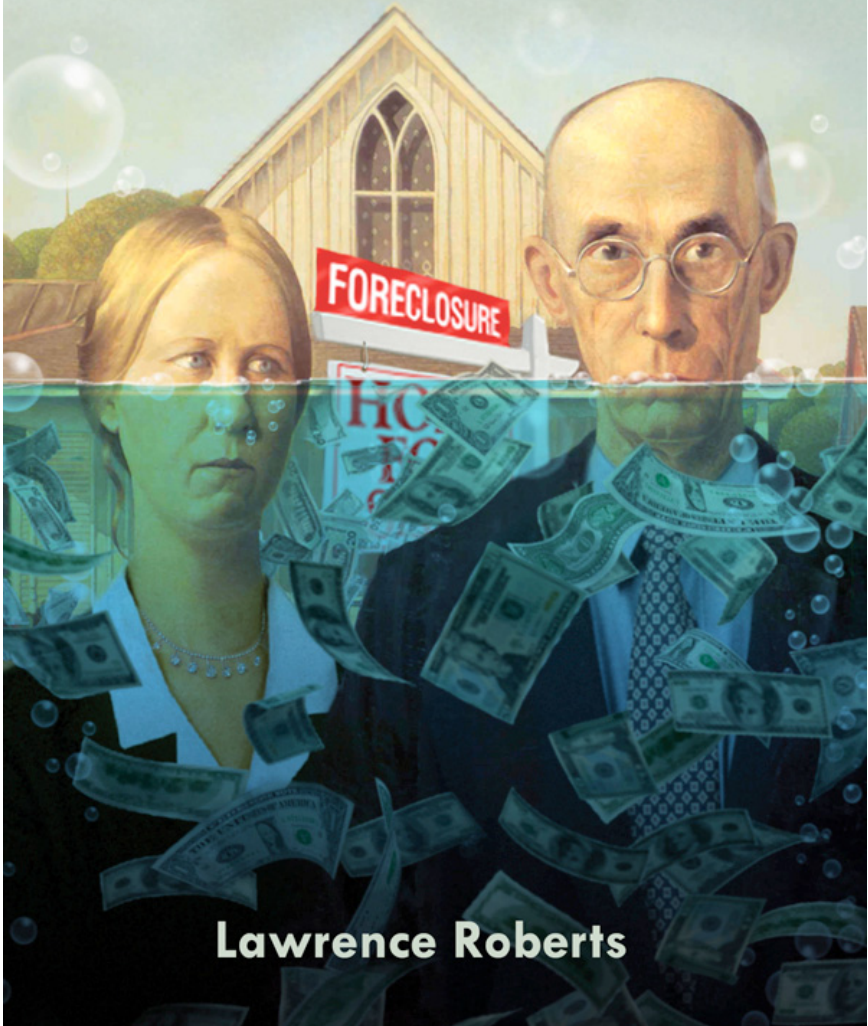


THE GREAT
HOUSING BUBBLE
Why Did House Prices Fall?



Copyright © 2008 by Lawrence Roberts
All Rights Reserved

Published by Monterey Cypress Publishing, a division of Monterey Cypress, LLC

ISBN: 0-615-22693-0
EAN-13: 978-0-615-22693-4

The softcover book, *The Great Housing Bubble*, can be purchased at => [Amazon.com](http://www.amazon.com).

The full text ebook of *The Great Housing Bubble* can be purchased at => <http://www.thegreathousingbubble.com/>

Other free excerpt ebooks of *The Great Housing Bubble* can be found at => <http://www.thegreathousingbubble.com/>

The author's work can also be found at the Irvine Housing Blog where he has been the primary writer since February of 2007.

<http://www.irvinehousingblog.com/>

The Irvine Housing Blog has become noted for its unique delivery of real estate market analysis in Slate Magazine, the Washington Post, and Newsweek Magazine. The blog reaches an average of 3,500 unique visitors a day, and it received over 2,000,000 page views in its first year of operation.

The author may be contacted at:

IrvineRenter@IrvineHousingBlog.com

The writings in this book are the opinions of the author. They are not intended to provide you with legal or financial advice, particularly with respect to residential real estate. The information in this book is designed to provide accurate and authoritative information in regard to the subject matter covered. It is presented with the understanding that Lawrence Roberts or Monterey Cypress Publishing is not engaged in rendering legal, accounting or other professional services. If legal advice or other professional assistance is required, the services of a competent professional person should be sought.

To
Michelle and James

Do you want more FREE eBooks like this one?

This eBook is an excerpt from [The Great Housing Bubble](#), the authoritative reference for one of the most dramatic events of our times.

This is one of a series of **FREE** eBooks you can obtain at [The Great Housing Bubble website](#). Others include:

[What is a Bubble?](#)

[Conservative House Financing](#)

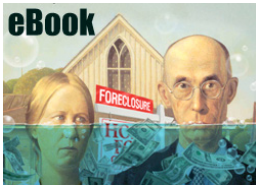
[Fundamental Valuation of Houses](#)

[The Credit and Housing Bubble](#)

[Housing Bubble Psychology](#)

[Buying and Selling During a Price Decline](#)

Full-text eBook at a retail price of \$9.95.



We are offering this great resource for the amazingly low price of just \$4.95!



Are we crazy to offer this valuable book for such a low amount? Perhaps, but we are convinced that you will like the eBook so much that you will want a hardcopy to hold in your hands and proudly display on your bookshelf.

Paperback on [Amazon.com](#) at a retail price of ~~\$19.95!~~



Amazon has gone crazy. They are offering the book for only \$13.56!

Buy now, this price will not last.



Also available at Barnes & Noble and other bookstores

Buy this book now!

I would like to thank the following people without whom this book would have never been published:

Profette – Anonymous published author, copy editor and support person. Without her encouragement I would not have believed people would be interested in my writing.

Brian Whitworth – Financial researcher and content editor. With his review, challenges to the basic assumptions, and review of the academic literature supporting the thesis, this book was elevated from a series of unsupported opinions to a well-researched and well-documented literary work.

Zovall – Anonymous owner of the Irvine Housing Blog who asked me to write for him in early 2007. If this had not happened, the framework of this book would never have been written.

Sean O’Daniels – Graphic artist whose creative cover design captured the essence of the housing bubble.

Tom Rollinger – Successful hedge fund manager, close friend and great networker who convinced me to finish the book by showing me how it could be marketed effectively.

Rik Osmer – A tireless supporter, proofreader, and former mortgage broker whose insights into the workings of the mortgage industry greater increased my understanding of the mechanics of the housing bubble.

Sheri Langerman – An early proofreader and editor. Her suggestions and insights helped shape the final text.

Richard May – His blog, colored by his irreverent sense of humor, was my inspiration to write about this subject in the public realm.

The Bubble Bloggers – The community of concerned citizens who have been loudly proclaiming the existence of the housing bubble in the noble cause of saving buyers from financial destruction.

The Irvine Housing Blog Community – The regular readers and astute observers on the Irvine Housing Blog have been an ongoing support group with constant encouragement and a feverish desire to see this book in print. This group, more than any other, has acted a crucible burning away the irrelevancies with their feedback and leaving a product which addresses the core of the housing bubble.

TABLE OF CONTENTS

Preface	ix
Irvine Housing Blog	ix
The Reservoir of Schadenfreude	x
Introduction	xiii
Conservative House Financing	1
Mortgage Interest Rates.....	2
Types of Borrowers	3
Types of Loans	4
Conventional 30-Year Amortizing Mortgage	5
The Interest-Only, Adjustable-Rate Mortgage.....	5
Negative Amortization Mortgages.....	6
Stated Income Loans	9
Downpayments.....	11
Equity Components	12
Initial Equity	13
Financing Equity	13
Inflation Equity	14
Speculative Equity	15
Mortgage Equity Withdrawal	16
The Fallacy of Financial Innovation.....	19
Summary	21
Bibliography.....	22
Index	31
End Notes.....	34

Table 1 - Top Subprime Lenders 2006	xiv
Table 2 - Loan Type and Borrower Type Matrix.....	4

Figure 2 - Components of Mortgage Interest Rates	2
Figure 3 - Interest-Only and Negative Amortization Purchases, 2000-2006	7
Figure 4 - Private Builder Low/No Documentation Loans as % of Total, 2006	10
Figure 5 - National Home Ownership Rate, 1984-2005	11
Figure 6 - Types of Equity.....	12
Figure 7 - Negative Amortization Loan Equity Curve.....	14
Figure 8 - Peak Buyer, No Downpayment, Negative Amortization Loan.....	16
Figure 9 - Mortgage Equity Withdrawal, 1991-2006.....	17

Preface

I work as a development consultant in the real estate industry in Southern California. My education and experience has acquainted me with a variety of real estate markets, but residential real estate is the one with which I am most familiar. I am not a realtor or a mortgage broker, and my livelihood, though dependent upon the real estate industry, it is not dependent upon facilitating a home-sale transaction. What is presented here is both historical account and unbiased analysis. My observations of the residential real estate market are not tainted by any need or desire to convince anyone they should buy a house. In fact, one of my motivations for writing about the Great Housing Bubble is to convince people *not* to buy a house when prices are inflated and save them from financial ruin. It saddens me to watch homebuyers get caught up in the bubble mythology and enter into a financial transaction that will have a strongly negative impact on their financial lives. People who have already made that decision cannot be helped except at the expense of a naïve buyer. Sellers have the marketing machine of the National Association of Realtors to help them. Buyers have few sources of unbiased information to assist their decision. Part of the purpose of this writing is to educate both buyers and sellers on the realities of the residential real estate market.

One of the difficulties of writing a book on the Great Housing Bubble in 2008 is that the bubble has not played itself out yet. There is a necessary change in tense required when speaking of events prior to 2008 and those projected to occur during and after 2008. Someone reading this in 5 years may look back on it as history, but for those of us living it now, it is a history not yet lived. Much of what is presented here may not come to pass, or it may not happen in the way hypothesized in this book. History will judge whether this is prescient, or if it is “a tale told by an idiot, full of sound and fury, signifying nothing.”¹

Irvine Housing Blog

I discovered Real Estate Bubble Blogs in November of 2006.² Many were in existence much earlier, but I was not a big reader of blogs prior to this time. I

THE GREAT HOUSING BUBBLE

first discovered the Irvine Housing Blog when my wife found a series of interesting posts on people who were attempting to sell properties for a quick profit (flipping,) and they were getting burned. I was quickly hooked. From the blogroll (links to other blogs) I was able to locate several other bubble blogs, and I quickly became a regular reader and commenter on several blogs in this community.

In February of 2007, I was asked to write for the Irvine Housing Blog. I had a great deal of pent-up energy for writing about the housing bubble. Over the months that followed I wrote a series of analysis posts which became the structure of this book. Daniel Gross, a freelance writer published in Slate Magazine, the Washington Post and Newsweek, characterized the writing as follows (Gross, *The Real Morons of Orange County*, 2007): "IrvineHousingblog, brilliantly drives home the same point with daily dispatches. The blog is a guide to the seventh circle of real estate hell – people who buy houses on spec with no money down. A typical entry chronicles the purchase price, tracks down the amount of debt on the property, and then calculates how much each party – the buyer, the first mortgage holder, the second mortgage holder – stands to lose assuming the seller receives the asking price."

The Reservoir of Schadenfreude

The readers of the Irvine Housing Blog have a voracious appetite for profiles of losing properties. They are not alone. Why do people get so much pleasure from seeing would-be real estate moguls lose a great deal of money? I can think of no other human endeavor that has engendered so much pleasure in the misfortune of others by otherwise caring, compassionate people. In my opinion, the outpouring of schadenfreude we are seeing as the housing bubble deflates is a mixture of Greek tragedy and bad karma. In short, bubble participants should have seen it coming, and they are getting what they deserve.

Schadenfreude is not a spiritually uplifting emotional response. Most religious traditions would counsel us against it. In Buddhist teaching, people are taught to cultivate feelings of compassion for the misfortune of others – feeling empathy and sadness for the slings and arrows of outrageous fortune when they impact another.³ The near enemy of compassion is pity: it masquerades as compassion, but it has an element of separateness which detracts from the sense of Oneness with all things. Joy is good: Sympathetic joy, the joy in the happiness of another, is another pillar of a spiritual existence; however, joy in the misfortune of another – schadenfreude – is not a skillful behavior leading to happiness. Even knowing that, many of us feel this joy anyway. Why is that?

I recognized financing terms were creating artificially high prices early on. By 2004, I was telling people I knew that this was a problem which would cause a market crash. Most people looked at me like I was crazy. "Real estate always goes up," I was told. "The government would never allow prices to crash," I was told. "If you do not buy now you will be priced out forever," I was told. This is the intoxicated language of real estate junkies who have overdosed on the real-estate-appreciation kool aid. If these statements had been offered in a defensive

PREFACE – THE RESERVOIR OF SCHADENFREUDE

manner of someone who is being made to realize they made a serious mistake, I could have felt sympathy for them; I would have been able to disarm their defensiveness and helped them see the light. However, what I generally got was a smug assuredness of someone who truly believed he was right and I was wrong; not just that I was wrong; I was a stupid, cowardly fool who did not have the brains or the bravery to take the free money being given out. This was particularly surprising given my line of work. It was as if a patient after getting a diagnosis of cancer told the doctor that the physician did not understand the tissue growth was a natural, healthy process. The buyers caught up in the Great Housing Bubble did not recognize the financial cancer even when an expert in the field told them how dangerous it was.

During the bubble rally, those of us who chose not to participate were labeled as “bitter renters.” It was suggested we were envious of the good fortune of homeowners as their property values rose, as they took on insane amounts of debt, and as they blithely financed a lifestyle well beyond their means. This was undoubtedly true for some, but in my opinion, this is not the primary reason so many derive so much pleasure from the misfortune of those now suffering from declining property values. These same people who chided us for being envious actually wanted us to be envious: they wanted us to know they were the winners in our competitive society; they wanted us to view them as superior. This act of putting themselves above us created a separation which prevented us from feeling sympathetic joy for their good fortune, and it prevented us from feeling compassion for them when they fell.

In our collective unconscious which manifests in our dreams and our mythology, water is often symbolic of our emotions or our emotional state. Have you noticed people are often categorized as deep or shallow? If you are in debt you often feel “underwater.” Anger is much like water: if not given an outlet, it will fill a reservoir until it reaches a breaking point and is expressed in a flood of emotional rage. Each encounter with a pathologic, kool-aid-drinking housing bull during the bubble rally has added to this reservoir, and reveling in failed flips is an outlet for this pool of toxic emotional waste.

There is an element of tragedy in every disaster, but financial bubbles are some of the most interesting because they are completely man made. They are created by the accumulation of individual decisions of buyers who are motivated by greed, foolish pride, and a false sense of security. Each of these people should have known better. Many of them were warned of their impending doom by those who saw trouble brewing, and yet, many chose to go down the path to the Dark Side. Newton’s Third Law states, “For every action, there is an equal and opposite reaction.” The Law of Karma states, “For every event that occurs, there will follow another event whose existence was caused by the first, and this second event will be pleasant or unpleasant according as its cause was skillful or unskillful.” It became obvious as the crash began; the behavior of buyers during the bubble rally was not skillful. Whether it is Newton’s Third Law, Karma, or a Calvinist form of retributive justice, as this bubble deflates, many of the participants in this bubble are about to experience a great deal of hardship. Like many others, I will enjoy their suffering until my reservoir of schadenfreude is emp-

THE GREAT HOUSING BUBBLE

tied. For the sake of my own personal spiritual well being, I hope this happens soon so I can regain my normal emotional balance and rekindle my feelings of compassion for my fellow human beings.

Introduction

Why did house prices fall? This is the fundamental question to most Americans, and to those who lent them money. Most homeowners did not care why residential real estate prices rose; they assumed prices always rose, and they should simply enjoy their good fortune. It was not until prices began to fall that people were left searching for answers. This book examines the causes of the breathtaking rise in prices and the catastrophic fall that ensued to answer the question on every homeowner's mind: "Why did house prices fall?"

Even though the decline is nowhere near over in 2008, already the Great Housing Bubble witnessed the largest decline in house prices since the Great Depression. The asset bubble for the Great Depression was the stock market while the asset bubble for the Great Housing Bubble was residential real estate. The title of the book, the Great Housing Bubble, is an allusion to the Great Depression of the 1930s. Both of these dramatic events were the result of a wild expansion of credit and a subsequent crash in asset prices that stressed the banking system and led to a dramatic economic slowdown.⁴

The book is arranged into 10 chapters. The first 4 chapters provide background information and are used to define terms and provide a broad conceptual understanding of residential real estate economics, chapters 5 through 8 discuss the structural and psychological factors that inflated and deflated the bubble, and the final two chapters describe methods of coping with the housing bubble. Chapter 1 is a general description of financial bubbles as a psychological phenomenon and the unique beliefs of residential real estate bubbles. Chapter 2 details the financing environment surrounding residential real estate. It defines and categorizes the types of borrowers and the types of loan programs available, and it illustrates how financing impacts the wealth of individual owners and the economy as a whole. Chapter 3 summarizes the mathematics determining the value of residential real estate and examines issues pertaining to the rent-versus-own decision, and chapter 4 delves into the fine points of determining the value of individual lots and raw land. Chapter 5 illuminates the credit bubble (which was largely responsible for the real estate bubble) with rigorous detail on the structure of the secondary mortgage market and how the expansion of credit

THE GREAT HOUSING BUBBLE

through this market inflated the housing bubble. Chapter 6 looks at the housing bubble, its various measurements, and explains why the bubble burst. Chapter 7 is a review of the psychology of real estate bubbles. Financial bubbles are primarily psychological phenomenon, and the various aspects of investor psychology are explored to see how they shape the market. Chapter 8 is a projection of future house prices based on the data and conditions as they existed in early 2008. Chapter 9 contains advice for both sellers and buyers who plan to be active while prices are declining. Chapter 10 is a review of the causes of the bubble and proposals for reforms to prevent residential real estate bubbles from happening again.

The examples and data used in the analysis are national in scope, and they are also focused on the local residential real estate market in Irvine, California. The Great Housing Bubble is a national phenomenon; however, the national statistics soften the extremes and make the rise and fall look less remarkable. In some local markets, the prices changes are truly extraordinary, and it is through examining these markets that the story of the bubble is best told. A fine exemplar of the Great Housing Bubble is Irvine, California. Irvine is a large, master-planned community of over 200,000 residents. The high incomes of Irvine residents are reflected in the rental rates for properties which are consistently near the highest in the nation. High incomes and rents translate into high real estate prices, even at the bottom of down cycles. When reviewing the properties in Irvine and the price tags attached to them, it is not uncommon for outsiders to believe a decimal point has been misplaced. The lessons learned from the Irvine experience are universal. Though many the examples from this work focus on Irvine, this is a book about the Great Housing Bubble of which Irvine was both a catalyst and one of its biggest participants.

Table 1 - Top Subprime Lenders 2006

Rank	Lender	Market Share %
1	Wells Fargo	13.0%
2	HSBC Finance	8.3%
3	New Century	8.1%
4	Countrywide Financial	6.3%
5	CitiMortgage	5.9%
6	WMC Mortgage	5.2%
7	Fremont Investment	5.0%
8	Ameriquist	4.6%
9	Option One	4.5%
10	First Franklin	4.3%
11	Washington Mutual	4.2%
12	Residential Funding	3.4%
13	Aegis Mortgage	2.7%
14	American General	2.4%
15	Accredited Lenders	2.3%
Top 15 Lenders		80.2%

Source: Inside B&C Lending

INTRODUCTION

The epicenter of the Great Housing Bubble is located in Irvine, California. One of the primary causes of the bubble was the lowering of lending standards and the extension of credit to people who could not handle the responsibility: Subprime borrowers. The word “subprime” has become indelibly linked to the Great Housing Bubble. It is one of the causal factors that make the bubble unique, and the collapse of subprime is widely regarded as the pin-prick which began the bubble’s deflation. Irvine, California, is the center of the subprime universe. Three of the top ten subprime lenders, New Century, Ameriquest, and Option One, are (or were) headquartered in Irvine. Most subprime lenders have processing offices in Irvine due to the large number of trained personnel living in the area. Irvine’s New Century Financial, formerly the second largest subprime operator, is heralded as the poster child of the bubble. The company name “New Century” implies a new era and a new paradigm. It embodies the fallacious beliefs and ideas that inflated the Great Housing Bubble.

Volatility in real estate prices is not new to California. During the 1970’s, real estate prices detached from typical valuations of three-times yearly income seen in the rest of the country. Once residents realized they could push up prices in their real estate markets to dizzying heights, they have been doing it ever since. Greed springs eternal. The Great Housing Bubble is the third such bubble in the last 30 years, and it is the largest of all. The detachment from traditional measures of valuation was so extreme that it is difficult for many to comprehend. Each time the bubble bursts, the crash is incorrectly blamed on some outside force, and each time the rally is thought to be different than the rally in previous cycles. It never is.

Conservative House Financing

When people decide they want to buy a house, they figure out how much they can afford, then they search for something they want in their price range. For most people, what they can “afford” depends almost entirely upon how much a lender is willing to loan them. Lenders apply debt-to-income ratios and other affordability criteria to determine how much they are willing to loan. Buyers are generally limited in how much they can borrow because lenders are wise enough not to loan borrowers so much that they default. Borrowers behave much like drug addicts – they will borrow all the money a lender will loan them whether it is good for them or not. Most borrowers are not wise to the differences between the various loan types, and they have limited understanding of the risks they are taking on.

The vast majority of residential home sales have lender financing. The interest rates and various loan terms have evolved over time. After World War II a series of government programs to encourage home ownership spawned a surge in construction and the evolution of private lending terms resulting in the 30-year conventionally amortized mortgage. This mortgage generally required a 20% downpayment, and allowed the borrower to consume no more than 28% of their gross income on housing. These conservative terms became the standard for nearly 50 years. Lending under these terms resulted in low default rates and a high degree of market price stability.

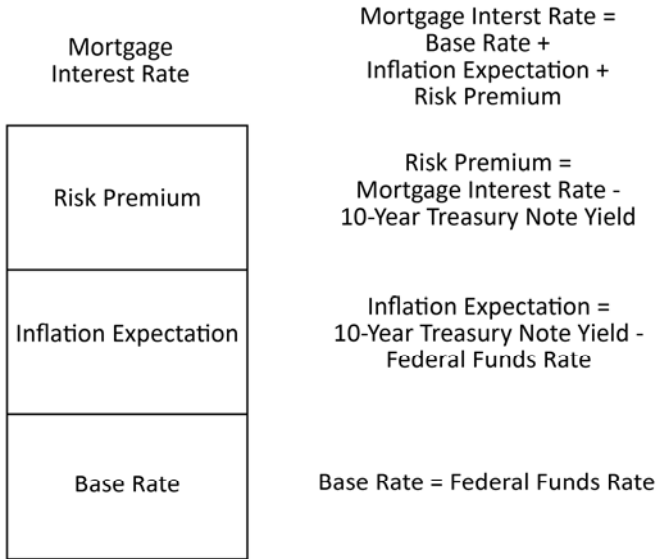
There were experiments with various forms of exotic financing during this period, particularly in markets like California where price volatility required special terms to facilitate buying at inflated pricing. The instability of these loan programs was demonstrated painfully during the deep market correction of the early 90s in California characterized by high default rates and lender losses. Rather than learn a difficult lesson regarding the use of these alternative financing terms from this experience, lenders sought out ways of shifting these risks to others through a complex transaction called a credit default swap. Once lenders and investors in mortgages thought the risk was mitigated, these unstable loan programs were brought back and made widely available to the general public resulting in the Great Housing Bubble.

THE GREAT HOUSING BUBBLE

Mortgage Interest Rates

Mortgage interest rates are the single-most important factor determining the borrowing power of a potential house buyer. When rates are very low, a borrower can service a large amount of debt with a relatively small payment, and when interest rates are very high, a borrower can service a small amount of debt with a relatively large payment. Mortgage interest rates are determined by market forces where investors in mortgages and mortgage-backed securities bid for these assets. The rate of return demanded by these investors determines the interest rate the originating lender will have to charge in order to sell the loan in the secondary market. Some lenders still hold mortgages in their own investment portfolio, but these mortgages and mortgage rates are subject to the same supply and demand pressures generated by the secondary mortgage market.

Figure 1 - Components of Mortgage Interest Rates



Mortgage interest rates are determined by investor demands for risk adjusted return on their investment. The return investors demand is determined by three primary factors: the riskless rate of return, the inflation premium and the risk premium. The riskless rate of return is the return an investor could obtain in an investment like a short-term Treasury Bill. Treasury Bills range in duration from a few days to as long as 26 weeks. Due to their short duration, Treasury Bills contain little if any allowance for inflation. A close approximation to this rate is the Federal Funds Rate controlled by the Federal Reserve. It is one of the reasons this activities of the Federal Reserve are watched so closely by investors. The closest risk-free approximation to mortgage loans is the 10-year Treasury Note. Treasury Notes earn a fixed rate of interest every six months until

PREVENTING THE NEXT HOUSING BUBBLE

maturity issued in terms of 2, 5, and 10 years. The 10-year Treasury Note is a close approximation to mortgage loans because most fixed-rate mortgages are paid off before the 30 year maturity with 7 years being a typical payoff time-frame.

The difference in yield between a 10-year Treasury Note and a 30-day Treasury Bill is a measure of investor expectation of inflation, and the difference between the yield on a 10-year Treasury Note and the prevailing market mortgage interest rate is a measure of the risk premium. Inflation reduces the buying power of money over time, and if investors must wait a long period of time to be repaid, as is the case in a home mortgage, they will be receiving dollars that have less value than the ones they provided when the loan was originated. Investors demand compensation to offset the corrosive effect of inflation. This is the inflation premium. The risk premium is the added interest investors demand to compensate them for the possibility the investment may not perform as planned. Investors know exactly how much they will get if they invest in Treasury Notes, but they do not know exactly what they will get back if they invest in residential home mortgages or the investment vehicles created from them. This uncertainty of return causes them to ask for a rate higher than that of Treasury Notes. This additional compensation is the risk premium. Mortgage interest rates are a combination of the riskless rate of return, the risk premium and the inflation premium.

The fluctuation in mortgage interest rates has implications for when it the best time to buy and the best time to refinance a home mortgage. It is a popular misconception that low interest rates make for a good buying opportunity. When interest rates are declining, borrowers can finance larger sums, and this does prompt many people to buy and home prices to rise, but when interest rates are low is also when prices are highest. A buyer in low-interest-rate environment may obtain an expensive property, but the resale value of that property will decline when interest rates rise because future buyers will not be able to finance such large sums. A low-interest-rate environment is an excellent time to refinance because a conservative borrower can either obtain a lower payment or shorten the amortization schedule and pay the loan off faster. The best time to purchase a house is when interest rates are very high. Again, this is counterintuitive because the interest is so much greater, but this will also mean the amount financed will be much lower and house prices will be relatively low. It is better to buy when interest rates are high and later refinance when interest rates decline. A borrower can refinance into a lower payment, but without additional cash, a borrower cannot refinance into a lower debt.

Types of Borrowers

Borrowers are broadly categorized by the characteristics of their payment history as reflected in their FICO score. FICO risk scores are developed and maintained by the Fair Isaac Corporation utilizing a proprietary predictive model based on an analysis of consumer profiles and credit histories. These models are updated frequently to reflect changes in consumer credit behavior and lending

THE GREAT HOUSING BUBBLE

practices. The FICO score is reported by the three major credit reporting agencies, Experian, Equifax and TransUnion. Borrowers with high credit scores have generally demonstrated a high degree of responsibility in paying their debt obligations as promised. Those with low credit scores either have little or no credit history, or they have a demonstrated track record of failing to pay their financial obligations. There are 3 main categories of borrowers: Prime, Alt-A, and Subprime.⁵ Prime borrowers are those with high credit scores, and Subprime borrowers are those with low credit scores. The Alt-A borrowers make up the gray area in between. Alt-A tends to be closer to Prime as these are often borrowers with high credit scores which for one or more reasons do not meet the strict standards of Prime borrowers. In recent years one of the most common non-conformities of Alt-A loans has been the lack of verifiable income. In short, “liar loans” are generally Alt-A. As the number of deviations from Prime increases, the credit scores decline and the remainder are considered Subprime.

Types of Loans

There are also 3 main categories of loans: Conventional, Interest-Only, and Negative Amortization. The distinction between these loans is how the amount of principal is impacted by monthly payments. A Conventional mortgage includes some amount of principal in the payment in order to repay the original loan amount. The greater the amount of principal repaid, the quicker the loan is paid off. An Interest-Only loan does just what it describes; it only pays the interest. This loan does not pay back any of the principal, but it at least “treads water” and does not fall behind. The Negative Amortization loan is one in which the full amount interest is not paid with each payment, and the unpaid interest gets added to the principal balance. Each month, the borrower is increasing the debt. Two of the features of all Interest-Only or Negative Amortization loans are an interest rate reset and a payment recast. All these loans have provisions where the interest rate changes or loan balance comes due either in the form of a balloon payment or an accelerated amortization schedule. In any case, borrowers often must refinance or face a major increase in their monthly loan payment. This increase in payment is what makes these loans such a problem.

Table 2 - Loan Type and Borrower Type Matrix

	Conventional	Interest Only	Neg Am
↑	Subprime	Subprime Interest Only	Subprime Neg Am
	Alt-A	Alt-A Interest Only	Alt-A Neg Am
	Prime	Prime Interest Only	Prime Neg Am
RISK →			

The category of loan and category of borrower are independent of each other. Starting in the lower left hand corner, there is lowest risk loan for a lender to make, a Prime Conventional mortgage. Up or to the right, the risk increases. The riskiest loan a lender can make is the Negative Amortization loan to a Subprime borrower.

PREVENTING THE NEXT HOUSING BUBBLE

Conventional 30-Year Amortizing Mortgage

A fixed-rate conventionally-amortized mortgage is the least risky kind of mortgage obligation. If borrowers can make their payment – a payment that will not change over time – they can keep their home. A 30-year term is most common, but if bi-weekly payments are made (two extra per year), the loan can be paid off in about 22 years. If borrowers can afford a larger payment in the future, they can increase the payment and amortize over 15 years and pay off the mortgage quickly. The best way to deal with unemployment or other loss of income is to have a house that is paid off. Stabilizing or eliminating a mortgage payment reduces the risk of losing a house or facing bankruptcy. Unfortunately, payments on fixed-rate mortgages are higher than other forms of financing, so borrowers often opt for the riskier alternatives.

The Interest-Only, Adjustable-Rate Mortgage

The interest-only, adjustable-rate mortgage (IO ARM) became popular early in this bubble when fixed-rate mortgage payments were too large for buyers to afford. In the coastal bubble of the late 80s, these mortgages did not become as common, and the bubble did not inflate far beyond people ability to make fixed-rate conventional mortgage payments.⁶ This is also why prices were slow to correct in the deflation of the early 90s. Most sellers did not need to sell, so they just waited out the market. The correction was a market characterized by large inventories, but this inventory was not composed of calamitous numbers of must-sell homes. The few must-sell homes that came on the market in the early 90s drove prices lower, but not catastrophically because the rally in prices did not get too far out of control. The Great Housing Bubble was different.

IO ARMs are risky because they increase the likelihood of borrowers losing their homes. IO ARMs generally have a fixed payment for a short period followed by a rate and payment adjustment. This adjustment is almost always higher; sometimes, it is much higher. At the time of reset, if the borrower is unable to make the new payment (salary does not increase), or if the borrower is unable to refinance the loan (home declines in value below the loan amount), the borrower will lose the home.⁷ It is that simple.

These risks are real, as many homeowners have already discovered. People try to minimize this risk by extending the time to reset to 7 or even 10 years, but the risk is still present. If a house were purchased in California in 1989 with 100% financing with a 10-year, interest-only loan, at the time of refinance the house would have worth less than the borrower paid, and they would not have been given a new loan. (Fortunately 100% financing was unheard of in the late 80s). Even a 10 year term is not long enough if purchased at the wrong time. As the term of fixed payments gets shorter, the risk of losing the home becomes even greater.

The most egregious examples of predatory lending occurred when these interest-only loan products were offered to subprime borrowers whose income only qualified them to make the initial minimum payment (assuming the borrower actually had this income). This loan program was commonly known as

THE GREAT HOUSING BUBBLE

the two-twenty-eight (2/28). It has a low fixed payment for the first two years, then the interest rate and payment would reset to a much higher value on a fully amortized schedule for the remaining 28 years. Seventy-eight percent of sub-prime loans in 2006 were two year adjustable rate mortgages.⁸ Anecdotal evidence is that most of these borrowers were only qualified based on their ability to make the initial minimum payment (Credit Suisse, 2007). This practice did not fit the traditional definition of predatory lending because the lender was not planning to profit by taking the property in foreclosure. However, the practice was predatory because the lender was still going to profit from making the loan through origination fees at the expense of the borrower who was sure to end up in foreclosure. There were feeble attempts at justifying the practice through increasing home ownership, but when the borrower had no ability to make the fully amortized payment, there was no chance of sustaining those increases.

The advantage of IO ARMs is their lower payments. Or put another way, the same payment can finance a larger loan. This is how IO ARMs were used to drive up prices once the limit of conventional loans was reached (somewhere in 2003 in California). A bubble similar to the last bubble would have reached its zenith in 2003/2004 if IO ARMs had not entered the market and inflated prices further. In any bubble, the system is pushed to its breaking point, and it either implodes, or some new stimulus pushes it higher: the negative amortization mortgage (Option ARM).

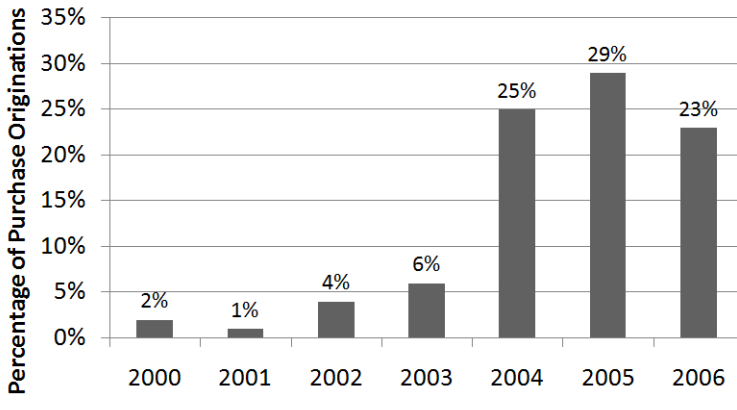
Negative Amortization Mortgages

The Negative Amortization mortgage (aka, Option ARM or Neg Am) is the riskiest loan imaginable. It has all the risks of an IO ARM, but with the added risk of an increasing loan balance. Using this loan, there is the risk of not being able to make the payment at reset, and the borrower is much more at risk of being denied for refinancing because the loan balance can easily exceed the house value. In either case, the home will fall into foreclosure. The Option ARM is one of the most complicated loan programs ever developed. It was heralded as an innovation because it allowed people greater control over their monthly payments, and it provided greater affordability in the early years of the mortgage.⁹ Twenty-nine percent of purchase originations nationwide in 2005 were interest-only or option ARM (Credit Suisse, 2007). The percentage in California was much higher. The proliferation of this product is largely responsible for the extreme prices at the bubble's peak.

An Option ARM loan provides the borrower with 3 different payment options each month: minimum payment, interest-only payment, and a fully amortizing payment. In theory, this loan would be ideal for those with variable income such as sales people or seasonal workers. This assumes the borrower has months where the income is more than the minimum, the borrower sees a need in good times to make more than the minimum payment and the borrower understands the loan. None of these assumptions proved to be true.

PREVENTING THE NEXT HOUSING BUBBLE

Figure 2 - Interest-Only and Negative Amortization Purchases, 2000-2006



Note: Purchase Originations Only

Source: Loan Performance, Credit Suisse Analysis

When confronted with several different prices for the same asset, people naturally will choose the lowest one. This common-sense idea apparently escaped the innovators who developed the Option ARM. Studies from 2006 showed that 85% of households with an Option ARM only made the minimum payment every month (Credit Suisse, 2007). Many could not afford to pay more, and many more could not see a reason to pay more. Most simply thought they would refinance when the payments got too high.

These loans are also very confusing. The interest rate being charged to the borrower adjusts frequently, and the payment rate (which is not correlated to the actual interest rate being charged) also changes periodically. The separation of the interest rate charged and the interest rate paid is what allows for negative amortization, and it also creates a great deal of confusion. The following is an attempt to explain the mechanics of this loan.

Payment Rate

A negative amortization loan is any loan where the monthly payment does not cover the monthly interest expense. Interest-only or conventionally amortizing loans do not have this feature, and the monthly payments are based on the interest rate charged and/or the duration of the amortization schedule. Since the negative amortization loan breaks down this traditional relationship, there is a completely separate rate calculated for the minimum payment amount. In general, this rate starts out low and increases gradually each year for the first several years. This is to allow the borrower time to adjust to a higher loan payment amount. These yearly increases are usually capped to prevent dramatic phenomenon known as “payment shock.” The payment rate is based on an interest rate, but this rate has no relationship to the interest rate the borrower is being charged on the loan balance. The presence of two interest rates is responsible for much of the confusion regarding these loans. The low starting payment rate is

THE GREAT HOUSING BUBBLE

often called a “teaser rate” because it is a temporary inducement to take on the mortgage. There was a widespread belief among borrowers that one could simply refinance from one teaser rate to another forever in a process known as serial refinancing. The biggest confusion regarding this loan is when people mistake this payment rate for the actual interest rate they are being charged on the loan. This is a natural mistake to make because historic loan programs did not make this distinction.

Interest Rate Reset

The Option ARM is a hybrid adjustable rate mortgage with payment options. The interest rate being charged to the borrower is subject to periodic fluctuations with changes in market interest rates similar to other adjustable rate mortgages. The timing of adjustment and limits therein are contained in the mortgage contract. The interest rate charged is fixed for certain periods at the end of which there is a change in the interest rate. When the interest rate changes on most adjustable rate mortgages, the payment required of the borrower changes as well. Since the charged interest rate and the payment rate are not the same for Option ARMs, the payment may not be affected and negative amortization can occur. Interest rate on most adjustable-rate mortgages is lower than those for fixed-rate mortgages because the lender is not subject to interest rate risk. If interest rates rise, lenders who have issued fixed-rate mortgages have capital tied up in below-market mortgages. With adjustable rate mortgages, higher interest rates are passed on to the consumer.

Since the low payment option on Negative Amortization loans is so appealing to consumers, the actual interest rate charged on Option ARMs is often higher than interest-only or fixed rate mortgages, which make these loans very attractive to investors. Since the interest rate is higher than the payment rate, negative amortization occurs, and the loan balance grows each month as the deferred interest is added to the loan balance. This capitalized interest is recognized as income on the books of mortgage holders. Generally Accepted Accounting Principles (GAAP) allow this, but the amount of income is supposed to be reduced to reflect the likelihood of actually receiving this money. Since the loan program was new, and default rates were low due to the bubble rally, the reported income was very high making these loans even more appealing to investors. From the investors’ perspective, they were buying high-interest loans with great income potential and low default rates. From the borrowers’ perspective, they were obtaining a loan at a very low interest rate – a perception rooted in a basic misunderstanding of the loan terms – and a very low payment which allowed them to finance large sums to purchase homes at inflated prices. This dissonance between the investors who purchased these loans and the borrowers who signed up for them did not become apparent until these loans began to reset to higher rates and recast to higher payments. In short, these loans are time bombs with fuses of varying lengths set to blow up the dreams of investors and borrowers alike.

PREVENTING THE NEXT HOUSING BUBBLE

Payment Recast

Interest-only and negative amortization payments cannot go on forever. At some point, the loan balance must be paid in full. For all adjustable rate mortgages, there is a mandatory recast after a fixed period of time where the loan reverts to a conventionally amortizing loan to be paid over the remaining portion of a 30 year term. This recast eliminates the options for negative amortization and interest-only payments and requires the fully amortized payments on an accelerated schedule for what is often an increased loan balance. For instance, if an interest-only loan is fixed for 5 years, at the end of 5 years, the loan changes to a fully-amortized loan with payments based on the remaining 25 year period. The longer interest-only or negative amortization is allowed to go on, the more severe the payment shock is when the loan is recast to fully amortizing status. Also, in the case of negative amortization loans, the total loan balance is capped at a certain percentage of the original loan amount, typically 110% but sometimes higher. If this threshold is reached before the mandatory time limit, the loan is also recast as a conventionally amortizing loan. Since many borrowers were qualified based on their ability to make the minimum payment at the teaser rate, when the loan recasts and the payment significantly increases (double or triples or more,) the borrower is left unable to make the payment, and the loan quickly goes into default.

The natural question to ask is, “Why would lenders do this?” There is no easy answer. Most simply did not care. The lender made large fees through the origination of the loan and subsequent servicing, and the loan itself was sold to an investor. The investor bought insurance against default, and many of these loans were packaged into asset backed securities which were highly rated by ratings agencies due to their low historic default rates. Nobody cared to examine the systemic risk likely to result in extremely high future default rates because the business was so profitable at the time of origination. Most assumed this would go on forever as house prices continued to appreciate. It was envisioned that most borrowers would either increase their incomes enough to afford these payments or simply refinance into another highly profitable Option ARM loan. In hindsight, the folly is easy to identify, but for those involved in the game, there was little incentive to question the workings of system, particularly since it was so profitable to everyone involved.

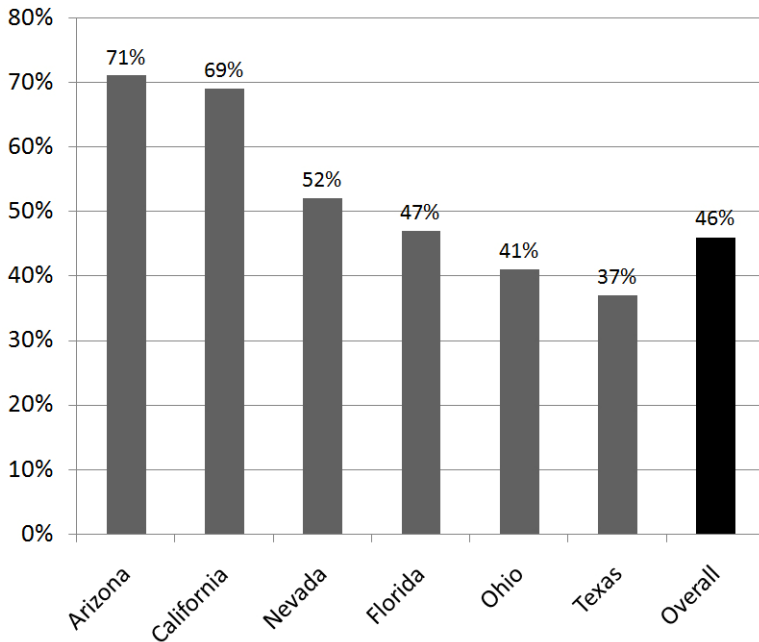
Stated Income Loans

One unique phenomenon of the Great Housing Bubble was the utilization of stated-income loans, also known as “liar loans” because most people were not truthful when stating their income. Loan documentation is usually a routine part of obtaining financing. Lenders ordinarily require a borrower to provide documentation proving income, assets and debt. However, during the final stages of the Great Housing Bubble, loan documentation was seen as an unnecessary barrier to completing more transactions, and loan programs which circumvented normal documentation procedures flourished. The fact that these programs ex-

THE GREAT HOUSING BUBBLE

isted at all is remarkable proof of the risk lenders were taking through the relaxing or outright elimination of lending standards. Eighty-one percent of Alt-A purchase originations in 2006 were stated-income, and 50% of subprime originations in 2005 and 2006 were stated income (Credit Suisse, 2007). Stated income loans increased from 18% of originations in 2001 to 49% in 2006 according to Loan Performance. In a related study by the Mortgage Asset Research Institute, 60% of stated-income borrowers had exaggerated their incomes by more than 50%.^{10, 11} Obviously, lying about one's income to obtain a loan is not a conservative method of financing a property purchase.

Figure 3 - Private Builder Low/No Documentation Loans as % of Total, 2006



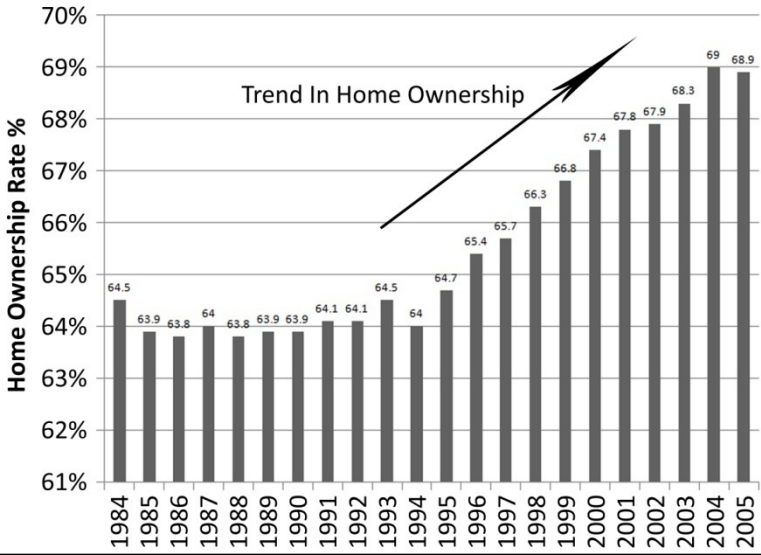
Source: Credit Suisse Analysis

The stated-income loan was originally provided to borrowers such as the self-employed who most often do not have W-2s to verify income. When these loan programs were first started, they were not made available to borrowers with W-2s as the transparency of the lie would have been obvious to all parties. During the bubble rally, this loan was made available to anyone, and lying was not only encouraged, borrowers were often assisted in fabricating paperwork by aggressive loan officers and mortgage brokers.¹² Since the loan could be packaged and sold to investors who had no idea what they were buying, there was a complete lack of concern for whether or not the borrower actually made the money stated in the loan application and thereby could actually make the payments on the loan. Everyone involved was raking in large fees, the borrower was obtaining the real estate they desired, and for a time, the investor was receiving payments from the borrower.¹³ As long as prices were rising, everyone bene-

PREVENTING THE NEXT HOUSING BUBBLE

fited from the arrangement. Of course, once prices started to fall, borrowers did not want to continue making payments they could not afford, and the whole system collapsed in a massive credit crunch.

Figure 4 - National Home Ownership Rate, 1984-2005



Source: US Census Bureau

Downpayments

The risk management measure not related to the mortgage terms is the downpayment. Most people do not think of downpayments as a way of managing risk, but lenders do. Downpayments reduce risk in two ways: first, they lower the monthly payment, and second, they provide a cushion ensuring the borrower can refinance (if necessary) should the house value decline. The problem with downpayments is obvious: few people save enough money to have one.

Eliminating downpayments through the use of 80/20 combo loans was another massive stimulus to the housing market. Subprime loan originations in 2006 had an average loan-to-value ratio of 94%. That is an average downpayment of just 6%. Also, 46% of home purchases in 2006 had combined loan-to-value ratios of 95% or higher (Credit Suisse, 2007). Lenders used to require downpayments because they demonstrated the borrower's ability to save. At one time, having the financial discipline to be able to save for a downpayment was considered a reliable indicator as to a borrower's ability to make timely mortgage payments. Once downpayments became optional, a whole group of potential buyers who used to be excluded from the market suddenly had access to money to buy homes. Home ownership rates increased about 5% nationally due

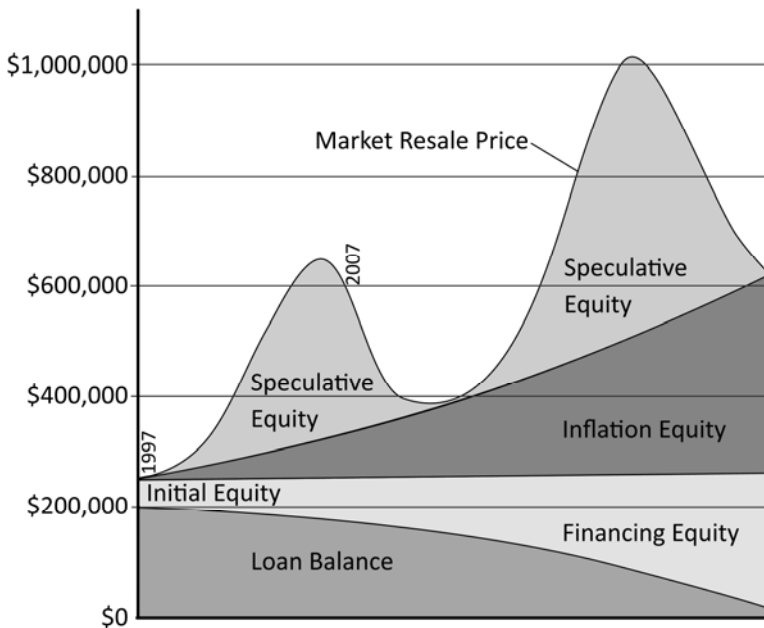
THE GREAT HOUSING BUBBLE

in part to the elimination of the downpayment barrier and the expansion of sub-prime lending.

Equity Components

In simple accounting terms, equity is the difference between how much something is worth and how much money is owed on it (Equity = Assets – Liabilities).¹⁴ People who purchase real estate use the phrase “building equity” to describe the overall increase in equity over time. However, it is important to look at the factors which either create or destroy equity to see how market conditions and financing terms impact this all-important feature of real estate.

Figure 5 - Types of Equity



For purposes of illustration, equity can be broken down into several component parts: Initial Equity, Financing Equity, Inflation Equity, and Speculative Equity. Initial Equity is the amount of money a purchaser puts down to acquire the property. Financing Equity is the gain or loss of total equity based on the decrease or increase in loan balance over time. Inflation Equity is the increase in resale value due to the effect of inflation. This kind of appreciation is the “inflation hedge” that provides the primary financial benefit to home ownership. Finally, there is Speculative Equity. This is the fluctuation in equity caused by speculative activities in a real estate market. This can cause wild swings in equity both up and down. If life’s circumstances or careful analysis and timing cause

PREVENTING THE NEXT HOUSING BUBBLE

a sale at the peak of a speculative mania, the windfall can be dramatic. Of course, it can go the other way as well. If a house is purchased at its fundamental valuation where the cost of ownership is equal to the cost of rental using a conventionally amortized mortgage with a downpayment, the amount of owner's equity is the combination of the above factors.

Initial Equity

The initial equity is equal to a purchaser's downpayment. If a buyer pays cash for a home, all equity is initial equity. Since most home purchases are financed, this initial equity is usually a small percentage of the purchase price, generally 20%. A downpayment is the borrower's money acquired through careful financial planning and saving, gifts from family members, or from the profits gained at the sale of a previous home. Downpayment money is not "free." This money generally is accumulated in a savings account, or if a buyer chooses to rent instead, downpayment money could be put in a high-yield savings account or other investments. There is an opportunity cost to taking this money out of another investment and putting it into a house. This cost and its impact on home ownership costs are detailed in later sections.

Financing Equity

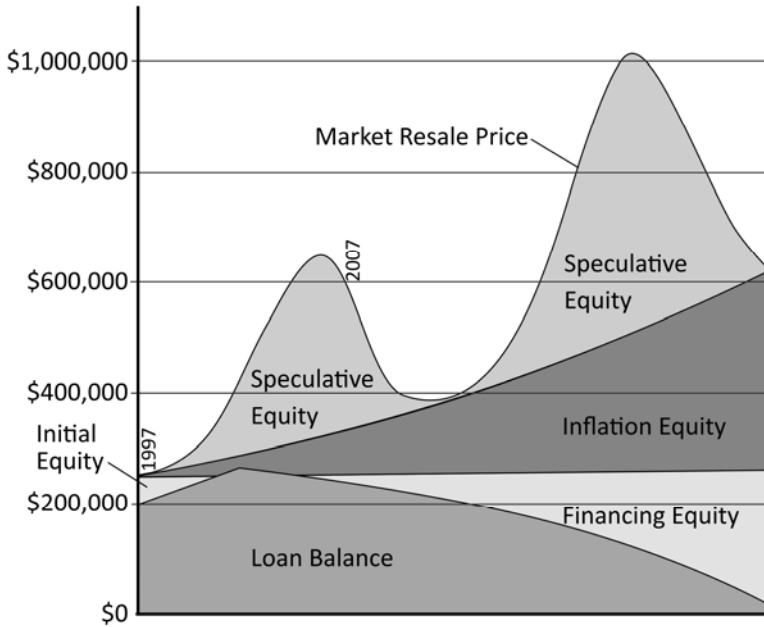
Financing equity is determined by the terms of the loan. With a conventionally amortizing mortgage, a portion of the payment each month goes toward paying down the loan balance. As this loan balance decreases, the owner's equity increases. This is a substantial long-term benefit of home ownership. With an interest-only mortgage, the loan balance does not decrease because only the interest is paid with each payment. With this kind of loan, there is no financing equity. One of the major drawbacks of using an interest-only loan does not become apparent until the house is sold and the seller wants to take the equity to the next home in a move-up. Since no financing equity has accumulated, the seller obtains less equity in the transaction. This means the move-up buyer will be able to afford less. Over the short-term, financing equity is not significant because the loan balance is not paid down by a large amount, but if the house has been held for 10 years or more, or if the loan was amortized over a shorter term, the financing equity can be a large amount. This can make a real difference when the total equity amount is to be put toward a larger, more expensive home. Also, financing equity is a great reservoir for retirement savings. In fact, it is the primary mechanism for retirement savings of most Americans outside of social security.¹⁵

The worst possible loan is the negative amortization loan because of its impact on equity. As noted in the figure on the next page, if a negative amortization loan is utilized, it will consume all equity in its path. It is a form of cash-out financing that reduces equity. This loan relies on inflation and speculative equity to have any equity at all. The negative amortization loan will only begin to build financing equity after the loan recasts and becomes a fully-amortized loan and the payments skyrocket – assuming the borrower does not default. Most people

THE GREAT HOUSING BUBBLE

cannot afford the fully-amortized payment, or they probably would not have used this form of financing initially. Even after the recast and the dramatic increase in payments, the loan does not get back to the original balance for many years.

Figure 6 - Negative Amortization Loan Equity Curve



Inflation Equity

House prices historically have outpaced inflation by 0.7% nationally.¹⁶ In a normal market, this is the only appreciation homeowners obtain. This appreciation is caused by wage inflation translating into higher housing payments and the ability of borrowers to obtain larger loan amounts to bid up prices. In areas like Irvine, California, where wage growth has outpaced the general rate of inflation, the fundamental valuation of houses has increased faster than inflation. The related benefit to home ownership obtained through utilizing a fixed-rate, conventionally-amortizing mortgage is mortgage payments are frozen and the cost of housing does not increase with inflation. Renters must contend with ever-increasing rents while homeowners with the proper financing do not face escalating housing costs. Over the short term this is not significant, but over the long term, the monthly savings accruing to owners can be very sizable, and if the owner owns long enough or downsizes later in life, housing costs can be nearly eliminated when a mortgage is paid off (except for taxes, insurance and upkeep). Although this benefit is attractive, it is not worth paying much of a premium to obtain. The long-term benefit is quickly negated if there is a short-term additional cost associated with obtaining it. For instance, if a property can

PREVENTING THE NEXT HOUSING BUBBLE

be rented for a certain amount today, and this amount will increase by 3% over 30 years, the total cost of ownership – even when fixed – cannot exceed this figure by more than 10% to break even over 30 years. The shorter the holding time, the less this premium is worth. In short, capturing the benefit of inflation equity requires a long holding period and a minimal ownership premium.

Speculative Equity

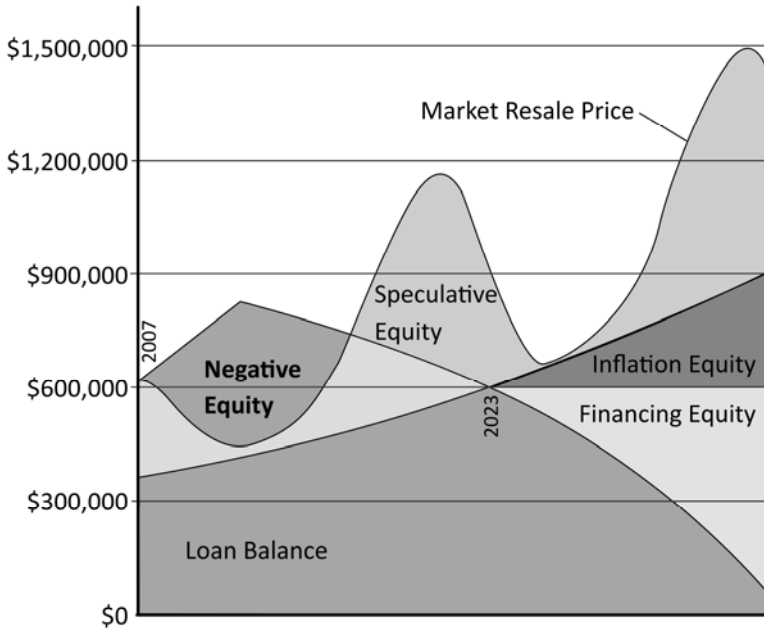
Speculative Equity is purely a function of irrational exuberance.¹⁷ It has become a common element in certain markets, and capturing it is the dream of every would-be speculator who buys residential real estate. It is a loser's game, but it does not stop people from chasing after it. Will the markets bubble again? Who knows? Human nature being what it is, the delusive beliefs of irrational exuberance may take root and the cycle may continue. In the aftermath of the Great Housing Bubble legislators may pass laws from preventing it from happening again. Of course, such laws require enforcement, and when greed takes hold, enforcement may simply not occur. For those that purchased at the peak of the bubble, they need another bubble or they may not get back to breakeven in the next 20 to 30 years.¹⁸ If however, there is another bubble, those who purchased at rental equivalent value after the crash will have an opportunity to reap a huge windfall at the expense of those who purchase at inflated prices in the future. As PT Barnum is credited with saying, "There is a sucker born every minute."¹⁹

The speculators who purchased at the peak of the Great Housing Bubble who put no money down (no Initial Equity) and utilized negative amortization loans – and there were a great many of these people – will have a painful future. The loan balance will be increasing at a time when resale home prices are falling. They will be so far underwater; they will need scuba equipment to survive. Plus, during the worst of their nightmare, their loan will recast, and they will be asked to make a huge payment on a property worth roughly half their loan balance. What default rates will these loans see? Realistically, they will all default. The only reason they purchased was to capture speculative profits which did not materialize. Even if some of these people hold on, and there is another speculative bubble similar to the last one, it will take 10 years or more for them to get back to breakeven, not including their carry costs. If there is no ensuing bubble, it will be 20 years. If you factor in their holding costs, they may never get back to breakeven.

Equity is made up of several component parts: Initial Equity, Financing Equity, Inflation Equity, and Speculative Equity. Each of these components has different characteristics and different forces that govern how they rise and fall. It is important to understand these components to make wise decisions on when to buy, how much to buy, and how to finance it. Failing to understand the dynamics involved can lead to an equity graph like the one for the peak buyer who purchased at the wrong time and utilized the wrong terms. Nobody wants to suffer that fate.

THE GREAT HOUSING BUBBLE

Figure 7 - Peak Buyer, No Downpayment, Negative Amortization Loan

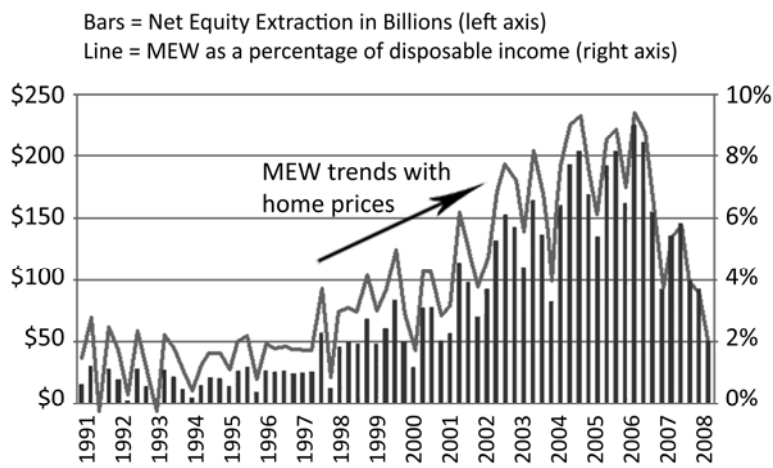


Mortgage Equity Withdrawal

Mortgage Equity Withdrawal or MEW is the process of obtaining cash through refinancing residential real estate using the accumulated equity as collateral for the loan. Before MEW homeowners would have to wait until the property was sold to get their equity converted to cash. Apparently, this was deemed an inefficient use of capital, so lenders found ways to “liberate” this equity with home equity lines of credit or cash-out mortgage refinancing. Home equity lines of credit are popular with lenders despite the additional risk of being in the second or third lien position because borrowers are less likely to default or pre-pay than non-cash-out refinancing.²⁰ The impact of MEW on equity is obvious; it reduces equity by increasing the loan balance. It has been noted that equity is a fantasy and debt is real, and MEW is the process of living the fantasy with the addition of very real debt. MEW has been utilized by homeowners for home improvement for decades, but the widespread use of this money for consumer spending was largely an innovation of the Great Housing Bubble.²¹ Since consumer spending is almost 70% of the US economy, mortgage equity withdrawal was the primary mechanism of economic growth after the recession of 2001 – a recession caused by the deflation of another asset bubble, the NASDAQ technology stock bubble.

PREVENTING THE NEXT HOUSING BUBBLE

Figure 8 - Mortgage Equity Withdrawal, 1991-2006



Source: Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board
Real Estate and Finance Blog - Calculated Risk

Many people who extracted their home equity lost their homes for lack of ability to refinance or make their new payments. After so many people lost their homes due to their own reckless borrowing, it is natural to wonder why these people did it. Why did they risk their home for a little spending money? First, it was not just a little money. Many markets saw home values increase at a rate equal to the local median income. It was as if their home was another breadwinner. The lure of this easy money was too much for many to resist. The rampant, in-your-face, marketing of these loans in every available media outlet touting the glossy “lifestyle” of over-the-top consumerism was a drug to many spending addicts. Also, during the bubble rally people really believed their house values would go up forever, and they would always have the ability to refinance enormous debts at low interest rates and maintain very low debt service costs. Most people did not think it possible they would end up in circumstances where they would lose their homes; however, they were mistaken. Given these beliefs, the equity accumulating in their house was “free money” they just needed to access in order to live and to spend like rich people. Even though they were consuming their net worth, and making themselves poor, they believed they were rich, and they wanted to spend accordingly.

Most homeowners do not save money for major improvements and required maintenance, and these homeowners often take out home equity lines of credit as a method of mortgage equity withdrawal to fund home improvement projects. The logic here is that renovations improve the property so an increase in property value offsets the additional debt. In reality, home improvement projects rarely adds value on a dollar-for-dollar basis, particularly with exterior enhancements which often only return 50 cents on the dollar in value.²² The home-improvement craze was so common that the term “pergraniteel” was coined to describe the Pergo fake wood floors, granite countertops, and steel appliances

THE GREAT HOUSING BUBBLE

that defined the Great Housing Bubble era in much the same way as shag carpeting and wood wall paneling defined the interior decorating of the 1970s.

Much of the money homeowners borrowed fueled consumer spending and reinforced poor financial management techniques. It was common during the bubble rally for people to run up enormous credit card bills then refinance every year and pay them off.²³ It is foolish enough to finance consumer spending, but it is even more foolish to pay for this spending over the 30-year term of a typical mortgage. The consumptive value fades quickly, but the debt endures for a very long time. Many people responded to the “free money” their house was earning by liberating their equity as soon as they could so they could buy cars, take vacations, and generally live the good life. This borrow-and-spend mentality was actually encouraged by lenders who were eager to make these loans and even the government which was benefiting by economic expansion and higher tax receipts.

The recession of 2001 was caused by the collapse of stock prices and the resulting diminishment of corporate investment. The recession was shallow, but the economy had difficulty recovering mostly due to continued erosion of manufacturing jobs.²⁴ The Federal Reserve under Alan Greenspan was desperate to reignite economic growth, so the FED funds rate was lowered to 1% and kept there for more than a year. It was hoped this increased liquidity would go into business investment to restart the troubled economy; instead, it went into mortgage loans and consumers’ pockets through mortgage equity withdrawal. Basically, the economic recovery from 2001 through 2005 was an illusion creating by excessive borrowing and rampant spending by homeowners. The economy did not grow through production; it grew through consumption.

There are many theories as to the decline and fall of the Roman Empire.²⁵ One of the more intriguing is the idea that Rome fell because it was weakened by the parasitic nature of Rome itself. Rome existed to consume the resources of the empire. Boats would come to the city loaded with goods and leave the city empty. Consumption kept the masses happy and thereby quelled civil unrest. The Roman Empire was the world’s only superpower with an unsurpassed military might. Equally unsurpassed was its ability to consume resources. Does any of this sound like the United States? The United States has clearly become a consumer nation, and the government continues to borrow huge sums of money to keep the economic engine of consumption going. In early 2008, Congress passed a “stimulus” package where many people would receive direct gifts of money in the hope they would spend it and keep the economy going. Since the Federal Government was already running a deficit, this money was borrowed from future tax receipts. In other words, this handout was obtained from future generations. With house prices crashing, direct handouts of borrowed government money were necessary to make up for the loss of borrowed private sector money that used to be available through mortgage equity withdrawal.

PREVENTING THE NEXT HOUSING BUBBLE

The Fallacy of Financial Innovation

The cutting edge is sharp. Innovators often pay a heavy price for attempts at advancement. Sometimes these advances lead to quantum leaps in human knowledge and understanding. Sometimes the time, effort, and money are merely thrown into the abyss. The financial innovations of the Great Housing Bubble are of the latter category. When the lending industry developed exotic loan products, they touted them as “innovation,” and they sold these toxins far and wide.²⁶ Since these loans achieved the highest default rates ever recorded, it is apparent the “innovations” of the bubble rally were not entirely successful. It is amazing that a group of assumingly intelligent bankers came up with this loan and expected a positive outcome.²⁷ The “innovation” meme is nothing more than a public relations effort to convince brokers the products were safe to sell and borrowers the products were safe to use. It is hard to fathom the widespread acceptance of this nonsense, but that is the nature of the pathological beliefs of a financial mania.

Many in the lending industry think their work is like science that continually advances. It is not. It is far more akin to assembly line work where the same widgets are pumped out year after year. When lenders start to innovate, trouble is brewing. The last significant advancement in lending was the widespread use of 30-year amortizing loans that came into favor after World War II. Prior to that time, home loans were interest-only, short-term loans with very high equity requirements (50% was most common). This proved problematic in the Great Depression as many out-of-work owners defaulted on their loans. A mechanism had to be found to get new buyers into the markets and allow them to pay off the loan. The answer was the 30-year, fixed-rate amortizing loan. To say this was an innovation is a stretch as this loan has been around as long as banking has existed, but it did not become widely used until equity requirements were lowered. The lenders were willing to lower the equity requirements as long as the loan was amortizing because their risk would decline as time went by and the loan balance was paid off.

Over the last 60 years since World War II ended, a number of experimental loan programs have been attempted. These include interest-only loans, adjustable rate loans, and negative amortization loans among others. It is this group of loans that has consistently failed in the past for one simple reason: if payments can adjust higher, people will default. The Option ARM is certainly the most sophisticated loan ever developed. It is also a dismal failure, not because it lacks sophistication, but because it has embedded within it the possibility (near certainty) of an increasing payment. Any loan program that has the possibility of a higher future payment will fail because there will be a certain number of people who cannot afford the higher payment.

Here is where the lenders delude themselves and deceive the general public after a financial debacle like the Savings and Loan problems of the 1980s or the Great Housing Bubble. They blame the collapse and the high default rates on some outside factor rather than the terms and conditions the lenders created all on their own. There are still many out there who believe the high default rates

THE GREAT HOUSING BUBBLE

and problems in the housing market in the 90s in California were caused by a weak economy. This is rubbish. House prices declined for 6 years. The decline started before the economy went soft, and it continued well after it had recovered. People defaulted because they overextended themselves on loans to buy overpriced housing, and toward the end of the mania, many were using interest-only loans. Whenever lenders start loaning people money with total debt-to-income ratios over 36% people will default. Whenever lenders start loaning more than 80% of the purchase price, people can sink underwater and when they do, they will default. This is not new. It happened in the early 90s; it happened during the Great Housing Bubble, and it happened for the same reasons: lax lending standards.

Someday the lending community may actually innovate and come up with some financial product that has low default rates which most people can qualify to obtain – or not. Unless you change human nature, there are always going to be people who are too irresponsible to make consistent payments. People either do or do not make their payments. This is the key to any loan program. New terms and schedules can be reinvented over and over again, and it will always boil down to people making payments. When complicated loan programs contain provisions that make it difficult for people to make payments – like increasing payment amounts – they will default, and the loan program will fail. This is certain.

Whenever lenders create new, “sophisticated” loan programs that require advanced financial management on the part of the borrower, both the lenders and the borrowers fall victim to the Lake Wobegon effect.²⁸ Everyone thinks they have above average abilities when it comes to managing their finances. In reality, perhaps 2% of borrowers have the financial discipline to handle an Option ARM loan. Unfortunately, 80% of borrowers think they are in this 2%. The reason for this comes from the inherent conflict between emotions and intellect. Eighty percent of borrowers may understand the Option ARM loan (or think they do,) but when the pressures of daily life create emotional demands for spending money on one’s lifestyle, the intellectual knowledge that this money should go toward a housing payment is conveniently set aside. It is this 2% of the most disciplined borrowers who will cut back on discretionary spending to make their full housing payment. Everyone else will make the minimum payment, fall behind on their mortgage, and end up in foreclosure.

It seems lenders forget basic facts about lending every so often and create a new financial bubble. Perhaps they succumb to the pressure of the investment community or their own shareholders, or perhaps they just start believing their own “innovation” marketing pitch and forget the basics of sound lending practices. This is why there are recessions at the end of a business cycle. These pathologic lending practices must be purged from the system or else they will survive to build an even bigger and costlier bubble. Although it is difficult to imagine a bubble bigger than the Great Housing Bubble, it is still possible.

In the aftermath of a financial fiasco, lenders return to the practices that did not fail them in the past. The only program lenders know empirically to be stable is a 30-year, fixed-rate, conventionally amortizing loan based on 80% of

PREVENTING THE NEXT HOUSING BUBBLE

appraised value taking no more than 28% of a borrower's gross income (36% maximum total debt). The credit crunch facilitated the decline in housing prices after the Great Housing Bubble. Large downpayments came back, and government assisted financing became widely used by first-time homebuyers to overcome the high equity requirements. The credit crunch was not caused by some unexpected or unknown factor; it was caused by the failure of lenders. Credit continued to tighten until lenders stopped making bad loans. The bad loans did not disappear until lenders returned to the stable loan programs with a proven track record. That is how the credit cycle works.²⁹

Summary

To be financially conservative is to accumulate wealth and to be risk averse. It requires managing equity, paying down a mortgage loan, and allowing net worth to accumulate rather than depleting it via consumer spending through mortgage equity withdrawal. Many people do not realize the risk they take on when they use some of the innovative loan programs developed during the bubble. Exotic financing terms are not exotic anymore. Interest-only, adjustable rates and negative amortization have become so ubiquitous that nobody seems to remember why 30-year fixed-rate mortgages are used. A home should be financed with a fixed-rate conventionally-amortized mortgage and a sizable downpayment. The reason for this is simple stress management: nobody wants to spend the next several years worried about a loan reset or the need for increasing house values or future salary increases. People should not buy with the desire to make a fortune in real estate. Instead, they should purchase with the intent to have a stable housing payment, and a stress-free life.

Bibliography

- Anderson, R. G., & Gascon, C. S. (2008). *Offshoring, Economic Insecurity, and the Demand for Social Insurance*. St, Louis, MO: Federal Reserve Bank of St. Louis.
- Ashcraft, A. B., & Schuermann, T. (2008). *Understanding the Securitization of Subprime Mortgage Credit*. New York, NY: Federal Reserve Bank of New York.
- Baker, D. (2002). The Run-up in Home Prices: a Bubble. *Challenge* , 93+.
- Baker, K., & Kaul, B. (2002). Using Multiperiod Variables in the Analysis of Home Improvement Decisions by Homeowners. *Real Estate Economics* , 551+.
- Balen, M. (2003). *The Secret History of the South Sea Bubble*. New York, NY: HarperCollins Publishers Inc.
- Bernanke, B. S. (1999). *Japanese Monetary Policy: A Case of Self-Induced Paralysis*. Washington, DC: Institute for International Economics.
- Bernanke, B. S. (2008). Reducing Preventable Mortgage Foreclosures. *Independent Community Bankers of America Annual Convention* (p. 1). Orlando, FL: Board of Governors of the Federal Reserve System.
- Bernanke, B. S., & Boivin, J. (2002). *Monetary Policy in a Data-Rich Environment*. Princeton, NJ: Princeton University.
- Bernanke, B. S., & Gertler, M. (2000). *Should Central Banks Respond to Movements in Asset Prices?* Princeton, NJ : Princeton University.
- Bernanke, B. (2007). The Economic Outlook. *Before the Joint Economic Committee, U.S. Congress* (p. 1). Washington, D.C.: Board of Governors of the Federal Reserve.
- Bikhchandani, S., Hirshleifer, D., & Welch, I. (1998). Learning from the Behavior of Others: Conformity, Fads, and Informational Cascades. *The Journal of Economic Perspectives* , 26.
- Black, A., Fraser, P., & Hoesli, M. (2006). House Prices, Fundamentals and Bubbles. *Journal of Business Finance & Accounting* , 1535+.
- Boucher, M. (1999). *The Hedge Fund Edge*. New York, NY: John Wiley & Sons, Inc.

BIBLIOGRAPHY

- Boykin, J. H., & Haney, R. L. (1997). *Financing Real Estate*. Prentice Hall College Division.
- Brown, S. J. (2006). How Critical Is the Housing Market? *ABA Banking Journal* , 64.
- Buffet, W. (2002). *Berkshire Hathaway annual report for 2002*. Omaha, NE: Berkshire Hathaway.
- Burdekin, R. C., & Siklos, P. L. (2004). *Deflation: Current and Historical Perspectives (Studies in Macroeconomic History)* . New York, NY: Cambridge University Press.
- BusinessWeek Magazine . (2006, September 11). Nightmare Mortgages. *BusinessWeek* , p. 1.
- Campbell, S. D., Davis, M. A., Gallin, J., & Martin, R. F. (2005). *A Trend and Variance Decomposition of the Rent-Price Ratio in Housing Markets*. Washington, DC: Board of Governors of the Federal Reserve System.
- Cannon, S., Miller, N. G., & Pandher, G. S. (2006). Risk and Return in the U.S. Housing Market: A Cross-Sectional Asset-Pricing Approach. *Real Estate Economics* , 519+.
- Capell, P. (2004). Eight Tips for Buyers Making Competitive Bids. *Real Estate Journal.com* , p. 1.
- Capra, F. (Director). (1946). *It's a Wonderful Life* [Motion Picture].
- Carter, J. (2006). *Mastering the Trade*. New York, NY: McGraw-Hill, Inc.
- Case, K. E., & Shiller, R. J. (2004). *Is There a Bubble in the Housing Market*. New Haven, CT: Cowles Foundation for Research in Economics, Yale University.
- Case, K. E., & Shiller, R. J. (1988). *The Behavior of Home Buyers in Boom and Post-Boom Markets*. New Haven, CT: Cowles Foundation for Research in Economics, Yale University.
- Chambers, M. S., Garriga, C., & Schlagenhauf, D. (2007). *Mortgage Contracts and Housing Tenure Decisions*. St. Louis, MO: Federal Reserve Bank of St. Louis.
- Chambers, M., Garriga, C., & Schlagenhauf, D. E. (2007). *Accounting for Changes in the Homeownership Rate*. St. Louis, MO: Federal Reserve Bank of St. Louis.
- Chomsisengphet, S., & Pennington-Cross, A. (2006). *Subprime Refinancing: Equity Extraction and Mortgage Termination*. St. Louis, MO: Federal Reserve Bank of St. Louis.
- Credit Suisse. (2007). *Mortgage Liquidity du Jour: Underestimated No More*. Credit Suisse Equity Research.
- Crone, T. M., & Nakamura, L. I. (2004). *Hedonic Estimates of the Cost of Housing Services -- Rental and Owner-Occupied Units*. Philadelphia, PA: Federal Reserve Bank of Philadelphia.
- Dalton, J. F., Jones, E. T., & Dalton, R. B. (1999). *Mind over Markets*. Greenville, SC: Traders Press, Inc.
- Daniel, K., Hirshleifer, D., & Subrahmanyam, A. (1998). Investor Psychology and Security Market Under- and Overreactions. 58.

THE GREAT HOUSING BUBBLE

- Das, S. (2005). *Credit Derivatives: CDOs and Structured Credit Products*. New York, NY: John Wiley & Sons, Inc.
- Davis, M. A., & Palumbo, M. G. (2006). *The Price of Residential Land in Large U.S. Cities*. Washington, D.C.: Federal Reserve Board.
- Davis, M., & Heathcote, J. (2003). *Housing and the Business Cycle*. Washington, DC: Board of Governors of the Federal Reserve System.
- Deming, W. E. (2000). *The New Economics for Industry, Government, Education - 2nd Edition*. Boston, MA: The MIT Press.
- Deng, Y., & Gabriel, S. (2006). Risk-Based Pricing and the Enhancement of Mortgage Credit Availability among Underserved and Higher Credit-Risk Populations. *Journal of Money* , 1431+.
- Dent, H. S. (2006). *The Next Great Bubble Boom*. New York, NY: Free Press.
- Doms, M., & Krainer, J. (2007). *Innovations in Mortgage Markets and Increased Spending on Housing*. San Francisco, CA: Federal Reserve Bank of San Francisco.
- Doms, M., Furlong, F., & Krainer, J. (2007). *Subprime Mortgage Delinquency Rates*. San Francisco, CA: Federal Reserve Bank of San Francisco.
- Douglas, M. (1990). *The Disciplined Trader, Developing Winning Attitudes*. New York, NY: New York Institute of Finance.
- Douglas, M. (2000). *Trading in the Zone*. New York, NY: New York Institute of Finance.
- Engen, E. M., Gale, W. G., & Uccello, C. E. (2004). *Lifetime Earnings, Social Security Benefits, and the Adequacy of Retirement Wealth Accumulation*. Washington, D.C.: Federal Reserve Board.
- Fabozzi, F. J., Davis, H. A., & Choudhry, M. (2006). *Introduction to Structured Finance*. New York, NY: John Wiley & Sons, Inc.
- Fishbein, A. J. (2008). *Piggyback Loans at the Trough: California Subprime Home Purchase and Refinance Lending in 2006*. Washington, D.C.: Consumer Federation of America.
- Fishbein, A. J., & Woodall, P. (2006). *Exotic or Toxic? An Examination of the Non-Traditional Mortgage Market for Consumers and Lenders*. Washington, D.C.: Consumer Federation of America.
- Fisher, J. D., & Quayyum, S. (2005). *The great turn-of-the-century housing boom*. Chicago, IL: Federal Reserve Bank of Chicago.
- Fletcher, J. (2005). *House Poor, Pumped-Up Prices, Rising Rates, and Mortgages on Steroids*. New York, NY: HarperCollins Publishers Inc.
- Frame, W. S., & White, L. J. (2005). Fussing and Fuming over Fannie and Freddie: How Much Smoke, How Much Fire? *The Journal of Economic Perspectives* , 28.
- Gallin, J. (2006). The Long-Run Relationship between House Prices and Income: Evidence from Local Housing Markets. *Real Estate Economics* , 417+.
- Gallin, J. (2003). *The Long-Run Relationship between House Prices and Income: Evidence from Local Housing Markets*. Washington, DC: Federal Reserve Board.

BIBLIOGRAPHY

- Gallin, J. (2004). *The Long-Run Relationship between House Prices and Rents*. Washington, D.C.: Federal Reserve Board.
- Ganguin, B., & Bilardello, J. (2004). *Standard & Poor's Fundamentals of Corporate Credit Analysis*. New York, NY: McGraw-Hill.
- Garber, P. M. (1989). Tulipmania. *The Journal of Political Economy* , 26.
- Geary, L. H. (2002, May 21). Riches to Rags: Millionaires who go Bust. *CNN/Money* , p. 1.
- Gerardi, K., Shapiro, A. H., & Willen, P. S. (2007). *Subprime Outcomes: Risky Mortgages, Homeownership Experience, and Forclosures*. Boston, MA: Federal Reserve Bank of Boston.
- Gibbon, E. (1999). *Decline & Fall of the Roman Empire, New Ed edition*. Hertfordshire, United Kingdom: Wordsworth Editions Ltd.
- Green, R. K., & Wachter, S. M. (2007). Praveen Kujal and Vernon L. Smith. *Housing, Housing Finance & Monetary Policy* (p. 64). Jackson Hole, Wyoming: Federal Reserve Bank of Kansas City.
- Greenspan, A. (1996). The Challenge of Central Banking in a Democratic Society. *Annual Dinner and Francis Boyer Lecture of The American Enterprise Institute for Public Policy Research*. Washington, D.C.: Federal Reserve Board.
- Greenspan, A. (2004). Understanding Household Debt Obligations. *Credit Union National Association 2004 Governmental Affairs Conference*. Washington, DC: Federal Reserve Board.
- Grigg, W. N. (2004, May). Will the Housing Bubble Burst? Our Socialist Mortgage System and Easy Money Policy Have Created a Dangerously Inflated Housing Bubble That, If Pricked, Could Take the Economy Down with It. *The New American* , p. 20+.
- Gross, D. (2004, February 27). Alan Greenspan: ARMed and Dangerous. *Slate Magazine: Moneybox* , p. 1.
- Gross, D. (2007, July 26). The Real Morons of Orange County. *Moneybox* , p. 1.
- Haines, C. L., & Rosen, R. J. (2006). Bubble, bubble, toil, and trouble. *Economic Perspectives* , 35.
- Hall, C. (2004). *Timing the Real Estate Market*. New York, NY: McGraw-Hill.
- Haney, R. L., Berens, G., & Miles, M. E. (1995). *Real Estate Development: Principles and Process*. Washington, D.C.: Urban Land Institute.
- Haubrich, J. G., & Lucas, D. (2006). *Who holds the toxic waste? An investigation of CMO holdings*. Cleveland, OH: Federal Reserve Bank of Cleveland.
- Heffernan, S. (2005). *Modern Banking*. New York, NY: John Wiley & Sons, Inc.
- Helbling, T., Conover, E., & Terrones, M. (2003). Chapter II: When Bubbles Burst. *World Economic Outlook* , 61+.
- Himmelberg, C., Mayer, C., & Sinai, T. (2005). *Assessing High House Prices: Bubbles, Fundamentals, and Misperceptions*. New York, NY: Federal Reserve Bank of New York.

THE GREAT HOUSING BUBBLE

- Hockley, C. A. (2005, June 7). Are CAP Rates Still a Valid Indicator of Value? *RealtyTimes*, p. 1.
- Jaeger, W. (2006). The Effects of Land-Use Regulations on Property Values. *Environmental Law*, 105+.
- Johnson, D., & Halliburton, M. (2007). The Subprime Credit Crunch. *ABA Banking Journal*, 64+.
- Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, 33.
- Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1991). The Endowment Effect, Loss Aversion, and Status Quo Bias. *The Journal of Economic Perspectives*, 15.
- Kiyosaki, R. T., & Lechter, S. L. (2000). *Rich Dad, Poor Dad: What the Rich Teach Their Kids About Money--That the Poor and Middle Class Do Not!* Lebanon, IN: Business Plus.
- Kolbe, P. T. (2007, Summer). Affordability in the Single-Family Housing Market. *Business Perspectives*, p. 8+.
- Kornfield, J. (1993). *A Path with Heart: A Guide Through the Perils and Promises of Spiritual Life*. New York, NY: Bantam Books.
- Kornfield, J. (2000). *After the Ecstasy, the Laundry: How the Heart Grows Wise on the Spiritual Path*. New York, NY: Bantam Books.
- Kornfield, J. (1993). *The Inner Art of Meditation*. Louisville, CO: Sounds True.
- Kornfield, J. (1996). *The Roots of Buddhist Psychology*. Louisville, CO: Sounds True.
- Krainer, J. (2003). House Price Bubbles. *FRBSF Economic Letter*, 4.
- Krainer, J. (2006). Residential Investment over the Real Estate Cycle. *FRBSF Economic Letter*, 4.
- Krainer, J., & Wei, C. (2004). House Prices and Fundamental Value. *FRBSF Economic Letter*, 4.
- Kruger, J., & Dunning, D. (1999). Unskilled and Unaware of It: How Difficulties in Recognizing One's Own Incompetence Lead to Inflated Self-Assessments. *Journal of Personality and Social Psychology*, 14.
- Kujal, P., & Smith, V. L. (2003). *Fairness and Short Run Price Adjustment in Posted Offer Markets*. Madrid, Spain: University of Carlos III De Madrid.
- Kujal, P., & Smith, V. L. (1991). *The Endowment Effect*. Madrid, Spain: Universidad Carlos III De Madrid.
- Kuttner, K. N., & Posen, A. S. (2001). *Passive Savers and Fiscal Policy Effectiveness in Japan*. Washington, DC: Institute for International Economics.
- Lacour-Little, M. (2004, March). Equity Dilution: An Alternative Perspective on Mortgage Default. *Real Estate Economics*, p. 359+.
- Leamer, E. E. (2007). Housing Is the Business Cycle. *Housing, Housing Finance and Monetary Policy* (p. 74). Jackson Hole, WY: Federal Reserve Bank of Kansas City.

BIBLIOGRAPHY

- Leamer, E. E. (2007). Housing Is the Business Cycle. *Housing, Housing Finance, and Monetary Policy* (p. 73). Jackson Hole, Wyoming: Federal Reserve Bank of Kansas City.
- Lefevre, E. (1994). *Reminiscences of a Stock Operator*. New York, NY: John Wiley & Sons, Inc.
- Leventis, A. (2007). *A Note on the Differences between the OFHEO and S&P/Case-Shiller House Price Indexes*. Washington, D.C.: Office of Federal Housing Enterprise Oversight.
- Libby, R., Libby, P., & Short, D. (2004). *Financial Accounting, 4th Edition*. Columbus, OH: McGraw-Hill.
- Lindsey, L. B. (2007, Spring). Fear and Greed: Why the American Housing Credit Crisis Is Worse Than You Think. *The International Economy*, p. 22+.
- Lowy, M. (1991). *High Rollers: Inside the Savings and Loan Debacle*. Westport, CT: Praeger Publishers.
- Lucas, D. J., Goodman, L. S., & Fabozzi, F. J. (2006). *Collateralized Debt Obligations: Structures and Analysis, 2nd Edition*. New York, NY: John Wiley & Sons Inc.
- Mackay, C., Vega, J. d., & Fridson, M. S. (1996). *Extraordinary Popular Delusions and the Madness of Crowds & Confusion de Confusiones*. New York, NY: John Wiley & Sons, Inc.
- Magee, R. D. (1998). *Technical Analysis of Stock Trends, 7th Edition*. Boca Raton, FL: St. Lucie Press.
- Mankiw, N. G. (2006). *Principles of Macroeconomics*. South-Western College Pub; 4 edition.
- Mankiw, N. G., & Weil, D. N. (1989). The Baby Boom, the Baby Bust and the Housing Market. *Regional Science and Urban Economics*, 24.
- Martin, R. F. (2005). *The Baby Boom: Predictability in House Prices and Interest Rates*. Washington, DC: Federal Reserve Board of Governors.
- McCarthy, J., & Peach, R. W. (2004). *Are Home Prices the Next Bubble*. New York, NY: Federal Reserve Bank of New York.
- McElroy, K. (2004). *Rich Dad's Advisors®: The ABC's of Real Estate Investing: The Secrets of Finding Hidden Profits Most Investors Miss*. Lebanon, IN: Business Plus.
- McMillan, L. G. (2004). *McMillan on Options, Second Edition*. Hoboken, NJ: John Wiley & Sons, Inc.
- McMillan, L. G. (2002). *Options as a Strategic Investment, Fourth Edition*. New York, NY: New York Institute of Finance.
- Miles, R. P. (2004). *Warren Buffett Wealth: Principles and Practical Methods Used by the World's Greatest Investor*. New York, NY: John Wiley & Sons, Inc.
- Minsky, H. P. (1982). *Can "It" Happen Again? Essays on Instability and Finance*. Unknown: M.E. Sharpe.
- Minsky, H. P. (2008). *Stablizing an Unstable Economy*. New York, NY: McGraw-Hill.

THE GREAT HOUSING BUBBLE

- Mints, V. (2006). *The Mortgage Rate and Housing Bubbles*. Moscow, Russia: Housing Finance International.
- Mortgage Bankers Association. (2007). *National Delinquency Survey*. Mortgage Bankers Association.
- Muellbauer, J. (2007). Housing, Credit and Consumer Expenditures. *Housing, Housing Finance, and Monetary Policy* (p. 63). Jackson Hole, WY: Federal Reserve Bank of Kansas City .
- Myers, D., & Ryu, S. (2008). Aging Baby Boomers and the Generational Housing Bubble: Foresight and Mitigation of an Epic Transition. *Journal of the American Planning* , 1-17.
- Natenberg, S. (1988). *Options Volatility and Pricing Strategies*. Chicago, IL: Probus Publishing Company.
- National Multi Housing Council, National Apartment Association. (2004). *Renting Can Be a Smart Investment*. Washington, DC & Alexandria, VA: National Multi Housing Council, National Apartment Association.
- Orman, S. (2006). *The 9 Steps to Financial Freedom: Practical and Spiritual Steps So You Can Stop Worrying, 3rd edition*. New York, NY: Three Rivers Press.
- Orwell, G. (1950). *1984*. New York, NY: Signet Classics.
- Paulson, H. M. (2007). Current Housing and Mortgage Market Developments. *Georgetown University Law Center* (p. 1). Washington, D.C.: US Department of Treasury.
- Peterson, J. R. (2005). Designer Mortgages: The Boom in Nontraditional Mortgage Loans May Be a Double-Edged Sword. So Far, Most Banks Have Moved Cautiously. *ABA Banking Journal* , 30+.
- Poole, R., Ptacek, F., & Verbrugge, R. (2005). *Treatment of Owner-Occupied Housing in the CPI*. Washington, DC: Federal Economic Statistics Advisory Committee.
- Porter, D., & Smith, V. (1992). *Price Expectations in Experimental Asset Markets with Futures Contracting*. Pasadena, CA: California Institute of Technology.
- Posen, A. S. (2003). *It Takes more than a Bubble to Become Japan*. Washington, DC: Institute for International Economics.
- Posen, A. (2006). *Why Central Banks Should Not Burst Bubbles*. Washington, DC: Institute for International Economics.
- Rappaport, J. (2006). *A Guide to Aggregate House Price Measures*. Kansas City, MO: Federal Reserve Bank of Kansas City.
- Rubino, J. (2003). *How to Profit from the Coming Real Estate Bust*. Rodale.
- Schiller, T. (2007, Fall). Housing: Boom or Bubble. *Business Review* , p. 10.
- Schwager, J. D. (2003). *Stock Market Wizards*. New York, NY: Harper Collins.
- Shakespeare, W. (1603). *Macbeth*. Stratford-upon-Avon.
- Shiller, R. J. (2001). *Bubbles, Human Judgment, and Expert Opinion*. New Haven, CT: Cowles Foundation for Research in Economics, Yale University.

BIBLIOGRAPHY

- Shiller, R. J. (2002). *From Efficient Market Theory to Behavioral Finance*. New Haven, CT: Cowles Foundation for Research in Economics, Yale University.
- Shiller, R. J. (2007). *Historic Turning Points in Real Estate*. New Haven, CT: Cowles Foundation for Research in Economics, Yale University.
- Shiller, R. J. (2004). *Household Reaction to Changes in Housing Wealth*. New Haven, CT: Cowles Foundation for Research in Economics, Yale University.
- Shiller, R. J. (2005). *Irrational Exuberance*. Doubleday.
- Shiller, R. J. (2007). *Understanding Recent Trends in House Prices and Home Ownership*. New Haven, CT: Cowles Foundation for Research in Economics, Yale University.
- Shiller, R. J., & N. Weiss, A. (1998). Moral Hazard in Home Equity Conversion. *AREUEA–ASSA session* (p. 29). Chicago Illinois: AREUEA–ASSA session.
- Shiratsuka, S. (2003). *Asset Price Bubble in Japan in the 1980s: Lessons for Financial and Macroeconomic Stability*. Tokyo, Japan: Institute for Monetary and Economic Studies -- Bank of Japan.
- Shleifer, A. (2000). *Inefficient Markets: An Introduction to Behavioral Finance*. Oxford University Press, USA.
- Sinai, T. (2008). *The Inequity of Subprime Mortgage Relief Programs*. Washington, DC: FreedomWorks Foundation.
- Smith, V. L. (2000). Exchange, Economic Theory, and the Hayek Critique. *Encyclopedia of Cognitive Science* , 42.
- Smith, V. L. (2004). Human Nature: An Economic Perspective. *Daedalus* , 67+.
- Smith, V. L., & Porter, D. (1992). *Price Expectations in Experimental Asset Markets with Futures Contracting*. Pasadena, CA: California Institute of Technology.
- Smith, V. L., Suchanek, G. L., & Williams, A. W. (1988). Bubbles, Crashes, and Endogenous Expectations in Experimental Spot Asset Markets. *Econometrica* , 56.
- Soros, G. (1994). *The Alchemy of Finance: Reading the Mind of the Market*. New York, NY: John Wiley & Sons, Inc.
- Soto, J. H. (2006). *Money, Bank Credit, and Economic Cycles*. Ludwig von Mises Institute.
- Sullivan, P. (2006, January 20). William 'Bud' Post III; Unhappy Lottery Winner. *Washington Post* , p. 1.
- Susanne Cannon, N. G. (2003). *Risk and Return in the U.S. Housing Market: A Cross-Sectional Asset-Pricing Approach*.
- Talbott, J. R. (2006). *Sell Now! The End of the Housing Bubble*. New York, NY: St. Martins Press.
- Talbott, J. R. (2003). *The Coming Crash in the Housing Market*. New York, NY: McGraw-Hill, Inc.
- Taleb, N. N. (2007). *The Black Swan: The Impact of the Highly Improbable*. New York, NY: Random House.

THE GREAT HOUSING BUBBLE

- Thompson, E. A., Treussard, J., & Hickson, C. R. (2004). *Predicting Bubbles and Bubble-Substitutes*. Los Angeles, CA: Department of Economics UCLA.
- Tversky, A., & Kahneman, D. (1991). Loss Aversion in Riskless Choice: A Reference-Dependent Model. *The Quarterly Journal of Economics* , 27.
- Vitale, J. (1998). *There's a Customer Born Every Minute: P.T. Barnum's Secrets to Business Success*. AMACOM.
- Wallace, G., Elliehausen, G., & Staten, M. (2005). *Are Legislative Solutions to Abusive Mortgage Lending Practices Throwing Out the Baby with The Bath? Guidance From Empirical Research*. Washington, D.C.: Georgetown University.
- Wallace-Wells, B. (2004, April). There Goes the Neighborhood: Why Home Prices Are about to Plummet-And Take the Recovery with Them. *Washington Monthly* , p. 30+.
- Wolff, M. (1998). *Burn Rate: How I Survived the Gold Rush Years on the Internet* . New York, NY: Simon & Schuster.
- Zuckoff, M. (2005). *Ponzi's Scheme: The True Story of a Financial Legend*. New York, NY: Random House.

INDEX

Index

- 1**
100% financing, 6
- 2**
2/28, 7
- 3**
30-year conventionally amortized mortgage, 2
- 8**
80/20, 12
- A**
adjustable rate mortgages. *See* ARMs
affordability, 2, 7
Alan Greenspan, 19
Alt-A, 5, 11
Ameriquest, xiv, xv
amortization schedule, 4, 5, 8
appreciation, x, 13, 15
- B**
bankruptcy, 6
- C**
collateral, 17
consumptive value, 19
Conventional mortgage, 5
cost of ownership, 14, 16
credit crunch, 12, 22
credit cycle, 22
- D**
debt-to-income, 2, 21
debt-to-income ratio, 2
default rates, 2, 9, 10, 16, 20, 21
deflation, xv, 6, 17
downpayments, 12, 22
- E**
Equifax, 5
equity, 13, 14, 16, 17, 18, 19, 20, 22
exotic financing, 2
Experian, 5
- F**
Fair Isaac Corporation, 4
FED, 19
Federal Funds Rate, 3
Federal Government, 19
Federal Reserve, 3, 19

THE GREAT HOUSING BUBBLE

FICO, 4
financial bubble, 21
fixed-rate conventionally-amortized
mortgage, 6, 22
foreclosure, 7, 21

G

Generally Accepted Accounting
Principles, 9
Great Depression, xiii, 20

H

home equity lines of credit, 17, 18

I

Inflation, 4, 13, 15, 16
inflation hedge, 13
inflation premium, 3, 4
Initial Equity, 13, 14, 16
interest rate reset, 5
Interest-Only loan, 5
interest-only, adjustable-rate mortgage.
See IO ARM
IO ARM, 6, 7
irrational exuberance, 16
Irvine Housing Blog, ii, v, ix, x, 35

K

kool aid, x

L

Lake Wobegon effect, 21
liar loans. *See* stated-income
lien, 17
liquidity, 19
Loan documentation, 10
loan-to-value, 12

M

median, 18
MEW, 17
Mortgage Equity Withdrawal. *See*
MEW
Mortgage interest rates, 3, 4

mortgage payment, 6
mortgage-backed securities, 3
move-up, 14
must-sell, 6

N

NASDAQ, 17
National Association of Realtors, ix
negative amortization, 7, 8, 9, 10, 14,
16, 20, 22, *See* Option ARM
Negative Amortization loan, 5
New Century, xiv, xv

O

Option ARM, 7, 8, 9, 10, 20, 21
Option One, xiv, xv

P

payment recast, 5
pergraniteel, 18
price volatility, 2
Prime, 5

R

recession of 2001, 17, 19
rental equivalent value, 16
retirement savings, 14
risk premium, 3, 4
riskless rate of return, 3, 4
Roman Empire, 19

S

Savings and Loan, 20
Schadenfreude, x
secondary mortgage market, xiii, 3
Speculative Equity, 13, 16
speculative mania, 14
stated-income, 10, 11
Subprime, xiv, xv, 5, 12
supply and demand, 3

T

TransUnion, 5
Treasury Bill, 3, 4

INDEX

Treasury Note, 3, 4

W

U

World War II, 2, 20

unemployment, 6

End Notes

¹ "Out, out, brief candle! Life's but a walking shadow, a poor player that struts and frets his hour upon the stage and then is heard no more: it is a tale told by an idiot, full of sound and fury, signifying nothing." Macbeth Quote (Act V, Scene V).(Shakespeare, 1603)

² Partial list of prominent real estate bubble and related blogs:

The Irvine Housing Blog – <http://www.irvinehousingblog.com/>

Patrick.net – <http://patrick.net/housing/crash.html>

The Real Estate Bubble Blog – <http://www.thehousingbubbleblog.com/index.html>

The House Bubble – <http://housebubble.com/>

Implode-o-meter – <http://ml-implode.com/>

Bubble Markets Inventory Tracking – <http://bubbletracking.blogspot.com/>

Housing Doom – <http://housingdoom.com/>

Southern California Real Estate Bubble Crash – <http://www.socalbubble.com/>

Calculated Risk – <http://calculatedrisk.blogspot.com/>

Housing Panic – <http://housingpanic.blogspot.com/>

Professor Piggington – <http://piggington.com/>

Dr. Housing Bubble – <http://drhousingbubble.blogspot.com/>

Bubble Meter – <http://bubblemeter.blogspot.com/>

Priced Out Forever – <http://pricedoutforever.com/>

The Bursting Bubble – <http://www.theburstingbubble.com/>

The Real Estate Bloggers – <http://www.therealestatebloggers.com/>

Housing Bubble Casualty – <http://www.housingbubblecasualty.com/>

Housing Bubble Bust – <http://www.housingbubblebust.com/>

Real Estate Realist – <http://www.realestaterealist.com/>

Housing Wire – <http://www.housingwire.com/>

Sacramento Area Flippers In Trouble – <http://flippersintrouble.blogspot.com/>

Seattle Bubble – <http://seattlebubble.com/blog/>

Westside Bubble Blog – <http://westside-bubble.blogspot.com/>

Marin Real Estate Bubble – <http://marinrealestatebubble.blogspot.com/>

Sonoma Housing Bubble – <http://sonomahousingbubble.blogspot.com/>

New Jersey Real Estate Report – <http://njrereport.com/>

New York City Housing Bubble – <http://nychousingbubble.blogspot.com/>

END NOTES

- ³ Much of the author's personal study of Buddhism comes from the writings and recordings of the author Jack Kornfield (Kornfield, *The Roots of Buddhist Psychology*, 1996), (Kornfield, *The Inner Art of Meditation*, 1993), (Kornfield, *A Path with Heart: A Guide Through the Perils and Promises of Spiritual Life*, 1993), (Kornfield, *After the Ecstasy, the Laundry: How the Heart Grows Wise on the Spiritual Path*, 2000). The audio recordings of the *Roots of Buddhist Psychology* have been particularly influential.
- ⁴ The stock market experienced a 500% gain in a five year period before its infamous crash. Much of the reason for the wild increase in pricing was very low margin requirements. People were allowed to buy 10 times as much stock as they had money due to 10:1 margin trading. This expansion of credit through the broker's margin is what drove prices up, and when prices started to fall, margin calls cascaded through the market and resulted in a crash.
- ⁵ According to Credit Suisse, the average credit score for Alt-A borrowers was 717 and for subprime borrowers it was 646.
- ⁶ There was a steep rise in prices in California and selected large metropolitan areas of the East Coast during 1987, 1988 and 1989. This was followed by a 7 year period of slowly declining prices as fundamentals caught up. This is considered by some to be a bubble because prices showed a detachment from fundamentals and a later return to the former relationship. This "bubble" did not see capitulatory selling, so it did not show the behavior of classic asset bubbles.
- ⁷ A study by Consumer Federation of America's Allen J. Fishbein *Piggyback Loans at the Trough: California Subprime Home Purchase and Refinance Lending in 2006* (Fishbein, *Piggyback Loans at the Trough: California Subprime Home Purchase and Refinance Lending in 2006*, 2008), reveals the following "1.26 million home purchase and refinance loans in California metropolitan areas in 2006 and found about one sixth of California home purchase borrowers taking out single, first lien mortgages and one quarter of refinance borrowers received subprime loans in 2006. The subprime mortgage market provides loans to borrowers who do not meet the credit standard for prime loans. To compensate for the increased risk of offering loans to borrowers with weaker credit, lenders charge subprime borrowers higher interest rates – and thus higher monthly payments – than prime borrowers. California has historically had lower rates of subprime lending than the national average, but the rates of subprime lending crept up in 2006. Additionally, more than a third of California home purchase borrowers also utilized a second "piggyback" loan on top of a primary, first lien mortgage. Piggyback loans combine a primary mortgage with a second lien home equity loan, allowing borrowers to finance more than 80 percent of the home's value without private mortgage insurance. These borrowers took out loans on as much as 100 percent of the value of the home in 2006. More than half these piggyback borrowers received subprime loans on their primary mortgages. Many subprime loans are adjustable rate mortgages (ARMs) that reset to higher interest rates after the first two years, meaning that homeowners that

THE GREAT HOUSING BUBBLE

received subprime purchase or refinance mortgages in 2006 are likely to see their interest rates and monthly payments increase – in many cases significantly – in 2008. Moreover, as real estate markets cool and decline, borrowers that utilized piggyback financing could find themselves owing more on their mortgage than their homes are worth.” An earlier related study, *Exotic or Toxic? An Examination of the Non-Traditional Mortgage Market for Consumers and Lenders* (Fishbein & Woodall, *Exotic or Toxic? An Examination of the Non-Traditional Mortgage Market for Consumers and Lenders*, 2006) by Allen J. Fishbein and Patrick Woodall also sounded the alarm concerning exotic financing.

⁸ This data comes from the Credit Suisse Report (Credit Suisse, 2007). The source of their data was Loan Performance.

⁹ The impact of exotic mortgage terms was explored by Matthew S. Chambers, Carlos Garriga and Don Schlagenhauf in the paper *Mortgage Contracts and Housing Tenure Decisions* (Chambers, Garriga, & Schlagenhauf, 2007). Their abstract reads as follows, “We find that different types of mortgage contracts influence these decisions through three dimensions: the downpayment constraint, the payment schedule, and the amortization schedule. Contracts with lower downpayment requirements allow younger and lower income households to enter the housing market earlier. Mortgage contracts with increasing payment schedules increase the participation of first-time buyers, but can generate lower homeownership later in the life cycle. We find that adjusting the amortization schedule of a contract can be important. Mortgage contracts which allow the quick accumulation of home equity increase homeownership across the entire life cycle.” The cold reality of negative amortization loans is summed up in the observation that increasing payment schedules decrease home ownership over time. People default when their payments go up. It is the fatal flaw of all these loan programs. One of the more amusing papers from the bubble was written by James Peterson (Peterson, 2005) “Designer Mortgages: The Boom in Nontraditional Mortgage Loans May Be a Double-Edged Sword. So Far, Most Banks Have Moved Cautiously.” The lenders during the Great Housing Bubble were anything but cautious.

¹⁰ This data comes from the Credit Suisse Report (Credit Suisse, 2007). The source of their data was Loan Performance.

¹¹ This data comes from the Credit Suisse Report (Credit Suisse, 2007). The source of their data was Mortgage Asset Research Institute.

¹² Anecdotal evidence indicates the practice of fabricating loan application income was common. There were a few high-profile arrests, as is always the case with this kind of phenomenon. As of the early 2008, no definitive studies have been undertaken to assess how widespread was the practice of intentionally fabricating loan application data by mortgage brokers.

END NOTES

- ¹³ Payments to investors from collateralized debt obligations were actually made by the servicer. If the borrower failed to make payments, the servicer would make them to the investor. When the loan was discharged through sale, the servicer would then recoup the money, plus interest, on any payments made on behalf of the borrower.
- ¹⁴ (Libby, Libby, & Short, 2004)
- ¹⁵ Numerous reports have been compiled on the savings adequacy of Americans. In the report *Lifetime Earnings, Social Security Benefits, and the Adequacy of Retirement Wealth Accumulation* by Eric M. Engen, William G. Gale, Cori E. Uccello (Engen, Gale, & Uccello, 2004), the authors detail the savings patterns on various generations preparing for retirement.
- ¹⁶ Robert Shiller constructed a graph of housing prices from 1890-2005 for the book *Irrational Exuberance* (Shiller, *Irrational Exuberance*, 2005). The rate of appreciation during this 115 year time period is 0.7% over the rate of inflation. The data from the US Census Bureau shows a 2.0% increase over inflation since 1940, however much of this increase was during the baby boom right after WWII and it does not reflect the improvement in house quality during this time. The 0.7% statistic is referenced a number of times in this work.
- ¹⁷ Robert Shiller titled his groundbreaking book *Irrational Exuberance* (Shiller, *Irrational Exuberance*, 2005) after a phrase in a speech given by Alan Greenspan, FED chairman from 1986-2006, in a speech at the Annual Dinner and Francis Boyer Lecture of The American Enterprise Institute for Public Policy Research, Washington, D.C., December 5, 1996 (Greenspan, *The Challenge of Central Banking in a Democratic Society*, 1996). The term “irrational exuberance” is used synonymously in this writing to describe the behavior of buyers in creating an asset price bubble.
- ¹⁸ Human nature being what it is, another real estate bubble will form unless measures are taken to prevent one. The projections of how long it will take markets to recover vary depending on the variables analyzed. Later chapters explore this question in detail.
- ¹⁹ Joe Vitale in his book *There's a Customer Born Every Minute: P.T. Barnum's Secrets to Business Success* (Vitale, 1998) disputes the contention that PT Barnum ever uttered the phrase with which he is credited.
- ²⁰ The conclusion of the paper *Subprime Refinancing: Equity Extraction and Mortgage Termination* (Chomsisengphet & Pennington-Cross, 2006) is as follows, “Consistent with survey evidence the propensity to extract equity while refinancing is sensitive to interest rates on other forms of consumer debt. After the loan is originated, our results indicate that cash-out refinances perform differently from non-cash-out refinances. For example, cash-outs are less likely to default or prepay, and the termination of cash-outs is more sensitive to changing interest rates and house prices.” The sensitivity to changes in interest rates is not surprising as borrowers will take the money if it is a good deal, and they will

THE GREAT HOUSING BUBBLE

repay it when the deal is less favorable. The observation that these loans have lower default rates and are less likely to be paid back early is quite surprising. This may have been an artifact of the bubble rally, and future data may show these loans do not perform as well as in previous years.

²¹ Robert Shiller wrote a paper on Household Reactions to Changes in Housing Wealth (Shiller, Household Reaction to Changes in Housing Wealth, 2004). He reached no definitive conclusions concerning the reactions to households to increasing home prices. At the time of his writing, the bubble was inflated enough to be obvious to him, and he does mention the bubble and its potential problems. The impact of mortgage equity withdrawal had not reached absurd height in early 2004, but by 2006, the pattern of household spending had become fairly obvious. In 2007 Oxford professor John Muellbauer wrote *Housing, Credit and Consumer Expenditures* (Muellbauer, 2007). His conclusion is that the spending “wealth effect” was insignificant in the past due to more restrictive credit policies which limited access to home equity (financial prudence on the part of lenders.) After the “liberalization” of credit markets and the dramatic increase in prices of the housing bubble, the consumer spending brought about by the wealth effect became pronounced. The wealth effect observed in the Great Housing Bubble was much larger than the wealth effect of the stock market bubble which preceded, and the effect was twice as large in the United States as it was in Great Britain.

²² There is a lack of scholarly studies on the financial results of home improvement projects (Baker & Kaul, 2002). Builder behavior is often revelatory of the state of the market. In most markets new home builders do not put in rear yard landscaping because they are not able to obtain a return on the investment. Also, the fact that builders have multitudes of upgrade options from a base package indicates the premium finishes do not provide a market return unless specifically requested by a purchaser. Builders can profit in that circumstance.

²³ The evidence of consistent refinancing is anecdotal, but it is reinforced by national statistical trends from the US Governments Flow of Funds accounting.

²⁴ In the paper (Leamer, *Housing Is the Business Cycle*, 2007), the author has graphs showing the loss of manufacturing jobs after the recession of 2001.

²⁵ (Gibbon, 1999)

²⁶ In the paper *Innovations in Mortgage Markets and Increased Spending on Housing* (Doms & Krainer, *Innovations in Mortgage Markets and Increased Spending on Housing*, 2007), Mark Doms and John Krainer document how financial innovation helped facilitate the housing bubble. Their abstract is as follows: “Innovations in the mortgage market since the mid-1990s have effectively reduced a number of financing constraints. Coinciding with these innovations, we document a significant change in the propensity for households to own their homes, as well as substantial increases in the share of household income devoted to housing. These changes in housing expenditures are especially large

END NOTES

for those groups that faced the greatest financial constraints, and are robust across the changing composition of households and their geographic location. We present evidence that young, constrained households may have used newly designed mortgages to finance their increased expenditures on housing.” Notice the “innovation” reduced financing constraints. This is the definition of loose credit. They also note the increase in home ownership and the increase in debt-to-income ratios. The latter is a telltale sign of a housing market bubble. The exotic loans tended to be concentrated in younger households who used to be excluded from the housing market due to lack of downpayments and insufficient income. Basically, exotic loans were given to persons who were not ready for home ownership, and the high default rates among this group should not have been a surprise.

²⁷ In response to the dramatic increase in subprime delinquencies in 2007, the Federal Reserve Bank of San Francisco commissioned a report on Subprime Mortgage Delinquency Rates (Doms, Furlong, & Krainer, Subprime Mortgage Delinquency Rates, 2007). The reports conclusions were as follows: “First, the riskiness of the subprime borrowing pool may have increased. Second, pockets of regional economic weakness may have helped push a larger proportion of subprime borrowers into delinquency. Third, for a variety of reasons, the recent history of local house price appreciation and the degree of house price deceleration may have affected delinquency rates on subprime mortgages. While we find a role for all three candidate explanations, patterns in recent house price appreciation are far and away the best single predictor of delinquency levels and changes in delinquencies. Importantly, after controlling for the current level of house price appreciation, measures of house price deceleration remain significant predictors of changes in subprime delinquencies. The results point to a possible role for changes in house price expectations for explaining changes in delinquencies.” In later sections the relationship between default rates and default losses is explored. When prices decline, default losses increase because lenders get less money from the collateral in a foreclosure. This report from the FRBSF demonstrates that lenders also face higher default rates, probably due to borrowers “giving up” when they owe more on their mortgage than their house is worth. These two phenomenon have a negative synergy. In a related report by Kristopher Gerardi, Adam Hale Shapiro, and Paul S. Willen titled Subprime Outcomes: Risky Mortgages, Homeownership Experiences, and Foreclosures (Gerardi, Shapiro, & Willen, 2007), the authors make the following observations, “First, homeownerships that begin with a subprime purchase mortgage end up in foreclosure almost 20 percent of the time, or more than 6 times as often as experiences that begin with prime purchase mortgages. Second, house price appreciation plays a dominant role in generating foreclosures. In fact, we attribute most of the dramatic rise in Massachusetts foreclosures during 2006 and 2007 to the decline in house prices that began in the summer of 2005.”

²⁸ In the paper Unskilled and Unaware of It: How Difficulties in Recognizing One's Own Incompetence Lead to Inflated Self-Assessments (Kruger & Dunning,

THE GREAT HOUSING BUBBLE

1999), the authors noted the tendency of individuals to overestimate their own competence and abilities. Their primary conclusion is as follows “People tend to hold overly favorable views of their abilities in many social and intellectual domains. The authors suggest that this overestimation occurs, in part, because people who are unskilled in these domains suffer a dual burden: Not only do these people reach erroneous conclusions and make unfortunate choices, but their incompetence robs them of the metacognitive ability to realize it.” It is a perfect description of the general public and their relationship to complex financial agreements like Option ARMs.

²⁹ The author is a believer in the Austrian School of Economics. Two of the sources of research and understanding on the credit cycle are *The Hedge Fund Edge: Maximum Profit / Minimum Risk Global Trend Trading Strategies* (Boucher, 1999), and *Money, Bank Credit, and Economic Cycles* (Soto, 2006).

Do you want more FREE eBooks like this one?

This eBook is an excerpt from [The Great Housing Bubble](#), the authoritative reference for one of the most dramatic events of our times.

This is one of a series of **FREE** eBooks you can obtain at [The Great Housing Bubble website](#). Others include:

[What is a Bubble?](#)

[Conservative House Financing](#)

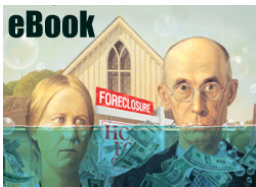
[Fundamental Valuation of Houses](#)

[The Credit and Housing Bubble](#)

[Housing Bubble Psychology](#)

[Buying and Selling During a Price Decline](#)

Full-text eBook at a retail price of \$9.95.



We are offering this great resource for the amazingly low price of just \$4.95!



Are we crazy to offer this valuable book for such a low amount? Perhaps, but we are convinced that you will like the eBook so much that you will want a hardcopy to hold in your hands and proudly display on your bookshelf.

Paperback on [Amazon.com](#) at a retail price of ~~\$19.95!~~



Amazon has gone crazy. They are offering the book for only \$13.56!

Buy now, this price will not last.



Also available at Barnes & Noble and other bookstores

Buy this book now!

THE GREAT HOUSING BUBBLE

Why Did House Prices Fall?

Are you thinking you might buy a house?

Are you trying to sell a house?

Are you a nervous homeowner worrying about declining home values?

Are you curious as to how and why real estate prices dropped?

The Great Housing Bubble has the answers!

What experts are saying:

“A very well-written and thoughtful analysis of what went wrong in the housing world and how we can avoid this problem in the future. Lawrence Roberts has a great understanding of the subject and does an excellent job communicating his ideas to the reader.”

James A. Randel, bestselling author of *Confessions of a Real Estate Entrepreneur*

Are you thinking about buying a house?

Many people will be active buyers despite the declining home prices. If you are considering buying during this time, there are many things you will need to know to make sure you do not become one of the casualties of the housing bubble.

How much are houses really worth?

Do you know how to evaluate the fundamental value of a piece of real estate? If you do not, you will probably over pay. Many people think comparative sales prices indicate value, but this incorrect. (The Fundamental Valuation of Houses, p. 29)

Do you understand complicated loan programs?

Many people think they have a grasp of how these exotic new loan programs work. Most people do not, and nobody should really be using them. (Conservative House Financing, p. 8)

How do you negotiate during a price decline?

Most buyers fail to take advantage of the powerful negotiating position they have during a price decline. There are specific techniques one can use to pay the lowest possible price. (Buying and Selling During a Decline, p. 163)

Buy this book now!

THE GREAT HOUSING BUBBLE

Are you buying a house as an investment?

Many people view residential real estate as a good investment, particularly during the real estate bubble. Historically, it has not been. The Great Housing Bubble tells the truth about residential real estate—the truth your realtor does not want you to know.

How do you make money in real estate?

Making money in real estate is about building equity. Most people believe you simply buy and equity appears by magic. It does not work that way. What exactly is equity? And how do you build it? (Equity Components, p. 19)

Why do most speculators lose money?

Most people who speculate in financial markets lose money. Why is that? (Speculation versus Investment, p. 99)

Are houses really a good investment?

Residential real estate has historically underperformed most other asset classes. The period of the Great Housing Bubble was a notable exception to the rule. (Renting versus Owning, p. 46)

What is the investment value of real estate?

There is an investment value to real estate. How is it calculated? What is it really worth? (Investment Value, p. 37)

What readers are saying:

“The detailed investigative work and deep market analysis is very insightful and thought provoking.”

Ben in Seattle

“I feel I have been given a first-rate education in real estate analysis and valuation from this book. I have continued to rent instead of purchase real estate in Irvine due, in large part, to data presented in this book.”

Jaysen in Irvine

What are you risking if you do not buy this book?

This book can save you from financial ruin and all the personal hardships that entails. **Many people lost their wealth, their homes, their credit and their good health during The Great Housing Bubble because they did not have the information presented in this book.** *You do not want to be one of them.* It is that important.

Extreme financial hardship

Residential real estate is generally an extremely leveraged financial asset. A 20% decline in house prices can completely wipe out your downpayment or any

Buy this book now!

THE GREAT HOUSING BUBBLE

accumulated equity in a property. Buying at the wrong time and paying too much can have devastating financial consequences for you.

Foreclosure/ short sale

Many people who overborrow and overpay end up losing the property in a foreclosure or short-sale. Being forced to move out of your home is never a pleasant experience.

Bankruptcy / bad credit

With the foreclosure or short-sale often comes a personal bankruptcy. If you manage to avoid bankruptcy, your credit will still be damaged for years.

Stress and health problems

Seeing hundreds of thousands of dollars of your net worth evaporate, losing your home, and being forced into bankruptcy is a very stressful set of circumstances. Many people who go through this experience have major health problems.

Can you afford to risk this?

Do you want to risk these problems? Are you willing to face these dangers without knowing what you can do to protect yourself? Your hard earned money, your credit, and your health are far too valuable to put at risk.

You need to buy this book to prepare you for the dangers out there.

What readers are saying:

“I thought I knew real estate before I read this book. I was wrong. This book opened my eyes to the truth about the real estate cycle. I was thinking of buying and investment property because prices had dropped. It wasn't until I read this book that I realized I was speculating and not investing. I almost made a very big mistake.”

Janet in Irvine

“This helped me avoid buying at the peak and losing hundreds of thousands of dollars. It saved me a great deal of grief and money. Even now, with California housing prices down over 30%, declining prices could still quickly consume your downpayment and put you ‘under water’, unable to sell your house for more than the loan value.

An excellent read, and an important one.”

Brian in Malibu

Buy this book now!

THE GREAT HOUSING BUBBLE

Do you own your house? How did the housing bubble impact you?

Almost 70% of American households own their houses. Even those who do not plan to buy or sell are impacted by the housing bubble. Everyone who owns a house saw a dramatic change in their net worth as house prices rose then fell. Some people refinanced and increased their mortgage balances to obtain the “free money” accumulating in their homes. Some people stopped saving for retirement and other purposes and became completely dependent upon their houses for their financial future. Every owner of real estate was impacted by the bubble.

How much value is your house going to lose?

The most pressing concern of most homeowners is how much is the resale price of their property going to decline before prices stabilize. (Future House Prices, p. 130)

Why did your house lose value?

Many people are very interested in why house prices went down at all. (The Housing Bubble, p. 71)

What readers are saying:

“I loved reading this book and learning about the financial impact of this whole mess that we’re in right now.”

Joe in Austin

“I had no idea my neighbors and the lenders were so crazy. The bubble wasn’t too mad there, so I really didn’t understand what all the fuss was about until I read this book. Wow! I can’t believe what was going on.”

Gale in Nashville

Do you understand the terms of your mortgage?

Many people who took out mortgages during the bubble did not use conventional, 30-year fixed-rate financing. Many of these borrowers utilized new, innovative loan programs that very few understand. (Conservative House Financing, p. 8)

Why did the economy suffer so much?

The deflation of the housing bubble brought down the entire economy and nearly caused the collapse of our entire financial system. (Doomsday Scenario, p. 159; Lingering Problems, p. 161)

Buy this book now!

THE GREAT HOUSING BUBBLE

What every seller needs to know about the housing bubble?

The tactics sellers must use to sell a home have changed radically since the market topped and prices began to fall. Those nimble sellers who are able to make the proper adjustments will sell their houses. Those that do not adapt will fail to sell their homes and lose much more money.

What readers are saying:

“I was not able to sell my house, and I was getting very frustrated. When I read this book, I realized what I really needed to do. The truth helped me overcome my denial, and I sold my house in three weeks – once I did what was necessary.”

Kurt in San Clemente

“My house was on the market for months with no offers. I paid for professional staging, and I even bought one of those crazy St. Joseph statues and buried it in the yard. Nothing. Once I read this book, I realized why the house was not selling. I didn’t want to follow the author’s advice, but it was the only way to sell my home.”

Josue in Sacramento

What do you have to do to sell your house?

What is the number 1 thing a seller must do to sell their property in a declining market? (Buying and Selling During a Decline, p. 163)

What if you owe more than your house is worth?

Many people have loans balances greater than the resale value of their property. What are their options? (Selling for Less, p. 164)

Is the government really trying to save the housing market?

Government policy during the housing bubble was not intended to save the housing market; it was intended to save the banks. Home owners are kept in a state of denial and indentured servitude to their lending overlords. (Bailouts and False Hopes, p. 122)

What are some of the things will you learn in this book?

The Great Housing Bubble is an exhaustive analysis of the issues related to this dark chapter in American history. Even though the decline is nowhere near over in 2008, already the Great Housing Bubble witnessed the largest decline in house prices since the Great Depression. Below is a sample of the types of questions this book answers.

Buy this book now!

THE GREAT HOUSING BUBBLE

Why did house prices go up so much so fast?

With lenders quickly increasing the amounts they were willing to lend, borrowers were able to increase their bids and drive prices skyward. (The Credit Bubble, p. 54)

Why did people borrow so much money?

People borrowed so much because they could, and since prices were going up so fast, most wanted to. Lenders made huge sums available to almost anyone with a pulse on payment schedules they could afford—temporarily. (Negative Amortization Mortgages, p. 13; Stated Income Loans, p. 16)

How crazy were the lenders?

Everyone thought house prices would go up forever, so few thought there was any risk of loss. (What is a Bubble, p. 1; The Fallacy of Financial Innovation, p. 26)

Why did we have a credit crunch?

People stopped paying back their loans, so lenders stopped lending money. (The Credit Crunch, p. 93)

What readers are saying:

“Lawrence Roberts has his finger on the pulse of the housing bubble – the bursting forehead vein, I should say!”

LC in Irvine

“Lawrence Roberts is one of the best that I have seen at breaking down the complicated and confusing mortgage and real estate industry so that novices like me can understand.”

Alan in Toledo

Why did we have so many foreclosures?

People stopped making payments because they borrowed too much money and they could not afford to pay it back. (Types of Loans, p. 11; The Bubble Bursts, p. 87)

How does the secondary mortgage market work?

The activity in the secondary mortgage market provided the air that inflated the housing bubble. (Structured Finance, p. 57)

Why is real estate cyclical, and what are the stages of the cycle?

Real estate prices rise and fall due to market psychology and credit availability. (Visualizing the Bubble, p.67; Psychological Stages of a Bubble, p. 111)

Buy this book now!

THE GREAT HOUSING BUBBLE

Are most home buyers speculators?

Many homebuyers in volatile real estate markets are motivated by profit. This motivation causes a great deal of property speculation. (Trading Houses, p. 104)

How did the bubble change people's lives?

The housing bubble made and lost fortunes for its many participants. Those that lost faced both economic and personal problems. (Economic Problems, p. 173; Personal Problems, p. 175)

How do we stop future housing bubbles?

It is possible to prevent future housing bubbles. It requires a combination of market reform and government intervention. (Preventing the Next Housing Bubble, p. 173)

What experts are saying:

“Lawrence Roberts was completely right.”

“Lawrence Roberts is THE real estate guru... one of the few who knew it was coming.”

“He’s the guy that predicted the crash and year and a half before it happened.”

Johnny Wendell – KTLK 1150 AM

Buy this book now!