a result, the supply of land available for development is relatively inelastic. And, when the supply of any asset is inelastic, increased demand results in rising prices. When the potential exists to gain by acquiring choice locations and holding them for speculation, the supply curve for land can actually be leftward leaning, meaning that as prices are increasing the supply brought to the market declines.

As land prices climbed upward, fewer and fewer households (particularly those who were renters hoping to become first-time homebuyers) were able to accumulate the savings sufficient to meet traditional cash down payment requirements and cover transaction closing costs. Fannie Mae, and the entire mortgage financing sector, had to come up with changes in program criteria if transaction volume was to be maintained. And, for Fannie Mae, at every turn there was the congressional mandate to achieve 30 percent of its dollar volume with loans made to low- and moderate-income households.

A long-standing accommodation to the problem of rising property prices was the expansion of private mortgage insurance (PMI) where borrowers were unable to make a minimum 20 percent cash down payment. PMI came into general use in the mid-1950s, and by the mid-1980s was made far more necessary because of the annual increases in property prices. Adding fuel to the rise in property prices was the almost annual increases in maximum loan amounts set by Fannie Mae and Freddie Mac, in essence validating the market inflation in property (i.e., land) prices. The amount of financing obtainable for a single-family property purchased or refinanced in 1980 was \$93,750. By 1990, the loan limit had been increased to \$187,450. Fast-forward to 2007 with the financial crash looming and the loan limit had risen to \$417,000. It is worth noting that these maximum loan limits were greater in what were determined to be high cost areas such as New York City, San Francisco, Boston and Washington, D.C.

As property prices climbed, an obvious challenge for the financial sector was how to respond. The borrower's capacity to service mortgage debt is typically calculated based on two ratios. The first is the percentage of monthly household income absorbed by the monthly mortgage payment, plus escrows for real estate taxes, fire insurance, condominium or homeowner association fees, and any private mortgage insurance premiums. The second ratio factors in other debts carried by the borrowers. Statistics collected over many decades indicated that the risk of borrower default increases whenever these ratios exceed 28 and 36 percent, respectively. Among finance specialists this is referred to as PITI, for principal, interest, taxes and insurance. Another factor contributing to borrower default is whether the borrowers are left with some multiple of their PITI payment obligations after closing occurs. Two months' reserve was considered a bare minimum. Meeting these criteria proved to be more and more difficult for many potential property buyers in the low- to moderate-income market. Many in this group were dependent on outright or conditional grants to raise the funds necessary for a minimum down payment and for closing costs. An analysis of loan level detail published in 2012 by the Federal Reserve Bank of Dallas showed that "the average first-time buyer LTV (i.e., loan-to-value) ratio rose sharply from about 88% in the mid to late 1990's to a peak of 94% in 2005."[3]

Our Housing & Community Development group at Fannie Mae continually evaluated loan performance in an effort to balance the potential for increased default risk with the objective of expanding ownership rates among identified underserved communities. Fannie Mae was committed to uniform mortgage lending standards available in all markets, with only minor accommodations to diversity of risk. For example, the rate of interest charged on mortgage loans where borrowers had less-than-stellar credit histories (what were called Alt-A borrowers) was only one-half of one percent higher than that charged for borrowers with perfect credit. Moreover, the rate of interest was reduced after the loan performed without delinquency during the first year.

Another requirement that significantly improved performance of loans to borrowers in the underserved communities was completion of homebuyer education. Moreover, Fannie Mae announced in 1997 a commitment to begin to use the technology of automated underwriting to improve the efficiency of loan processing and underwriting. The first steps were taken in 1994 with the release of a pilot version of what the company called "Desktop Underwriter" (DU).

Unfortunately, despite what in normal times would have been successful in managing delinquencies and foreclosure-related losses, the widespread collapse of the nation's property markets in 2008 seriously affected Fannie Mae's Alt-A loan performance. Losses associated with this business depleted Fannie Mae's capital reserves, resulting in conservatorship. A civil lawsuit filed against three former Fannie Mae executives in 2011 by the United States District Court for the Southern District of New York alleged serious misrepresentation by the company of the actual exposure to subprime loans. An important charge in this lawsuit was

that Fannie Mae "adjusted and recalibrated the risk assessment models within its DU system ... to provide more 'approve' messages in DU for larger volumes of loans with lower FICO scores and higher LTVs than previously permitted."

At the end of 2008, the Committee on Oversight and Government Reform of the U.S. House of Representatives held hearings on the role of Fannie Mae and Freddie Mac in the Financial Crisis. Former Chairman of the Board, Franklin Raines offered his perspective on how the company had worked to meet its mission goals while managing the increased risks:

"As subprime and Alt-A loans began to grow as a share of the overall mortgage market, the risk management restrictions Fannie Mae had in place limited the company's involvement with those products. And, as a result, in 2004, the company's share of the overall secondary market plummeted.

"Fannie Mae ... expanded its appetite for credit risk. However, it is important to note that, rather than lead the market toward looser credit standards, Fannie Mae generally resisted pressures to significantly lower its standards until about 2006."

Later in the hearing, Daniel Mudd (who succeeded Franklin Raines as C.E.O. in 2004) was asked to respond to what was written in an internal Fannie Mae document that read, in part:

"We are at a strategic crossroads, and we face two stark choices. One is stay the course, and the other is to meet the market where the market is. Fannie could maintain our strong credit discipline, it would protect the quality of the book, it would intensify our public voice on concerns about the housing bubble and accelerating risk, and most importantly, it would preserve capital. ...If you stay the course, you'll have lower revenues and slower growth, but you will have more security. On the other hand, if you invest in riskier mortgages, you have potential for high revenues and faster growth."

Mr. Mudd responded that these were the market dynamics that the company faced, not knowing whether they were "secular" or "cyclical." Fannie Mae's executives faced hard decisions of how to meet its congressionally-mandated mission goals even as an increasing share of the market was captured by the subprime participants. Although I had retired from my position at Fannie Mae in early 2005, I can say that those of us producing the business and working with the lending community were very concerned about the extent of outright fraud attached to the subprime market. There were other factors, of course. Rising property prices, driven by rising land prices, imposed a high level of financial stress on every sector of the economy.

For many years during my tenure at Fannie Mae, I did what I could to direct the attention of my direct management to the cyclical character of land

markets and the need to track land prices as an important indicator of the general economic health of the nation. After 1995, in my new position in the Housing & Community Development group, the market analysis work I performed brought me into a close working relationship with our economics staff as well as our research and development group. I suggested to them that the addition of one data element – the site value reported by real estate appraisers — to the information submitted by lenders under the Neighborhood Reinvestment Act would be extraordinarily helpful in identifying overheated markets. At the time, our chief economist was David Berson, today the chief economist at Nationwide Mutual Insurance. Around 2003 I approached David with the idea of organizing a conference on the cyclical character of land markets and the role played by tax policies. David was receptive. Unfortunately, just as this discussion occurred Fannie Mae came under intense regulatory scrutiny because of alleged accounting irregularities. The company shifted into crisis mode and many important initiatives were interrupted. This conference was one.

My analysis of property markets did find support from the Vice President in charge of our northeastern regional group, Deborah Holmes. Deborah was one of the few people at Fannie Mae who came to share with me the larger picture of what caused the affordable housing crisis worsening year by year. With Deborah's support I developed a presentation examining the connection between the conventional property tax and our speculation-driven property markets. Between 2003 and late 2004 I scheduled talks on this issue in conjunction with the Directors of our Partnership Offices located throughout the northeastern United States. Over the years since my retirement I have delivered this talk to many different public interest groups, a recorded version of which, titled "Saving Communities," is available on my personal Youtube channel.

## **CONCLUSION**

So, what is the take-away from everything you have heard from me today? I believe the evidence is clear that our property markets are destined to experience cyclical periods of boom and bust because of the failure to remove the potential financial gains to be realized by speculation in land, in locations. The economics have been understood for centuries. Every parcel or tract of land has some potential annual rental value, a value based on existing or potential locational advantages. Some advantages are attached to what nature provides. In a city or town many additional advantages result from investment in public goods and services that generate population and business density. This value is unearned to individuals or entities that control locations. When the community fails to collect this value to pay for what the community provides, those who hold locations enjoy an unearned, imputed income stream capitalized by market forces into a potential selling price for the location. Speculation in locations is, then, a highly rewarding investment option. Holding locations vacant or underdeveloped (e.g., as a surface parking lot) becomes widespread, driving up the asking price of land

that is offered for sale.

As I have explained in this paper, Fannie Mae and the mortgage finance sector, more generally, repeatedly introduced innovations in response to rising property prices in order to maintain transaction volumes and even increase the rate of property ownership within underserved communities. The unrecognized consequence was to add even more fuel to the speculative fires that burned.

## **NOTES**

- [1] By the mid-1980s I had written numerous papers on this subject. I came to this understanding after a year of study at the Philadelphia extension of the Henry George School of Social Science, after which I was invited to join the school's all-volunteer faculty.
- [2] Tim Howard. *The Mortgage Wars: Inside Fannie Mae, Big-Money Politics, and the Collapse of the American Dream* (McGraw-Hill, 2014), p.26.
- [3] John V. Duca, John Muelbauer and Anthony Murphy. "Shifting Credit Standards and the Boom and Bust in U.S. House Prices: Time Series Evidence from the Past Three Decades," Federal Reserve Bank of Dallas. Revised December 2012, p.2.