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# Strategies Mortgage Loan Executives Need to Prequalify Mortgage Loan Applicants

Clement Olutayo Ogunyemi Walden University

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## Walden University

College of Management and Technology

This is to certify that the doctoral study by

Clement Ogunyemi

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Walden University 2017

#### Abstract

Strategies Mortgage Loan Executives Need to Prequalify Mortgage Loan Applicants

by

Clement Ogunyemi

MBA, Walden University, 2012

BS, Grambling State University, 2009

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

April 2017

Abstract

The mortgage industry played a major role in the recession faced by the U.S. economy in 2008, with approximately 8.8 million borrowers, or 10.8% of all homeowners, with negative equity in their homes. The purpose of this multiple case study was to explore strategies mortgage loan executives use to prequalify mortgage loan applicants. The target population consisted of 8 mortgage executives at 5 mortgage lending firms located in northwest Arkansas who demonstrated strategies to enhance the prequalification of mortgage loan applicants. The conceptual framework for the study was the theory of asymmetric information. In-depth, face-to-face interviews were conducted and the home loan toolkit and standard disclosure packets were reviewed. The data analysis technique used in this study followed Yin's 5-step data analysis process. Each interview response was interpreted, synthesized, and shared with the participant for validation during the follow-up member checking meeting. I coded the data to identify similarities in the data and prevalent themes, and to align the new data with previous literature. Based on methodological triangulation and thematic analysis, 4 themes emerged: counseling, government guidelines and regulation, disclosure, and literacy. Social change benefits include a more knowledgeable mortgage consumer that will benefit from enhanced education by the mortgage lender, which may result in lower mortgage defaults. This can increase homeowners' self-esteem, provide for community growth and development, and stabilize, and eventually grow, property tax revenues that could strengthen communities by expanding services and improving infrastructure.

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### Dedication

I am dedicating this study to my son, my lifeline, my guardian angel, Ethan Azariah Ogunyemi. You may not understand it now, but you have motivated me throughout everything and been the one constant in my life that can never fail me. You have been there for me without even knowing it. Thank you and Daddy will forever love you!

#### Acknowledgements

Proverbs 3:5–6, says, "Trust in the Lord with all your heart and lean not to your own understanding. But in all your ways acknowledge Him and He will direct your paths." To my father, Dr. Olatunde Ogunyemi, I know our relationship has not always been the best but you have ALWAYS been there to push me to be great! I told you a long time ago that I would one day also be Dr. Ogunyemi. Little did I know, those words spoken during my adolescence have now become my reality. Thanks for always forcing us to strive to be the best that we can be and to exceed expectations. Thank you for never allowing me to quit in anything in life, from sports to this doctoral program. To my beautiful, gentle hearted, patient, and kind mother. Thanks for all the calm words of comfort you have always given me. You have always told us that we can and will be successful and there was never a need to settle for barely getting by. You have always motivated me and kept me uplifted. You have shown me what TRUE sacrifice is. You have always been a wonderful sounding board and allow me to vent my frustrations, yell, scream, and cry. I love you so much and thank you for being such a wonderful friend and mother. Alyssia, Latoya, Joshua, Olaolu, Dan, and Xavier, I could not have asked for a better support system. All the times I have wanted to give up, I have looked to each of you for motivation. I look at all of you and realize that everything I do is for each of you. Thank you, I love you, and may this bond NEVER be broken. CLODAJ! MJ, I will forever love you. Thanks for the love and support! To all my friends, mentees, and fans, thank you for keeping me uplifted in prayer and with kind words. This one is for you!

## Table of Contents

List of Tablesv
Section 1: Foundation of the Study1
Background of the Problem1
Problem Statement
Purpose Statement2
Nature of the Study
Research Question4
Interview Questions4
Conceptual Framework
Asymmetric Information5
Operational Definitions7
Assumptions, Limitations, and Delimitations8
Assumptions
Limitations9
Delimitations10
Significance of the Study10
Contribution to Business Practice
Implications for Social Change11
Review of Academic and Professional Literature12
Asymmetric Information15

Theory of Planned Behavior	16
Housing Market (Precrisis)	17
Loan Origination & Borrower Selection	19
The Mortgage Crisis	21
Borrower Characteristics	23
Prime vs. Subprime Lending	25
Subprime Lending Crisis	28
Predatory Lending	32
Adjustable Rate Mortgages	35
Mortgage-Backed Securities	36
Financial Literacy	37
Importance of Financial Literacy	39
Financial Literacy and Mortgages	41
Understanding Mortgage Contracts	42
Transition and Summary	43
Section 2: The Project	45
Purpose Statement	45
Role of the Researcher	46
Participants	47
Research Method and Design	48
Method	49

Research Design	50
Population and Sampling	52
Ethical Research	54
Data Collection	55
Instruments	55
Data Collection Techniques	56
Data Organization Technique	59
Data Analysis Technique	60
Reliability and Validity	64
Credibility	64
Transition and Summary	67
Section 3: Application to Professional Practice and Implications for Social Change	69
Introduction	69
Presentation of Findings	70
Emergent Theme 1: Counseling	71
Emergent Theme 2: Government Guidelines and Regulation	78
Emergent Theme 3: Disclosure	84
Emergent Theme 4: Literacy	87
Application to Professional Practice	91
Implications for Social Change	93
Recommendations for Action	94

Recommendations for Further Research	96
Reflections	98
Conclusion	
References	101
Appendix: Interview Protocol	122

## List of Tables

Table 1	
Table 2	
Table 3	
Table 4	
Table 5	
Table 6	88

#### Section 1: Foundation of the Study

Changes in mortgage products and the channels through which borrowers obtained loans partly facilitated the collapse of the housing markets (Bostic et al., 2012). An estimated 1.5 million households defaulted on personal home loans and foreclosed in 2009 (Singh & Bruning, 2011). Traditionally, borrowers who received classroom and home study financial counseling had on average, a 24% reduction in delinquency rates (Aaberg & Delgadillo, 2013). Financial illiteracy partly contributed to increased household borrowing during the recent U.S. mortgage boom (Duca & Kumar, 2014).

#### **Background of the Problem**

The mortgage industry played a vital role in the recession faced by the U.S. economy in 2008 (Singh & Bruning, 2011). By March 2008, approximately 8.8 million borrowers had negative equity in their homes (Singh & Bruning, 2011). Docking (2011) reported that this number made up approximately 10.8% of all homeowners. By August 2008, 9.2% of all outstanding U.S. mortgages were delinquent or in foreclosure (Singh & Bruning, 2011). The financial environment is a complex system that is inherently flawed and unstable (Sau, 2013). A major contributory factor in the subprime collapse was the lack of consumer financial literacy.

Homeownership education began with the implementation of the 1968 Housing and Urban Development (HUD) Act, in which public and private organizations began providing counseling to homeowners (Aaberg & Delgadillo, 2013). Aaberg and Delgadillo (2013) discovered that everyone within the housing industry should play a role in improving the efficiency and fairness of home buying for consumers. Financial knowledge may improve a borrower's ability to manage credit, making them more attractive to lenders (Huston, 2012).

#### **Problem Statement**

Millions of U.S. residents lost homes to foreclosure during the Great Recession of 2007–2011 (Prohaska & Lichtenstein, 2014). There were 25 bank failures in the United States in 2008, which was compounded by the 40 bank collapses in 2009, and 157 bank closures in 2010 (Samad, 2012). The general business problem is that from 2005 to 2010, mortgage foreclosures steadily rose throughout the United States. The specific business problem is that mortgage loan executives often lack strategies to prequalify mortgage loan applicants.

#### **Purpose Statement**

The purpose of this qualitative, exploratory, multiple case study was to explore strategies mortgage loan executives use to prequalify mortgage loan applicants. The target population consisted of five financial institutions in northwest Arkansas, incorporating mortgage executives who possessed strategies that may enhance the prequalification of mortgage loan applicants. In this study, I interviewed eight mortgage loan executives in northwest Arkansas, who had worked in the mortgage banking industry for a minimum of 3 years. The results from this study might assist individuals in making informed mortgage loan decisions. Mortgage executives may be able to reduce foreclosures and foreclosure-related costs by providing better education to potential homebuyers. The implications for positive social change include the potential to reduce the blight caused by abandoned housing and improve the living conditions in affected communities.

#### Nature of the Study

There are three distinct methods for data collection and analysis: (a) qualitative, (b) quantitative, and (c) mixed methods (Marshall & Rossman, 2013). Researchers have used the quantitative method to compare variables and for the collection and comparison of numerical data (Staggers & Blaz, 2013). A quantitative methodology was not appropriate for the study because I did not test a theory or hypothesis and did not collect numerical data for inferential statistical testing (Hoare & Hoe, 2013). A mixed methodology could improve the overall strength of research than would typically be achieved by qualitative or quantitative methods. A mixed methodology was not suitable for this study because of time constraints related to concurrent or sequential research (Venkatesh, Brown, & Bala, 2013). Researchers use qualitative research to assess the attitudes, beliefs, preferences, and behaviors of the participants in their natural setting (Yilmaz, 2013). Marshall and Rossman (2013) asserted that other advantages of the qualitative study method over the quantitative method and mixed methods include the fact that the researcher does not establish assumptions a priori; instead, the researcher focuses on processes and outcomes and why they occur. A qualitative research method was suitable for this study to capture and understand the viewpoints of study participants.

Case study research facilitates holistic exploration of a problem within its context by using a variety of data sources (Hoon, 2013). A case study should be used to answer how and why questions, when the researcher cannot manipulate the behavior of those involved in the study, to uncover the contextual conditions because they are relevant to the problem under study, and/or when the boundaries between the phenomenon and context are not clear (Yin, 2012). I used a case study design for this context because the case study is an intensive description and analysis of a central problem (Baskarada, 2014).

Through phenomenology, the researcher is able to provide meaningful results about the lived experiences of participants in a balanced way and demonstrate how those experiences affect their personal perspective of the problem (Pereira, 2012). The intent of this study was not to explore the experiences of those involved in the phenomenon but to explore the strategies mortgage loan executives in northwest Arkansas use for adequate prequalification of mortgage loan applicants, thus potentially avoiding high foreclosure costs and lost profits incurred by northwest Arkansas banks. Narrative researchers report narrative stories of individual's experiences (Marshall & Rossman, 2013). Narrative research was not appropriate because the focus of the study was not on any one person. Ethnographers focus on the behavior and belief systems of a cultural group (Wilcox, 2012). An ethnographic design was not appropriate because my focus with this study was not on an entire culture to gain perspectives from those who live in that culture.

#### **Research Question**

The central question for the study was: What strategies do mortgage loan executives use to prequalify mortgage loan applicants?

#### **Interview Questions**

When interviewing participants, I asked the following open-ended questions:

- 1. What prequalification criteria, if any, does your institution employ when screening new applicants for mortgage loans?
- 2. What sort of formal training or education does your institution provide to mortgage applicants?
- 3. How has your experience with the financial and mortgage crises impacted your ideas about consumer financial literacy?
- 4. How has the mortgage crisis affected your business?
- 5. What are the main causes of default and foreclosure? Describe the causes if they are different for different classes of people.
- 6. What would you say is the level of financial understanding of your customers who are signing new mortgage contracts?
- 7. What type of learning materials do you provide for your potential borrowers to better understand how mortgage products work?
- 8. What other information do you see pertinent that has not been discussed in this interview?

#### **Conceptual Framework**

#### **Asymmetric Information**

Three economists, Akerlof, Spence, and Stiglitz, developed the theory of asymmetric information between 1970 and 1973 to investigate and explain the lack of information available to borrowers prior to signing long-term mortgage contracts (Kau, Keenan, Lyubimov, & Slawson, 2012). Asymmetric information is distinguished by whether there is adverse selection or moral hazard, often called hidden knowledge or unseen action, respectively (Kau et al., 2012). The mortgage crisis and the subsequent seizing up of world credit markets in late 2008 led to severe adverse selection problems, when potential purchasers of credit instruments came to the abrupt realization that they had significantly less information about the prospect of repayment of such loans than the issuers did (Kau et al., 2012). The theory of information asymmetry is relevant to this study because lenders need to possess enough information about the borrower to make an informed decision about whether or not to provide mortgage services. Through the theory, researchers are able to better explain and understand the importance of providing adequate information to potential borrowers.

#### **Theory of Planned Behavior**

Theorists, economists, and researchers considered the theory of planned behavior one of the most effective socio-psychological theories, as it explains the attitude-behavior relationship (Acarli & Kasap, 2015). The theory of planned behavior was designed by Ajzen in 1988 to predict human behavior (Asare, 2015). Researchers use the theory of planned behavior to predict factors affecting intention of the behavior (Acarli & Kasap, 2015). According to the theory of planned behavior, in order for a behavior to come into being, there must be intent towards that very behavior (Acarli & Kasap, 2015). Chang-Ik and Hee Sun (2015) asserted the theory of planned behavior applies to various behavioral intentions. When borrowers obtain a loan, they risk the inability to make regular monthly payments and the risk of changes in property values (Cohen, 2012; Prather, Lin, & Chu, 2013).

#### **Operational Definitions**

*Adjustable-rate mortgage (ARM):* ARMs are mortgages in which the contractual interest rate adjusts periodically with a specified market rate (Johnson & Li, 2014). ARMs became popular during the high-interest-rate environment of the early 1980s (Travers, 2010). Adjustable rate mortgages can be variable-rate loans or adjustable mortgage loans (Martinez, 2009).

*Consumer debt:* Consumer debt is outstanding debt used to fund consumption rather than investment. Consumer debts are generally spread out over many debt accounts (Gal & McShane, 2012).

*Financial crisis:* A financial crisis occurs when there is a decline in asset prices, panic, and exchange rates (Frankel & Saravelos, 2012).

*Financial literacy:* Financial literacy is a measure of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances through appropriate short-term decision-making and sound, long-range financial planning, while mindful of events and changing economic conditions (Tokar, 2015)

*Mortgage-backed securities:* The asset securitization process by which the lender transforms a pool of assets into one or more securities (Park, 2013). The underlying economic rationale behind mortgage-backed securities is diversification (Chang & Chen, 2013).

*Mortgage default:* A mortgage default occurs when a borrower can no longer afford to pay his or her mortgage (Seller & Walden, 2014). A strategic mortgage default

occurs when a borrower has the means to make payments on the mortgage but chooses not to (Seller & Walden, 2014).

*Mortgage foreclosure:* During a mortgage foreclosure the bank takes possession of a mortgaged property as a result of the borrower's inability to maintain the recurring payments (Brevoort & Cooper, 2013).

*Predatory lending:* Predatory lending is the use of unfair lending terms and tactics that limit or misrepresent information (Phillips, 2009). Predatory lending is the use of lending practices that take advantage of borrowers who lack the necessary financial knowledge and sophistication to protect themselves against unethical and illegal lending standards and practices (Demyanyk & Van Hemert, 2011).

*Subprime loans:* Subprime loans are those made to borrowers who may have blemished credit histories and/or low incomes. Subprime loans were originally created to help make credit available to individuals who were previously not considered creditworthy (Makarov & Plantin, 2013).

#### Assumptions, Limitations, and Delimitations

#### Assumptions

Philosophical assumptions may be useful for interpretations that are relevant to improved findings (Bennell et al., 2012). Researcher assumptions can influence the conduct of research (Kirkwood & Price, 2013). Assumptions are propositions accepted as true, or at least plausible, which could have a significant influence on the findings of the study (Bernard, 2013). One assumption was that the participants would be true representatives of the population who could answer questions on lending practices and default rates and the impact financial literacy may have. The second main assumption was that participants would share information openly and freely in order to achieve the objectives of the study. Thirdly, I assumed that all responses from interviews were correct and true. The fourth assumption was that the results of this study might provide opportunities for other researchers to understand the research topic.

#### Limitations

Limitations in research commonly originate from the study of one geographical region, a small sample size, or limitations in data availability (Coffie, 2013). Using a qualitative approach for this study created limitations because I did not use quantitative metrics to obtain numeric results. Results of qualitative research can be subjective in nature, and thus, be prone to error (Su & Ni, 2013).

This study was not exhaustive because the data collected throughout its duration was limited to a small sample size of eight mortgage executives in northwest Arkansas. The cultural and economic constraints of the study may limit the application of its results to broader geographic areas. Another limitation faced involved the ability to interpret the responses of participants in an objective manner. Response data could be biased or distorted to such an extent that the results become invalid (Seidman, 2013). Maintaining the anonymity of participants encouraged them to provide honest answers that resulted in accurately represented information. Respondents could have distorted answers to avoid varying from the prevailing perceptions of the group. Respondents could have also provided answers that overemphasized desirable outcomes and underemphasized undesirable outcomes. The results of the study were further limited to the personal

experience of participants. Other limitations included time constraints to collect data, access to participants, the complexity of the changing environment, and the timeliness of data interpretation.

#### Delimitations

Delimitations involve narrowing the study scope to include only those data sources that would best contribute to the central research question or detail what the study did not encompass (Kenny, 2012). Delimitations aid the researcher in refining the scope of research by identifying the exclusions from the study (Alina, Mathis, & Oriol, 2012). For the purposes of this study, participants were eight mortgage loan executives in northwest Arkansas who had knowledge about mortgage applicants' borrowing knowledge and behaviors and the impact such knowledge may have on lost profits and default costs. I conducted face-to-face interviews as the primary method of gathering data. The unbiased perceptions and experiences of mortgage executives were fundamental to an accurate synthesis of the information received.

#### Significance of the Study

#### **Contribution to Business Practice**

This study may be of significance because mortgage lenders and banking institutions in northwest Arkansas need to understand the impact of increasing consumer financial literacy on applicants' understanding of complex financial documents and the inherent costs of mortgage foreclosures imposed on the financial institution (Huston, 2012). In lieu of the increased adverse impacts of residential home foreclosures on mortgage lending institutions, I explored the role mortgage executives should play in developing strategies to prequalify mortgage loan applicants. The results obtained through this doctoral research study may contribute to a better understanding of the role mortgage executives play in providing financial education. My central goal was that the findings from this study would offer information to help mortgage loan executives provide financial education to mortgage loan applicants prior to the application process in an attempt to help decrease foreclosure-related costs to banks, lost profits, and potential bank failures. If mortgage executives prescreen mortgage loan applicants, the industry could reduce financial losses brought on by foreclosures and experience sustainability. To avoid another mortgage crisis, some positive changes and exchanges of knowledge may need to occur. Mortgage market failures indicate the need for the better evaluation of borrowers who are applying for mortgage loans.

#### **Implications for Social Change**

Social change can occur when individuals possess the opportunities and resources necessary to understand the long-term contracts they are entering. Residential mortgage lenders have participated in predatory lending practices throughout the years (Agarwal et al., 2014). Useful mortgage information can be essential for those purchasing a home (Agarwal et al., 2014). Having the knowledge about the various loan types and the risks associated with each would help potential homeowners better prepare themselves before applying for a mortgage loan. Positive social change occurs when informed borrowers avoid defaulting on personal home loans. Financially literate individuals have the ability and confidence to manage their personal finances by making the appropriate short and long-term financial planning decisions while planning for life events and changing

economic conditions (Tokar, 2015). Better prequalification standards may promote better consumer financial awareness and confidence in applying for quality mortgage loans. Raising awareness around the problem and then addressing it should help to promote social change, as I sought to do with this study.

#### **Review of Academic and Professional Literature**

My intent with this qualitative, exploratory, multiple case study was to explore strategies mortgage loan executives need to prequalify mortgage loan applicants. The overarching question was: What strategies do mortgage loan executives need to prequalify mortgage loan applicants? I sought to gain a more concrete understanding of the causes of the foreclosure and banking crisis, subprime and predatory lending, various mortgage products and services, and financial literacy and its role in consumer understanding and the housing crisis. An exhaustive literature review requires a critical analysis of the literature on which to base conclusions and inform professional practice (Kowalczyk & Truluck, 2013). My primary objective with this comprehensive review of the literature was to explore and synthesize prior literature to understand the foreclosure crisis that began in 2006 and the impact of financial literacy on individuals' understanding of complex financial documents and jargon. The purpose of the literature review was to provide results of previous studies related to this study (Trotter, 2012).

I conducted a review of the literature using scholarly peer-reviewed journals and dissertations. The strategies used to search for relevant literature included accessing the Walden University Library to search the databases of ABI/INFORM, Business Source Complete, Emerald, Academic Search Complete, Business Source Complete, and

Thoreau Multiple Databases to locate peer-reviewed academic and professional journals, Walden University dissertations, and books related to research methodology and design, namely qualitative research and case study research design. The scholarly peer-reviewed journal publications I used in this literature review included American Economic Review, Financial Services Review, Journal of Business & Technology Law, International Journal of Market Research, The Economic Journal, Atlantic Economic Journal, Marguette Law Review, Academy of Accounting & Financial Studies Journal, International Journal of Business & Finance Research, Tulane Law Review, The Journal of Economic History, The Economic and Labour Relations Review, Review of Financial Studies, Journal of Corporate Treasury Management, Journal of Applied Finance, International Real Estate Review, Griffith Law Review, Business & Society Review, International Journal of Market Research, Academy of Banking Studies Journal, Journal of Business & Economics, International Journal of Consumer Studies, International Journal of Economics and Finance, Financial Markets, Institutions & Instruments, Journal of Real Estate Finance & Economics, Southern Economic Journal, Quarterly Journal of Economics, Journal of Family and Economic Issues, Harvard Journal of Law & Public Policy, and International Business Research. Key word search terms included mortgage crisis, financial literacy and mortgages, subprime lending, predatory lending, mortgages and finance, case study research design, qualitative research, financial crisis, subprime mortgages, mortgage foreclosures, bank failures, financial systems failure, mortgage delinquency, global economic meltdown, consumer debt, mortgage contract,

default risk, low underwriting standards, lax lending standards, information asymmetry, housing bubble, adjustable rate mortgages, and mortgage-backed securities.

I thoroughly reviewed each article to identify and use further references relevant to this study. The 151 references that comprise this study included 129 scholarly peerreviewed articles representing 85.43% of the total, 11 nonpeer reviewed articles representing 7.28%, 10 books representing 6.62%, and one government publication representing 0.66%. The total references used that were published within the last 5 years were 129, which are 85.43% of the total number. The literature review will contain 68 references, with 47 references published within the past 5 years, representing 69.1% of total used, and 60 references from scholarly peer-reviewed sources, representing 88.2%.

I began the literature review process by exploring the theory of planned behavior. Previous researchers (e.g., Su & Ni, 2013) have asserted that the theory of planned behavior can be used to understand the constructs which influence individuals' behavioral intent. Researchers have found that when borrowers obtain a loan, they risk the inability to make regular monthly payments and the risk of changes in property values (Cohen, 2012; Prather, Lin, & Chu, 2013). Faulty mortgage contracts led to rises in defaults and foreclosures (Aalbers, 2009; Lander, Barker, Zabelina, & Williams, 2009). Martinez (2009) and Ross and Squires (2011) discussed how the economic crisis fueled the rise in residential foreclosures, thus making it the largest socio-politico-economical event since the 1950s. Bostic et al. (2012), Ross and Squires (2011), and Smith (2010) attributed much of the mortgage crisis to relaxed underwriting and lending standards. Docking (2011) further asserted that during loan origination, lenders failed to verify pertinent pieces of information about the borrower's ability to repay the loan.

Makarov and Plantin (2013), Stanger (2012), and Travers (2010) found that subprime lending is a result of credit being made more readily available to individuals who would not normally qualify for credit. Throughout the subprime crisis, the number of subprime foreclosures increased exponentially (Xudong & Bostic, 2009). Financial institutions and lenders began to exploit less knowledgeable borrowers and offer products that were not thoroughly understood by borrowers (Ament, 2009; Cohen, 2012; Lander et al., 2009). Aalbers (2009) further asserted that unsophisticated and vulnerable consumers often became victims to predatory tactics by lenders. Research indicated that many consumers lacked the skills necessary to evaluate the best means through which to borrow money and how to manage financial risks (Ibrahim & Alqaydi, 2013; Martinez, 2009; Taylor & Wagland, 2013). Financial literacy is the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being (Alhenawi & Rlkhal, 2013; Hastings, Madrian, & Skimmyhorn, 2013; Taylor & Wagland, 2013).

#### **Asymmetric Information**

Economists have convincingly argued that not only can asymmetric information in a possible transaction affect the participants, but, if systematically present, can destroy the usual efficiency properties of markets (Kau et al., 2012). When lenders acquire more personal knowledge about the borrower, the lender is then not at such a great informational disadvantage. Better performance can be expected if the originator continues to bear a substantial portion of the risk arising from a failure to act prudently with regard to the approval process (Kau et al., 2012).

Banks that do not take the necessary steps to mitigate information asymmetries could experience adverse selection when screening applicants. Adverse selection in the mortgage market occurs when the originator does not know the full characteristics of the borrower (Kau et al., 2012). Banks typically screened and monitored borrowers to minimize the costs of adverse selection and moral hazard (Marinescu & Manafi, 2015). Failure to adequately screen for good applicants could be costly for lenders. The borrower chooses a contract based on the offerings of the originator. Borrowers more prone to default tend to take out larger loans (Kau et al., 2012). Borrowers who expost were riskier, put less money into down payments, and pay higher contract rates (Kau et al., 2012).

#### **Theory of Planned Behavior**

The theory of planned behavior was designed by Icek Ajzen in 1988 to predict human behavior and to predict factors affecting intention of the behavior (Acarli & Kasap, 2015; Asare, 2015). Su and Ni (2013) asserted that three constructs affect individual's behavior: attitudes toward the behavior, subjective norms, and perceived behavioral control. The central theme of the theory of planned behavior is the individual's intention to perform a given action (Acarli & Kasap, 2015). The theory of planned behavior has been used to show that people's choices are affected by their norms, attitude, perceived behavioral control, and behavioral intentions (Koropp, Grichnik, Kellermanns, & Stanley, 2014). There are two constructs that influence behavioral intention: (a) the individual's attitudes toward particular behavior which refers to positive or negative feelings on specific behavior and (b) subjective norms which refer to the individual's perceived social pressure on a specific behavior (Su & Ni, 2013). The theory of planned behavior was relevant to this study because lenders must first understand the importance of financial literacy and have access to adequate resources to the extent that lenders perceive financial literacy as a natural subject (Teo et al., 2011).

#### **Housing Market (Precrisis)**

Rapid surges in real housing prices, both in the United States and in foreign countries, in the late 1990s and early 2000s implicated signs of widespread personal and institutional bankruptcies and an international recession (Kemme & Roy, 2012). The recession created an unstable environment within the housing market. The rapid increase in real house prices caused borrowers to obtain larger loans (Aalbers, 2009a). The organization of the mortgage market led to rising defaults and foreclosures year after year (Aalbers, 2009b). Sharp increases in housing prices in the early 2000s preceded the subprime mortgage crisis (Goetzmann, Peng, & Yen, 2012)

The housing boom began in 2000, and by 2004, more Americans had become homeowners than any other time in history (Phillips, 2009). Americans were presumably living the "American dream". Conversely, during this boom cycle, housing price increases considerably outpaced household income (LaCour-Little & Yang, 2010). During the period beginning January 2000 through December 2005, the housing price index more than doubled, while the median household income increased by merely 10% (LaCour-Little & Yang, 2010).

At the onset of the mortgage crisis in 2003, decreasing interest rates attracted potential homebuyers to the market that led to a boom, which subsequently created a bubble (Adjei, 2013). One of the motivating factors in the surge in housing demand over the last decade was low interest rates (MacDonald & Winson-Geideman, 2012). Historically, wishful thinking of unending future increases in asset prices fueled global economic booms (Kemme & Roy, 2012). Economic booms are cyclical in nature and cannot be sustainable. The steady influx of liquidity to sustain the growing market fueled the housing bubble (Aalbers, 2009b). The rapid rise in real estate values to unsustainable levels characterized the real estate bubble (Travers, 2010). The volatility of a bubble market could lead to that bubble eventually bursting and beginning a downward spiral. Several factors including price volatility, increasing interest rates, lax underwriting standards, predatory lending, fraud, and the borrower's lack of due diligence created a lending environment where homeowners ended up owing more money on their homes than they were worth, while trapping homeowners in loans that they could not afford to repay (Smith, 2010). Granting mortgage loan applicants the pertinent information about the inherent risks of losing their homes to foreclosure may be critical to helping them avoid undervaluing the risks involved and reevaluating their options (Collins, 2014).

In the summer of 2004, short-term interest rates increased significantly, causing the housing bubble to burst and the subsequent drop in home sales and housing prices (Phillips, 2009). One cause of housing price drops was the structurally faltering economy (Aalbers, 2009b). Pessimism about rising default rates and the escalating subprime mortgage foreclosures created the credit crunch, paralyzing the financial system and leading to a global economic calamity (Chang & Chen, 2013).

#### **Loan Origination & Borrower Selection**

Many Americans view purchasing a home as one of the most difficult and frustrating financial decisions of their lives. While the purchase of a house has been the most important investment decision made by households during the owner's lifetime, the value of the house typically exceeded the net worth of the household (Cocco, 2013). Aalbers (2009a) defined a mortgage as the conveyance of an interest in real property presented as security for the repayment of a debt. A mortgage allows the lender the contingent property rights over the assets of the debtors, and in the event of a default, the lender can activate those rights (Aalbers, 2009a). A mortgage is money loaned as security on the property owned by a borrower that will allow that borrower to purchase the property (Aalbers, 2009b). During mortgage contract origination, the borrower is required to make regular scheduled monthly payments (Sarmiento, 2012).

Historically, banks, mortgage companies, and financial institutions would refuse loans to individuals with poor, little, or no credit, or with low income, considering them at-risk borrowers (Makarov &Plantin, 2013). With mortgage underwriting standards on the decline because of the lack of appropriate review and documentation, proof of income, proof of employment, and proof of owned assets was no longer necessary (Docking, 2011). During loan origination, mortgage brokers would tend to originate lower-quality loans and low-documentation loans (Jiang, Nelson, & Vytlacil, 2014). Many of these loans were deceptive, and thus inherently unstable, leading to late payments, delinquencies, foreclosures, and loss of homes (Ross & Squires, 2011).

Credit risk management is a key banking system to control nonperforming loans (Arora & Singh, 2015). Banks need efficient alignment of credit strategy, credit policy and processes, and efficient channels of sharing risk information to mitigate credit risk (Arora & Singh, 2015). One of the most important credit risk factors is the borrower's ability to make regular monthly payments, and the borrower should not default if monthly payments are affordable (Prather et al., 2013). In a typical residential mortgage contract, the lender, or creditor, is entitled to receive repayment of principal and interest of the loan, while the borrower, or owner, assumes the risk of any changes in the value of the property (Cohen, 2012).

The expansion of some mortgage products combined with weakening underwriting standards contributed to an increase in loans that were unaffordable or put borrowers into a financial bind if home values fell (Bostic et al., 2012). By September 2008, 20% of Americans owed more on their mortgages than the homes were worth (Ngassam, 2013). Relaxed underwriting standards created an environment through which mortgage brokers could sell loans at higher than average risks to borrowers (Smith, 2010). Ross and Squires (2011) further asserted that as the structure of the mortgage market and range of product offerings changed, regulation became weakened, resulting in an inflated housing bubble that eventually burst, consequently causing the foreclosure and economic crises.

#### The Mortgage Crisis

During the downturn of the economy in 2008, total losses suffered by U.S. residential mortgage loans fell between \$750 billion \$2 trillion (Adelson, 2013). The sudden rise in U.S. subprime mortgage delinquencies cut market value and threatened financial institutions (Matthews & Driver, 2013). Over the last two decades, the U.S. economy experienced an increase in mortgage defaults and personal bankruptcies (Desai, Elliehausen, & Steinbuks, 2013). The U.S. mortgage epidemic fueled both the U.S. and global financial crisis. Several factors fueled this international epidemic including predatory lending practices, mortgage fraud, unethical practices, unclear or lax regulations, and conflicts of interest (Lander et al., 2009).

A default occurs when a mortgage loan is delinquent for more than 90 days (Sarmiento, 2012). The subject of mortgage defaults has been one of the most widely studied topics related to mortgage lending (Voicu, Jacob, Rengert, & Fang, 2012). The debt crisis, marked by sharp increases in delinquencies, foreclosures, and defaults, brought to light the prevalence of the subprime mortgage market and its devastating effects (Perry & Motley, 2009). The financial crisis began with the prevalent increase in subprime mortgage foreclosures within the United States (Martinez, 2009). Approximately 7.5 million Americans were upside down on personal mortgages, owing more than the property is actually worth, with that number expected to increase by 2.1 million (Martinez, 2009).

The sharp increase in subprime mortgage defaults added over 500,000 homes to the housing supply (Agarwal, Ambrose, Chomsisengphet, & Sanders, 2012). The spike in housing price appreciation prior to the subprime crisis significantly reduced borrowers' risk-aversion (Liu & Sing, 2013). The rapid increase in the number of subprime mortgages offered by various financial institutions, in conjunction with the U.S. housing market crash in late 2006 and early 2007 was largely responsible for the U.S. Great Recession (Travers, 2010). Throughout 2007, U.S. foreclosure proceedings reached approximately 1.5 million homes, representing a 53% increase from 2006 (Gilbert, 2011). In 2007, the foreclosure rate more than doubled, with subprime mortgages comprising more than half of the foreclosures (Perry & Motley, 2009).

In 2008, more than 3 million U.S. citizens lost homes due to foreclosures, and as a result of the economic crisis, 8 to 10 million homes would enter foreclosure in 2009 (Ross & Squires, 2011). By the second quarter of 2008, the number of foreclosure listings increased and reached a peak of 1.2 trillion homes in foreclosure (Martinez, 2009). Approximately 1.5 million households defaulted on their home loans, which led to foreclosures in 2009 (Singh & Bruning, 2011).

Lenders witnessed the value of collateral decline with the decline in housing prices. While declining housing prices became the biggest contributor to the mortgage crisis including default and foreclosure rates, the advent of subprime mortgage products played an integral role in the crisis (LaCour-Little & Yang, 2010). The financial crisis began with the U.S. subprime mortgage market in 2008, with effects spreading to all the world's financial markets (Shrivastava & Busch, 2013).

#### **Borrower Characteristics**

Typically, borrowers who did not qualify for prime mortgages had to obtain mortgages that required obtaining insurance through high-priced subprime loans (Xu & Zhang, 2014). During the housing crisis, the government treated houses as commodities (Gupta, 2014). The mortgage debacle drained wealth from consumers and eroded the strength of the banking sector, thus putting considerable pressure on U.S. homeowners (Singh & Bruning, 2011). The prevailing regulatory conditions and implied financial liberalization gave way to the housing bubble phenomenon driven primarily by the overoptimism of the new era where home prices would rise (Kemme & Roy, 2012).

When the housing bubble burst, homeowners discovered that their homes were worth less than previously expected and many of these homeowners had received large loans with low down payments and high-interest rates (Aalbers, 2009a). Such rates had the tendency to affect firms' and households' demand for credit (Alan & Loranth, 2013). The nature of the housing crisis caused homeowners to have feelings of mistrust, betrayal, shame, and embarrassment when facing the risk of foreclosure (Ross & Squires, 2011). For potential homebuyers, making the best mortgage choice was complex and dependent upon a plethora of factors which included but was not limited to (a) the marginal tax rate, (b) risk tolerance, (c) projected length of homeownership, and (d) investment opportunities (Prather et al., 2013).

The collapse of the home lending market caused the value of securities tied to real estate to plummet, subsequently damaging financial institutions (Singh & Bruning, 2011). During the recession, housing prices fell by 20% from their peak in 2006, with

total home equity dropping from \$13 trillion to \$8.8 trillion (Singh & Bruning, 2011). The fall in housing prices adversely affected household wealth and consumption (Liao, Zhao, & Sing, 2014). Lenders began to act recklessly, believing home prices would continue to rise indefinitely, and credit would remain inexpensive and readily accessible to borrowers, thus allowing borrowers to refinance homes if necessary (Travers, 2010). In 2007, home prices began to plummet, while subprime borrowers became unable to keep up with their mortgage payments (Travers, 2010). The subprime credit crisis began in 2006 when default rates and foreclosures took a sharp rise, and housing prices fell (Aalbers, 2009b). The massive and steady declines in housing prices led to default and foreclosures reaching record levels (LaCour-Little & Yang, 2010).

The increased capital that led to the advent of subprime lending and the changing mortgage market created information asymmetries (Ament, 2009). Information asymmetries between lenders and inexperienced borrowers existed because of borrowers' disconnect from the credit market (Ament, 2009). Borrowers typically lacked the necessary information to effectively and efficiently compare various mortgage products. In turn, this lack of knowledge made it difficult for them to ascertain whether to keep shopping for better products or to accept the first offer (Martinez, 2009). Nontransparent contract terms such as teaser rates, balloon payments, prepayment penalties, and negative amortization have lured potential lenders to undertake loans that are not befitting to their financial situations (Xu, 2014).

#### **Prime vs. Subprime Lending**

Studies have shown that there is a strong correlation between the increase in home foreclosures and the subprime mortgage lending market (Singh & Bruning, 2011). In the mid-90s and 2000s, subprime mortgages showed a significant increase (Singh & Bruning, 2011). The overall market share of the high-risk subprime loans grew exponentially from 5.4% to 20.1% over the 5-year period from 2001 to 2006 (Smith, 2010).

Widespread extensions of credit and the restructuring of the mortgage industry led to rapidly increasing lending over the last decade, particularly in predominantly lowincome neighborhoods (Ross & Squires, 2011). Fundamental structural changes in the U.S. housing market made homeownership increasingly unstable (Ross & Squires, 2011). Mortgage lending split into two markets: the primary market (where loans were made directly to borrowers) and the secondary market (where loans were purchased and repackaged into mortgage-backed securities) (Ross & Squires, 2011).

In the primary market, mortgages originate between the borrower and the lender (Aalbers, 2009b). Ideally, potential borrowers sought out mortgage loans within the primary marketplace (Smith & Hevener, 2014). Mortgagers wrote prime loans for individuals with high credit ratings and sufficient funds to qualify for the loan (Smith & Hevener, 2014). Between 2004 and 2008, banks originated approximately 12.6% of primary mortgage loans with a second loan (Eriksen, Kau, & Keenan, 2013).

The secondary marketplace gave way to exotic mortgage products such as subprime lending and predatory lending that peaked in 2006 (Ross & Squires, 2011). An influx of capital from the vertical mortgage market allowed lenders to be free to extend loans to subprime borrowers and, as a result, allowed lenders to charge higher fees and interest rates than that of prime mortgages (Ament, 2009). Investors who were willing to buy into such products and securities initiated a considerable influx of capital into the subprime mortgage market (Martinez, 2009).

A report provided by the Mortgage Bankers Association indicated that as early as 2002, there were signs of a collapse with delinquency rates five and a half times higher than that of prime mortgages and the foreclosure initiation rate for subprime loans was greater than ten times that of prime loans (Smith, 2010). Although securitization should improve the efficiency of capital markets by reducing risks, the outbreak of the subprime mortgage crisis caused investors to question the benefits of securitization (Peicuti, 2013). Securitization is the creation of information-insensitive securities (Park, 2013). Prior to the mortgage crisis, many lenders extended subprime mortgages for 100% of the property value, with 80% of subprime loans carrying adjustable rates (Travers, 2010).

Reports conducted by the Mortgage Bankers Association indicated that subprime foreclosures far exceed those of prime mortgages (Xudong & Bostic, 2009). Less creditworthy borrowers obtained subprime mortgages at higher than traditional loan interest rates (Travers, 2010). HUDhelped design subprime loans for individuals with blemished or limited credit histories, and as such, the loans were issued at higher interest rates than prime loans to offset the added credit risk (Gilbert, 2011). The subprime mortgage market served borrowers with higher repayment risks than are generally acceptable in the prime mortgage market (Xudong & Bostic, 2009). During the early 2000s, creditors created more refined techniques for assessing and pricing the credit risk of borrowers, which in essence expanded the market for borrowers with poor credit to gain access to the mortgage market (Collins, 2014). For individuals with lower income, subprime lending may have been the only form of credit available because of the lower than average credit scores (Stanger, 2012). Such a rapid expansion of access to the credit market was unprecedented and opened homeownership to classes of people for the first time (Collins, 2014).

Traditionally, the minimum lending standards requested of borrowers included the income of the borrower, payment history, and down payment amount (Martinez, 2009). Subprime lenders ignored the standard requirements and utilized a risk-based analysis of the borrower's credit scores to ascertain the interest rate imposed upon the borrower (Martinez, 2009). Causes of high delinquency rates and subsequent subprime crisis included biased government housing policies, irrational house price behavior, and lax lending standards (Dell'arricia, Igan, & Laeven, 2012). Standardized underwriting guidelines usually caution against lending to risky borrowers, which were those with Fair Isaac Corporation (FICO) credit scores below 620 (Keys et al., 2010). Subprime lenders tended to disregard the borrower's income and assets and only looked at the credit score to determine the borrower's ability to repay his or her loan (Martinez, 2009). Lax standards led to frail or non-existent income and asset documentation (Jiang et al., 2014).

Typically, subprime mortgage interest rates are higher than that of prime mortgages in order to compensate the lender for the higher default risk associated with the subprime loans (Demyanyk & Van Hemert, 2011). Subprime mortgages tend to have higher than average interest rates and fees, with interest rates approaching 10-11% and fees exceeding \$10,000 (Travers, 2010). Lam and Chen (2012) stated that the Depository Institutions Deregulatory and Monetary Control Act of 1980 created lax usury laws on interest rates, which in turn allowed lending institutions to charge higher than usual interest rates on mortgages for those potential homeowners with subpar credit histories.

# **Subprime Lending Crisis**

One of the primary functions of the financial system was to make credit widely available to potential borrowers (Makarov & Plantin, 2013). The unexpected surplus of losses suffered by mortgages and mortgage-related securities initiated the financial crisis (An, Deng, Rosenblatt, & Yao, 2012). Many believed that the rapid growth of the subprime mortgage market represented advances towards more readily available credit because banks began providing credit to less credit-worthy individuals (Makarov & Plantin, 2013). The subprime crisis essentially froze the credit markets (Kim, Park, & Noh, 2013). Subprime mortgage loans assisted borrowers with subpar credit histories or other adverse circumstances that render them ineligible for lower-rate "prime" mortgages (Perry & Motley, 2009). For the borrower, the key distinction between prime and subprime mortgages was the higher upfront and continuing costs associated with subprime loans (Keys et al., 2010).

The subprime mortgage crisis has been an ongoing real estate and financial crisis caused by a substantial increase in mortgage delinquencies and foreclosures in the United States, with unfavorable consequences for banks and financial markets around the globe (Singh & Bruning, 2011). During the financial crisis, banks, and financial institutions were bought out and nationalized (Aalbers, 2009b). Foreclosures suffered by banks had resulted in losses in the hundreds of billions of dollars (Martinez, 2009). The subprime crisis, beginning in 2006, was characterized by an unusually large number of subprime mortgage originations between 2006 and 2007 becoming delinquent or in foreclosure months later (Demyanyk & Van Hemert, 2011). The increase in mortgage delinquencies led to bigger downturns in home prices, thus causing lenders to reduce lending which effectively froze the credit markets (Travers, 2010).

Subprime loans made credit available to communities where credit had not typically been readily available (Aalbers, 2009b). The influx of foreign cash into the United States coupled with low-interest rates disseminated by the Federal Reserve Bank drove down interest rates and drove banks to compete aggressively to attract new borrowers (Travers, 2010). Lower short-term interest rates and higher expected price increases led to a surge of funds into the residential marketplace that resulted in an increase in home loans (LaCour-Little & Yang, 2010). Subprime loans are considered equity stripping because of the high fees and interest rates imposed by lenders on borrowers knowing that the borrower most likely will not be able to repay the loan, with some borrowers falling behind on payments and defaulting within months (Martinez, 2009).

Lax underwriting standards associated with the subprime mortgage market caused difficulties in the housing market (Spahr & Sunderman, 2014; Xudong & Bostic, 2009). As subprime mortgages grew in popularity, the standards to qualify for subprime mortgages fell, allowing for an influx of borrowers (Travers, 2010). Elements of

subprime lending included significant tightening of loan requirements for applicants, lenders tightening credit, large layoffs and bankruptcies within lending companies, large investment losses reaching the billions, monetary bailouts and interest rate reductions, and stock market volatility (Gilbert, 2011). In 2007, the increased awareness of the subprime mortgage problems led to the tightening of credit by lending institutions (Demyanyk & Van Hemert, 2011). The general premise was that banks issued more credit than borrowers could afford to repay (Makarov & Plantin, 2013). The surge in delinquencies led to a severe financial crisis, thus placing subprime lending practices under scrutiny (Makarov & Plantin, 2013). The subprime mortgage crisis was a result of several market imperfections, including asymmetric information and sub-optimal choices for consumers (Perry & Motley, 2009).

Banks denied some borrowers' previous loan applications and, as a result, those borrowers accepted the first offer extended by the subprime lender even if the terms are predatory in nature to avoid further rejection (Martinez, 2009). Borrowers were offered subprime mortgages without confirming their income, with many borrowers who were able to obtain subprime loans having credit scores of less than 580 (Travers, 2010).

The typical characteristics of subprime borrowers included recent delinquencies, foreclosures, judgments, bankruptcies, and high debt-to-equity ratios (Smith, 2010). Subprime borrowers will have a history of delinquencies and defaults, bankruptcies or public filings, high levels of debt, little collateral to use as a down payment, or seeking to purchase a home in an area with unstable housing and labor markets (Xudong & Bostic, 2009). Borrower factors such as high debt-to-income and high loan-to-value ratios directly correlate to a high risk of default (Martinez, 2009). Many consider subprime lending ethical because it gives those with low credit ratings the opportunity to obtain mortgages and loans (Lander et al., 2009). Consumers underestimated subprime borrowing risks, while those same consumers overestimated returns (Aalbers, 2009b). The deregulation of lending institutions, in turn, allowed unregulated lending institutions to sell mortgage products borrowers did not understand (Aalbers, 2009b). Relaxed underwriting standards and guidelines allowed borrowers who were unqualified to buy mortgages they could not afford (Nichols, Hendrickson, & Griffith, 2011).

The subprime mortgage crisis revealed ongoing problems within the financial system (Chang & Chen, 2013). The volume of subprime lending doubled from \$65 billion to \$138 billion over the 5 years spanning from 1995 to 2000 (Xudong & Bostic, 2009). Another report indicated that subprime mortgage lending increased from approximately \$65 billion in 1995 to \$500 billion in 2005 (Keys et al., 2010). Between the years 2000 and 2003, a number of subprime mortgages increased by approximately 250% to \$332 billion (Xudong & Bostic, 2009). Subprime mortgage delinquencies increased by 50% from 2005 to 2007, which conversely forced many mortgage lenders out of business and led to a global financial crisis (Keys et al., 2010). Despite the fact that subprime mortgages comprised less than 20% of all outstanding mortgages, greater than half the foreclosure initiations were on subprime mortgages (Gilbert, 2011).

Following the U.S. subprime crisis, economic indicators became severely deteriorated (Sarmiento, 2012). During the two years that followed, House Prices (Case-Shiller Index) declined by 35% and the unemployment rate increased from 4.7% to 9.4%

(Sarmiento, 2012). Lower interest rates and more readily available mortgage money substantially raised real estate values within the UnitedStates (Lander et al., 2009). The sharp increase in interest rates fundamentally slowed the mortgage borrowing market and consequently forced mortgage brokers and mortgage companies to enter into the subprime market in an attempt to maintain volume (Smith, 2010). Between 1994 and 2005, the value of these subprime loans grew from \$35 billion to greater than \$600 billion, with their share of the mortgage market growing from 5% to 20% of home loans (Ross & Squires, 2011). Many linked the rise in subprime mortgage defaults to borrowers' lack of understanding of the complex terms of their mortgages and the subsequent underestimation of their ability to repay (Perry & Motley, 2009).

#### **Predatory Lending**

Predatory lending is the use of lending practices that take advantage of borrowers who lack the necessary financial knowledge and sophistication to protect themselves against unethical and illegal lending standards and practices (Demyanyk & Van Hemert, 2011). Put another way, predatory lending is fraud or fraudulent activity that originates in the initial loan between the originator and the borrower (Cohen, 2012). Predatory lending has typically involved the use of unfair lending terms and tactics that limited or misrepresented information and in some cases, involved fraud and deceit (Phillips, 2009). Predatory loans were originated to exploit borrowers who were unsophisticated and vulnerable (Aalbers, 2009b).

Ament (2009) defined predatory loans as loans structured to result in the serious disproportionate net harm to borrowers. Features of predatory loans have included, but

are not limited to: (a) higher interest rates and fees, (b) abusive terms and conditions that are designed to entrap borrowers and create larger debt obligations, (c) the failure to account for the borrower's ability to repay the loan, and (d) the failure to comply with fair lending laws by targeting certain groups or classes of people (Aalbers, 2009b). Nearly 70% of defaults were a result of fraudulent misrepresentations on the original loan application (Lander et al., 2009). Lenders exploited the information asymmetries that existed because of borrowers' lack of knowledge and disconnection from the credit market, which allowed for predatory tactics (Ament, 2009). Subprime borrowers are less knowledgeable about mortgage products and do not conduct the necessary research to find the best mortgage rates (Xudong & Bostic, 2009).

During the housing boom, many advocates became concerned that lenders were taking advantage of borrowers and exposing them to too much risk (Collins, 2014). Lenders began applying unethical and illegal processes to subprime loans, causing these loans to shift from subprime lending to predatory lending (Lander et al., 2009). Mortgage originators began to care less about credit risks and began to extend more mortgages to less creditworthy borrowers (Cohen, 2012). Predatory lenders earned a profit by robbing homeowners in underserved communities of their equity and wealth through high-cost loans (Aalbers, 2009b). Lenders understood that they could reap higher profits by foreclosing on homes rather than by modifying the terms of the loan (Cohen, 2012).

In the predatory marketplace, lenders possessed extensive knowledge about credit and the mortgage markets, while borrowers had limited sophistication in relation to the mortgage market (Ament, 2009). With subprime mortgages, the burden of risk imposed on borrowers increases, or the banks reduce the value of the borrower's loan (Cohen, 2012). Predatory lending involves the deception and manipulation of borrowers because of their limited or lack of understanding about the terms of the financial obligations in which they are entering (Ament, 2009). Predatory lending also encompassed the offering of subprime loans to individuals who would generally qualify for prime loans, with 50% of subprime refinanced loans being eligible for prime loans (Lander et al., 2009).

Predatory lending occurs when individuals or organizations encourage borrowers to enter into contracts that are harmful to them (Demyanyk & Van Hemert, 2011). Typically, mortgage disclosures appear to offer little to no real information, but conversely bombard applicants with legalese (Collins, 2014). Oftentimes, predatory lenders targeted subprime borrowers (Xudong & Bostic, 2009). Borrowers signed complex financial documents highlighting payments and percentages they did not thoroughly understand, and as such could not maintain their monthly payments over time (Ament, 2009). When a borrower gets a predatory loan, the lending institution locks the borrower into loans with onerous terms and other excessively destructive conditions (Xudong & Bostic, 2009).

The predatory terms and practices associated with the subprime marketplace caused many borrowers to lose equity because of the subprime refinancing cycle (Martinez, 2009). The housing bubble and burst, falling home values, declining home sales and increasing interest rates, combined with nefarious lending tactics by predatory lenders led to mortgage defaults and subsequent foreclosures (Phillips, 2009). Perpetual defaults on mortgage loans mostly allowed lenders to repossess the homes and strip them of their equity, thus leading to frequent mortgage foreclosures for individuals and housing abandonment (Aalbers, 2009b).

Many of the borrowers defaulted on these loans, which caused adverse effects to the lender as well (Demyanyk & Van Hemert, 2011). Predatory lending has cost borrowers an average of \$9 billion per year (Ament, 2009). Predatory lending has not only affected families but has posed a devastating threat to the community when the homes remain vacant for prolonged periods of time, thus becoming a breeding ground for crime and neighborhood instability and driving potential businesses away from the area (Phillips, 2009). Homes that became vacant for prolonged periods due to foreclosure caused the neighborhoods to lose equity and municipalities to lose tax dollars (Martinez, 2009). Loopholes in federal laws have only forced predatory lenders to adapt their strategies and tactics (Ament, 2009).

### Adjustable Rate Mortgages

There are two main types of mortgages within the credit market: traditional fixed rate mortgages (FRM) and ARMs (Martinez, 2009). Innovative mortgage products rose from \$365 billion in 2004 to nearly \$958 billion by 2006 (LaCour-Little & Yang, 2010). Most subprime mortgages fell into the category of adjustable rates, containing provisions or clauses that the average consumer cannot easily understand. Borrowers need to possess a basic understanding of financial markets in order to understand the possible interest rate fluctuations that can cause payment shocks (Martinez, 2009). Lenders would shift the risks associated with rising interest rates onto the borrowers by contracting for

adjustable-rate mortgages where the interest rate would fluctuate (Cohen, 2012).

Changes in interest rates can potentially lead to significant payment shocks because of the income risks created by ARM contracts (Prather et al., 2013). Interest rate changes increased mortgage default risk (Prather et al, 2013). Despite comprising only 6% of the total outstanding loans, ARMs accounted for 36% of the loans in foreclosure during 2008 (Martinez, 2009). Although ARM contracts typically contain provisions that could make home purchases more affordable, ARMs contain higher credit risk than FRMs (Prather et al., 2013). Many loans exploited buyers by locking them into monthly payments they could not afford in the end (Ross & Squires, 2011). In the case of ARMs, consumers were locked into a mortgage contract in which the rates reset, often by several percentage points within two to three years, or the loan was unaffordable as a result of excessive fees and interest rates (Ross & Squire, 2011). ARMs offered initial teaser rates that borrowers initially found attractive, but could potentially increase the probability of payment shock and default risk (Prather et al., 2013). Many borrowers that undertook ARMs did not thoroughly understand the potential consequences (Lander et al., 2009). Approximately 23% of all mortgage loans during 2005 were interest-only ARMs (Lander et al., 2009).

#### **Mortgage-Backed Securities**

Mortgage-backed securities (MBS) originated in the secondary market because of the heightened number of delinquent home loans and banks' losses due to foreclosure (Martinez, 2009). Roughly, 60% of all U.S. mortgage debts traded as mortgage-backed securities, and as such, the U.S. secondary marketplace has been the largest fixed income market in the world (Keys et al., 2010). The debt crisis was mainly due to the subprime mortgage crisis, as governments accumulated large fiscal deficits and issued extravagant debts aimed at alleviating the effects of the crisis (Chang & Chen, 2013). The subprime mortgage boom attributed to the increased demand for private label mortgage-backed securities (MBS) both in the domestic and foreign markets (Demyanyk & Van Hemert, 2011). Mortgage-backed securities are asset-backed securities representing claims to cash flows from pools of mortgage loans, mainly on residential properties (Travers, 2010). Mortgage-backed securities originated by pooling together mortgage loans from banks and mortgage companies and issuing them as securities (Travers, 2010). Investors' demand for higher yields caused an increase in the demand for private label MBS's, which created sharp increases in the subprime share of the mortgage market from approximately 8% to 20% over five years and increases in the securitized share of the subprime mortgage market (Demyanyk & Van Hemert, 2011).

# **Financial Literacy**

The increased complexity of the economy, financial markets and their regulations, valuation methods, and availability of different financial products generated a strong move to study and measure financial literacy among high school and university students, as well as investors and professionals (Ibrahim & Alqaydi, 2013). Traditionally, most Americans have been oblivious to finance and financial principles and as such; borrowers did not understand the importance of credit, how it works, or the terms of the loan (Martinez, 2009). Over the last two decades, the importance of financially literate individuals has grown. It is, therefore, important for individuals to possess the necessary financial knowledge and capability to make sound financial decisions. In order to be

financially literate, individuals should possess the skills necessary to evaluate the best means through which to borrow money and how to manage financial risks (Taylor & Wagland, 2013). Studies have shown that there is a high correlation between financial knowledge and the likelihood of engaging in a number of financial practices, such as paying mortgage loans on time (Hastings et al., 2013). In their study, Ibrahim and Alqaydi (2013) found that average financial literacy scores were just 43.3%.

The Jump\$tart Coalition for Personal Financial Literacy first defined financial literacy in 1997 as the ability to use knowledge and skills to manage one's financial resources effectively for lifetime financial security (Hastings et al., 2013). Taylor and Wagland (2013) defined financial literacy as a consumer's understanding of money and his or her ability to make practical and beneficial personal financial decisions. Alhenawi and Rlkhal (2013) defined financial literacy as the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being. Individuals must gain an understanding of financial jargon and concepts, as well as an understanding of the availability of credit and investment markets. The information presented through financial education programs should be understandable and meet individuals' information needs (Gallery & Gallery, 2010). The positive effects of financial literacy can extend beyond the financial well-being of an individual. Moving an individual from a low level to the average level of financial capacity can improve the psychological well-being of that individual by about 6% (Gallery & Gallery, 2010). The Organization of Economic Co-operation and Development (OECD) defined financial education as the process of improving consumers' understanding of financial products, concepts, and risks, to help

consumers become more cognizant of the financial risks and opportunities needed to make informed choices (Gallery & Gallery, 2010). Without a comprehensive understanding of finance and the terms of the loans in which they are entering, borrowers are unable to make informed decisions, thus increasing the likelihood of default (Martinez, 2009). Despite the plethora of programs around teaching financial literacy enacted by the federal government, the issue has remained prevalent (Martinez, 2009).

## **Importance of Financial Literacy**

U.S. policymakers created and implemented policy initiatives since the 1950s and 1960s to improve the quality of personal financial decision making through financial education (Hastings et al., 2013). Both the government and the private sector have encouraged the development of financial education programs as a valuable tool in remedying the detected low levels of financial literacy (Taylor & Wagland, 2013). Program curriculum should address various topics such as (a) checking and savings accounts, (b) basic investments, (c) the basics of banking and financial systems, and (d) primary investments (Martinez, 2009). Improving financial literacy through education programs is now a global issue (Gallery & Gallery, 2010). Recent studies have shown that people in the United States lack numeracy and financial literacy (Collins, 2012). Financial literacy gives individuals a better understanding of the rights and obligations of homeownership (Martinez, 2009). Once Americans become financially literate, they will be less likely to obtain a loan they cannot afford (Martinez, 2009).

After the creation of the President's Advisory Council on Financial Literacy, financial literacy became a national priority (Eades et al., 2012). The Federal Reserve,

among other governmental agencies, noted that financial literacy is important to the wellbeing of the financial sector and the economy (Alhenawi & Rlkhal, 2013). In 2004, the OECD established the Financial Education Project to assist policy-makers and regulators to analyze and assess the effectiveness of existing financial literacy programs and develop new training programs (Gallery & Gallery, 2010). In today's world of increasingly complex financial decisions, financial literacy is a vital skill for all consumers (Taylor & Wagland, 2013). Financial literacy and awareness play a pivotal role in the reduction of poor financial decision-making. Collins (2012) asserted that a lack of financial literacy could hinder individuals' ability to make well-informed financial decisions. The lack of financial literacy can be problematic if individuals become unable to optimize their welfare, most often when the stakes are high, or produce competitive pressures for market efficiencies (Hastings et al., 2013). Studies of financial behavior identified by Collins (concluded that financial education, counseling, and advice might assist individuals in their engagement in financial practices that support longerterm financial security.

Many American families have struggled in the aftermath of the financial crisis, which reinforced the need for reliable and useful information to facilitate good financial choices (Collins, 2012). The lack or absence of financial literacy can hinder individuals from making well-informed financial decisions (Collins, 2012). Low financial literacy correlates with adverse credit behavior such as debt accumulation, high-cost borrowing, poor mortgage choices, mortgage delinquency, and foreclosure (Hastings et al., 2013). Federal Reserve Statistics show that in 2008 consumer debt was over \$2.5 trillion, and revolving debt accounted for \$972 billion of this amount. Financial literacy helps individuals to make well-informed financial decisions. Studies of financial literacy have shown that financial education, counseling, and advice may help individuals with long-term financial security (Collins, 2012). Higher levels of financial literacy can alleviate some of the regulatory burdens, potentially reducing the need for legislation and the degree of government involvement in financial markets (Collins, 2012).

## **Financial Literacy and Mortgages**

The financial services industry has grown exponentially over the last two decades providing numerous services and products (Taylor & Wagland, 2013). The financial environment is a complex system that is inherently flawed and unstable (Sau, 2013). Selecting the best mortgage product to utilize in financing a home purchase became a daunting and overwhelming task for potential homebuyers (Prather et al., 2013). One of the real costs loan failures incurred was the adverse impact on individual's faith and trust in institutions, and subsequently the stability of their daily lives (Ross & Squires, 2011).

A major contributory factor in the subprime collapse was the lack of consumer financial literacy. The basics of saving, obtaining the right mortgage and an investment strategy for the future required a degree of financial skill (Taylor & Wagland, 2013). Understanding the risks associated with mortgage products is central to individuals' borrowing decision-making.

One of the things that emerged from the global financial crisis is the need to understand the extent to which individuals understood the complex products and contracts in which they were entering (Gallery & Gallery, 2010). The ubiquity of the subprime mortgage market demonstrated the importance of understanding complex financial instruments (Perry & Motley, 2009). Alhenawi and Rlkhal (2013) highlighted the predicated notion that the United States would fall into a financial crisis because of individual's lack of financial literacy. The global financial crisis has highlighted the urgent need for sustainable solutions that will effectively minimize the impact of future economic shocks (Gallery & Gallery, 2010). Research indicated that there is a need to rethink the scope of financial literacy programs and initiatives and to increase financial literacy levels among key market participants (Gallery & Gallery, 2010). Research suggested that loan marketing preved on the fears and misunderstandings of the unsophisticated borrowers (Perry & Motley, 2009).

#### **Understanding Mortgage Contracts**

Lenders have historically utilized observable information obtained during the underwriting process, such as loan-to-value (LTV), mortgage choice, and income reports, to ascertain the ex-ante default risks of potential borrowers (Liu & Sing, 2013). Borrowers have lacked a thorough understanding of their default risks prior to making mortgage choices (Liu & Sing, 2013). Failed mortgage contracts are at the foundation of the financial crisis, yet go unnoticed. Studies have provided evidence that the design of mortgage contracts has been a key contributory factor to the financial crisis (LaCour-Little & Yang, 2010).

Most discussions about responses to the financial crisis failed to address contract law (Cohen, 2012). Many have ignored the importance of the mortgage contract because of the assumption that when a bank issues a contract, the bank will strictly enforce that contract (Cohen, 2012). A deeper understanding of mortgage contract law could potentially alleviate the advent of foreclosures and underwater residential mortgages (Cohen, 2012). When a mortgage contract originates, the lender will have no further contractual obligations to the borrower and consequently, the borrower has duties as highlighted within the contract, to repay the principal plus interest within the specified prepayment period (Cohen, 2012). There are two types of risks associated with mortgage loans: credit risk and interest rate risk. When there is an inherent credit risk tied to a mortgage contract, the lender will require collateral, charge a higher interest rate, or require a larger down payment to protect itself against this risk (Cohen, 2012). If a homeowner defaults on his or her repayment of the loan, the homeowner breaches the contract (Cohen, 2012).

#### **Transition and Summary**

The purpose of this qualitative exploratory multiple case study was to explore strategies mortgage loan executives need to prequalify mortgage loan applicants. If bank executives fail to address the gap in financial literacy education, then the financial institution may face the losses in revenue and high costs associated with the foreclosure process. I discussed various events and concepts, such as subprime lending, predatory lending, and the mortgage crisis within the context of the literature review where previous scholarly works of literature were compiled to add value and offer a deeper perspective on the phenomenon. In Section 2, I will cover the methodology of the study. Subsections within Section 2 will include (a) participants, (b) research methodology and design, (c) population, (d) sampling method and size, (e) how I will ensure ethical research standards, (f) the data collection process and technique, (g) data organization techniques, (h) data analysis, and (i) an evaluation of the reliability of the instruments used in the study.

#### Section 2: The Project

The mortgage industry played a vital role in the recession faced by the U.S. economy in 2008 (Singh & Bruning, 2011). Changes in mortgage products and the channels through which borrowers obtained loans majorly facilitated the collapse of the housing markets (Bostic et al., 2012). Increased defaults in 2008 created a surplus of houses (Martinez, 2009). The oversupply of houses coupled with the lack of buyers pushed housing prices down into the plunge known as the mortgage crisis (Singh & Bruning, 2011). Potential homeowners should have been aware of ongoing changes in the mortgage market and their overall financial capabilities (Singh & Bruning, 2011). Section 2 will include a more detailed explanation of population and sample, ethical research, data collection, data analysis, and a systematic description of how I approached the study.

#### **Purpose Statement**

The purpose of this qualitative, exploratory, multiple case study was to explore strategies mortgage loan executives need to prequalify mortgage loan applicants. The study revolved around the overarching question: What strategies do mortgage loan executives need to pre-qualify mortgage loan applicants? For the research component of the study, I interviewed eight mortgage loan executives in northwest Arkansas. Those interviewed included mortgage officers, finance managers, bank policy makers, and bank branch managers who, at the time of the study, had worked in the mortgage banking industry for a minimum of 3 years. If mortgage executives can educate potential homebuyers on core financial principles, those individuals could potentially make more informed buying decisions, thus reducing the number of defaults, foreclosures, and bank losses and failures.

### **Role of the Researcher**

My role as the researcher in this study was to serve as a scholar-practitioner and conduct personal interviews to gather information on participants' views on consumer financial literacy and how higher literacy can reduce mortgage defaults and foreclosures. I did not rely on data collected by other researchers but inserted myself as the primary instrument. My primary aim with this research was to study and understand the problem from the viewpoint of the selected participants as an active learner rather than approaching it as an expert in the field. Throughout the interview process, maintaining relative distance from the problem and allowing interviewees to speak independently could help mitigate bias (Seidman, 2013).

Published in 1979, *The Belmont Report* summarizes the basic ethical principles identified by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (U.S. Department of Health, Education, & Welfare, 1979). Section C.1 of *The Belmont Report* states that respect for persons requires that subjects, to the degree that they are capable, are given the opportunity to choose what happens to them (U.S. Department of Health, Education, & Welfare, 1979). Informed consent contains three elements: information, comprehension, and voluntariness. I informed each participant of the nature of the research study and that their participation was voluntary. Participants felt no coercion or undue influence to participate in the study. Participants were selected in a fair manner and without favoritism or the lack

thereof to certain classes of people. *The Belmont Report* sets forth guidelines for the protection of human subjects, which includes providing informed consent, ensuring voluntary survey completion, and supporting the ability to withdraw from the study at any time without negative consequences (U.S. Department of Health, Education, & Welfare, 1979). My selection of participants was not based on the ability of members of that social class to bear burdens and on the appropriateness of placing further burdens on already burdened persons, adhering to guidelines highlighted in *The Belmont Report*.

During the interviews, I presented the participants with open-ended questions in order to gather the necessary data from their responses to answer the research question. Upon successful completion of the interviews, I transcribed the data and shared my interpretation with each participant for validation. Good case study integrity should include a chain of evidence through multiple sources of information and a case study database for easy retrieval (Yin, 2012). Data collected during interviews will be stored in a locked safe for a period not exceeding 5 years and then destroyed.

### **Participants**

The subjects' participation in this study was voluntary. I selected participants based upon their interaction and experience within the banking and mortgage marketplaces. The target population consisted of five financial institutions, incorporating mortgage executives who had strategies to enhance the financial literacy of mortgage loan applicants in northwest Arkansas. Ideal candidates included major contributors to the mortgage banking decision-making process, such as mortgage executives, who had been in the industry for a minimum of 3 years. Participants' businesses were based in the area of northwest Arkansas. Upon identifying potential participants, I called each participant and requested a meeting to explain the research study and asked if they would be willing to participate. I also explained to participants that they could opt out or decline participation at any time.

Throughout this study, I did not interview any people identified as individuals within protected classes. I used the interview questions listed in Section 1 to gain a better and more thorough understanding of the problem under study. Miles, Huberman, and Saldana (2013) asserted that in qualitative research, a smaller sample size as opposed to a larger sample size is sufficient. Marshall and Rossman (2013) observed that seven to 10 participants are appropriate for case study analysis. Research conducted by Marshall, Cardon, Poddar, and Fontenot (2013) indicated that a sample size of 15 to 30 interviews is sufficient for a qualitative case study. Based on the aforementioned recommendations, the predetermined sample size for this study was 15 participants. Yin (2014) suggested keeping the sample size small when the goal of the research is to obtain the rich, vivid details of the thoughts and opinions of participants.

### **Research Method and Design**

In this study, I determined that a qualitative multiple case study research model was best suited to answer the research question. I collected the data through one-on-one interviews, pamphlets, handouts, and other documentation provided by mortgagers to educate potential homebuyers, in an attempt to complete an in-depth analysis and exploration of the central theme within a bounded system (Yin, 2014). The purpose of this qualitative, exploratory, multiple case study was to explore strategies mortgage loan

executives need to prequalify mortgage loan applicants. A notable difference between quantitative and qualitative research methods is the ability of the researcher to investigate environments, situations, and processes such as feelings, attitudes, and learning processes using the latter methodology (Hazzan & Nutov, 2014).

#### Method

There are three distinct methods for data collection and analysis: (a) qualitative, (b) quantitative, and (c) mixed methods (Marshall & Rossman, 2013). Quantitative research entails using statistical interpretations derived from the study to test hypotheses (Marshall & Rossman, 2013). Throughout this study, I did not test a hypothesis, and as such, quantitative research was not a suitable method for the study. Quantitative research lacks the ability to capture characteristics of real-life events (Staggers & Blaz, 2013; Venkatesh et al., 2013). A mixed methods study was not chosen because it is limited by time constraints and challenges associated with collecting concurrent, sequential data (Venkatesh et al., 2013)

Practitioners have used qualitative research to understand various behaviors including consumer behavior (Bailey, 2014). Many researchers have used qualitative research to assess the attitudes, beliefs, preferences, and behaviors of the participants in their natural setting (Yilmaz, 2013). Qualitative research is valuable to gain a deeper understanding of people and their behavior in a social, cultural, and economic aspect (Hazzan & Nutov, 2014). Scholars use qualitative research to explore and explain the underlying motivational factors for the way individuals and groups think and behave (Bailey, 2014). Researchers use qualitative research methods to probe into social phenomena and the situations and processes surrounding a group of people (Hazzan & Nutov, 2014). While researchers should possess a broad theoretical understanding of the phenomenon under study, it is imperative to be careful not to allow preconceptions to interfere with the development of new insights (Yin, 2014). Using qualitative research methods is often conducive to in-depth interview techniques, offers the expertise and knowledge of researchers to discuss the procedures they used and interpretations they concluded, and provides an objective answer to the research question (Bailey, 2014).

# **Research Design**

Marshall and Rossman (2013) identified several research designs suitable for qualitative research including, but not limited to, ethnography, narrative research, grounded theory, phenomenology, and case study. Live observations and studies of individuals or groups were not suitable for this study, making ethnography and narrative research ineffective choices for the design of this study (Marshall & Rossman, 2013). I did not develop nor seek to understand a theory within the context of the population and as such, deemed a grounded theory approach unsuitable for the study. Phenomenological researchers pursue meanings, structure, and the essence of the lived experiences of a phenomenon within a group of people (Gill, 2014). Researchers using phenomenology are limited in the collection of pertinent data and, as such, this method was not appropriate for this study.

Case studies are appropriate when the researcher seeks to understand complex social issues and mitigate the manipulation of participant behavior (Yin, 2014). Through case study research, the researcher gathers rich data to understand how and why

something occurs in a natural setting (Yilmaz, 2013). Researchers use case study research as a tool to show other organizations possible results of engaging in similar practices (Marshall & Rossman, 2013).

There are three different types of case studies: explanatory, exploratory, and descriptive (Dul & Hak, 2012). In an explanatory case study, the researcher seeks answers to questions that explain causal links in complex interventions (Dul & Hak, 2012). Dul and Hak (2012) asserted that researchers using descriptive case studies could obtain insight into the problem and the context through which it occurred. Researchers use exploratory case studies to comprehend the characteristics of real-life events (Yin, 2012). Spector (2013) asserted that employing an exploratory case study could help the researcher examine competing accounts of the same event. An exploratory case study was appropriate for this study because I was able to gather rich data about the mortgage crisis from the viewpoint of those that were involved.

To gain a deeper understanding of the problem of limited prequalification measures of mortgage loan applicants, I conducted interviews with managers who have insights about the problem. Yin (2012) asserted that semistructured interviews assist in the study of a problem or individuals' behavior. Obtaining descriptions of the problem from the perspective of bank officials and mortgage brokers helped me fulfill the purpose of this study, which was to explore strategies mortgage loan executives in northwest Arkansas need for the adequate prequalification of mortgage loan applicants, potentially avoiding high foreclosure costs and lost profits incurred by the bank.

#### **Population and Sampling**

The general population for this study was mortgage executives who, at the time of the study, had a minimum of 3 years' experience in the mortgage banking industry. The scope of the study was limited to mortgage loan executives who possessed strategies to prequalify mortgage loan applicants in the northwest Arkansas metropolitan area. The sampling approach that I employed for this study was purposeful, criterion-oriented sampling. The comprehensive review of the literature I completed allowed for the realization that consumer financial literacy may have an adverse effect on the performance and vitality of the mortgage market and banking system. Understanding how mortgage executives can help increase financial awareness and literacy among consumers could provide insight into how to equip consumers with a better understanding of the complex financial contracts they are entering and, in turn, reduce foreclosures and bank losses.

Criterion-oriented sampling was key to ensuring that the bank executives I selected for interviewing met the participant eligibility criteria of operating in the northwest Arkansas area and having had worked with mortgages for at least 3 years. This study included interviews with eight mortgage loan executives from five mortgage-lending firms in northwest Arkansas. I contacted participants to set up face-to-face interviews, which consisted of eight interview questions and lasted between 30 and 60 minutes. Once participants consented to the interview, interviews took place in a public setting that was mutually safe for the participant and me, such as a conference room in a public library. I maintained study participants' confidentiality during and after the study

by identifying each participant only by a number (i.e., Participant 1, Participant 2, etc.) and by storing data in a locked safe for 5 years.

Data saturation is reached when the researcher gathers data to the point of diminishing returns when nothing new is added (Bowen, 2008). As suggested by Marshall et al. (2013), I continually brought new participants into the study until reaching data replication or redundancy. Yin (2012) recommended that for a qualitative case study, interviewing 10 participants would lead the researcher to achieve data saturation. Dworkin (2012) recommended that the number of participants required to achieve saturation is between five and 50 participants. I recognized data saturation when responses from interview participants began to demonstrate a pattern and subsequent participants were offering no new information. At this point, I halted the process because conducting further interviews would yield diminishing to no returns in quality data.

Through qualitative research sampling, researchers typically focus on a small number of interviewees, relying on depth and detail to obtain pertinent data (Yin, 2014). The purpose of qualitative sampling is to focus on a small sample of participants to gather a wide range of information about the issues (Trotter, 2012). A small sample helped elicit profound information with each participant to the point of saturation (Petty et al., 2012).

Purposeful sampling is a form of qualitative sampling through which the researcher selects information-rich cases for in-depth study (Patton, 2011). Purposeful sampling was appropriate for this study because it ensured the data collected aligned with the purpose of the study (Marshall & Rossman, 2013). Through purposeful sampling, the

researcher interviews participants who possess general knowledge about the topic or have undergone the experience (Petty et al., 2012). Researchers use purposeful sampling to recruit participants with advanced knowledge of the problem (Minor-Romanoff, 2012). I used open-ended questions to encourage participants' vivid descriptions of personal experiences, facilitating the collection of invaluable insight around the problem. The purposeful, criterion-oriented sample consisted of eight mortgage executives working in five banks and mortgage companies in northwest Arkansas.

### **Ethical Research**

Walden University and the Walden Institutional Review Board (IRB) granted permission and approval prior to conducting any interviews with participants. Participants received briefing on the research study prior to interviews. Once participants agreed to proceed with the interview, they signed an Informed Consent Form. Through the informed consent form, participants understood that the interview was voluntary and that they could withdraw at any time with a verbal request to stop the interview without penalty. The identities of participants remained confidential to ensure privacy and confidentiality. Participants were identified only as Participant 1, Participant 2, and so on. In accordance with IRB guidelines, data are filed and stored it in a locked safe for 5 years. There were no incentives offered to participants to complete the interview process. Participants received my name and e-mail address, in case they had any questions or concerns about the right to withdraw or chose to cease participation without any negative consequences.

## **Data Collection**

## Instruments

Data collection is a vital part of the research process (Boateng, 2012). Inaccurate data collection can lead to discrepancies in the data and incomplete or invalid results (Boateng, 2012). The three main data collection techniques used in qualitative research are participant observation, in-depth interview, and focus group discussion (Astin & Long, 2009). In this qualitative case study, as the interviewer conducting semistructured face-to-face interviews, I inserted myself as the primary data collection instrument. Semi-structured interviews have open-ended questions with the flexibility of including minor divergences to gain the in-depth information needed to answer the research question (Drew, 2014). The application of this semi-structured interview approach allowed me to modify interviews to capture specific information about how each bank executive views the impact of consumer financial literacy, or the lack thereof, on foreclosures, foreclosure-related costs, and bank failures.

Initial contact with potential participants was established through face-to-face interaction, by phone calls, and by e-mails. Once interviewees consented to the interview, interview times and locations were set up. Prior to conducting interviews, each participant received the informed consent form. The interview consisted of eight interview questions and lasted between 30 and 60 minutes. Each participant received the same questions in the exact order to enhance the study's reliability. The interview protocol, which outlines what I will say and do during the interviews, is listed in the Appendix . Interviews were recorded using a recording device, pen and paper, and Microsoft Word to transcribe data.

In order to ensure validity and reliability, I employed a member check of each participant's responses. The member checking process helped reach data saturation through obtaining in-depth information and enhance academic rigor (O'Reilly & Parker, 2012). Upon completion of each interview transcript, participants' responses were interpreted, synthesized, and shared with the participant for validation during the followup member-checking interview.

### **Data Collection Techniques**

Once a participant accepted the invitation, I scheduled face-to-face semistructured interviews following the interview protocol (Appendix ). Condie (2012) asserted that substantial amounts of data could be collected using interviews as the preferred tool for data collection in the shortest possible. Semistructured interviews are useful data collection techniques in studies where participants need to describe personal experiences (Rubin & Rubin, 2012). Semistructured inquiry allows the researcher to understand a verbal description of the participants' experiences (Edward & Welch, 2011). Rowley (2012) asserted that semi-structured interviews provide precision and reliable answers when the researcher wishes to find answers to specific questions.

Notes transcribed during the interview captured the emotions and expressions of each participant. I conducted interviews at an agreed upon time, date, and location, such as private rooms at the public library. Participants received the same eight interview questions and agreed to have responses recorded with a recording device and in

Microsoft Word. Each interview lasted approximately 30-60 minutes.

The data collection process proceeded as follows:

- Requested and received permission to conduct the study from Walden University IRB.
- 2. Gathered contact information of potential participants.
- Communicated the purpose of the study with participants and gained their written consent (Informed Consent Form).
- 4. Followed up with potential study participants and clarified any questions about the informed consent form.
- 5. Retrieved, in person, a signed informed consent form indicating the study participants' voluntary agreement to participate in the study.
- 6. At the beginning of each interview, reiterated the study participant's rights from the informed consent.
- 7. Conducted the interview.
- 8. Imported data into NVivo 10.
- 9. Transcribed the responses within the interview protocol.
- 10. Reviewed and interpreted the interview transcript.
- 11. Communicated interpretation of the interview to the participant.
- 12. Asked the participant if the interpretation accurately depicted their responses or if there was any additional information.
- 13. Continued member checking until saturation was reached.

Through the member checking process the researcher can confirm data saturation through obtaining in-depth information and enhance the academic rigor of the study (O'Reilly & Parker, 2012). Once each participant's responses were received, I wrote each question, followed by a synthesis of each participant's response. Each participant received an interpretation of their respective interview responses and was asked to review the synthesized responses to ensure the accurate capture and portrayal of their responses (Harper & Cole, 2012; Marshall & Rossman, 2013).

The main objective of a pilot study is to determine whether conducting a largescale survey is worth the effort (Mahfoud et al., 2011). A pilot study may not be required because case studies are subject to emergent questions and response from participants irrespective of the interview questions predefined for the intended study (Uwuigbe, 2014). In-depth interviews and the data collected were augmented with other company data related to financial literacy and education, such as pamphlets, brochures, and financial statistics related to foreclosure-related costs to the bank. Some mortgage banks may already have some form of standard pre-qualification measures for applicants. If this was the case, documents from such programs were used to confirm the responses from research participants. I used data obtained from preexisting financial literacy documents to assess the level of education provided by the mortgage bank. A review of the financial literacy documents was 1 way to gauge the ease of which the information is presented to the end users, the mortgage loan applicants. A thorough review of other documents, including statistical data held at the bank, could help ascertain if the lack of financial literacy of mortgage loan applicants has had adverse effects on the mortgage

bank and how such lack of financial knowledge may have led to losses by the bank. Yin (2012) stated that case study research entails collecting data from several data sources.

### **Data Organization Technique**

Data organization can assist the researcher in answering the overarching research question (Basurto & Speer, 2012). Effective data collection may facilitate access to the data for future use (Gajewski, 2013). Qualitative research is recursive in nature and as such, the primary researcher and other researchers may need to access the data in the future (Harnish, 2012). Upon successfully gathering the necessary data, I transcribed and synthesized the interviews and reviewed for validity and reliability through member checks. Every participant received a synthesized copy of personal responses to each question for member checking. Member checking helped enrich the integrity of the conclusions reached in the study (Hunt & Handsfield, 2013). A transcribed journal file of notes taken during interviews was kept and arranged into categories and descriptions from interview responses (Yin, 2014). The transcribed narratives from each interview were recorded in Microsoft Word and saved it to a password protected USB jump drive. Part of the data storage process includes maintaining the transcribed recorded interviews, the audio-recorded copy of interviews, and backup copies of the recorded interviews (Anyan, 2013). All data collected, including the USB jump drive, will remain secured in a locked location for a minimum of 5 years. After the 5-year period and after all research has been exhausted, data-eliminating software will be used to destroy backed up data and hard copies shredded. NVivo software provided an analysis tool to sort and organize pertinent data for this study.

#### **Data Analysis Technique**

The data collected throughout this study should represent a holistic exploration of the problem that participants are facing. A common data analysis technique used in qualitative research is thematic analysis, where the researcher identifies key themes and maps out the correlation between the themes to create a thematic map (Petty, Thompson, & Stew, 2012). Through the establishment of a consistent interview protocol, I asked each participant the same interview questions listed below.

## **Interview Questions**

- 1. What prequalification criteria, if any, does your institution employ when screening new applicants for mortgage loans?
- 2. What sort of formal training or education does your institution provide to mortgage applicants?
- 3. How has your experience with the financial and mortgage crises influenced your ideas about consumer financial literacy?
- 4. How has the mortgage crisis affected your business?
- 5. What are the main causes of default and foreclosure? Describe the causes if they are different for different classes of people.
- 6. What would you say is the level of financial understanding of your customers who are signing new mortgage contracts?
- 7. What type of learning materials do you provide for your potential borrowers to better understand how mortgage products work?

8. What other information do you see pertinent that has not been discussed in this interview?

Boblin, Ireland, Kirkpatrick, and Robertson (2013) noted face-to-face interviews and methodological triangulation of other data sources, such as company documents, archived records, and augmented interview data are sound data collection techniques. Methodological triangulation involves using more than one method to collect data. The data obtained from preexisting financial literacy documents was a tool used to assess the level of education provided by the mortgage bank. I used other documents, including statistical data held at the bank, to ascertain how the lack of financial literacy of mortgage loan applicants has had adverse effects on the mortgage bank and how such lack of financial knowledge may have led to losses by the bank. The purpose of the data analysis process was to uncover themes that answer the central research question. In this case, the data analysis process was a framework to understand the role mortgage loan executives in Northwest Arkansas need for the adequate prequalification of mortgage loan applicants prior to the application process.

The data collected may relate to the conceptual framework of this study to determine how asymmetric information and adverse selection impede potential buyers from making informed buying decisions. During the mortgage crisis, inexperienced borrowers became disconnected from the credit market, which led to information asymmetries (Ament, 2009). Akerlof et al. posited that information asymmetries existed when there is a lack of information available to borrowers prior to signing long-term mortgage contracts (Kau, Keenan, Lyubimov, & Slawson, 2012). Asymmetric information exists where there is a hidden knowledge or unseen action (Kau et al., 2012). Many consumers have historically lacked the requisite knowledge to evaluate the best means through which to borrow money and how to manage financial risks (Taylor & Wagland, 2013). Where information asymmetries exist, borrowers have historically lacked the necessary information to effectively compare the various mortgage products that exist (Martinez, 2009). This theory along with previous works on adverse selection (Ament, 2009; Cohen, 2012; Lander et al., 2009; Marinescu & Manafi, 2015) provided the conceptual framework for this study. The research questions revealed what steps mortgage executives are taking to ensure potential homeowners possess adequate information prior to making a decision. The mortgage crisis and the subsequent seizing up of world credit markets in late 2008 were related to severe adverse selection problems, when potential homebuyers came to the realization that they had significantly less information about the prospect of repayment of such loans than the issuers did (Kau et al., 2012).

Data analysis involves working through data to discover meaningful themes, patterns, and descriptions that help answer the central research question of the study (Yin, 2012). I followed Yin's 5-step data analysis process: (a) compiled and transcribed interview notes, (b) obtained a general understanding of the data, (c) disassembled and reassembled the data, (d) interpreted the meaning of the data, and (e) concluded the data. Buchanan (2013) used the aforementioned method for data analysis during qualitative single case studies and confirmed its appropriateness for similar studies.

Upon successfully gathering the necessary data, I transcribed and synthesized the interviews and reviewed for validity and reliability through member checks. Every participant received a synthesized copy of responses to each question for member checking. After completing member checks, the transcribed data was coded using a twostep process to breakdown, examine, and categorize data provided by the participant (Petty et al., 2012). Coding is the process of tagging segmented data with category names or descriptive words and then grouping the data (Wilson, 2012). Coding is essential in identifying patterns and themes (Smit, 2012). Through coding, concepts indicated by the data are labeled and categorized (Da Mota Pedrosa Näslund, & Jasmand, 2012). The coding process allows for the designation of meaning to the descriptive information collected and compiled through the study (Basurto & Speer, 2012). To begin the coding process, the words and phrases within the data receives an identifying code or label (Basurto & Speer, 2012). Secondly, in the coding process, researchers use axial coding to identify of concepts, categories, or themes within the data and making connections between the concepts, categories, or themes (Yin, 2014).

After interview transcription, I imported textual transcripts into NVivo from Microsoft Word to begin the analysis. NVivo is a tool that researchers have used to organize and categorize data for analysis and coding (Gogarty, 2013). NVivo is qualitative analysis software used for coding thematic categories and extracting themes to answer a research question (Trotter, 2012). Researchers have used NVivo to achieve organization and gain an understanding of the unstructured information (Ellegood, 2014). The auto-coding feature in the NVivo software helped identify similarities in data and prevalent themes, thereby observing consistencies among the perspectives of participants. Using NVivo can help increase the rigor in qualitative research (Ellegood, 2014). The NVivo software helped align the collected data with previous literature (Garrett-Howard, 2012).

### **Reliability and Validity**

### Credibility

Reliable studies contain a consistent research method to eliminate doubt and increase credibility (Svensson & Doumas, 2013). To help ensure the credibility of this study, all responses were recorded and interview transcriptions were circumspectly and methodically reviewed. In order to establish credibility, the researcher must review interview transcripts and identify similarities across participants (Thomas & Magilvy, 2011). Analysis of participants' responses should help identify patterns of perceptions about the role mortgage executives should play in developing strategies to pre-qualify mortgage loan applicants (Byrne, 2013).

Once the review of participant's responses to each question was completed, I wrote the interpretation of each response and provided the synthesized interpretation of the responses to participants for their review and confirmation (member check). Member checking establishes rigor in the research. Member checking could yield reliable information for the research by minimizing biases and capturing comprehensive information (Houghton, Casey, Shaw, & Murphy, 2013). The interviewee has the opportunity to read the data and the interpretation of the data from the interview to ensure accuracy and credibility (Marshall & Rossman, 2013). Corbin (2014) noted that member

checking could validate that the information was correct and that participants' responses were accurately portrayed. Participants are the only individuals who can confirm the integrity of the results and as such, verified interview transcriptions confirmed data integrity.

### Transferability

Dependability

Transferability refers to the degree to which the researcher can generalize or transfer qualitative research results to other settings (Yin, 2014). Transferability is the researcher's ability to provide the necessary details as a way to replicate the study with a different research sample (Thomas & Magilvy, 2011). Using transferability allows the researcher to establish consistency in study methods and provide an accurate representation of the studied population (Thomas & Magilvy, 2011). The researcher is able to describe the applicability of research findings to other individuals or study sites with similar characteristics (Petty et al., 2012). Proving transferability in a research study involves showing that the researcher has proven research objectives using suitable means.

Interviewees should possess information and experience pertinent to addressing the research question (Rubin & Rubin, 2012). Comparing and verifying all relevant data from multiple interviews will add to the transferability of the study. Using multiple sources to verify and confirm the interpretation of themes helps enable diverse perspectives towards conclusions (Halkier, 2013). Quality data collection and data analysis will increase transferability (Moore, 2015). To obtain transferability in this qualitative study, I carefully documented and described the entire research process.

Dependability is comparable to reliability and refers to the stability of the data (Houghton et al., 2013). Dependability occurs when another researcher is able to follow the decisions of the current researcher (Thomas & Magilyy, 2011). Dependability is not measurable and needs to be established using other qualitative means, such as member checking and triangulation (Duc et al., 2014). Stewart, Polak, Young, and Schultz (2012), Travers (2012), and Stipp and Kapp (2012) conducted follow-up interviews to confirm the results of their analysis. I provided detailed steps taken throughout the study in conjunction with the participants' actual responses and transcripts. Marshall and Rossman (2013) defined member checking as a process whereby the researcher provides selected representatives with the opportunity to review the interpretation of the participants' personal responses in support of data completeness and interpretation accuracy. By performing a member check in this study, interviewees had the opportunity to clarify the interpretation and possibly foster further perspectives on the study. A pilot study was not necessary because pertinent knowledge could be obtained during the data collection process. Conducting a pilot study could be beneficial for the researcher by testing the interview protocol and discovering hidden bias (Uwuigbe, 2014). For this study, using semistructured interviews could uncover knowledge regarding the research topic.

### Confirmability

Confirmability refers to how well results align with accepted previous research results, particularly when a researcher applies a similar case study protocol (Thomas & Magilvy, 2011). Demonstrating confirmability included: (a) using a case study protocol, (b) recording and accurately transcribing interview data, (c) documenting data analysis techniques, and (d) disclosing the procedures used in the case study. The member checking process helped to reach data saturation through obtaining in-depth information and enhance academic rigor (O'Reilly & Parker, 2012). Data saturation is the point at which the researcher gathers data to the point of diminishing returns (Bowen, 2008). For purposes of this study, I continued sampling until reaching data saturation. Data saturation is the point in which any new data collected became redundant (Marshall, Cardon, Podder, & Fontenot, 2013). Yin (2012) recommended that for a qualitative case study, interviewing 10 participants would saturate the information.

### **Transition and Summary**

Section 2 of the research study contained the restated purpose statement, the role of the researcher of this study, study participants, research methods, ethical procedures, and design. In this section, I also provided the population and sampling methods, an explanation of the data collection instruments and processes, data organization, and data analysis techniques. In Section 2, I provided a list of the interview questions along with a description of the validity and reliability of instruments used in this study. Validity and reliability checks will adequately protect the authenticity and reliability of the study. Throughout the interview process, open-ended questions were the primary data collection technique I used to gain insights into the experiences of study participants. In Section 3, I will present the research findings, a discussion on the applications to professional practice, implications for social change, recommendations for action and further study, reflections, and the conclusion of the study.

# Section 3: Application to Professional Practice and Implications for Social Change Introduction

The purpose of this qualitative, exploratory, multiple case study was to explore strategies mortgage loan executives need to prequalify mortgage loan applicants. Based on the research question and my analysis of interview responses and government documents, I identified four main themes: (a) counseling, (b) government guidelines and regulations, (c) disclosure, and (d) literacy. The emergent themes reflected participants' perceptions, experiences, and views regarding the problem under investigation. Counseling for first-time homebuyers has become more readily available and easily accessible for consumers. Banks have done a better job at providing consumers with the tools necessary to be successful in purchasing a home. The government requires that the mortgager provides the homebuyer with a list of credit counseling agencies nearest to their property. Every borrower has to review and sign a standard disclosure packet that highlights terms of the loan and gives the consumer adequate time to ask questions or suggest changes to their loan. Many of the participants expressed that while more information is available to consumers, that information has become more complex and may be difficult for the average consumer to comprehend. The importance of developing financially literate consumers emerged as a common theme amongst participants. The most prevalent theme was the misdirection of government guidelines and regulations. Seven of the eight participants of this study spoke about the impact of the new guidelines put into place by the government. Participants indicated that postrecession regulations

have made it tough for qualified buyers to obtain a loan while making it costly for the banks to originate a mortgage loan.

### **Presentation of Findings**

The overarching research question that guided this study was: What strategies do mortgage loan executives need to prequalify mortgage loan applicants? The four relevant themes emerged from the content analysis and are represented in Table 1, including (a) counseling, (b) government guidelines and regulation, (c) disclosure, and (d) literacy. My analysis of the findings helped me answer the research question and the results aligned with the conceptual framework of this study. The findings supported the results of the literature review and extended the body of knowledge under review. Codes were stored in nodes, points where concepts can potentially branch out into networks of subconcepts. Nodes are coding features of NVivo and could represent concepts, processes, people, and other categories. Nodes allow researchers to gather related material in one place to look for emerging patterns or ideas (Yin, 2014). Sources are the research materials used to conduct the analysis within NVivo (Dworkin, 2012). Examples of sources include interview transcripts, field notes, company documents, recorded interviews, and notes. References are the number of occurrences of each theme throughout the coded sources. Researchers gather references within nodes by coding sources, such as interviews and company documents (Yin, 2014).

### Table 1

Themes	Sources	References
Counseling	15	30
Government guidelines and regulation	7	39
Disclosure	3	6
Literacy	7	8

Nodes Related to Themes

### **Emergent Theme 1: Counseling**

The first theme to emerge was the importance of homebuyer counseling for new buyers (see Table 2). Nodes for Theme 1 included homebuyer counseling and buyer counseling agencies/services. Theme 1 relates to asymmetric information. Asymmetric information is distinguished by whether there is adverse selection or moral hazard, often called hidden knowledge or unseen action, respectively (Kau et al., 2012). When individuals have the proper tools and guidance to make informed decisions, then information asymmetries do not exist. Collins (2012) noted financial counseling might assist consumers in their engagement in financial practices that support longer-term financial security. Aaberg and Delgadillo (2013) stated that traditionally, borrowers who received classroom and home study financial counseling had on average, a 24% reduction in delinquency rates. The emergent subthemes were homebuyer counseling and buyer counseling agencies and services.

My findings in this study related to the theme, counseling, were supported by the findings of prior researchers. One such finding by Cohen (2012) was that a deeper

understanding of mortgage contract law could potentially alleviate the advent of foreclosures and underwater residential mortgages. The findings in this theme also related to findings from Gallery and Gallery (2010), in which they stated that the global financial crisis pointed to the need for consumers to better understand the complex products and contracts in which they were entering. All participants interviewed discussed how the need for buyers to better understand mortgage contracts became critical postcrisis. Collins (2012) stated that the financial crisis reinforced the need for reliable and useful information to facilitate good financial choices, further supporting the findings of this study.

I reviewed the Home Loan Toolkit and the Standard Disclosure Packet that are produced and provided by the Consumer Financial Protection Bureau (CFPB), that each lender is required to provide to all applicants. My review of the Home Loan Toolkit helped to discover that HUD sponsors housing counseling agencies throughout the country so they can provide free or low-cost advice. The Toolkit also provides contact information for HUD's counseling services. Borrowers can find a list of homeownership counseling organizations within the Standard Disclosure Packet. Borrowers can also find another copy of the home loan toolkit within the Standard Disclosure Packet.

### Table 2

Nodes Related to Theme 1: Counseling

Subthemes	Sources	References	
home buyer counseling	3	3	
buyer counseling agencies/services	4	10	

**Homebuyer counseling.** A thematic analysis of the participants' answers to Interview Question 2 portrayed the need for consumers to receive some form of counseling or education throughout the homebuying process (See Table 3). In response to the housing crisis that began in 2006, policymakers promoted third-party mortgage default counseling as a way to help people at risk of losing their homes to avoid foreclosure (Collins, Schmeiser, & Urban, 2013). Collins et al. (2013) suggested that counseling policies may help promote consumer financial well-being.

### Table 3

Excerpts of Answers to Interview Question # 3 How has your experience with the financial and mortgage crises impacted your ideas about consumer financial literacy?	Interpretation & Analysis	Emergent Themes
P6 stated: "I find that people are more confused about the process than educated."	Participants noted the need for consumers to obtain more knowledge beyond the initial mortgage buying process. For many who become confused about the mortgage process, there are counseling agencies available, as well as other resources provided by the government for additional counseling.	Counseling agencies are available for consumers to utilize after they begin the mortgage process. Consumer counseling should extend beyond the initial loan application process.
P5 "For 90% of consumers, the interview is the extent of the training they will receive. Some loan programs require homebuyer education."	Most consumers do not receive the necessary counseling & education to make a well-informed decision about obtaining a mortgage loan.	Only certain loan types require home- buyer education. Home-buyer counseling & education should be mandatory for all new applicants.
<ul> <li>P8 "Each consumer receives notification of the 10 closest credit-counseling services. Consumers have the option to attend a free 8-hour course."</li> <li>P6 stated: "Each Loan Officer gives each applicant a list of the 10 nearest credit-counseling agencies that includes the addresses and phone numbers of those agencies."</li> </ul>	The resources are available to consumers. In the past, consumers had limited to no options for receiving any form of education before, during, or after the mortgage application process.	Banks, government agencies, & mortgage lenders understand the need for counseling programs and agencies

## Counseling (Interview Question 3)

Participant 3 indicated that first-time homebuyers are encouraged, but not required to, seek homebuyer counseling. Participant 3 asserted that mortgage officers go to great lengths to educate and train lenders to be well prepared to explain the home buying process and how the mortgage will work over time for the consumer. Participant 5 explained that loan officers spend even more time with first-time buyers, going through terms, certain parts of the loan, and what their payments consist of.

Throughout Participant 3's over 30-year career, consumers were not very knowledgeable about how their mortgage would work over time. Participant 2 encourages consumers to use all the resources provided by the bank throughout the loan process. Participant 2 educates each consumer on the pros and cons of each mortgage program that he or she may qualify for. The goal is to help the consumer find the program that will save them the most overall. Participant 4 found, through experience, that minorities, such as Hispanics in northwest Arkansas, need a much higher level of understanding, counseling, and education. Historically, foreclosures have been more prevalent for minority homeowners regardless of economic class (Williams, 2015). Participant 4 asserted that technology has made obtaining information much easier in 2016 than 10 years prior. It has become much easier for the consumer to conduct personal research and find the necessary counseling needed to make an informed decision.

Some mortgage products require applicants to take homebuyer counseling courses prior to final loan approval. Some state and federally funded programs, such as the Arkansas Development Finance Authorities Bond Program require homebuyer counseling. Participant 4 stated that Bank C offers an Affordable Product, which is an income-based, census tract based product. In the event that a consumer qualifies for this loan type, the individual is then required to participate in and complete the mandatory homebuyer counseling program, which can be completed online or through an accredited agency such as the Credit Counseling of Arkansas. With most of the courses being offered online through a third party, there is no way for the bank to ensure borrowers are actually reading the materials and learning the necessary information (Participant 5). Participant 5 stated that certain governmental mortgage loan programs require applicants to complete homebuyer education courses. In speaking with Participant 8, I learned that consumers applying for certain loan types, such as the Arkansas Development Finance Authority and lower down payment loans, require first-time homebuyer education. These governmental loans are typically reserved for the low to moderate income consumer. Conventional mortgage finance is inaccessible to low-income households because of their high debt-to-income ratios, inadequate cash for the down payments, and long repayment periods (Acheampong & Anokye, 2015). Bank A has an in-house product that is geared towards the low to moderate income household. Banks also require that the applicant completes the homebuyer education program. Participant 8 stated that the assumption here is that "this is their first home and they do not have as much knowledge as someone who has purchased before."

**Buyer counseling agencies/services.** In this subtheme, all eight participants, as well as the Home Loan Toolkit, discussed the buyer counseling agencies and services that each mortgage loan applicant receives. Within the Home Loan Toolkit, which banks are

required to provide to each applicant, consumers can find counseling agencies, sponsored by HUD, throughout the country to provide free or low-cost advice. The HUD Act of 1968 created a platform through which public and private organizations began providing homeownership counseling (Aaberg & Delgadillo, 2013). In a recent development, HUD has offered \$42 million in grant money to provide counseling for families that are trying to better understand the home buying process.

Participant 1 informed me that the government requires each bank to provide a listing of the 10 closest housing counselors within a 10-mile radius of the consumer's zip code. Participant 7 directed me to the Standard Disclosure Packet that each consumer receives upon acceptance, where the contact information for the various credit-counseling agencies is. The Home Loan Toolkit directs consumers to HUD-approved housing counselors online or by telephone. Mortgage officers at Bank A participate in First Time Homebuyer Seminars through a collaborative effort with the Credit Counselors of Arkansas. Participant 2 confirmed this statement by indicating that each consumer receives notification of the 10 closest credit-counseling services. Consumers have the option to attend a free 8-hour course. Participant 6 reaffirmed that each loan officer gives each applicant a list of the 10 nearest credit-counseling agencies that includes the addresses and phone numbers of those agencies. According to Participant 6, in 2015, banks began requiring applicants to sign and acknowledge receipt of the creditcounseling agency list. Mortgage lenders at Bank E take a more proactive approach. Participant 8, who is an employee of Bank E, stated that each consumer receives a list of credit counseling agencies during the initial application process.

### **Emergent Theme 2: Government Guidelines and Regulation**

The second theme to emerge was the impact of government guidelines and regulation on the vitality of the bank. A thematic analysis of the participants' answers to Interview Questions 1 and 3 portrayed how the addition of government guidelines and rules has impacted the loan origination process (see Table 4). All participants, except Participant 8, stressed the impact and costs of new government guidelines and regulation on their businesses. The negative impacts of the 2007–2009 financial crises on consumers of financial products illustrated the importance of ensuring that adequate consumer protection systems exist (Polat & Alsaif, 2014). The CFPB has issued rules to help regulate the way mortgage lenders design the mortgages for borrowers. The CFPB is a federal agency that helps consumer finance markets work by making rules more effective, by consistently and fairly enforcing those rules, and by empowering consumers to take more control over their economic lives. The Wall Street Reform and Consumer Protection Act of 2010 that was signed into law in July 2010 gave the CFPB its authority (Polat & Alsaif, 2014). The Home Loan Toolkit provides contact information for the CFPB.

## Table 4

Excerpts of Answers to Interview Question # 1 What pre-qualification criteria, if any, does your institution employ when screening new applicants for mortgage loans? & Interview Question # 3 How has your experience with the financial and mortgage crises impacted your ideas about consumer financial literacy?	Interpretation & Analysis	Emergent Themes
P1 stated: "There will be a commonality amongst those that interviewed: For the most part, mortgage loan officers are operating under the same set of highly regulated rules and guidelines."	Since the financial crisis, loan officers have been operating under highly regulated guidelines & rules. No exceptions are made based upon size and popularity of the bank. The industry is uniformly regulated.	Universal government rules & regulations were necessary following the financial crisis.
P2 "Guideline changes tightened to the point that it became harder for good, ideal consumers to qualify for a mortgage loan."	Most participants stated that the new guidelines that were meant to filter out the "bad" borrowers ended up being very counterproductive and squeezed out some good borrowers also. Many participants considered this to be an overregulation of the industry.	The post-crisis government rules & regulations became so strict that bad borrowers as well as the good were sifted out, leading many to believe that the industry had become overregulated.
<ul> <li>P5 "Beginning in 2008, Fannie Mae &amp; Freddie Mack began requiring more documentation in order for the consumer to obtain a mortgage loan."</li> <li>P5 "There is a lot of pressure to make sure the bank has obtained all documentation for future inquiries from investors and auditors."</li> <li>P6 "The added regulation is doing the opposite of what they were intended to do."</li> <li>P1 felt that "The housing bust caused lawmakers to overreact &amp; put unreasonably strict controls on the mortgage industry, thus creating an environment of fear amongst lenders &amp; frustration for consumers."</li> </ul>	Many participants feel much pressure when originating a mortgage loan. They feel pressured to make sure that ALL necessary documentation is obtained prior to a consumer undertaking a new loan. This has caused an added stress to the loan officer throughout the process and made it difficult for them to decipher the good from the bad borrower(s).	The added government regulations have created an uneasy environment for banks and lenders to ensur- they are only providing loans to "worthy" consumers. The new regulation environment invokes discouragement, fear, and frustration with lenders and borrowers.
<ul><li>P6 "Since the inception of Dodd Frank, the bank's regulatory burden has increased by 15%."</li><li>P7 "All the added regulation is not helping the consumer in any way. It is simply raising the costs."</li></ul>	Many lenders are seeing that the added regulations are only adding to the amount of work that must be performed to originate a loan, which also adds to the costs associated with that origination. Lenders have to hire and pay more people to perform the job, which costs them more time and money.	The new government regulations have created additional costs to the lender.

Government Guidelines and Regulation (Interview Questions 1 and 3)

During our interaction, Participant 1 stated the following: "There will be a commonality amongst those that I interview: For the most part, mortgage loan officers are operating under the same set of highly regulated rules and guidelines." The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) was passed in 2010 by the Obama administration as a response to the Great Recession (Johnston, 2016). The stated aim of the legislature was to promote the financial stability of the United States by improving accountability and transparency in the financial system, to end "too big to fail," to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes (U.S. Government Publishing Office, 2010).

Participant 1 has seen through his experience that after the crisis, the government put more regulations in place that they thought would benefit the consumer. During the years following the crisis, Participant 2 witnessed guideline changes that tightened to the point that it became harder for good, ideal consumers to qualify for a mortgage loan. Title XIV, the Mortgage Reform and Anti-Predatory Lending Act, focused on standardizing data collection for underwriting and imposes obligations on mortgage originators to only lend to borrowers who are likely to repay their loans (U.S. Government Publishing Office, 2010). Title XIV also establishes national underwriting standards for residential loans (U.S. Government Publishing Office, 2010). Participant 5 recalled that the government tightened credit guidelines beginning in 2008, with agencies such as Fannie Mae and Freddie Mack requiring more documentation of consumers to obtain a loan. Title XIV, Subtitle B of The Dodd-Frank Act states that the loan originator shall make a reasonable and good faith effort based on verified and documented information that at the time the loan is consummated, the consumer has a reasonable ability to repay the loan (U.S. Government Publishing Office, 2010). Participant 3 informed me that federal regulations forced lenders to be more thorough when proving consumers' income, assets, and debts. As an underwriter, Participant 5 feels there is a lot of pressure to make sure she has done everything she can possibly do by ensuring she has all documentation for future inquiries from investors and auditors.

Conversely, these new regulations hurt the banks financially. Many smaller banks and financial institutions had to cease originating mortgages and car loans in response to the new regulations (U.S. Government Publishing Office, 2010). Participant 6 viewed all the added regulation as "doing the opposite of what it was intended to do." Participant 1 viewed the new regulations as creating an "environment of fear" within the mortgage industry. Participant 1 shared that the housing bust caused many lawmakers within the government to overreact and put unreasonably strict controls on the mortgage industry, thus creating problems for the consumer that the consumer may not thoroughly understand. Participant 4 viewed the new regulations as being predominantly driven by politics. Participant 1 stated:

The Dodd-Frank Act created redundancies by trying to do away with bad products, although the mortgage industry had already corrected itself. Dodd-Frank has greatly challenged mortgage companies and their processes, as well as the consumer. This created an added cost to the consumer that the average consumer is clueless about. Participant 6 stated that since the inception of Dodd-Frank, the bank's regulatory burden has increased by 18%. The Dodd-Frank Act requires the CFPB to promulgate regulations for new and simplified disclosures during the origination of a mortgage loan (Johnston, 2016).

When Participant 4 entered the mortgage business in 1985, the first 4 years looked very similar to the current environment: the banks documented every detail of the customer's application. Then the industry swung to very loose and lax standards and regulations. Several practitioners discussed how prior to the housing crash, the mortgage industry had moved to more lax underwriting standards (Jiang et al., 2014; Lam & Chen, 2012; Nichols et al., 2011; Spahr & Sunderman, 2014; Xudong & Bostic, 2009). Participant 4 stated that when the government wanted to increase mortgage loan volume, they would simply loosen the guidelines for obtaining a loan. Participant 4's statement confirmed research conducted by Nichols et al. (2011) in which they found that prior to the housing crisis, government standards became very lax in an attempt to create more homeowners. In 2016, mortgage environment is marked by tight regulations and controls. The financial crisis forced the government to increase supervision and improve regulation of the industry (Bakare, 2016). Government interventions were considered necessary to stop the crisis and restore confidence in financial intermediation (Weinberg, 2015).

Participant 4 further described the CFPB by saying that is was a post-recession organization that in essence put a squeeze on lenders and borrowers. Participant 4 has seen the adverse effects of overregulating in his experience as well. The intent of the

added regulations was to ensure that borrowers received loans that were not unfair, abusive, or deceptive, and to ensure the lender would be repaid (O'Keefe, 2016). Participant 4 stated that the people that were being protected by regulation generally ended up being the ones being squeezed out. In theory, the government began protecting a class of people they felt lacked the adequate knowledge to make an informed decision.

Participant 7 stated: "All the added regulation is not helping the consumer in any way. It is simply raising the costs." Participant 1 informed that in the past, banks used to assign three mortgage loan officers to each loan processor. Because the process has become so large and so much more complex, each loan officer has an assigned loan processor. Underwriting a loan has become a specialized skill. Participant 6 stated it simply: "We have to hire way more people to do the work." Participant 7 also confirmed the added costs of loan origination by asserting extra work requires "people's time and time is money so they start charging for it." Banks pass the added costs down to the consumer through the interest rates paid over the life of the loan. Participant 4 confirmed that the costs of originating a loan are significantly higher than it was in 2005, which was directly correlated with increased spending associated with hiring the right people to get the loan in place. Participant 1 explained how the CFPB is helping to overregulate the industry and "strangling the business."

The participants in this study have been working within the mortgage industry long enough to have lived through the financial crisis. The housing boom began in 2000, and by 2004, more Americans had become homeowners than any other time in history (Phillips, 2009). Conversely, during this boom cycle, housing price increases considerably outpaced household income (LaCour-Little & Yang, 2010). Findings from prior research studies supported the derived theme, regulation, by discussing how lax lending standards and poor regulation led to lenders writing more creative mortgage contracts.

### **Emergent Theme 3: Disclosure**

The third theme to emerge was disclosure. A thematic analysis of the participants' answers to Interview Questions 3 and 7 portrayed the importance of the standard disclosure packet as well as its overwhelming nature (Table 5). Prior to closing on a mortgage loan, each potential borrower receives a standard disclosure packet which also contains the Home Loan Toolkit. Participant 4 stated that the Standard Disclosure booklet is a federal requirement of each institution that offers mortgage products. In speaking with Participant 1, I learned that the standard disclosure packet provides consumers with all the intricate details of a mortgage, including key terms and definitions. Participant 2 confirmed that each consumer receives disclosures that explain that type of loan prior to them signing up for it. The Standard Disclosure Packet includes the interest rate agreement, the loan estimate, the borrower's certification & authorization, acknowledgment of receipt of all documents, Federal Housing Administration (FHA) and Veterans Affairs (VA) disclosures based on the loan program, settlement service providers list, homeownership counseling list, fair credit reporting act, and the Home Loan Toolkit.

## Table 5

## Disclosure (Interview Questions 3 and 7)

Excerpts of Answers to Interview Question # 3 How has your experience with the financial and	Interpretation & Analysis	Emergent Themes
mortgage crises impacted your ideas about		
consumer financial literacy? &		
Interview Question #7		
What type of learning materials do you provide for		
your potential borrowers to better understand how		
mortgage products work?		
P4 'The Standard Disclosure booklet is a federal	The government regulates the	Standard disclosure packet
requirement of each institution that offers mortgage products."	mortgage industry and instructs them in what needs to be provided	are required prior to allowing a consumer to sign
	to consumers prior to closing on a	into a mortgage contract.
P2 "Each consumer receives disclosures that explain that type of loan prior to them signing up for it."	mortgage question. Each participant stated that the	The standard diclosure packet provides basic
	requirements imposed by the	information about what a
	government & their respective	mortgage is and specific
P1 "Consumers have the tools, but if they sign a	institutions include providing the	terms of each mortgage.
mortgage contract and say they do not understand,	standard disclosure packet to each	
then it isn't because they were not provided with the	person who is interested in	
necessary tools."	obtaining a mortgage loan. When talking to participants, I	
P5 "The information is there. It just comes down to	understood that the disclosures	
whether or not the consumer chooses to utilize it."	are thorough and provide adequate	
	information for consumers to	
	better understand the mortgage	
	contracts they are entering.	
P5 'There are roughly 40 different disclosure topics	While consumers are provided	The standard disclosure
consumers have to sign off on"	with the requisite disclosures, reading through the disclosures	packets are extensive and can be overwhelming for
P7 'The disclosure package that is provided to	can be intimidating &	consumers. While
customers is over 100 pages. Creating more	overwhelming to the consumer,	consumers have the tools,
disclosures is not helping consumers or the banks."	with more than 100 pages in the disclosure packet.	they may or may not use those tools.
P1 "Most consumers will not read the entire packet,	Participants stated that because	
and if and when they do, they still do not thoroughly	of the size and somewhat complex	
understand it."	nature of the disclosure packets, many consumers will not read the	
	entire packet.	

Participant 1 has come to realize that most consumers will not read the entire packet, and if and when they do, they still do not thoroughly understand it. Participant 1 further asserted that while the loan officer(s) do everything within their power to make sure consumers understand, they cannot go through every page of the packet with each consumer. Participant 1 stated the following: "Consumers have the tools, but if they sign a mortgage contract and say they do not understand, then it isn't because they lacked the necessary tools." Participant 5 stated "The information is there. It just comes down to whether or not the consumer chooses to utilize it." Participant 2 stated that in addition to receiving and signing for the standard disclosure packet, the consumer is advised about what their worst case scenario could be, based on that product. Consumers are required to sign each disclosure prior to closing.

As stated by Participant 5, there are roughly 40 different disclosure topics consumers have to sign off on plus a booklet that comes from the government that provides the basics of mortgages. With more than 20 years of experience, Participant 1 has seen that there is no way to tell if the consumer is just nodding and saying yes when in actuality they don't really understand the information being presented. People do not want the loan officer(s) to know that they do not understand. There is nothing the mortgage officer can do to further help those people. Participant 5 acknowledged that all the disclosures may become overwhelming to the average consumer. Typically, mortgage disclosures appear to bombard applicants with legalese (Collins, 2014). Participant 7 had this to say to reaffirm the overwhelming nature of the disclosure packet: The disclosure package that customers receive is over 100 pages. Creating more disclosures is not helping consumers or the banks. Many consumers will begin to gloss over the disclosures and then just want to sign and get it over with. We should reduce the amount of disclosures to keep the consumer's attention span for the important parts of what they need to understand. Consumers typically only want to know how much to bring to closing and how much their monthly payments will be.

### **Emergent Theme 4: Literacy**

The fourth theme to emerge was literacy. A thematic analysis of the participants' answers to Interview Questions 3 and 6 portrayed how consumer financial literacy could impact the mortgage decision-making process (Table 6). Throughout the review of previous academic literature, I discovered one of the things that emerged from the global financial crisis was the need to understand the extent to which individuals understood the complex products and contracts in which they were entering (Gallery & Gallery, 2010). The CFPB publishes an annual Financial Literacy Report, as required under the Dodd-Frank Act. The Financial Literacy Annual Report highlights the importance of financial literacy and provides guidance to government entities and schools about how to provide financial education that can lead to better outcomes for American consumers. One of the main functions of the CFPB is to ensure that consumers receive timely and understandable information to make responsible decisions about financial transactions.

### Table 6

# Literacy (Interview Questions 3 and 6)

Excerpts of Answers to Interview Question # 3	Interpretation & Analysis	Emergent Themes
How has your experience with the financial and		
mortgage crises impacted your ideas about		
consumer financial literacy?		
&		
Interview Question 6		
What would you say is the level of financial		
understanding of your customers who are signing		
new mortgage contracts?		
P1 "While there is more information available to	In 2016, there is plenty of	In 2016, there is a plethora
participants today, that information is more complex	information available to consumers.	of information related to
and not easily understood by the average consumer."	While more information about mortgages is readily available to	mortgages that is readily available to consumers.
P6 "People are more confused about the process	consumers with the advent of the	It is necessary for lenders to
than educated."	internet, many consumers suffer from	ensure consumers understan
	information overload. The	the information presented.
	information is available, there is no	uie monimuon presente di
	way to ensure consumers have a	
	thorough understanding of the	
	information being presented.	
P2 "Mortgage consumers are better informed	Participants have seen that	The crisis has forced more
and are spending more time researching at home	consumers spend more time	consumers to be aware of
before they go into the bank for pre-qualification."	trying to understand how a	the terms of their mortgage
	mortgage works and how the various	contracts. Consumers are
P4 "Consumers are more concerned in 2016 than	terms of a mortgage work and the	doing a better job conductin
they were in 2005 about making a good decision.	impact to them as a consumer.	research on their own and
Now most consumers have done the necessary	Consumers ask more questions	becoming more literate
research through the information that is more readily	during the interview and are doing	as it relates to mortgages.
available to them."	independent research to ensure they	
	are making the best decisions about	
P5 'The mortgage crisis has made people ask more	their mortgages.	
questions and led bankers to be more thorough in		
their preparation of the consumer for home buying.		
Consumers are more literate in 2016 than they have		
been in the past mainly because loan officers take the		

necessary steps to ensure consumers are prepared."

Participant 1 confirmed there is more information available to applicants today, but that information is more complex and not easily understood by the average consumer. Participant 6 has found that people are more confused about the process than educated. Developing financial literacy could prove vital for all consumers to navigate through complex financial decisions (Taylor & Wagland, 2013). The collapse of the mortgage market demonstrated the importance of understanding complex financial instruments (Perry & Motley, 2009). Participant 5 has been in the business long enough to experience the crisis, the adverse results of the crisis, and the correction period. She asserted that prior to the crisis, consumers had a poor understanding of mortgages. Participant 3 commented that "with every disaster comes opportunity."

Participant 3 stated that when consumers are considering new mortgages, they conduct their own research by reaching out to several different sources for estimates and information. Participant 2 stated mortgage consumers are better informed and are spending more time researching at home before they go into the bank for prequalification. According to Participant 4, consumers are much more concerned in 2016 than they were in 2005 about making a good decision and as such, they have done the necessary research through the information that is more readily available to them. Participants 2 and 5 stated that people are trying a lot harder to understand what is going on with their mortgage(s) and are taking their financial vitality more seriously. Participant 5 emphasized that the mortgage crisis has made people ask more questions and led bankers to be more thorough in their preparation of the consumer for home buying. Financially literate consumers have a better understanding of the rights and obligations of homeownership and will be

less likely to pursue a loan they cannot afford (Martinez, 2009). Participant 5 stated that consumers are more literate in 2016 than they have been in the past mainly because loan officers take the necessary steps to ensure consumers understand the mortgage.

The consensus among all study participants was that most first-time homebuyers need a little more guidance throughout the process, while those that have purchased before tend to ask fewer questions. Participant 8 confirmed that first-time homebuyers are usually not very knowledgeable about mortgage products, so they have to provide more guidance to these borrowers than for borrowers who have owned a home before. With 30 years of experience, Participant 6 has seen that borrowers who are more sophisticated tend to ask more in-depth questions. Participant 3 stated that consumers as a whole are a lot more educated than they have been, mainly in part because of the forms they are required to fill out, new regulations, and the fact that lenders have to be more thorough. Participant 4 affirmed that, in general, in 2016 the financial understanding of first-time homebuyers is higher than it was 8 years ago. Participant 1 asserted that there really is not much middle ground: either the consumer knows what they are doing or he or they don't.

Participant 4 has seen that consumers are fairly well informed until they run into a financial crisis of their own and suddenly they have "amnesia about what they actually knew." Many consumers will then blame the bank for their personal financial crisis. According to Participant 4, when the bank provides the consumer with the amount of their monthly payments, the consumer should know whether or not they can afford the payment. Participant 4 asserted, "A reasonable person should have the ability to

determine how much they can afford to pay each month." Participant 7 stated that consumers have an idea of what they think they can afford to pay each month.

### **Application to Professional Practice**

This research could be relevant to the profitability of mortgage companies and banks that offer mortgage products. The objective of this qualitative exploratory multiple case study was to explore strategies mortgage loan executives need to prequalify mortgage loan applicants. Through interviews with key decision makers within the mortgage industry and documentation review, I identified factors that contribute to the overall profitability of financial institutions. The results of the research could give useful guidelines to key decision makers within the mortgage industry on strategies to make long-term decisions that can better prepare the industry for financial hardship, mitigate the consequences when a potential crisis arises, accelerate the recovery, and possibly prevent another crisis. Participants will receive a summary of the findings to integrate the findings into organizational strategies.

The study findings may apply to mortgage executives by providing insight into (a) counseling, (b) government guidelines and regulation, (c) disclosure, and (d) literacy. A critical theme that emerged involved strict government guidelines and regulations. While the focus of this research was to take a closer look into how the financial knowledge of the consumer may have an impact on banks' and mortgage companies' profitability and revenues, the results of this study could contribute to raising awareness around the issue of government reform. Many of the participants interviewed shared the sentiment that the government enacted several rules and guidelines to govern the mortgage industry.

Prior to the housing crisis, government standards became very lax in an attempt to create more homeowners (Nichols et al., 2011). Postcrash, the government and policymakers immediately tightened the controls around who would be able to qualify for a mortgage loan (Keys et al., 2010). Policymakers have created and implemented policy initiatives to improve consumers' financial decision-making (Hastings et al., 2013). Conversely, seven of the eight participants stated that the government's guidelines are doing more harm than good. The results of the research showed that many individual consumers are more knowledgeable than ever before. The issue that is plaguing the banks' profitability is the added time and resources needed to complete a mortgage contract under the new guidelines and regulations. Publishing the findings of this study may disseminate knowledge about the adverse fiscal implications of having industry standards that are too strict and that cause the banks to incur losses in profitability.

Many of the participants interviewed during this study indicated frustration around the new regulations set forth by the government. Participants I spoke with throughout this study have called for governmental reform. Matthews and Driver (2014) asserted that there is a need for reform in government housing policy and mortgage institutions if the United States is to maintain the high rate of homeownership. If mortgage lenders feel as though policymakers trust them to effectively screen applicants and that the government is looking out for mortgage lenders' best interests when creating and implementing new regulations and policies, then they can perform their jobs more efficiently and with pride.

#### **Implications for Social Change**

Nontransparent contract terms such as teaser rates, balloon payments, prepayment penalties, and negative amortization have lured potential borrowers to undertake loans that are not befitting their financial situations (Xu, 2014). Increasing transparency and awareness around mortgage contracts is one way to increase consumer confidence and knowledge. Financially literate consumers possess the ability and confidence to manage their personal finances by making the appropriate short-term decisions and sound, longterm financial planning while planning for life events and changing economic conditions (Tokar, 2015). When consumers possess adequate knowledge and resources to understand long-term mortgage contracts, they will make better decisions about their long-term future. Mitigating or eliminating information asymmetries can effectively reduce adverse selection. When consumers have access to pertinent information related to mortgage products, they are able to make more informed decisions. The nature of the housing crisis caused homeowners to have feelings of mistrust, betrayal, shame, and embarrassment when facing the risk of foreclosure (Ross & Squires, 2011). Hastings et al. (2013) stated there is a high correlation between financial knowledge and the likelihood of engaging in sound financial practices, such as paying mortgage loans on time. Informed consumers might make effective mortgage decisions that may (a) reduce late payments; (b) reduce mortgage defaults and foreclosures; (c) reduce mortgagerelated costs; and (d) reduce the feelings of frustration, shame, and betrayal. Becoming financially literate involves the consumer's ability to evaluate his or her best borrowing options and his or her ability to manage financial risks (Taylor & Wagland, 2013).

Positive social change occurs when informed borrowers avoid defaulting on their home loans. Lower defaults can reduce costs to communities by reducing property tax losses incurred due to abandonment; reducing the rate of neighborhood decline and deterioration; and reducing negative neighborhood image and declines in property values.

#### **Recommendations for Action**

The intent of the research was to explore strategies mortgage loan executives need to pre-qualify mortgage loan applicants. The findings from the study may provide further knowledge that most consumers are better informed in 2016 than they were prior to the crash that began in 2006. The findings may also provide further knowledge about the potential need for government reform to help reduce bank costs. Following the housing crash, the government enacted various regulations and policies the government felt would better screen for quality borrowers, thus reducing foreclosure-related costs to the banks. While the new governmental policies and regulations may squeeze out some bad borrowers, these same policies force the banks to hire more people to complete the process and prolong the process of underwriting a loan. The new regulations also create an environment of fear within the banks and frustration for those consumers hoping to obtain a mortgage. Many participants interviewed throughout this study indicated that the government and policymakers should focus less on creating policies to try to weed out "bad" borrowers and focus more on educating those potential borrowers. Many within the industry believe that if policymakers take an approach more focused on education, then the industry will self-correct.

Mortgage lenders may find the results of this study useful when applying strategies to ensure applicants possess adequate knowledge prior to entering a mortgage contract. Policymakers may also find the results useful to help create and implement policies that truly help banks and the consumer. Policymakers could use the strategies derived from the study findings to minimize stress to mortgage lenders and consumers, and minimize the costs incurred by banks and passed on to borrowers. I recommend that policymakers review and reevaluate current policies and the inherent costs associated with the regulations. The findings of this study indicate that there is a need for committed government officials to take a deeper look into how each policy affects the vitality and profitability of banks and financial institutions. Politics should not be the driving factor for regulations and policies surrounding the governance of the mortgage industry, but such policies should focus on what is in the best interest of the banks and the consumers.

The dissemination target audience for this study should include mortgage lenders, bank executives, policymakers, politicians, stakeholders, academic practitioners, business consultants, and researchers who may build upon the findings of this study and add to the body of knowledge. Seminar participants, readers of scholarly journals, and conference attendees may deem the findings of this study useful. Study participants will receive a copy of this study to review the findings. Local, state, regional, and national mortgage associations will receive copies of this study and may consider the findings beneficial.

#### **Recommendations for Further Research**

The limitations of this study include geographic constraints, the personal experiences of each participant, time constraints to collect data, access to participants, the complexity of the changing environment, and the timeliness of data interpretation. The results from this study come from a single geographic location. Gaining insights from individuals within various geographic locations may add insight into how financially literate borrowers are and how useful governmental policies and regulations are. Participants in other geographic locations may have different sentiments regarding the effectiveness of government intervention. Mortgage executives in other locations may find that they were hit harder by the recession and that government intervention has helped them to weed out borrowers that are not prepared to undertake a mortgage. As I conducted the study in northwest Arkansas, other researchers may seek to broaden the population to include other states or countries.

Other researcher could further research by focusing on whether government reform could lower costs incurred by mortgage providers. Many participants in this study did not feel a huge impact during the housing bubble bust. The biggest impact that participants have felt has come because of the government "*over-correcting*" the system. Federal regulations require more documentation than is necessary to prove a borrower's ability to repay the loan, while not accounting for his or her daily expenses, which could truly represent how much he or she can afford to repay. The added steps in the mortgage underwriting process have led many mortgagers to hire additional people, thus increasing overhead costs, which translate into higher interest rates and fees for consumers. Several participants stated that the added regulations have doubled the costs incurred by the bank when underwriting a mortgage loan. If given the time, a researcher could more thoroughly examine the effects of more much strict regulations on the profitability of the banking industry and individual mortgage providers. Results from that research could potentially further indicate that there has to be some middle ground between standards that are too lax and guidelines that are so strict that they force most consumers out of obtaining a loan.

Another topic for possible research is the most cost effective way to ensure consumers thoroughly understand the mortgage terms and processes. I learned from speaking with participants that while in general consumers are better informed than in the past, some barriers still exist. One barrier in the geographic location is language. Oftentimes, consumers who have recently moved to the country not only lack an understanding of how a mortgage works, they also do not understand the language presented to them in a mortgage contract. Teo et al. (2011) asserted that lenders must first understand the importance of financial literacy and have access to adequate resources to the extent that lenders perceive financial literacy as a natural subject. Potential homebuyers view the decision to undertake a mortgage loan as complex and dependent on risk tolerance, projected length of homeownership, and investment opportunities (Prather et al., 2013). Researchers should examine ways in which mortgage lenders can better prepare borrowers for the long-term mortgage contracts they are signing.

## Reflections

The findings of this study established a qualitative multiple case study as a practical approach to exploring the influence on revenues and profitability from prequalification of mortgage loan applicants. Completing the DBA process was both challenging and rewarding. Initially, I thought it would be easy to obtain participants for this study. I underestimated the complexity in recruiting individuals to participate in the study. I gained a wealth of knowledge about the views of mortgage lenders and executive decision makers. Meeting with the eight participants became an inspiring and educational experience. Participants were open and shared their experiences working with borrowers and with policymakers. Each participant was very passionate about his or her job.

I found the interview process quite insightful. While I have never worked in the mortgage industry directly, I have gone through the home buying process three times now. First-hand knowledge of the complexity of mortgage contracts, coupled with a personal desire to educate consumers led to the undertaking of this topic. I am very passionate about this topic but had to remain objective and seek to understand the issue from the participant's perspective through interviews and documentation reviews. Participants were very willing to answer interview questions and open to discuss a subject that is not often discussed, yet is a known issue. As I interviewed participants, I began to see themes develop that I had not previously anticipated.

Throughout the research process, I also learned the proper method to develop a research study. I understand how to align the elements of the study: (a) the problem

statement, (b) purpose statement, and (c) the research question(s). During the interview phase, I was able to develop an interview protocol and interview questions, conduct faceto-face interviews with the study participants, and interact with them in a natural, comfortable setting. After collecting all pertinent data, I sorted and analyzed the data. The skills I developed throughout this process will aid me in conducting future research projects.

## Conclusion

The purpose of this qualitative exploratory multiple case study was to explore strategies mortgage loan executives need to pre-qualify mortgage loan applicants. Throughout the analysis of the study, four themes emerged: (a) counseling, (b) government guidelines & regulation, (c) disclosure, and (d) literacy. The results of this study indicated that while consumers are more knowledgeable about mortgage products and terms and given the necessary documentation to better understand the mortgage loan process, banks are still incurring high costs to originate a mortgage loan. The unexpected losses suffered by mortgages and mortgage-related securities initiated the financial crisis (An et al., 2012). After the housing market crash that began in 2006, the government issued strict policies and standards to limit the amount of risky borrowers in the market. Standardized underwriting guidelines typically caution against lending to risky borrowers (Keys et al., 2010). Conversely, current industry standards are hindering both ideal and risky borrowers from obtaining a loan.

Reform of current governmental policies and better education for consumers are necessary measures for mitigating costs incurred by banks. During the mortgage crisis, foreclosures suffered by banks resulted in hundreds of billions of dollars in losses (Martinez, 2009). These alarming losses caused the government to intervene on behalf of the banks. Some borrowers did not understand the importance of credit, how it works, or the terms of the loan (Martinez, 2009). With the complexity of making sound financial decisions, it is critical for all consumers to be well educated prior to obtaining a loan (Taylor & Wagland, 2013). Most people do not have a background in finance nor do they understand the intricate details of the mortgage environment. Banks are responsible for ensuring consumers have a good understanding of their mortgages and their responsibilities under that contract. Study findings indicated that if banks can effectively convince the government to loosen industry standards, banks would be able to reduce overhead costs associated with drafting a loan and create a less stressful environment for mortgage lenders and qualified borrowers.

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## **Appendix: Interview Protocol**

Interview Title: Strategies Mortgage Loan Executives Need to Prequalify Mortgage Loan Applicants.

- 1. The interview session will commence with greetings and introductions.
- 2. The study participants will have previously read the informed consent form and provided their consent via e-mail, agreeing to participate in the research.
- 3. I will thank the participant for their agreement to participate in the research study. I will also provide information regarding the member checking process that will follow the transcription and interpretation of the data. Following transcript interpretation, I will schedule time with the interview participants for member checking procedures to assist with ensuring the reliability and validity of the data.
- 4. I will give the participant a hard copy print out of the informed consent letter for their records.
- 5. I will turn on the audio recorder and I will note the date, time, and location.
- 6. I will indicate the coded sequential representation of the participant's name e.g.,'Participant 1' on the audio recording, documented on my copy of the consent form and the interview will begin.
- I will give each participant the required time to fully answer each predetermined interview question in detail (including any additional follow-up/probing questions).
- 8. At the close of the interview, I will thank each research participant for his or her time and participation in the study.