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Winning Banking Strategies to Identify Efficiency Changes During a Financial Crisis

Adeeb Seman Hattar
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College of Management and Technology

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Adeeb Hattar

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2016

Abstract

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by

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MBA, University of Redlands, 2012

BS, California State University San Bernardino, 2010

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

December 2016

Abstract

Between 2007 and 2009, taxpayers paid \$700 billion to bail out failing U.S. banks. The purpose of this single case study was to explore strategies that leaders of a successful U.S. bank used to identify efficiency changes occurring during the financial crisis. The target population of this study included 6 bank leaders located in San Bernardino, California, who occupied a managerial role in a successful U.S. bank during a financial crisis, had experience with the efficiency changes that occurred during a financial crisis, and developed and implemented strategies to identify efficiency changes that took place during a financial crisis. The conceptual framework for this study was the theory of economic efficiency. Data consisted of semistructured interviews, annual fiscal reports, and proxy statements. All interpretations of the data were subjected to member checking to ensure trustworthiness of interpretations. Yin's method of qualitative data analysis was adopted, which consisted of five sequential steps: compiling the data, disassembling the data, reassembling the data, interpreting the meaning of the data, and drawing conclusions from the data. Based on the methodological triangulation of the data collected, 3 of the main themes that emerged were management strategies, application of digital technology, and growth maximization and risky loan elimination. The implications for positive social change include the potential to avoid bank failures in the future, resulting in a stronger and more robust economy, thus sparing taxpayers the burden of bailing out failing banks.

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Dedication

I dedicate this doctoral project to my parents and siblings, Seman, Magduleen, Claire, Phillip, and Peter. Thank you for your moral and loving support, encouragement, patience, and most importantly, the motivation you gave me to begin and end this journey successfully. Without any of you, I would not be the man, the son, or the brother I am today. Your continuous prayers gave me the power to encounter challenges I believed to be too difficult and to balance demands that I thought to be extremely stressful. Words alone cannot explain the appreciation or the endless feelings I have for all of you. The greatest gift I could ever receive from God is all of you, and I will love you forever.

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Section 1: Foundation of the Study

Between 2007 and 2009, economic financial crises led 168 U.S. banks to fail while profits of surviving banks drastically declined (Federal Deposit Insurance Corporation [FDIC], 2009). In the fourth quarter of 2008 alone, the reported loss in the banking industry was nearly \$32.1 billion, which represented a loss of 0.94% on the return of average assets (FDIC, 2009). The 168 U.S. banks that failed between 2007 and 2009 had deposits of \$432.8 billion and assets equal to \$547.1 billion, which cost the FDIC \$52.2 billion (FDIC, 2009). The U.S. banking system, with its secular principles, offers services such as accepting deposits, providing loans (business, auto, and mortgage), and offering investment products to consumers (Chansarn, 2014). In return for lending capital, U.S. banks receive compound interest on the loaned funds with an objective of increasing profits (Chansarn, 2014).

Background of the Problem

The financial crisis began in 2007 as the housing market began to decline (Trussel & Johnson, 2012). The primary cause of the real estate crash in the United States and eventually worldwide was risky home mortgages along with subprime mortgages containing balloon interest payments in addition to predatory lending (Trussel & Johnson, 2012). The crisis grew much worse when the housing market began to collapse soon after the rapid growth in the housing market and home prices (Huang & Tang, 2012). The crash in the real estate market caused a major increase in the number of home mortgage defaults, particularly for subprime mortgages (Jaggia, Roche, & Thosar, 2014). This initiated a decrease in the price of securities affiliated to the U.S. real estate market, in

turn hurting financial institutions in the United States and worldwide (Pontell, Black, & Geis, 2014).

Efficient banks have a higher chance of success than inefficient banks because of better organizational structure and communication, more adept and highly skilled professionals, overall less risky mortgages, and greater assets, which all translate to greater liquidity and solvency (Said, 2013). Decreasing the efficiency of banks will increase the possibility of failures in the financial system (Tamer & Yousef, 2013). To improve the efficiency of banks and avoid future oversights, bank leaders must understand the factors that negatively affected banking efficiency during the financial crisis between 2007 and 2009 (De Jongh, De Jongh, Jongh, & Gary, 2013). Three years after the start of the 2007 financial crisis, the gross domestic product of the United States did not grow (Pascu, 2014). Instead of the V-shaped recovery process that usually occurs after a postwar recession, the recovery of the 2007-2009 recession has been slow because of the recession's effect on countries such as China, those in the European Union, and those in Latin America (Stock, 2014).

Problem Statement

Between 2007 and 2009, taxpayers in the United States paid \$700 billion to bail out failing banks (Donaldson, 2012). The total budget of the U.S. government between 2007 and 2009 was \$8.8 trillion (White House, 2015); of that, 7.9% of the taxpayers' money went toward bailing out failed financial institutions (White House, 2015). After 168 banks failed, Congress passed specific financial reforms known as the Dodd-Frank Wall Street Reform and Consumer Protection Act to address the worst recession in 80

years (Nazareth & Rosenberg, 2013). This made loan approvals more difficult and modified the financing and banking industry (Nazareth & Rosenberg, 2013). The general business problem was that ineffective and risky banking practices in the United States jeopardized the steadiness of the financial system and resulted in the financial crisis (W. Bakhit & S. Bakhit, 2014). The specific business problem was that some U.S. banking leaders lacked strategies to identify efficiency changes occurring during a financial crisis.

Purpose Statement

The purpose of this qualitative exploratory case study was to explore strategies that leaders of a successful U.S. bank used to identify efficiency changes occurring during a financial crisis. I collected data from comprehensive and thorough interviews with leaders of a successful U.S. bank that had survived the financial crisis without needing Troubled Asset Relief Program (TARP) funds from the government. The research location was in San Bernardino, California. The conclusions of this study may help bank leaders make the necessary financial changes so that taxpayers will not be responsible for paying for the faults of others as they did during the recession. Moreover, the principal benefit of fewer bank failures will result in a stronger and a more robust economy, which should lead to a net socioeconomic gain.

Nature of the Study

In qualitative research, researchers gain a deep understanding of a specific experience (Thomas & Magilvy, 2011). I used a qualitative method because I was interested in gaining a deep and thorough understanding of the strategies used by leaders of a successful bank during a financial crisis. A quantitative method would not have been

the most appropriate approach in this study. The quantitative method is suitable for a systematic experimental study of social phenomena through computational techniques using statistical or numerical data (Smith, 2014). As I did not use numerical data, nor was I interested in relationships or comparisons between variables, a quantitative method would not have fit into my research.

A mixed-method researcher uses a combination of both qualitative and quantitative methodologies (Venkatesh, Brown, & Bala, 2013). The mixed method is most applicable when the researcher wants to focus on a complex set of research objectives involving multiple stages with distinctive types of data. Focusing on a complex set of research objectives involving multiple stages with distinctive types of data will enhance the extent of understanding achieved through a study (Venkatesh et al., 2013). The mixed method was not suitable for this study because the purpose of this study was to focus on a single objective (i.e., explore strategies), and I could achieve the purpose of this study in a single stage (i.e., qualitative method) using only qualitative data. Therefore, I used a case study design with an exploratory nature to focus on the complexity of a single case, as suggested by Yin (2014).

Other qualitative design approaches such as phenomenological, ethnographic, and grounded theory were not appropriate for this study. The phenomenological design would not have been suitable because I was not conducting a comprehensive contextual analysis of a limited number of conditions or events (Moustakas, 1994). Researchers use ethnography to explore human groups to understand how group members jointly shape and preserve a culture (Cruz & Higginbottom, 2013). Researchers use the ethnographic

design to study communities, groups, organizations, and social movements (Cruz & Higginbottom, 2013). Furthermore, ethnographic researchers apply a range of data collection methods during long-term engagements in their surroundings (Cruz & Higginbottom, 2013). The ethnographic design would not have fit the context of the present study.

Researchers who use a grounded theory approach may generate a theory (Mattarelli, Bertolotti, & Macri, 2013). The process involves theoretical categories, constructs, and the means to classify the information and make new associations between theory and phenomena (Mattarelli et al., 2013). As I was not interested in generating a theory for this research, a grounded theory approach would not have fit the purpose of this study (Kelemen-Erdos, 2012).

Research Question

The overarching research question for this study was the following: What strategies do leaders of a successful U.S. bank use to identify efficiency changes during a financial crisis?

Interview Questions

Interview questions were essential tools in this exploratory qualitative study. The analysis of the responses to the interview questions provided a better understanding of the types of strategies used in a successful U.S. bank during the financial crisis. The following were the interview questions for this study:

1. What specific strategies did your banking institution identify and implement during the financial crisis to achieve economic success and become more financially solvent?
2. What economic efficiency changes were transformed into success in your banking institution during the financial crisis?
3. What specific processes and procedures did you use to implement these strategies?
4. What responsibilities and organizational structure did you require to implement these strategies?
5. What key skills and roles did you apply to implement these strategies?
6. What other information, including company documents, that you consider relevant to this research would you like to share with me?

Conceptual Framework

The main goal of U.S. banks is pure economic gain, through which bank leaders aim to maximize profits and mitigate losses (Tanu, 2013). Leaders of U.S. banks base financing on creditworthiness and interest. The theory of economic efficiency is foundational to these concepts. The Russian economist Lerner developed the theory in 1943 (Kiani, Chen, & Madjd-Sadjadi, 2012; Lerner, 1972). Proponents of the economic efficiency theory posit that nothing can improve without affecting something else (Kiani et al., 2012).

By applying the theory of economic efficiency, I could identify areas that need improvement in relation to this study's specific research question. To achieve economic

efficiency, the price of a product must equal its marginal cost (Lerner, 1972). *Marginal cost* is the change in total cost when the quantity of production increases by one unit (Lerner, 1972). When the price of a product exceeds its marginal cost, its economic efficiency decreases (Lerner, 1972). During the burst of the housing bubble, which peaked in 2004, bank underwriters issued many risky home loans while inflating prices for financial gain that disrupted the economic efficiency of U.S. banks. Consequently, the marginal cost exceeded home prices and led to the housing bubble, which then led to the 2007-2009 economic crisis (Renaud, 2012).

Operational Definitions

Data envelopment analysis (DEA): Data envelopment analysis is a linear programming method displaying the efficiency of a particular decision-making unit, which generates a margin, usually by many inputs to generate many outputs (Sanei & Banihashemi, 2014).

Economic financial crisis: An economic financial crisis occurs when exchange rates and asset prices decline because of a stressed banking system, which leads to a recession (Duraskovic, 2014).

Islamic banking: Islamic banking is a traditional method of banking prevalent in most Islamic countries and based on the concepts of Islam and Shariah law that prohibit interest-based finance (Shafique, Hussain, & Taimoor, 2013).

Return on assets (ROA): Return on assets is a factor used to indicate the profit of an institution based on the return from assets (Yang & Baek, 2013).

Stochastic frontier approach (SFA): The stochastic frontier approach is a method of economic modeling used in the banking system to measure efficiency over time (Ningaye, Mathilde, & Luc, 2014).

Successful U.S. banks: Successful U.S. banks are Western financial institutions that did not seek government help or a bailout during the financial crisis (Friedman, 2013).

Troubled Asset Relief Program (TARP): The Troubled Asset Relief Program is a group of programs founded and run by the U.S. Treasury to improve the country's financial system, reinstate economic growth, and stop foreclosures during the 2007-2009 financial crisis (Winkelvoss, Amoruso, & Duchac, 2014). The Treasury received \$700 billion to acquire illiquid mortgage-backed securities along with other assets in an effort to reinstate liquidity to the money markets (Winkelvoss et al., 2014).

Western banking: Western banking is a form of banking in which financial institutions include services such as deposits, loans, and investment products that charge interest and fees on investments and deposits (Samad, 2014).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are the foundation of any proposed research and refer to something a researcher accepts as true without any proof (Baumgartner, 2012). I included three assumptions in this study. First, I assumed that the data I acquired were precise, accurate, and true. Second, I assumed that U.S. banks that survived the economic crisis were more efficient than banks bailed out by the government. Third, I assumed that government-

bailed-out U.S. banks would benefit most from the new strategies and techniques used in banks that did not need any TARP funds.

Limitations

Limitations are the potential weaknesses of a study (Moustakas, 1994). The first possible limitation was that, because the financial crisis occurred 6-8 years ago, the interview participants may not have recollected the specific strategies used during that time. As a result, the participants may have provided inaccurate or incomplete responses. Another possible limitation was the relatively small sample size. The data were predominately nonnumerical and qualitative in nature. Moreover, the data collected may not have been sufficient to investigate the individual experience of U.S. bank leaders in adequate depth.

Delimitations

Delimitations narrow the general range of a study (Alina, Matis, & Oriol, 2012). I restricted the extent of the study to distinguish the efficiency of the U.S. banking system throughout the economic decline between 2007 and 2009. Furthermore, the study only included leaders from one successful bank that did not need TARP funds. Even though a deep exploration of a case may require much effort and rigor, generalizing the findings to other U.S. banks was beyond the objectives of this research.

Significance of the Study

The importance of this study, from a business perspective, was to learn about and understand the decisions made by leaders of a successful U.S. bank that did not need TARP funds. Instituting successful banking practices should promote business growth

and development, which would translate to growth in the gross domestic product (GDP) and lead to a more robust U.S. economy. Consequently, this could result in a stronger global economy.

Contribution to Business Practice

The research contributes to business practice by sharing best strategic practices used by leaders of a successful U.S. bank to identify efficiency changes that took place during the financial crisis. Allowing other banks to identify, read about, and learn these strategies will reduce the likelihood of failures in future crises with similar efficiency changes. Because banks are financial institutions, other financial institutions such as mortgage loan companies, insurance companies, and brokerage firms may reap similar benefits.

Implications for Social Change

The results of the study may assist bank leaders in identifying and implementing best practices for sustaining efficiency and avoiding failure during a financial crisis. Moreover, banking that is more efficient will have positive implications for society because of the expansion of development and the growth of employment in various sectors. In turn, this may improve the world economy. The results of the study may provide business leaders, government leaders, borrowers, and investors with a better understanding of how to operate during a financial crisis.

A Review of the Professional and Academic Literature

The literature review focused on peer-reviewed journal articles related to U.S. banks. The literature review included works of researchers who examined efficiencies,

inefficiencies, investments, strategies, and productivity outcomes in different banking systems. The focus was primarily on U.S. banks and the strategies that leaders used during a financial crisis.

I used 203 references to explore and deliver a critical synthesis in the study. Of the 203 references, there were 187 (92.12%) peer-reviewed sources and 176 (86.70%) sources published within the last 5 years (i.e., 2012-2016). I used the research databases ABI/INFORM, Banking Information Source, EBSCOhost, OXResearch, and ProQuest at Walden University for peer-reviewed articles. I incorporated the following key words in the searches: *Western banks, U.S. banks, efficiency, inefficiency, cost efficiency, economic financial crisis, analysis, banking, economic costs, recession, loans, revenue, interest, capital, assets, management, and risk*. In addition, I divided the literature review into six major categories: (a) relevant theories, (b) U.S. banking systems versus other world banking systems, (c) efficiency in Western banks, (d) impact of enforcing regulations and banking rules on cost efficiency, (e) efficiency differences between Western and Islamic banks, and (f) efficiency differences based on size.

Relevant Theories

Three economic theories can serve as a basis for understanding the strategies used by leaders of a successful U.S. bank to identify efficiency changes that occurred during the financial crisis. These economic theories are economic efficiency, economic solvency, and economic growth. By applying the theories of economic efficiency, economic solvency, and economic growth, I was able to identify areas that need improvement in relation to this study's specific research question, which was the

following: What strategies do leaders of a successful U.S. bank use to identify efficiency changes during a financial crisis?

The main goal of U.S. banks is pure economic gain, through which bank leaders aim to maximize profits and mitigate losses (Tanu, 2013). Leaders of U.S. banks base financing on creditworthiness and interest. The theories of economic efficiency, economic solvency, and economic growth are foundational to these concepts. Bank underwriters issued many risky home loans, while inflating prices for financial gain, which disrupted the economic efficiency, solvency, and growth of U.S. banks. Consequently, the marginal cost of homes exceeded home prices and led to the housing bubble, which peaked in 2004 and then led to the 2007-2009 economic crisis (Renaud, 2012).

In banking, the theory of economic efficiency relates to everyday bank operations, home loan processing, customer service, and bank productivity, all of which influence the overall ability of the bank to meet its short- and long-term goals, known as *solvency* (Chan-Lau, 2012). To operate more efficiently, leaders of U.S. banks utilized digital technology, including online and remote banking as well as automated underwriting systems, to issue less risky loans (Goh & Kauffman, 2013). Consequently, greater bank efficiency leads to greater bank solvency and, as a result, greater net profit, success, and overall growth (Said, 2013).

Theory of economic efficiency. The ultimate goal of a financial institution is to achieve economic success (Said, 2013). To achieve economic success, a financial institution must be economically solvent and economically efficient (Said, 2013). As

demonstrated, both solvency and efficiency lead to the common denominator of greater economic efficiency, resulting in economic success (Said, 2013). Greater success will result in greater economic solvency, and greater economic solvency will lead to yet greater economic success and less chance of bank failure. Likewise, efficiency will lead to greater economic efficiency, and, as a result, greater economic success will lead to a more efficient bank and less likelihood of failure.

Economists attribute the theory of economic efficiency to the Russian economist Lerner, who grew up during the Great Depression and believed in free trade and a free market (Kiani et al., 2012; Lerner, 1972). Lerner coined the term *economic efficiency*, which economists later applied to banking and financial sectors (Kiani et al., 2012; Lerner, 1972). According to the theory of economic efficiency, the aim of U.S. banks is pure economic gain (Tanu, 2013). Bank leaders in the United States base financing on interest charged and the creditworthiness of the client. The basis of earnings in U.S. banks is the difference between the interest charged on loans and the interest rate depositors receive, as well as the fees charged to customers on products and services (Tanu, 2013). For example, if borrowers pay 7% on loans while depositors receive 2% on savings accounts, the banks make a net profit of 5%, which results in net economic solvency.

In contrast to Western banking systems, the theory of economic efficiency in other banking systems such as Islamic banks rests on ethics and morality, which originates from the Shariah law (Ahmed et al., 2014). The principal instruments on which leaders of Islamic banks base economic gain are (a) Musharakah, (b) diminishing

Musharakah, (c) Ijara, (d) Istasna, (e) Murabaha, (f) Bai Salam, and (g) Mudaraba (Hanif, 2011). *Musharakah* involves creating a partnership to start some economic activity, whereas *diminishing Musharakah* involves one partner or partners gradually buying out the interest of the other partner or partners (Hanif, 2011). *Ijara* refers to renting a physical asset to another party (Hanif, 2011). *Salam* refers to paying now for a commodity delivered in the future, as in agricultural endeavors, whereas *Istisna* refers to paying now with the expectation of future delivery for something yet to come into existence, such as a real estate development (Hanif, 2011). *Murabaha* refers to buying an asset, adding a fixed markup as profit, and then selling the asset (Hanif, 2011). Mudaraba is a method of partnership where one party offers the capital and the other party delivers the skills (Hanif, 2011). In summary, Islamic banks base financing on religious beliefs that prohibit charging interest (Wilson, 2012). In contrast, U.S. banks base financing on the interest charged and the creditworthiness of the client; the U.S. practice is independent of any religious beliefs (Tanu, 2013).

Theory of economic solvency. Economists attribute the second theory, the theory of economic solvency, to American author Davis, who in 1910 wrote about the theory in his book *The Origin of the National Banking System* (Davis & Noyes, 2010). Economic solvency may lead to success or failure in a banking system. Banks may hold a percentage of customer deposits to prevent a lack of cash flow, insolvency, or a lack of liquidity, which can lead to bank failure (Chan-Lau, 2012). *Solvency* refers to the ability of the bank to meet its short- and long-term financial expenses and achieve long-term expansion and growth (Chan-Lau, 2012).

The interaction between asset and liability structures determines bank solvency; bank managers or bank regulators can change these structures and interactions (Gatzert & Wesker, 2012). To reduce potential solvency and liquidity risks, it is important to increase equity capital by maintaining a significant percentage of the bank's assets (Gatzert & Wesker, 2012). Therefore, the more economically solvent a bank becomes, the more economically efficiently the bank operates (Chan-Lau, 2012).

Theory of economic growth. The theory of economic growth was the third concept I used as a base for comprehending other economic concepts as they translate to the success or failure of a banking institution during a financial crisis. American economist Solow developed the theory of economic growth in 1956 (King & Levine, 1993). Solow posited that economic growth occurs when people take and rearrange resources in a way to make them more valuable (King & Levine, 1993). Efficient banks have a greater chance of growth than inefficient banks, which makes liquidity and bank efficiency suitable indexes to determine whether a bank will fail based on current performance (Said, 2013). The lack of economic efficiency in banks will increase the possibility of failures in the financial system (Tamer & Yousef, 2013).

Finally, net profit is an essential factor in the economic growth of any financial institution (Tanu, 2013). The difference between the interest charged on loans and the interest rate depositors receive, as well as the fees charged to customers on products and services, defines how economically efficient, solvent, and successful a bank is (Tanu, 2013). For this study, I applied these three economic conceptual theories to explore the

types of strategies used by leaders of a successful U.S. bank to identify efficiency changes occurring during a financial crisis.

The U.S. Banking System Versus Other World Banking Systems

Banking began during ancient times, even before the existence of actual banks, when people used sacred structures such as temples to save and protect financial possessions (Burns, 2013). Banking first appeared around 2000 BC in Assyria, Greece, Babylonia, and throughout the Roman Empire but did not begin to progress into modern banking until the medieval and Renaissance eras, when it emerged in the Italian cities of Florence and Venice (Malanima, 2011). Regardless of the banking system, banking is the most important sector of any economy. A banking system is a financial institution that acts as an intermediary for savers and borrowers (Tanu, 2013). The basis of earnings in U.S. banks is the difference between the interest charged on loans and the interest rate depositors receive, as well as the fees charged to customers on products and services (Tanu, 2013).

In China, the Song Dynasty operated as a bank. As far back as 960 A.C., the Song Dynasty accepted deposits, made loans, and issued bank notes (Liu, 2015). Western bankers introduced the modern concepts of banking in China in the early 19th century (Nolan, 2011). Piaohao, also known as Shanxi, was an early Chinese bank that introduced checks cashable throughout the company's many branches in China to handle large amounts of cash (Brandt, Ma, & Rawski, 2014), which eventually led to 475 branches covering most of China (Brandt et al., 2014). In addition to the nationwide network of Piaohao banks in China, many small local banks called Qianzhuang began in

the Shanghai region (Brandt et al., 2014). In 1776, these banks in Shanghai started to commercialize by conducting local money exchange, issuing cash, as well as negotiating bills and notes in the local business community (Brandt et al., 2014). Due to the expansion of China's foreign trade, the Chinese merchants kept a close affiliation with the banks (Brandt et al., 2014). When Western banks began in China, personnel in Western banks began to distribute *chop loans* to the Qianzhuang, who would then loan this money to Chinese merchants to obtain goods from foreign firms (Nishimura, 2005). By 1890, approximately 10,000 Qianzhuang banks existed in China (Li Sun & Zhang, 2013). After 1949, the Chinese banks became nationalized (Li Sun & Zhang, 2013).

The first indications of an Islamic banking system emerged in the early 1970s (Kozarevic, Nuhanovic, & Nurikic, 2013). The first Islamic banks were the Dubai Islamic Bank in the United Arab Emirates (UAE; Said, 2012) and the International Islamic Development Bank in Jeddah, Saudi Arabia (Mustafa & Razak, 2012). Islamic banks also act as intermediaries for savers and borrowers, but the difference from U.S. banking is that Islamic banking does not involve an agreed-upon rate of interest provided to depositors or an established rate of interest from the borrowers (Ahmed et al., 2014). Instead, Islamic banking involves profit-sharing arrangements with both the borrowers and the depositors standing to gain profit and revenue (Febianto, 2012). Similar to U.S. banks and Chinese banks, Islamic banks charge fees for products and services (Samad, 2014). Medium- and larger sized firms tend to be the focus for the profit-sharing modes of financing, because smaller firms have a higher risk of failure due to lack of experience and poor record keeping (Alam, 2013). By 2013, Islamic banks reached \$1.2 trillion in

assets globally (Ul-Hassan & Usman, 2013). Although Islamic banks are growing rapidly worldwide, some advantages of U.S. and Chinese banks outweigh the advantages of Islamic banks (M. A. Qureshi & Shaikh, 2012).

In contrast to Islamic banks, U.S. banks have experience and long-term understanding of the banking industry, particularly regarding interest, which is their main source of revenue (Samad, 2014). Unlike the customers of Islamic banks, customers of U.S. banks do not share any losses with the banks, and most transactions require insured security (Metwally, 2012). The imbalance between global finances, the prevailing market conditions, recapitalization, and poor asset growth are the main factors that impede the success of banks worldwide (Zeng, 2013). If leaders of U.S. banks would choose to compete with any other banking industry, entering the industry would not be an issue (Goh & Kauffman, 2013). Leaders of U.S. banks could use their resources to improve technology, provide additional services and products, and share risk extensively (Goh & Kauffman, 2013).

Efficiency in the U.S. Banking System

Researchers have explored the various efficiencies in the U.S. banking system. There are many tools and techniques to measure efficiency changes in banking institutions (Tsolas, 2011). These include (a) scope efficiency, (b) operational efficiency, and (c) scale efficiency (Tsolas, 2011). *Scope efficiency* refers to the relationship between creating varieties of output and the average cost (Tsolas, 2011). *Operational efficiency* deals with the relationship between the input to manage a business operation and the

output achieved from the business. *Scale efficiency* is the affiliation between the average cost and the level of output (Tsolas, 2011).

For example, in China, researchers have used the data envelopment analysis (DEA) efficiency measuring tool to evaluate the efficiency of the 14 largest Western banks to project whether competition can improve the efficiency and performance of banks (Ye, Xu, & Fang, 2012). Ye et al. analyzed data from 1998 to 2007 and tested five hypotheses on the affiliation between market structure, profitability, and efficiency. Ye et al. concluded that technical efficiency had a substantial influence on bank profitability and that policy makers should encourage additional rivalry throughout the Chinese banking region.

In the U.S. market, the subprime mortgage sector was a main influence responsible for the global financial crisis of 2007-2009 (Martin, 2011). Up to the 1980s, personnel in financial institutions were lending money to communities based on savings these financial institutions received from the same communities. After the financial crisis of the 1980s, personnel in U.S. banks stopped lending money to local communities and began lending money to international markets (Martin, 2011). The efficiency of Western banks subsequently declined because of the high risk of international lending, which eventually led to the 2007-2009 financial crisis and the housing market crash (Martin, 2011).

The root cause of the U.S. financial crisis related to the self-regulating policies at the time that permitted the personnel in U.S. investment banks to minimize diversification and enhance advantage over competition (Coffee, 2009). In addition, the

competition significantly increased from the overemphasis on the subjective consumer credit ratings (Coffee, 2009). The 2007-2009 crisis stemmed from a lack in efficiency and failing new technologies, leading to the burst of a supply-compelled bubble (Coffee, 2009).

The competition in the U.S. market directly relates to the efficiency of the financial institutions (Coffee, 2009). As competition increases, efficiency increases (Coffee, 2009). In other parts of the world like Australia, the lack of efficiency in the banking system resulted principally from the deregulation of their financial system along with instability within the financial market itself that began in the early 1980s and lasted till the late 2000s (Abbott, Wu, & Wang, 2013). In contrast, Said and Masoud (2014) conducted a study on the cost and profit efficiencies of commercial banks in Tanzania using nonparametric statistical approaches. Said and Masoud examined the influences of ownership, bank profile, size, and corporate structure on bank efficiency. Banks overall were less cost efficient than profit efficient, but foreign banks were less cost efficient while domestic banks were less profit efficient.

Bank profitability influenced the efficiencies and productivity of Greek banks (Schiniotakis, 2012). Moreover, the leaders of most Greek commercial banks in 2009 attempted to advance their capital adequacy (Schiniotakis, 2012). Although cooperative banks failed to advance, the economic crisis affected the banks less (Schiniotakis, 2012). However, Greek cooperative banks owned nearly double the amount of nonprofit loans when compared with commercial banks, which indicated that large banks were less

efficient than small banks (Schiniotakis, 2012). The DEA method was suitable to collect information from 2007 to 2009 (Schiniotakis, 2012).

Impact of Enforcing Regulations and Banking Rules on Cost Efficiency

Kenjegalieva, Simper, and Weyman-Jones (2009) examined the inefficiency of Western banks in Eastern European countries between 1999 and 2003. Kenjegalieva et al. used different sample sizes each year. Kenjegalieva et al. sampled 116 banks in 1999, 127 banks in 2000, 115 banks in 2001, 117 banks in 2002, and 128 banks in 2003 and indicated that the efficiency gap involving the sample countries had weakened over time.

An exploration of individual branches of a large Western banking financial institution in Greece involved two methods to evaluate the efficiency of the bank and its branches (Tsolas & Giokas, 2012). The first method involved goal programming (GP), and the second method involved using the DEA method (Tsolas & Giokas, 2012). Although a financial recession and governmental and market unsteadiness did take place, a strong relationship remained between the rankings obtained by GP and DEA. These researchers indicated that bank branch transactions and production efficiency had a positive relation (Tsolas & Giokas, 2012).

Exploring the effects of improving the Korean financial system by increasing banking efficiency using a multiple criteria linear programming data mining approach during a 1997-1998 national banking crisis revealed that, in the course of 1997-2003, banking efficiency decreased (Kwak, Shi, & Kou, 2012). The financial crisis ended in 1998 (Kwak et al., 2012), and an increase in efficiency occurred because of government monitoring and enhanced regulations. In addition, because of efficiency increasing, the

capital sufficiency improved (Kwak et al., 2012). The capital ratio suffered and declined during the 2-year financial crisis (Kwak et al., 2012).

Applying the stochastic frontier approach (SFA) method on 40 foreign and 62 domestic banks between 2000 and 2007 to measure the cost efficiency in another study revealed that foreign banks exhibit higher cost efficiency than domestic banks (Rouissi & Bouzgarrou, 2012). Domestic banks in developed countries such as France had an advantage of cost efficiency, and the decision by domestic bank leaders to practice retail banking services resulted in high fixed costs (Rouissi & Bouzgarrou, 2012). Gargouri (2013) examined the efficiency of the Tunisian commercial banking system between 1993 and 2010 using the SFA method. Gargouri found that small and medium sized banks had better cost efficiency than large banks. Furthermore, small banks were less efficient than large and medium sized banks based on profit estimates (Gargouri, 2013). Therefore, Gargouri concluded that a competitive atmosphere has more of an advantage in terms of efficiency for the commercial banking system in Tunisia (Gargouri, 2013).

Bauman (2011) explored how leaders led corporations after a crisis and how rational decisions using an ethical approach played a crucial part in the building phase. He discovered that the ethical virtues of justice and care were the most effective approaches for the leaders of a corporation to gain momentum after a financial crisis (Bauman, 2011). The most significant method for leaders of a financial institution to handle a financial crisis is the ethics of a caring approach, as the focus of the method is on the stakeholders (Bauman, 2011).

Efficiency Differences Between U.S. and Islamic Banks

Although the focus of the research question was to identify the strategies of leaders of a successful U.S. bank to identify efficiency changes during a financial crisis, the comparison to other banking systems, including Islamic banking, may render some new information. In spite of the major differences between the U.S. and Islamic banking systems, it would be valuable to compare and contrast the efficiencies respectively. Unlike the vast amount of research conducted on efficiency in U.S. banks, limited research exists on the efficiency of the Islamic banking system. An exploration into the liquidity, solvency, and risk of the Islamic banking community of Brunei Darussalam revealed that credit risk, foreign-exchange risk, and operating risk were the most significant kinds of risk that challenged its Islamic banks (A. Hassan, 2009).

Analyzing accounting ratios can include liquidity, solvency, risk, and profitability (M. Hassan, 1999). With regard to cash deposits, Islamic banks had more liquidity than U.S. banks. Western banks had a cash deposit ratio of .01, whereas Islamic banks had a cash deposit ratio of .02. Moreover, when compared to Western banks, the overall risk in Islamic banks remained lower, even though the risk during the development stages was higher (M. Hassan, 1999). Efficiency factors led to the real estate bubble and the financial crisis that occurred in Dubai between 2007 and 2009 (Renaud, 2012). Compared to the rest of the Arab countries, Dubai was the only real estate economy with Western investors having a market that rapidly grew in investments because of trade, professional services, construction, tourism, and financial services (Renaud, 2012). The banking sector in Dubai began to implement U.S. banking methods and procedures, and as soon

as the global financial crisis occurred, Dubai had one of the worst real estate bubble crashes in history (Renaud, 2012). As the example of Dubai showed, Islamic banks were more efficient than U.S. banks (Renaud, 2012).

Abu-Alkheil, Burghof, and Khan (2012) compared the efficiency performance of the Bosna Bank International (BBI) in Bosnia-Herzegovina and the Islamic Bank of Britain (IBB) in the United Kingdom to small conventional banks in each country and to small and large Islamic banks from Muslim-majority countries between 2005 and 2008. The focus of Abu-Alkheil et al. was to evaluate the changes of BBI and IBB productivity relative to small Islamic banks outside and within Europe in relation to small conventional banks in the United Kingdom and Bosnia. The ordinary least squares regression analysis was suitable for checking the DEA results, as well as regulating the effect of external and internal factors on the efficiency of the banks (Abu-Alkheil et al., 2012).

Based on the outcomes, the researchers concluded that the inefficiencies of IBB and BBI were because of mismanagement and were at large banks rather than small banks (Abu-Alkheil et al., 2012). When compared to Islamic banks, IBB had a lower efficiency rate than BBI, whereas BBI recorded lower growth in estimated efficiency. Likewise, BBI and IBB had negative growth in technology innovations but had upward growth in technical and productive efficiency (Abu-Alkheil et al., 2012). The resulting conclusion was that IBB had a lower efficiency performance compared to conventional banks. Generally, a bank that is less efficient is smaller, is less profitable, has acquired

more debt, has invested less in skills, and works in nations with a lower gross domestic product per capita (Abu-Alkheil et al., 2012).

Hidayat and Abduh (2012) evaluated the performance of Islamic banking compared to Western banking in Bahrain by studying the impact of the global financial crisis. Hidayat and Abduh applied panel regression analysis to analyze the data. Exploring the balance sheets and income statements involved applying ratios to determine the liquidity, credit risk performance, and profitability of the selected banks. Using the ideologies of Islamic finance would not have resulted in a financial crisis (Hidayat & Abduh, 2012). Islamic banks had more liquidity than Western banks, meaning the Western banks had higher liquidity risk when compared to Islamic financial institutions (Hidayat & Abduh, 2012). The financial crisis had no substantial impact on the financial performance of Islamic banks during the crisis period (Hidayat & Abduh, 2012).

Rashwan (2012) conducted a study on the efficiency and profitability of Islamic and conventional banks during and after the 2007-2009 financial crisis to examine if there were any major differences between the two banking sectors. He applied the MANOVA technique, a method that researchers use when examining the differences between two or more vectors, to analyze the financial secondary data of both banks (Rashwan, 2012). The major difference between the two banking sectors emerged in 2007 and 2009, whereas in 2008, there were no major differences indicating that the financial crisis affected both sectors (Rashwan, 2012). Apparently, Islamic banks

outperformed conventional banks in 2007 and conventional banks outperformed Islamic banks in 2009 (Rashwan, 2012).

Tahir, Razali, and Haron (2013) inspected the efficiency and productivity of 15 Islamic banks that applied either the standard DEA approach or alternative DEA approach. Tahir et al. found that the level of inefficiency between the banks using the standard DEA approach had a higher efficiency level than banks applying the alternative DEA approach. Nair, Purohit, and Choudhary (2014) applied the grounded theory approach with a multiple regression analysis to examine if leaders of Islamic banks encountered the same risks as leaders of non-Islamic banks. Exploring the risks leaders of Islamic banks encountered in comparison to the risks leaders of traditional banks faced revealed that Islamic banks had the same risks as Western banks (Nair et al., 2014). The Islamic banks faced fewer technically advanced risk measurement procedures than Western banks, although Islamic banks typically face more risk than Western banks because of the lack of skill and understanding of financial tools (Nair et al., 2014). Leaders of Islamic banks revealed that they needed additional capital to succeed when facing high risk (Nair et al., 2014).

Al-Tamimi (2013) sought to determine factors affecting Islamic conventional banks in the UAE between 1998 and 2010. He used the independent variables of competition between UAE banks measured by concentration (CONC) and three control variables, economic conditions (ECON) measured by economic growth, the banks' magnitude measured by total assets, and profitability measured by the ROA. Risk taking was the only dependent variable in the study (Al-Tamimi, 2013). He concluded that there

was a substantial difference between UAE conventional bank and Islamic banks regarding risk-taking behavior. Conventional banks in the UAE were riskier than Islamic banks, and privately owned UAE national banks were negatively associated with bank risk-taking.

The Islamic banking system had a higher cost because of mandatory compensation to the Shariah Compliance Board, as the board directed compliance with all suitable Islamic laws (Elkhatib, 2013). The Shariah Compliance Board generated additional legal costs, salaries, and costly complex financial products to allow Islamic banks to remain competitive with Western banks (Elkhatib, 2013). Asma and Manelle (2014) conducted a three-dimensional analysis of Western and Islamic banks in 21 Middle East and North African countries to measure efficiency and profitability. Asma and Manelle began with a performance comparison between Western and Islamic banks in terms. Asma and Manelle's second analysis focused on the impact bank size had on performance. The third analysis was on the effect of the recent financial crisis. As a result, Asma and Manelle found Islamic banks were less efficient in profit than Western banks.

Usman and Khan (2012) compared three Western and three Islamic banks in Pakistan between 2007 and 2009. Usman and Khan's evaluation of bank efficiency included *t* tests and found that Islamic banks had higher growth rates, liquidity power, and profitability than Western banks. An exploration of the cost and profit efficiency of 14 Islamic banks in Malaysia between 1998 and 2004 involved applying the DEA on 12 Islamic windows located at non-Islamic banks and on two Islamic banks (Kamaruddin,

Safa, & Mohd, 2008). The basis of the evaluation between Islamic banks was financial ratios collected from income statements and balance sheets. Achieving technical efficiency within Islamic banks involves using technology, including online banking, debit cards, and automated teller machines. With regard to cost efficiency, the Islamic banks consumed approximately 30% of resources to generate outputs, which resulted in wasting resource consumption. The researchers concluded that non-Islamic banks were twice as efficient as Islamic banks in Malaysia between 1998 and 2004 (Kamaruddin et al., 2008). Furthermore, the foreign Islamic banks and Islamic windows functioned less proficiently regarding profits rather than costs, but the operating profit efficiency and Western banking system were equivalent.

Rozzani and Rahman (2013) applied the SFA to explore the efficiency of Western and Islamic banks between 2008 and 2011. These researchers collected information from 19 commercial banks and 18 Islamic banks in Malaysia and analyzed the determinants affecting conventional and Islamic banks' efficiency (Rozzani & Rahman, 2013). The levels of profit efficiency in conventional and Islamic banks in Malaysia were similar when working on a small scale (Rozzani & Rahman, 2013). The economic downturn in Malaysia occurred in 2002, but the recovery in 2003 and 2004 was rapid (Sufian, 2007). An exploration into the efficiency of Islamic banks in Malaysia between 2001 and 2005 using the DEA method revealed that Western banks were less efficient than Islamic banks and bank profitability increased when the banks were more efficient (Sufian, 2007). The market share and bank size decreased the efficiency of banks (Sufian, 2007).

The Islamic banks had less managerial efficiency in managing costs than Western banks had (Sufian, 2007).

Ghauri and Qambar (2012) applied financial ratios to evaluate and compare the performance of Islamic banks with Western banks. Ghauri and Qambar collected and analyzed information from 52 Western banks and 35 Islamic banks from seven countries using bank spread, bank margin to total assets, and non-interest-based costs to total assets. Ghauri and Qambar found that Western banks had lower operational costs than Islamic banks. Nichita, Kagitci, and Vulpoi (2013) explored the efficiency of Islamic banks in Saudi Arabia between 1998 and 2013 on data available on the website of each financial institution. Nichita et al. revealed that Islamic banks operating under a financial crisis have an advantage because of their position within Saudi Arabia and are likely to be more efficient in the near future in comparison to Western banks.

Musibah and Alfattani (2014) explored the efficiency of Islamic banks functioning in the Gulf Cooperation Council area between 2007 and 2011. The researchers used the ROA model along with multiple regression analysis. Musibah and Alfattani included 36 Islamic banks and concluded that the ROA was a vital factor affecting Shariah Supervisory Board effectiveness and the financial performance of Islamic banks.

Efficiency Differences Based on Size

The aim of the following studies was to indicate how size could affect the efficiency of banks. Al-Saidi and Al-Shammari (2013) conducted a study to explore the affiliation between bank performance and board composition. Regarding board

composition, Al-Saidi and Al-Shammari considered the role of nonexecutive directors, board size, role duality, and family directors. Furthermore, Al-Saidi and Al-Shammari included data from a sample of nine Kuwait banks between 1996 and 2010. Two-stage least squares and ordinary least squares were suitable for analyzing such a connection and addressing endogeneity in explanatory variables (Al-Saidi & Al-Shammari, 2013). These researchers found a link between the board composition of banks and bank performance (Al-Saidi & Al-Shammari, 2013). Based on the ordinary least squares regression results, only the board size and proportion of nonexecutive directors negatively affected bank performance, whereas role duality positively affected the performance of a bank (Al-Saidi & Al-Shammari, 2013).

An exploration into the connection between bank-based financial development and economic growth in Hong Kong involved an attempt to discover if the correlation between bank-based financial development and economic growth in Hong Kong followed a supply leading or a demand-following response (Ho & Odhiambo, 2013). The affiliation between bank-based financial developments and economic growth in Hong Kong was profound to the proxy used to examine banking sector development (Ho & Odhiambo, 2013). Comparing the efficiency of Western banks in China to Western banks outside China involved applying the DEA method to determine the sources of inefficiency in the banks in China between 2001 and 2007 (Sok-Gee, 2011). Commercial banks in China emerged as technically inefficient. In addition, the technical inefficiency of banks in China had its foundation in pure technical inefficiency, which meant that the commercial banks had issues between inputs and outputs (Sok-Gee, 2011).

Using the DEA method, Toci and Hashi (2013) explored the efficiency of most banks in four countries in South-East Europe between 2002 and 2005. The outputs were loans, while labor and capital were the inputs (Toci & Hashi, 2013). Marginal improvement in the efficiency of banks occurred because the banks in general failed to improve efficiency as much as the few best performers, which exhibited a change in technology (Toci & Hashi, 2013). The researchers concluded that the central banks should focus on increasingly inefficient banks that failed to obtain new technologies as they may have to exit the market, which in turn creates instability in the banking sector (Toci & Hashi, 2013). Raphael (2013) explored the efficiency of 58 Western banks in Tanzania, Kenya, Uganda, Rwanda, and Burundi between 2008 and 2011 by using the DEA method. A severe decline occurred in technical efficiency from 0.81 (2008) to 0.56 (2009), and thereafter the trend of technical efficiency increased in 2011 to 0.73. During this period, most commercial banks in East Africa operated under a decreasing return to scale (Raphael, 2013). As a result, a lack of use within the input resources caused commercial banks in East Africa to become insufficient (Raphael, 2013).

Using the DEA method, Andries and Capraru (2012) explored the efficiency of 923 commercial banks in 27 European countries. Competition severely decreased between 2005 and 2007, whereas between 2001 and 2006, the competition increased. The researchers concluded that policy makers should not depend on raising competition to develop the efficiency of banks, but instead should build an environment that will improve the efficiency of banks (Andries & Capraru, 2012). Using the DEA method, S. Kumar and Gulati (2010) explored the performance, efficiency, and effectiveness of 27

banks in India during the 2006-2007 financial year. S. Kumar and Gulati collected information from the efficiency and effectiveness scores of all 27 individual public sector banks to measure the relationship between efficiency and size of the banks. The researchers found high efficiency but did not imply high effectiveness in the Indian public sector banking industry (S. Kumar & Gulati, 2010). Furthermore, the technical efficiency of the small banks was higher than the efficiency of large banks, and effectiveness and performance corresponded positively, which indicated that leaders of Indian banks should focus primarily on income-generating abilities (S. Kumar & Gulati, 2010).

Applying the SFA method to measure efficiency, Perera, Skully, and Wickramanayake (2013) determined the cost efficiency of 111 Western banks in Pakistan, India, Sri Lanka, and Bangladesh between 1997 and 2004. Perera et al. concluded that efficiencies depended on the size of banks. Between 1997 and 2004, banks declined overall, and small banks were less cost efficient than large banks because of the size of assets. In addition, the bank size positively correlated with profitability. The researchers indicated that a slack in the legal systems could lead to inferior contract enforcement on loan contracts. An exploration into the efficiency of 13 banks in Jordan between 2000 and 2012 by Al-Amarneh (2014) indicated that ownership concentration had a substantial and positive effect on bank profitability, while foreign ownership positively affected operating efficiency. What is more, as a board size increases, profitability increases, signifying that good corporate governance standards are vital to every bank and significant to investors and other stakeholders (Al-Amarneh, 2014).

Using the DEA method, Tai (2013) explored the efficiency of 18 banks in the UAE between 2003 and 2011. Tai discovered an increase in competition and market among all UAE national banks. Banks that were more efficient benefited from low costs and earned higher market shares.

Applying the DEA method, Oke and Poloamina (2012) explored the efficiency of 15 Western banks in Nigeria between 2001 and 2008 while concentrating specifically on cost efficiencies. Oke and Poloamina concluded that net assets were a better index for measuring bank size efficiency than total assets. In addition, the impacts of total assets, competition, net assets, and profitability on a bank's cost efficiency were nonlinear at the 95% confidence interval (Oke & Poloamina, 2012). Studying the efficiency of banks in 11 Central and Eastern European Countries between 2005 and 2008 by applying the DEA method revealed that both the financial capitalization and size of the bank positively link with revenue and cost efficiency (Pancurova & Lyocsa, 2013). Small banks were less profitable and cost efficient than large banks were. The domestic banks were less cost efficient but more revenue efficient than foreign banks, suggesting different banking behaviors between domestic banks (more risky, less cost focused) and foreign banks (more risky, less revenue focused) (Pancurova & Lyocsa, 2013).

Using the DEA method, Hassine and Limani (2014) found that the dominant source of the overall inefficiency of Islamic banks in the Middle East and North African region between 2005 and 2009 was organizational (technical) and not regulatory (allocative). The internal factors of Islamic banks contributed to the evolution of the economic efficiency of Islamic banks in this region (Hassine & Limani, 2014). Using

DEA analysis, L. Kumar, Malathy, and Ganesh (2010) explored the influence of technology change in the Indian banking sector between 1995 and 2006. The researchers found that technology and innovation had a greater impact than efficiency change. L. Kumar et al. concluded that policies that result in efficiency change are likely to have less of an impact on the outlook of the banking sector compared to policies that recommend using the latest technologies.

Using the DEA method to measure the competencies and deficiencies of different bank branches, M. I. Qureshi, A. Rustam, S. Rustam, Umar, and Zaman (2012) explored the performance and efficiency of 10 banks in Pakistan. Banks in Pakistan play a leading role in the economy, as they hold the savings of the public and finance the expansion of business, investment, and trade (M. I. Qureshi et al., 2012). The researchers found that eight of the 10 banks were less efficient (M. I. Qureshi et al., 2012). To meet the challenging environment and competitors, leaders of less efficient banks must improve their technological system and use every input resource they have to overcome any deficiencies in the future (M. I. Qureshi et al., 2012).

Erasmus and Makina (2014) applied the standard DEA model using linear averages of inputs, outputs, and the alternative DEA approach with nonlinear averages to explore the cost and efficiency of the main banks of South Africa between 2006 and 2012. Erasmus and Makina concluded that the global financial crisis did not affect the efficiency of most banks, and because the banks were DEA efficient before the financial crisis, the banks' efficiency improved their resilience through the financial crisis. Exploring the intellectual capital of the Australian financial sector between 2006 and

2008 involved determining several constituents of intellectual capital performance and the affiliation between intellectual capital performance and financial performance of the financial subdivision (Joshi, Cahill, Sidhu, &, Kansal, 2013). The researchers concluded that high levels of human and structural efficiencies did not result in higher levels of financial performance. Ferreira (2013) examined the affiliation between bank market consolidation and banks' efficiency in all 27 European Union countries during 1996 and 2008. As the banks' market power increased, the inefficiency also increased. As a result, there was less competition among the banks, which increased output results with lower input costs (Ferreira, 2013).

Using the DEA method, Minh, Long, and Hung (2013) explored the efficiency of 32 small and large Western banks in Vietnam between 2001 and 2005. Minh et al. found that small banks had an improvement in production efficiency and large banks did not have higher efficiency than small banks, indicating that size was not the only factor that could increase efficiency. After exploring and comparing the efficiencies of Western banks within Malaysia, Thailand, and Indonesia between 2002 and 2009, Liu and Chen (2012) proposed the two new variables of nonperforming loans and income loans. The researchers indicated that if banks were both cost and profit efficient, they would control the quality of loans. In comparison with prior studies, banks that used securities and loans as output variables had less control over the quality of loans (Liu & Chen, 2012).

Although Indonesian banks were the most efficient, if Thai and Malaysian banks continued to grow in the technology sector, they could compete with Indonesian banks in terms of efficiency (Liu & Chen, 2012).

Applying the DEA method and the input and output gears of a decision-making unit, Mariappan and Sreearthi (2013) explored the performance of seven banks in India between 2008 and 2012. The researchers applied a range from 0 to 1 to measure the performance, revealing that the Punjab Bank was efficient based on output-oriented technical efficiency and that UCO Bank and Dena Bank were efficient based on input-oriented technical efficiency (Mariappan & Sreearthi, 2013). Using secondary data, Pawar and Nayak (2013) examined the technological efficiency of small and large banks in India after facing severe competition from private sector banks. Pawar and Nayak indicated that, regardless of the size of the bank, banks that enhanced efficiency in technology aggressively improved performance in terms of advances, deposits, income, and expenditure (Pawar & Nayak, 2013).

Rashid and Rustam (2014) examined the efficiency of domestic and foreign banks operating in Pakistan using the DEA method. Rashid and Rustam included a discussion of the basic factors that negatively influenced the efficiency of banks. Foreign banks were more efficient in minimizing inputs in contrast to local banks. Local banks were less efficient than foreign banks when maximizing the outputs (Rashid & Rustam, 2014). Using the SFA method, Vardar (2013) examined 39 banks in the Central and Eastern European countries between 1995 and 2006 to determine whether bank leaders priced accordingly the profit efficiency scores in bank stocks. The affiliation between efficiency changes and stock returns confirmed that changes in profit efficiency had a positive and statistically meaningful impact on stock returns (Vardar, 2013).

Zeitun and Benjelloun (2013) explored the efficiency of 12 banks in Jordan between 2005 and 2010 by using the DEA method. The researchers indicated that a constant return to scale and variable return to scale are suitable to measure the relative efficiency of the banks. Only a limited number of Jordanian banks were efficient in the management of their financial resources and earned a profit from using the DEA method, also known as the technical efficiency scale, and only a few banks were efficient on the scale of pure technical efficiency. As a result, the financial crisis had a major impact on the banks' efficiency (Zeitun & Benjelloun, 2013).

Foo and Witkiwska (2014) examined the massive changes in China's economy by applying concentration and efficiency measures to analyze the Chinese banking sector between 2006 and 2007. A review of policy implications for reforms in the Chinese banking market revealed that the Chinese banking sector lacked maturity because four semiprivate, state-owned commercial banks still governed the sector. The only reason that financial markets in China did not open fully to foreign markets until 2006 was that leaders of financial markets in China first had to handle China's nonperforming loans (Foo & Witkowska, 2014). Quresh, Hussain, and Rehman (2012) explored the efficiency of banks in Pakistan on a sample of 341 respondents. The researchers used a pre-institute 5-point Likert survey tool to collect information. The researchers found that employees' and customers' interactions, convenience, reputation, financial benefits and services, and technology were essential factors for overall efficiency. Consumers preferred comfort and transaction ease in a financial institution. By these indices, Islamic banks were the least efficient and Western banks were the most efficient (Quresh et al., 2012).

Applying the DEA method and the Tobit regression analysis, Ismail, Abd Majid, and Rahim (2013) explored Islamic and Western banks in Malaysia to determine the significance of cost efficiency within the financial industry. Allocative efficiency emerged as the key contributor to cost efficiency for Islamic banks, and technical efficiency emerged as the key contributor to cost efficiency for Western banks (Ismail et al., 2013). Islamic banks were less efficient when using IT and electronics, whereas Western banks were less efficient in allocating and using other resources (Ismail et al., 2013). The main source of technical efficiency found in both Islamic and Western banks was scale efficiency, signifying that size is an essential factor in improving bank efficiency (Ismail et al., 2013). The results of the Tobit regression analysis led the researchers to conclude that the size of a bank positively correlated to efficiency and that a negative and significant link exists between loan quality and efficiency. Using the DEA method, Ftiti, Nafti, and Sreiri (2013) explored the efficiencies of Islamic banks in the Gulf Cooperation Council countries during 2008. The researchers indicated that, on average, Islamic bank efficiency increased when the GDP of the country it operated under increased. Moreover, countries that contained the least amount of Islamic banks had lower levels of GDP (Ftiti et al., 2013). In addition to the amount of Islamic banks, the population level also positively affected the Islamic banks' efficiency (Ftiti et al., 2013). The researchers also concluded that an Islamic bank that has management of superior value might have higher levels of efficiency compared to banks with poor levels of quality management (Ftiti et al., 2013).

Masood and Ashraf (2012) conducted a study on 25 Islamic banks from 12 different countries between 2006 and 2010 to inspect whether bank-specific and macro-economic factors had an influence on the profitability of Islamic banks. The researchers examined Bahrain, Bangladesh, Indonesia, Kuwait, Malaysia, Pakistan, Qatar, Saudi Arabia, Sudan, Turkey, United Arab Emirates, and Yemen. After collecting and analyzing the data, Masood and Ashraf indicated that asset size had a positive correlation with the bank's profit and banks with higher assets had higher profits. Wasiuzzaman and Umadevi (2013) examined the differences in bank characteristics of Islamic and conventional banks in Malaysia using nine conventional and five Islamic banks during 2005–2009. To analyze the study, Wasiuzzaman and Umadevi applied three stages of analysis. First, Wasiuzzaman and Umadevi used descriptive statistics to understand the difference between the two banks. Next, Wasiuzzaman and Umadevi applied *t*-tests to determine if the differences between the two banks were significant. Finally, Wasiuzzaman and Umadevi used regression analysis to examine the outcome of variables on bank profitability. The researchers concluded that although Islamic banks were smaller, Islamic banks had greater asset quality, efficiency, and liquidity (Wasiuzzaman & Umadevi, 2013).

Transition and Summary

In Section 1, I included the following subsections: (a) background of the problem; (b) problem statement; (c) purpose statement; (d) nature of the study; (e) research question; (f) interview questions; (g) conceptual framework; (h) operational definitions; (i) assumptions, limitations, and delimitations; (j) significance of the study; and (k) the

literature review. Section 2 will include (a) a restatement of the purpose, (b) the role of the researcher, (c) research participants, (d) research method and design, (e) population and sampling, (f) ethical research, (g) data collection instruments, (h) data collection techniques, (i) data organization techniques, and (j) reliability and validity of the study. In Section 3, I will begin with an overview of the study followed by a presentation of the findings. Section 3 will also include a discussion on how the findings are relevant for improving the efficiencies of U.S. banks during a financial crisis.

Section 2: The Project

The focus of this exploratory qualitative case study was the strategies used by U.S. bank leaders during the financial crisis. Similar to the research of Stewart et al. (2012), I collected data from the research participants using semistructured interviews. I gathered data through the review of bank documents. In exploring the strategies used by U.S. bank leaders, I identified efficiency changes that occur during a financial crisis, resulting in improving business practices by offering a better understanding of bank efficiencies. In Section 2, I include the following: (a) a restatement of the purpose of the study, (b) the role of the researcher, (c) research participants, (d) research method and design, (e) population and sampling, (f) ethical research, (g) data collection instruments, (h) data collection techniques, (i) data organization techniques, and (j) reliability and validity of the study.

Purpose Statement

The purpose of this qualitative exploratory case study was to explore strategies that leaders of a successful U.S. bank used to identify efficiency changes occurring during a financial crisis. By conducting comprehensive and thorough interviews, I collected data from the leaders of a successful U.S. bank that survived the financial crisis without the need for TARP funds from the government. The research location was San Bernardino, California. The conclusions of this study may help banks make the necessary financial changes so that taxpayers will not be responsible for paying for the faults of others as they did during the recession. Moreover, the principal benefit of fewer bank

failures will be a stronger and a more robust economy, which should lead to a net socioeconomic gain.

Role of the Researcher

The researcher is the main tool for collecting data in a qualitative case study (Yin, 2014). My role in the data collection stage of this qualitative, exploratory case study was to gather information by interviewing the participants through interview questions and to collect data without any bias. I am very familiar with the topic of this study because I have been working in the banking industry for over 7 years. I had no relationship with the participants or the institutions in which they worked. I followed every ethical regulation related to the *Belmont Report* protocol (Adams & Miles, 2013). Moreover, the participants received the proper attention and protection that they deserved (Adams & Miles, 2013).

To mitigate any potential bias or personal influence from the research, researchers apply the bracketing method (Tufford & Newman, 2012). Bracketing is a procedure that researchers use to ensure the validity of the data collection and analysis procedure after initiating a qualitative study (Chan, Fung, & Chien, 2013). Every researcher should provide each participant with a transcript of his or her interview so that the participant can examine and validate the data for accuracy (Tiemens, Nicholas, & Forrest, 2013). Therefore, to mitigate any potential bias or personal influence, I applied the bracketing method in this study.

The objective of the interview protocol was to understand the purpose of the interview and to preserve all ethical standards when working with participants (De

Ceunynck et al., 2013). To enhance each interview session, I used the same interview protocol with every research participant. A researcher who uses an interview protocol will have the appropriate framework to achieve a well-planned and meaningful interview (De Ceunynck et al., 2013). A researcher who achieves a well-planned and meaningful interview will increase the likelihood of obtaining the most pertinent information without being susceptible to personal interpretation and bias (De Ceunynck et al., 2013). Utilizing the interview protocol may lead to the emergence of new and valuable information (De Ceunynck et al., 2013).

Participants

A researcher can achieve a qualitative study using a single unit with several participants within the same setting (Yin, 2015). Therefore, I conducted research on one successful U.S. bank in San Bernardino, California. Participants consisted of U.S. bank leaders who met the following eligibility requirements: (a) occupied a managerial role in a successful U.S. bank during a financial crisis, (b) had experience with the efficiency changes that occurred during a financial crisis, and (c) developed and implemented strategies to identify efficiency changes that took place during a financial crisis. Any bank leader who did not fulfill the eligibility requirements was not eligible to participate in the study. By reviewing and signing the consent form, bank leaders confirmed that they met these requirements in addition to consenting to participate in this research.

A researcher can use purposeful snowball sampling for case study interviews (Chireshe, 2015). The snowball sampling method is a nonprobability purposive sampling method whereby each person whom the researcher will interview recommends other

people for additional interviews (Perez et al., 2013). Researchers can collect sufficient leads that are viable and valuable to gathering the proper number of respondents by following this technique (Liyanage Chamila & Chandana, 2013). Before choosing the potential participants, I obtained permission from the Southern California managing director of Bank X to conduct the study. I gained access to the participants by initially contacting the Southern California managing director of Bank X, who indicated the first potential participant of the study. I then asked the first participant to recommend another participant who occupied a managerial role during the 2007-2009 financial crisis. I continued to use the same process to identify all participants.

Marshall, Cardon, Poddar, and Fontenot (2013) suggested that researchers should contact each potential participant once they receive the referral and recommendation. Therefore, upon receiving a referral and recommendation, I contacted each potential participant to set up the interview. I sent each potential participant an e-mail introducing the research project, the informed consent form, and myself. I also asked each participant to contribute to the study. If the participants aligned with the research focus, they were eligible to complete the study. I allowed 1 week for the potential participants to respond to the invitation. If any of the respondents did not meet the eligibility criteria, failed to answer, or refused the invitation, I followed the recommendation of Bradley, Getrich, and Hannigan (2015) to request more referrals from previously interviewed participants until I completed the number of interviews needed to reach data saturation. A participant who agreed to the interview needed to bring the consent form signed on the day of the interview. If for any reason the participant did not bring the consent form signed, prior to

the start of each interview, I provided the participant with the consent form to sign (see Appendix A). I began each interview only after I received the signed consent form.

During the interview, establishing a rapport with the participants is essential to effective qualitative research (Swauger, 2011). To build a working relationship with each participant, researchers must always be clear about their intentions, principles, and position (Swauger, 2011). I disclosed this information to the participants in the interview consent form. I never used any power to control the participants and worked to ensure that the participants felt comfortable in the understanding that they could withdraw from the study at any time during the interview.

In addition, Swauger (2011) suggested that researchers should apply an ethic-of-care approach with participants to establish a working relationship. An ethic-of-care approach involves the researcher communicating consistently with the participants (Swauger, 2011). Therefore, I communicated regularly by phone and e-mail with the participants. Further, to avoid any conflict of interest, I did not compensate the participants. The rationale for not providing compensation was that participants who joined the study freely would be more likely to contribute because of interest in the field (Golafshani, 2003).

Research Method

Researchers can pursue three methods of research: qualitative, quantitative, and mixed methods (Moustakas, 1994). Of the three, qualitative research aligns with the factors relating to the nature of this study the most, because it involves exploring different perspectives of people. Qualitative researchers focus on interviewing people,

monitoring behavior patterns, and recording what they observe (Moustakas, 1994). The intent is to discover common values and generate data for future interpretation by the researcher (Birchall, 2014).

The qualitative research method is more suitable for data collection than the quantitative research method in studies of this nature because researchers may conduct in-depth interviews on personal experiences (Moustakas, 1994) rather than focusing on numerical data to prove or disprove a hypothesis (Rabier, 2014). The quantitative method is also appropriate when researchers expand and develop theories, mathematical models, or hypotheses related to phenomena (Smith, 2014), which was not the case in this research. Moreover, a quantitative method is effective in studies seeking answers to exact, constricted questions to collect numerical data from participants (Trueb, 2013). Quantitative researchers work on the assumption that the numbers will produce fair results and therefore will be generalizable to a larger population (Trueb, 2013).

In the mixed-method approach, researchers use a combination of qualitative and quantitative data (Venkatesh et al., 2013). The mixed research method is applicable when neither the quantitative nor the qualitative research method is sufficient to understand the research topic (Golicic & Davis, 2012). My aim was to arrive at an in-depth understanding of bank leaders' experience and behavior during a financial crisis and not to describe any numerical data or variables. For these reasons, the mixed method and the quantitative research method were not applicable to this study.

Research Design

The research questions determine what research design a researcher should select (Aslam, Georgiev, Mehta, & Kumar, 2012). I chose a single case study design because of its flexibility when exploring a decision or set of decisions to determine why decisions were made, how they were applied, and with what outcome (Yin, 2015). Case study researchers also use a small sample size to gather in-depth and detailed data from the participants that are richer and of greater depth than that in other research designs with larger sample sizes (Yin, 2014). Moreover, the single case study design is ideal for studying small group behavior such as that involved in the managerial process. This design could lead to a better understanding of how certain interventions may produce the expected results (Yin, 2014).

Besides the case study, researchers may use other research designs such as grounded theory, phenomenological, and ethnographical approaches to conduct their studies. Although I considered each of these designs, I found the case study design the most applicable for the research question I was addressing. In a grounded research design, the researcher creates a new theory when existing theories cannot justify a phenomenon (Palan & Mallalieu, 2012; Wolfswinkel, Furtmueller, & Wilderom, 2013). The main goal of this study was to explore the experiences of bank leaders in a successful U.S. bank, not to systematically develop a theory. For this reason, the grounded theory approach would not have been relevant to this study.

I considered the phenomenological research design for this study because its main purpose is to understand the lived experience of the participants (Deal & Grassley, 2012).

Moreover, the researcher can explore the experience of individuals from their own standpoints and discover new topics that can challenge structural assumptions (Tirgari, 2012). Although the purpose of the phenomenological design is to understand the lived experience of individuals (Deal & Grassley, 2012), the design is not the most suitable method to explore successful banking strategies.

Ethnography involves exploring human groups to understand how they jointly shape and preserve a culture (Cruz & Higginbottom, 2013). Researchers who apply ethnography examine communities, groups, organizations, and social movements (Cruz & Higginbottom, 2013). Ideally, the researcher should be a member of the cultural group to examine individuals of that culture, which is costly and time consuming (Iloh & Tierney, 2014). As my focus was understanding the viewpoints of the participants and not the behaviors of a culture, ethnography was not the appropriate method for this study.

To meet the research criteria, I collected data until data saturation. Data saturation occurs when new information does not emerge as researchers collect more data (Bradley et al., 2015). To ensure that there were enough data to analyze, I interviewed six knowledgeable and skilled bank leaders. If data saturation does not happen during the initial interviews, then the researcher should refer to the participants until data saturation (Askari et al., 2014). Therefore, if after initially interviewing the sixth participant, I noted new data, then I would refer to the same participants with probing questions until data saturation. Read et al. (2015) suggested that to ensure that data saturation is reached, researchers must not set a maximum number of times that they will interview participants; therefore, I did not limit the number of times I interviewed the participants.

Population and Sampling

The target population for this study consisted of 38 experienced bank leaders within a successful U.S. bank located in San Bernardino, California. For case study interviews, a researcher can apply the purposeful snowball sampling technique (Chireshe, 2015). Snowball sampling is most effective when each person whom the researcher interviews recommends other participants (Liyanaage Chamila & Chandana, 2013). Researchers who use snowball sampling refer to a specific group of people who have the best knowledge about the issue under research (Perez et al., 2013). For these reasons, I applied the exploratory single-case study design using the snowball sampling technique to collect data from bank leaders.

To meet the research criteria, I collected data until data saturation. Data saturation happens when new information does not emerge as researchers collect more data (Bradley et al., 2015). Bernard (2012) opined that there is no set number of interviews for data saturation. Moin et al. (2015) reached data saturation after conducting interviews with five participants. Daggett et al. (2013) reached data saturation after interviewing eight participants, whereas Fugard and Potts (2015) claimed that researchers should conduct a minimum of six to 10 interviews to reach data saturation. Based on the experience and recommendations of these previous researchers, I interviewed six participants. I referred to these six participants several times with probing questions until data saturation.

To select the participants for this study, I first obtained permission from the Southern California managing director of Bank X to gain access to the participants. I then

applied the snowball sampling technique by asking the interview participants to recommend other bank leaders who occupied a managerial role during the 2007-2009 financial crisis. I sent potential participants an e-mail introducing the research project and myself, in which I asked them to participate. If the participants are eligible, Ghobadian and O'Regan (2014) suggested that the researcher contact the participants to set up a convenient time and place for an interview during business hours in an appropriate and convenient setting. Therefore, if the participants were eligible, I contacted them to set up a convenient time and place for a 60-minute interview during business hours in an appropriate and convenient setting (e.g., work office).

The choice of a suitable interview setting is to maintain a comfortable place and atmosphere to inspire confidence for the participants (Farago, Zide, & Shahani-Denning, 2013). As a result, participants become encouraged to open up about their personal experiences (Wilson & Washington, 2007). To build a relationship with the participants, researchers must state their motives, intentions, and roles clearly (Swauger, 2011). I was clear about my motives, intentions, and roles with the participants to establish a working relationship. Moreover, Farago et al. (2013) argued that the researcher should display a nonaggressive approach throughout each interview to ensure the participant's comfort. Therefore, to ensure the participant's comfort, I displayed a nonaggressive approach throughout each interview.

Ethical Research

To protect each research participant ethically, I first received approval from the Walden University Institutional Review Board (IRB) to begin the research with approval

03-04-16-0368517. Additionally, I completed the National Institutes of Health's training course, "Protecting Human Research Participants" (see Appendix B for the certificate of completion #1047171). Further, before choosing potential participants, I obtained permission from the Southern California managing director of Bank X. Once I received permission to interview the participants, and after the IRB granted me approval to begin the interviews, I contacted each participant via e-mail with an invitation to participate in this study along with the consent form. The participant needed to bring the consent form signed on the day of the interview. If for any reason the participant did not bring the signed consent form, before the start of the interview, I provided the participant with the consent form to sign (see Appendix A). I began each interview only after I had received the signed consent form.

As stated in the consent form, the participants had the option to ask questions and could withdraw from the interview at any time during the interview. To avoid any conflict of interest, I did not compensate the participants who completed the interview. The rationale for not providing compensation is that participants who joined the study freely were more likely to contribute because of an interest in the field (Golafshani, 2003).

Researchers must maintain strict confidentiality of all participants before, during, and after the study as an essential guide in ethical research (Shuchman, 2014). To guarantee confidentiality and privacy, I always maintained the identity of every bank leader confidential throughout the research process. I kept the name of the research organization and the participants confidential by replacing the name of the research

organization by BI (Banking Institution), and each participant's name by the letter BL (Bank Leader) following a numerical code 1 to 6.

I followed every ethical regulation and practice to carry out the research. I will not disclose any of the participants' confidential information in this study with anyone. I will save the transcripts, files, and interview recordings on a password-protected personal external hard drive, which I will store in a secured cabinet. After 5 years, I will permanently delete all audio files and interview recordings from the external hard drive and the digital recorder. The initiation of Section 3 of this study was dependent upon the approval of the IRB, which aligned with the IRB approval # 03-04-16-0368517. I followed the ethical policies and procedures of Walden University during the data collection and analysis.

Data Collection Instruments

The researcher is the main tool in collecting data for a qualitative case study (Yin, 2014). During a case study, researchers gather different types of data to have a better understanding of the issue they are researching (Ruso, 2012). According to Yin (2014), there are six primary sources for case study research: documentation, archival records, interviews, direct observation, participant observation, and physical artifacts. Similar to Agostino, Arena, and Arnaboldi (2013), I collected data using two data sources, which were interviews and documentation. For the participants to answer questions in detail, the researcher must ask detailed, open-ended interview questions (Lietz, Lacasse, & Cheung, 2014).

The first source of data for this study consisted of interviews. To enhance each interview session, I used the same interview protocol with every research participant. Researchers who use the same interview protocol with every research participant increase the likelihood of obtaining the most pertinent information without being susceptible to personal interpretation and bias (De Ceunynck et al., 2013). The researcher can focus on the correct and relevant data by using an interview protocol (see Appendix C), which may lead to the emergence of a completely new area of important and valuable information (De Ceunynck et al., 2013). Before collecting any data, I obtained IRB approval. I then invited the participants to become members of this study by e-mailing each participant the informed consent form (see Appendix A). Every participant who agreed to participate in the study would need to sign the informed consent form that I would collect before the interview. I then arranged face-to-face interviews; each interview lasted approximately 60 minutes and included six open-ended interview questions (see Appendix D).

The second source of data for this study consisted of documentation. The purpose for researchers to collect documents is to validate data (Hared, Abdullah, & Sheikh Mohammed, 2013). Yin (2014) claimed that documents are useful in validating and verifying evidence from other data sources. I collected documentation through two sources. The first source was from the interview participants. I asked participants to provide me with company documents that they considered relevant to this research. The second source consisted of company websites; I identified and downloaded annual fiscal reports and proxy statements.

To maintain validity in the research, I used member checking. Member checking is a method in which a researcher restates and summarizes the data and then questions the participant to determine the accuracy of the data (Welch et al., 2014). Researchers who use member checking increase their precision and the credibility of the interpretation of the data results and the lack of bias of the participants' experiences (Reilly, 2013). Moreover, researchers can build a foundation of trust with the participants and ensure data quality (Kim et al., 2015).

I applied member checking once I completed the interviews. The interview participants had a chance to member check my explanation of the answers they provided during the interviews. Afterward, I shared my interpretation of the responses with each participant. The interview participants had the opportunity to review, change, or modify my script for their approval. Revising the script ensured open and honest responses from the participants' experiences (Reilly, 2013).

Data Collection Technique

The interview method is the most favored approach to carrying out a qualitative study because of its conversational style and simplicity (Ratislavova & Ratislav, 2014). The techniques that I used to gather information were similar to the techniques of Azimian, Negarandeh, and Fakhr-Movahedi (2014), which are semistructured, detailed, one-to-one interviews. I used the following procedure to conduct the study. I first requested and received the approval to conduct a study from Walden University IRB. I then gathered contact information of potential participants. Next, I contacted the potential participants by providing them the informed consent form via e-mail. If I did not receive

a response within one week, I followed up with a phone call to the participants. Lastly, once I received the signed consent, I scheduled each interview at a specific date and time suitable to the participant.

Turner (2010) suggested that researchers follow the interview protocol technique to complete each interview. Turner recommended that researchers start each interview by introducing themselves and reviewing the consent form. I followed Turner's recommendations during the interviews. I then recorded every interview using a digital recorder. As McNamara (2009) suggested, I checked on the device occasionally to make sure that the device was working properly. Following McNamara's recommendations, I used the same interview questions for each participant and asked each open-ended question one at a time. Each interview lasted approximately 60 minutes (see Appendix C). I then uploaded the information from the interviews to the software program NVivo 10 to analyze the data, while keeping the identity of the participants confidential following the recommendations of Lochridge, Wolff, Oliva, and O'Sullivan (2013).

The semistructured, detailed, one-to-one interview is beneficial for gaining insight and context into the topic (Jacobson, Pruitt-Chapin, & Rugeley, 2009). In addition, research participants can describe what is significant to them along with the opportunity to probe (Jacobson et al., 2009). The disadvantage of a semistructured, detailed, one-to-one interview is that the interviews can lead to bias (Jacobson et al., 2009). The method is time consuming and costly in comparison to other data collection methods (Jacobson et al., 2009). Moreover, the method may seem intrusive to the respondent (Jacobson et al., 2009).

Member checking is an essential method that researchers use when they ask one or more of the respondents to check the accuracy, validity, credibility, and the applicability of the study (Welch et al., 2014). Moreover, researchers can build a foundation of trust with the participants and ensure data quality (Kim et al., 2015). Therefore, I applied member checking once I completed the interviews. The interview participants had a chance to member check my explanation of the answers that they provided during the interviews. Afterward, I shared my interpretation of the participants' responses. Interview participants had the opportunity to review, change, or modify my script for their approval. Revising the script ensured open and honest responses from the participants' experiences (Reilly, 2013). In addition, by keeping the identity of the participants confidential, participants are more likely to speak freely and frankly with the researcher (Merriam, 2014).

The second source of data was documentation. The purpose for researchers to collect documents is to validate data (Hared et al., 2013). I collected documentation through two sources. I asked participants to provide me company documents, which they considered relevant to this research. The second source consisted of company websites that include annual fiscal reports and proxy statements. Company documents are beneficial for data collection because of being an attainable source of background information (Jacobson et al., 2009). Furthermore, these documents provide the researcher with information that may not be directly observable in comparison to other data collection methods (Jacobson et al., 2009). The disadvantage of bank documents as a data source is that the information could be incomplete and inaccurate (Jacobson et al., 2009).

In addition, collecting and analyzing the records can be time consuming and inconvenient (Jacobson et al., 2009).

Data Organization Techniques

A researcher can keep the identity of a participant confidential by assigning generic codes to every participant (Gibson, Benson, & Brand, 2013). I used alphanumeric codes to keep the identities of each participant exclusive. Once the participants granted me permission to audio record the interview through the signed consent form, I replaced the name of each participant by the letter BL (Bank Leader) following a numerical code 1 to 6. I then audio recorded each interview with the permission of the participant. Next, I transcribed the interviews verbatim using Microsoft Word and uploaded the information into the software program NVivo 10. With the software program NVivo 10, researchers can keep track of the data by coding and exploring the themes while keeping the identity of the participants confidential (Lochridge et al., 2013).

Jacob and Furgerson (2012) recommended that researchers save the folders containing the transcribed interviews and written records for each study participant. Therefore, I saved the folders containing the transcribed interviews and written records for each participant. Furthermore, to ensure the participants' protection, researchers must store the data in a safe and secure location (Shuchman, 2014). I will store the research for 5 years on a personal external hard drive. I shared none of the participants' data with anyone else. After the 5-year period, I will shred the paper notes. As well, I will delete the transcripts, files, and interview recordings from the external hard drive.

Data Analysis

Data analysis is an essential part of the research method (Ritchie et al., 2013). To conduct a proper data analysis, it is essential to apply the methodological triangulation method. Researchers use methodological triangulation in qualitative research to triangulate data from different sources such as interviews and documents (Cao, 2012). Researchers such as Dollins, Bray, and Gadbury-Amyot (2013) and Yin (2014) recommended triangulating interview data with other data sources. Similar to the research of Bekhet and Zauszniewski (2012), I applied the methodological triangulation method to compare and contrast the data that I collected from the interviews with data retrieved from the documents.

After collecting the data, I analyzed it. Data analysis involves working through data to discover significant themes, patterns, and descriptions that answer the key research questions of the study (Yin, 2015). I began by organizing the data collected in a category relating to successful strategies. I then chose the initial categories originating from the findings from the literature review. For strategies, I used categories such as efficiency, inefficiency, cost efficiency, economic costs, skills and development, and growth. For leadership qualities, I used categories such as communication, ethics, confidence, commitment, positive attitude, and creativity.

Although these initial classifications indicated what the possible categories could be, the data dictated the final nature of the categories. Yin (2015) described a sequential method of data analysis in his book *Qualitative Research from Start to Finish*. I adopted the same method of data analysis in this study. Yin's (2015) method consists of five

sequential steps: (a) compiling the data, (b) disassembling the data, (c) reassembling the data, (d) interpreting the meaning of the data, and (e) concluding the data. Other researchers have applied this data analysis method, including Buchanan (2013) in his qualitative single-case study.

The first step was to import the textual transcripts of the interviews from Microsoft Word into the software NVivo 10. After this step, I compiled the information. Compiling is the technique of organizing the data in a meaningful manner (Yin, 2015). Then, I began by disassembling the information, a proper way of coding the data (Yin, 2015). Coding is the procedure for grouping data with category names or descriptive words (Castleberry, 2014). Coding of information is necessary for recognizing patterns and reoccurring themes (Castleberry, 2014). I used the auto coding option in NVivo 10 to recognize the similarities in the data and prevalent themes.

Once I disassembled the data, I started the process of reassembling the data. Reassembling in the data analysis process involves considering the data under different arrangements until themes emerge (Yin, 2015). The next step of the data analysis would be to interpret the significance of the data (Yin, 2015). Interpreting the significance of the data involves describing and making sense of the data (Turner, 2010). The last step in the data analysis would be making conclusions based on the data (Yin, 2015). Concluding is essential to understanding the significant findings of the qualitative study that derive from patterns and themes relating to the central question (Yin, 2015).

Researchers may use different data analysis software for creating themes (Castleberry, 2014). With the NVivo 10 software, researchers can input, save, code, and

analyze themes and patterns in an accessible single location. The NVivo 10 software has a special feature where the researcher may use continuous coding schemes (Zapata-Sepulveda, Lopez-Sanchez, & Sanchez-Gomez, 2012). The program is a powerful tool in qualitative research, where the researcher may align the collected data with previous literature and identify important themes (Castleberry, 2014). Using NVivo 10 increases the consistency in qualitative research (Choi et al., 2012).

The conceptual framework links the literature, methodology, and results of the study (Borrego, Foster, & Froyd, 2014). I analyzed the data in view of Lerner's economic efficiency theory, Davis' economic solvency theory, and Solow's economic growth theory. I achieved a better understanding of the data that I collected by considering these theories.

Reliability and Validity

In a qualitative study, researchers consider four components that relate to reliability and validity: (a) dependability, (b) credibility, (c) transferability, and (d) confirmability (Guba & Lincoln, 1985). Recording the participants' complete responses and excluding my bias from the conclusions should result in a high level of confidence in this research. Any research should be valid when research outcomes result from high quality and trustworthy data (Seidman, 2012).

Dependability

In a qualitative study, researchers use dependability to address reliability (Rowan & Huston, 1997). Dependability occurs when other researchers perform the same steps to conduct similar research and reach the same conclusions, or when traceability of the

research processes exist (Thomas & Magilvy, 2011). Any variation in the conclusions between a research and its replication is a result of variations in the steps or procedures of the researcher. To enhance dependability, I used member checking.

Member checking is a method in which a researcher restates and summarizes the data and then questions the participant to determine the accuracy of the data (Welch et al., 2014). Researchers who use member checking ensure precision and credibility of the interpretation of the data results and guard against researcher bias when interpreting the participants' experiences (Reilly, 2013). Furthermore, researchers can build a foundation of trust with the participants and ensure data quality (Kim et al., 2015). Once I completed the initial interviews, the interview participants had a chance to member check my explanation of the answers that they provided during the interviews. Afterward, I shared my interpretation of the participants' responses. The interview participants had the opportunity to review, change, or modify my script for their approval. Houghton, Casey, Shaw, and Murphy (2013) and Pun, Yain, and Kin (2012) suggested that researchers use the audit trail to enhance dependability; therefore, I used an audit trail in my research.

Credibility

Assessing credibility ensures the researcher that the identification and description of each participant are accurate (Edhborg, Nasreen, & Kabir, 2015). One of the most important factors to establish trustworthiness is credibility (Cope, 2014). To establish trustworthiness, researchers must acknowledge how congruent the findings are with reality (Guba & Lincoln, 1985). The main criterion of credibility is that the results of qualitative research must be reliable or acceptable from the research standpoint (Glozah,

2015). From a credibility standpoint, the purpose of qualitative research is to define or recognize a phenomenon of interest from the viewpoint of the participants, as the participants are the only individuals who can evaluate the credibility of the outcome (Guba & Lincoln, 1985).

To conduct a proper data analysis, it is essential to apply the methodological triangulation method. Researchers use methodological triangulation in qualitative research to triangulate data from different sources such as interviews and documents (Cao, 2012). Similar to the research of Bekhet and Zauszniewski (2012), I applied the methodological triangulation method to compare and contrast the data collected from the interviews with data retrieved from the documents. To enhance credibility during the interview process, I applied member checking once I completed the interviews. The interview participants had a chance to member check my explanation of the answers that they provided during the interviews. Afterward, I shared my interpretation of the participants' responses. Interview participants had the opportunity to review, change, or modify my script for their approval. Revising the script ensured open and honest responses from the participants' experiences (Reilly, 2013).

Transferability

Transferability refers to the extent to which findings can contribute to current practices in other contexts, to further theory development, and to transfer the outcome to future research projects (Lincoln & Guba, 1985). The qualitative researcher can improve transferability by defining the background and expectations central to the research (Guba & Lincoln, 1985). To enhance transferability, Yin (2014) suggested that the researcher

provide in-depth and detailed information from the participant's perspective. Researchers who provide in-depth and detailed information will allow the reader to gain insight and context into the topic (Jacobson et al., 2009). I included rich descriptions of my findings along with a thorough explanation. Montfort, Brown, and Pegg (2012) and Thomas and Magilvy (2011) claimed that researchers could enhance transferability as long as they provide sufficient details to allow the readers to determine if the findings are transferable from one organization to another.

Confirmability

Confirmability refers to the effort a researcher takes to verify and confirm the accuracy of the results (Guba & Lincoln, 1985). There are different strategies that a researcher can apply to improve confirmability (Guba & Lincoln, 1985). I used the bracketing technique to establish confirmability. Bracketing demonstrates the validity of the data collection and analysis method in a qualitative study (Chan et al., 2013). Similar to member checking, bracketing involves the researcher confirming the accuracy of the interview with the participants. As soon as a researcher completes each interview, he or she should provide the participant with an electronic transcript of their interview so that the participant can examine and validate the interview transcript for accuracy (Tiemens et al., 2013). To ensure confirmability, I provided the participants with an electronic transcript of their interviews so that they could examine and validate the data for accuracy. If any of the data were incorrect, the participants were able to change or clarify any incorrect data (Tiemens et al., 2013). To enhance confirmability, I will keep the records and preserve the data for potential inspections for 5 years.

Data Saturation

To meet the research criteria, I collected data until data saturation. Data saturation occurs when new information does not emerge as researchers collect more data (Bradley et al., 2015). To ensure that there were enough data to analyze, I interviewed six knowledgeable and skilled bank leaders. If data saturation does not happen during the initial interviews, then the researcher should refer to the participants until data saturation (Askari et al., 2014). Therefore, if after initially interviewing the sixth participant, I discovered new data, then I would refer to the same participants with probing questions until data saturation. Read et al. (2015) suggested that to ensure reaching data saturation, researchers must not limit the maximum number of times they interview the participants. Hence, I did not limit the maximum number of times I interviewed the participants.

Transition and Summary

In Section 2, I discussed in detail the purpose of the study, role of the researcher, participants and sample size, research method and design, data collection and analysis, and lastly the reliability and validity of the data. In Section 3, I will include (a) the presentation of findings, (b) applications to professional practice, (c) implications for social change, (d) recommendations for action, and (e) recommendations for future study.

Section 3: Application to Professional Practice and Implications for Change

The purpose of this qualitative exploratory case study was to explore strategies that leaders of a successful U.S. bank used to identify efficiency changes occurring during a financial crisis. The research findings consisted of four major core themes and nine subthemes that relate to the strategies used by the bank leaders to identify efficiency changes that occurred during the financial crisis. These four core themes were (a) management strategies, (b) application of technology, (c) growth maximization and risky loan elimination, and (d) customer service strategies. The subthemes were (a) excellent management skills and wise decision making, (b) staff education and staff reduction, (c) expenditure reduction, (d) digital technology, (e) mobile and online banking, (f) ethically based loan processing, (g) improved underwriting, (h) excellent customer service, and (i) customer education.

Presentation of the Findings

A single case study design was the most suitable for this study. I chose a single case study design because of its flexibility when exploring a decision or set of decisions, why the decisions were made, how they were applied, and with what outcome (Yin, 2015). The overarching research question was the following: What strategies do leaders of a successful U.S. bank use to identify efficiency changes during a financial crisis? I chose six bank leaders from a successful U.S. bank as the research participants. In addition to semistructured interviews, I used annual fiscal reports and proxy statements as sources of information for this study. I kept participants' names confidential by replacing

each name with the letters BL (Bank Leader) and with the numbers 1 through 6 (BL01, BL02, BL03, BL04, BL05, and BL06).

I used Yin's (2015) analysis method to analyze the textual data. I audio recorded each interview with the permission of the participant. Next, I transcribed the interviews verbatim using Microsoft Word. Lastly, I uploaded the information into the software program NVivo 10 while maintaining the confidentiality of each research participant. To ensure the accuracy of the participants' responses, I applied member checking during the interviews. During the data analysis, I applied methodological triangulation to compare and contrast the data that I collected from the interviews with the data retrieved from the fiscal reports and proxy statements. Upon completion of the data analysis, I found that the participants relied on the following four core themes, which relate to various banking strategies: management strategies, application of technology, growth maximization and risky loan elimination, and customer service strategies.

Emergent Theme 1: Management Strategies

During 2007-2009, bank underwriters of Bank X issued nonrisky home loans while conserving home prices, which benefited the economic efficiency, solvency, and growth of Bank X. Based on the data analysis, a theme of management strategies emerged. During the interviews, the participants mentioned different management strategies 34 times (refer to Table 1). This theme of management strategies aligns with Lerner's (1972) theory of economic efficiency and Tanu's (2013) findings that the main goal of U.S. bank leaders is to achieve economic gain by maximizing profits and mitigating losses. Proponents of Lerner's economic efficiency theory posit that nothing

can improve without affecting something else (Kiani et al., 2012). Consequently, to improve Bank X's overall management strategies, leaders of Bank X adopted an extensive home loan approval process using advanced automated underwriting while training and educating the banking staff regarding the financial crisis, which led to improved long-term success and greater customer retention at Bank X. In contrast to Bank X, during 2007-2009, bank underwriters of other institutions issued many risky home loans while inflating prices for financial gain, which disrupted the economic efficiency, solvency, and growth of U.S. banks (Renaud, 2012). Consequently, the marginal cost of homes in the books of these banks exceeded home prices and led to the housing bubble, which then led to the 2007-2009 economic crisis (Renaud, 2012). However, for Bank X, the net effect of maximizing profits and mitigating losses resulted in greater solvency, liquidity, and economic success.

The subthemes were the following: (a) excellent management skills and strong decision making, (b) staff education and reduction, and (c) expenditure reduction. Barrington (2015) confirmed the importance of staff education and reduction, while Calathes and Yeager (2016) confirmed the importance of expenditure reduction. Lastly, Merga and Alemayehu (2015) confirmed the significance of excellent management skills and strong decision making in economic gain.

Table 1

Frequency of Occurrence of Management Strategies

Subtheme	<i>N</i>	% frequency of occurrence
Excellent management skills and strong decision making	13	38.24
Staff education and reduction	11	32.35
Expenditure reduction	10	29.41

Note. *N* = Frequency.

Excellent management skills and strong decision making. The bank leaders' decision to change the *home loan approval* process at Bank X made the issuing of loans more streamlined. BL01 opined, "These approved loans were based on the verification of employment, verification of income, and the credit history including the FICO score". During the 2007-2009 financial crisis, bank leaders of Bank X changed the home loan approval process significantly by making the issuing of loans more stringent and based on logic as well as the customer's creditworthiness. BL03 described two essential factors to excellent management skills and strong decision making: (a) staying conservative when issuing home loans and (b) analyzing the credentials of each customer to validate whether his or her credit and income were sufficient to afford a mortgage.

In banking, the theory of economic efficiency relates to everyday bank operations, home loan processing, customer service, and bank productivity, all of which influence the overall ability of the bank to meet its short- and long-term goals, known as solvency (Chan-Lau, 2012). Liu and Chen (2012) proposed the two new variables of

nonperforming loans and income loans. Liu and Chen indicated that if banks were both cost and profit efficient, they would control the quality of loans. Efficient banks tend to have more highly skilled professionals, better organizational structures, and less risky mortgages than inefficiently managed banks, which translate into greater liquidity, solvency, and economic success (Said, 2013). Leaders of Bank X overcame the financial crisis by using excellent management skills along with wise decisionmaking. This subtheme of excellent management skills and strong decision making aligns with the findings of Chan-Lau (2012), Liu and Chen (2012), and Said (2013) regarding successful efficiency strategies. Leaders of Bank X made sure that the daily operations of Bank X remained cost efficient by employee reduction and state-of-the-art technology, including advanced automated underwriting. Consequently, Bank X remained cost and profit efficient while controlling the quality of loans.

Staff education and reduction. Training and educating the banking staff regarding the financial crisis improved long-term customer relationships and resulted in greater customer retention at Bank X. The implementation of staff education and training combined with a greater role of electronic banking made Bank X more efficient with a reduction in staff. Consumers prefer comfort and transaction ease when dealing with a financial institution (Quresh et al., 2012). BL04 asserted, “The management changes helped the customer transition to a more convenient banking experience. We managed to save a lot of money by minimizing the number of employees and reducing the number of banking centers”. This finding aligns with the findings of Quresh et al. (2012), who opined that consumers appreciate convenience and ease of transactions. From the

perspective of the employer, educating a staff adds to human capital and encourages employee commitment (Bawuro, Danjuma, & Ibrahim, 2016).

The simplification of the employee structure made the reduction in the number of branches possible. Leaders of Bank X were able to lower the variable cost by minimizing the numbers of branches, amount of labor, and overall staff, all of which improved the solvency and efficiency of Bank X. BL02 expressed that employees in the banking centers took on more responsibilities. Instead of having 10 employees to manage a branch, bank leaders reduced the number of associates to half, with each associate having more responsibility and duties. BL03 claimed, “With every employee knowing so much, we needed to have a lot less. Our chain of command went from multiple people and multiple titles to fewer people with multiple roles”. The subtheme of staff education and reduction aligns with Pawar and Nayak’s (2013) findings that regardless of the size of the bank or the number of staff, banks that enhanced their efficiency in technology improved their performance regarding deposits, income, and expenditure.

Expenditure reduction. An essential factor in overcoming the financial crisis was the implementation of expenditure reduction. Having fewer employees and branches resulted in the lowering the total operating cost of Bank X compared to its competitors. The interaction between asset and liability structures determines bank solvency; bank managers or bank regulators can change these structures and interactions (Gatzert & Wesker, 2012). Consequently, greater bank efficiency leads to greater bank solvency and, as a result, greater net profit, success, and overall growth (Said, 2013).

Findings from the interviews with Bank X leaders align with the findings of Gatzert and Wesker (2012) and Said (2013) about economic solvency and bank efficiency. BL01 opined that by reducing the number of employees and banking centers while improving the application of digital technology, especially in automated underwriting, Bank X leaders reduced operating costs. Thus, bank leaders improved the overall structure of Bank X, which improved Bank X's solvency, efficiency, and growth. Offering fewer bonuses also reduced the overall bank expenditure for Bank X, as did the reduction of employees and total branch numbers. Using an objective and unbiased method known as automated underwriting, leaders of Bank X further reduced expenditure and the size of the mortgage sector by eliminating risky and underperforming loans. Economic solvency may lead to success in a banking system. Banks may hold a percentage of customer deposits to prevent a lack of cash flow, insolvency, or a lack of liquidity, which can lead to bank failure (Chan-Lau, 2012). BL03 expressed, "We were reducing certain branches and the mortgage sector. It was all about being efficient; it was all about condensing but producing high-quality". Leaders of Bank X maintained the solvency of the bank by meeting the short- and long-term reduction in expenses while achieving long-term expansion and growth.

Emergent Theme 2: Application of Technology

Leaders of Bank X emphasized the implementation of technology in banking as a key component of their success. Based on the data analysis, a theme of application of technology emerged. During the interviews, participants mentioned the theme of the application of technology 102 times (refer to Table 2). This theme of application of

technology aligns with the findings of Goh and Kauffman (2013), who asserted that to operate more efficiently, leaders of U.S. banks use digital technology including online and remote banking as well as automated underwriting systems to issue less risky loans. Moreover, leaders of U.S. banks could use their resources to improve technology, provide additional services and products, and share risk extensively (Goh & Kauffman, 2013). Greater bank efficiency leads to greater bank solvency and, as a result, greater net profit, success, and overall growth (Said, 2013). Leaders of Bank X mentioned remote banking, automated teller machines, online banking, and digital smartphone applications as examples of the application of technology. Bank leaders use technology to enhance the efficiency and performance of their institutions (Pawar & Nayak, 2013).

Through the implementation of digital technology, banking became much simpler by placing most bank services at the customer's fingertips, including check deposits and bill payments (Stich, 2016). Leaders of U.S. banks could use their resources both to improve technology and to provide additional services and products through the use of improved technology (Goh & Kauffman, 2013). Since implementing the application of technology, leaders of Bank X improved the overall operation of the bank by decreasing the cost of operations and increasing the overall efficiency of Bank X. This theme of application of technology aligns with Lerner's (1972) theory of economic efficiency. To achieve economic efficiency, leaders of Bank X adopted an advanced online and remote banking system, which maximized profits, mitigated losses, and led to improved long-term success and greater customer retention at Bank X. This finding also aligns with the findings of Stich (2016) and Goh and Kauffman (2013), who opined that through the

implementation of digital technology, bank leaders can provide improved customer service and products. I divided the responses of the participants into two subthemes: (a) digital technology and (b) mobile and online banking.

Table 2

Application of Technology

Subtheme	<i>N</i>	% frequency of occurrence
Digital technology	90	88.24
Mobile and online banking	12	11.76

Note. *N* = Frequency.

Digital technology. The application of technology by the bank leaders of Bank X reduced the cost of operations while favoring higher profits. The application of digital technology is an essential factor in improving the overall efficiency of a financial institution (Quresh et al., 2012). BL01 claimed that enhancing the technology at banking centers transitioned customers from the center to other means of banking to help cut back costs at the branch level. The subtheme of digital technology aligns with the findings of Quresh et al. (2012), who asserted that the application of digital technology is a factor in improving banks' efficiency. Goh and Kauffman (2013) opined that leaders of U.S. banks could use their resources to improve technology, provide additional services and products, and share risk extensively to improve the banks' overall efficiency. BL05 expressed, "We wanted to integrate our bank in people's day-to-day devices such as their computers, laptops, and phones. So, while we were trying to minimize one area, we were heavily focusing on another area, and that was improving our technology".

As many of the digital transactions occur outside an actual banking center, bank leaders who do not adopt innovations such as digital technology run the risk of their banks becoming irrelevant to their customers (Shah, 2016). Kumar et al. (2010) found that technology and innovation had a greater impact than efficiency change in the financial sector. BL06 concluded, “We felt like we were ahead of the rest in terms of technology, and as we were educating our own employees and our customers on technology and how technology could be so beneficial towards us”.

Mobile and online banking. Much of the success of the bank leaders at Bank X was due to the direct application of digital technology that made banking more accessible anywhere and anytime. To operate more efficiently, leaders of U.S. banks utilized digital technology including online and remote banking, as well as automated underwriting systems, to issue less risky loans (Goh & Kauffman, 2013). According to Lerner’s (1972) theory of economic efficiency, a financial institution can only achieve success when it is economically efficient, which results in a more solvent institution (Said, 2013). BL02 asserted, “We started shifting to online applications along with many new software programs beginning with the computer and cell phone. We began to teach customers the new concept of banking”. This subtheme of mobile and online banking aligns with the findings of Said (2013) concerning economic efficiency and solvency, because leaders of Bank X improved forms of banking including online and remote banking, as well as automated underwriting, which made Bank X operate more efficiently.

Both efficiency and solvency are factors in a financial institution’s economic success (Said, 2013), which is why the bank leaders at Bank X succeeded during the

financial crisis while others did not. BL05 expressed that improving the website, mobile application, and automated teller machine services while making sure that customers were up to date with the changes was essential to the direct application of digital technology. Leaders of Bank X also focused on teaching customers new and quick alternative routes to the traditional banking style. The desire for mobile banking capabilities is a main cause for customers to change banks. The two main features that interest customers are mobile remote deposit capture and mobile payments (Shah, 2016). BL06 concluded, “We improved our technology so much. It was our ATMs, mobile applications, and special computer programs that played a significant role in improving our financial success”.

Emergent Theme 3: Growth Maximization and Risky Loan Elimination

According to the theory of economic growth, growth occurs when people take and rearrange resources in such a way as to make these resources more valuable and more efficient (King & Levine, 1993). Based on the data analysis, a theme of growth maximization and risky loan elimination emerged. During the interviews, the participants mentioned the theme of growth maximization and risky loan elimination 21 times (refer to Table 3). This theme of growth maximization and risky loan elimination aligns with Lerner’s (1972) theory of economic efficiency. The main goal of U.S. bank leaders is to achieve economic gain by maximizing profits and mitigating losses. To increase Bank X’s growth and reduce the issuance of risky loans, leaders of Bank X adopted an extensive home loan approval process using advanced automated underwriting while training and educating the banking staff regarding the financial crisis, which led to long-

term growth and a reduction in issuing risky loans. In the U.S. market, the subprime mortgage sector was the main factor responsible for the financial crisis (Martin, 2011). Bank underwriters issued many risky home loans, while increasing the prices of these homes in their books for financial profit, which disrupted the economic efficiency, solvency, and growth of U.S. banks. Therefore, the cost of homes in their books exceeded the real home values and resulted in the housing bubble leading to the 2007-2009 economic crisis (Renaud, 2012). Banks that were inefficient had less chance of growth than efficient banks (Said, 2013). Liquidity and bank efficiency are indexes to determine whether a bank will fail based on current performance (Said, 2013). Moreover, the net profit is another factor in the economic growth of any financial institution (Tanu, 2013).

Leaders of Bank X reduced the mortgage issuance in their organization to lessen the losses from risky loans. This theme of growth maximization and risky loan elimination aligns with the findings of Martin (2011) that the subprime mortgage sector was a main factor for the global financial crisis of 2007-2009. This theme also aligns with the findings of Said (2013), who claimed that to avoid being part of the financial crisis, leaders of efficient banks issued less risky mortgages than leaders of inefficiently managed banks, which translated into greater liquidity, solvency, and economic success. Specifically, the Bank X leaders minimized risky subprime loans and mitigated the risk by using automated underwriting programs to make the loan issuing process less dependent on human decision-making. Leaders of Bank X utilized highly selective criteria in the loan and underwriting process that resulted in low default rates. Lowering bank losses from bad loans improved the solvency of Bank X. For Bank X, greater bank

solvency led to greater bank efficiency, and as a result led to greater economic gain. Consequently, the rearranging of resources by the leaders of Bank X led to long-term economic growth and success to endure the financial crisis. I divided the responses of the participants into two subthemes: (a) ethically based loan processing and (b) improved underwriting.

Table 3

Growth Maximization and Risky Loan Elimination

Subtheme	<i>N</i>	% frequency of occurrence
Ethically based loan processing	12	57.14
Improved underwriting	9	42.86

Note. *N* = Frequency.

Ethically based loan processing. The management team at Bank X processed loan requests based on firm ethical and moral standards to ensure fair and unbiased decisions. To operate more efficiently, leaders of U.S. banks utilized digital technology including online and remote banking as well as automated underwriting systems to issue less risky loans (Goh & Kauffman, 2013). Unwise underwriting and mortgage origination in the years leading up to the 2007-2009 financial crisis was one of the major causes of the financial crash (O’Keefe, 2016). To avoid affiliation with the banks who were failing, the participants asserted that every loan application at Bank X had to comply with specific standards set by ethical underwriters, bank management, and Federal guidelines and regulations. This subtheme of ethically based loan processing aligns with the findings

of Goh and Kauffman (2013) and O’Keefe (2016) concerning loan processing. Leaders of Bank X made sure that employees applied the proper decision-making and work ethics along with moral standards when issuing loans. Consequently, wise underwriting and mortgage origination in the years leading up to and during the 2007-2009 financial crisis were essential factors to succeeding during the crisis.

BL05 expressed: “We were very clear that our ethical conduct played a huge part of our decision-making and that all our associates were aware that we were not going to tolerate any wrong doing”. This subtheme of ethically based loan processing aligns with the findings of Bauman (2011), who discussed the concept of ethical conduct in finance and its impact on a financial institution, especially during a financial crisis. Bauman discovered that the ethical virtues of justice and care were the most effective approaches for the leaders of a corporation to use to gain momentum after a financial crisis. Leaders who use the ethic of care approach following a financial crisis maintain a focus on the stakeholder (Bauman, 2011). BL06 claimed: “As long as we were following the proper code of ethics, we knew that Federal and State regulations would also find that our lending behavior is ethical”.

Improved underwriting. The underwriting approach utilized by leaders of Bank X was ethical and based on proper underwriting, involving thorough verification controls, as well as accurate appraisals of property values. This subtheme of improved underwriting aligns with the findings of Goh and Kauffman (2013), who noted that to operate more efficiently, leaders of U.S. banks must utilize digital technology including online and remote banking as well as automated underwriting systems to issue less risky

loans. Leaders of Bank X depended heavily on automated underwriting programs because of the reliability and accuracy of this computer program, whereas bank underwriters of other financial institutions issued many risky home loans while overvaluing prices for financial gain, which affected the economic efficiency, solvency, and growth of U.S. banks. Subsequently, the marginal cost of homes exceeded home prices and led to the housing bubble, which then led to the 2007-2009 economic crisis (Renaud, 2012). The theory of economic efficiency (Lerner, 1972) is foundational to the main goal of U.S. banks, which is pure economic gain (Tanu, 2013). The role of ethical and stringent underwriting criteria is essential to mitigating losses (Tanu, 2013). Leaders of U.S. banks based financing on creditworthiness and interest. Proponents of the economic efficiency theory posited that nothing can improve without affecting something else (Kiana et al., 2012).

BL01 expressed: “It was about the quality of the customers coming in. The ability of the customer to pay on the loan is what we looked at”. Although a borrower’s debt-to-income ratio is typically one factor for consideration throughout the underwriting process, several other borrower requirements should factor into the underwriting process, including loan-to-value ratio, credit score, residual income, liquid cash reserves, and past payment history (O’Keefe, 2016). BL03 posited that the underwriting process was the biggest change in the strategy of Bank X. Leaders of Bank X ascertained that underwriters did a full financial review of the customer before approving or declining the customer for a loan. This subtheme of improved underwriting aligns with the findings of O’Keefe (2016) concerning the importance of considering multiple factors in the

underwriting process. At Bank X, the entire loan team and upper management reviewed every loan through extensive, fair, and unbiased reviews before final loan approval. The leaders of Bank X used the winning strategy of improved underwriting to lower the loan default rate and overcome the financial crisis.

Emergent Theme 4: Customer Service Strategies

In banking, the theory of economic efficiency relates to everyday bank operations, home loan processing, bank productivity, and customer service, all of which influence the overall ability of the bank to meet its short- and long-term goals known as solvency (Chan-Lau, 2012; Lerner, 1972). Based on the data analysis, a theme of customer service strategies emerged. During the interviews, participants mentioned different customer service strategies 31 times (refer to Table 4). The theme of customer service strategies aligns with the findings of Chan-Lau (2012) concerning the theory of economic efficiency in practice during everyday bank operations. Bank leaders of Bank X focused on the needs of the customers by providing excellent customer service. The primary goal was to put the customer at the center of attention (Izogo & Ogba, 2015). According to Epps and Ivanov (2014), providing excellent customer service would enable the financial institution to achieve long-term growth. A staff that provides excellent customer service gains the trust of the customer and keeps customers calm in adverse situations (Quresh et al., 2012). The staff of Bank X educated customers on different banking products and services, to improve the overall banking experience. With this education, customers felt more comfortable with new computer-based technology such as mobile and online banking.

Additionally, the focus of the leaders at Bank X on client-centered services resulted in higher customer satisfaction and an increase in customer retention. As customer retention increased, customers kept more assets at Bank X, therefore leaders of Bank X maximized profit and Bank X became more efficient. The satisfied customers were able to take advantage of more products and services, which increased the net profit of Bank X. The net profit resulted in greater efficiency and success at Bank X. Therefore, leaders of Bank X may serve as a model for other bank leaders to avoid the likelihood of bank failure and avoid the need to accept TARP funds from the government. The subthemes that emerged were (a) excellent customer service and (b) customer education.

Table 4

Customer Service Strategies

Subtheme	<i>N</i>	% frequency of occurrence
Excellent customer service	14	45.16
Customer education	17	54.84

Note. *N* = Frequency.

Excellent customer service. The responses of the participants and information from the annual fiscal reports of Bank X demonstrated the importance of having excellent customer service. Customer satisfaction is vital to the success of a bank (Wen-Tsao & Leu, 2016). By providing excellent customer service, bank staff gains the customers' trust and confidence (Quresh et al., 2012). The subtheme of excellent customer service aligns with the findings of Wen-Tsao and Leu (2016) and Quresh et al. (2012) on the importance of excellent customer service and high customer satisfaction. As BL01

emphasized, during the crisis, rather than assisting customers with just the one particular aspect of banking that brought them in to the bank, personal bankers conducted complete financial reviews with customers. Excellent customer service influences overall customer retention (Khan & Haseeb, 2015). Epps and Ivanov (2014) suggested that leaders of financial institutions should focus on customer satisfaction, training, education, and excellent customer service rather than profit.

BL03 expressed: “It was about giving the customer what they wanted and when they wanted it”. Wen-Tsao and Leu (2016) argued that high customer satisfaction can attract customers to continue doing business with the bank and maintain the customers’ loyalty. In turn, greater customer retention leads to higher bank efficiency and improved institutional solvency (Khan & Haseeb, 2015). BL04 concluded: “We made sure that our associates complied with our new style of banking and made sure that they knew what was expected. Our aim was quality service, quality sales, and quality results”.

Customer education. Implementing customer education protocols through the application of digital technology directly favored the introduction of diversity in products and services of Bank X. BL02 stated that leaders of Bank X ascertained that employees educated customers about different services and products, which enabled customers to not only understand the products and services, but to see a need for them. The goal was to make sure that customers knew how much the employees at Bank X appreciated their business. The overall effect of customer education was instrumental in improving the economic efficiency and solvency of Bank X.

As recommended by Halliru (2016), leaders of financial institutions have noticed the importance of educating customers and the positive affiliation with customer retention. BL05 said that during the crisis, many customers at Bank X were anxious and unsure of what to do. As a result, leaders of Bank X implemented customer education protocols with new platforms including web banking and online banking. The subtheme of customer education aligns with the findings of Halliru concerning the importance of teaching customers about new banking products and services. BL06 concluded: “We were educating our employees and our customers on technology and how technology could be so beneficial”.

Application to Professional Practice

During the 2007-2009 financial crisis, bank leaders of Bank X improved the home loan approval process significantly by making the issuing of loans more stringent and based on logic as well as the customer’s creditworthiness. This research contributes to professional practice by sharing successful strategic practices used by the leaders of Bank X to accomplish efficiency changes during the 2007-2009 financial crisis. Other bank leaders who implement these strategies could reduce the likelihood of failures in future financial crises. The leaders of Bank X used the winning strategy of improved underwriting to lower the loan default rate and overcome the financial crisis. Bank leaders should consider implementing the automated underwriting system, as the system streamlines the application process (Markus & Mentzer, 2014).

The automated system has strict guidelines to adhere by and eliminates any human bias in the underwriting process (Markus & Mentzer, 2014). The automated form

of underwriting complies with the Dodd-Frank Wall Street Reform and Consumer Protection Act. With the automated form of underwriting, the loan approval process becomes more selective, which leads to improvements in the financing and banking industry (Nazareth & Rosenberg, 2013). The development of the automated underwriting system was a direct consequence of the application of digital technology in banking. Applying the automated underwriting technology should result in the elimination of risky loans (Markus & Mentzer, 2014).

Applying a proper ethical framework at every level of the banking system should translate into doing the right thing for the customer (Bauman, 2011). Doing the right thing for the consumer implies that there should be proper decision-making, transparency, and trust between consumers and the financial institution (Bauman, 2011). Also, based on the results of this study, leaders of other institutions could implement staff education and training, combined with an improved and convenient method of banking known as electronic banking, to make their banks more efficient.

Implications for Social Change

The reason for this study was that some U.S. banking leaders lacked strategies to identify efficiency changes during a financial crisis. This study is significant because it includes strategies that leaders of a successful U.S. bank used to identify efficiency changes occurring during a financial crisis. Applying these successful banking strategies should promote business growth and development, which would translate to growth in the gross domestic product (GDP) and lead to a more robust U.S. economy.

If bank leaders implement successful banking strategies similar to those implemented by the bank leaders of Bank X, fewer bank failures are likely to occur. Hence, the remaining banks would become more economically stable, thus having a greater impact on the local economy, stimulating local businesses, and promoting new entrepreneurships. A solvent bank can improve growth and development in the community as a whole, thereby decreasing the need for TARP funding from the government thus sparing taxpayers the burden of bailing out failing banks. The principal benefit of fewer bank failures will result in a stronger and more robust economy, which should lead to social and economic gains.

Recommendations for Action

I recommend that bank leaders implement strategies to (a) reduce expenditure and implement educational programs, (b) implement digital technology including mobile and online banking, (c) excel with customer service, and (d) implement ethically based loan processing. If bank leaders implement these recommendations, fewer banks may fail. Additionally, the staff in the lending sector may become more objective and ethical.

Reduce expenditure and implement educational programs. Implementing rightsizing strategies and providing staff with education and training can make a bank more efficient. Reducing variable costs and maintaining or increasing revenue can improve the solvency and efficiency of the bank. I recommend that bank leaders lower the bank's variable cost by minimizing the numbers of branches, amount of external labor, and the overall number of employees. In addition, retained employees should follow tailored educational programs to gain knowledge to perform the tasks that the

dismissed employees performed and to gain a better understanding of the new technological solutions and processes. An essential factor to overcoming the 2007-2009 financial crisis was the implementation of expenditure reduction. Consequently, greater bank efficiency leads to greater bank solvency and, as a result, greater net profit, success, and overall growth (Said, 2013). Also, offering fewer bonuses can reduce the overall bank expenditure. Using an objective and unbiased method known as automated underwriting, leaders can further reduce expenditure and the size of the mortgage sector and reduce or eliminate risky and underperforming loans.

Implement digital technology including mobile and online banking. I

recommend that bank leaders innovate with technology, specifically through mobile and online banking as well as automated underwriting systems to issue less risky loans and operate more efficiently. Bank leaders should apply digital technology to make banking more accessible anywhere and anytime. Improving the website, mobile application, and automated teller machine services while making sure that customers are up to date with the changes is essential to the direct application of digital technology.

Excel with customer service. I also recommend that bank leaders provide excellent customer service to enable the financial institution to achieve long-term growth and educate customers on different banking products and services to improve the overall banking experience. Customer satisfaction is an essential factor to the success of a bank; by providing excellent customer service, the bank staff should gain the customers' trust and confidence. Focusing on customer satisfaction and excellent customer service rather than only on profit will attract customers to continue doing business with the bank and

will maintain the customers' loyalty (Wen-Tsao & Leu, 2016). In turn, greater customer retention leads to higher bank efficiency and improved institutional solvency (Khan & Haseeb, 2015).

Implement ethically based loan processing. To implement ethically based loans, I recommend that loan managers process loan requests based on firm ethical and moral standards to ensure fair and unbiased decisions. Moreover, leaders of banks should ascertain that employees apply the proper work ethics along with these ethical and moral standards when issuing loans. I will share the information about the most successful banking strategies during a financial crisis with bank leaders of other financial institutions so that they can gain a deep and thorough understanding of these strategies. To disseminate the results, I shall schedule a series of lectures, synthesize pamphlets summarizing the main recommendations, and set up meetings with policy makers at other major financial institutions. The implementation of strong moral codes, ethical standards, and the application of online digital technology will lead bank leaders to survive a future financial crisis without the need of TARP funds.

Recommendations for Further Research

I suggest a number of recommendations for further research:

1. I limited this case study to one banking institution. I recommend for future researchers to conduct a multiple case study targeting multi-institutions. The findings of these future studies may confirm or contradict the findings of this research.
2. The interview participants may not have recalled all of the specific strategies

used during the financial crisis, as the financial crisis occurred 6-8 years ago.

To address this limitation in future research, I recommend that researchers repeat the study during or immediately after a crisis. This will enable future research participants to recall details that the research participants of this study may have omitted. The additional data may provide additional results.

3. A limitation of this study was the relatively small sample size. This study included only six participants; therefore, future researchers could improve upon this limitation by conducting a study consisting of a larger number of participants from which the additional data may provide a broader range of results.
4. The data were predominately non-numerical and qualitative in nature. To address this limitation in future research, researchers could apply different designs and methodologies. For example, researchers can apply the quantitative or mixed research methods on winning banking strategies to identify efficiency changes during a financial crisis.

Reflections

While pursuing my Doctoral of Business Administration degree at Walden University, I realized from the early stages of the program that this level of education was difficult yet highly rewarding. I knew that there would be many roadblocks and obstacles during my journey, but vowed never to give up during the process of completing the dissertation. While in this process, I gained invaluable knowledge and experience about the banking industry. I changed my interpretation about winning banking strategies since

I began this study. The responsibilities, decision-making, and work ethics of the research participants made me realize how much respect these individuals deserve for being able to succeed in a time like the 2007-2009 financial crisis. I gained much information from these findings, which may become a part of the body of literature on the subject of winning banking strategies.

Conclusion

The cause of so many bank failures during the 2007-2009 financial crisis was mainly the failures in the home lending process, predatory lending practices, and unethical behavior (Trussel & Johnson, 2012). Bank leaders sought to maximize profits for the financial institutions (Trussel & Johnson, 2012). In this study, the leaders of Bank X discussed effective strategies for surviving a financial crisis, focusing on the implementation of appropriate technology and ethically based banking practices. The technology included an automated underwriting system to minimize risky loans and lower loan default rates while focusing on personalizing customer service. As a result, the number of employees within the financial institution decreased. The remaining employees conducted banking practices more efficiently because of the application of the digital technology. Bank leaders who provided excellent management strategies, outstanding decision-making, and superb customer service made the banking sector operate more efficiently. Bank leaders who implement these successful strategies will help banks attain the financial solvency to avoid a possible future financial crisis. These effective bank leaders will spare taxpayers the burden of bailing out failing banks that need TARP funds to survive. Implementing the application of technology such as digital

underwriting systems along with ethically based loan processing and excellent management skills would improve the overall efficiency of the financial sector.

References

- Abbott, M., Wu, S., & Wang, W. C. (2013). The productivity and performance of Australia's major banks since deregulation. *Journal of Economics and Finance*, 37, 122-135. doi:10.1007/s12197-011-9172-0
- Abu-Alkheil, A., Burghof, H., & Khan, W. A. (2012). Comparison of efficiency and productivity changes of Islamic and conventional banks: Evidence from Europe and Muslim-majority countries? *Journal of Applied Business Research*, 28, 1385-1412. doi:10.19030/jabr.v28i6.7351
- Adams, D. P., & Miles, T. P. (2013). The application of Belmont Report principles to policy development. *Journal of Gerontological Nursing*, 39(12), 16-21. doi:10.3928/00989134-20131028-07
- Agostino, D., Arena, M., & Arnaboldi, M. (2013). Leading change in public organisations: The role of mediators. *Leadership & Organization Development Journal*, 34, 596-615. doi:10.1108/LODJ-12-2011-0123
- Ahmed, S. U., Rahman, M. A., Ahmed, S. P., & Ullah, G. M. W. (2014). Pricing linkage between Islamic banking and conventional banking: The case of Bangladesh. *International Journal of Finance & Banking Studies*, 3(4), 84-97. doi:10.20525/.v3i4.193
- Alam, N. (2013). Impact of banking regulation on risk and efficiency in Islamic banking. *Journal of Financial Reporting & Accounting*, 11, 29-50. doi:10.1108/JFRA-03-2013-0010

- Al-Amarneh, A. (2014). Corporate governance, ownership structure and bank performance in Jordan. *International Journal of Economics and Finance*, 6(6), 192-202. doi:10.5539/ijef.v6n6p192
- Alina, B. V., Matis, D., & Oriol, A. S. (2012). True and fair view and creative accounting conceptual delimitations based on Papineau's tree methodology. *Annales Universitatis Apulensis: Series Oeconomica*, 14, 104-115. Retrieved from <http://www.oeconomica.uab.ro>
- Al-Saidi, M., & Al-Shammari, B. (2013). Board composition and bank performance in Kuwait: An empirical study. *Managerial Auditing Journal*, 28, 472-494. doi:10.1108/02686901311329883
- Al-Tamimi, H., & Jellali, N. (2013). The effects of ownership structure and competition on risk-taking behavior: Evidence from UAE conventional and Islamic banks. *International Journal of Business and Finance Research*, 7(2), 115-124. Retrieved from <http://www.theibfr.com/ijbfr.htm>
- Andries, A. M., & Capraru, B. (2012). Competition and efficiency in EU27 banking systems. *Baltic Journal of Economics*, 12(1), 41-60. doi:10.1080/1406099x.2012.10840510
- Askari, F., Atarodi, A., Torabi, S., & Moshki, M. (2014). Exploring women's personal experiences of giving birth in Gonabad city: A qualitative study. *Global Journal of Health Science*, 6(5), 46-54. doi:10.5539/gjhs.v6n5p46
- Aslam, S., Georgiev, H., Mehta, K., & Kumar, A. (2012). Matching research design to clinical research questions. *Indian Journal of Sexually Transmitted Diseases and AIDS*, 33, 49-53. doi:10.4103/0253-7184.93829

- Asma, S., & Manelle, L. (2014). The efficiency's analysis of Islamic banks in MENA countries: Trends and perspectives. *Indian Journal of Commerce and Management Studies*, 5(1), 36-46. Retrieved from <http://www.scholarshub.net/ijcms.html>
- Azimian, J., Negarandeh, R., & Fakhr-Movahedi, A. (2014). Factors affecting nurses' coping with transition: An exploratory qualitative study. *Global Journal of Health Science*, 6(6), 88-95. doi:10.5539/gjhs.v6n6p88
- Bakhit, W., & Bakhit, S. (2014). Banks' stability: The effect of monetary policies in the light of global financial crisis. *International Journal of Finance & Banking Studies*, 3(2), 60-80. doi:10.20525/.v3i2.184
- Barrington, L. (2015). Ageism and bias in the American workplace. *Generations*, 39(3), 34-38. Retrieved from <http://www.asaging.org/generations-journal-american-society-aging>
- Bauman, D. C. (2011). Evaluating ethical approaches to crisis leadership: Insights from unintentional harm research. *Journal of Business Ethics*, 98, 281-295. doi:10.1007/s10551-010-0549-3
- Baumgartner, I. (2012). Handling interpretation and representation in multilingual research: A meta-study of pragmatic issues resulting from the use of multiple languages in a qualitative information systems research work. *The Qualitative Report*, 17(42), 1-21. Retrieved from <http://nsuworks.nova.edu/tqr>

- Bawuro, F. A., Danjuma, I., & Ibrahim, A. K. (2016). Value of training and development during recession to employees: Evidence from Nigeria. *International Journal of Business & Management*, 4(4), 204-211. Retrieved from <http://www.theijbm.com>
- Bekhet, A. K., & Zauszniewski, J. A. (2012). Methodological triangulation: An approach to understanding data. *Nurse Researcher*, 20(2), 40-43.
doi:10.7748/nr2012.11.20.2.40.c9442
- Bernard, H. R. (2012). *Social research methods: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Birchall, J. (2014). Qualitative inquiry as a method to extract personal narratives: Approach to research into organizational climate change mitigation. *The Qualitative Report*, 19(38), 1-18. Retrieved from <http://nsuworks.nova.edu/tqr>
- Borrego, M., Foster, M. J., & Froyd, J. E. (2014). Systematic literature reviews in engineering education and other developing interdisciplinary fields. *Journal of Engineering Education*, 103, 45-76. doi:10.1002/jee.20038
- Bradley, P. V., Getrich, C. M., & Hannigan, G. G. (2015). New Mexico practitioners' access to and satisfaction with online clinical information resources: An interview study using qualitative data analysis software. *Journal of the Medical Library Association*, 103, 31-35. doi:10.3163/1536-5050.103.1.006
- Brandt, L., Ma, D., & Rawski, T. G. (2014). From divergence to convergence: Reevaluating the history behind China's economic boom. *Journal of Economic Literature*, 52, 45-123. doi:10.1257/jel.52.1.45

- Buchanan, W. L. (2013). *Exploring sustainability: The key to corporate profitability in the 21st century* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3604426)
- Burns, A. R. (2013). *Money and monetary policy in early times*. London, England: Routledge.
- Calathes, W., & Yeager, M. G. (2016). Sweetheart settlements, the financial crisis, and impunity: A case study of SEC v. Citigroup global markets, Inc. *Social Justice*, 42(1), 53-69. Retrieved from <http://socialjusticejournal.org>
- Cao, M. T. (2012). Success predictor for international joint ventures in Vietnam. *International Journal of Emerging Markets*, 7, 72-85.
doi:10.1108/17468801211197914
- Castleberry, A. (2014). NVivo 10 [software program]. Version 10. QSR International; 2012. *American Journal of Pharmaceutical Education*, 78(1), 1-2.
doi:10.5688/ajpe78125
- Chan, Z. C. Y., Fung, Y., & Chien, W. (2013). Bracketing in phenomenology: Only undertaken in the data collection and analysis process? *The Qualitative Report*, 18(59), 1-9. Retrieved from <http://nsuworks.nova.edu/tqr>
- Chan-Lau, J. (2012). Do dynamic provisions enhance bank solvency and reduce credit procyclicality? A study of the Chilean banking system. *Journal of Banking Regulation*, 13, 178-188. doi:10.1057/jbr.2012.4

- Chansarn, S. (2014). Total factor productivity of commercial banks in Thailand. *International Journal of Business and Society*, 15, 215-234, 373. Retrieved from <http://www.ijbs.unimas.my>
- Chireshe, E. (2015). Barriers to the utilisation of provisions of the Zimbabwean Domestic Violence Act among abused Christian women in Zimbabwe. *Journal of International Women's Studies*, 16(2), 259-273. Retrieved from <http://vc.bridgew.edu/jiws>
- Choi, S., Holmberg, I., Löwstedt, J., & Brommels, M. (2012). Managing clinical integration: A comparative case study in a merged university hospital. *Journal of Health Organization and Management*, 26(4), 486-507.
doi:10.1108/14777261211251544
- Coffee, J. C., Jr. (2009). What went wrong? An initial inquiry into the causes of the 2008 financial crisis. *Journal of Corporate Law Studies*, 9, 1-22. Retrieved from <http://www.tandfonline.com/loi/rcls20#.V0XdTb6TVHA>
- Cope, D. G. (2014). Methods and meanings: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum*, 41, 89-91. doi:10.1188/14.onf.89-91
- Cruz, E. V., & Higginbottom, G. (2013). The use of focused ethnography in nursing research. *Nurse Researcher*, 20(4), 36-43. doi:10.7748/nr2013.03.20.4.36.e305
- Daggett, V. S., Bakas, T., Buelow, J., Habermann, B., & Murray, L. L. (2013). Needs and concerns of male combat veterans with mild traumatic brain injury. *Journal of Rehabilitation Research and Development*, 50, 327-340.
doi:10.1682/jrrd.2011.09.0168

- Davis, A. M., & Noyes, A. D. (2010). *The origin of the National Banking System: History of the National Bank currency: History of crises under the National Banking System (1911)*. Whitefish, MT: Kessinger.
- Deal, B., & Grassley, J. S. (2012). The lived experience of giving spiritual care: A phenomenological study of nephrology nurses working in acute and chronic hemodialysis settings. *Nephrology Nursing Journal*, *39*, 471-481. Retrieved from <https://www.annanurse.org/resources/products/nephrology-nursing-journal>
- De Ceunynck, T., Kusumastuti, D., Hannes, E., Janssens, D., & Wets, G. (2013). Mapping leisure shopping trip decision making: Validation of the CNET interview protocol. *Quality and Quantity*, *47*, 1831-1849. doi:10.1007/s11135-011-9629-4
- De Jongh, E., De Jongh, R., De Jongh, D., & Gary, V. V. (2013). A review of operational risk in banks and its role in the financial crisis. *South African Journal of Economic and Management Sciences*, *16*, 364-382. Retrieved from <http://www.sajems.org/index.php/sajems/index>
- Dollins, H., Bray, K., & Gadbury-Amyot, C. (2013). A qualitative case study of the legislative process of the hygienist-therapist bill in a large midwestern state. *Journal of Dental Hygiene (Online)*, *87*, 275-288. Retrieved from <http://jdh.adha.org>
- Donaldson, T. (2012). Three ethical roots of the economic crisis. *Journal of Business Ethics*, *106*, 5-8. doi:10.1007/s10551-011-1054-z

- Duraskovic, J. (2014). The global economic crisis through the prism of the Great Depression. *Management*, 71(19), 39-47. doi:10.7595/management.fon.2014.0013
- Edhborg, M., Nasreen, H. E., & Kabir, Z. N. (2015). "I can't stop worrying about everything": Experiences of rural Bangladeshi women during the first postpartum months. *International Journal of Qualitative Studies on Health and Well-being*, 10, 26226-26278. doi:10.3402/qhw.v10.26226
- Elkhatib, D. H. (2013). Islamic finance. *International Lawyer*, 47, 275-278. Retrieved from <http://ilra.law.smu.edu/Journals/TIL>
- Epps, B., & Ivanov, S. (2014). U.S. banks: Can they improve? A Deming analysis of internal operations. *International Journal of Organizational Innovation*, 7(2), 38-47. Retrieved from <http://www.ijoi-online.org>
- Erasmus, C., & Makina, D. (2014). An empirical study of bank efficiency in South Africa using the standard and alternative approaches to data envelopment analysis (DEA). *Journal of Economics and Behavioral Studies*, 6, 310-317. Retrieved from <http://ifrnd.org/journal/index.php/JEBS>
- Farago, B., Zide, J. S., & Shahani-Denning, C. (2013). Selection interviews: Role of interviewer warmth, interview structure, and interview outcome in applicants' perceptions of organizations. *Consulting Psychology Journal: Practice and Research*, 65, 224-239. doi:10.1037/a0034300
- Febianto, I. (2012). Adapting risk management for profit and loss sharing financing of Islamic banks. *Modern Economy*, 3, 73-80. doi:10.4236/me.2012.31011

- Federal Deposit Insurance Corporation. (2009). *Quarterly banking profile: Fourth quarter 2008*. Retrieved from https://www.fdic.gov/bank/analytical/quarterly/2009_vol3_1/Quarterly_Vol3No1_entire_issue_FINAL.pdf
- Ferreira, C. (2013). Bank market concentration and bank efficiency in the European Union: A panel Granger causality approach. *International Economics and Economic Policy*, 10, 365-391. doi:10.1007/s10368-013-0234-y
- Foo, J., & Witkowska, D. (2014). An efficiency comparison of Chinese banks: A multidimensional analysis. *International Journal of Business*, 19, 44-62. Retrieved from <http://www.craig.csufresno.edu/ijb>
- Friedman, M. (2013). To bail out or not to bail out: Moral hazard and other ethical considerations. *Georgetown Journal of Law and Public Policy*, 11, 411-426. Retrieved from <http://www.law.georgetown.edu/academics/law-journals/gjlpp/index.cfm>
- Ftiti, Z., Nafti, O., & Sreiri, S. (2013). Efficiency of Islamic banks during subprime crisis: Evidence of GCC countries. *Journal of Applied Business Research*, 29(1), 285-304. doi:10.19030/jabr.v29i1.7615
- Fugard, A., & Potts, H. (2015). Supporting thinking on sample sizes for thematic analyses: A quantitative tool. *International Journal of Social Research Methodology*, 18, 669-684. doi:10.1080/13645579.2015.1005453

- Gargouri, I. (2013). Efficiency of Tunisian commercial banks according to the intermediation approach. *International Journal of Economics and Finance*, 5(5), 190-203. doi:10.5539/ijef.v5n5p190
- Gatzert, N., & Wesker, H. (2012). The impact of natural hedging on a life insurer's risk situation. *The Journal of Risk Finance*, 13, 396-423. doi:10.1108/15265941211273731
- Ghauri, S., & Qambar, A. (2012). Rewards in faith-based vs conventional banking. *Qualitative Research in Financial Markets*, 4, 176-196. doi:10.1108/17554171211252510
- Ghobadian, A., & O'Regan, N. (2014). A case study and interview with Jill McDonald CEO and president of McDonald's Northern Europe division. *Journal of Strategy and Management*, 7, 87-100. doi:10.1108/JSMA-12-2013-0066
- Gibson, S., Benson, O., & Brand, S. L. (2013). Talking about suicide: Confidentiality and anonymity in qualitative research. *Nursing Ethics*, 20, 18-29. doi:10.1177/0969733012452684
- Glozah, F. N. (2015). Exploring Ghanaian adolescents' meaning of health and wellbeing: A psychosocial perspective. *International Journal of Qualitative Studies on Health and Well-being*, 10, 26370-27146. doi:10.3402/qhw.v10.26370
- Goh, K. H., & Kauffman, R. J. (2013). Firm strategy and the Internet in U.S. commercial banking. *Journal of Management Information Systems*, 30(2), 9-40. doi:10.2753/MIS0742-1222300201

- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8, 597-607. Retrieved from <http://nsuworks.nova.edu/tqr>
- Golicic, S. L., & Davis, D. F. (2012). Implementing mixed methods research in supply chain management. *International Journal of Physical Distribution & Logistics Management*, 42, 726-741. doi:10.1108/09600031211269721
- Guba, E. G., & Lincoln, Y. S. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
- Halliru, M. (2016). Competitive advantage through market driving: An evaluation of guaranty trust bank experience in Nigeria. *Journal of Finance, Accounting and Management*, 7(1), 12-29. Retrieved from <http://www.gsmi-ijgb.com/Pages/JFAM.aspx>
- Hanif, M. (2011). Differences and similarities in Islamic and conventional banking. *International Journal of Business and Social Science*, 2(2), 166-175. Retrieved from <http://www.ijbssnet.com>
- Hared, B. A., Abdullah, Z., & Sheikh Mohammed, R. H. (2013). Management control patterns in the traditional societies: A case study in Somalia. *Australian Journal of Business and Management Research*, 3(9), 1-15. Retrieved from <http://www.ajbmr.com>
- Hassan, A. (2009). Risk management practices of Islamic banks of Brunei Darussalam. *Journal of Risk Finance*, 10, 23-37. doi:10.1108/15265940910924472
- Hassan, M. (1999). Islamic banking in theory and practice: The experience of Bangladesh. *Managerial Finance*, 25, 60-113. doi:10.1108/03074359910765966

- Hassine, M. B., & Limani, R. (2014). The impact of bank characteristics on the efficiency: Evidence from MENA Islamic banks. *Journal of Applied Finance and Banking*, 4(3), 237-253. Retrieved from <http://www.scienpress.com/Contact.asp>
- Hidayat, S. E., & Abduh, M. (2012). Does financial crisis give impacts on Bahrain Islamic banking performance? A panel regression analysis. *International Journal of Economics and Finance*, 4(7), 79-87. doi:10.5539/ijef.v4n7p79
- Ho, S. Y., & Odhiambo, N. M. (2013). Banking sector development and economic growth in Hong Kong: An empirical investigation. *International Business & Economics Research Journal*, 12, 519-532. doi:10.19030/iber.v12i5.7827
- Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigour in qualitative case-study research. *Nurse Researcher*, 20(4), 12-17.
doi:10.7748/nr2013.03.20.4.12.e326
- Huang, H., & Tang, Y. (2012). Residential land use regulation and the US housing price cycle between 2000 and 2009. *Journal of Urban Economics*, 71, 93-99.
doi:10.1016/j.jue.2011.08.001
- Iloh, C., & Tierney, W. G. (2014). Using ethnography to understand twenty-first century college life. *Human Affairs*, 24(1), 20-39. doi:10.2478/s13374-014-0203-3
- Ismail, F., Abd Majid, M. S., & Rahim, R. A. (2013). Efficiency of Islamic and conventional banks in Malaysia. *Journal of Financial Reporting and Accounting*, 11, 92-107. doi:10.1108/JFRA-03-2013-0011

- Izogo, E. E., & Ogba, I. (2015). Service quality, customer satisfaction and loyalty in automobile repair services sector. *International Journal of Quality & Reliability Management*, 32, 250-269. doi:10.1108/ijqrm-05-2013-0075
- Jacob, S. A., & Furgerson, S. (2012). Writing interview protocols and conducting interviews: Tips for students new to the field of qualitative research. *The Qualitative Report*, 17(42), 1-10. Retrieved from <http://nsuworks.nova.edu/tqr>
- Jacobson, M., Pruitt Chapin, K., & Rugeley, C. (2009). Toward reconstructing poverty knowledge: Addressing food insecurity through grassroots research design and implementation. *Journal of Poverty*, 13, 1-19. doi:10.1080/10875540802623260
- Jaggia, S., Roche, H., & Thosar, S. (2014). A valuation framework for rent-to-own housing contracts. *The Appraisal Journal*, 82, 231-243. doi:10.2139/ssrn.2400719
- Joshi, M., Cahill, D., Sidhu, J., & Kansal, M. (2013). Intellectual capital and financial performance: An evaluation of the Australian financial sector. *Journal of Intellectual Capital*, 14, 264-285. doi:10.1108/14691931311323887
- Kamaruddin, B., Safa, M., & Mohd, R. (2008). Assessing production efficiency of Islamic banks and conventional bank Islamic windows in Malaysia. *International Journal of Business and Management Science*, 1, 31-48. Retrieved from <http://www.safaworld.org/ijbms>
- Kelemen-Erdos, A. (2012). Sustainable public transport: A central European study. *Periodica Polytechnica Social and Management Sciences*, 20, 81-90. doi:10.3311/pp.so.2012-2.03

- Kenjegalieva, K., Simper, R., & Weyman-Jones, T. (2009). Efficiency of transition banks: Inter-country banking industry trends. *Applied Financial Economics*, *19*, 1531-1546. doi:10.1080/09603100902984343
- Khan, M. N. H., & Haseeb, S. (2015). Impact of employee motivation and satisfaction on customer satisfaction and organizational performance: A theoretical framework. *International Journal of Business & Management*, *3*(1), 129-134. Retrieved from <http://www.ccsenet.org/journal/index.php/ijbm>
- Kiani, K. M., Chen, E. H., & Madjd-Sadjadi, Z. (2012). Financial factors and firm growth: Evidence from financial data on Taiwanese firms. *Quantitative Finance*, *12*, 1299-1314. doi:10.1080/14697688.2011.556143
- Kim, J., Kim, M., Han, A., & Chin, S. (2015). The importance of culturally meaningful activity for health benefits among older Korean immigrant living in the United States. *International Journal of Qualitative Studies on Health and Well-being*, *10*, 27501-27505. doi:10.3402/qhw.v10.27501
- King, R. G., & Levine, R. (1993). Finance, entrepreneurship and growth. *Journal of Monetary Economics*, *32*, 513-542. doi:10.1016/0304-3932(93)90028-E
- Kozarevic, E., Nuhanovic, S., & Nurikic, M. B. (2013). Comparative analysis of risk management in conventional and Islamic banks: The case of Bosnia and Herzegovina. *International Business Research*, *6*(5), 180-193. doi:10.5539/ibr.v6n5p180

- Kumar, L., Malathy, D., & Ganesh, L. S. (2010). Productivity growth and efficiency change in Indian banking. *Journal of Advances in Management Research*, 7, 194-218. doi:10.1108/09727981011084995
- Kumar, S., & Gulati, R. (2010). Measuring efficiency, effectiveness and performance of Indian public sector banks. *International Journal of Productivity and Performance Management*, 59, 51-74. doi:10.1108/17410401011006112
- Kwak, W., Shi, Y., & Kou, G. (2012). Bankruptcy prediction for Korean firms after the 1997 financial crisis: Using a multiple criteria linear programming data mining approach. *Review of Quantitative Finance and Accounting*, 38, 441-453. doi:10.1007/s11156-011-0238-z
- Lerner, A. P. (1972). *Flation: Not inflation of prices, not deflation of jobs*. New York, NY: Quadrangle Books.
- Lietz, C. A., Lacasse, J. R., & Cheung, J. R. (2014). A case study approach to mental health recovery: Understanding the importance of trauma-informed care. *Ethical Human Psychology and Psychiatry*, 16, 167-182. doi:10.1891/1559-4343.16.3.167
- Li Sun, S., & Zhang, Y. (2013). Corporate governance and organizational survival under punctuational change: The case of China's burgeoning banking industry, 1897-1927. *Nankai Business Review International*, 4, 268-289. doi:10.1108/nbri-07-2012-0003
- Liu, W. G. (2015). The making of a fiscal state in Song China, 960-1279. *Economic History Review*, 68, 48-78. doi:10.1111/ehr.12057

- Liu, Y.-C., & Chen, Y.-H. (2012). A meta-frontier approach for comparing bank efficiency differences between Indonesia, Malaysia and Thailand. *Journal of Applied Finance and Banking*, 2(6), 131-150. Retrieved from <http://www.scienpress.com/Contact.asp>
- Liyanage Chamila, R. P., & Chandana, R. H. (2013). Climate change risk perceptions and environmentally conscious behaviour among young environmentalists in Australia. *Young Consumers*, 14, 139-154. doi:10.1108/17473611311325546
- Lochridge, J., Wolff, J., Oliva, M., & O'Sullivan-Oliveira, J. (2013). Perceptions of solid organ transplant recipients regarding self-care management and transitioning. *Pediatric Nursing*, 39(2), 81-89. Retrieved from <https://www.pediatricnursing.net/index.html>
- Malanima, P. (2011). The long decline of a leading economy: GDP in central and northern Italy, 1300-1913. *European Review of Economic History*, 15, 169-219. doi:10.1017/S136149161000016X
- Mariappan, P., & Sreearthi, G. (2013). Application of data envelopment analysis (DEA) to study the performance efficiency of the scheduled commercial banks of India. *International Journals of Marketing and Technology*, 3(8), 52-70. Retrieved from http://www.ijmra.us/commerce_journal.php
- Markus, M. L., & Mentzer, K. (2014). Foresight for a responsible future with ICT. *Information Systems Frontiers*, 16, 353-368. doi:10.1007/s10796-013-9479-9

- Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research?: A review of qualitative interviews in IS research. *Journal of Computer Information Systems*, 54(1), 11-22. Retrieved from <http://www.tandfonline.com/loi/ucis20#.VypZS4QrKJAo>
- Martin, R. (2011). The local geographies of the financial crisis: From the housing bubble to economic recession and beyond. *Journal of Economic Geography*, 11, 587-618. doi:10.1093/jeg/lbq024
- Masood, O., & Ashraf, M. (2012). Bank-specific and macroeconomic profitability determinants of Islamic banks. *Qualitative Research in Financial Markets*, 4, 255-268. doi:10.1108/17554171211252565
- Mattarelli, E., Bertolotti, F., & Macri, D. M. (2013). The use of ethnography and grounded theory in the development of a management information system. *European Journal of Information Systems*, 22, 26-44. doi:10.1057/ejis.2011.34
- McNamara, C. (2009). *General guidelines for conducting interviews*. Minneapolis, MN: Authenticity Consulting. Retrieved from <http://managementhelp.org/evaluatn/interview.htm>
- Merga, N., & Alemayehu, T. (2015). Knowledge, perception, and management skills of mothers with under-five children about diarrhoeal disease in indigenous and resettlement communities in Assosa District, Western Ethiopia. *Journal of Health, Population and Nutrition*, 33, 20-30. Retrieved from <http://www.jhpn.net>
- Merriam, S. B. (2014). *Qualitative research: A guide to design and implementation*. Hoboken, NJ: John Wiley & Sons.

- Metwally, M. M. P. (2012). Differences between the financial characteristics of interest-free banks and conventional banks. *Journal of Financial Management & Analysis*, 25(1), 44-50. Retrieved from <http://library.usask.ca/find/ejournals/view.php?id=954921415432>
- Miles, W. (2015). Contagion versus interdependence across regional U.S. housing markets and implications for RMBS geographic diversification strategy. *Journal of Real Estate Portfolio Management*, 21, 33-52. Retrieved from <http://aresjournals.org/loi/repm>
- Minh, N. K., Long, G. T., & Hung, N. V. (2013). Efficiency and super-efficiency of commercial banks in Vietnam: Performances and determinants. *Asia-Pacific Journal of Operational Research*, 30, G1-G19. doi:10.1142/s0217595912500479
- Moin, T., Ertl, K., Schneider, J., Vasti, E., Makki, F., Richardson, C., Havens, K., & Damschroder, L. (2015). Women veterans' experience with a web-based diabetes prevention program: A qualitative study to inform future practice. *Journal of Medical Internet Research*, 17, 127. doi:10.2196/jmir.4332
- Montfort, D., Brown, S., & Pegg, J. (2012). The adoption of a capstone assessment instrument. *Journal of Engineering Education*, 101, 657-678. doi:10.1002/j.2168-9830.2012.tb01123.x
- Moustakas, C. E. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.

- Musibah, A., & Alfattani, W. (2014). The mediating effect of financial performance on the relationship between Shariah supervisory board effectiveness, intellectual capital and corporate social responsibility, of Islamic banks in Gulf Cooperation Council countries. *Asian Social Science*, *10*(17), 139-164.
doi:10.5539/ass.v10n17p139
- Mustafa, D., & Razak, N. A. A. (2012). Islamic development bank, foreign aid and economic growth in Africa: A simultaneous equations model approach. *International Journal of Economics and Finance*, *4*(6), 94-107.
doi:10.5539/ijef.v4n6p94
- Nair, G. K., Purohit, H., & Choudhary, N. (2014). Influence of risk management on performance: An empirical study of international Islamic bank. *International Journal of Economics and Financial Issues*, *4*, 549-563. Retrieved from <http://www.econjournals.com/index.php/ijefi>
- Nazareth, A. L., & Rosenberg, G. D. (2013). The new regulation of swaps: A lost opportunity. *Comparative Economic Studies*, *55*, 535-548.
doi:10.1057/ces.2013.10
- Nichita, M., Kagitci, M., & Vulpoi, M. (2013). Islamic banking system. The case of the Kingdom of Saudi Arabia. *Romanian Economic and Business Review*, *9*, 211-226.
Retrieved from <http://www.rebe.rau.ro/about.html>
- Ningaye, P., Mathilde, M. Y., & Luc, N. N. (2014). Competition and banking efficiency in the CEMAC zone. *International Journal of Economics and Finance*, *6*, 127-139. doi:10.5539/ijef.v6n6p127

- Nishimura, S. (2005). The foreign and native banks in China: Chop loans in Shanghai and Hankow before 1914. *Modern Asian Studies*, 39, 109-132.
doi:10.1017/s0026749x04001404
- Nolan, J. (2011). Good guanxi and bad guanxi: Western bankers and the role of network practices in institutional change in China. *International Journal of Human Resource Management*, 22, 3357. doi:10.1080/09585192.2011.586869
- Oke, D. M., & Poloamina, I. D. (2012). Further analysis of bank efficiency correlates: The Nigerian experience. *Journal of Applied Finance and Banking*, 2(4), 1-11.
Retrieved from <http://www.scienpress.com/Contact.asp>
- O'Keefe, P. T. (2016). Qualified mortgages and government reverse redlining: How the CFPB'S qualified mortgage regulations will handicap the availability of credit to minority borrowers. *Fordham Journal of Corporate & Financial Law*, 21, 413-447. Retrieved from <http://ir.lawnet.fordham.edu/jcfl>
- Palan, K. M., & Mallalieu, L. (2012). A troubled relationship: An exploration of mall retailers and teen shoppers' thoughts, behaviors, and coping strategies as they interact with each other. *Young Consumers*, 13, 242-254.
doi:10.1108/17473611211261638
- Pancurova, D., & Lyocsa, S. (2013). Determinants of commercial banks' efficiency: evidence from 11 CEE countries. *Czech Journal of Economics and Finance*, 63, 152-179. Retrieved from <http://journal.fsv.cuni.cz>

- Pascu, M. (2014). 2014: The turning point in the post-crisis world. *Management & Marketing, 9*, 91-100. Retrieved from <http://econpapers.repec.org/article/aiomanmar>
- Pawar, I. A., & Nayak, M. P. (2013). Financial performance of public sector banks in India. *International Journal of Management Research and Reviews, 3*, 3668-3676. Retrieved from <http://www.ijmrr.com>
- Perera, S., Skully, M., & Wickramanayake, J. (2013). Cost efficiency in South Asian banking: The impact of bank size, state ownership and stock exchange listings. *International Review of Finance, 7*, 35-60. doi:10.1111/j.1468-2443.2007.00067.x
- Perez, D. F., Nie, J. X., Ardern, C. I., Radhu, N., & Ritvo, P. (2013). Impact of participant incentives and direct and snowball sampling on survey response rate in an ethnically diverse community: Results from a pilot study of physical activity and the built environment. *Journal of Immigrant and Minority Health, 15*, 207-214. doi:10.1007/s10903-011-9525-y
- Pontell, H. N., Black, W. K., & Geis, G. (2014). Too big to fail, too powerful to jail? On the absence of criminal prosecutions after the 2008 financial meltdown. *Crime, Law and Social Change, 61*(1), 1-13. doi:10.1007/s10611-013-9476-4
- Pun, K. I., Yain, W. S., & Kin, C. P. (2012). Key performance indicators for traffic intensive web-enabled business processes. *Business Process Management Journal, 18*, 250-283. doi:10.1108/14637151211225199

- Quresh, A. H., Hussain, Z., & Rehman, K. U. (2012). A comparison between Islamic banking and conventional banking sector in Pakistan. *Information Management and Business Review*, 4, 195-204. doi:10.5539/ijbm.v5n2p137
- Qureshi, M. A., & Shaikh, M. (2012). Efficiency of Islamic and conventional banks in Pakistan: A non-parametric approach. *International Journal of Business and Management*, 7(7), 40-50. doi:10.5539/ijbm.v7n7p40
- Qureshi, M. I., Rustam, A., Rustam, S., Umar, A. B., & Zaman, K. (2012). Measuring bank branch performance in Pakistan: Data envelopment analysis (DEA). *Oeconomics of Knowledge*, 4(4), 25-40. Retrieved from <http://econpapers.repec.org/article/eokjournal>
- Rabier, C. (2014). On quantitative trait locus mapping with an interference phenomenon. *Test*, 23, 311-329. doi:10.1007/s11749-013-0349-z
- Raphael, G. (2013). Efficiency of commercial banks in East Africa: A non-parametric approach. *International Journal of Business and Management*, 8(4), 50-64. doi:10.5539/ijbm.v8n4p50
- Rashid, K., & Rustam, A. (2014). Comparative analysis of local and foreign banks efficiency: A case study of Pakistan. *Oeconomics of Knowledge*, 6(3), 7-52. Retrieved from <http://econpapers.repec.org/article/eokjournal>
- Rashwan, M. H. (2012). How did listed Islamic and traditional banks performed: Pre and post the 2008 financial crisis? *Journal of Applied Finance and Banking*, 2(2), 149-175. Retrieved from <http://www.scienpress.com/Contact.asp>

- Ratislavova, K., & Ratislav, J. (2014). Asynchronous email interview as a qualitative research method in the humanities. *Human Affairs, 24*, 452-460.
doi:10.2478/s13374-014-0240-y
- Read, K. B., Surkis, A., Larson, C., McCrillis, A., Graff, A., Nicholson, J., & Xu, J. (2015). Starting the data conversation: Informing data services at an academic health sciences library. *Journal of the Medical Library Association, 103*(3), 131-135. doi:10.3163/1536-5050.103.3.005
- Reilly, R. C. (2013). Found poems, member checking and crises of representation. *The Qualitative Report, 18*(15), 1-18. Retrieved from <http://nsuworks.nova.edu/tqr>
- Renaud, B. (2012). Real estate bubble and financial crisis in Dubai: Dynamics and policy responses. *Journal of Real Estate Literature, 20*(1), 51-77. Retrieved from <http://www.springer.com/business+%26+management/finance/journal/10966>
- Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (2013). *Qualitative research practice: A guide for social science students and researchers*. Thousand Oaks, CA: Sage.
- Rouissi, R. B., & Bouzgarrou, H. (2012). Cost efficiency of French commercial banks: Domestic versus foreign banks. *International Journal of Business and Finance Research, 6*(4), 101-112. Retrieved from <http://www.theibfr.com/ijbfr.htm>
- Rowan, M., & Huston, P. (1997). Qualitative research articles: Information for authors and peer reviews. *Canadian Medical Association Journal, 157*, 1442-1446.
Retrieved from <http://www.cmaj.ca/>

- Rozzani, N., & Rahman, R. A. (2013). Determinants of bank efficiency: Conventional versus Islamic. *International Journal of Business and Management*, 8(14), 98-109. doi:10.5539/ijbm.v8n14p98
- Ruso, N. (2012). The role of technology: Community based service-learning projects on ethical development. *TOJET: Turkish Online Journal of Educational Technology*, 11, 375-385. Retrieved from <http://www.tojet.net>
- Said, A. (2012). Efficiency in Islamic banking during a financial crisis: An empirical analysis of forty-seven banks. *Journal of Applied Finance & Banking*, 2, 163-197. Retrieved from <http://www.scienpress.com/Contact.asp>
- Said, A. (2013). Risks and efficiency in the Islamic banking systems: The case of selected Islamic banks in MENA region. *International Journal of Economics and Financial Issues*, 3, 66-73. Retrieved from <http://www.econjournals.com/index.php/ijefi>
- Said, S. M., & Masoud, R. M. (2014). Cost and profit efficiency and management behaviour of commercial banks (evidence from Tanzania). *Asian Economic and Financial Review*, 4, 1447-1460. Retrieved from <http://www.aessweb.com/journals/5002>
- Samad, A. (2014). Commercial bank non-interest fee charges: Are fee charges different between Islamic banks and conventional banks? Evidence from Bangladesh. *Asian Economic and Financial Review*, 4, 1681-1690. Retrieved from <http://www.aessweb.com/journals/5002>

- Sanei, M., & Banihashemi, S. (2014). Selecting the best of portfolio using OWA operator weights in cross efficiency-evaluation. *ISRN Applied Mathematics, 4*, 69-72.
doi:10.1155/2014/978314
- Schiniotakis, N. I. (2012). Profitability factors and efficiency of Greek banks. *EuroMed Journal of Business, 7*, 185-200. doi:10.1108/14502191211245606
- Shuchman, M. (2014). Researcher-participant confidentiality now a formal concept in Canadian law. *Canadian Medical Association Journal, 186*, 250-251. Retrieved from <http://www.cmaj.ca>
- Seidman, I. (2012). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. New York, NY: Teachers College Press.
- Shafique, O., Hussain, N., & Taimoor, M. (2013). Differences in the risk management practices of Islamic versus conventional financial institutions in Pakistan. *Journal of Risk Finance, 14*, 179-196. doi:10.1108/15265941311301206
- Shah, C. G. (2016). Virtual banking: A guide to innovation and partnering by D. Schatt (a review). *Financial Analysts Journal, 72*(1), 61-62. Retrieved from <http://www.cfapubs.org/loi/faj>
- Smith, T. A. (2014). Testing theory and related factors for influencing proficiency in quantitative research. *Academy of Educational Leadership Journal, 18*(4), 117-128. Retrieved from <http://www.alliedacademies.org/academy-of-educational-leadership-journal>

- Sok-Gee, C. (2011). Technical efficiency of commercial banks in China: Decomposition into pure technical and scale efficiency. *International Journal of China Studies*, 2, 27-38. Retrieved from <http://ics.um.edu.my/?modul=IJCS>
- Stewart, A. M., Polak, E., Young, R., & Schultz, I. Z. (2012). Injured workers' construction of expectations of return to work with sub-acute back pain: The role of perceived uncertainty. *Journal of Occupational Rehabilitation*, 22(1), 1-14. doi:10.1007/s10926-011-9312-6
- Stich, A. (2016). What are your top 5 essential apps? *Journal of Financial Planning*, 29, 32-33. Retrieved from <https://www.onefpa.org/journal/Pages/default.aspx>
- Stock, J. H. (2014). The economic recovery five years after the financial crisis. *Business Economics*, 49, 21-26. doi:10.1057/be.2013.33
- Sufian, F. (2007). The efficiency of Islamic banking industry in Malaysia: Foreign vs. domestic banks. *Humanomics*, 23, 174-192. doi:10.1108/08288660710779399
- Swauger, M. (2011). Afterword: The ethics of risk, power, and representation. *Qualitative Sociology*, 34, 497-502. doi:10.1007/s11133-011-9201-5
- Tahir, I. M., Razali, A. R., & Haron, S. (2013). Analysing Islamic bank efficiency in Malaysia using the standard and alternative approaches to data envelopment analysis. *Journal of Economics and Behavioral Studies*, 5, 798-804. Retrieved from <http://www.ifrnd.org/JournalDetail.aspx?JournalID=2>
- Tai, L. S. (2012). Competition and efficiency of national banks in the United Arab Emirates. *Journal of Applied Business and Economics*, 13(5), 76-86. Retrieved from <http://www.na-businesspress.com/JABE/jabescholar.html>

- Tamer, M. S., & Yousef, M. H. (2013). Efficiency analysis of UAE banks using data envelopment analysis. *Journal of Economic and Administrative Sciences*, 29, 4-20. doi:10.1108/10264111311319204
- Tanu, S. A. (2013). Profitability performance of private sector banks. *BVIMR Management Edge*, 6, 57-67. Retrieved from <http://www.bvimr.com/bvimrjournal.aspx>
- The White House. (2015). *Office of Management and Budget*. Retrieved from <https://www.whitehouse.gov/omb/budget/Historicals>
- Thomas, E., & Magilvy, J. K. (2011). Qualitative rigor or research validity in qualitative research. *Journal for Specialists in Pediatric Nursing*, 16, 151-155. doi:10.1111/j.1744-6155.2011.00283.x
- Tiemens, K., Nicholas, D., & Forrest, C. (2013). Living with difference: Experiences of adolescent girls with cleft lip and palate. *The Cleft Palate - Craniofacial Journal*, 50(2), e27-e34. doi:10.1597/10-278
- Tirgari, V. (2012). Information technology policies and procedures against unstructured data: A phenomenological study of information technology professionals. *Academy of Information & Management Sciences Journal*, 15, 87-106. Retrieved from http://www.alliedacademies.org/aimsj_public.php
- Toci, V. Z., & Hashi, I. (2013). Intermediation efficiency of banks in South-East Europe: An empirical assessment using DEA and Malmquist index. *International Journal of Finance & Banking Studies*, 2(3), 1-20. doi:10.20525/ijfbs.v2i3.151

- Trueb, B. (2013). Integrating qualitative and quantitative data: Index creation using fuzzy-set QCA. *Quality and Quantity*, 47, 3537-3558. doi:10.1007/s11135-012-9738-8
- Trussel, J., & Johnson, L. (2012). A parsimonious and predictive model of the recent bank failures. *Academy of Banking Studies Journal*, 11(1), 15-30. Retrieved from <https://www.questia.com/library/p374536/academy-of-banking-studies-journal>
- Tsolas, I. E., & Giokas, D. I. (2012). Bank branch efficiency evaluation by means of least absolute deviations and DEA. *Managerial Finance*, 38, 768-785. doi:10.1108/03074351211239397
- Tufford, L., & Newman, P. (2012). Bracketing in qualitative research. *Qualitative Social Work*, 11, 80-96. doi:10.1177/1473325010368316
- Turner, D. W. (2010). Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report*, 15, 754-760. Retrieved from <http://nsuworks.nova.edu/tqr>
- Ul-Hassan, M., & Usman, M. (2013). Building the entrepreneurship through non-banking institution: An empirical study on the contribution of gear for economic development in Islamic way. *Middle East Journal of Scientific Research*, 15, 1356-1358. doi:10.5829/idosi.mejsr.2013.15.10.1046
- Usman, A., & Khan, M. K. (2012). Evaluating the financial performance of Islamic and conventional banks of Pakistan: A comparative analysis. *International Journal of Business and Social Science*, 3(1), 253-257. Retrieved from <http://www.ijbssnet.com>

- Vardar, G. (2013). Efficiency and stock performance of banks in transition countries: Is there A relationship? *International Journal of Economics and Financial Issues*, 3, 355-369. Retrieved from <http://www.econjournals.com/index.php/ijefi/index>
- Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Quarterly*, 37, 21-54. Retrieved from <http://www.misq.org>
- Wasiuzzaman, S., & Umadevi, N. G. (2013). Comparative study of the performance of Islamic and conventional banks. *Humanomics*, 29, 43-60.
doi:10.1108/08288661311299312
- Welch, E. C., Hankemeier, A. D., Wyant, L. A., Hays, G. D., Pitney, A. W., & Van Lunen, L. B. (2014). Future directions of evidence-based practice in athletic training: Perceived strategies to enhance the use of evidence-based practice. *Journal of Athletic Training*, 49, 234-244. doi:10.4085/1062-6050-49.2.15
- Wen-Tsao, P., & Leu, Y. (2016). An analysis of bank service satisfaction based on quantile regression and grey relational analysis. *Mathematical Problems in Engineering*, 2016, 1-9. doi:10.1155/2016/1475148
- Wilson, D., & Washington, G. (2007). Retooling phenomenology: Relevant methods for conducting research with African American women. *Journal of Theory Construction and Testing*, 11, 63-66. Retrieved from <http://tuckerpub.com/jtct.htm>

- Wilson, R. (Ed.). (2012). *Islamic financial markets*. London, England: Routledge.
- Winkelvoss, C. M., Amoruso, A. J., & Duchac, J. (2014). Executive compensation at banks receiving Federal assistance under the troubled asset relief program (TARP). *Journal of Legal, Ethical and Regulatory Issues*, 17, 37-49. Retrieved from <http://www.alliedacademies.org/legal-ethical-and-regulatory-issues/>
- Wolfswinkel, J. F., Furtmueller, E., & Wilderom, C. P. M. (2013). Using grounded theory as a method for rigorously reviewing literature. *European Journal of Information Systems*, 22(1), 45-55. doi:10.1057/ejis.2011.51
- Yang, J., & Baek, J. (2013). Volume of derivative trading, enterprise value, and the return on assets. *Modern Economy*, 4, 513-519. doi:10.4236/me.2013.48055
- Ye, Q., Xu, Z., & Fang, D. (2012). Market structure, performance, and efficiency of the Chinese banking sector. *Economic Change and Restructuring*, 45, 337-358. doi:10.1007/s10644-012-9123-6
- Yin, R. K. (2014). *Case study research: Design and methods*. Thousand Oaks, CA: Sage.
- Yin, R. K. (2015). *Qualitative research from start to finish* (2nd ed.). Thousand Oaks, CA: Sage.
- Zapata-Sepulveda, P., Lopez-Sanchez, F., & Sanchez-Gomez, M. C. (2012). Content analysis research method with NVivo-6 software in a PhD thesis: An approach to the long-term psychological effects on Chilean ex-prisoners survivors of experiences of torture and imprisonment. *Quality and Quantity*, 46(1), 379-390. doi:10.1007/s11135-011-9551-9

Zeitun, R., & Benjelloun, H. (2013). The efficiency of banks and the financial crisis in a developing economy: The case of Jordan. *Journal of Finance, Accounting and Management, 4*, 1-20. Retrieved from <http://www.gsmi-ijgb.com/Pages/JFAM.aspx>

Zeng, Z. (2013). A theory of the non-neutrality of money with banking frictions and bank recapitalization. *Economic Theory, 52*, 729-754. doi:10.1007/s00199-011-0662-2

Appendix A: Interview Consent Form

I invite you to participate in this research. The purpose of this research is to explore strategies used by leaders of a successful U.S. bank to identify efficiency changes that took place during a financial crisis. Adeeb Hattar is inviting male and female (a) bank leaders who occupied a managerial role in a successful U.S. bank during a financial crisis, (b) bank leaders who have an experience with the efficiency changes that occurred during a financial crisis, and (c) bank leaders who developed and implemented strategies to identify efficiency changes that took place during a financial crisis. This form is part of a method called *informed consent* to admit you to understand this study before determining whether to take part. A researcher named Adeeb Hattar, who is a doctoral student at Walden University, is conducting this study. You may already know Adeeb as a Relationship Manager at Bank of America, but this study is separate from that role.

The information you provide will be valuable because you played a key role as a bank leader and made critical decisions during the 2007-2009 financial crisis. My goal is to share the findings from this study to avoid another financial crisis and improve banking practices and strategies. To facilitate my note taking, I would like to audio tape record our interview. I will be the only researcher on the project who will have access to the recordings. I will keep all data confidential. Your participation is strictly voluntary, and you may withdraw from the interview at any time during the interview. I have planned this interview to last no longer than 1 hour, and during this time, you will be asked a series of questions.

Background Information:

The purpose of this qualitative exploratory case study is to explore strategies used by leaders of a successful U.S. bank to identify efficiency changes that took place during a financial crisis.

Procedures:

If you agree to be in this study, you will:

- Meet in person, at your suitability, up to 60 minutes to answer the questions of the researcher.
- Have the interview recorded by the researcher.
- Provide company fiscal reports and proxy statements for 2007-2009.
- Answer probing questions at a later time (if needed).

Here is a sample question:

Interview Question 1: What specific strategies did your banking institution identify and implement during the financial crisis to achieve economic success and become more financially solvent?

Voluntary Nature of the Study:

This study is voluntary. The researcher will respect your choice regardless if you choose to be or not be in the study. Nobody at Walden University will treat you differently if you choose not to be part of the study. If you decide to join the study now, you are given the option of withdrawing from the study at any time during the interview.

Risks and Benefits of Being in the Study:

Being a part of this kind of study may impose certain risk of minor anxieties of daily life, such as stress. The affiliation with this particular study will not pose any kind

of risk to your well-being. The benefits of this study may potentially deliver a better understanding of the strategies used by leaders of a successful U.S. bank to identify efficiency changes occurring during a financial crisis. In-depth interviews of six bank leaders will be the best way to uncover the strategies that took place during the financial crisis in a successful U.S. bank. There will be no direct benefits to the participants in this study.

Payment:

There will be no type of compensation given to the participants for participating in this study.

Privacy:

Any data you provide will always remain confidential. The researcher will not use your personal information for any reason. In addition, the researcher will not use your name or anything else that could uncover who you are in the study reports. The transcripts, files, and interview recordings will be kept on a personal external hard drive device in a secured home cabinet. The researcher will provide the highest level of privacy for each participant throughout the research process. Furthermore, the research will be stored privately for 5 years. After 5 years, I will shred the paper notes and delete the transcripts. All audio files and interview recordings will be deleted permanently from the external hard drive and the digital recorder.

Maintaining Confidentiality in Snowball Sampling:

The nominating subject may or may not choose to reveal their identity to the subsequent contact. By initialing the box below, as the nominating subject, you agree to reveal your identity. By not initialing the box will be interpreted that you are unwilling to

permit your name to be used when referring the additional contacts, even if you have already provided the names and contact information.

Contacts and Questions:

You are allowed to ask any questions at any time including now. If by any chance you have questions later or would like to withdraw from the study, you may contact the researcher through telephone or through e-mail. If you want to discuss your rights as a participant privately, you can contact Walden University at 1-800-925-3368 ext. 312-1210 from the USA, 001-612-312-1210 from outside the USA, or e-mail address irb@waldenu.edu. Walden University's IRB approval number for this study is **03-04-16-0368517** and it expires on **March 3, 2017**. The researcher will supply you with a copy of this form to retain.

Statement of Consent:

I have read the above information and I understand the study good enough to make a decision about my contribution. By signing below, I understand that I am agreeing to the terms explained above and will retain a copy for myself.

Printed Name of Participant

Participant's Signature

By initialing this box, I agree to reveal my identity when referring additional contacts

Date of Consent:

Printed Name of Researcher

Researcher's Signature

Appendix B: National Institutes of Health Certificate of Course Completion



Appendix C: Interview Protocol

Interview Protocol Form

Financial Institution: _____

Research participant (Name, Title, and Position): _____

Qualifications:

Highest Degree Attained: _____

Years in Banking: _____

Area of Specialization: _____

Interviewer: _____

Interview Protocol

At the start of every interview, I will introduce myself and review the consent form. During the interview, I will take notes of the research participant's tone of voice, body language, and facial expressions while avoiding any personal views and outlooks. I will record every interview using a digital recorder, which will be stored directly to a personal external hard drive. As suggested by McNamara (2009), I will check on the device occasionally to make sure that the device is working properly. In addition, I will ask the participants the same interview questions to explain their understanding of the topic. I will ask each question one at a time, and will inform the participant when it is time for the next question. Each interview will last approximately 60 minutes. To collect data until data saturation, I will ask the participants probing questions during a later time (if applicable).

Appendix D: Interview Questions

Interview Question 1: What specific strategies did your banking institution identify and implement during the financial crisis to achieve economic success and become more financially solvent?

Interview Question 2: What economic efficiency changes were transformed into success in your banking institution during the financial crisis?

Interview Question 3: What specific processes and procedures did you use to implement these strategies?

Interview Question 4: What responsibilities and organizational structure did you require to implement these strategies?

Interview Question 5: What key skills and roles did you apply to implement these strategies?

Interview Question 6: What other information including company documents, that you consider relevant to this research would you like to share with me?