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## The Great Recession of 2007 and the Housing Market Crash: Why Did So Many Builders Fail?

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The Great Recession of 2007 and the Housing Market Crash

Why Did So Many Builders Fail?

Lessons for the Local Homebuilding Industry

by

Mohamad Ali Hasbini

A dissertation submitted in partial fulfillment of  
the requirements for the degree of  
Doctor of Business Administration  
Muma College of Business  
University of South Florida

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## **DEDICATION**

I dedicate this work to my wife Sawsan whose patience, understanding, and sacrifice made life a joy for me the past thirty years. To my children Leena, Zeina and Jad, I could not have achieved this momentous task without your support. Leena, a special thanks to you for being my role model. To my late father Abdul Rahman and my mother Nadia, this honor is for you.

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## **ABSTRACT**

Events around the “Great Recession” of 2007 created havoc in the homebuilding industry, more than any other previous economic down cycle. Countless seasoned local homebuilders across the country did not survive. The impact of their failure on the economy, community, employment, lenders, suppliers, and subcontractors was devastating. While previous studies have sought to identify the symptoms and causes of business failure, very little research has been done on home builder business failure due to acts, omissions, characteristics, or other events which are non-financial. Specifically, those that are attributable to the failed entities' top management and leadership during the housing crisis and the Great Recession. Therefore, the purpose of this qualitative inquiry is to uncover those nonfinancial factors and help to fill the gap in the literature

Additionally, we seek to find specific strategies that could be incorporated into the business models of local homebuilders which allow them to anticipate and navigate turbulent economic times. The ultimate goal of such strategies, however, is to shield the organizations of those builders from the negative effects of recessions and allow them to thrive in the aftermath.

We begin our study, however, with the context of homebuilders’ business failure: the housing market crash and the Great Recession of 2007.

## **CHAPTER ONE**

### **Navigating the Turbulent Economic Waters of the 2007 Great Recession and the Crash of the Housing Market**

#### **Tagline**

What triggered the crash of the U.S. housing market? This analysis looks at the economic and industry forces that led to an economic downturn that put as many as half of all U.S. residential builders out of business.

#### **Keywords**

Great Recession, home building, housing market, economics, financial bubbles, housing bubbles, business failure, financial regulations, sub-prime lending

#### **Executive Summary**

Since the Great Depression, the U.S housing market has significantly influenced economic production and employment levels. Direct and indirect investments in the housing industry, along with the induced economic activities such as real estate transactions and construction as well as other factors, accounted for an estimated 15-20% of GDP during boom years (CBPP, 2012).

The burst of the \$8 trillion housing bubble in 2007 and the subsequent collapse of the financial markets in 2008 created massive disarray in homebuilding (Bivens, 2011). As many as 50% of homebuilders closed their doors, either voluntarily or through bankruptcy filings (Quint, 2015). Concurrently, from 2006 through 2012, the Great Recession resulted in the loss of over \$7 trillion of home equity (Gould Ellen, 2012). Over 24 percent of home mortgages went

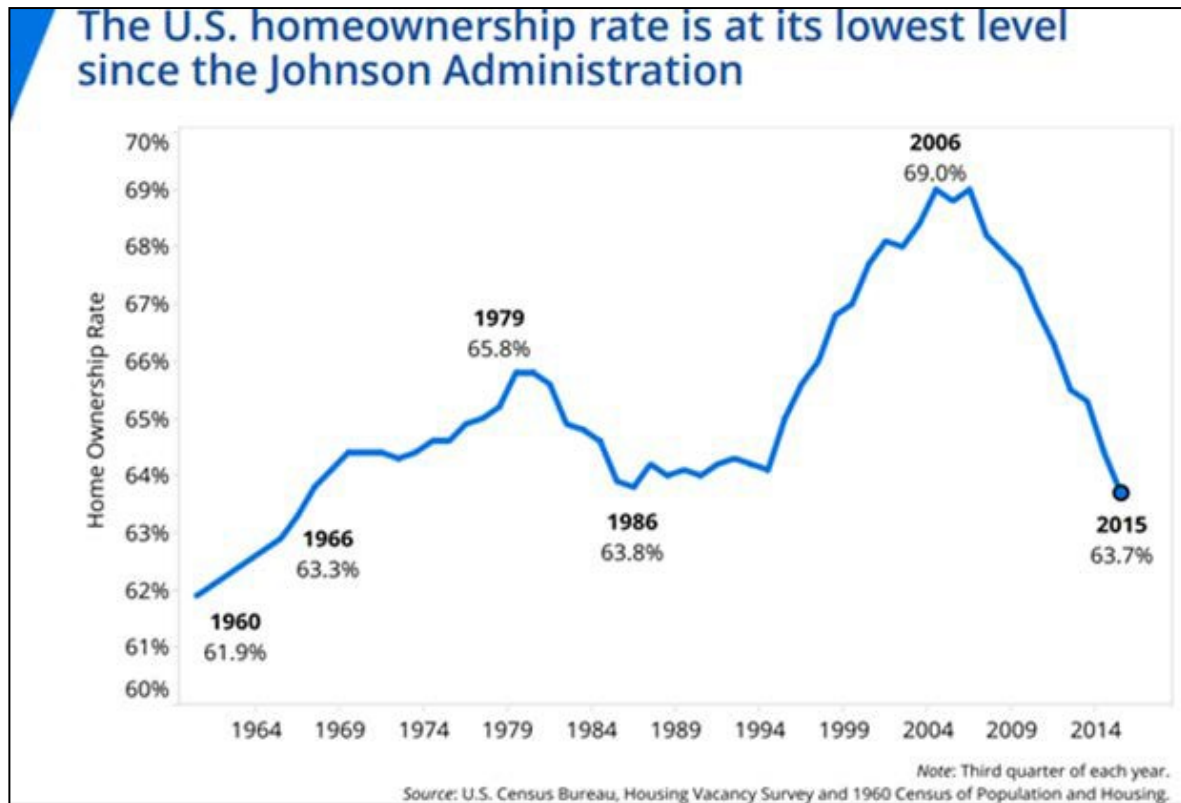
“underwater” with balances exceeding home values (Carter & Gottschalck, n.d.). For some homeowners, the thought of losing their home through foreclosure and incurring disruption to family life became a reality. The stress from threats of the loss of a home, unemployment, and depletion of savings exacted a great toll on many. Not since the Great Depression had the U.S. economy faced forces so devastating to the housing market and personal wealth.

### **The U.S. Housing Market**

“We shape our dwellings, and afterward our dwellings shape us.”

Winston Churchill

Home ownership has long symbolized the American dream. For many, a home represents a large source of pride, savings, and wealth. It is not only a shelter for raising families but also a place to make memories, live comfortably, and provide opportunities to improve one’s life. Research has also indicated other benefits of home ownership such as creating incentives for property enhancements, improvements in children’s life outcomes, improving people’s propensity to vote, and reducing crime rates (Zywicki & Okolski, 2009). Home ownership in recent decades has been encouraged by U.S. government policies such as the interest mortgage deduction, progressive Housing and Urban Development (HUD) regulations, the Community Reinvestment Act (CRA), and homeownership targets set by the Clinton and Bush administrations (Zywicki & Okolski, 2009). As shown in Figure 1A, recent history has shown the homeownership rate in the U.S. averaged between 64-65%, except for the period leading to the Great Recession, when it spiked to 69%. Among 50 sampled nations the U.S. ranks 41 for homeownership which falls below Romania, Russia, and Cuba, among other others (Worldatlas.com).

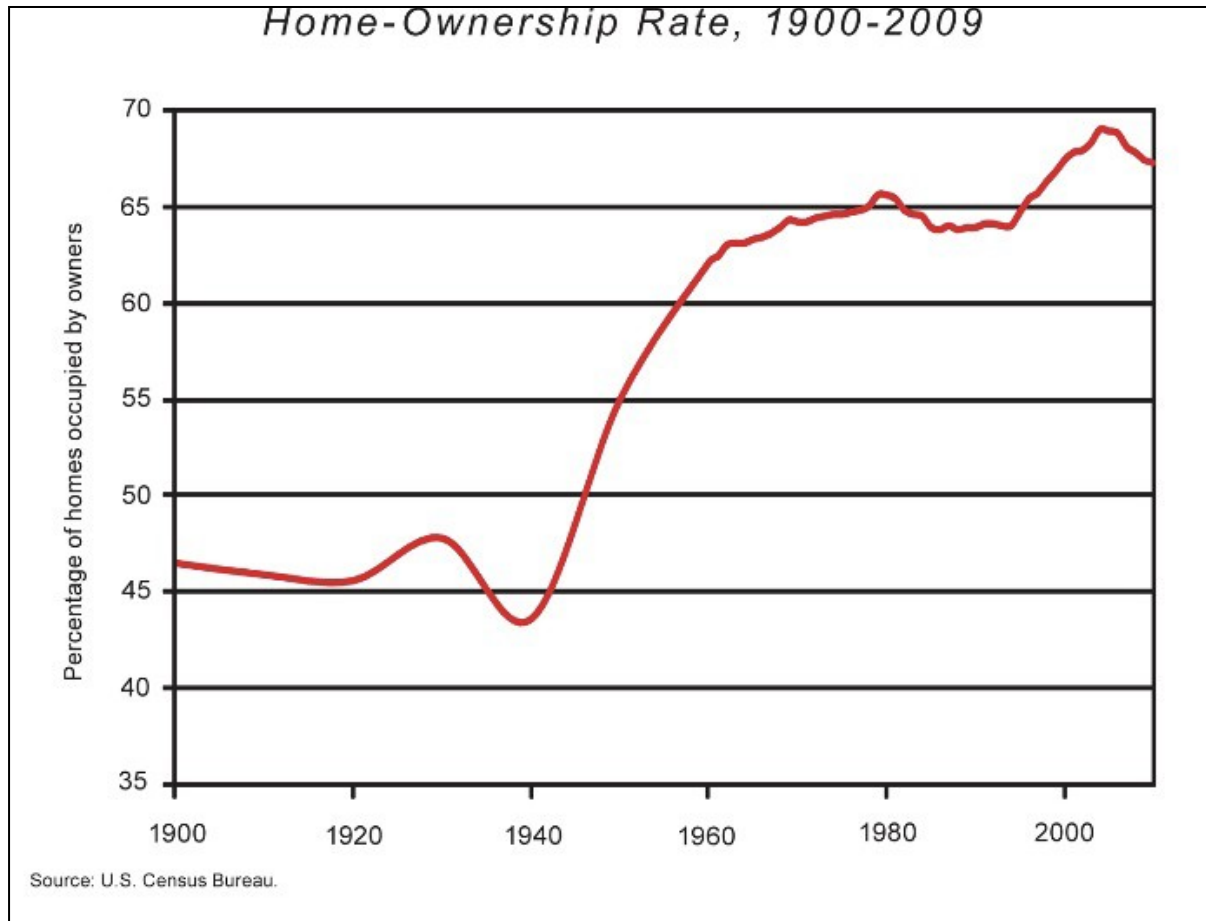


**Figure 1A: Home Ownership over Time**

Home ownership in America was once limited to farmers, who had the ability to establish a homestead on land they worked. With the industrial revolution and growth of urban dwellers home ownership became more common. Reforms of the National Bank Act in the late 1860's allowed banks to experiment with home mortgages. They became more popular in the 1890's with simple structures requiring a down payment of up to 50% followed by interest-only payments, and a balloon payment of principle made at the end of the loan. The typical term of those loans, however, did not exceed five years (Roth, 2016).

Following a decline in the great depression (1929-1940), home ownership rates increased dramatically, as shown in Figure 2A. The post-war need for housing and the development of a better highway system created conditions for the development of the American suburb. Fast-growing cities like Levittown were based on a vision of communities of neat ranks of houses, each

with its square of lawn, neighborhood public schools, picnic areas, and playgrounds. This became the idyllic manifestation of the middle class American dream (Blumgart, 2016).



**Figure 2A: Home ownership rates in past century**

Today the U.S. housing market represents the supply and demand of housing transactions between buyers, sellers, brokers, lenders, speculators, and others. At its core the housing market includes the resale market of existing homes as well as new residential construction. A broader definition incorporates the rental markets and the impacts of government housing policies and regulations. The economic impact of new housing construction is substantial due to materials procurement and construction processes of new homes and its labor intensity. On average new housing contributes 5% to GDP, while consumer spending on housing-related activities and

services contributes an additional 12-15% (Independence Title, 2014).

Therefore, housing is a significant driver of economic activity with both direct and indirect impacts. Empirical research suggests that since World War II the new housing market has led society in and out of recessions (Woodward, 2015).

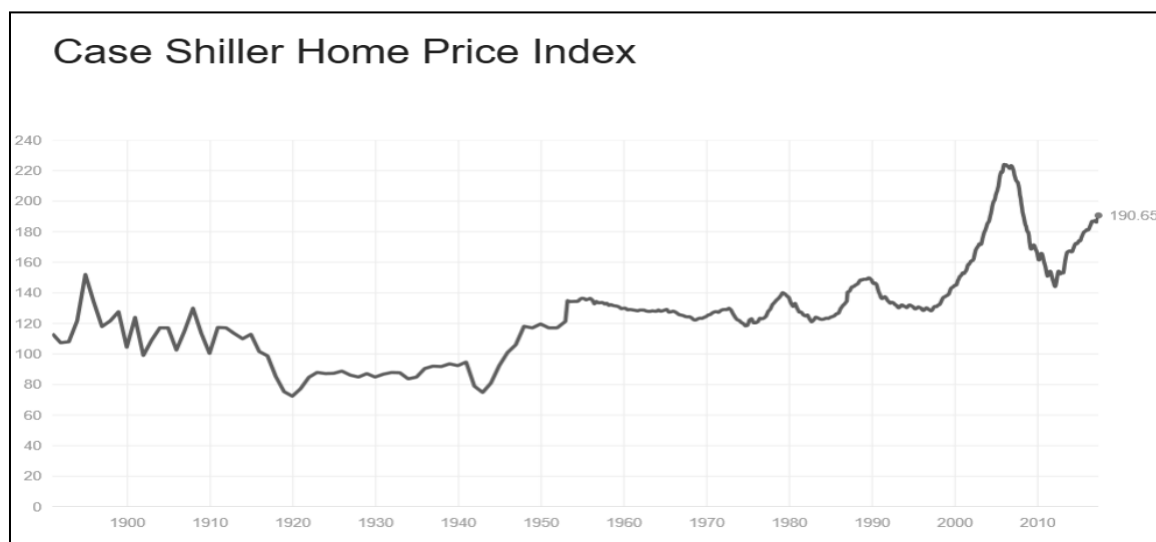
Resale housing, on the other hand, has little impact on GDP. Changes in home values correlate significantly with changes in consumption through either the wealth effect or the collateral effect. As the value of houses changes, households may feel more or less wealthy, which in turns affects their consumption and impacts economic growth and GDP. The same holds true for credit access when home values change, allowing households to borrow more or less against the value of their collateral, thus influencing consumer spending and consumption.

Within the housing market, the construction and purchase of newly built homes whether detached, attached, or multifamily has the greatest impact on GDP growth rates (Case, et al., 2005). According to the National Association of Homebuilders (NAHB), homebuilding not only creates jobs directly, but its indirect ripple effect also contributes to the economy with goods, services, and taxes for local governments. The NAHB estimates that for every 100 single-family homes built in a typical local area, 394 jobs are created, \$28.7 million in local income is generated, and \$3.6 million in taxes are paid to local government. An additional recurring annual financial impact translates into 69 more local jobs, \$4.1 million in local income, and \$1 million in revenues for local government. Similarly, the construction of 100 apartment units creates 161 local jobs, \$11.7 million in income, and \$2.2 million in taxes for local governments. The recurring annual financial impact translates into an additional 44 jobs, \$11.7 million in income, and \$2.2 million in revenues for local governments (NAHB, 2015). Additionally, since homebuilding is labor intensive, any decline in the demand for housing will have a significant

impact on the unemployment rate.

Many factors influence the demand for housing. Demographics, job creation, and employment top the list of factors affecting the ability of people to purchase a home, followed by affordability and financing availability. When the consumers' willingness to spend money increases, as represented by the consumer confidence index being in a normal range (Greiner, 2015), the demand for housing improves.

The housing market has faced serious challenges during the past century, but with the exception of the Great Depression of 1929 none led to the deterioration of home prices seen during the Great Recession of 2007. Neither the 20% interest rates of the early 1980s nor the decimation of the savings and loan industry in the early 1990s led to a similar crash of home values. It is also worth noting that not all economic downturns cool the housing market. In fact, during the 2001 recession, the housing market and housing demand remained strong despite the economic downturn, as shown in Figure 3A. Home price appreciation stimulated consumer spending during that period, which kept the recession relatively short and shallow (Byun, 2010).



**Figure 3A: Case-Shiller Home Price Index** (Retrieved from <http://www.multpl.com/case-shiller-home-price-index-inflation-adjusted/>)

## Housing Bubbles

Definition: *“Temporary condition caused by unjustified speculation in the housing market that leads to a rapid increase in real estate prices. As with most economic bubbles, it eventually bursts, resulting in a quick decline in prices. The end of a housing bubble is hard to predict given the fact that economic conditions can change without warning. If a housing bubble swells to an extremely high level, the aftermath of a burst may set the housing market back years.”* (businessdictionary.com/definition/housing-bubble)

The world has witnessed numerous asset bubbles over the years. Examples include the Dutch Tulip bubble of the 1500s, the South Seas bubble in the 1700s, the Gold Rush of 1849, the forgotten U.S. real estate bubble of the 1920s, and the Japanese real estate and stock market bubble in the 1980s (HBS 2017; Smith 1935). Recently we have seen the effect of the dot-com bubble in 2000s, and the housing bubble of 2006. Although these examples all have common denominators, they differed in severity and their occurrence was difficult to predict. Typically a bubble forms when the price or value of the underlying financial asset increases to levels far exceeding its historical norm or intrinsic value. Participants ignore cautionary signs, holding to an inflated and unrealistic belief about, or even indifference as to what that intrinsic value may be (Picardo, 2015).

The 19<sup>th</sup> century recorded the first real estate bubbles in the U.S. with the sale of public lands by the Federal Government. The cycle of peak and valley in land speculation and sales has typically lasted 18 years (Hanke, 2010). Housing bubbles are usually defined as a periodic form of economic bubble which usually occur following a marked increase in housing prices. Although housing bubbles have been less frequent than other bubbles, they are more damaging



due to their longevity and output losses (Helbing & Terrones, 2003). Compared with other assets, particularly equities, housing prices take much longer to recover after the bubble bursts (Reinhart & Rogoff, 2009, p. 161).

Housing bubbles typically form organically with population growth when a new generation reaches home buying age. This growth creates new households, thus increasing housing demand. With other factors such as the entry of immigrants into the housing market, impacts of speculators, good economic conditions, low-interest rates, and abundant financing options, prices are bound to rise. With the time lag in construction, increased demand causes prices to rise. When home prices deviate substantially from underlying, demographically derived organic demand a burst is likely to occur, sending the general economy into a crisis. In some instances a bubble burst can be easily brought about by some catalyst that shocks the economic system. Examples include natural disasters, government actions, war, fear of political or economic instability at home or abroad, or threats to energy supplies. One such catalyst was the 1926 hurricane in Florida that pricked the real estate bubble of the 1920's. This led to an increase in the foreclosure rate which continued into the Great Depression (White, E.N., 2009).

Economists argue over the starting date of the 2006 housing bubble. Thomas Lawler, former senior vice president at Fannie Mae, claims that 2002 represents the kick-off date for the bubble. He argued that after the dot-com bubble and the 2000 recession, investors were seeking more stable investments and real estate presented the perfect opportunity. Given the low interest rates set by the Federal Reserve to support the economy, the availability of financing, and relaxed mortgage standards, homebuyers had strong incentives to purchase a home. However, economist Robert Shiller points to a much earlier date. Examining the 10-city composite home-price-index shows the index rose between 1995 and 2006. This would place the housing bubble's

start in the mid 90's.

There were plenty of advance warning signs of the 2006 housing bubble burst which pointed to a financial crash and a severe housing market correction. Some economists and political analysts predicted the bubble and its burst in the early 2000s. Professor Robert Shiller wrote about the pending bubble burst in his “Irrational Exuberance” publication. Dean Baker also identified the bubble and repeatedly warned about its implications (Baker, 2002). Sir Andrew Large, the Deputy Governor of the Bank of England, cautioned in 2004 about the dangers of excessive borrowing and an imminent crash. In 2005 the chief economist of the International Monetary Fund (IMF), Raghuram Rajan warned of catastrophic consequences to the financial system due to deregulation, institutional moves, and risk taking resulting from the housing bubble. Fed Chairman Alan Greenspan and former Treasury Secretary Larry Summers, who were present at the conference, discounted the warning as “largely misguided.” (Denning, 2011).

Late in 2005 and throughout 2006, the business press and media were inundated with reports of an imminent threat to the economy from the housing bubble. Among the many who also sounded the alarm, NYU Economist Nouriel Roubini warned the housing market was following a “free fall” trajectory which might derail the entire U.S. economy bring on a recession. During the same period, Mark Zandi, Chief Economist for Moody's research firm, warned of a double-digit decline in home values leading to a crash during the 2007-2009 period. By mid-summer 2007 Yale economist Robert Shiller indicated real home prices would sharply decline in the not-so-distant future, predicting a 50% drop in value in certain regions of the country (Bianco, 2008).

## The Great Recession of 2007

By most accounts, the Great Recession of 2007 caused the United States its worst and longest economic downturn since the Great Depression. Beginning with the burst of the housing bubble, U.S. GDP started its fall into negative territory with a significant decline in economic activity across the country. The National Bureau of Economic Research (NBER), a private non-profit research organization, officially declared the start of the recession in December, 2007 and recorded its end in June, 2009. As shown in Figure 4A, the NBER considers a list of economic indicators when dating recessions, which include real personal income, industrial production, retail sales, nonfarm employment, and GDP growth.

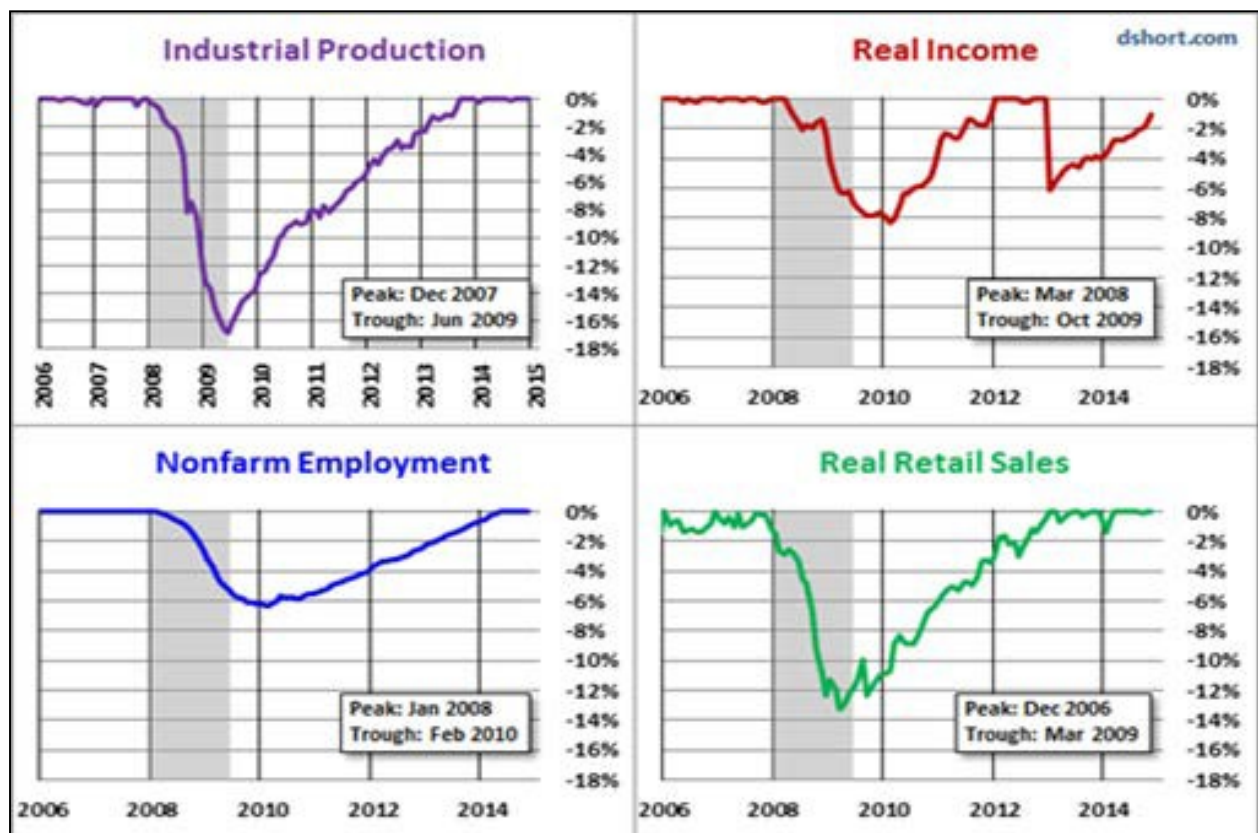


Figure 4A: Indicators of the beginning of the recession from the National Bureau of Economic Research

Economists dubbed it the “Great Recession” due to its severity and extended duration, with global ramifications affecting mostly the advanced economies of the world (Dao & Loungani, 2010). The effects on U.S. households of this severe economic downturn were devastating. Unemployment rose to 10% in many parts of the country and remained high long after the recession ended. In many regions home values dropped between 15% and 45% from their highs while stock market indices lost 50% of their values. The Dow Jones Industrial Average dropped 55% from a high of 14279 in October, 2007 to 6440 in March, 2008. When combined, those effects led to a reduction of 38.8% in the net worth for the average American family (Bricker, et al., 2012). The collateral damages resulting from the mortgage meltdown were numerous. As home prices fell, property tax revenues collected by local governments dropped.

Homeless rates rose with more families losing their homes to foreclosures. Rental tenants were affected when landlords lost their investment rental properties. Researchers attributed other indirect and disturbing effects to this economic instability: an increase in health- and stress-related ailments such as heart attacks (Burgard, et al., 2007), a reduction in societal cohesion (Giuliano & Spilimbergo, 2009), and even a reduction in the academic performance of many students of laid-off parents (Stevens & Schaller, 2009).

This financial turbulence also devastated large financial organizations, which led to the financial crisis. Many firms were in such financial distress that only government intervention was able to save them. Bear Stearns, the prestigious investment banking firm founded in 1923 and recognized as the "Most Admired" securities firm in *Fortune's* "America's Most Admired Companies" survey three years earlier (Business Wire, 2005), was in such dire financial need that the Federal Reserve had to intervene to facilitate its acquisition by JP Morgan. Others claimed that

without a government bailout of the multinational insurance corporation American International Group, Inc., also known as AIG, the U.S. financial system would have been in jeopardy and its demise would have affected the entire global economy (Amadeo, 2017). Accordingly, Bank of America, Citigroup, and other financial institutions received billions of dollars in loans and guarantees needed to shore up their balance sheets and preserve confidence in the banking system. Lehman Brothers, on the other hand, filed for bankruptcy when the Treasury Department refused to bail them out after negotiations for the sale of the company fell apart. Others ended up with the same fate causing panic among global bankers, thereby adding more fuel to the fire of the Great Recession.

The Federal Government, through its executive and legislative branches, had to react quickly. In late 2008 and early 2009 the Troubled Asset Relief Program (TARP), a financial stabilization measure, and the fiscal stimulus of the American Recovery and Reinvestment Act (ARRA) were enacted. The objective was to calm the financial markets swiftly, boost the demand for goods and services, and help preserve and create jobs during the recovery period. The Congressional Budget Office found that improvements to GDP and the unemployment rate were a direct result of ARRA, and the recovery would have been much slower without its implementation (CBPP, 2017).

The Federal Reserve also responded decisively to the crisis by using creative tools from its toolbox. The initial Fed response was the “traditional” reduction of the Federal Funds rate from 5.25% in September of 2007 to 0-.25% during 2008. Non-traditional policy measures then focused on easing the credit situation and improving the economy’s cash flow. The Large-Scale Asset Purchase program (LSAP) was implemented to lower long-term borrowing rates for the private and public sectors by the purchase of mortgage-backed securities and debts of

government sponsored entities such as GSE's, Fannie Mae, Freddie Mac, and the Federal Home Loan Bank (Gagnon, et al., 2010).

Major changes in financial regulations and banking also resulted from the financial crisis. With the turmoil in the financial markets subsiding in 2010, Congress enacted the Dodd-Frank Act, which was intended to reform and safeguard the financial sector and reduce the risks of financial distress, especially for large financial organizations. New regulations, for example, allowed the Federal Reserve to oversee nontraditional credit intermediaries designated as "Systematically Important Financial Institutions." The Act also authorized the Federal Deposit Insurance Corporation to liquidate financial institutions if they deemed their failure would negatively affect the financial system. Other measures required large financial institutions to create detailed exit strategies, should they face liquidation in bankruptcy courts, without having to ask for government intervention. Traditional banks were also required to increase their capital balances, reduce dividend payments to build capital, and conduct regular stress testing to deal with unforeseen hidden risks

The formation of the housing bubble followed a unique pattern. Initially, public policies depressed short-term rates and encouraged homeownership. Homebuyers saw great opportunities to improve their lives with home purchases. Financial institutions devised customized lending programs, and mortgages packaged as investment commodities were sold on the open market, bringing in millions in fees. Demand for housing skyrocketed and pushed prices higher, attracting speculators wanting to cash in on the abundant opportunities. Collectively, those activities formed upward pricing pressure and opened the floodgates for additional residential lending, creating a hyperactive and unsustainable demand for housing. The result was an unprecedented rise in home prices that was destined to collapse. Apparent from the

evidence, this housing bubble was driven and sustained by the main ingredients of a classical bubble: a substantial liquidity source causing it to inflate, homebuyers and investors believing that they had opportunities to achieve higher returns without additional risks, and market inefficiencies and regulatory failures allowing the bubble to inflate without resistance (Krugman, 2009b).

The subsequent chain of events triggered a rapid decline in home values, leading to massive foreclosures and the ensuing collapse of the housing market. It began with the increase of rates in adjustable rate mortgages during the latter part of 2005 and throughout 2006. Some subprime and prime borrowers were able to refinance or sell their properties, but many were unable to make higher mortgage payments and defaulted. By mid-summer of 2006 delinquencies in the mortgage pools of securities started to rise, causing investors to stop buying securitized mortgages. Funding for new mortgages and refinances ceased, with real estate speculators exiting the market in droves while dumping even more homes, and pushing values down further. Throughout 2007 and 2008, a number of hedge funds and investment bankers failed while banks stopped lending money to each other fearing defaults. Making matters worse, the sources of business funding dried up and companies unrelated to housing struggled, resulting in more job losses. With a faltering economy, layoffs in many industries were rampant, forcing more homeowners to default. Foreclosures became inevitable, and the numbers were mounting.

A key consideration by homeowners on whether to default on a mortgage is the amount of equity accrued in a home. Adverse life events such as natural disasters, illness, divorce, and job loss can trigger delinquencies and result in foreclosures (Zywicki & Okolski, 2009). During the bubble, exotic and high loan-to-value mortgages with low initial interest rates were offered to prime and subprime borrowers.

These required little or no down payment and thus gave rise to a payment shock when they reset to higher rates. Additionally, home-equity loans put in place by homeowners to finance a multitude lifestyle expenditures such as vehicles and vacations, added another layer of debt and consumed accumulated equity. The rapid fall in home values resulted in negative equity, giving homeowners strong incentives to default. Since foreclosure rates and drop in home values are strongly correlated (Zywicki & Okolski, 2009), by the middle of the recession one in four home mortgages were “underwater.”

## **Literature Review**

A comprehensive literature review formed the basis of this study. In this review we examined previous bubbles and recessions, the activities of the financial markets, the regulatory environment for the period preceding the housing market collapse, and the impact of the housing market crash.

## **Literature Summary**

A broad summary of this review is given in Table 1A.

**Table 1A: Primary causes of the housing bubble that led to the financial crisis**

<b>Construct</b>	<b>Findings</b>	<b>Source</b>
Government Monetary and Housing Policies	The government allowed weak lending standards which stimulated speculation and later defaults when rates increased.	Liebowitz, S. J. 2008. “Anatomy of a Train Wreck.” Independent Policy Report



Table 1A (Continued)

	Flawed housing and monetary policies by the government were the main causes of the crisis. These include down payment requirements by HUD, CRA rules, subsidizing GSE's, and pushing for the granting of sub-prime loans.	White, L. H. (2009). Housing Finance and the 2008 Financial Crisis.
	Land restrictions imposed by local governments limited the supply of land for housing, which led to substantial appreciation in home prices.	Sowell, T. (2009). The Housing Boom and Bust, rev. ed. New York: Basic Books
	Foreign savings flowing into the U.S. economy provided cheap and easy credit to both households and businesses, resulting in a housing boom.	Bernanke, B. S. (2009). Four questions about the financial crisis. <i>Chairman of the Board of Governors of the US Federal Reserve System, Speech at the Morehouse College, Atlanta, Georgia, April, 14.</i>
	Low short-term rates by the Fed pushed yields for municipal and government bonds lower, forcing asset managers toward higher yield but riskier mortgage-backed securities. Also, the 1998 repeal of the Glass-Steagall Act, which was intended to protect the banking system.	Ritholtz, B. (2011). Examining the big lie: How the facts of the economic crisis stack up. <i>Washington Post</i> .
	The huge push for homeownership by HUD increased pressure on the GSEs to provide mortgages for people of low and modest income.	Engel, K. C. and McCoy, P.A. (2016). <i>The subprime virus: Reckless credit, regulatory failure, and next steps</i> . Oxford University Press.
Shadow Banking System and Financial Engineering: the Securitization	The panic of the "shadow banking system" resulted in insolvency when financial firms refused to increase the margins on repo agreements or renew the sale and repurchase of those agreements.	Gorton, G. B. (2010). Slapped in the Face by the Invisible Hand: Banking and the Panic of 2007. Oxford University Press.

Table 1A (Continued)

	The unregulated “shadow banking system” hedge funds and investment bankers fed the housing bubble while becoming highly leveraged and later failing.	Krugman, P. R. (2009). <i>The return of depression economics and the crisis of 2008</i> . New York: W.W. Norton.
	Mortgage credit expansions into subprime zip codes provided a greater number of riskier securitized mortgages, thus leading to the bubble and crisis.	Mian, A., & Sufi, A. (2009). The Consequences of Mortgage Credit Expansion: Evidence from the U.S. Mortgage Default Crisis. <i>The Quarterly Journal of Economics</i> , 124(4), 1449-1496.
	Loans that were securitized and sold had a higher foreclosure rate than loans held in banks' portfolios.	Vig, V., Seru, A., & Piskorski, T. (2009). Securitization and Distressed Loan Renegotiation: Evidence from the Subprime Mortgage Crisis. In <i>2009, Meeting Papers</i> (No. 1169). Society for Economic Dynamics.
	Increased securitization of mortgages into mortgage-backed securities led to the lowering of lending standards.	Zandi, M. (2008). <i>Financial shock: a 360o look at the subprime mortgage implosion, and how to avoid the next financial crisis</i> . FT Press.
	The “global savings glut” from emerging economies, seeking safe returns, ultimately found its way into the U.S. real estate market. This cheap capital funded mortgage-backed securities thereby fueling the housing bubble.	Jagannathan, R. K. (2013). Causes of the great recession of 2007–2009: The financial crisis was the symptom, not the disease! <i>Journal of Financial Intermediation</i> , 22(1) 4-29.
	Securitization allowed lenders to transfer the default risk of mortgage- backed-securities to investors, thereby creating a moral hazard.	Engel, K. C., & McCoy, P. A. (2011). The subprime virus: reckless credit, regulatory failure, and next steps. New York, N.Y.: Oxford University Press, 2011.

Table 1A (Continued)

Subprime Market	Sub-prime borrowers did not cause the housing crash as early data suggested. The prime market was at least as responsible.	Ferreira, F., & Gyourko, J. (2015). <i>A new look at the US foreclosure crisis: Panel data evidence of prime and subprime borrowers from 1997 to 2012</i> (No. w21261). National Bureau of Economic Research.
	The expansion of mortgage credit into subprime zip codes and the increase of securitization of those mortgages significantly contributed to the default crisis.	Mian, A., & Sufi, A. (2009). The Consequences of Mortgage Credit Expansion: Evidence from the U.S. Mortgage Default Crisis. <i>The Quarterly Journal of Economics</i> , 124(4), 1449-1496.
	The quality of subprime mortgages deteriorated long before the onset of the Great Recession. It could have been detected earlier, except that escalating home prices concealed the problem.	Demyanyk, Y., & Van Hemert, O. (2011). Understanding the subprime mortgage crisis. <i>Review of Financial Studies</i> , 24(6), 1848-1880.
	The subprime lending market experienced a dramatic increase in the number of high loan-to-value (LTV) ratio loans toward the latter part of the housing boom. With prices rising, these loans performed well. When prices dropped, those loans caused borrowers to default.	Gerardi, K. L. (2008). Making sense of the Subprime crisis. <i>Brookings Papers on Economic Activity</i> , 69-159
	Home loans issued in subprime zip codes were not aimed at the poor. Later mortgage losses were due to high- and middle-income borrowers. Also, mortgage debt burdens as measured by debt-to-income ratio did not change from pre-bubble period.	Adelino, M., Schoar, A., & Severino, F. (2016). "Loan Originations and Defaults in the Mortgage Crisis: The Role of the Middle Class." 29.7. <i>The Review of Financial Studies</i> , 1635-1670.

**Table 1A (Continued)**

Lending products and Underwriting Standards	Increased debt to income ratios, low short-term rates by the Federal Reserve, relaxed mortgage lending standards, increased leveraging by the investment bankers produced the crash	Gwartney, J., Macpherson, D., Sobel, R. and Stroup, R. (2008). Special Topic: The Crash of 2008: Cause and Aftermath.
	Lenders reduced their mortgage underwriting standards to meet the requirements of the Community Reinvestment Act. GSEs responded to HUD requests by reducing income and down payment requirements.	Holt, J. (2009). A summary of the primary causes of the housing bubble and the resulting credit crisis: A non-technical paper. <i>The Journal of Business Inquiry</i> , 8(1), 120-129.
	The “moral hazard” effect led to lax in mortgage standards as the risk of the transactions shifted to the next player.	Bianco, K. (2008). <i>The Subprime Lending Crisis: Causes and Effects of the Mortgage Meltdown</i> . CCH.
Other Contributing Factors	Emphasized the irrational exuberance of all players as the lead cause of the bubble.	Shiller, R. J. (2012). <i>The subprime solution: how today's global financial crisis happened, and what to do about it</i> . Princeton University Press.
	Authors identified factors that contributed to the bubble, including the excess supply of housing units during the boom, changes in demographics, quality of housing, and restructuring of the housing industry.	Haughwout, A., Peach, R. W., Sporn, J., & Tracy, J. (2012). The supply side of the housing boom and bust of the 2000s. In <i>Housing and the financial crisis</i> (pp. 69-104). University of Chicago Press.
	The irrational demand for housing resulted in higher prices and extended the duration of the bubble.	Glaeser, E. L., Gyourko, J., & Saiz, A. (2008). Housing supply and housing bubbles. <i>Journal of Urban Economics</i> , 64(2), 198-217.

**Table 1A (Continued)**

	The crisis resulted from the actions of U.S. housing policies, greedy investment bankers, imprudent bankers, incompetent rating agencies, shortsighted homeowners, irresponsible housing speculators, and predatory mortgage brokers and lenders.	Wallison, P. J. (2009). Cause and effect: government policies and the financial crisis. <i>Critical Review</i> , 21(2-3), 365-376.
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## **Literature Analysis**

Seeking potential answers to our inquiry regarding triggers to the housing market crash, our literature review focused on two fundamental questions: what forces colluded to create the housing bubble, and how did these forces collectively push the housing market to the precipice? Through our literature review we found a number of factors that directly or indirectly contributed to home price appreciation, which led to a hyperactive demand for housing and a massive bubble. Given the nature and complexity of our inquiry, we narrowed our attention to the impacts resulting from the following factors: a) the government monetary and housing policies b) the shadow banking system (existing outside of conventional lending channels), financial engineering of mortgages c) sub-prime market d) lending and underwriting standards. We also noted other less-critical but relevant factors that collectively contributed to the bubble formation and burst.

## **Government Monetary and Housing Policies**

Researchers are always interested in the government's role in any crisis. Questions pertinent to our inquiry centered around the following: 1) did governments' policies provide fertile grounds for the bubble formation? 2) did those policies, actions, or inactions, trigger the burst? Some have claimed that the expansion could not have happened without a substantial increase in the availability of mortgage debt for potential homeowners, which were a direct

result of those policies.

Engel et al (2016) argued that in an attempt to spur the economy following the dot-com bubble, the recession in 2000, the Enron bankruptcy, and the September 11 attack, the Federal Reserve slashed short-term interest rates and kept them low for an extended period. It wasn't until 2004 when the Federal Fund's rate increased gradually. The researchers concluded this decision resulted in an increase in housing prices of approximately 10% nationally. Ritholtz (2011) posited that the Fed's policy of keeping short-term rates low also resulted in a lower yield for municipal and government bonds, forcing asset managers to find alternative investment vehicles. The higher yielding mortgage-backed securities presented the perfect opportunity.

Taylor and Silver (2009) suggested that by depressing the Fed Funds rate, the Federal Reserve contributed to the expansion of the housing market. L.H. White (2009) expanded Taylor's argument and placed blame on both the ill-advised monetary policies and the government's housing policies. He claimed that both policies were key contributors to the bubble formation and the crisis that ensued. His contention was that the monetary policies which kept the very short-term rates low in the early 2000's made adjustable rate mortgages (ARM) more attractive when compared to conventional fixed rate 30-year mortgages. Naturally, low ARM rates opened borrowers to more expensive housing than they might buy otherwise and allowed more homeowners who were financially marginal to enter the market. He also suggested that borrowers assumed the Federal Reserve would maintain short-term rates low for an extended period. However, when ARM rates rose after their reset, affordability became an issue, and borrowers could no longer afford their monthly house payment. This resulted in delinquencies and home foreclosure. He also noted that government housing policies made the situation even more disastrous. By relaxing FHA down-payment standards and strengthening the Community

Reinvestment Act, banks were pressured to provide home mortgages for low-income borrowers not considered as creditworthy. He added that the debt guarantees of the government sponsored entities, Fannie Mae and Freddie Mac, vastly contributed to the bubble.

Liebowitz (2008) suggested that by allowing weak mortgage underwriting standards the government contributed to the crisis. Speculators then had easy access to borrowed funds which spurred the demand for housing. When home prices deteriorated they quickly defaulted and exited the market. Gwartney et al. (2009) theorized that in addition to weak lending standards increasing the debt-to-income ratio for borrowers, the Federal Reserve's low short-term rate policy amplified the financial leverage of investment bankers who took advantage of the low rates when they created their toxic assets. They later defaulted when they could no longer find alternative financing. Sowell (2009) focused on local governments and their land use restrictions contributing to the housing bubble. He suggested that given the limited supply of land, housing markets that were subject to those restrictions had the highest price increases.

Bernanke (2009) disagreed about the Government's role in depressing interest rates and furthering the crisis. He attributed low-interest rates, in part, to accumulated savings from emerging market economies flowing into the U.S. mortgage market, thus placing downward pressure on interest rates. In his view the low rates set by the Fed accounted for a small portion of the housing expansion. Jagannathan et al. (2013) expanded this by pointing to the "Global Savings Glut" that was seeking low-risk safe investments with better yields. They attributed the origin of the glut to the supply shock of labor in developing countries.

The massive labor supply coupled with innovation and the impact of globalization created massive amounts of savings in the emerging economies that were not invested domestically due to inadequate financial markets. They also argued that ultimately the

foreign capital found its way into the U.S. real estate market where Wall Street engineered “highly rated bonds” backed by home mortgages. With ample mortgage financing available and cheap consumer credit demand for housing increased, laying the groundwork for a housing bubble.

Engel & McCoy (2016) addressed another government policy: the huge push for homeownership by HUD. This increased pressure on government sponsored entities, GSEs, to provide mortgages for minorities and people with low or modest income. They stated that “subprime loans were presented as the key growth in homeownership by the Bush Administration” (Engel & McCoy, 2016). The authors also emphasized the failure of Federal agencies and Congress to intervene even when horror stories of mortgage abuses were discovered early. The attitude of government officials then was that if there were problems in mortgage lending, the market would solve them.

Researchers found other policies to blame. Smith (2007) argued that the 1997 tax code encouraged overinvestment in residential real estate when it allowed homeowners to exclude up to half a million dollars in capital gains from the sale of their residence. Homeownership became a very attractive investment when compared to other financial investments, thereby fueling the housing bubble. Ritholtz (2011) pointed to the repeal of the Glass-Steagall legislation in 1998. The law, enacted in 1933, was intended to protect the banking system by prohibiting banks from certain activities and separating them from hedge funds and investment banks. The repeal encouraged banks to take on more risky investments and enter the “innovative” mortgage loan markets, thereby fueling the housing bubble.



## **The shadow banking system and the financial engineering of securitized mortgages by Wall Street.**

In the late 90's and early 2000's, a substantial amount of foreign capital seeking safe investments flowed into the U.S. financial system. As a result the demand for government bonds soared, depressing yields. Due to government monetary policy at the time keeping short-term rates low following the 2000 recession, Wall Street needed alternative investments with higher yields for these foreign investors.

Private label securitized home mortgages—those not sponsored by GSE's—presented the perfect opportunity. By bundling home loans into a trust providing monthly payments in a rated bond portfolio with home mortgages as collateral, Wall Street provided the perfect vehicle for investors needing strong returns. The securitization process, however, was not new, as government sponsored entities such as Fannie Mae and Freddie Mac had long securitized their mortgage portfolios when they acquired conforming loans from mortgage lenders, and thus replenished the funding for home loans. Seizing on the opportunity, a “shadow banking system” was created by highly leveraged entrepreneurs who became non-bank lenders funding home loans. Designated as “private lenders,” they were not subject to regulation, and because they did not hold any customer deposits they did not fall under the jurisdiction of the FDIC. Private lenders understood that conforming loans sold to GSEs were not as profitable due to strict rules. Instead, they offered a variety of non-traditional mortgages to homebuyers and sold them to private Wall Street securitizers who packaged them as collateralized debt obligations or CDOs, and then wholesaled them to ultimate investors. To achieve their goals and compete against government sponsored entities, they relaxed their underwriting mortgage lending standards, and specifically designed their business model to sell to Wall Street firms under the private label

securitization market. By 2006, private underwriters were responsible for more than 12 million sub-prime mortgages valued at \$2 trillion, mostly issued to low and moderate income borrowers (Zywicki & Okolski, 2009).

According to Krugman (2009b), the real culprit behind the crisis was this unregulated “shadow banking system.” Camouflaged as private lenders, hedge funds and investment bankers saw great opportunities in packaging and selling collateralized debt obligations consisting of billions in home mortgages, thereby creating and feeding the housing bubble. He stated that they were bound to fail due to their high leveraged make-up. Gorton (2009) agreed, adding that the credit crisis was merely a banking panic within the shadow banking system. These lenders failed when they were unable to obtain liquidity needed to increase the margins on their repossession agreements or renew the sale and purchase of those agreements at the onset of the crisis.

Zandi (2008) confirmed that the financial engineering of securitizing mortgages into mortgage-backed securities lowered lending and underwriting standards. Mian et al. (2009) amplified the significance of securitized sub-prime mortgages when mortgage credit expanded into subprime zip codes. Vig (2009) provided more evidence that securitized loans resulted in a higher foreclosure rate than those loans held by banks as portfolio loans. Engel & McCoy (2016) agreed that the securitization of mortgages allowed lenders to transfer all default risks to the investors, thereby creating a moral hazard. Private lenders had no incentives to improve the quality of the loans they produced since they earned their transaction fees upfront from borrowers and the securitization proceeds, and thus had no stake in the performance of the loans.

### **Lending products and underwriting standards**

To supply the ravenous lending machines, private lenders needed new mortgages.

Therefore, they expanded their reach by implementing additional mortgage products while resorting to new techniques such as providing non-traditional mortgages and relaxing underwriting and loan terms. Examples of exotic mortgage loans provided to borrowers included the Hybrid ARM, interest-only loans, negative amortization loans, and pay-option adjustable mortgages. Also, by relaxing mortgage standards, credit for home purchases was easily obtained by additional borrowers, thus pushing the demand for houses even higher and resulting in more pressure on home prices. Whether it was a refinance or a home purchase, low down payments, low-doc or no-doc, stated income, high-loan-to-value, or piggyback loans, represented some of the unique products used by lenders. Upper management also overruled loan underwriters and approved loans with “exceptions.” Deception and fraud were inevitable as the frenzy continued. Subprime lending, a term used to describe loans to borrowers with blemishes on their credit, became the new description of a type of loan offered by many lenders. By the end of 2008, subprime mortgage debt including exotic mortgages reached \$2 trillion (Engel & McCoy, 2016).

Lowering standards with low-doc home equity lines also allowed homeowners to use their homes as sources of cash when values rose, thus destroying equity they may have accumulated over the years. The continuing entry of speculators lured by rising prices and low mortgage underwriting standards pushed demand and prices even higher. Everyone was hoping to cash-in on the new gold rush.

Holt (2009) suggested relaxed mortgage standards were a direct result of government policies intended to improve homeownership rates among low-income households. Lenders reduced their underwriting standards to meet the requirements of the Community Reinvestment Act. Moreover, both Freddie Mac and Fannie Mae responded to HUD requests to increase the percentage of loans to lower income households by reducing income and down payment

requirements. Bianco (2008) added the effect of a “moral hazard” to the lax mortgage standards since each actor in the mortgage transaction collected its profits and passed on the risk. To prove her point, she alluded to the drop in the denial rates during the bubble for conventional loans as reported in the Home Mortgage Disclosure Act.

### **Subprime Market and Lending**

Subprime mortgage lending originated in 1980 with the Depository Institutions and Monetary Control Act that deregulated the banking industry. The Act ended state usury laws and allowed banks to charge interest rates based on the risks involved (Litrell, 2010). Due to higher risks, banks naturally charged higher rates and fees on certain loans and sometimes even requiring credit life insurance policies. In those early days, however, much of the subprime lending was concentrated on refinances as opposed to financing new home purchases (Immergluck, 2004). The early refinances helped homeowners with equity manage and pay credit card debts while leveraging the tax deductibility of home mortgage interest. Technology, public policy, and securitization of mortgages, however, fueled the growth of the subprime market (Brescia, 2008). By 2006, subprime mortgages became mainstream with 20% of all originated mortgages and 25% of all securitized ones being subprime with the vast majority underwritten by unregulated private lenders (Zywicki & Okolski, 2009).

Demyanyk (2011) found the quality of subprime mortgages deteriorated long before the onset of the Great Recession with the escalation in home prices concealing the problem. Gerardi et al. (2008) affirmed that the number of high loan-to-value subprime loans increased dramatically as the housing boom progressed. Those loans performed well in the early stages when prices were rising since borrowers had the ability to refinance or sell if they were uncomfortable with their mortgage payments. It is when prices began to decline that those

mortgages quickly went underwater, pushing borrowers toward default and foreclosure. Mian et al. (2009) examined the expansion of subprime lending into subprime zip codes.

They discovered a high correlation of mortgage defaults with subprime zip codes, and from 2002 to 2005, income and mortgage credit growth in those zip codes were negatively correlated.

Adelino et al. (2016) refuted the zip code arguments which assumed that borrowers in poorer neighborhoods reflected the characteristics of those zip codes. To the contrary, Adelino found borrowers' income was double the neighborhoods' average and that most of the losses incurred were between middle-class and high-income borrowers. Also, the debt-to-income ratio of borrowers did not change when compared to the pre-bubble era.

Ferreira et al (2015) also argued against those who blamed the subprime borrowers and subprime lenders for the housing crash. They concluded that prime borrowers were as responsible for causing the housing bubble. By analyzing foreclosure data from 1997 to 2012 they found that foreclosures of prime borrowers quickly outnumbered those of sub-prime mortgages. Because delinquencies and foreclosures started with the failure of sub-prime borrowers, researchers and the press jumped to the early conclusion that the sub- prime market was the major offender. Given the gravity of the crisis and the nature of exotic loans marketed by a few sub-prime lenders with bad practices, many of those lenders were equally blamed. However, their data confirmed that sub-prime borrowers represented only 20% of the market, while the prime sector had 60% or more. When home prices fell 40%-50% in certain regions, a great number of prime borrowers stopped making mortgage payments even when they had made a 10% or 20% down payment. With the prospects of unemployment looming on the horizon, one solution that many borrowers resorted to was to mail the house keys to their lender, ultimately resulting in a foreclosure.

Their final analysis concluded that the real estate bubble was mostly the result of creditworthy borrowers who assumed that the value of their home would never decrease.

### **Other contributing factors**

Krugman (2009a) articulated that for a bubble to form and inflate three prerequisites must be present. First, there must be a catalyst or reason causing investors to believe they can achieve higher returns without taking additional risks. Second, a liquidity source must be available to feed the bubble. Third, market inefficiencies or regulatory failures must exist, allowing the bubble to inflate without impediments. Examples of the catalysts from the Great Depression era were electricity and technological advances, such as the combustion engine. In the dot-com period, it was the promise of increased productivity from the internet which presented the convincing arguments. In the housing market crisis it was the thought that the Great Moderation which promised economic stability, economic growth, and low inflation could be maintained through financial innovations, market efficiency, and policymaking.

Shiller (2012) added his “Irrational Exuberance” theory, saying it was the “heightened state of speculative fervor” of all players in the marketplace that created the housing bubble.

Haughwout et al. (2012) explored the impact of the excess supply of housing units generated by the housing industry. They concluded that the consolidation and growth of national builders contributed to the oversupply of units in a major way since they were already committed to projects in their pipeline well before price declines and tightening of the credit markets.

Glaeser (2008) maintained that it was the irrational demand during the housing bubble that resulted in sharp increases in home prices which extended its duration given the inelastic supply of housing.

Wallison (2009) summed up his arguments by blaming all those that had a role in the debacle: the greedy investment bankers, the shortsighted homeowners, irresponsible speculators, imprudent bankers, incompetent rating agencies, bad housing policies, predatory mortgage brokers, and lenders.

## **Discussion**

Scholars and the business press have outlined many hypotheses concerning the housing bubble, its burst, and the financial crisis that followed and which resulted in the Great Recession of 2007. Among those are the effect of the government's housing and monetary policies, the shadow banking system and the securitization of mortgage debts, the relaxing of mortgage underwriting standards, and subprime lending. Evidence also points to an abundant flow of foreign capital seeking good returns, and investment bankers accepting high risk without real government oversight. Other contributors were private lenders offering exotic home loans, as well as greed, fraud, and deceit among mortgage originators. Other forces fueling demand for housing included speculators who invested heavily in the residential real estate market, thereby adding more pressure on demand and exacerbating the crisis as they exited the market.

From a housing industry perspective, did these factors trigger the ensuing housing market crash, or did other underlying variables play a larger role? In addressing the question, one must keep in mind the business cycle in the background against which this series of events played out. Foldvary (1997) predicted that the 18-year business cycle following the 1990 downturn would cause the U.S. economy to have a major downturn around 2008 assuming no major interruptions to the cycle, as shown in Table 2A. Although such predictions by economists always provoke disagreements, it is important to understand the business cycle and its impact on the market as a whole.

**Table 2A: 1997 Prediction of a major economic downturn in 2008 (Adapted from Foldvary, 1997)**

Peaks in Land Cycle Value	Interval (Years)	Peaks in Construction Cycle	Interval (Years)	Peaks in Business Cycle	Interval (Years)
<b>1818</b>	--	--	--	1819	--
<b>1836</b>	18	1836	--	1837	18
<b>1854</b>	18	1856	20	1857	20
<b>1872</b>	18	1871	15	1873	16
<b>1890</b>	18	1892	21	1893	20
<b>1907</b>	17	1909	17	1918	25
<b>1925</b>	18	1925	16	1929	11
<b>1973</b>	48	1972	47	1973	44
<b>1979</b>	6	1978	6	1980	7
<b>1989</b>	10	1986	8	1990	10
<b>2006</b>	17	2006	20	2008	18

With an extended expansion of the housing market from the mid-1990s through the mid-2000s, the homeownership rate increased from 64% to 69%. Although a few percentage points may not seem substantial, it represents what appeared to be an additional 15 million households entering the housing market and acquiring properties they called home. The expansion also coincided with a strong appreciation of home values in certain regions of the country. An examination of home prices shows they remained in concert with general prices as measured by the CPI until 1995. Beginning with 1996 and ending in 2006, the Case-Shiller National Real Housing Price Index rose from 80 to 190, and home prices skyrocketed, as shown in Figure 5A. The average home price more than doubled between 1998 and 2006, representing the largest recorded increase in U.S. history. Economist Robert J. Shiller previously warned, however, that



housing price increases beyond the general inflation rate could not be sustained long term. The serious decline in home prices that followed severely dropped the index to a low of 125 in 2012 and resulted in a sharp decline in property values leading to a significant rise in defaults and foreclosures.

Since the Great Depression home prices in the U.S. had never experienced such a cycle of surge and decline (Byun, 2010). We believe this phenomenon of a sharp rise and substantial fall of home prices in such a short time frame had the greatest impact on the housing market, leading to the severe market correction.

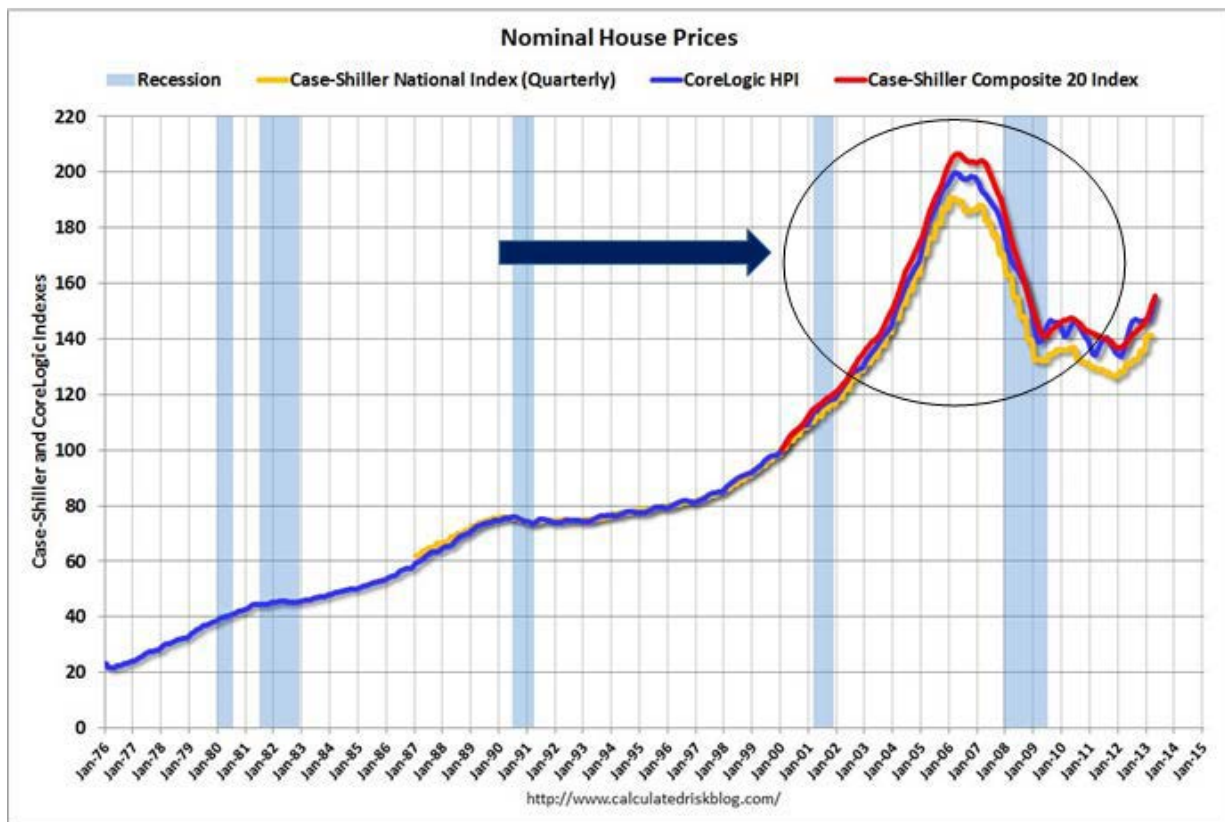


Figure 5A: Evidence of Bubble in Case-Shiller Housing Index

Therefore, it appears that when residential homes turned from being a shelter for families to being a commodity traded through complex financial instruments by Wall Street professionals a new unsustainable demand for housing was produced. With ample liquidity, loose underwriting, and easy credit the rapid acceleration in prices occurred. The base level organic demand was augmented by non-organic demand from speculators and "flippers" wanting simply to cash in on rising values. In 2005 alone, 28% of homes were purchased by speculators for investment purposes, while an additional 12% were for a second home. The resulting excess demand and ensuing bidding wars that followed caused rapidly increasing prices as the market sought a new equilibrium. In addition, studies have shown that to meet the artificially increased demand the housing industry produced nearly 3.5 million excess units nationally during the boom years (Haughwout, et al., 2012). The lag time for land acquisition, development, and construction of new homes explains why the industry continued to oversupply the market with more units even after the bubble burst. This lagging oversupply resulted in a substantial downward pressure on prices.

### **Effect of Government Monetary and Housing Policies**

The literature reflect that the low short-term rate policy set by the Federal Reserve in the early 2000's encouraged the flight of investments from low earning government bonds into higher yielding mortgage-backed securities. The real downward pressure on interest rates, however, came from the invested savings flowing from emerging economies (Bernanke, 2009). Foreign investments from sovereign funds, Europe, Brazil, oil producing countries, and China, were substantial. With globalization, money had been chasing investments with safe and solid returns worldwide, and the U.S. presented the perfect opportunity at the time. Investors saw a great investment in the U.S. real estate market through the rated and insured securitized

mortgages that carried a favorable coupon rate. There is no doubt the housing expansion benefited from low rates, but to claim that government monetary policy was responsible for the housing bubble, in our opinion, lacks the evidence supporting those views and shows very little merit.

Critics also attribute the housing bubble to government housing programs and policies. They point to the role played by the Housing and Urban Development Agency (HUD), the government-sponsored entities Fannie Mae and Freddy Mac, and the actions of the Clinton and Bush administrations in encouraging homeownership. The Community Reinvestment Act of 1977 (CRA), which promoted community development by encouraging financial institutions to help meet the credit needs of local communities (Littrell & Brooks, 2010), received much criticism due to foreclosures despite contrary data that dispute its contribution. Proponents argue that if the implementation of CRA rules were the reason behind so many foreclosures, then defaults should have occurred in the suburbs where the housing boom happened as opposed to inner cities and in-fill projects where the CRA was mainly emphasized. Those proponents also add that the CRA mandate not only deterred discrimination and predatory lending to working-class borrowers and minorities, but also served those communities with safe and sound lending practices resulting in lower foreclosures (Taylor & Silver, 2009). The Financial Crisis Inquiry Commission in its final report, along with economists from the Federal Reserve, provided additional support to the views that government housing policies, including loans in CRA districts, were not a major cause of the crisis.

Over the years most government policies and agencies acted in ways to facilitate and promote homeownership by easing barriers. Creating the demand for housing, however, is a market function. Moreover, since much of the housing price escalation took place long after the

Federal Reserve tightened its monetary policy, the funds rate did not contribute to the rise in home prices. Thus, the argument blaming the government for inflating the bubble does not appear to meet the rigor test. If government agencies are to share any blame it would be in the absence of meaningful public oversight of certain market functions, specifically those pertaining to the credit agencies.

### **Role of subprime lending and borrowers**

Many early conclusions pointed to subprime borrowers as being irresponsible for accepting lending terms that are unrealistic, thus causing the mayhem in the housing market. The rationale given was the fact that the number of subprime delinquencies and foreclosures in the early days of the bubble burst far exceeded the number of prime foreclosures. New studies have shown, however, that only 20% of foreclosures resulted from subprime lending, while the majority were prime borrowers that defaulted for a variety of reasons. Also research has revealed that, during the bubble, lenders placed prime borrowers in the subprime category so they could earn higher fees and process loans faster. Lenders even went as far as classifying loans as a subprime due to the loan characteristics, regardless of the credit standing of the borrowers. Another important consideration that deserves exploration is the timing effect on subprime borrowers. One may argue that, in better times, many would have fulfilled their loan obligations. Job losses, a faltering economy, actions of the banking industry, and most of all the sharp drop in home equities made circumstances extremely difficult even for the most creditworthy borrowers. Whether subprime borrowers would have defaulted if the timeframe for their loan time cycle were different requires further analysis.

### **Impact of adjustable rate mortgages**

Researchers also blamed the adjustable rate mortgages (ARMs) and the rate resets for the

bubble burst. They stated that as rates reset, after an initial period with a fixed “teaser” rate, borrowers faced a mortgage payment shock and stopped making payments on their loans. However, ARMs were not a new mortgage product. When Congress decided in the early 1980s to deregulate the banking industry and abolish interest rate caps on home mortgages, banks introduced new mortgages including ARMs. These mortgages appealed to borrowers due to offering a lower rate than comparative fixed rate mortgages.

Many homeowners assumed they would be in their home for only a few years, thus a lower monthly payment would be advantageous. As long as they could refinance if rates changed or could sell their property, the rate reset was seen as irrelevant. The fact that a high number of financed ARM mortgages in the 1980s through the early 2000’s did not create any problems for lenders suggests that they were not a key ingredient of the bubble burst. Only when refinancing was not available, or a falling real estate market created negative equity, did adjustable or hybrid mortgages become problematic.

## **Conclusion**

In purely economic terms, the painful housing market crash was merely a severe correction which brought the market close to equilibrium. Dynamics of supply and demand apply regardless of the type of commodity traded. Homebuyers, speculators, government actions and policies, GSE’s, Wall Street, hedge funds, and other players in the private sector all contributed toward inflating the housing bubble. Its burst was imminent as the sharp rise in home prices was not sustainable. There is no doubt that the fraudulent activities performed by some participants in the mortgage industry resulted in harm and pain for many. Their impact, however, was small in the grand scheme of the bubble burst. Researchers did raise concerns as to whether the homebuilding industry was culpable in fueling the bubble given that overbuilding in certain markets did

happen. This is evidenced by the additional 3.5 million units produced during the bubble (Haughwout, et al. 2012). The behavior of homebuilders, however, was rational as they operated to fulfill market needs for residential units, and many had to complete projects already underway. In addition, Wall Street and equity markets that financed projects for national builders demanded a continuous stream of revenues (Zywicki & Okolski, 2009). The significant consolidation of homebuilders which occurred in the 1990's and early 2000's may explain why national builders produced more units in some markets and kept their building machines at full capacity. The herding behavior of builders in markets full of uncertainty also encouraged some overbuilding. They relied on positive signals received from worthy competitors about future demand prospects and chose to ignore the signals of bad economic conditions (Banerjee, 1992).

The role of the “Big Three” rating agencies, Fitch, Standard & Poor's, and Moody's Investors services, however, is debatable. The Financial Crisis Inquiry Commission reported the rating agencies were “key enablers of the financial meltdown.” Supposedly, they were the independent gatekeepers in the financial markets responsible for rating the debt instruments and securities for investors and lenders, as well as for debtors' financial ability to repay obligations. In this fiduciary responsibility they failed to properly assess the risks associated with those securities, which allowed the financial markets to flood the residential lending market with substantial liquidity. There is no doubt that investors would have reconsidered the purchase of those securities if the rating agencies quantified risk factors correctly. This would have resulted in alternative investment vehicles being created for the liquidity that fueled the housing bubble.

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## **CHAPTER TWO**

### **Exploring the Impact of Non-Financial Factors on Homebuilders' Failure**

#### **Abstract**

During the Great Recession of 2007, many homebuilders in the United States failed. The generally recognized causes of business failures are many and varied. While previous studies have sought to identify the symptoms and causes of business failure, very little research has been done on home builder business failure due to acts, omissions, characteristics, or other events which are non-financial. Specifically, those that are attributable to the failed entities' top management and leadership during the housing crisis and the Great Recession. The purpose of this qualitative inquiry is to uncover those nonfinancial factors and help to fill the gap in the literature.

#### **Keywords**

Recession, Great Recession, economics, entrepreneurship, financial management, homebuilding, business failure

#### **Executive summary**

This narrative inquiry explores the impact of characteristics and acts of entrepreneurial builders/owners and their top managers on the builder entity susceptibility to failure as a result of direct, indirect, ad hoc, or outside factors during the Great Recession of 2007. We interviewed home builders who survived the Great Recession and others who did not along with key stakeholders who had knowledge and expertise in dealing with home builders.

The study yielded the following results: homebuilders, in many cases, did not suddenly fail due to certain quantitative considerations and financial difficulties as a result of the economic downturn. Other qualitative aspects of those business entities and their leadership that manifested over time, before and during the recession, played a significant role in their business demise. Recognizing those factors by the homebuilding industry is critical to avoiding failure, especially when faced with the challenges of recessions.

## **Introduction**

*“As an unfortunate consequence of the home building recession, dozens of high-profile companies have closed their doors, liquidated, or filed for Chapter 11 bankruptcy... Industry sources expect half of the home building companies that did business at the peak of the market in 2005 to be around when the market bottoms.”*

Builder Magazine, January 2009

Since the Great Depression, the homebuilding industry has played a significant economic role in the national economy. Direct and indirect investment in the housing industry, along with the induced economic activities from real estate transactions, construction and development expenditures, finance, home furnishing, professional services, appliances, rents, and utilities, accounted for an estimated 15-20% of the gross domestic product (GDP) during boom years (Center B. P., The State of the Residential Construction Industry, 2012). Due to its share of the overall economic production and employment levels, the industry is considered a key component of the national economy (Center, 2012). Therefore, the survival and success of home builders, especially during turbulent economic times, is important not only to the principals of the homebuilding entities and their immediate employees and families, but also to organizations that depend on their success, including sub-contractors, lenders, investors, suppliers, engineers,

policymakers, appliance manufacturers, and home furnishing companies.

The bursting of the housing bubble in 2007, and the subsequent collapse of the financial markets in 2008, along with other effects of the Great Recession, created disarray as home builders struggled to survive in the collapsing home building industry. Scores of building companies across the country failed. Many had been successful and well-established before the onset of the recession. Census Bureau data reflected that between 2007 and 2012, 50% of residential building entities left the marketplace, either filing for bankruptcy or shutting their doors indefinitely. Over the same period, the National Association of Home Builders (NAHB) confirmed similar results, reporting a 54% decline in its membership. (Table 1B)

**Table 1B: Residential Builders, 2007 vs. 2012**

	2007		2012		Percent Change	
	Economic Census	NAHB	Economic Census	NAHB	Economic Census	NAHB
Residential Builders	98,607	57,095	48,557	26,421	-50%	-54%

Source: Homebuilder data from U.S. Census Bureau and the National Association of Homebuilders (2015) (Quint, 2015)

The organizations of many failed builders suffered a slow and painful death. The impact of their failure extended well beyond the lost fortunes, stress, and struggles of builders trying to save their businesses. Jobs were lost and reputations tarnished while countless homeowners in many communities were left with unfinished houses or lost deposits. In addition, scores of subcontractors and suppliers were forced to file for bankruptcy as a result of not having been paid for materials and services rendered. Lenders that financed home construction were left with overvalued portfolios of foreclosed homes following lengthy court proceedings against failed builders. Those lenders incurred substantial losses when they liquidated the foreclosed properties during the worst financial

crisis that had faced the nation since the Great Depression of 1929.

Recessions affect industries differently, and statistics have shown that more business failures occur during difficult economic times (Pearce, 2006). Although certain industries, businesses, and products are countercyclical to downturns, home building is certainly not recession-proof. During past recessions, many builders struggled but managed to overcome the difficult economic times. In fact, during the 2001 recession, homebuilders shrugged off the negative effects of the economy and continued building at a rate that the housing market helped shorten the time frame of the recession. Why, then, did so many seasoned home builders fail during the Great Recession of 2007?

The literature and business press have identified various symptoms of business failure that, predictably, were financial: declining sales revenues, profitability issues, cash flow problems, high debt levels with diminishing or non-existent financing options, just to name a few. Scholars also have focused on financial performance models using financial ratio analysis to predict business failure (Altman, 1971; Kangari, 1992; Pompe, 1992). Again, this work exposed the symptoms but was unable to identify the causes of failure (Ropega, 2011; Argenti, 1976). Other studies which examined non-financial factors responsible for failure addressed only a specific set of enterprises and produced a limited number of causes (Charan, 2002).

In the homebuilding industry, a complete explanation of home builders' business failure remains elusive as little research has been done regarding the effect that acts, omissions, characteristics, or other events attributable to those failed entities' top management and leadership have had on home builder business failure. One might wonder if less obvious qualitative factors specific to the industry, whether at the individual level of the building organization or the culmination of actions and events affecting or conducted by

builders before and during the recession, may have contributed to their business failure.

This research seeks to address the gap in the literature and establish that non-financial events may have led some building organizations to their demise (Figure 1B). Examples of non-financial events include life events preceding the Great Recession that diverted a leader's energies or interest in the business, losing key personnel resulting in a dysfunctional management, or failing to adapt to changing conditions. Other possible contributors include lenders' response to the recession, the absence of a succession plan, lacking business cycle experience, excessive delegation during the growth years, substantial legal liabilities, a desire to shed unmanageable personal and business debts, and possibly even health issues. Any one of these circumstances may have paved the way for failure.

Our interest in this research stems from our experience in residential construction and development in Florida during the past 30 years, which exposed us first hand to the devastation created by the failure of local home builders as a result of the Great Recession of 2007. We personally knew most of the local failed builders who were considered leaders in the local building association with long track records of success. Also, a recent but limited study we conducted in the spring of 2016 with a small number of local builders and key informants revealed a complex set of preliminary results. The study showed that some homebuilders did not fail simply due to financial difficulties; other qualitative aspects of the business entities and their leadership played a significant role. Although these findings were not conclusive due to the limited number of conducted inquiries, we were confident that an in-depth, rigorous qualitative research study would uncover additional factors and substantiate the preliminary results.

Therefore, we hypothesize that the Great Recession of 2007 was not the sole cause leading to the failure of so many homebuilders who were once successful. The



financial downturn may have been the catalyst that dealt the final blow to some homebuilding entities that were vulnerable to the economic storm due to factors preceding the economic downturn that developed over time. Our inquiry presents an attempt to extend previous research and fill the gap by exposing qualitative non-financial factors that might explain failures of entrepreneurial homebuilders during the Great Recession.

Thus, the main purpose of this study was to identify the unique and specific qualitative factors that make homebuilders and their organizations more susceptible to failure, especially during economic downturns. To achieve our goal, we conducted a rigorous qualitative inquiry using semi-structured interviews with twenty-five participants to expose those unique factors. We hope that our findings add to the body of knowledge and benefit the building industry, including all stakeholders who depend on its continuing success.

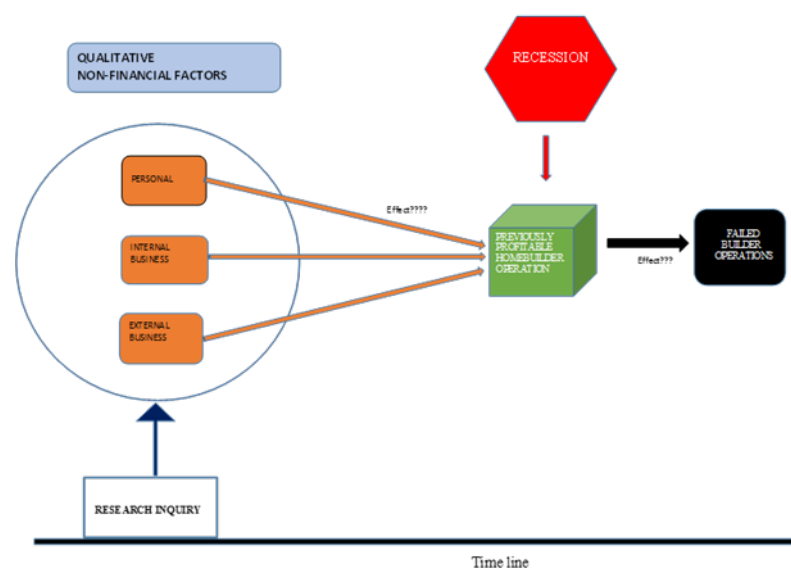


Figure 1B: Research

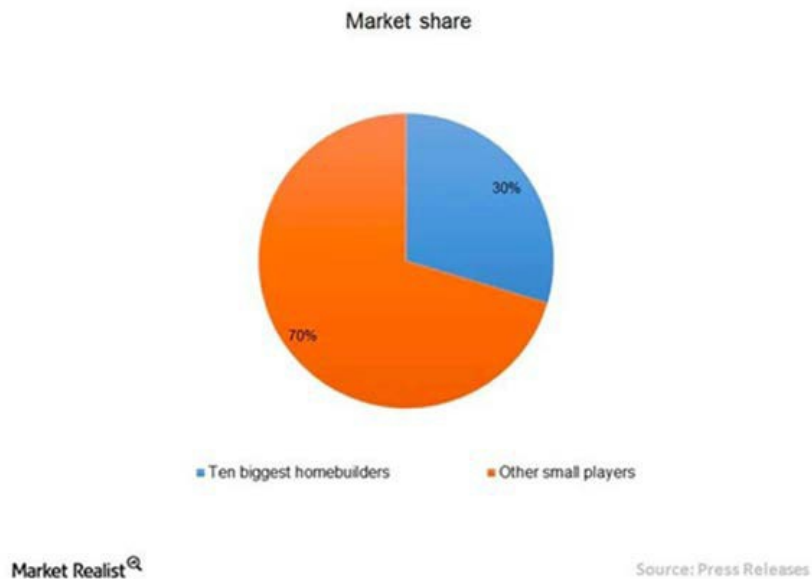
## **Scope of the study**

To gain a solid understanding of the causes that led to the failure of many homebuilders following the crash of the U.S. housing market, we organized our study as follows. We started our inquiry with a brief overview of the makeup of the homebuilding industry and its impact on the national economy. Then, we performed a review of the business press and academic literature on business failure to gain an understanding of the depth and magnitude of the problem from the practical and research points of view. Qualitative interviewing, a preferred qualitative research technique (Seidman, 2013; Denzin, 1998) is particularly useful in analyzing relationships and studying evolving events. To that end, we prepared a preliminary list of potential factors derived from our personal experience to assist in formulating questions for the interviews. The list of potential factors served as the basis for questionnaires used for semi-structured interviews conducted with a select number of stakeholders who had direct involvement, knowledge, and expertise of what may have transpired during different stages of the recessionary periods. After conducting an analysis and tabulation of the coded interviews to identify themes, we explored the extent and effects of certain qualitative factors in entrepreneurial home builders' failures during the Great Recession of 2007. We followed our analysis with a discussion and concluded our study with recommendations and limitations.

## **The Homebuilding Industry**

The homebuilding industry is largely comprised of small and privately financed local home builders controlling 70% of all housing starts. They typically build custom, semi-custom, entry- level homes, and executive type homes, all within a limited geographical area. The remaining 30% is shared by large national and regional public builders that number fewer than 100 in total (Barnes, Home, sweet home: Your guide to the homebuilding industry, 2015) (Figure 2B). Due to the failure of so many local builders as a result of the Great Recession of

2007 and the financial crisis that followed, the number of local builders declined, thus reversing their relative market position with large builders. However, with the economic recovery and ease of entry, the industry quickly rebounded with the entry of new local entrepreneurial builders attempting to fill the need for housing as the inventory of foreclosed and short-sold homes depleted.



**Figure 2B: Homebuilding Industry Breakdown**

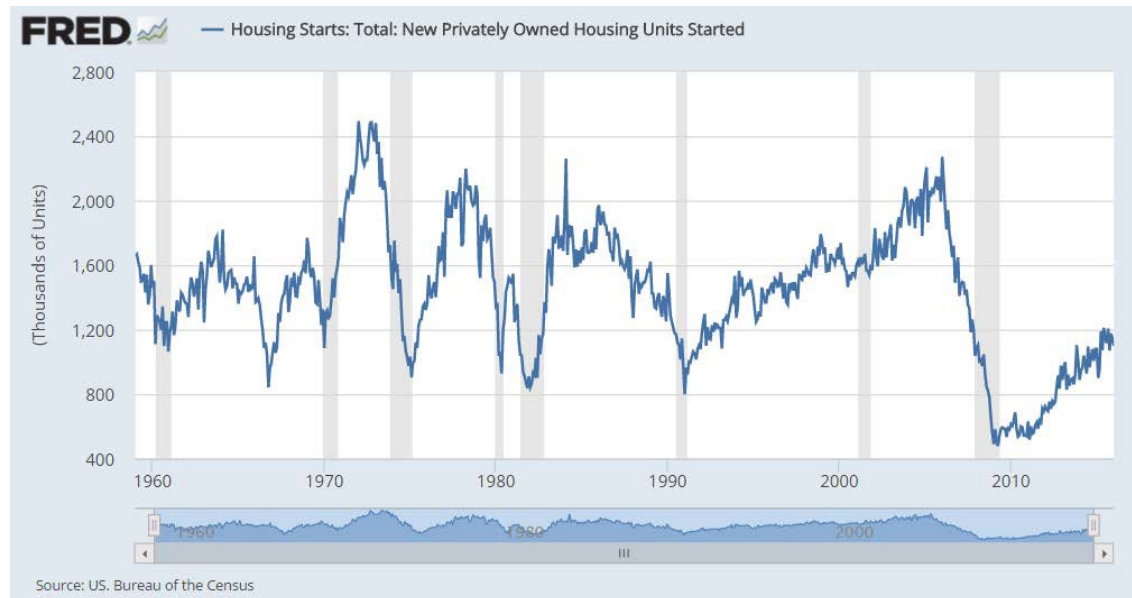
Within the housing market, the construction and purchase of newly built homes, whether detached, attached, or multi-family, has the greatest impact on GDP growth rates (Case, 2005). According to the National Association of Homebuilders (NAHB), home building not only creates jobs directly, but its indirect ripple effect also contributes to the economy with goods, services, and taxes for local governments. The NAHB estimates that for every 100 single-family homes built in a typical area, 394 jobs are created, and \$28.7 million in income generated, along with \$3.6 million in taxes for local government. An additional recurring annual financial impact translates into 69 more jobs, \$4.1 million in local income, and \$1 million in revenues for the local government (NAHB, 2015).

On the other hand, the construction of 100 apartment units creates 161 jobs, \$11.7 million in income, and \$2.2 million in taxes for local governments. The recurring annual financial impact of those multifamily units translates into an additional 44 jobs, \$11.7 million in income, and \$2.2 million in revenues for local governments (NAHB, 2015). Additionally, since home building is labor intensive, any decline in the demand for housing significantly impacts the unemployment rate.

Construction spending impacts the economy through the expenditures on housing construction, which include labor, material, and construction related services such as engineers, architects, and site contractors. The expenditures are augmented by the financial services provided by lenders, mortgage brokers, title companies, and appraisers. Additional expenditures are made on household equipment and furniture, such as appliances and carpets, which are classified separately in the statistics provided by the government as personal expenditures on durable goods. The availability of housing also improves the labor mobility within an economy and impacts the residential mortgage market, which plays a key role in the transmission of monetary policy. Therefore, a strong housing sector represents a key component of a healthy economy (Zhu, 2014).

Another significant impact results from the creation of household wealth, which has a direct influence on consumption. As homes appreciate in value, homeowners feel wealthy and increase consumption. During the Great Recession of 2007, much of that wealth dissipated when home values declined in many locales throughout the country. Recently, however, the real estate market has regained its strength with increased demand, allowing home values to rebound in many areas, albeit not to pre-recession levels. As of April 2017, the seasonally adjusted annual rate of new residential housing starts was 1,172,000 units as reported by the U.S. Census Bureau, which represents a substantial improvement from the midst of the Great

Recession when the number dipped below 500,000 units. (Figure 3B)



**Figure 3B: Housing Starts in the US since the 1960s**

### **Business Failure**

The economic reality of the business world is that enterprises fail and shut their doors every day, regardless of size and maturity level. Recent history provides many examples of such companies that felt invincible and ultimately failed. From the inaugural list of 500 companies that made up the Standard and Poor's (S&P) in 1957, only 74, or 15%, remain active today (Cokins, 2012). Others, such as Enron, WorldCom, Blockbuster, Borders, Builders' Square, Wang Labs, and Digital Equipment, which were once-booming companies, later failed in the marketplace. In addition, 12 of the 25 companies considered as models of success in T. Peters and R. Waterman's book *In Search of Excellence* in the early 1980s have gone bankrupt or are performing poorly (Cokins, 2012).

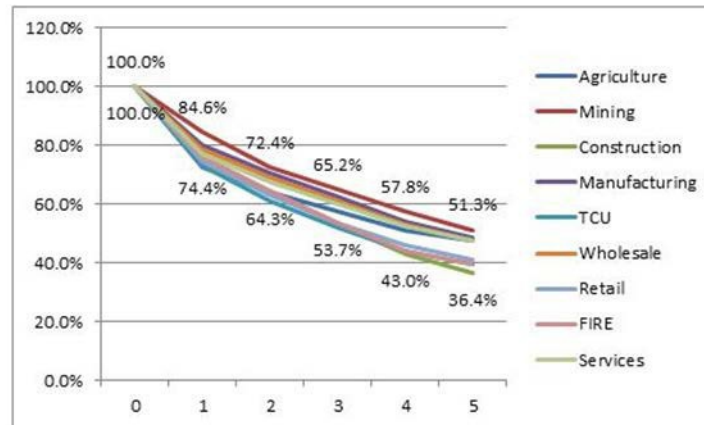
The business press defines business failure in various ways. It is often the outcome of a complex process and is rarely dependent on a single factor (Arditi, 2000). Dun and Bradstreet describe a failed business as follows: "*a business that ceases operations following assignment*

*of bankruptcy, with losses to creditors after actions such as foreclosure or attachment; voluntarily withdraws from the marketplace leaving unpaid debts; is involved in court actions such as receivership, reorganization or rearrangement; or has compromised creditors”*

While the definition of business failure may vary, ultimately, it refers to the inability of a firm to continue its operations, mainly as a result of a financial impairment or lack of adequate financial resources (Holt, 2013; Everett, 1998). Business failure can happen for a variety of reasons at any point in the business cycle, including prosperous economic times. Scholars also have argued that business failure occurs when the entity discontinues its operations for any reason, ceases to trade and loses its creditors, sells the business to prevent further losses, or fails to keep its operations going (Van Frederikslust, 1978).

The business literature contains many reasons for failure. Depending on size and age of the organization, the reasons range from unrealistic growth, operational mediocrity, inefficiencies, declining markets, lack of reserve capital, financing constraints, ineffective marketing, and underestimating the competition. The list expands into areas of leadership with dysfunctional management, irrational decision making, change of focus, and failure to adapt with the changing times. Additional causes of failure may include poor financial management, lack of planning, poor location, the personal use of business funds, ignoring customer needs, poor pricing strategies, and the lack of a viable market. Start-ups and small entrepreneurial firms typically suffer the highest failure rates. Data from the U.S. Bureau of Labor Statistics indicate that 60% of new firms fail during the first four years of operation (Figure 4B).

**Five Year Survival Rates for Startups by Industry Sector**



Source: Created from data from the Census Bureau's Business Dynamics Statistics

**Figure 4B: Five Year Survival Rates of Startups by Industry Sector**

Economic recessions introduce additional challenges, complicating the business environment and causing more companies to fail. As consumers cut spending and delay major purchases as a result of the economic downturn, resources available to businesses shrink. Lenders tighten their lending requirements, reducing liquidity available to businesses while competition becomes more severe with decreasing margins. As a result of those negative impacts, studies have shown a strong correlation between recessions and business failure. For example, during the Great Depression of 1929, 50% of retailing businesses went bankrupt. More recently, during each of the recessions since 1990, nearly a half-million companies failed as reflected in the data on industrial performance (Pearce, 2006).

How do home builders compare to other industries when it comes to business failure? Although they operate like any for-profit company, the characteristics of the product they manufacture make them unique. The value of the constructed home, the construction process, the length of time it takes to produce it, and the financial requirements for clients to buy combine to pose a unique set of risks, which increases the odds of failure drastically. Critical factors interact that could result in entity failure even without a major recession impacting the

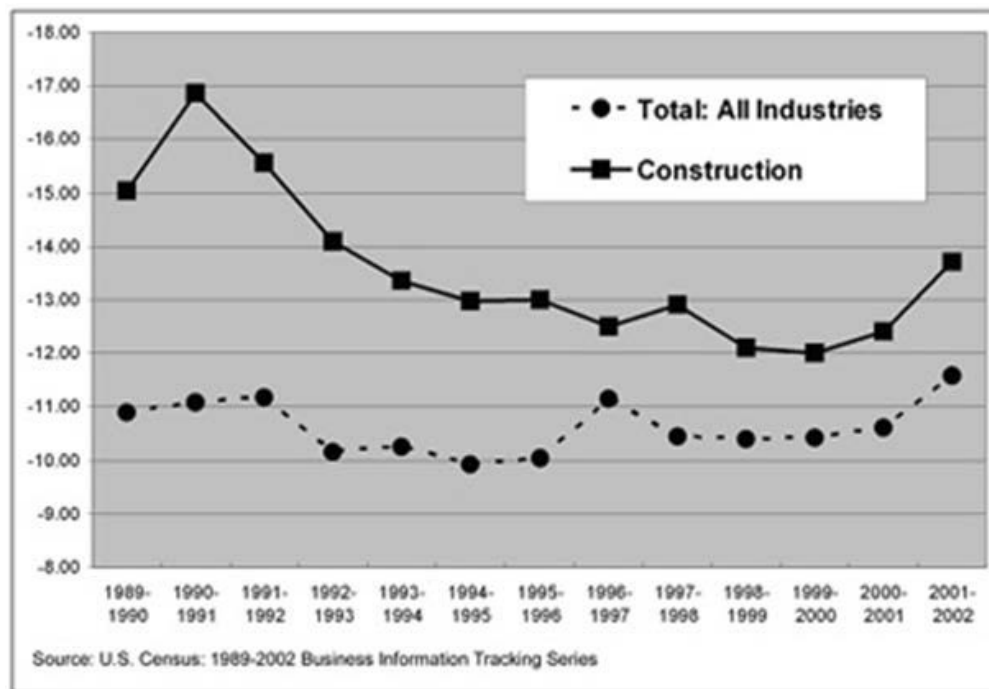
economy. Dealing with home buyers, labor, supervisors, employees, subcontractors, inspectors, and designers is challenging enough. Adding weather conditions, regulations, lending rules, challenges of the raw materials used to manufacture a home, and the effects of the political and economic environment cause the risk of failure to grow exponentially.

On the one hand, homebuilders tend to be problem solvers, and they seem to be optimistic by nature when considering the daily challenges they face. However, when it comes to business failure, this trait tends to work against them. Though they may sense the business may not be on solid financial ground, they figure problems can be resolved eventually (Trellis, 2002). Historically, the business press has outlined a variety of reasons that led homebuilders to fail. The reasons were mostly financial, including but not limited to: insufficient capital, heavy operating expenses, and excessive debts resulting from land acquisitions, lack of strict cash flow management, pricing and estimating deficiencies. Other failures occurred when the required business processes were not put in place with the adoption of new management software causing frustrations, turnover, and a meltdown (Builder, The 11 paths to Business Failure: A Cautionary Tale, 2002).

Design and innovation are also critical to home building. Builders with dated architectural designs lose market share and reputation; therefore, they are forced out of the market by the competition. Other causes of failure that have recently plagued the industry include legal action against builders by homeowner associations, class action lawsuits resulting from water intrusion and mold, volatile organic compounds (VOC) in paint products and wood floors, and material failure claims from siding material (Builder, The 11 paths to Business Failure: A Cautionary Tale, 2002).



Statistically, the failure rate of construction companies, including home builders, has exceeded that of other industries due to the complexity of the manufactured product and decisions involved. Census data from 1989 to 2002 show an average failure rate of 14% of companies in the construction industry as compared to less than 12% for all industries. (Figure 5B)



Source: Arditi & Koksai data 2000 report

**Figure 5B: Failure Rate Comparison between Construction and all Industries**

## Literature Review

Scholars in the academic literature have examined business failure from many different perspectives. According to Altman (1971), there are many different causes of failure and the prevention or prediction of failure may not be improved by attempts to establish causal links. He suggests that a better approach is to try to detect imminent failure far enough in advance to be able to respond with a sound plan to save the entity. Altman introduced the “Z” score, or

propensity to fail measure, and addressed the business cycle effect on failure as a critical component. Ross (1973) created the 10 commandments of management which included strategic planning, control systems, and recognition that customer is king, among others. According to the author, breaking any number of the commandments will cause a company to fail.

Others in the business press, such as Barmash (1972), narrowed the causes of failure to a fundamental trait in corporate management: greed. He provided 16 business cases that supported his claim of companies succumbing to failure due to greed.

Argenti (1976) argued that companies do not suddenly fail. A failure period exists that spans over time and may even extend for years when top managers remain in denial and go to considerable lengths to avoid facing the facts. Defects in the management team, accounting system, and poor response to change topped his list of failure causes. Argenti also concluded that although corporate planning is considered a vital tool for management, its application in corporate structures managed by an autocrat or entrepreneur may not be as effective.

Finkelstein (2003) narrowed the failure arguments to the breakdown in the reasoning and strategic thinking of executives. It results from the failing attitude of managers to create a culture for metrics and analysis given the complexities of the business world today. Laitinen (1991) established that business failure follows a certain process and can vary from one firm to another.

H.W. Ooghe (2004) expanded the work of other scholars and developed a detailed conceptual failure and bankruptcy model which illustrated not only the causes of business failure but also the mutual relationships that exist between the entity's characteristics responsible for the failure. Grunert (2005) argued that nonfinancial factors can be used as

predictors of company failure and can improve the accuracy of the model used to predict failure. H.D. Ooghe (2008) examined the time dimension of failure and the influence of the organization's characteristics on the causes of failure. He concluded that failure processes depend on the leadership characteristics and maturity of the company.

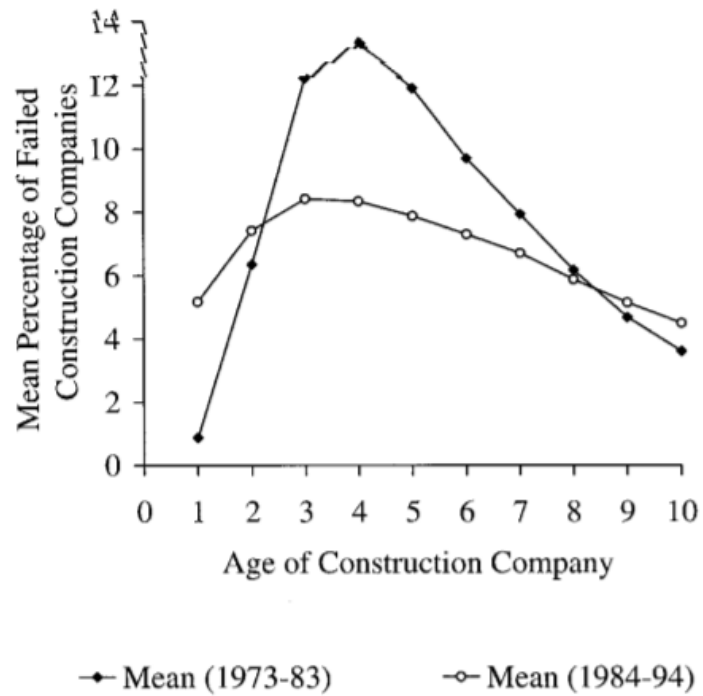
Crutzen (2010) extended the failure process argument and determined it is characterized by the following five patterns: a) firms fail due to an abrupt event b) apathetic firms are unable to compete in a turbulent environment c) firms serve interests other than their own d) firms fail due to a critical managerial error, and e) recurring badly-managed firms. E. S. Altman (2010) expanded previous research and proposed the use of non-financial variables in small to medium enterprises (SME), such as company characteristics and other aspects of operational risk, as predictors of company failure, which can significantly improve the accuracy of the prediction model.

Ropega (2011) concurred with Argenti (1976) and Arditi (2000) that business failure is not a sudden event but a dynamic process caused over time by many factors within and outside the organization. Moreover, while financial symptoms may be easily observed, organizational and behavior signs typically are difficult to identify. He concluded that the assessment of such factors is subjective, yet the impact of the factors could be devastating if not addressed early enough.

Unfortunately, business failure research in the construction industry has typically lumped home builders with commercial builders and general contractors. Although home builders share common ground with other general contractors, distinct characteristics make them unique. Kangari (1992) recognized the fact that the construction industry has such unique characteristics that existing prediction models of failure may not be appropriate. He

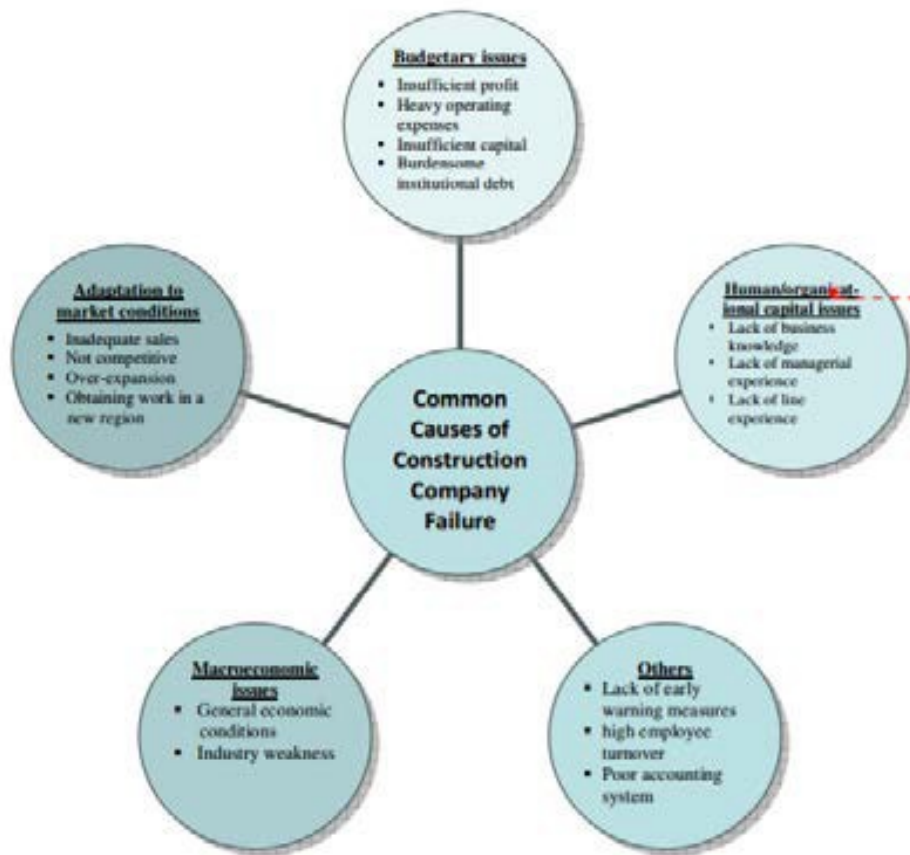
developed a quantitative model based on specific financial ratios to assess the financial performance and grade a construction company along with its chances of survival. The model implements financial ratios with certain trade characteristics and company size.

Arditi (2000) analyzed construction companies that failed between 1989 and 1993 and found the reason most failed was due to internal administrative reasons, such as budgetary and human capital issues, and external issues, such as macroeconomics and financial disasters. Their analysis pointed to five factors that caused 80% of those failures, which included insufficient profits, industry weakness, heavy operating expenses, and burdensome institutional debts. Arditi also suggested that builders do not recognize the onset of failure because it is a subtle phenomenon. By the time the impact of failure hits the financial statements as reflected in a financial ratio analysis, it is too late. When he examined the failure of construction companies by their relative age, Arditi concluded that the risk of failure increases through what he described as the adolescence period. It then levels off and diminishes after due to experience and perceived credibility. (Figure 6B)



**Figure 6B: Age-depended business failures in the US construction industry** Source: Kale, S., & Arditi, D. (1999). Age-dependent business failures in the US construction industry. *Construction Management & Economics*, 17(4), 493-503.

Wong (2010) synthesized the literature and provided a summary of failure causes pertinent to construction companies to include macroeconomic issues, human and organizational capital problems, adaptation challenges to market conditions, and budgetary issues as depicted in Figure 7B.



**Figure 7B: Common causes of business failure in the construction industry**

Source: Wong, J. M., & Ng, T. S. T. (2010). Company failure in the construction industry: A critical review and a future research agenda. In *FIG International Congress*

Our literature and business press review documented that qualitative factors can provide clues as to why some builders fail while others survive, and thus, is worthy of exploration. Therefore, we hope the findings of this study are worthwhile to the industry and related stakeholders.

## Methodology

The first step in any research process is to identify the main research questions and the most appropriate means to address them. We generated research questions focused on qualitative factors that may have contributed to builder successes and failures during the Great

Recession. We used the Dun and Bradstreet definition of business failure cited previously as a guide in selecting failed builders for our study. We sought to identify the factors that led to the entity's business failure which resulted from the actions, traits, and other activities of the individual builder and their team.

A grounded theory approach can explain and describe the phenomena of builders' business failure by uncovering relevant conditions that surrounded the business demise. This approach can help determine how the players, in our case home builders, responded to the changing conditions and consequences of their actions (Corbin, 1990). Also in grounded theory, interviews present a sound method in qualitative research and play a key role in the collection of data (Creswell, 2013). Therefore, we selected qualitative semi-structured interviews as a method of inquiry to pinpoint the personal and non-financial factors we were seeking to expose. A pre-determined set of open questions allowed us to explore particular themes and prompted additional discussions with participants. This process expanded our inquiries even further and enhanced our search for failure causing factors.

An informed methodology in qualitative research also requires that the collection and analysis of information be done using qualitative research methods that adhere to recognized standards of research. To that end, the interpretation of findings was conducted with rigor. The quality of the results depended on following solid research methodology as outlined by Rubin (2011) when formulating questions for a qualitative interview.

To conduct our study, we first obtained approval from the Institutional Review Board (IRB) of our institution. Twenty seven interviews were scheduled with different participants, although two were cancelled once we reached theoretical saturation when no new ideas emerged (Corbin, 1990). We pilot tested the first three interviews to frame the questions, adapted research procedures, assessed the investigator bias, and refined the research

instruments (Sampson, 2004). To conduct our analysis, we dissected the data by following qualitative research procedures prescribed by Strauss and Corbin and open coded our interviews following each session with a thorough examination of the transcripts. Our coding scheme was refined as we progressed in the process where we added, deleted, and revised our coding categories. The new categories allowed us to see emerging ideas and patterns which led to unexpected additional core categories. Our final phase of selective coding reduced our data to a final set of four predominant themes supporting our key findings in explaining homebuilder failure.

### **Participants' selection**

We identified a diverse group consisting of 25 individuals to obtain a varied perspective on the subject while achieving validity and reliability. Our group was comprised of 7 builders who successfully navigated through the Great Recession of 2007 and 11 who decided to give up their economically failing firms and shut down their operations. The list also included 7 outside stakeholders or key informants in banking, engineering, the financial sector, public accounting, real estate development, and law. It was important to include key informants in the study as they had knowledge of the operations of many builders which they gained by providing services to builders. Our builder participants consisted of established home builders who had been involved in the construction of a minimum of 25 units in any given year. We excluded start-ups, small, and custom home builders with fewer units as they typically face distinct challenges. National public builders did not fit our profile as local private builders; therefore, they also were excluded. Our interviewees were not diverse when it came to gender. Although we seriously attempted to have a well-balanced pool, only one female executive participated in the study, which reflects the male-dominated nature of the industry. Additionally, since not all builders could remain objective in their responses, especially the ones who failed, we projected



a triangulation effect to evolve as a result when comparing the responses of the interviews gained from the different perspectives.

### **Format of the questionnaires**

We developed two questionnaires for the task of identifying qualitative factors relevant to our study: one set designed for the builder group and the other targeted for key informants. To limit the time required for each interview, we emailed a letter to each participant before the interviews which described the purpose of the study, interview process, approved consent form, confidentiality statement, and provided a list of the questions (Exhibit 1).

#### **I. Builder questionnaire**

The first block of questions sought background information on each interviewee, such as education, years in business, professional licenses held, business strengths and weaknesses, and managerial style. The second block incorporated questions seeking a detailed view of the interviewee's success or failure by identifying concepts that composed their cognitive representations of what may have transpired. During the concept-identification process, we used both open questions (for example, "Can you describe or think of any qualitative, non-financial factors that may have contributed, influenced, or played a big role in the success or failure of your business? Why do you believe that is the case?" or "What business strategies you considered very beneficial to the firm?"), and centered questions (for example, "What are the environmental, organizational, or individual factors that affected your success?"). To reduce the risk that interviewees would evoke only the external causes of failure, we chose to avoid direct, embarrassing questions, such as "Why did you fail?" The participants also were invited to answer other questions, including: "What changes would you make if you were to recreate the business?" and "What would you consider to be the five major business causes of

builder failure?”

## II. Key informant questionnaire

The key informant questionnaire reflected additional views from a different vantage point of what transpired or should have changed. With only 13 short, simple questions, it covered a wide array of subjects to pinpoint the qualitative factors we were seeking. The questionnaire included questions such as “what inspired you the most/least about the building entity,” any “personal attributes of the leadership that you observed,” and “what would you attribute the success or failure of the entity to?” The insight and observation from an outsider viewpoint with a vested interest proved invaluable, as objectivity was critical in this endeavor.

### **The interviews and data collection**

We conducted the interviews during May, June, July, and August 2017. Since most participants were working professionals, we performed 24 face-to-face interviews at their office or the office of the principal investigator. One interview was done via phone for logistical reasons. On average, the interviews lasted approximately one hour with a follow-up phone conversation to clarify responses, adding more insights to the answers. Although an attempt was made to follow the same format for all interviews, flexibility with the topic and structure was important especially when related issues were raised spontaneously. Related issues were either explored at that time using specific methods to expand the conversation with open-ended questions or limited by asking for specific examples via close-ended questions. Others related issues were deferred for a later discussion after being noted.

### **Technical steps**

Early interviewees raised objections on the use of a camcorder as they did not feel comfortable, so we did not use video recording. The interviews were recorded using two means for additional backup: a cell phone and a tablet. We used a software transcription

service, which simplified the process and completed the transcripts within a 24 hour period. Notes were taken to emphasize key points during the interviews with an understanding from the participants that a later follow-up discussion may occur. The transcripts were reviewed and compared to the notes to confirm the accuracy of the data. We then analyzed transcripts and compared the responses from the interviews to reveal any themes, ideas, conclusions, or underlying concepts relevant to our research question. We did not simply intend to look for similar responses, but for a range of issues and links among the answers that might provide additional depth and insights to our study. We did not encounter any technical problems during the process.

### **Data analysis and results**

Various factors surfaced from the information provided by the participants. For example, we discovered the companies that failed had been in business an average of 18 years at the time of the recession versus 24 years for the ones that survived. In addition, the average age of failed builders was 54 years, and 48 years for those who survived. Also, 37% of the failed builders returned to home building and are surviving, 36% switched to a related business, and 27% retired with no further interest in home building.

Not surprisingly, each of the three categories of interviewees exhibited distinct characteristics. Failed builders appeared to be still in shock as to what may have transpired. Many blamed their failure mostly on external factors over which they claim they had little or no control. On the other hand, there were some intriguing responses from surviving builders regarding what causes failure when certain personal or business aspects are mismanaged. After all, they survived and weathered the storm. Since they are in a recovery mode and doing well, they were comfortable sharing information with a researcher. Their confident demeanor was apparent during the interviews. One builder noted, however, that even with

the best preparations made in dealing with the recession, it was a difficult and chaotic period.

The key informants appeared to have a distinct perception of the industry in general and of builders who failed. This diverse group consisted of the CEO of a civil engineering firm that has worked closely with many builder clients, a developer who sold developed lots to builders over many years, two bankers with a portfolio of real estate loans which included builders that failed, and a CPA whose client list included builders that survived the Great Recession of 2007. Two lawyers who dealt with builders and developers also were included to get their perspective, especially from the legal and asset protection side. All participants based their opinions and responses on past dealings and experiences with their clients, not on our particular group of interviewees. They were able to address and assess the capabilities, strengths, and weaknesses of their builder clients from an objective point of view after observing their previous successes, managerial style, and past financial performance. Their insights provided a wealth of knowledge with responses that had a richer understanding of qualitative factors that probably would not have been exposed otherwise.

## **Findings**

The data analysis confirmed our hypothesis that certain characteristics and qualitative fatal flaws of local entrepreneurial home builders, exposed by the drastic events around the Great Recession of 2007, facilitated their business demise. The causes of failure which we derived from our interviews centered around four key personal and internal business factors manifested by:

1. A lack of entrepreneurial focus
2. An unbridled exuberance
3. A weak business and financial acumen
4. A poor business discipline

We tabulated our findings with a brief description in Table 2B below.

**Table 2B: Personal Factors**

Personal Factors	
Entrepreneurial Focus	
<p><b><u>Failed Builders</u></b></p> <ul style="list-style-type: none"> <li>• Lacked entrepreneurial business focus</li> <li>• Did not monitor economic conditions or adapt to changes in them</li> <li>• Had a propensity to deflect responsibility and project it on outside forces</li> </ul>	<p><b><u>Builders that Survived</u></b></p> <ul style="list-style-type: none"> <li>• Had an Intense business focus in responding to the downturn, managing resources, and making decisions</li> <li>• Monitored changes in the business climate and took decisive and necessary steps to adapt</li> <li>• Took responsibility for actions</li> </ul>
Exuberance	
<ul style="list-style-type: none"> <li>• Unbridled exuberance</li> <li>• Underestimated their vulnerability to the recession due to construction lag time and backlog which clouded their judgment</li> <li>• Exuberance guided the entity's long-range commitments and investments during the pre-recession period</li> <li>• Based decisions on past successes</li> </ul>	<ul style="list-style-type: none"> <li>• Guarded optimism</li> <li>• Exhibited a certain market anxiety as a response to increased activity and responded accordingly</li> <li>• Cautious and conservative approach with long-range plans</li> <li>• Based decisions on facts not emotions</li> </ul>

Table 2B (Continued)

Internal Business Factors	
Business & Financial	
<p><b><u>Failed Builders</u></b></p> <ul style="list-style-type: none"> <li>• Management team lacked the emphasis on finance and accounting, educated and trained in fields other than business</li> <li>• Did not place a critical emphasis on finance and numbers</li> </ul>	<p><b><u>Builders that Survived</u></b></p> <ul style="list-style-type: none"> <li>• Management team had strong finance and accounting background and knowledge</li> <li>• Ran the business by the numbers</li> </ul>
Business Discipline	
<ul style="list-style-type: none"> <li>• Managed the building entity as a construction company</li> <li>• Failed to timely react to the incoming recession until it was too late</li> <li>• Did not undertake decisive measures to keep the business afloat: late in cutting overhead and reducing inventories</li> <li>• Assumed business plan and strategies were sound: business complacency</li> <li>• Underestimated the overall risks of financial leverage with the decisions and investments made pre-recession</li> <li>• Risk insensitivity when making long-term business decisions</li> <li>• Lacked the business experience in dealing with prior recessions</li> </ul>	<ul style="list-style-type: none"> <li>• Managed the building entity as a business</li> <li>• Monitored signs of instability and economic indicators and reacted accordingly and timely</li> <li>• Marshalled dynamic capabilities and pulled resources to face turbulent economic times</li> <li>• Re-worked strategies and business plan in response to the recession</li> <li>• Undertook calculated risks when it came to financial leverage</li> <li>• Risk sensitivity to business decisions</li> <li>• Experienced with previous downturns</li> </ul>

#### A. Personal factors

##### Finding 1: Entrepreneurial business focus

A clear distinction appeared between failed builders and those that survived in how they managed their respective companies at the onset of the recession. An examination of the data reflected that more failed builders followed a hands-off approach, excessive delegation, even

absentee ownership as opposed to builders that survived. At first glance, this managerial style could be construed as a failure causing factor in home building. However, after further exploration, what differentiated builders who survived from those who failed was their intense entrepreneurial business focus that guided them in making the necessary decisions to weather the storm and even seize new opportunities. That is, regardless of which managerial style builders used in running their companies, timely actions concerning inventory liquidation, debt balances, operational efficiencies, pricing, negotiations, and innovation, as examples, made the difference regarding survival. The relentless focus on immediate and decisive response to the economic downturn given the short window of opportunity distinguished those who survived from those that did not. Their reaction included comments such as:

*"...Okay, we have got to start making some decisions and get ahead of this downturn. That is when we started to sell off some of the assets and started to get an action in place to get the books cleared up."* (Builder that survived)

*"...had to make sure that you stepped up as a leader and pointed your ship in the right direction and got your entire team and told them 'Look, this is how we are going to survive. There's going to be some cuts, unfortunately, but for us to survive as a company, and hopefully, one day hire people back. This is the direction we have to go.'" (Builder that survived)*

Builders that failed exhibited a certain form of complacency in response to the downturn.

Comments made by those who failed included:

*"...we did not implement any measures or strategies to safeguard the business and mitigate potential risks before and at the onset of the recession."* (Failed builder) *"....I have been through these things many times. I said, in a couple of years, we will be through it. We will be sitting here with a nice little office and still have plenty of cash, and by that time, we will be breaking even, and we will be well on our way to coming back again."* (Failed builder)

Key informants corroborated our findings and were quick to point out this distinction between the builders. Comments made about builders that survived included:

*“From an individual point of view, the leader's point of view, the principal, those that succeeded were much focused. They were focused on what they did. They were focused on business. They were interacting with peers, with lenders. They were asking questions. They were curious in gathering additional information, be it through various media outlets, such as the Wall Street Journal, or specific studies that were being done in the home building market or the local real estate market.”* (Key informant)

*“Even if they did not see it coming, when it hit them, they made the changes necessary to survive. Even if that included putting personal assets back into the company to keep it afloat.”* (Key informant)

*“Very responsive executive c-suite leadership and they are constantly engaged with their middle management people, and they are ever changing and responding. They have strategic plans in place. Five years plans in place. Succession plans in place, and there's no luck or very, very little luck whatsoever involved in what they are doing. They are fully in, 100 percent engaged all the time.”* (Key informant)

## **Finding 2: Unbridled exuberance**

Our data reflected that our failed group exhibited an unbridled optimism during the pre-recession period which was reflected by their total failure to detect the onset of the recession until it was too late. Many simply did not see it coming. The backlog of sold homes and the construction lag time may have blinded their judgment. They were profitable and did very well before the burst of the housing bubble, which led them to underestimate their vulnerability to an economic downturn and assume it “was just a blip.” Others who failed had a successful run for many years, breaking sales records year after year, and they felt invincible. A few not only underestimated the real effects of the downturn, but they also assumed their healthy cash position at the onset of the crisis made them immune to failure.

The real problem for many of these builders was the fact that their unbridled exuberance impacted long-term decisions they made long before the burst of the housing bubble. Since homebuilding requires a long-term approach when securing land and lot positions to generate future revenue streams, the optimism led to risky commitments in meeting those needs. Thus, builders expanded their operations, entered new markets, built excess inventory, and purchased



land at the peak of the market. “Build them, and they will come” was the standard response many reiterated at the time. Those were just a few examples of actions taken to meet the demands of the market, which naturally required increasing lines of credit and loading up on debt. Given this unbridled optimism, builders that failed underestimated the risks involved with such activities rather than considering the ups and downs of the business cycle that impacted their business entities later.

A few interviewees commented as such:

*“...No, did not see it coming at all. Did not see how severe it was going to be. We had been through recessions before, saw opportunities. We were looking for opportunities at the time.”* (Failed builder)

*“...We had the idea that good times were going to last for a good long time.”* (Failed builder)

*“...And so, still, it was not hitting you in the face because you still had a profitable year.”* (Failed builder)

*“...Like I expressed before, we had never seen anything like this, that it was ... the business was so good.”* (Failed builder)

On the other hand, 100% of builders that survived maintained guarded optimism and exhibited a certain level of anxiety during the pre-recession period, even when they had ample business to deal with. Their understanding of the business cycle guided their cautious approach.

*“...we were savers. We squirreled it away. We knew rainy days come, and so we were always fairly conservative in that way. We had a bit of a nest egg, and it helped us. We always wondered should we have invested more back into the company to build it more, and in turn, I think it was maybe good we did what we did.”* (Builder that survived)

Key informants also recognized the distinction between the two classes of builders and described the difference between the two groups as follows:

*“...At that time, there was still a lot of euphoria because it had been a very long run in the market. The money was stupid-crazy-good. Builders were doing well...some prepared for*

*a dark hour whereas a lot of builders did not do that. They thought, ‘Well, maybe this is just a blip on the screen.’* (Key informant)

## **B. Internal Business Factors**

### **Finding 3: Business and financial acumen**

Generally, home builders excel at building and selling homes. Understanding capital markets, finance and cost accounting details, risk analysis and theory is not their strong suit, nor do they enjoy delving into those areas. Thus, the distinction between builders that failed and those that survived in our group was very clear when it came to the business and financial education and training at the leadership level of those organizations. Our data reflected that 87% of builders that survived either had a background in accounting, finance, economics, or assigned that role to a key executive at the highest level to help them manage, analyze, and strategize the financial side of the business. Of those that failed, 94% were trained in fields other than business, and some did not place a serious emphasis on the financial side of the operations. It would be of real interest to determine whether this particular factor had a direct causality on other factors, such as the entrepreneurial business focus, the unbridled exuberance, and the business discipline. We suspect that it does, but we did not test this theory as we were limited on data to reach a general conclusion.

One builder who survived attested to this fact:

*“We had an incredible chief financial officer that helped us tremendously through the downturn.”* (Builder that survived)

It was also interesting to note that builders who failed acknowledged the importance of the business financial acumen and expertise. Comments made by two of our participants regarding that role were:

*“Financial people are critical in a downturn, to work through these issues with your lenders.”* (Failed builder)

*“The best builders I have ever met in my life have been accountants because it gets down to...Managing your business is not knowing how to put down bricks and sticks or how to shovel dirt. It is about knowing how to manage your money.” (Failed builder)*

Our key informants pinpointed the distinction between the builders:

*“They were unbalanced. They did not have...Either the principal did not have a strong accounting finance background, or he had not hired strong accounting and finance background. If they had an accounting department, they were not as important part of the organization as some other areas, i.e. Marketing or construction superintendents or purchasing.” (Key informant)*

*“You have got to have the business acumen to know how to account for it properly, and know that the numbers you are making decisions on are actually real numbers. You have got to be able to wrap yourself with good talent, which most of them were not able to do. You have got to be able to make decisions based on fact, not emotions. Moreover, a lot of those guys made their decisions based on emotions.” (Key informant)*

*“They also had a firm understanding of accounting. They were more concerned with closings than they were with sales. They kept track of their inventory, and they believed the numbers. So when they saw the numbers, particularly the closings start slowing off, most of them, all of them that survived, pulled the reins back very quickly.” (Key informant)*

*“I think even the private builders that failed locally were generally not...didn't have strong financial backgrounds.” (Key informant)*

*“I will tell you as a banker, the most successful home builders that I had, all had a finance background. They were either accounting, finance or economic backgrounds.” (Key informant)*

#### **Finding 4: Business Discipline**

A home building company's existence is supported by operational tasks that form its business discipline. Those operational tasks include managing its marketing resources and activities, creating a healthy balance between profits and business risks through financial planning, decision-making, and control. Other functions incorporate managing its human resources, operations, strategic planning, service, and information technology. In our study, while each group of builders showed certain strengths and weaknesses in each discipline, our failed builder participants exhibited serious deficiencies in many of those areas while the

survived builders scored much higher while managing their entities. Our data confirmed those findings with statements made by participants that survived as such:

*“... We do not take a lot of risks. We want to make sure that the mandate of the company is to have this set up for the next two generations of the family. So, we may leave a lot of money currently on the table on certain projects in certain divisions, but we want to make sure that long term, we are still here. So, we tend to take a lot less risks than others,”*  
(Builder that survived)

*“... We never kept running out to borrow more money from somebody else so that we can chase another project. We kept within our long-term vision and stayed that course. We did not get overextended.”* (Builder that survived)

Key informants also recognized this distinction and commented as follows when asked to describe the traits of each group:

*“Well, I would say that overriding factor would be the lack of business discipline. So that would encumber not monitoring, not being hands-on, not monitoring their financial statements. Not being hands-on, delegating to people that didn't have the experience. Not building that team properly. Those all contributed to their failure.”* (Key informant)

*The ones that were more prone to survival were better-disciplined business people. They monitored macroeconomic indicators as well as micro indicators in their own industry. They had the ability to adapt to changing conditions based on those monitoring, and they had a risk sensitivity in a risk management tools that allowed them to survive and adapt.”*  
(Key informant)

### **Summary of the Qualitative Findings**

We summarized the findings in Table 3B, where we organized data into two groups: builders that failed and those that survived. We then tabulated the positive or negative outcomes from the coded observations for each of the four identified themes for each builder participant. By aggregating the net outcome between the positive and negative themes, a glaring observation was revealed: builders that failed had a net negative score in each of the themes that were addressed in our inquiry: entrepreneurial focus (-31), exuberance (-32), business & financial acumen (-13), and business discipline (-105). Builders that survived scored a net positive in each of the categories: entrepreneurial focus (45), exuberance (12), business & financial acumen (12),

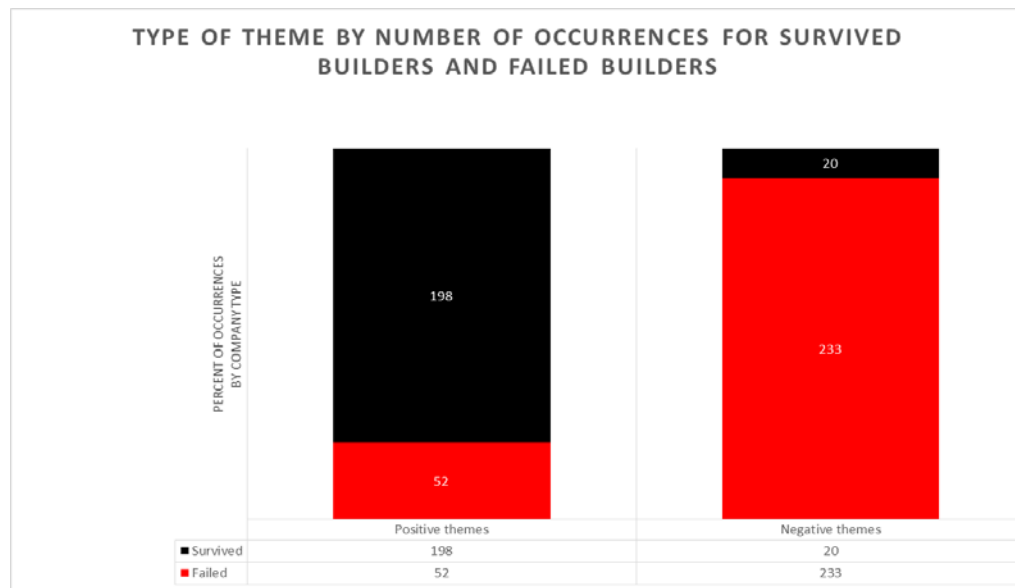
and business discipline (111). By combining the data for each builder group and averaging the net outcome of observations, failed builders reflected a negative 16 score while those that survived scored a positive 25. This analysis indicates that the coded data confirmed our hypothesis that non-financial factors might explain causes of failure of entrepreneurial homebuilders during the Great Recession. Moreover, it led to the proper categorization of builders into failed or survived. This model could also be used as a good indicator to predict survival or failure of local entrepreneurial home builders.

**Table 3B:** Positive, negative, and net themes by builder

	Failed Builders													Builders that Survived												
Builder-Participant	1	2	3	4	5	6	7	8	9	10	11			1	2	3	4	5	6	7						
Positive themes	6	5	15	4	4	4	3	3	3	2	3	52		21	43	22	28	23	24	37		198				
Negative themes	38	28	23	21	28	22	17	16	16	10	14	233		6	2	3	1	3	3	2		20				
Net outcome: Positive - Negative	-32	-23	-8	-17	-24	-18	-14	-13	-13	-8	-11			15	41	19	27	20	21	35						
							Average					-16						Average				25				

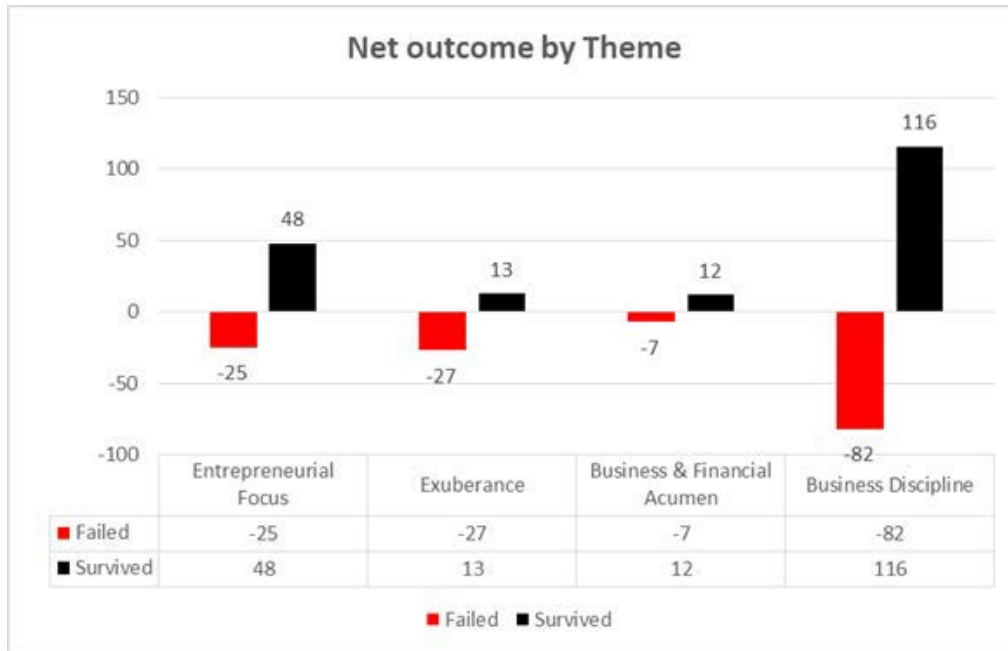
Combining all coded results and organizing them by positive or negative themes for all builder participants revealed another key observation (Figure 8B). A distinct difference appeared between the number of positive themes for builders that survived and those that failed. Positive themes were predominantly present within the organizations of those that survived while negative themes were largely associated with builders that failed. The data

identified in the interview transcripts reflected a total of 451 categorized axial codes which translated into 250 positive themes and 251 negative themes. Builders that survived accounted for 198 of the positive themes while builders that failed showed only 52. Conversely, of the 251 negative themes, builders that failed accounted for the majority of those with 233 while builders that survived had only 18.



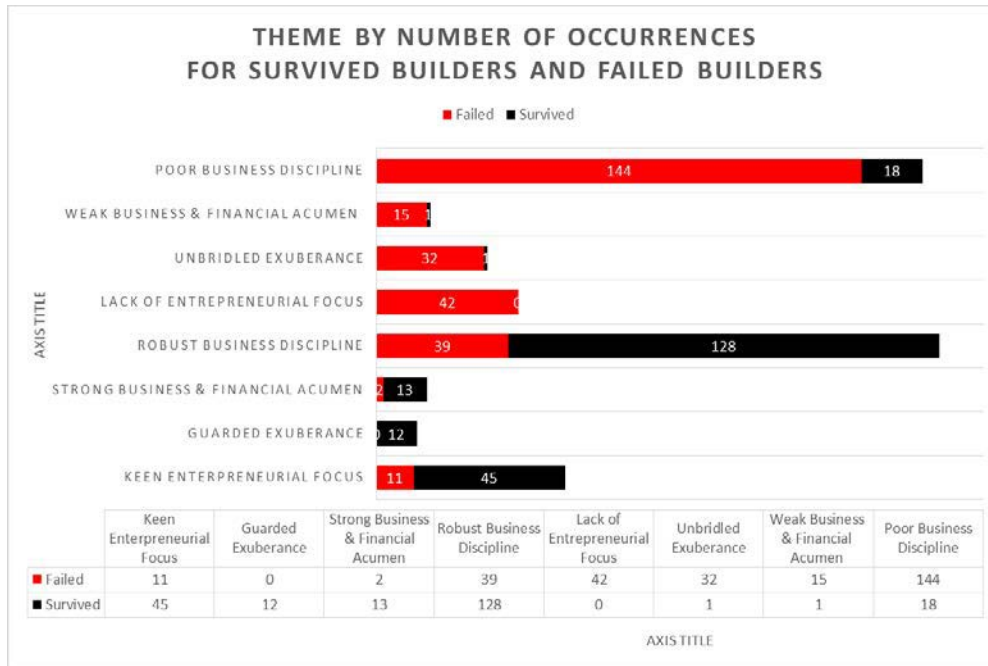
**Figure 8B: Number of Positive and Negative themes**

Additionally, manipulating the data pertaining to the positive and negative themes for each builder group and reflecting the net outcome of each theme indicated that survived builders had a net positive outcome in each of the positive themes while the opposite was true for the failed builder group, which again confirmed our findings (Figure 9B).

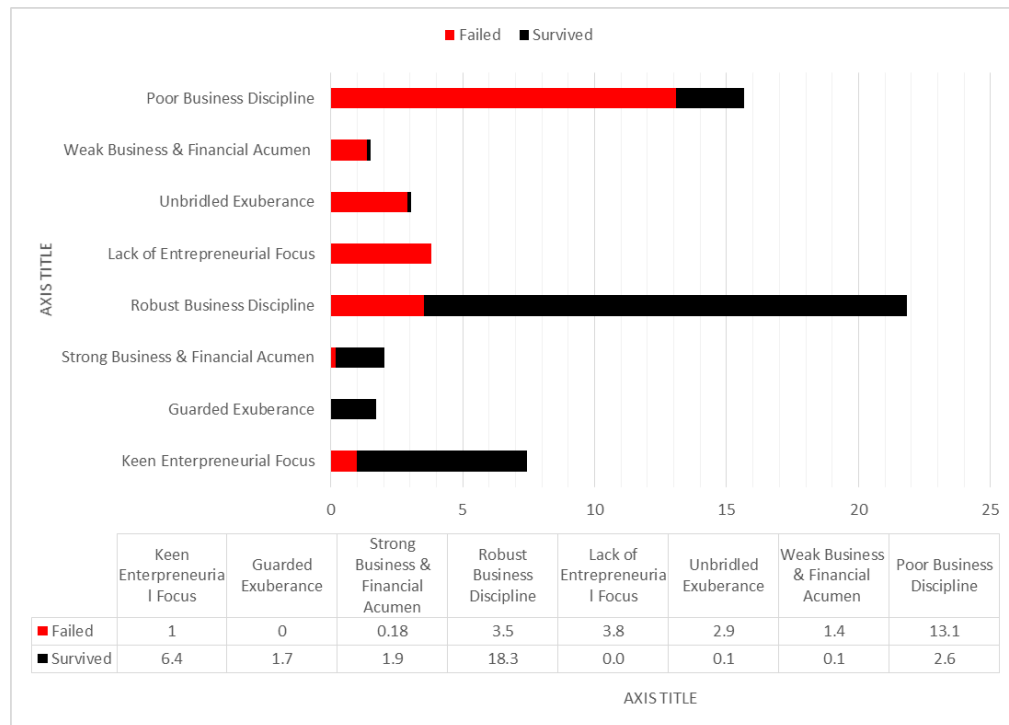


**Figure 9B: Findings: Net outcome by Theme**

Dissecting the data further, we joined the positive and negative occurrences for each identified theme for all of our participants, which demonstrated how themes affect survival or failure (Figure 10B). The results show that the positive themes, such as strong business discipline, strong business and financial acumen, guarded exuberance, and strong entrepreneurial focus, were mainly in the survived builder group. The negative themes, such as poor business discipline, weak business and financial acumen, unbridled exuberance, and lack of entrepreneurial focus, were mainly lodged with the failed group. Averaging the themes by the number of builders between failed and survived is reflected in Figure 11B which confirmed previous results showing that survived builders commanded more positive themes, while failed builders had most of the negative themes.



**Figure 10B: Findings: Number of Occurrences by Theme between Builders...**



**Figure 11B: Findings: Average Number of Occurrences for each theme**



Additionally, while there were positive and negative themes in most categories, one stood out among others: exuberance. There were no negative unbridled exuberance scores with the builders that survived, and conversely, there were no positive guarded exuberance scores in the failed builders' camp. This outcome may indicate distinct personality differences among builders. Although it would be difficult to confirm given our limited data, it represents an endeavor worth pursuing. Another factor that emerged which deserves closer attention is entrepreneurial focus. Builders that survived exhibited an intense entrepreneurial focus in the way they managed their businesses, and they showed that trait relentlessly. Nowhere did we encounter in the coded data any indication that reflected a hesitation or weakness from those builders when it came to that attribute.

## **Discussion**

The production of residential homes represents an intense manufacturing operation that faces many challenges. Labor, material, finances, environment, rules, and regulations, among many others, all pose serious threats to home builders. Moreover, weak economic conditions expose the cyclical nature of the industry and the hidden weaknesses of many business enterprises. History has demonstrated that home builders may survive typical economic downturns, even with some shortcomings. However, a recession similar to what transpired in 2007 is a rare event for which most private entrepreneurial home builders were not prepared.

For illustration purposes, a typical recession represents a thunderstorm or even a tropical storm in home building. The Great Recession, however, was a category five hurricane that revealed and exploited every structural weakness that certain builders possessed. Only those that had a solid foundation in business with specific traits were able to manage and avoid the negative consequences and survive. Those who did not suffered immensely and failed as 50% of builders did not make it and were forced to exit the business and close their doors (Quint, 2015).

Our inquiry produced results that explain why some builders failed while others survived the Great Recession of 2007. Discussions during our interview process with the participants exposed causes of business failure of local entrepreneurial home builders. Although those failure-causing factors are not unique to homebuilding, they represent essential traits for businesses if they need to overcome the existential challenges of a serious recession. The findings also confirmed the evidence found in the literature that nonfinancial factors can be used as predictors of company failure (Grunert, 2005). We discovered that the failure of many builder participants was not a sudden event, but a dynamic process that took place over time with actions taken before the Great Recession, which coincide with the findings of Argenti (1976) and Arditi (2000). Although we only exposed factors about the building entity, our study showed that those factors could result from internal and external factors (Holt, 2013; Wong, 2010). Moreover, our findings indicate that while financial symptoms of failed builders may be easily observed, the organizational and behavioral signs of those entities were typically more difficult to identify (Ropega, The Reasons and Symptoms of Failure in SME, 2011).

In addition, during casual conversations, a few builder participants pointed to other business issues that created serious problems for them. Topping the list was the lack of available financing and the substantial product liabilities resulting from Chinese drywall. At first glance, those may appear to be failure causing factors, but in reality, they represent part of the business challenges that builders typically face. It is how builders dealt with or prepared for those challenges that dictated their survival or failure, which was the ultimate focus of our research.

Another challenge mentioned by all builder participants was the severe decline in real estate values during the Great Recession of 2007. It was difficult for all builders, especially the ones that failed, to see the value of their assets decline as rapidly as they did, considering the devastating ramifications. With the values of real estate holdings substantially below debt

balances, lenders were quick to demand an immediate equity infusion from builders to fulfill the debt covenants present in the loan documents. Unfortunately, many who were short on cash with severe liquidity problems were unable to implement a work-out plan with their lenders and had no choice but to sign a deed-in-lieu of foreclosure. The losses incurred by many builders were staggering. The lenders' reaction and how they dealt with this particular issue, in many cases, pained homebuilders, thus souring all banking relationships and leaving a permanent scar that builders will remember for a long time. Negative comments made during the interviews on this particular issue were so widespread among most builders, including those who survived, that it is worth addressing separately as a serious problem facing the industry.

The following remarks about lenders' responses were made:

*"Neither bank offered any ways. With our financial strength, they did not offer us any ways or any means to work through this time period and come out of it, both of us stronger. They basically said we are getting out of the construction business, and we are cutting all ties with our contractors. They abandoned us out of the blue."* (Failed builder)

*".... but I think the banks panicked. I do not know what caused the panic, but they panicked, and they took the machete and just cut it all off."* (Failed builder)

*"....what we learned is lenders are not your friend. They all sucked us in with these, 'We will finance all your projects. We will do all of this for you,' and then the minute it started to get stormy out there they were banging on doors with axes looking for blood. They were not willing to ride it out and help weather the storm; they just wanted out. If it meant to sacrifice a lot of builders, they did not care."* (Builder that survived)

In fairness to lenders, however, the pressure they received from their top management, boards, credit committees, and government regulators to reduce their real estate portfolios were so immense that very little room was left to renegotiate or restructure builders' debts and lines of credit. As one banker put it:

*"...we fight business on a dual front. Meaning that we have the business and the reputational risk that we manage with you and the risk of default with you, but then on the other side, we have the regulatory risk with this four letter word called FDIC that holds a gun to our heads at a time, particularly as things get worse, that gun gets bigger,*

*and they're more apt to pull the trigger on a cease and desist order.”*

*“There was a lot of factors that went into all of this. From the banking standpoint, the banks do shoulder a portion of the blame. Some of the pressure, or the blame, I guess, rests with the government, regulatory. And some of it rests with the builders. You know, some of the builders just got greedy. Some of the banks just got greedy.”*

One survived builder that had many dealings with different lenders over the years

commented objectively on the subject:

*“....regardless of how many times what you think your bank tells you that you are in a relationship with them, you need to understand that it is a business and when times get bad, if you have not run your business right, there is no bank or lender that's going to bail you out based on a relationship that they have had, especially when they are put in the position in scrutiny, tying things up. So you cannot borrow your way out of problems. When you get hit or hammered in this industry with the recession, if your business plan is based on a relationship, I can borrow my way out of this, you are probably destined to fail.”*

It is worth noting that our research pointed us to one unique, privately owned homebuilder in Indiana who undertook extraordinary steps during its closure process. This homebuilder did not simply close its doors and walk away like so many others did. Instead, it published a notice of its closure on its website, listing an explanation for the closure, which included, among other reasons, the expected long-term weakness of the housing market. Then, the homebuilder implemented a plan to complete all homes under construction while ensuring all of its contractors and suppliers were paid. In addition, the homebuilder invested in a warranty insurance plan for its homeowners to ensure that future warranty obligations would be addressed. This homebuilder demonstrated a commendable, admirable act of integrity and business discipline that went above and beyond what many builders would have done and should be noted by the industry.

## **Conclusion**

Schumpeter's "winds of creative destruction" (1912) blew their mightiest and created havoc for the U.S economy during the Great Recession of 2007. The crash of the housing market exposed the weaknesses and fatal flaws of many builders. For many, the lack of available financing may have dealt the final blow to their survival. Their failure, as harsh as it was, is considered part of the evolution process in our entrepreneurial business world today. Some builders may have become motivated and more determined to make it work the next time given the experience and lessons learned.

It is possible that many failed builders would have survived a typical economic downturn. Almost all of the study participants, for example, had been through previous recessions, and they managed to survive. The Great Recession of 2007, however, created the perfect storm, packing a severe punch given the impact of the housing bubble burst and the devastation of the financial crisis. Homebuilders typically do not expect such black swan events, nor do they prepare for them. To survive one, however, they must have, at a minimum, the unique traits and attributes exposed in this study, which will allow them to navigate the turbulent times of economic downturns and possibly thrive in the aftermath. By having a strong business and financial emphasis guiding their organization, a keen entrepreneurial focus, and robust business discipline, home builders can be assured that their decision-making process, whether short or long term, is based on facts as opposed to egos or emotions. Their risk tolerance will be adjusted to match their financial position, and their responses to any economic turbulence will be enhanced. These traits may even curb the unbridled exuberance exhibited by those who ultimately failed.

We are also confident that given the U.S. capitalistic economy and the theory of economic innovation, new firms entering the marketplace with creative ideas implementing new strategies with technological advances will better serve home buyers and the industry in the long run. We hope the lessons provided by this severe recession will be remembered in the years to come as home builders face the next and inevitable economic downturn. Although some of the factors discovered in this study were not unique or exclusive to home builders, their application to general business is of real value. While we have not shared those results with any of the participants, we believe most industry observers will confirm the impacts of those qualitative factors as causes of failure.

### **Limitations and implications for future research**

This study focused on addressing the failure of small to medium-size builders who constructed anywhere from 25 to 200 homes a year. We excluded large national builders and small custom homebuilders from the study. Therefore, our conclusion cannot be generalized to the entire home building industry. The findings did, however, identify specific, useful factors relevant to local home builder failure. The degree to which each factor caused failure was difficult to predict as additional data is needed for such endeavor. Also, the relationship and causality between the different factors which could be relevant were not tested, given the limited scope of the study. Therefore, we believe that future research with robust quantitative and qualitative methods can be completed on a larger scale, with detailed surveys to test and empirically confirm our hypothesis.

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## **CHAPTER THREE**

### **Lessons for the Local Homebuilding Industry**

#### **Abstract**

The “Great Recession” of 2007 created havoc in the homebuilding industry, more than any other previous economic down cycle. Countless seasoned local homebuilders across the country did not survive. The impact of their failure on the economy, community, employment, lenders, suppliers, and subcontractors was devastating. By incorporating specific strategies into their business models, local homebuilders may be able to anticipate future downturns and navigate turbulent economic times, thereby shielding their organizations from the negative effects of recessions and possibly thriving in the aftermath.

#### **Keywords**

Homebuilding, Entrepreneurship, Recessions, Strategic Planning, Economics, Management Practices, Business Failure.

#### **Executive Summary**

For local homebuilders, preparing for periods of economic decline is as important as planning for growth and expansion. Equipped with the right tools for the inevitable down cycle, local builders can act proactively and decisively to minimize the negative effects of an economic downturn and potentially gain future market share and prosper post-recession. Optimum preparations include the continuous monitoring and collection of relevant macroeconomic and market information, and the implementation of specific marketing, operational, and innovation strategies which may help to recession-proof the homebuilding entity. Furthermore, local homebuilders equipped with specific traits, such as a keen entrepreneurial focus, guarded

optimism, robust business discipline, and strong business and financial acumen, have a better chance of survival and success when facing economic downturns.

## **Introduction**

The homebuilding industry has been affected greatly over the years by cyclical economic downturns. During the Great Recession of 2007, a large number of builders unable to withstand the devastating effects of the depressed cycle, partly due to existing financial and organizational weaknesses, perished (Quint, 2015). Even seasoned local homebuilders failed.

The ripple effect of their failures created economic devastation: employees with years vested in the business lost their jobs, subcontractors and suppliers were forced into bankruptcy as a result of not receiving payment for their work and supplied materials, and partially completed communities were littered with vacant and unfinished homes. The resulting costs to builders, their families, employees, investors, suppliers, and others were enormous.

Sadly enough, many failed builders were financially sound before the Great Recession. They had achieved great successes building many homes over the years while they enjoyed good reputations and were active in their communities and local builders' associations. What could they have done to avoid their downfall? Would an early warning system incorporated within their business processes help those builders predict or anticipate such downturns? Are there specific recession proofing strategies that could have been implemented? Is home building so different from other businesses that it requires unique action plans when dealing with difficult economic times? If so, then at what stage should the plans be executed?

The purpose of this study is to address these questions with the goal of finding effective strategies for local homebuilders as they prepare for future down cycles which maybe looming. The literature and business press include ample research addressing the negative impacts of economic downturns with many strategies for businesses, in general, during periods of economic

turbulence. However, action plans specific to local homebuilders that might be implemented to safeguard those organizations from business failure before, during, and after the recessionary periods were not found within the literature and business press. Drawing from the literature and our previous research, we propose such a blueprint for local homebuilders that can be of real benefit to all stakeholders and augment the existing body of knowledge.

### **Protocol for the Literature Review**

Our approach to the literature review incorporates different sources. We examined the following: (1) building industry trade magazines and business press to understand the question from a builder's perspective, (2) Google and Google Scholar for scholarly and academic research on the subject, (3) Elsevier, (4) Research Gate, (5) academic databases (Ebsco Business Search Premier), and References in articles cited for additional resources related to our search. The following keywords were used in various combinations to acquire a wide range of research articles: recessions, homebuilding, businesses and homebuilders' failure, management practices, strategic planning, innovation, and entrepreneurship. We first examined the impact of recessions on businesses in general, then specifically on homebuilding. The goal was to identify specific strategies for implementation by local homebuilders that might help them to (a) create recession-resistant building entities, (b) anticipate and predict an economic downturn, (c) manage business affairs during the recession, and (d) thrive afterward. A total of 42 articles were reviewed and formed the basis of this study.

### **Research Methodology**

Our research starts with a brief overview of the homebuilding industry along with the economic impact it creates on the national economy. We then examined the make-up of the homebuilding industry and market share differences between large builders and local homebuilding entities. To understand economic down cycles, we reviewed U.S recessions

starting with the Great Recession of 2007 then returning to the Great Depression of 1929. We examined the political and economic climates that preceded those recessions, the potential triggers that may have precipitated them, and certain governmental interventions applied to help contain their negative effects. This process exposed certain characteristics of recessions along with their impact on the economy and financial markets (Appendix 1). We then focused our literature review on alternative strategies used by businesses, in general, to help prepare and shield business entities from the downside effects of recessions. We extended our search to studies of specific economic data and forecasting methods that businesses use to anticipate recessions. By applying strategies used by businesses in general to recession-proof their entities to homebuilding and implementing specific measures to anticipate and forecast the onset of a recession, we identified strategies to help local homebuilders survive economic downturns and thrive after them. Additionally, our study incorporated recommendations which resulted from a series of interviews conducted with local builders that survived the Great Recession of 2007 and others that failed. Furthermore, we added the perspective of key informants who provided engineering, financial, and legal services to homebuilders for many years to gain additional points of view.

### **The Homebuilding Industry and the Great Recession of 2007**

Since the Great Depression of 1929, the homebuilding industry has played a significant economic role in the national economy. Residential investments including direct, indirect, and induced economic activities ranging from construction expenditures, development, finance, home furnishing, professional services, appliances, and rents and utilities, account for an estimated 15-20% of the Gross Domestic Product (GDP) during boom years (Martin, 2012).

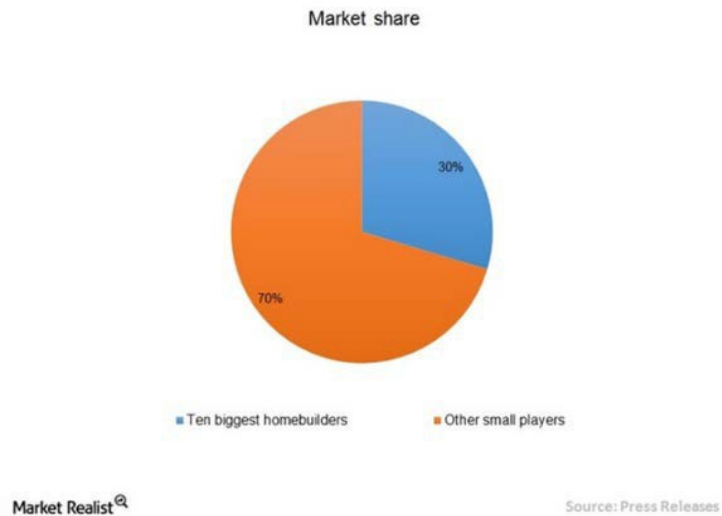
According to the National Association of Homebuilders (NAHB), homebuilding not only creates jobs directly, but also indirectly contributes to the economy with goods, services, and taxes for

local governments. The NAHB estimates that every 100 single-family homes built in a typical area create 394 jobs and generate \$28.7 million in income, along with \$3.6 million in taxes and other revenues for local governments. An additional recurring annual financial impact translates into 69 more jobs, \$4.1 million in local income, and \$1 million in revenues for local governments. Alternatively, the construction of 100 apartment units creates 161 jobs, \$11.7 million in local income, and \$2.2 million in taxes and other revenues for local governments. The recurring annual financial impact of those multifamily units translates into an additional 44 jobs, \$503,000 in local income, and \$2.6 million in revenues for local governments (NAHB, 2015).

Additionally, since building residential homes is labor intensive, any decline in the demand for housing significantly impacts the unemployment rate. Due to its share of the overall economic production and employment levels, the homebuilding industry is considered a key component of the national economy (Martin, 2012). Therefore, the survival and success of homebuilders, especially during recession times, is of importance not only to the principals of homebuilding entities and their immediate employees and families, contractors, lenders, investors, suppliers, engineers, appliance manufacturers, home furnishing companies, but also to the national economy in its broadest sense.

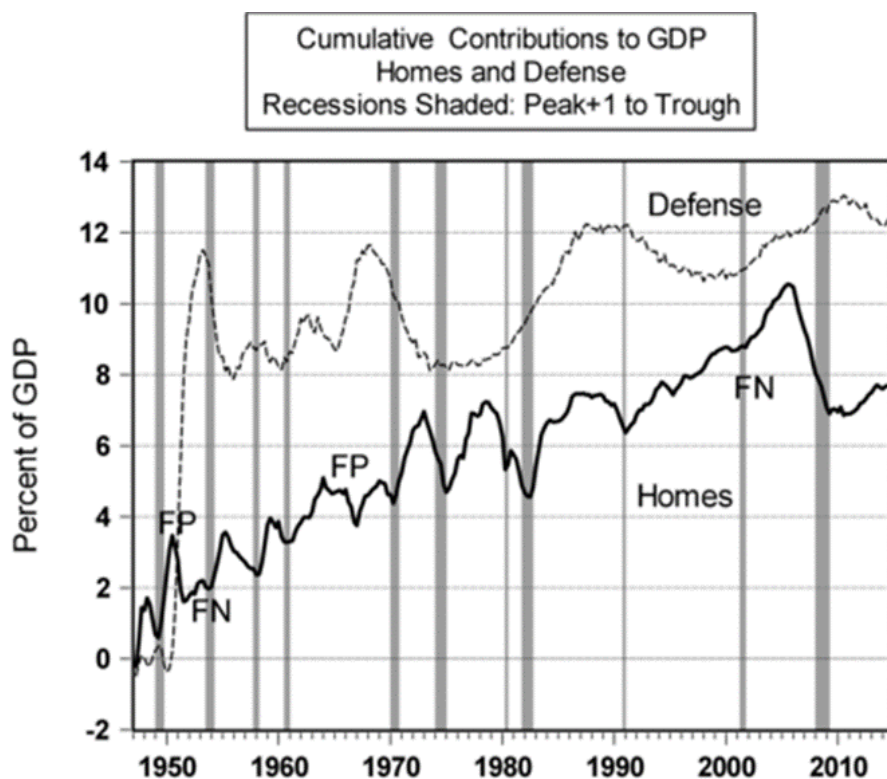
Within the homebuilding industry, small and privately financed local home builders control 70% of all housing starts. They typically build custom, semi-custom, entry-level homes, and executive type homes, sometimes reaching up to 250 homes, all within a limited geographical area. The remaining 30% is shared by large national and regional public builders which number fewer than 100 in total (Barnes, 2015) (Figure 1C). Due to the failure of so many local builders as a result of the Great Recession of 2007 and the financial crisis that followed, the number of local builders declined, thus reversing their relative large market position with large builders. However, with the economic recovery and ease of entry, the industry quickly

rebounded with new local entrepreneurial builders attempting to fill the need for housing as the inventory of foreclosed and short-sold homes was depleted.



**Figure 1C: Homebuilding industry market share breakdown**

Research has shown that housing represents a critical component of the U.S. business cycle. Evidence revealed that declines in housing preceded 9 of the 11 previous recessions (Figure 2C), and while a weakening in housing in 1953 and 1967 would have led to imminent recessions, they were averted by a substantial fiscal stimulus on defense spending during the Korean and Vietnam Wars. Scholars, thus, concluded that “*housing is really the business cycle*” (Leamer, 2015).



**Figure 2C: Housing and Business Cycle**

Source: Housing Really Is the Business Cycle: What Survives the Lessons of 2008–09? Journal of Money, Credit, and Banking, Leamer 2015

The extreme cyclical nature of the homebuilding industry creates serious financial and operating risks. Those risks, among others, result from the lack of available financing, turbulent economic conditions, a decline in employment levels, a sharp increase in interest rates, drop in consumer confidence, and regulations. Additional factors, such as weather conditions and material cost fluctuations, pose additional threats affecting the success of building organizations. Furthermore, the oversupply of existing homes for sale and an abundance of rental properties create more risks and downward pressure on profit margins.

The bursting of the housing bubble in 2007 and the subsequent collapse of the financial markets in 2008 created disarray as many builders struggled to survive in the collapsing homebuilding industry. Census Bureau data showed that from 2007–2012, 50% of active building entities left the marketplace, either filing for bankruptcy or shutting their doors indefinitely. Over the

same period, the National Association of Home Builders (NAHB) confirmed similar results, reporting a 54% decline in its membership. (Table 1C).

**Table 1C: Establishment Count Comparisons of Homebuilders**

### Economic Census vs. NAHB: Establishment Counts

	2007		2012		% Change	
	Economic Census	NAHB	Economic Census	NAHB	Economic Census '07-'12	NAHB '07-'12
<b>New Residential Builders</b>	<b>98,067</b>	<b>57,095</b>	<b>48,557</b>	<b>26,421</b>	<b>-50%</b>	<b>-54%</b>
New Single-Family General Contractors	59,679	34,335	30,487	18,932	-49%	-45%
New Multifamily General Contractors	3,010	681	1,799	326	-40%	-52%
New Housing for-sale Builders	35,378	22,079	16,271	7,163	-54%	-68%

Source: U.S. Census Bureau, 2007 and 2012 Economic Census; 2012 NAHB Membership Census; and 2007 NAHB Membership Profile Report.

## Recessions: Background and Historical Perspective

Recessions are periods of economic decline and are usually marked by high unemployment, stagnant wages, and slow retail sales. While there is no unanimity among economists on the causes, recessions are considered an inherent part of a capitalist economy. Recessions do not happen in a vacuum or appear out of nowhere. They represent the culmination of events and economic activities, policy decisions by governments or global uncertainties, which provide the economic atmosphere for a mild or perfect storm of economic contraction (Appendix 1).

There are those who claim, based on business cycle theory that periodic excesses or shortages in inventories lead to periodic contractions and expansions of production (Penn, 2004). Others stress cycles of innovation whereby new ideas stimulate economic growth until the exhaustion of technology (Schumpeter, 1912). Some economists champion the supply shock effect as a cause,



mainly catastrophic events such as war or an oil crisis (Barafuldi, 2016).

A recession, as defined by the National Bureau of Economic Research, occurs when the Gross Domestic Product (GDP) falls into negative territory for two consecutive quarters.

Although no two recessions are the same regarding length and severity, the average span of the economic downturns between 1920 until 2009 was approximately 14 months while the average decline in real GDP output was -6.2% (Penn, 2004) (Table 3). Although each recession may have distinct characteristics, all economic downturns share these common denominators:

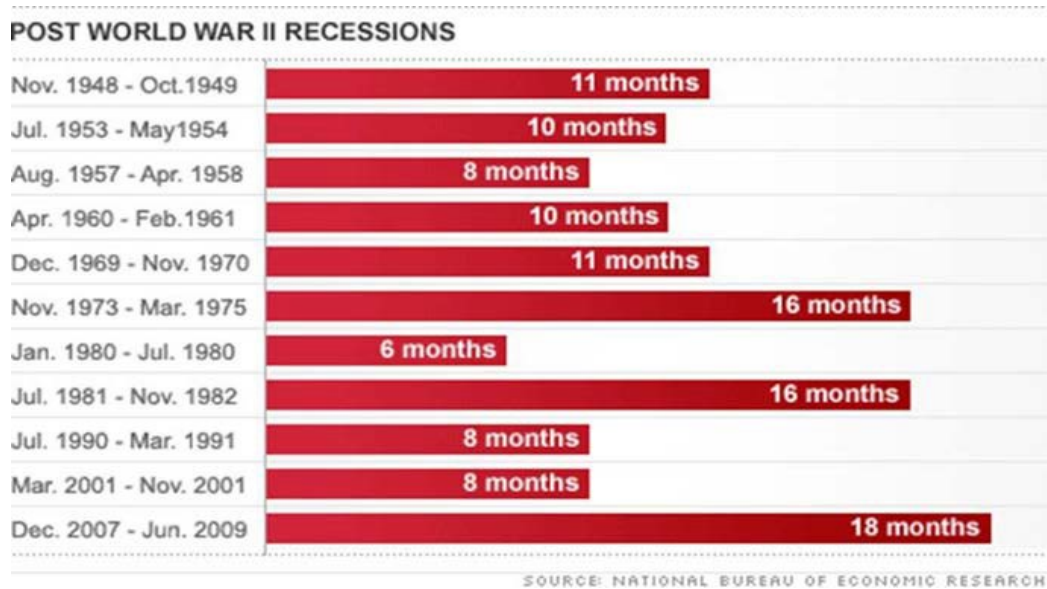
- Contraction in demand for products leading to excesses in production capacity
- Decrease in business confidence and consumer confidence
- Decrease in revenues and profits
- Drop in capital spending and investments
- De-stocking and heavy discounting
- Increase in the unemployment rate
- More scrutiny in lending rules and requirements
- Decrease or limited liquidity
- Falling demand for imports
- Increases in government debts to balance the revenue decline

We may glean from Table 2C the cyclical recurrence of economic contractions. It seems that every 7-10 years, economic turbulence takes shape followed by a period of growth, lifting the economy. Regardless of whether the proponents of the business cycle theory, innovation theorists, or supply shock economists are correct, recessions appear somewhat predictable and could be planned for. According to a recent survey sponsored by Zillow, a panel of 100 experts in real estate and economics predicted a 73% chance that the next recession will begin by the end of 2020. They do not expect, however, that housing will play a major role with the next one as it did with the previous recession, but some markets could see collateral damage as a result (Builder, Panel Sees Recession by Year End 2020, 2017).

**Table 2C: Major recessions since the Great Depression and their effects**

<b>Name</b>	<b>Time frame</b>	<b>Duration</b>	<b>GDP Decline</b>	<b>Peak Unemployment</b>
Great 07 Recession	Dec 07- Jul 09	1 year 6 months	-4.3%	10% June 09
Early 2000s recession	Mar 01– Nov 01	8 months	-.03%	6.3% June 03
Early 1990s recession	Jul 90 – Mar 91	8 months	-1.4%	7.8% June 92
Early 1980s recession	Jul 81 – Nov 19	1 year 4 months	-2.7%	10.8% Nov 82
1973-1975 recession	Nov 73 – Mar 75	1 year 4 months	-3.2%	9.0% May 75
1969-1970 recession	Dec 69 – Nov 70	11 months	–0.6%	6.1% Dec 70
1960-61 recession	Apr 60 – Feb 61	10 months	-1.6%	7.1% May 61
1958 recession	Aug 57 – April 58	8 months	-3.7%	7.5% Jul 58
1953 recession	July 53 – May 54	10 months	-2.6%	6.1% Sep 54
1949 recession	Nov 1948 – Oct 1949	11 months	-1.7%	7.9% Oct 49
1945 recession	Feb–Oct 1945	8 months	-12.7%	5.2% Jan 46
1937-38 recession	May 37 – June 38	1 year 1 month	-18.2%	19.0% 1938
The Great Depression	Aug 29 – Mar 33	3 years 7 months	-26.7%	24.9% 1933

Except for the Great Depression of 1929, Figure 3C shows that the duration of most recessions is short: six to 18 months. The psychological impact, however, of the pre and post-recessionary periods tends to extend the economic pain and economic devastation beyond the actual recession.



**Figure 3C: List of Previous Recessions and their Duration...**

## Literature Summary

To derive strategies that homebuilders can implement when dealing with recessions, we concentrated our literature search on four distinct areas: operational efficiencies, innovation, marketing strategies, and forecasting methods. We found the following studies to be most relevant:

**Table 3C: Literature findings on recession strategies**

<b>Strategy</b>	<b>Findings</b>	<b>Authors</b>
<b>Operational Efficiency</b>	Proposed an action program linking theory and business experience to successfully manage through a recession by recession- proofing the enterprise during the pre-recession period and implementing recession-fighting strategies during the downturn.	Pearce, J. A., & Michael, S. C. (2006). "Strategies to prevent economic recessions from causing business failure." <i>Business Horizons</i> , 49(3), 201-209.
	Concluded that by streamlining their production system, builders can balance fluctuations in market demand and bring stability to their operations.	Lu, W., Olofsson, T., & Stehn, L. (2011). "A lean-agile model of homebuilders' production systems." <i>Construction Management and Economics</i> , 29(1), 25-35.
	Study identified three potential challenges facing lean organizations during turbulent times and made recommendations to counter those challenges.	Brown, K. k., Schmitt, T. g., & Schonberger, R. s. (2015). "ASP, The Art, and Science of Practice: Three Challenges for a Lean Enterprise in TurbulentTimes." <i>Interfaces</i> , 45(3), 260-270.
	Discussed different strategies that companies had implemented to survive a recession which led to the classification of companies as prevention, promotion, pragmatic and progressive focused. Those in the progressive club surpassed all others in revenues and profits.	Gulati, R., Nohria, N., & Wohlgezogen, F. (2010). "Roaring out of recession." <i>Harvard Business Review</i> , 88(3), 62-69.
	The study identified seven disciplinary benefits which are classified as effects of recessions: <ul style="list-style-type: none"> <li>• Re-examination of products to create more value</li> <li>• Improvements in financial disciplines</li> <li>• Re-assessment of the production process</li> <li>• Review of all policies</li> <li>• Review of strategies and the utilization of resources by upper management to reduce risks</li> <li>• Exposure of unethical behavior with improvements of internal controls</li> <li>• Reduction in burdensome regulations</li> </ul>	Penn, W. (2006). The Benefits of Recessions: "What We Should But Often Fail to Learn." Jackson, MS.T W. <i>Bellhaven College</i>
<b>Innovation</b>	The research examined organizational attributes that correlate with innovation. Proposed a conceptual model of organizational innovation.	Singh, S. K. (2011). "Organizational Innovation as Competitive Advantage during Global Recession." <i>Indian Journal of Industrial Relations</i> , 46(4),

**Table 3C (Continued)**

		713–725. <a href="http://www.jstor.org/stable/23070491">http://www.jstor.org/stable/23070491</a>
	Paper examined the critical role of innovation and its impact on potentially lifting the economy from a recession. Correlation between lack of innovation and turbulent times.	Hausman, A. h., & Johnston, W. M. (2014). “The role of innovation in driving the economy: Lessons from the global financial crisis.” <i>Journal of Business Research</i> , Vol. 67 Issue 1, p 2720, 7 p 67
	The study addressed the challenges of innovation adoption by the building industry and the variables likely to inhibit or promote innovation. Concluded that large production builders building entry-level housing should be the target for innovation that contributes to affordability. Planners should also craft strategies that recognize factors and opportunities that influence innovation adoption by homebuilders.	Kobel, C.T. (2008) “Innovation in Homebuilding and the Future of Housing.” <i>Journal of the American Planning Association</i> . 74, 1, 45-58.
	Study provides novel evidence on how business cycles shape innovative capabilities in recessions.	Amore, M. D. (2015). “Companies are learning to innovate in recessions.” <i>Research Policy</i> , 44(8), 1574-1583.
<b>Marketing Strategies</b>	This study investigated marketing strategies that companies undertook during the Great Recession of 07 and the resulting impacts on firms' performance and whether the companies survived or failed as a result.	David Nickell, Minna Rollins, Karl Hellman, (2013) "How to not only survive but thrive during recession: a multi-wave, discovery-oriented study." <i>Journal of Business &amp; Industrial Marketing</i> , Vol. 28 5, pp.455 - 461.
	Tested the effectiveness of proactive marketing efforts by firms in responding to a recession as compared to others that took a passive approach. Results: firms with established brands, resources, and an entrepreneurial culture would benefit the most from this strategy.	Srinivasan, R. (2005). “Turning adversity into an advantage: Does proactive marketing during a recession pay off?” <i>International Journal of Research in Marketing</i> , 22(2), 109-125.
	Study examined the post-recession era where the newly created market environment for businesses is demanding new strategies to face different challenges ahead.	Piercy, N. F., Cravens, D. W., & Lane, N. (2010). “Marketing out of the recession: recovery is coming, but things will never be the same again.” <i>Marketing Review</i> , 10(1), 3- 23.
	Examined the components of different marketing strategies that enable companies to weather recessions. (1990-91 recession )	Pearce, J. A., & Michael, S. C. (1997). “Marketing strategies that make entrepreneurial firms recession- resistant.” <i>Journal of Business Venturing</i> , 12(4), 301- 314.

**Table 3C (Continued)**

<b>Forecasting</b>	<p>To recession-proof the organization</p> <ul style="list-style-type: none"> <li>• Use readily data available from the business press to forecast the business cycle</li> <li>• Implement cycle strategies in response to the forecasting data</li> <li>• Entities that master those cycle strategies will outperform the competition</li> </ul>	<p>NAVARRO, P. (2009). "Recession-Proofing Your Organization." <i>MIT Sloan Management Review</i>, 50(3), 45-51.</p>
	<p>Study surveys recent research on the usefulness of the term spread (i.e., the difference between the yields on long-term and short-term Treasury securities) for predicting changes in economic activity.</p>	<p>Wheelock, D. C., &amp; Wohar, M. E. (2009). "Can the Term Spread Predict Output Growth and Recessions? A Survey of the Literature." <i>Review</i> (00149187), 91(5), 419-440.</p>
	<p>The yield curve is an effective tool to accurately forecast economic downturns when it inverts when short-term rates are higher than long-term rates.</p>	<p>Stojanovic, D. (1997)</p> <p>Yielding Clues About Recessions: The Yield Curve as a Forecast Tool.</p> <p><i>Federal Reserve Bank of St. Louis</i></p>
	<p>New forecasting model that improves the ability to predict the start of recessions by a four quarter time horizon. The model uses a combination of variables: ratio of growth in loans and loan commitments in commercial and industrial loans, the yield curve and S&amp;P 500</p>	<p>Rogers, T. F. (2011). Improving recession forecasts with business loan data from commercial banks.</p> <p><i>Journal of Applied Economics &amp; Policy</i>, 31-46.</p>
<b>General Strategies</b>	<p>Book explored the dynamic changes in the business world entering a period of prolonged slow growth where opportunities still exist for those positioned to exploit them. Companies need to employ defensive strategies to protect financial and business fundamentals then go on the offensive with innovation. Capitalize on changes in the external environment, unleash advertising and marketing power and take the fight to competitors.</p>	<p>Rhodes, D., &amp; Stelter, D.</p> <p>(2010). <i>Accelerating Out of the Great Recession: How to Win in a Slow-growth Economy</i>. New York: McGraw-Hill.</p>
	<p>Strategies to be implemented by service-oriented firms in response to a downturn.</p>	<p>Byrd, J., Smith, D., &amp; Helms, M. M. (2012). "How to Prosper during an Economic Downturn." <i>The CPA Journal</i>, 82(11), 6-7</p>
	<p>Article emphasized the critical role of housing in the overall business cycle, timing for intervention with monetary policy and the impact of decline in home prices.</p>	<p>Leamer Edward .E (2015) "Housing Really Is the Business Cycle: What Survives the Lessons of 2008-09?" <i>Journal of Money, Credit, and Banking Supplement 1</i> March- April 2015, v. 47, pp. 43-50.</p>
<b>Qualitative study</b>	<p>Examined the changes in the homebuilding industry, its potential future and critical</p>	<p>The State of Residential Construction Industry. Bipartisan</p>

**Table 3C (Continued)**

<b>on Homebuilding</b>	importance to the national economy.	Policy Center
	Study explored the economic benefits of the housing industry in California and its contribution to the state's economy.	The Economic Benefits of Housing in California. Center for Strategic Economic Research
<b>Dynamic Capabilities Theory</b>	Study explored dynamic capabilities and concluded that although necessary, they are not sufficient conditions for competitive advantage, but can be used to enhance resource configurations to attain competitiveness.	Eisenhardt, Kathleen M., and Jeffrey A. Martin. "Dynamic capabilities: what are they?" <i>Strategic Management Journal</i> 21.10-11 (2000): 1105-1121.
<b>Dynamic Capabilities Theory</b>	How businesses need to marshal their resources and operate during turbulent economic times.	Teece, David J., Gary Pisano, and Amy Shuen. "Dynamic capabilities and strategic management." <i>Strategic Management Journal</i> 18.7 (1997): 509-533.
<b>Industry Publication</b>	General Information	Economic Census Offers New Look at the Great Recession

## Operational efficiencies

Operational efficiencies appear to be the first place business entities direct their focus at the onset of an economic downturn. Gulati et al. (2010) examined the strategy selection and corporate performance of different companies during the previous three recessionary periods 1980, 1990, 2000. The study found that companies differ in their response to a recession depending on the cognitive orientation of their executives when responding to a crisis.

Companies were grouped into four categories:

1. Prevention-focused, which made defensive moves to avoid losses and minimize risk by cutting operational costs and reducing discretionary spending, employee reduction, and preserve cash.
2. Promotion-Focused, willing to invest in offensive moves by pushing change through and pursuing opportunities even in a downturn, whether it is a business, assets, or

talent. The focus is on the upside potential derived out of such moves.

3. Pragmatic companies that combine both offensive and defensive strategies by improving their operational efficiencies with cost-cutting measures and investing in the future with new assets or developing new markets.
4. Progressive companies which mastered the optimal combination of defensive and offensive strategies: cutting costs selectively while expanding in areas where the benefits are apparent, increasing spending on research and development and marketing judiciously, developing new markets, and investing in property, plant, and equipment due to depressed prices.

Companies that followed those strategies benefited from the downturns by outperforming their rivals by at least 10% in sales and profit growth; the odds of achieving those results were 21% for prevention-focused, 26% for promotion-focused, 29% for pragmatic, and 37% for progressive-focused companies. Progressive companies, however, succeeded above all others by following a multipronged approach of balancing cost-cutting measures to survive today while investing in their future growth. Progressive leaders also maintained flexibility in their approach by encouraging their teams to determine the best strategic initiatives needed for improving efficiencies and development and not to be bound by a structured roadmap.

Other scholars such as Pearce (2006) proposed strategies to successfully navigate a recession by addressing efficiencies. The strategies consisted of an action program linking theory and business experience which incorporated a two-step approach:

- A) Recession proofing is done during the pre-recession period by:
  - Position the firm by investing in multiple markets and geographies
  - Develop a turnaround contingency plan dealing with limited cash flow due to



declining sales revenues and limited borrowing capabilities. The turnaround requires retrenchment and recovery; therefore, cost and asset reduction measures must be used to conserve cash flow which will enable the firm to rebound from the recession.

**B) Recession fighting measures during the downturn:**

- Promote aggressively by maintaining marketing initiatives despite difficult times. Maintain an advertising campaign since there is less competition. Introduce new products and attract new customers.
- Prepare to exploit the anticipated recovery through judicious investments. Seek bargains and buy during the recession.

Brown et al. (2015) examined the impact of economic downturns on organizations that systematically applied lean concepts throughout the operations, supply and demand chain. The concepts incorporated lean practices in product design, supply, logistics, administrative and customer service, based on four lean principles: focus on customer needs, flow process, customer pull, and continuous improvements. The authors pointed to problems that led to failure even for companies that implemented the lean concepts, which proved that organizations typically do not prepare themselves for the inevitable disruptive events, such as a recession. Therefore, probing questions should be asked about the company's existing markets and prospects for future markets, given the changes in financial and customer markets. A continuous qualitative and quantitative self-evaluation would be a good strategy for mitigating some of the risk resulting from an economic downturn.

Other scholars, such as Penn (2006), identified specific disciplinary benefits to business entities that result from recessions. He argued that, generally, companies facing economic instability attempt to improve their financial discipline quickly, review policies,

and reduce risk by addressing strategies and resource utilization of upper management. Moreover, products and production processes are re-examined to create more value while improvements in internal control measures potentially could expose costly unethical behavior within the organization.

## **Innovation**

Innovation is perceived as a major driver of the economic engine due to its contribution to growth and job creation. In simple terms, when employment increases due to innovation, wages earned are spent on products, services, and taxes, thereby fueling the economy for additional growth. Thus, innovation in different industries impacts homebuilding in many different ways. When industries in technology, pharmaceuticals, defense, manufacturing, logistics, and distribution expand as a result of innovation, they hire and relocate people, thus, creating a need for additional housing.

Scholars also have examined the critical importance of innovation during economic downturns. Chesbrough (2009) argued that companies that invest in their innovative capabilities in difficult economic periods may enjoy higher returns when improvements and growth in the economy return. The key, however, is maintaining focus even when faced with tight resources, and the need for future growth options is critical. Thus, open innovation presents a viable option to companies which could be best served by allowing some projects to be developed outside its sphere, thereby saving money and energy. Other innovation options may be spun off as separate ventures while retaining equity and keeping core projects within the organization.

The literature also addressed organizational innovation as a pre-requisite to maintaining a competitive advantage during recessions (Singh, 2011). The author proposed a model in which innovation in a firm depends on knowledge within its management practices

and the strength of organizational learning capabilities that the entity has in place. In addition, he argued that important drivers of innovation flourish when surrounded by a congenial organizational structure and culture.

Koebel (2008) concluded that the adoption of innovative ideas by homebuilders are crucial for the future of the industry. To impact a larger portion of the housing market, production builders constructing entry-level homes should be the target for innovations that can contribute to affordability. Small custom builders with higher priced houses could be more receptive to innovations in energy efficiency, sustainability, and durability since they typically deal with a relatively affluent and informed clientele. Furthermore, planners should encourage innovation in homebuilding by crafting strategies that recognize the factors and opportunities that influence innovation adoption by homebuilders.

Innovative ideas are critical for the building entity's longevity and survival since they entice new buyers into the marketplace. Builders with dated architectural designs, for example, lose market share and reputation, and are forced out of the market by the competition. During economic downturns, the need for innovation becomes almost existential for the survival of the building entity, and it is not limited to designs or the efficient use of space. It extends to every facet of the business to include the production cycle, quality delivery process, customer service and warranty, new product choices, finishing details, systems, and processes, just to name a few.

In today's market, discerning homebuyers are keen on innovative ideas in energy efficiency and sustainability. Architects have learned from the fashion industry how to introduce new concepts to create continuous interest by tweaking designs while making them more appealing and current. New designs are bright and cheerful with open spaces that address the demographic changes in the family structure. Thus, additional space is created

for an aging parent, the boomerang kid back from college, or incorporating appealing designs for the millennial buyers. Other creative ideas include additional space for entertainment by extending the living areas into the outdoors for family gatherings and eliminating unusable space.

### **Marketing strategies**

Contrary to popular views that recessions require retrenchment and cutbacks, Pearce et al. (2006) suggested that specific marketing activities can help pull an organization through a recession. He posit that marketing strategies in the core business provide a safeguard against an economic downturn, and expanding marketing efficiency during the pre-recession peak period should help the firm survive the recession. The proposed model included four factors:

- Improving marketing efficiency by implementing an incentive system that motivates a highly skilled sales staff in addition to improving product development and coordination with operations
- Streamlining the value chain through efficient marketing efforts in restructuring departments, reducing distribution channels, and implementing innovative sales and advertising efforts
- Retrenchment in the core business about specific products and geographic coverage
- Expansion into new markets to generate a larger market share through price competition and a broader geographic area

To turn adversity resulting from economic downturns into an advantage, Srinivasan et al. (2005) suggested a proactive marketing strategy. His model tested the effects of aggressive marketing efforts undertaken during a recession and recommended the following:

- Recessions should be viewed as opportunities and exploited with aggressive marketing
- Realized benefits from marketing investments made during recessionary periods

could be captured sooner than later

- Firms must have a strategic emphasis on marketing already in place before the recession to derive the value of marketing investments made during a downturn
- Companies that have a strategic marketing emphasis, an entrepreneurship culture, and slack resources with the flexibility to deploy those resources are more likely to step up their marketing efforts during the recession and realize the benefits

Piercy et al. (2010) advocated that recessions create a new normal, thus changing the dynamics of the business world. A fundamental marketing restructuring is needed as a result of the changes in market characteristics. New action marketing strategies start by overcoming the resistance to change and being prepared for the new era of value-based competition instead of price-based efforts. Product strategy and marketing communications should be the focus of any strategic marketing plan to deal with the new risks and challenges of economic recovery.

## **Forecasting**

In “*Recession-Proofing Your Organization*,” Navarro (2009) suggested that executives must have the ability to forecast the business cycle by applying data and information that is widely available and that this function must not be delegated to others. He proposed a set of business-cycle management strategies to be used with the forecasted data and concluded that by implementing those strategies, organizations would not only be able to anticipate down cycles, but outperform the competition and become recession-proof. He argued that since GDP is a measure of economic growth, by constantly monitoring its main components of consumption, business investments, net exports, and government spending, builders can develop an economic sense of the direction of the business cycle and anticipate potential recessions. His GDP forecasting equation incorporates the consumer confidence index, retail

sales, vehicle and home sales, the Institute of Supply Management (ISM) manufacturing index, Trade Report and Budget Report.

Others, such as McBride (2016), focused on another predictor of recessions: statistics in new home sales and housing starts. He argued that residential investment is very cyclical and frequently the best leading indicator of the economy. He concurred with Leamer (2015) that “*Housing is the Business Cycle*” and argued that residential investments usually lead the economy into and out of recessions. Housing which triggered the financial crisis that led to the Great Recession provided little contribution to uplift the economy due to its lingering weakness, and the result was a sluggish recovery.

Bank loan commitment data, on the other hand, could improve the ability to forecast economic downturns according to Rogers (2011). He found that by incorporating this forward- looking, commercial bank information with the yield curve and S&P 500 fluctuations, the predictive power of the forecasting model improved by four quarters. Others, such as Jeremy J. Nalewaik, an economist at the Federal Reserve Board (FRB), suggested that a combination of the Gross Domestic Income (GDI) and GDP may be more accurate in defining and predicting an economic downturn (Barafuldi, 2016).

## **Discussion**

The local homebuilding industry has shown resiliency despite the devastation created by the Great Recession of 2007 that led to the loss of so many local builders. The future remains bright as the need for housing in the United States expands. The Joint Center for Housing Studies at Harvard University projected the need for 16.4 million new housing units between 2010 and 2020 to meet housing demand driven by population and demographic changes (Masnick, 2010). Newly released data as of January 2017 from the U.S. Department of Housing and Urban Development and the U.S. Census Bureau shows that current

production levels are averaging an annual rate of 1.246 million units on a seasonally adjusted basis (Thompson E., 2017). This indicates an approximate yearly shortage of 400,000 units to fulfill current needs.

Therefore, the future of housing in the short-run is encouraging from an organic population growth and from demographic changes. Baby boomers are continuing to retire, thus creating a need for retirement housing in active adult communities and vacation homes. Echo boomers, or the children of baby boomers, along with new immigrants, are forming new households and entering the market in great numbers, thus fueling the demand for additional housing in all sectors. Therefore, local homebuilders who endured the Great Recession of 2007 may benefit from positive demographic changes and financial trends.

It is just a matter of time, however, before the next down cycle creates new challenges for the industry. Thus, we should not only expect new threats but new opportunities. Private local homebuilders must implement specific strategies to meet those challenges and take advantage of those opportunities. Consequently, we propose the following recommendations which we have drawn from our literature review and insights gained from our experience surviving several downturns during the past 30 years as a local homebuilder in Hillsborough County, Florida.

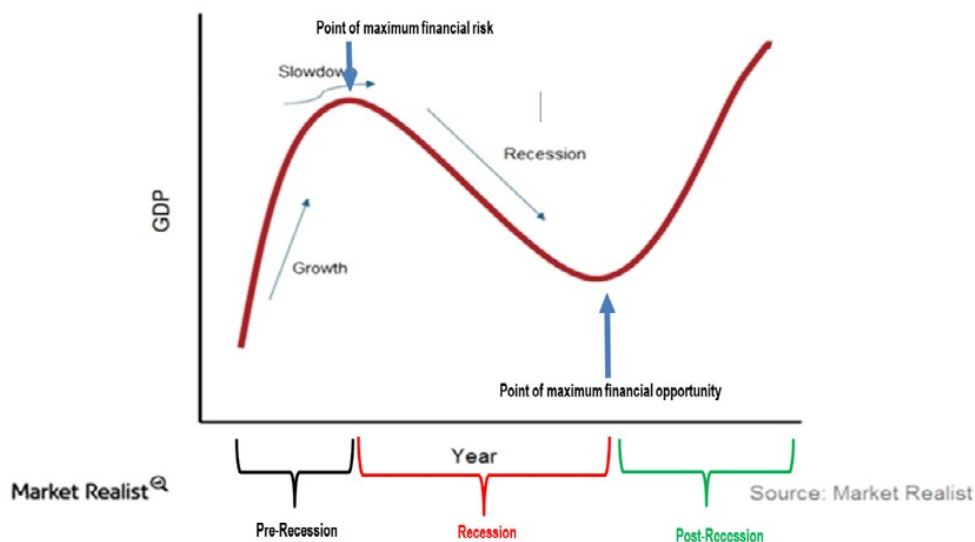
### **Building a recession-resistant local homebuilding organization**

To effectively deal with economic downturns, local homebuilders must formulate strategies appropriate to which segment of the downturn they encounter. Ideally, implementing the optimal combination of defensive and offensive strategies by cutting costs selectively while expanding in areas where the benefits are apparent (Gulati, et al. 2010). As an example, pre- recessionary periods require specific actions that deal with growth and the maximization of returns while simultaneously preparing for an eventual downturn. At the

beginning of and during the economic contraction when business entities endure extreme economic difficulties, the implementation of defensive measures could ensure survival. These strategies could include retrenchment and thoughtful cost containment while innovating with new ideas in design efficiency, energy, and sustainability.

While in the early stages of the post-recessionary period, filling vacancies in the organization with a talent search and hiring while marketing aggressively in an attempt to fill the void left by other builders. The key, however, is in the timing of those actions since predicting the onset or the end of a recession accurately is extremely difficult, even when attempted by the experts. Furthermore, since the slope of a typical economic cycle differs depending on its severity, the critical time frame falls between the peak point of maximum financial risk and the valley at the bottom of maximum financial opportunity (Figure 4C). Strategically, a local homebuilding company can undertake a series of sequential moves in each of the prescribed stages of the business cycle in forecasting, operational efficiencies, marketing, and innovation.

We have summarized those in table 4C.



**Figure 4C: Points of Maximum Financial Risk and Opportunity**



**Table 4C: Pre-recession strategies up to the point of maximum financial risk**

<b>Operational efficiencies</b>	<b>Marketing</b>	<b>Innovation</b>	<b>Forecasting</b>
Effective inventory management (Pierce & Michael, 2006)	Diversify into counter-cyclical and recession tolerant projects: such as age-targeted homes	Innovate product by introducing new concepts with real value to create a niche (Koebel, 2008)	Develop forecasting capabilities and apply business cycle management strategies to predict key turning points in the business cycle (Navarro, 2009)
Streamline operations  (Gulati et al, 2010; Lu et al., 2011; Pierce & Michael, 2006; Teece et al., 1997)	Cautiously expand with emphasis on marketing efficiency (Pearce, 2006)	Re-visit quality measures from an innovation perspective (Koebel, 2008; Lu et al., 2011)	Monitor the yield curve if it inverts and use as a good predictor of recessions (Stojanovic, 1997)
Conserve resources, build cash reserves (Pearce, 2006; Navarro, 2009)	Explore affordable products (Navarro, 2009)		
Be cognizant of collective behavior influences leading to ill-advised decisions	Enhance electronic footprint  Improve relationships with real estate industry professionals (Brown et al., 2015; Michael, 1997; Nickell, Rollins & Hellman, 2013)  Increase community involvement (Srinivasan, 2005)		

**Table 4C (Continued)**

**During recession**

<b>Operational</b>	<b>Marketing</b>	<b>Innovation</b>	<b>Forecasting</b>
<p>Defensive moves: entrenchment and thoughtful cost containment to protect the business (Reeves, 2009)</p> <p>Maintain agility in response to new challenges in operations (Gulati et al., 2010)</p> <p>Keep key team members, reduce overhead, unnecessary staff, and adjust salaries with pay cuts if necessary (Navarro, 2009)</p> <p>Work in manageable projects regarding size</p> <p>Renegotiate contracts and proposals aggressively</p> <p>Cross train staff to serve in multi-function positions</p> <p>Re-examine and re-tool systems and processes</p>	<p>Expand marketing in the core business (Pearce, 2006)</p> <p>Invest in new marketing techniques: social media, crowdsourcing, real estate data (Nickell, 2013)</p> <p>Shift emphasis to minimize risks: build on owners' lots</p> <p>Undertake opportunistic moves to enhance the competitive advantage (Reeves, 2009) such as:</p> <p>Diversify by seeking general contracting opportunities: building light commercial, office buildings, and retail plazas.</p> <p>Explore custom building and remodeling</p> <p>Bank work-outs: completion and marketing of unfinished home inventories</p> <p>Bank work-outs: completion of unfinished developments</p> <p>Expand geographically with caution and only within comfort zone</p>	<p>Continue to innovate with new ideas such as green building and energy efficient homes (Kobel, 2008)</p> <p>Explore higher density, in-fill, affordable projects such as multifamily, duplexes, townhomes (Kobel, 2008)</p> <p>Respond to changes in demographics. The need for multigenerational housing, retirees housing development, or micro units in infill locations as examples (Brown et al., 2015; Singh, 2011)</p>	<p>Apply forecasting model with key economic indicators to continue monitoring the business cycle key turning points (Navarro, 2009)</p>

Table 4C (Continued)

## Post-recession strategies from the point of maximum opportunity

Operational efficiencies	Marketing	Innovation	Forecasting
<p>Early stages of recovery: talent search and hiring</p> <p>Cautious steps with overhead expansion (Gulati et al., 2010)</p>	<p>Aggressive marketing by filling the void left by other builders (Rhodes &amp; Stelter, 2010)</p> <p>Implement marketing strategies with new buyers in mind (millennials)</p> <p>Technology adoption for the demands of the new market (Piercy et al., 2010; Rhodes &amp; Stelter, 2010)</p> <p>Expand geographically within comfort zone</p>	<p>Introduce new innovative concepts in land development that can create higher densities while preserving open space for recreation. Coving is one concept</p> <p>Develop products that appeal to the new generation of buyers: millennials, baby boomers retiring and downsizing (Brown et al., 2015; Kobel, 2008)</p> <p>Develop plans maximizing space use and incorporating changes in buyers' needs (Brown et al., 2015; Kobel, 2008)</p>	<p>Apply forecasting model with key economic indicators to continue monitoring the key turning points of the business cycle (Navarro, 2009)</p>

**Recommended strategies**

**I. Recession forecasting:** Predicting the onset of a recession is not an easy task as we have seen with the Great Recession of 2007. Economists and forecasters failed to accurately anticipate the turning point of the economy, and underestimated its severity (Peláez, 2015). However, by routinely monitoring the four components of Gross Domestic Product, Consumption, Business Investments, Net Exports, and Government Spending, builders can develop a keen sense of the economic climate and the direction of the business cycle and quickly spot recessionary dangers ahead (Navarro, 2009). This sixth sense then becomes a component of the risk management program for the business firm and part of the business leader's strategy.

Recommended key economic indicators to follow:

- For Consumption: Consumer Confidence, Retail Sales, Vehicle Sales, Housing Starts, and Existing Home Sales, Unemployment rate
- For Business Investments: Institute of Supply Management (ISM), and the Industrial Production (IPI) Indexes
- For Net Exports: Trade Report
- For Government Spending: Budget Report

Although these indicators may not individually reflect the direction and state of the economy, collectively, they provide a clearer picture that may provide guidance.

Local homebuilders also should not underestimate the role of the media and business press when monitoring the economic cycle. Paying close attention to them provides certain benefits. Late 2005 and throughout 2006, journalists and reporters filled newspapers and airwaves with news reports concerning the bursting of the housing bubble and a potential downturn. Those who responded to the warning signs survived while others perished.

II. Operational efficiencies: With an advance warning system in place, local homebuilders may then direct their attention to the implementation of recession-fighting strategies at the first warning signs of economic trouble. Some companies may take refuge with a defensive strategy of hibernation during the economic winter, a strategy that may buy time in the short run, but will not foster a sustainable competitive advantage in the long run. The business world is continually evolving, and recessions will undoubtedly speed up the failure of ineffective business models and accelerate the restructuring of entire industries (Reeves, 2009). Therefore, addressing key

vulnerabilities with scrutiny of the business plan ensures that the business is financially and operationally sound before any defensive or proactive moves necessary to survive a recession are taken (Berson, 2009). Protecting the business entity would then be the first step, confirming that it is on solid financial ground. Therefore, greater efficiencies throughout the organization must be implemented including thoughtful cost reductions, cash and working capital management, organization redesign, and process improvement (Reeves, 2009). Retraining the workforce presents another way to increase capacity and reduce costs (Bennet, 2009). Efficiency also can be improved by applying lean concepts to every facet of the business while making sure not to get discouraged with difficult economic times (Brown, 2015). Efficiency measures also should incorporate additional risk mitigation with credit management by divesting non-core assets, exercising prudence with capital investments, and securing additional credit lines and equity capital (Deimler, 2009). Tax strategies should not be ignored either when disposing of certain assets or incurring operating losses with loss carrybacks to recover previously paid taxes.

III. Marketing: The strategies deployed depend on the stage in the cycle of the economic contraction. Therefore, during the pre-recession period, the entrepreneurial builder can position the entity in multiple markets and should plan for a decline in sales revenue while promoting the product or services in the midst of the recession despite the difficult times (Pearce, 2006). Other suggested strategies include attracting new customers, finding alternatives to price cuts, and extensive application of social media and crowd- sourcing where necessary (Nickell, 2013).

Investing in real estate agent relationships is one area where many builders fall

short in their strategic downturn planning. Building stronger relationships with agents by determining ways to add value to their businesses and contributing to their future strategies not only cements those relationships, but also can pay great dividends when the economy recovers (Reeves, 2009). Local entrepreneurial homebuilders who view challenges during the economic contractions as opportunities and develop a proactive marketing response to exploit them will achieve superior business performance even during the recession (Srinivasan, 2005). Therefore, developing and implementing a marketing program that can capitalize on the perceived opportunities by swiftly and extensively deploying marketing resources will afford the building entity a competitive edge (Srinivasan, 2005). Proactive marketing also may be viewed as a manifestation of the dynamic capabilities of the business organization by leveraging the internal capabilities and resources of the business to deal with the economic constraints (Teece, 1997).

The Great Recession of 2007 also caused the market and business landscape to change with new challenges of economic recovery. Local homebuilders must overcome any resistance to change in this new world and should not perceive it as business as usual. Post-recession customers are demanding a superior value for their largest investment. Therefore, homebuilders must re-examine their core capabilities and business models by re-thinking their marketing communications and message and develop a value-based competitive advantage (Piercy, 2010).

Additionally, we list the following observations and recommendations which represent the culmination of a limited study we conducted with a small number of builders who survived the Great Recession of 2007 as well as with others who failed. Also, we included the

insights of key informants who provided builders with services, such as financial, legal, and engineering. Four key qualitative and non-financial factors from our study appeared critical to a builder's success and survival, especially when faced with a serious economic downturn.

Our key findings are listed below.

**a. Entrepreneurial business focus**

Success in homebuilding is challenging even during normal economic times considering the risk factors involved. Homebuilders typically manage the affairs of their building entity with a hands-on mentality. Delegation of certain day-to-day activities may be necessary to achieve growth and manage the operations of the business. An absentee ownership of a local building organization, however, is a recipe for failure. Chances of failure increase drastically when a builder is not at the helm, especially in a down cycle economy.

Our study revealed that builders that survived the crisis responded to the economic crisis with an intense entrepreneurial business focus. Their actions were immediate and timely. Whether they were dealing with operational efficiencies, such as implementing measures to reduce home inventories, cutting overhead, lowering debt balances, or monitoring the changes in the business climate, they were focused and decisive, and they took the necessary steps to adapt to the new economic conditions. Unfortunately, builders that lacked this entrepreneurial business focus and did not exhibit the needed intensity in managing the building company failed when they faced the turbulent economic times (Hasbini, 2017).

**b. Guarded exuberance**

Many builders underestimated the devastating effects of the Great Recession of 2007. Some did not even see it coming until it was too late. The perfect storm that crushed the

housing market was so severe that even the strongest builders were vulnerable. Many failed builders were successful before the downturn and even broke sales records year after year, which made them feel invincible. Others, blindsided by their healthy cash position, assumed they were immune to failure and thought they could weather the storm, only to discover they were mistaken.

The unbridled exuberance of these builders led them to underestimate their vulnerability to the recession and misguided their entities' long-range plans before the recession concerning risky commitments and decisions. Additionally, the construction lag time and sales backlog throughout 2006 and the early part of 2007 may have clouded the judgment of many failed builders. They were too busy completing the work in progress to perceive the imminent burst of the housing bubble. A number of their sales later canceled, leaving them with substantial inventories and heavy debts. Failed builders also relied on the rosy picture painted by forecasters as late as the fall of 2006, which was incorrect. This echo chamber effect corrupted their judgment when they heard and repeated that the incoming economic events were going to be mild and with a short duration (Hasbini, 2017).

Builders that survived the downturn, on the other hand, exhibited a certain market anxiety even during the peak period, and they responded accordingly. Their guarded exuberance guided their short-term and long-term plans, which they implemented cautiously and conservatively. Thus, they based their decisions on facts and not emotions, which enhanced their chances of survival. Whether it was an acquisition deal for finished lots to build on, property to develop, or expanding their inventory program, builders who endured the economic downturn were cautious and objective (Hasbini, 2017).



### **c. Business discipline**

Homebuilders enjoy the creative aspects of their business as those provide an element of satisfaction. The products they create are places buyers call home while their canvas is sometimes a community made of many neighborhoods with playgrounds, parks, and trails that parents enjoy while raising their children. Their business model, however, is a manufacturing facility where the plant to manufacture the products is constantly on the move. While designs and finishing touches are important, it is the bottom line on the financial statements that matters as it ensures the continuity and success of the entity. For that to happen, builders must not only prepare for growth and expansion, but they also should equally prepare for periods of economic decline.

Builders that exhibited a robust business discipline during the period around the Great Recession of 2007 managed to survive as they revealed this discipline in the way they managed their building company. They ran their building companies as a business, monitored the signs of instability in the economy, and reacted accordingly and timely. Their business strategies and business plans were under constant review as a response to the recession while they showed risk sensitivity toward all business decisions, especially financial leverage. Additionally, as the need arose, they marshaled their entities' dynamic capabilities with best practices and pulled their resources while cutting overhead, including unnecessary staff, which they did decisively in the early days of the down cycle. Moreover, they liquidated their unproductive assets fast, even at a great loss, which generated needed liquidity and sometimes loss carrybacks that resulted in tax benefits.

On the other hand, builders that failed due to their weak business discipline exhibited a form of complacency at the onset and during the recession. They failed to timely react to the

incoming recession as they assumed their business strategies were sound. The reality of the new economic conditions, however, required adaptation and immediate change in direction, which actions they failed to pursue. Thus, they did not undertake the decisive measures to keep the business afloat by cutting overhead and reducing inventories early in the downturn. Some ran their building entity as a construction company, not as a business. Additionally, many underestimated the risks of financial leverage with investment decisions that showed a risk insensitivity about long-term decisions (Hasbini, 2017).

#### **d. Business and Financial Acumen**

One key finding stood out in the prior research: most builders who had a strong business and financial acumen survived. Their educational background was in accounting, finance, economics, or general business; those who lacked this background ensured that a key executive, such as a Chief Financial Officer, comptroller, or Vice President possessed that acumen. Builders that failed, on the other hand, had either an engineering, architecture, political science, education, or art backgrounds. A couple did not complete their college degrees. However, they were very successful before the recession, which negates the argument that a strong business acumen is necessary to be successful in the building business. It could be that an event such as the Great Recession of 2007 requires distinct traits in builders, including a solid understanding of budgets, pricing, costs, projections, and cash flow, among other financial data.

Financial discipline, for example, requires that the homebuilding entity implement sound business practices to deal with turbulent economic times. A weakness in that area could spell trouble for the entity. Therefore, homebuilders who lack strength in finance and accounting or financial discipline must ensure this position is performed by a key member with a solid financial background, who is capable of providing the necessary information for

proper managerial control. Otherwise, the entity may be flying blindly toward failure.

Considering the limited number of participants in our study, we have to qualify any suggestion that may infer having a business educational background is a pre-requisite for success in homebuilding, but it is still an interesting finding that deserves future study.

Therefore, we believe private entrepreneurial local homebuilders that possess a solid business and financial acumen and manage the affairs of their companies with a keen entrepreneurial focus, a robust business discipline, and a guarded optimism may be able to shield their businesses from the negative aspects of downturns. Additionally, they can enjoy the financial rewards of their hard work.

## **Other Considerations**

### **I. Lenders' response and reaction to the crisis**

Financial leverage is a necessity in homebuilding. Long-term growth cannot be achieved without borrowing and carrying a certain level of debt. However, debt can be lethal during difficult economic times. At the onset of the Great Recession of 2007 when the financial crisis began to take hold, many builders found themselves at odds with their lending institutions. Lenders at the local level did not have a clear picture of the ramifications of the housing market crash that led to the financial crisis and Great Recession. Stories of builders considered top clients by their lenders and never missed a payment on their borrowing lines were asked to liquidate their debt balances, and they had their revolving lines of credit curtailed (Rudolph, 2009). Based on comments received from builder participants in our study, the lenders' response during the crisis was the one factor that alienated many local builders most. Most exhibited a strong feeling of distrust for their formal lenders (Hasbini, 2017). Of course, bankers blamed government regulators as the villains that ordered banks to

reduce their real estate loan portfolios. The pressure on bankers that provided those loans, however, was coming from all sides. Their real estate portfolios were losing value fast, and bank boards were feeling the demand from stockholders, thereby pressuring their management team to collect debts quickly and limit losses (Hasbini, 2017).

Therefore, since many lenders are hesitant to re-enter the real estate market and extend credit to local builders, alternative forms of financing with equity partners, joint ventures, private funding, and seller's financing have to be entertained. Homebuilders also must have the financial discipline to limit their debt exposure, even at the risk of walking away from deals that may be considered lucrative and certain.

## **II. Real estate market collapse**

The sudden, severe decline in real estate values following the financial crisis during the Great Recession had a stark and austere effect on the financial and homebuilding industries. Builders who invested on a speculative basis in land and inventories of homes found themselves caught with assets on their balance sheets that were declining sharply in value. As demand for those assets evaporated, lenders that provided financing for the assets became leery and demanded an immediate equity infusion from builders as prescribed by loan documents to maintain their collateral position. With cash in short supply, builders could not honor their obligations and ended up simply signing a deed-in-lieu of foreclosure or filing for bankruptcy protection. This sharp drop in asset values in a short period was the one event that most builders in our participant group did not expect or had the time to respond to, which led to many failures.

## **III. Strategies of large production builders impacting local builders**

Following the Great Recession of 2007, some national builders in Florida markets

followed a new strategy by expanding their product lines, which had previously been limited to first-time homebuyers. By entering the move-up market that was served by many local builders and catering to new buyers desiring bigger and better-appointed homes, public builders realized they could increase their sales revenues and realize higher profit margins. This serious competition caused local homebuilders to lose part of the market share; as a result, many found themselves unable to secure land positions to build their homes, let alone compete.

### **Conclusions and Limitations**

Although homebuilders function and operate like any for-profit company, the characteristics of the product they manufacture, its value, the length of time it takes to produce, and the financial requirements for clients to buy it combine to pose a unique set of risks.

Furthermore, recessions add new risks and challenges requiring the adaptation of new strategies. However, homebuilders should not view recessions only as periods of entrenchment and downsizing, but as opportunities to achieve growth. Those who prepared their companies for the downturn and were poised to take advantage of the opportunities during the Great Recession, did extremely well, and thrived in the aftermath. The business press documented many stories of lenders aggressively liquidating prime properties that were acquired by some builders at bargain prices. Projects that also needed completion were auctioned off.

Therefore, local homebuilders must firmly understand the cyclical nature of the industry, knowing that good times will be followed by dark days as history has shown. Preparing for a black swan event should be in the toolbox of every local homebuilder determined to succeed through the business cycle in a potentially rewarding industry.

Our study did not explore all strategies that could be effective in homebuilding when dealing with recessions, nor did we test the ones recommended. We leave that for future research. Also, the recommendations were strictly from our research, interviews, and successful experience in building and developing in Florida for the past 35 years, including navigating previous recessions. The conducted interviews from our previous research were done with local homebuilders from the West coast of Florida and one from Georgia. Therefore, the results may not apply to all local residential builders, although we believe that geographic peculiarities do not influence those results.

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## **Appendices**

## Appendix A

### List of recessions, triggers, characteristics, and government interventions

<i>Name</i>	<i>Political and economic climate preceding the recessions and their impact on the financial markets</i>
Great Recession of 2007	The failure and collapse of large financial and investment firms in the United States, such as Lehman Brothers, Bear Sterns, AIG, Citicorp Bank, Fannie Mae, and Freddie Mac as a result of the subprime mortgage crisis presented a real threat to the confidence in the U.S economy. A global financial crisis loomed on the horizon starting with the bursting of the housing bubble which was created by runaway lending practices. Subsequently, home prices fell substantially in many regions of the country along with the securities that held those assets. The weakened economy also shook the U.S auto industry and forced the Government to provide a massive bailout and stimulus package to prop the economy and prevent further deterioration and collapse which could have led to an imminent depression.
Early 2000s recession	After a long period of growth during the 1990's, the economy was tested with the debacle at Enron, Compaq, and the dot-com collapse. The September 11 attacks further contributed to a contraction in the economy. A brief recession resulted, however, despite the gravity of the events at the time.
1990-1991 recession	To control the rise in inflation during the late 80's, the Federal Reserve increased interest rates which resulted in weakening the growth of the economy. Subsequently, the Savings and Loans crisis, events in the Middle East when Iraq invaded Kuwait causing instability and shock to oil prices, and lack of consumer confidence all contributed to a weakened economy and a brief recession.
1980-1982 recession	The overthrow of the Shah in Iran and the installation of a new regime of Ayatollahs in power, instability in oil production, and sharp increases in oil prices led to the 1979 energy crisis. During the same time frame, a tight monetary policy put in place to manage inflation carried over from the 70's, created the perfect environment for the recession. Short-term rates hovered around the 20% mark.
1973-75 recession	High military spending on the Vietnam War, rising unemployment, the Arab-Israeli war in October of 73 which led to the oil crisis, and the stock market crash of 73-74 all contributed to the economic downturn and the recession of 73. Inflation was on the rise, and the country ended up in a period of stagflation.
1969-70 recession	The end of the economic expansion of the 60's was marked by rising deficits and moves by the government to tighten the budget. Coupled with the rise in inflation, which triggered the Federal Reserve to raise interest rates; a mild recession resulted.
1960-61 recession	The short recession caused by increases in interest rates by the Federal Reserve in 1959, the stock market reacted negatively with the Dow Jones reaching a low point in early 1960. The economy rebounded to record a high growth decade.
1958 recession	Monetary policy intervention during the late fifties caused budget surpluses to turn into deficits contributing to another mild recession.

1953 recession	Following the Korean War, more defense spending was needed for national security. An inflationary period resulted with the Federal Reserve tightening monetary policies to combat inflation. Again, a mild recession resulted.
1949 recession	The weak economy caused this brief economic downturn; forecasters at the time expected things to get much worse, based on their recent experiences of previous poor economies that took place in their lifetime.
1945 recession	After the second world war, capital expenditures of the federal government were reduced which caused a substantial drop in GDP causing a mild recession in technical terms. A peacetime economy emerged with average unemployment rates, which classified this economy as “end of war recession.”
1937-38 recession	Coming at the tail end of the Great Depression, this recession was caused by an effort of the Federal government to tighten fiscal policies to balance the budget, a firm position by the Federal Reserve to tighten monetary policy, and a decline in investments by businesses. The results were devastation in the economy as unemployment rose to 19% while GDP dropped to -18%.
The Great Depression	Although the collapse of the banking industry appeared to be the trigger of the Great Depression and the long period of recessions that followed through-out the 30's, there were many other factors, including government policies during the 20's in imposing extensive tariffs and lack of direction, all created the fertile grounds for the depression. It was the worst economic disaster of the 20 <sup>th</sup> century as millions remained unemployed.

## Exhibit 1



May 15, 2017

Dear builder participant,

The Great Recession of 2007 dealt a serious blow to the homebuilding industry. Seasoned builders struggled in a futile effort to save their organizations due to circumstances imposed on them. While others had no choice but to close their doors as a result of actions undertaken before the onset of the recession that were detrimental to their survival. Stories of bankers' panic (pulling lines of credit), government inaction (delayed approvals), product liability (Chinese drywall), lenders' fraud (canceling approved homeowners' loans), were rampant. Other factors such as denial, human resource problems, delegation, health, and partners' conflicts, etc. may have played a role. Therefore, we are conducting a research study to uncover those qualitative and non-financial factors responsible for builder failure. Our ultimate goal is to develop strategies that homebuilders can use to survive and thrive during future economic downturns.

Having felt the disastrous impacts of the Great Recession as a builder, I can relate to the struggle that many in the industry had to go through during those difficult time. Therefore, I would like to thank you in advance for taking the time to discuss my research study. Your input as a builder will be invaluable. It is a worthy research with the objective of uncovering those potential causes that undermined many homebuilders across the country. I am hoping that the study yields results that will benefit homebuilders and the industry as a whole.

If you choose to participate, you will find a list of questions that I need to cover during a short interview. My objective is to identify those qualitative and non-financial factors which may have precipitated over time before and during the Great Recession that contributed to builders' failure. You will also find a USF informed consent form that describes the study. A signature is required to ensure that the study is done according to the set rules of social behavioral research. Please return in the postage-paid envelope.



We wish to schedule the interview at a convenient time for you during the latter part of July or early August. It may take approximately 30 minutes and can be accomplished over the phone, skype, facetime or in person. I appreciate an email confirming your willingness to participate, preference as to the timing, and best contact number.

A copy of the complete study will be available to all participants.

Thank you.

Regards,

Ali Hasbini  
[Hasbini@mail.usf.edu](mailto:Hasbini@mail.usf.edu)



## **Informed Consent to Participate in Research Involving Minimal Risk**

**Pro # Pro00029572**

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You are being asked to take part in a research study. Research studies include only people who choose to take part. This document is called an informed consent form. Please read this information carefully and take your time making your decision. Ask the researcher or study staff to discuss this consent form with you, please ask him/her to explain any words or information you do not clearly understand. The nature of the study, risks, inconveniences, discomforts, and other important information about the study are listed below.

The research study is titled:

**Navigating the Turbulent Economic Waters of the 2007 Great  
Recession: What Triggered the Housing Market Crash?  
Why did so many Builders  
Fail?  
Emerging Lessons for the Homebuilding Industry**

The person who is in charge of this research study is **Ali Hasbini**. This person is called the Principal Investigator. However, other research staff may be involved and can act on behalf of the person in charge. He is being guided in this research by Dr. Joanne Quinn.

This study is part of the course work for the doctoral degree requirements of The University of South Florida for Ali Hasbini. He is a builder and developer with over thirty years of experience in homebuilding and development in Hillsborough County Florida. He is also a CPA and previously held a faculty position at USF where he taught accounting courses.

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### **Purpose of the study**

The Great Recession of 2007 devastated the homebuilding industry and resulted in the failure of seasoned homebuilders. Data collected from the Census Bureau showed that 50% of active building entities left the marketplace, either shutting their doors indefinitely, or filing for bankruptcy. During the same time frame, data from the National Association of Home Builders confirmed similar results when it reported a 54% decline in its membership.

	2007		2012		Percent Change	
	Economic Census	NAHB	Economic Census	NAHB	Economic Census	NAHB
Residential Builders	98,607	57,095	48,557	26,421	-50%	-54%

Homebuilder data from U.S. Census Bureau and the National Association of Homebuilders

The impact of those failures on the builders themselves, their families, employees, sub-contractors, suppliers, lenders, investors, municipalities and communities were immense. Using financial performance models to predict failure with financial ratios analysis can shed light upon the symptoms which were predictably financial in nature: cash flow, liquidity, high debt levels, declining sales revenue, profitability and diminishing financing options. The real causes of failure, however, were difficult to identify with those models. One might wonder then whether less obvious factors, maybe at the individual level, could have contributed to the business failure. We believe that for some builders, perhaps other non-financial and non-operational events might have led to the organization's demise. Examples could be managerial style, personality type, life events, or loss of key personnel. Maybe the lack of a succession plan, looming substantial legal liabilities, government bureaucracy or possibly even health issues. Any of these might have paved the way for failure.

Therefore, with your assistance, we wish to uncover and understand those qualitative factors that can potentially cause homebuilders' failure through specific circumstances, actions, or decisions made by builders around recessions. We believe that our findings would add to the body of knowledge and would be of real benefit to the building industry. The purpose of this study then, would be to explore and identify the qualitative and non-financial factors that may have contributed to the failure of seasoned home builders during the Great Recession of 2007. Interviews will be conducted with 10 builders who survived the economic downturn along with 10 builders who were not as lucky. In addition, 10 key informants will also be interviewed to uncover additional factors related to the success and failure of home builders. Those may include engineers, bankers, financial consultants, who had intimate knowledge and experience with builders and had provided services to the building industry.

## Why are you being asked to take part?

We are asking you to take part in this research study because of your experience, knowledge and understanding of pertinent issues related to the research problem. Your valuable input will be critical for understanding the central phenomenon in the study.

## Study Procedures:

If you decide to take part in this study, we wish to schedule interviews in the next thirty days. Those should last no more than 30-45 minutes. The research will be conducted at a time and place of your convenience, and they can be done in person, over the phone, or Skype/Facetime.. If you have time availability during that time frame, please confirm the most convenient time and place that you may be available. Prior to the interviews, a brief questionnaire will be e mailed to all participants that covers specific questions seeking answers, information and opinions that we believe are pertinent to the study.



Information collected through each interview may be digitally recorded for transcription purposes. The Digital recordings will be used to document the interviews and are strictly confidential. They can be accessed only by the researcher. Notes will also be taken during the interview process by the interviewer. If a follow-up discussion is required to clarify certain points, we hope that you will afford us the opportunity to do so. The digital recorded conversations will be kept and safeguarded for a period of five years after the submittal of the final study, after which they will be destroyed. Once the research is complete, copies of the study results will be made available to all participants if they choose to receive one.

### **Total Number of Participants**

About 30 individuals will take part in this USF study and they'll individually participate in the study at the site of their choosing.

### **Alternatives / Voluntary Participation / Withdrawal**

You do not have to participate in this research study and you can withdraw at any time.

### **Benefits**

Your participation in this study would benefit the homebuilding industry. There will be no additional benefits to the participants.

### **Risks or Discomfort**

This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study.

### **Compensation**

No payment or any other form of compensation will be paid for taking part in this study.

### **Costs**

Participants will not incur any costs as a result of participating in the study.

### **Conflict of Interest Statement**

No conflict of interest should exist as a result of the study. We do not expect the occurrence of any potential conflict of interest that will undermine the professional interests of the participants or the existence of a possibility of a clash between the PI self-interest and interviewees' interest.

## Privacy and Confidentiality

The research involves complete confidentiality. Only pseudonyms will be used in the research results. Any participant can withdraw from the study at any point for whatever reason. Should you decide to withdraw, any information provided to the study will be excluded.

We will keep your study records private and confidential. Certain people may need to see your study records. Anyone who looks at your records must keep them confidential. These individuals include:

- The research team, including the Principal Investigator, Faculty coordinator, and all other research staff.
- Certain individuals at the university who need to know more about the study, and individuals who provide oversight to ensure that we are doing the study in the right way.
- The USF Institutional Review Board (IRB) and related staff who have oversight responsibilities for this study, including staff in USF Research Integrity and Compliance.

You can get the answers to your questions, concerns, or complaints

If you have any questions, concerns or complaints about this study, or experience an unanticipated problem, call Ali Hasbini at 813-309-7698.

If you have questions about your rights as a participant in this study, or have complaints, concerns or issues you want to discuss with someone outside the research, call the USF IRB at (813) 974-5638 or contact by email at [RSCH-IRB@usf.edu](mailto:RSCH-IRB@usf.edu).

## Consent to Take Part in this Research Study

I freely give my consent to take part in this study. I understand that by signing this form I am agreeing to take part in research. I have received a copy of this form to take with me.

\_\_\_\_\_  
Signature of Person Taking Part in Study

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person Taking Part in Study

## Statement of Person Obtaining Informed Consent

I have carefully explained to the person taking part in the study what he or she can expect from their participation. I confirm that this research subject speaks the language that was used to explain this research and is receiving an informed consent form in their primary language. This research subject has provided legally effective informed consent.

\_\_\_\_\_  
Signature of Person obtaining Informed Consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person Obtaining Informed Consent

## **Interview Questions for Builders**

- 1.** Can you share with us a brief overview of your personal, educational and professional background?
- 2.** Can you describe the business activities and or projects that your company was involved in prior to the Great Recession of 2007?
- 3.** When was your building company established and how was it structured in terms of staffing key positions?
- 4.** Did you have a defined chain of command that was followed by staff?
- 5.** How would you describe your managerial style?
- 6.** How would you describe your personality as a builder?
- 7.** Can you share with us your past experiences with previous economic downturns?
- 8.** Looking back at the 2004-2007 time period, was there anything different about the way you managed the organization as compared to previous recessions?
- 9.** When the conditions in the housing market started to deteriorate, did you have any indications or feelings about how severe the economic conditions might get?
- 10.** Did you have any discussions with your lenders, financial advisers, staff, etc. about the difficult times that preceded the housing market crash of 2007? If so, what was the outcome of those discussions and did you implement any specific measures?

- 11.** When did you realize that it was a severe recession? Do you recall your thoughts at that time?
- 12.** What measures or strategies (if any) did you or your company implement to safeguard the business and mitigate potential risks prior to and at the onset of the 2007 recession?
- 13.** What measures (if any) did you or your company undertake to safeguard the business and mitigate potential risks during the 2007 recession?
- 14.** What additional measures you wish were or should have been implemented and why? What measures you wish you did not implement?
- 15.** From your experience in homebuilding, can you share with us any qualitative/non-financial factors that are critical for the success of a homebuilder? Examples (Personal, internal business, external business). Which ones do you believe may lead to failure?
- 16.** Can you describe or think of any qualitative, non-financial factors that may have contributed, influenced or played a big role in the success or failure of your business? Why do you believe that is the case?
- 17.** Did your company shift direction prior to the recession of 2007 into large projects, new ventures, new products, and or new investments?
- 18.** Did you delegate key decisions to your top managers? Did they have prior recession experience?

- 19.** Did you have any family members in key positions in the company? Did they have prior recession experience?
- 20.** Which area of the homebuilding do you enjoy managing the most?
- 21.** If we could turn back the clock, what changes would you make if you were to recreate the business? What would you have changed or done differently in dealing with the Great Recession?
- 22.** What would you consider to be the five major business causes of builder failure?
- 23.** Do you have any advice that you would recommend to a local homebuilder on the subject of recessions?
- 24.** Did your company belong to a trade association? Did you attend their meetings? Did you receive any information that was valuable concerning the recession?
- 25.** Are there any other relevant factors or ideas that you would like to share with us about the subject matter of this study? Anyone that you recommend that might provide us with more information on the subject?

### **Interview questions for key informants**

- 1.** Can you share with us your background and your professional experience with homebuilders and the building industry?
- 2.** How did you interact with those builders/clients? In what capacity? Can you briefly describe the different services/functions your organization performed for those builders/clients?
- 3.** Without mentioning names, can you recall builders/clients that survived the Great Recession of 2007, and those that failed?
- 4.** Looking back at the organization of those specific builders/clients that survived, what would you attribute their survival/success to? What led you to that conclusion?
- 5.** What inspired you the most about the leadership of those entities that succeeded i.e. personal attributes? Any peculiar traits that you observed? (Background, education, personality, staff, systems, product, managerial style)
- 6.** Looking back at the organization of those specific builders/clients that failed, what would you attribute their failure to? What led you to that conclusion?
- 7.** What inspired you the least about the leadership of those entities that failed i.e. personal attributes? Any peculiar traits that you observed? (Background, education, personality, staff, systems, product, managerial style)

8. From your perspective being on the outside, for those builders/clients that survived, why do you believe they were **prone to survive and succeed**? What led you to that conclusion? (Did they have better skills, better personalities, good managers, more experience, better business plan, discipline)
9. From your perspective being on the outside, for those builders that failed, were there anything different about those organizations that made them more **prone to failure**? What led you to that conclusion?
10. If we could turn back the clock, what advice, course of action would you have changed, recommended, or done differently in dealing with builders that failed?
11. Do you have any advice that you would recommend to a local homebuilder or to an entrepreneur entering the building business in order to succeed
12. Do you have any advice that you would recommend to a local homebuilder or to an entrepreneur entering the building business on the subject of economic downturns and dealing with them
13. Are there any other relevant factors or ideas that you would like to share with us about the subject matter of this study?

## **BIOGRAPHY**

Mohamad Ali Hasbini is the President and Chief executive Officer of Sunrise Homes Inc. and Transcend Development Corp. Over the past 30 years, he developed more than fifty residential communities and built thousands of homes in Hillsborough County, Florida. His companies are also involved in the development and construction of commercial projects. Hasbini received the USF Alumni Association's "Entrepreneur of the Year Award", and his companies were honored over the years by numerous awards from the Tampa Bay Builders Association.

Prior to his career in residential construction and real estate development, Hasbini taught the Principles and Managerial Accounting courses at USF. He also worked as a consultant and general manager for an overseas concern in the Middle East.

Hasbini earned an MBA with a concentration in Finance and a Bachelor of Science in Accounting, both from USF. He is a Certified Public Accountant and holds a Class "A" State Certified General Contractor license. He served on the USF Advisory Council for the School of Accountancy for many years and holds an emeritus position with the group.