ABSTRACT

U.S. NEWSPAPERS’ COVERAGE OF THE 2008 FINANCIAL CRISIS AND RECESSION

The purpose of the thesis is to examine how the U.S. newspapers cover the 2008 financial crisis and recession and how the coverage may set tone on public view about the economy. A total 493 stories were selected between September and December 2008 in four newspapers which represent all geographical areas within the U.S. and are in the list of top 50 U.S. newspapers by circulation that year. A content analysis of the chosen stories was conducted. Results suggested the newspapers used “recession” and “financial crisis” much more frequently than “credit squeeze,” “credit crunch,” and “Great Depression” over the period, which indicates a financial crisis and a recession may be made salient in public mind. Results also revealed that October saw the biggest number of negatively framed stories, the highest investors’ fear since at least 1990 and the worst performance of the Dow Jones Industrial Average since its creation in 1896. That number of stories with negative tones outpaced that of stories with either positive or neutral tones in all newspapers may make the public pessimistic and fearful about the economy. Early recession headline or deckline stories may also influence consumer confidence.

Trang Pham
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U.S. NEWSPAPERS’ COVERAGE OF THE 2008 FINANCIAL CRISIS AND RECESSION

by

Trang Pham

A thesis
submitted in partial fulfillment of the requirements for the degree of Master of Arts in Mass Communication and Journalism in the College of Arts and Humanities California State University, Fresno August 2010
APPROVED

For the Department of Mass Communication and Journalism:

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Chapter 1

INTRODUCTION

The 2008 financial turmoil in the United States has been considered the worst financial failure since the Great Depression (Gosselin, 2008). The turmoil was started by the subprime mortgage crisis in which an increasing number of people with poor credit history failed to pay their housing mortgages. The disturbance of the ostensibly small part of the financial sector has expanded to the whole financial system in the U.S. and worldwide due to banks’ unregulated risk taking investment in financial innovation instruments and their interconnections. The complexities of the instruments and uncertainty about banks’ solvency triggered a credit crunch in the entire financial system, which led to the financial crisis with a series of banking collapses and government bailouts (Krohn & Gruver, 2008).

Two hedge funds managed by Bear Sterns, a global investment bank, announced major losses resulting from trading mortgage loan-backed securities and then closed in July 2007 (Krohn & Gruver, 2008). Eight months later, J.P. Morgan acquired Bear Sterns in a fire sale. Fannie Mae and Freddie Mac, two major lenders in the housing mortgage industry, were bailed out by the government in September 2008 when they were short of capital, in heavy debt, and could trigger systematic risk to the economy. That month also saw Washington Mutual’s assets seized by regulators, the biggest bank failure in U.S. history, and Lehman Brothers’ bankruptcy (The University of Iowa Center for International Finance and Development and Reuters, as cited in Allayannis, 2009, pp. 7-8).
The collapse of Lehman Brothers, the U.S. fourth-biggest investment bank in 2008, eroded public confidence in the banking sector and marked a contagion of financial turmoil to the economy (Allen, Babus, & Carletti, 2009). According to the University of Iowa Center for International Finance and Development and Reuters, the Dow Jones Industrial Average posted its worst loss week and greatest volatility day ever since its foundation on October 11 (as cited in Allayannis, 2009, p. 9). The economy started its output loss in at least two quarters in a row in the third quarter of 2008 (Bureau of Economic Analysis, n.d.), an economic downturn period called recession (Bloomberg, n.d.).

Given the severity of the co-happening 2008 financial and economic downturn, the purpose of this study is to examine how U.S. newspapers covered both the financial crisis and recession and how the coverage may influence the public. According to Soroka (2006), news coverage tends to be more negative than positive because journalists as individuals find negative news more important than positive news and a core function of the press is to discover problems. Since people react to negative news in bigger magnitude than to positive news, journalists also have tendency to report negative stories to meet demands of their audience and readers. Gill (2005) indicated that as the economy declined, news coverage and negative stories about the economy increased. Agenda-setting theory is the underlying theory for the research since its tenets help explain the transfer of media agenda to public agenda.

Agenda-setting theory’s four tenets are salience, gatekeeping, framing, and priming. According to McCombs and Shaw (1972), the theory originally posits that issues of salience in media coverage can be transferred to public. It suggests a causal relationship between time and space devoted to some issues in media and priority of issues considered important in public mind. Media Tenor (n.d.)
indicated the media choose which issues to report or not to report, thus playing a
gatekeeping role over the content to convey to audience and readers. Gatekeeping
also refers to news flow among media organizations, for example, agenda of elite
newspapers is adopted or adapted by other news organizations (McCombs, 2004).
While first-level agenda setting suggests that media are good at telling people
what to think about, the second-level agenda setting or framing posits that media
can tell people how to think about issues (McCombs, 2005). Framing means that
media select some elements of an issue to make them important in a report
(Entman, 1993). Thus, framing refers to the transfer of aspects of an issue from a
media agenda to a public agenda (McCombs, 2005). As issues and elements are
transferred from a media agenda to a public agenda, priming explains how people
develop a perception about the issues. As people are not able to pay attention to
everything, media’s salient issues and aspects become primed in people’s minds
when they have an opinion about those issues and elements.

However, agenda-setting effects are not always found in studies exploring
relationships among news coverage, economic reality, and public perception about
the economy. Stevenson, Gonzenbach, and David (1994) indicated that public
interests and concerns about current economic issues and expectations about the
economy predict the New York Times’s recession coverage, which in turn may
foresee consumers’ confidence in the economy. Su (2008) suggested consumer
sentiment was influenced by economic reality during both normal times and a
recession, but media coverage about the economy during a recession was more
influential than during a non-recession. A possible explanation is that the public
may update economic news via media more often during the economic turmoil. In
contrast, other researchers suggested a causal relationship between media coverage
and public view about the economy. Blood and Phillips (1995) found that
recession headlines of the newspaper could bring about depressing influence on consumers’ confidence. Hester and Gibson (2003) suggested negative stories partly predicted public perception about the economy and could result in doom expectation and performance of the economy.

Though the research does not adopt time series analysis to find causal associations as previous researchers (Blood & Phillips, 1995; Hester & Gibson, 2003; Stevenson et al., 1994; Wu, Stevenson, Chen, & Guner, 2002) did, the research is important since few researchers studied media coverage of both financial crisis and recession and few have touched upon the worst financial failure since the Great Depression. An assumption of the study is that the public are more exposed to media news during a recession to learn about developments in the economy. The agenda-setting theory will help explain what influence newspapers’ coverage of the financial crisis and recession may have on readers.

In order to understand the financial crisis and recession in 2008, the first part of the literature review will discuss financial and economic context of the U.S. The underlying theory of the study, agenda-setting theory, will be examined in the second part. Studies about the economy adopting agenda-setting theory will be reviewed in the third part. The last portion will explore media influence in the economy in general and in financial crisis and recession in particular.
Chapter 2

LITERATURE REVIEW

Since the thesis examines U.S. newspapers’ coverage of the 2008 financial crisis and recession, the first part of the literature review will explore the U.S. financial and economic context. The next section will review agenda-setting theory and the role of the media.

The Financial and Economic Context of the U.S.

Because an important concept of the research is the issue of financial crisis and it has been understood differently by researchers, it is necessary to define this concept at the beginning of the research process to ensure consistency.

Definition of Financial Crisis

Over the years, various researchers have defined financial crisis slightly differently. In the early 1980s, Goldsmith (1982) defined the financial crisis as “a sharp, brief, ultracyclical deterioration of all or most of a group of financial indicators – short-term interest rates, asset (stock, real estate, land) prices, commercial insolvencies and failures of financial institutions” (p. 42). Bordo (1986) took into account change in expectation as a financial indicator element of a financial crisis and defined it from a monetarist’s perspective. According to Bordo (1986), financial crisis includes 10 links such as money supply shrinkage, bankruptcy fear of some financial institutions, expectation change, and selling illiquid assets for money. Hubbard (1991) further delineated financial crisis as “episodes of breakdowns in financial trade” (p. 1). This microeconomic approach examines situations when the process of fund channeling from the final savers to
the final investors, risk allocating, and borrowers’ performing incentives are interrupted. BusinessDictionary.com’s description of financial crisis focuses on the banking sector. According to this definition, a financial crisis happens when money demand exceeds money supply, when depositors withdraw money from a bank and banks are pressed to sell investments to compensate the withdrawn liquid asset to avoid collapse (“Financial Crisis,” n.d.).

Eichengreen and Portes (1987) view a financial crisis as [a] disturbance to financial markets, associated typically with falling asset prices and insolvency among debtors and intermediaries, which ramifies through the financial system, disrupting the market’s capacity to allocate capital within the economy. In an international financial crisis, disturbances spill over national borders, disrupting the market’s capacity to allocate capital internationally. (p. 2)

This definition is probably the most useful for research since its definitional scope is the financial system as a whole, which includes the banking sector and extends to the international level. It implies a distinction among the financial crisis and the asset-market links including debt defaults, bank failures, and exchange market disturbances. These three links are the anatomy of the financial crisis at both the national and global levels (Eichengreen & Portes, 1987).

Aside from defining a financial crisis and distinguishing the various elements involved, it is important to understand common phenomena that lead to and are caused by such a crisis.

Information About Leading Factors and Consequences of a Financial Crisis

Reinhart and Rogoff (2008a) analyzed “external and domestic debt, trade, GNP (Gross National Product), inflation, exchange rates, interest rates, and
commodity prices” of 60 countries in five continents over eight centuries to give insights on financial crisis (p. 1). Researchers suggest that serial default is common for emerging countries struggling to become a developed country. The U.S. 2007 subprime financial crisis shares similarities with other crises in the sense that the financial sector sparks the crisis and sharply changing interest rates and commodity prices have negative influences on the economy. The authors also found default usually precedes inflation, currency, exchange rate, and banking crises.

Reinhart and Rogoff (2008b) found that the frequency of banking crises is similar and the characteristics of before and after crisis periods are also the same in all countries of different levels of income. Bubbles in asset price, credit booms, and large capital inflow usually happen prior to banking crises in all countries. Banking crises are attributable to governments’ declining revenue and escalating expense. Government debts usually increase 86% 3 years after a banking crisis happens. Herring and Wachter (2003) suggested that real estate bubbles cause many financial crises to occur.

Reinhart and Rogoff (2009) examined major systematic banking crises including those in developed countries such as Norway in 1899, the United States in 1929, Spain in 1977, Norway in 1987, Finland in 1991, Sweden in 1991, and Japan in 1992, and those in emerging countries such as the 1997-1998 Asian crisis, Colombia in 1998, and Argentina in 2001 because of the availability of the housing data. Their findings indicated that these severe financial crises tend to have strong negative effects on asset and equity prices, Gross Domestic Product (GDP), and employment. Real housing prices fall 35% 6 years after the crises. Typically, the GDP slides 9% approximately 2 or more years after a crisis. Three
and a half years after the crises occur, equity prices slump 55%. Four years after the crises, unemployment rates increase about 7 percentage points per average.

**Distinction and Association Between Financial Crisis and Recession**

The financial sector is the heart of a capitalist economy; it channels money from depositors to borrowers and its financial instruments help reduce risk for businesses and households through various forms of insurance (Herring & Santomero, 1996). Given these elements, it is important to make a distinction and explore the relationship between a financial crisis and a recession, a period of downturn in economic activities.

There are two definitions of recession in the existing literature. The traditional one only takes into account a period of contracting GDP. Bloomberg’s online finance glossary defines recession as “a temporary downturn in economic activity, usually indicated by two consecutive quarters of a falling GDP” (“Recession,” n.d., para. 91). According to this definition, the most recent recession started in the second quarter of 2008 (Bureau of Economic Analysis, n.d.). However, the National Bureau of Economic Research (NBER) Business Cycle Dating Committee, a private and nonprofit group of economists, defines a recession on a number of indicators including GDP:

> A recession is a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in production, employment, real income, and other indicators. A recession begins when the economy reaches a peak of activity and ends when the economy reaches its trough. (NBER, 2008, p. 1)

Most recessions called by the NBER include at least two quarters of declining GDP (NBER, 2008). According to Marsh (2008), the term “recession” is
official once it is announced by the NBER and only after NBER economists follow the organization’s research procedures. In December 2008, NBER announced that the U.S. recession started in December 2007.

Researchers explained how financial crises affect the economy as a whole. Friedman and Schwartz (1963), two monetarists, suggested a banking panic in the U.S. causes money supply shrinkage, which in turn leads to a contraction in economic activities. Mishkin (1991) adopted an asymmetric information interpretation to provide a complementary approach to the existing literature on financial panics developed by monetarists. Because borrowers have more information about the risk of their projects than do banks, creditors can only have average interest rates for both good and bad borrowers. As a result, reverse selection occurs because of three factors: (a) good borrowers have to pay a higher interest rate than they should; (b) some good borrowers drop the profitable projects; and (c) only riskier borrowers accept higher rates. As a result of these factors, lenders reduce the amount of loans. Mishkin reviewed historical financial crises in the U.S. in view of interest rate spreads with the expectation that “bank panics are also associated with a larger interest-rate spread between higher- and lower-quality debt instruments” (p. 74). The reverse selection and borrowers’ riskier behaviors that can lead to default of borrowers would make investment and economic activity slide. By documenting that the sectors that borrow more heavily are more negatively affected during banking panics, Dell’Ariccia, Detragiache, and Rajan (2008) indicated that a decline in GDP growth and credit is attributable to banking distress. Oura (2004) asserted that “a (financial) crisis is often followed by a severe economic recession, and sometimes its effects are extremely devastating” (p. III).
On the other hand, economic downturn can reduce bank assets and make the lenders fail to pay depositors. The depositors fear for banks’ default and therefore seek to withdraw their money massively (Allen, Babus, & Carletti, 2009).

Mishkin (1991) plotted differences in interest rates of safe and risk bonds, as well as stock market performance in U.S. financial panics in the following years: 1857, 1873, 1893, 1907, 1930-1933, and 1940. Mishkin concluded that these events had some links with economic downturns happening around those years. The “most severe financial crises” happened in 1857, 1873, 1893, 1907, and 1930-1933 (p. 96). The 1857 crisis happened before a recession began but the remaining most severe crises occurred after severe economic downturns started.

Since many bank panics can cause contraction for the aggregated economy, some suggest the government should regulate the banking sector, and therefore prevent, contain, and resolve the panics (Gelpern, 2009). Regulators should have prudent regulations to prevent bank crises or reduce their frequency by auditing the banks and requiring them to meet capital adequacy (Morrison & White, 2005).

History of Financial Crises in the U.S.

Though the U.S. has undergone dozens of financial crises in its history, this section will focus on the Long Term Capital Management (LTCM) in 1998 in the context of the Asian financial crisis in the late 1990s. LTCM is one of the most recent financial crises and shares some similarities with the ongoing crisis.

The context of the LTCM crisis – Asian financial crisis. The Asian financial crisis started on July 2, 1997 as Thailand floated baht (its currency) when it ran out of foreign reserves. The currency plummeted and the crisis became regional because foreign investors pulled out of countries including Indonesia,
Malaysia, South Korea, Hong Kong, the Philippines, Singapore, and Taiwan, which have been open to capital inflow. As a result, the emerging markets experienced output contraction and soaring unemployment. GDP of the two worst affected countries, Thailand and Indonesia, fell 35% between 1997 and 2002 in comparison with previous forecasts before the crisis ("Gold From the Storm," 2007).

Greenspan (1998) partly attributed the Asian crisis to the countries’ macroeconomic policies and forced currency devaluation. Local currencies pegging to the dollar, inefficient projects funded by cheap capital, and loosely regulated financial management systems made the economies vulnerable to massive withdrawal of foreign capital out of the countries ("Gold From the Storm," 2007).

Having a high output growth over decades before the crisis, the Asian economies recovered several years after the crisis thanks to banking restructuring and IMF’s bailouts. People earned the same yearly average income as they did before the crisis in Malaysia by 2000, in Thailand by 2003, and in the Philippines by 2004 ("Gold From the Storm," 2007).

The Asia crisis also had contagion effects on emerging economies in the world including Russia, a country with rising debt, a flawed banking industry, and exchange rate policy tying rubles to dollars with a permitted range of fluctuation in 1998. One possible reason is that mutual funds, the main financial investors in these markets, shrank their emerging market portfolios in general due to losses caused by illiquidity in a crisis market in Asia and falling local currencies in other emerging economies including Russia. In turn, this move further slowed down economic growth in these economies (Malki, 1999).
LTCM. Two Nobel winners, Myron Scholes and Robert Merton, established LTCM, a U.S. hedge fund to buy and sell bonds for profits (Schifferes, 2007). Only big investors could invest in LTCM, which can trade both in “long and short positions” in foreign and emerging markets since it was founded in 1994 (Jorion, 1999, p. 2).

The fund was highly profitable at the initial stage. LTCM’s returns after fees were about 20% in 1994, and 40% in 1995 and 1996. Its capital increased to above $7 billion in 1997 from $1 billion in 1994. The fund charged much higher fees in comparison with other hedge funds. LTCM’s yearly charge included 2% of capital and 25% of profit. The total fee charged by 1997 rose to about $1.5 billion (Jorion, 1999).

LTCM was heavily in debt. As it was considered “safe” by investors, LTCM paid very small collaterals in its transactions where LTCM sold some of its assets to investment and commercial banks to obtain cash and promised to buy them back in the future at a fixed price. LTCM had a capital base of $4.7 billion and had total assets of $125 billion after returning $2.7 billion to its investors in 1997 to maintain 40% of returns after the fund fee (Jorion, 1999).

The firm’s main strategy was “convergence-arbitrage trades” based on mean reversion theory, which suggests both returns and prices finally move to the mean or average. LTCM made profits by trading two almost identical bonds with the same maturity and small differences in bond yields (Jorion, 1999, p. 3).

The strategy worked for the firm until Russia announced its default on its government bonds in August 1998 amid the financial crisis (Jorion, 1999). About a 28% decline in the crude oil price in 1998 largely made the world’s third-largest oil producer’s budget plummet and Russia failed to pay back its debt and its bonds (Malki, 1999). As a big investor in Russia, LTCM lost 52% of its value for the
first 8 months in 1998. Because its equity fell faster than its assets, the debt ratios were almost doubled to 50 times. If the fund had been liquidated or gone bankrupt at that time, lenders would have suffered big losses because the collaterals were small and it was uncertain if these collaterals could have been liquidated (Jorion, 1999).

In September 1998, the New York Federal Reserve organized bail out for the firm and more than 10 banks invested $3.4 billion to get 90% stake in the firm (Jorion, 1999). The Federal Reserve also reduced interest rates in October 1998 (Schifferes, 2007). The U.S. economy did not fall into a recession in the late 1990s according to the Department of Commerce’s GDP quarterly growth data and NBER’s business cycle expansion and contraction (NBER, n.d.). LTCM was finally liquidated in 2000 (Schifferes, 2007).

Billio, Getmansky, and Pelizzon (2009) examined the effects of financial crises on hedge funds and found some similarities between LTCM and the 2008 financial crisis. The researchers considered several crises for the analysis including the surprising move by the U.S. Federal Reserve to start tightening monetary policies in February 1994, the Tequila Crisis in Mexico at the end of 1994, the Asian financial crisis in 1997, the LTCM crisis in 1998, the dot.com crisis in the first quarter of 2000, the Japanese crisis in March 2001, acquisition freeze, default rise related to September 11, 2001, WorldCom accounting scandals in 2002, the subprime mortgage crisis in 2007, and the financial crisis in 2008. Billio et al. (2009) focused on systematic and idiosyncratic (company specific) risks the funds were exposed to during the crises. Systematic risks are “liquidity, credit, and volatility” (p. 32) while latent risks are those from diversification strategy during the turbulent periods. The researchers suggested that the common idiosyncratic risk exposure existed during the Long-Term Capital Management
crisis of 1998 and the 2008 global financial crisis across the industry: “This common latent factor can potentially be related to margin spirals, runs on hedge funds, massive redemptions, credit freezes, market-wide panic, and interconnectedness between financial institutions” (Billio et al., 2009, p. 33). Other financial crises only influenced hedge funds through the systematic risk exposures.

The collapse of LTCM, one of the biggest hedge funds in 1998, and Lehman Brothers, the U.S. fourth-largest investment bank in 2008, demonstrated the common idiosyncratic factor of the two crises (Billio et al., 2009).

Lehman Brothers sparked surprise and loss of confidence in the financial sector when it went bankrupt on September 15, 2009. According to Allen, Babus, and Carletti (2009), public confidence in the banks and financial institutions decreased sharply and the negative effects of the financial crisis started to spread into the real economy in the wake of Lehman Brothers’ collapse. Mamudi (2009) suggested the investment bank’s bankruptcy “spread fear throughout the financial system”; investors withdrew their money, investing in money market funds usually considered safe; and credit markets were frozen because of the absence of buyers (para. 5).

Madhani (2009) attributed Lehman Brothers’ large exposure to the subprime market as the major cause of its collapse. The investment bank obtained loans from other banks and sold the loans as mortgage backed securities (MBS) or claims on pooled and packaged assets that the banks securitized to investors in secondary market. In the process, Lehman Brothers could get a profit from the difference in monthly interest banks paid it and in monthly interest it paid the investors. However, the risk came when subprime crisis occurred; mortgage loan buyers defaulted and failed to pay the banks. The banks then were not required to
pay monthly interests to Lehman Brothers but it was obligatory for Lehman Brothers to pay monthly interest to the investors. Thus, Lehman Brothers failed to meet its financial obligations and collapsed.

Lehman Brothers’ bankruptcy filing in September 2008 and its detrimental contagion effect to the financial sector and the economy are remarkable events in the financial crisis (‘A Year On,” 2009). Despite being regarded as safer than hedge funds, people withdrew money in mass from many money market mutual funds in large part because they were holding securities issued by Lehman Brothers. The U.S. government had to declare to the public that it would guarantee the financial sector on September 19, 2008 (Allen, Babus, & Carletti, 2009).

LTCM and Lehman Brothers had three common characteristics. First, they had numerous business linkages with hedge funds through future contracts and derivative agreements. Many hedge funds also held their bonds as collaterals. Second, because of their international business involvement, they had financial impacts globally. Third, due to both firms’ top positions in the financial system, the conventional wisdom was they were “too big to fall” (Billio et al., 2009, p. 3). Their collapse was unexpected by investors, thus the financial system and hedge funds became more fragile. Lehman Brothers’ bankruptcy increased its counter-party risk and seize-up of financial markets. The hedge funds incurred big losses because their collateral disappeared when Lehman Brothers and LTCM failed to pay their bond holders. The hedge funds were also short of liquidity to fund simultaneous buying and selling of the same securities in different markets to make profit. For these reasons, investors’ panic, capital withdrawal from hedge funds, and credit squeeze were viewed as common latent factors of the two financial crises (Billio et al., 2009).
2008 financial crisis and its timeline. The 2008 financial crisis was sparked by the subprime mortgage crisis in 2007 since many borrowers with poor credit history failed to pay their housing mortgages. Many leading banks in the U.S. and Europe were hit by the price plummet of MBS (Blackburn, 2008). Although losses of betting on mortgages and related securities accounted for less than 0.5% of the value loans and securities financial institutions held in the world (Zandi, 2008), the subprime mortgage crisis triggered a global financial crisis. This was in part due to the severe illiquidity problems. These illiquidity problems were the result of nontransparencies and the involvement of too many agents in the process of pooling assets and selling them to many layers of buyers (Krohn & Gruver, 2008). The credit crisis became a liquidity crisis, which in turn developed into the financial crisis (Krohn & Gruver, 2008).

According to Allayannis (2009), some signs observed prior to the financial crisis were heavy leverage, booming real estate prices, securitization growth, big compensation, and limited restraint. Many players contributed to the crisis from their ends. Banks accepted excessive risks by taking big debt ratios, trading and securitizing mortgage-backed securities, and by providing large incentives for those who were involved in the new financial instruments. The Federal Reserve maintained low interest rates to facilitate economic growth to enable the public to fulfill the American dream. The public was eager to buy houses at “cheap” prices (p. 4).

The subprime crisis was mainly caused by housing market bubbles that started busting in the U.S. in 2006 (Shiller, 2008). Housing sales and building rose rapidly within only a few years and resulted in an all-time high rate of home ownership of 69% by 2005. Some elements only fueled the speculative housing investments: low global interest rates and the expectations by some buyers that
home prices would never fall (Zandi, 2008). Due to the highly inflated housing prices, the decline was inevitable. In fact, by 2006, housing prices started to decline. Mortgage rates rose after the Federal Reserve increased short-term interests in 2004. Home owners who had entered into adjustable rate mortgages (ARMs), which are fixed for some years and adjusted to market interest rates for the rest of the loan duration, were beginning to have to pay higher rates that they couldn’t afford. Insolvency rates on ARM loans had risen sharply since 2006. By 2008, one in four ARM loans was either 90 days overdue or in foreclosure (Krohn & Gruver, 2008).

Falling asset prices lead to higher borrowing costs for the lending institutions, which have to make compulsory sales of assets to meet their capital and collateral requirements, which in turn further reduce the asset prices. This interaction, called liquidity spiral, can quickly lead to delinquency of financial institutions (International Monetary Fund, 2008). Liquidity spiral also makes investors concerned about rising risks in the markets, and as a result investors prefer hoarding their liquidity. Amid a liquidity crisis, investors also sell risky securities and buy safe assets, thus increasing the yield spread between these two kinds of assets (Elul, 2008).

The Federal Reserve has taken measures to solve the liquidity crisis since August 2007. It reduced the discount rate, an interest rate that an eligible institution can borrow from the Federal Reserve, and widened the categories of discount-rate borrowers to include government-sponsored enterprises and primary dealers. It also made billions of dollars in loans to help JPMorgan acquire Bear Sterns, and bailed out AIG to prevent the giant insurance corporation from collapse. Congress also backed Fannie Mae and Freddie Mac, two government-sponsored enterprises, issuing 40% of mortgage-backed securities in 2006, and
approved a $700 billion plan to buy financial institutions’ assets to ease the liquidity constraints (Krohn & Gruver, 2008).

Researchers have defined the timeline of the ongoing financial crisis. According to Blackburn (2008), the credit crisis started in the last quarter of 2006 when interest rates rose to prevent the U.S. dollar devaluation. As a result, some big mortgage companies collapsed in the first quarter of 2007. The summer of 2007 saw the severe extent of the credit crisis. Central banks around the world injected a large amount of liquidity into the financial system but credit was still squeezed among banks. Greenspan (2007) asserted that the collapse of the credit crisis was marked in August 2007 when the worldwide financial markets seized up. Ivashina and Scharfstein (2009) suggested the peak period of the financial crisis was in the fourth quarter of 2008 when Lehman Brothers announced its bankruptcy.

The performance of the Dow Jones Industrial Average Index, one of the most common indicators of stock prices in the U.S.; and the CBOE Volatility Index, the premier gauge for U.S. stock market volatility for the past 5 years, show the peak of the crisis was between October 2008 and December 2008 (Yahoo! Finance, n.d.a, n.d.b). To better understand the 2008 financial crisis, it is useful to delineate key areas of a financial crisis.

Key Areas of a Financial Crisis

Banking crisis. Two separate sets of theories exist to explain the cause of a banking crisis (Allen, Babus, & Carletti, 2009). The first theory says random massive withdrawal from banks, regardless of state of the economy, can trigger banking panic. Diamond and Dybvig (1983) explained how a panic happens. They modeled a situation when people are not certain how much they need for
their consumption and it is too expensive for them to get cash or liquid papers by selling long-term investments. When they believe other people will withdraw the deposits, they will withdraw their money too for fear of a banking panic. The second theory says a banking panic is “the natural outgrowth of a business cycle” (Allen, Babus, & Carletti, 2009, p. 6). Jacklin and Bhattacharya (1988) indicated that when depositors have information that the economy is doing poorly, they will withdraw their deposits because of the negative business picture of the whole banking sector, thus triggering banking panic.

**Role of liquidity in interbank markets.** The interbank markets are where some banks transfer funds to other banks in need of liquidity with an interest rate. Smooth operation of these markets is essential to stabilize financial system (Allen, Babus, & Carletti, 2009).

Researchers have explained how interbank markets are interrupted and frozen. Diamond and Rajan (2009) attributed banks’ possession of too many illiquid assets when there is a growing probability of falling prices of these assets due to limited buyers’ demand and investors’ reluctance to invest in term credit to the market freeze. The banks do not sell off the assets with the hope that their prices will increase, thus they will survive. On the other hand, due to the tendency of the falling prices of assets, those who have cash or liquid assets in the financial system prefer keeping these liquid assets for expected high profits and do not want to lend others in a term loan. Heider, Hoerova, and Holthausen (2009) suggested asymmetric information and counter-party risk could lead to credit squeeze. This happens when the bank that lends money to other intermediary institutions does not have the same information of risk as the latter have about themselves. Because borrowers could default and the lender will suffer from counter-party risk, the
lender can increase the interbank interest rates and the interest spreads between safe and risk loans. As a result, the interbank markets are collapsed when liquid partners hoard cash instead of lending to banks facing liquidity problems.

Researchers also suggested the implementation of government policies to alleviate illiquidity problems in interbank markets. Friedman (1960) argued that if a central bank reduces inflation rates to zero, there will be no banking crisis. However, this assumption lacks realism and within this scenario, banks would have incentives to hold cash in the absence of losing purchasing power instead of investing in higher interest assets (Smith, 2002). Allen, Carletti, and Gale (2009) suggested the central bank use open operation markets to buy securities, thus injecting liquidity in the financial system to prevent price shocks. Diamond and Rajan (2006) also agreed that open operation markets adopted by the central bank could improve liquidity problems, thus banks could have liquidity to finance long-term projects.

Contagion. According to Allen, Babus, and Carletti (2009), a crisis in a number of banks can be contagious to the whole financial sector and the economy. The literature about contagion examines how banks and other intermediaries are affected in a crisis in two ways: direct linkages or indirect linkages in their balance sheets. Some examples of direct linkages (in a bank’s balance sheets) include banks insuring each other by swapping deposits, banks investing in associated projects, and banks having mutual claims on the balance sheets with others. Examples of indirect linkage include risk transferred among banks by financial innovation instruments and liquidity shocks.

Allen and Gale (2000) suggested banks prevent liquidity shocks by swapping deposits. It is a perfect mechanism in a complete system because if a
bank faces losses, these losses will be transferred to a large number of banks in the system. However, if the system is not complete and if a bank collapses, the whole system can be negatively affected or fail.

Leitner’s (2005) model delineated a model of the associated investments in which an investor’s success depends on the other investor’s success. For this reason, if an investor does not have enough capital to carry on its investment projects, others will rescue this investor to prevent the failure of all the investors.

Researchers have examined how severe a system of banks that have mutual claims on their balance sheets are affected if a bank fails. Upper and Worms (2004) studied a scenario when a German bank failed; the worst result in this scenario was 15% of assets of the whole German banking system would be lost.

Financial innovation instruments such as credit default swaps (CDS) and loan sales are studied by researchers to find out which is the banks’ preferred instrument in different market conditions. CDS is an insurance agreement on securities in which a bank seller is paid a fee to insure the securities by a bank buyer if these securities are not paid back (Krohn & Gruver, 2008). Banks also sell loans to each other. One of the differences between CDS and loan sales is loan monitoring right and the monitoring execution in reality. Though the originating bank still has the control in a CDS contract, moral hazard happens and thus the bank does not want to monitor the loan. The loan sale passes this control right to the loan buyer but the buyer has incomplete information about the original borrowers in order to monitor the loan (Parlour & Winton, 2008). Parlour and Winton found banks prefer loan sales when the cost of capital is low, but prefer both CDS and loan sales when the cost of capital is high. Other financial innovations, securitization—the process of grouping illiquid assets and then selling claims on these assets—has helped mobilize significantly larger sources of
funds for home mortgages across geographic areas. However, it also posed a
danger of loss of control of credit history of borrowers by investors who buy the
mortgage (Elul, 2008). According to Shin (2009), securitization increases fragility
in the financial system.

Allen and Carletti (2006) examined liquidity shocks on the banking sector,
which owns, designs, and trades credit risk transfer, a financial innovation
instrument. The financial sector transfers risk generated when borrowers default or
issuers of securities fail to realize their financial obligations. Some types of credit
risk transfer are loan trading, papers whose value derives from credit (credit
derivatives). If the liquidity shocks are considered the same for everyone in the
market, banks keep enough short-term assets and do not have to increase their
liquidity. If only a bank or a small number of banks have liquidity problems, banks
have tendency to invest in long-term risk free assets like Treasury bonds, which
are tradable in the market. This could lead to a sharp fall in prices of these long-
term assets in the future because of “detrimental” credit risk transfer leading to
less liquidity in the market and a greater exposure of banks to liquidity shocks.

**Bubbles and crisis.** According to Allen, Babus, and Carletti (2009), a bank
crisis usually happens after asset bubbles burst. One important reason leading to
price bubbles is the central bank’s expansion policy on money and credit
take place in an economy where most funds are channeled through banks such as
in Japan and in Germany. When banks massively lend loans to the real estate
sector during a short period of time, the prices of the assets will increase because
of an abundance of funds available to buy buildings and land. In turn, the
increased price will lead to a rise in real estate collateral values and less
precautionary perceptions from banks toward the real estate market. Banks continue to expand credits to this sector that only pays low interest rates to banks. Some reasons leading to the banks’ credit expansion can be high debt, moral hazards resulting from insurance, herd behavior, and short-term view.

Makarov and Plantin (2009) assumed that housing supply is at a certain amount and examined how house prices move when banks mortgage homes. The aggregate housing demand is pushed by aggregate debt level from the buyers. Because housing supply is fixed, the supply at a certain time includes foreclosures when buyers fail to pay the mortgage, sales of houses where owners or mortgage payers move to a bigger house, and sales of houses where owners or mortgage payers move for other reasons. Thus, selling prices of these clearing houses determine how much borrowers need to borrow from financial institutions.

Bondt (2003) explained the causes of asset price bubbles from perspectives of behavioral finance, the interdisciplinary study of finance and psychology that analyzes investor behavior with assumption that investors do not always behave rationally. For example, individual investors pay premium for stocks they are familiar with; they tend to sell stocks when the prices rise but keep them when the prices fall because they do not want to realize losses; they do not diversify their portfolios well because of limited knowledge.

Ito (2003) asserted an asset bubble can cause detrimental damages to the public who bought the asset, banks that loan and finance them, stock market plunges, and strain on economic activities.

Now that we have examined definitions of financial crisis and recession, financial crisis terms and timelines, it is important to examine the role the media may play in spreading the word of a financial crisis and/or a recession. The next
section will review the literature on an important media theory: agenda-setting theory.

Agenda-Setting Theory

Agenda-setting theory was first developed by McCombs and Shaw (1972). The ideas of agenda setting were first outlined in Lippman’s “Public Opinion,” which examined the role of the press and suggested that the media create “pictures in our heads” (Lippmann, 2007, p. 9). McCombs and Shaw were the first to empirically test the tenets of agenda setting in their landmark study of undecided voters. The results revealed that the majority of voters learned about presidential candidates and their views through the media or other informed people. McCombs and Shaw found that the degree to which the public think the issues are important depends largely on the amount of media coverage on the issues. The findings support the hypothesis that mass media transmit their agenda to the public by focusing on certain topics, but there are other elements that contribute to the media’s influence on audiences. These elements include salience, gatekeeping, framing, and priming.

Salience

The first component of agenda setting is “salience.” Salience refers to the amount of importance or perceived importance of an issue (McCombs & Shaw, 1972). The key component of agenda-setting theory is the ability for the media to transfer salience of the media agenda to the public agenda. In other words, the degree to which an issue is important to the media is shared by the public. The media agenda is defined as the issues that are dominated in the media and therefore viewed as important. The public agenda is defined as the issues the public are most concerned with or frequently discuss. Salience transfer occurs
when the media agenda is transferred and thus reflected in the public agenda. The results of McCombs and Shaw’s study revealed salience by showing the primary issues on the minds of undecided voters and how they aligned with the top issues that were being reported in the media. The theory suggests a causal relationship between priorities of issues reported in the media and priorities of issues on the public mind.

Researchers show that exposure to the stories makes people think these stories are important and can partly explain salience transfer (Media Tenor, n.d.). For example, according to a Media Tenor study, a sharp increase in German television news coverage about mad cow disease made the public highly aware and concerned about the topic. Although salience transfer reflects the ability of the media to set the agenda, there are other components that contribute to agenda-setting effects. Because the media can’t report on everything that happens in the world, they choose to cover some issues while they omit others. This selective process refers to gatekeeping and helps to further reveal how salience transfer occurs.

**Gatekeeping**

According to Garson (n.d.), gatekeeping refers to the media’s ability to control the content of the issues they publish or broadcast. Because reporters and editors choose what to cover and what not to cover, the public are aware of issues heavily covered in the media and are almost ignorant of the underreported or nonreported issues, especially when they do not have firsthand knowledge of these issues (Media Tenor, n.d.). For example, while covering natural disasters in Asia, three television channels in Germany broadcasted 666 reports about the 2004 Southeast Asia tsunami and only 66 reports about the 2005 Pakistan earthquake.
The difference in the amount of coverage of these two disasters may have contributed to the large discrepancy in private donations to help the respective stricken areas. The donations for the tsunami hit $178 million while the earthquake received only $8 million by the time Media Tenor conducted its study (Media Tenor, n.d.).

Since editors and reporters of a news organization are also influenced by their colleagues in other mass media agencies in selecting and reporting news, some editors and reporters may align with their colleagues’ views and adopt and cover the stories. Thus gatekeeping does not only determine content of salience transfer from the media agenda to the public agenda but also describes news flow from one news organization to others. Studies have been done about the influence of news choice and storytelling among mass media organizations. Whitney and Becker (1982) found 46 editors in local media in Columbus and Dayton, Ohio who selected news from newswire services in seven content categories: labor, accidents and disasters, crime and violence, human interests, national, political, and international news in proportion with these categories provided by the news services. The researchers suggested that the local media agenda was partly formulated by regional, national, and international editors of some newswire services. McCombs (2004) suggested that elite news media usually have big influence on other news media’s coverage. The elite media not only initiate topics of coverage but also influence how the topics are presented in local media. The transfer of attributes of a topic or framing extends the influence scope from public attention about the issues to public comprehension of the issue.
**Framing**

As research has shown us, salience is an important component in the first level of agenda setting, focusing on the importance of issues and how the media transfer their view of importance onto that of the public. Aside from aligning the importance of issues, the second level of agenda setting is the media’s ability to influence *how* we think about an issue. This second level of agenda setting is referred to as “framing” (McCombs, 2005).

Framing is described by Entman (1993) as the media’s ability “to select some aspects of perceived reality and make them more salient in a communication text, in such a way to promote a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation” (p. 52). According to McCombs (2005), not all attributes of an object are frames; an attribute is a frame if it serves as the dominant viewpoint of the object or the central theme of the object. Scheufele (1999) indicated that there are two concepts of framing for constructing and understanding the news: media frames and audience frames. Media frames are defined as a central story line that suggests the importance of the issue (Gamson & Modigliani, 1987). Gitlin (1980) posited that media frames help journalists to organize and present stories efficiently. For example, reporters are taught to write hard news stories using “inverted pyramid or an upside-down triangle” structure (Eng & Hodson, 2001, p. 64). Audience frames are groups of ideas stored in people’s minds that help them process information (Entman, 1993). McCombs (2004) indicated that some attributes are more easily remembered by audiences because these characteristics may resonate with them. For example, when a reporter frames a story in which a detail is lightly mentioned or even left out, that detail can be the most memorable and important part to some readers as it is most salient in people’s minds (Entman, 1993). In
short, framing suggests that how people attach significance and comprehension to a story is influenced by how the story is covered in the media. According to McCombs (2004), how people think about these issues depends on the two levels of attributes: cognitive and affective. Cognitive level means the public pays attention to topics or substantive attributes and affective elements depending on how the public view the issues: positive, negative, or neutral (McCombs, Llamas, Lopez-Escobar, & Rey, 1997).

The captions and images of two photographs from the Associated Press (AP) and Agence France-Presse (AFP) best explain the elements of framing. Both photographs and stories were on the aftermaths of the Katrina hurricane in 2005. In the AP story, the photograph showed a Black man with a caption that read, “A young man walks through chest deep flood water after looting a grocery store in New Orleans on Tuesday August 30, 2005” (Snopes, n.d.). In contrast, the AFP photographer shot a similar scene in which a White couple, instead of the Black man, was walking through the water and the caption said, “Two residents wade through chest-deep water after finding bread and soda from a local grocery store after Hurricane Katrina came through the area in New Orleans, Louisiana” (Snopes, n.d.). Though both stories and photographs were on the same issue, how the photographers shot the image and worded the caption sent two different messages to readers. The AP story and photograph resonated a negative connotation while the AFP story revealed a more human and positive meaning. Therefore, the two stories’ frames may have influenced and shaped the public’s opinion about the subjects in the photo and the events that were taking place in New Orleans.

Framing is a key element that contributes to not only shaping public opinion but also in helping to transfer salience. However, how a reader or viewer
interprets a message is also dependent upon priming. The concept of priming will be discussed in the next section.

**Priming**

Priming is a process by which the public develops certain perceptions on issues due to the way the media frame those issues and amount of time and space the media devote to them. Priming occurs when the public’s attention is drawn to certain topics and elements that are covered in the media (Garson, n.d.). An example of priming, cited in a study by Iyengar, Peters, and Kinder (1982), demonstrates that change in amount of coverage and the importance of a topic covered by the press can lead to fluctuations in the evaluation criteria of the president. For instance, if a foreign crisis is more salient than a domestic economic problem in the national press, the public may be more concerned about the international crisis than the economic issue and therefore may evaluate the president based primarily on how well he handles the crisis abroad. How successfully the president “solves” the economic problem is a less important criterion for the public than how he addresses it and gives attention to the situation (Iyengar et al., 1982).

According to McCombs (2004), people’s selective attention can explain how priming of public opinions works. Given that people can’t pay attention to everything, the media play an important role. When the people need to make a judgment on how well the president performs or who they will vote for, they only use the information in the media that is salient at the point of the judgment instead of a comprehensive analysis of all information (Tversky & Kahneman, 1973). McCombs (2004) suggested people have their agenda of salient topics and elements in their minds, which prime certain criteria that will allow them to
evaluate public figures or political candidates. In the process of priming, the media not only transfer their agenda to the public but also promote public consensus about criteria to judge if a president is good or bad (McCombs & Shaw, 1993).

Psychologically, priming happens when people develop easily cued images in their mind, memory traces (Tulving & Watkins, 1975), or activation tags (Collins & Loftus, 1975). According to Collins and Loftus, activation tags are created in a person’s mind after a concept is primed. When another concept is introduced, it links with an available activation tag in an intersection. For example, when readers and audiences receive information from the media, the information is stored in their minds. Later, access to similar content in the media can prime these stored thoughts, feelings, or opinions, and connections are made through these activation tags.

Because many topics are created and primed in people’s minds due to what has been transmitted by the media, priming is a direct result or extension of agenda setting (Iyengar & Kinder, 1987) or is a consequence of agenda-setting effects (McCombs, 2004). The following section will discuss factors that influence the extent of salience transfer to the public agenda and ultimately contribute to the strength of agenda-setting effects.

Determining Factors of Agenda-Setting Effects

According to Garson (n.d.), there are three factors that determine the magnitude of agenda-setting effects: exposure, unobtrusiveness, and need for orientation.

First, exposure pertains to the amount of media to which a person attends. Research suggests that the more people are exposed to media, the stronger the agenda setting effect. Wanta and Hu (1994) conducted a study on the agenda
setting process and considered three variables: “media credibility, media reliance, and media exposure” (p. 1). The results showed that media exposure largely determines the magnitude of agenda-setting effects. Similarly, Miller and Wanta (1996) examined how people process information from the news media and found that the more people are exposed to the information, the more likely they are to deem the issues important. The researchers also indicated that media exposure is a stronger contributor to agenda-setting effects on the public than source credibility. McCombs (2004) suggested that “the best single predictor” of the people’s attachment of importance to issues is the frequency the issues are covered by the media (p. 59). Along with exposure, agenda-setting effects are also the results of several conditions including accessibility and availability of an issue by the public. But aside from exposure, accessibility, and availability, other elements also factor into agenda setting, such as personal experience.

Because people interact with friends and family, along with observing and experiencing issues themselves, these personal interactions/experiences have been found to greatly determine the strength of agenda-setting effects. However, when weighing in on media stories and their effects on the public, the issues are categorized in two ways: obtrusive and unobtrusive. McCombs (2004) defined obtrusive issues as those people have direct experience with or “obtrude into our daily lives” (p. 60). Unobtrusive issues are those people are unaware of or unfamiliar with. For example, gasoline prices can be considered an obtrusive issue as people can learn how prices fluctuate when they fill their fuel tank. However, national trade deficits can be considered an unobtrusive issue since few people learn about this issue from their own experiences or observations. Researchers found that the more unobtrusive the issues are, the bigger the agenda-setting effects. Zucker (1978) found a high correlation between media agenda and public
agenda on unobtrusive issues such as pollution, drug abuse, and energy. In contrast, there was a very low correlation between the two agendas on obtrusive issues, such as crime and cost of living. Research suggests that one reason for the different responses to obtrusive or unobtrusive issues in the media may be due to the concept of need for orientation.

According to McCombs (2005), need for orientation “describes individual differences in the desire for orienting cues and background information” (p. 54). In other words, the concept of need for orientation explains how various people respond to the media agenda. There are two conditions needed for orientation: relevance and uncertainty. Relevance means that certain issues resonate with an individual or a group of people or their community. This element is the first condition needed for orientation (McCombs, 2005). To find out how an issue is relevant to an individual, McCombs (1999) asked people to name the reasons why they consider a problem to be the most important issue the United States was facing in 1992 and 1996. McCombs (1999) found that people ranked the following, in order of their importance: (a) emotional arousal, (b) personal interest, (c) peer influence, and (d) self interest.

The second condition involved in orientation is how uncertain people feel about the issues given a certain degree of relevance (McCombs, 2005). Individuals have a high need for orientation if they have high relevance about the issues and high uncertainty. They have low need for orientation if they have low relevance. High relevance and low uncertainty leads to moderate need for orientation (McCombs, 2005, p. 547). Since people have few personal experiences with unobtrusive issues, the media play an important role in providing the “need orientation” on those issues. As a result, this explains high correlation on importance of unobtrusive issues between media agenda and public agenda. On
the other hand, people have low need for orientation on issues that obtrude into their everyday lives, thus low effects of agenda setting are predicted on unobtrusive issues.

As the literature has reviewed, agenda-setting theory has evolved in terms of both theoretical and empirical aspects since the landmark study in 1968. The theory initially posited that the media influence the public by transmitting the issues deemed important. Apart from this function of salience transfer of topics, agenda setting research has expanded on how the media may influence the public. Studies have been conducted on the media’s control of topics to report to the public and how news flows among mass media organizations (gatekeeping). The original theory has also expanded to include “salience transfer of attributes” besides “salience transfer of issues” (framing or second-level agenda setting). In addition, research has been done on elicitation of public perceptions as a result of media’s way and amount devoted to report an issue (priming). Research has also examined factors that determine magnitude of effects of agenda setting function on readers and audience: exposure to media, obtrusive and unobtrusive issues covered by media, as well as readers’ and audiences’ need for orientation. Empirically, agenda-setting theory has been used widely in various mass communication contexts including mass media and the economy apart from mass media and voting behavior (McCombs, 2005). The next section will review research on agenda-setting theory, media, and the economy.

**Agenda-Setting Theory and the Economy**

Some studies on media coverage of the economy have focused on finding the correlation, if any, among media coverage about the economy, real economic situations, and public opinions about the economy (Su, 2008). Since the second
level agenda-setting theory, framing, posits that the media tell the public how to think about these issues, the element of “attribute salience transfer” within agenda setting has been a major focus of the research.

Hester and Gibson (2003) studied the tone of news coverage on the economy and its influence of public attitude about the economy. The researchers coded stories that included the term “economy” in front page news stories of the New York Times and the opening stories on ABC World News Tonight from July 1998 to June 2002. The researchers used the current situation index and the expectation index from the Conference Board’s Consumer Research Survey during that period as variables for public attitude. In addition, they relied on monthly change figures of unemployment, the Consumer Price Index, and the Dow Jones Industrial Average as variables of economic fundamentals. The content and time-series analyses suggested that the news organizations framed the economy more negatively than positively. As a result, the negatively framed news helped predict public expectation about future performance of the economy.

Su (2008) explored the causal relationship among media’s coverage, consumer sentiment, and the economy during recessions and nonrecession times. The findings showed that consumers seek economic information from the media as one of their information channels. However, their real experiences with areas of commodities prices, wages, and employment most influenced their perceptions about the economy. Results also showed that during recessions, business media have more effect on the consumer sentiment than in nonrecession times, but real economic situations always had more influence on consumer sentiment than did media coverage of the economy.

Researchers also examined factors that determine the magnitude of agenda-setting effects on economic issues reported in the media and public opinion about
them. According to Yagade and Dozier (1990), the more concrete an issue is, the more possibility the media have to make the public think it is important. Because concrete stories are easily covered by the media and don’t require extra cognitive work, there tends to be more media coverage on concrete issues rather than on abstract issues. In other words, the public doesn’t need to make extra mental effort to understand concrete issues; thus, they are more susceptible to media agenda-setting effects. An example of this was found in a 1990 study. Yagade and Dozier (1990) surveyed college students and examined both concrete and abstract issues: Drug abuse and energy were defined as the concrete issues, whereas the nuclear arms race and the federal budget deficit were defined as abstract issues. The researchers found that concreteness increased agenda-setting effects but abstractness decreased them. However, while examining the issues of inflation, energy and employment reported by television, Behr and Iyengar (1985) suggested unemployment is the sole issue of the economic situation that directly affects the public. A possible reason can be explained by the low coverage about unemployment in national newscasts in comparison with the amount of coverage given to the other two issues.

By reporting economic issues, the media help make the issues salient in the public’s mind. According to McComb (2004), both newspapers and television programs that cover economic and business issues can influence how people think about the issues and align their behavior. The next section will discuss the media’s influence on the public about the economy in recession and financial crisis.

**Media Influence in the Economy, Recession, and Financial Crisis**

The mass media play an important role in forming public opinion by transferring salience of issues and attributes from the media agenda to the public
agenda. Though people may learn about the economy from various sources, according to McCombs (2005), people with less knowledge about the economy are likely to be more susceptible to agenda-setting power on the economy. This section will discuss media influence in the economy and financial crisis.

Media Influence in the Economy

According to Soroka (2006), most research has assumed that effects of both good and bad economic news are the same in magnitude for both the public and policymakers. Soroka (2006) did a content analysis of economic news in newspapers and found that public responses to negative economic news are stronger than their responses to positive economic news. This result can be explained both by people’s loss aversion and the monitoring role of the press in a democratic society. Loss aversion means that people pay more attention to the loss they face than the gain. Because journalists are individuals, they may also regard negative stories more important than positive stories because of loss aversion. The reason can also be explained by the media’s role in a democratic society. Journalists find themselves responsible to monitor elected agencies and the government and hold them responsible for negative effects of the sliding economy (Soroka, 2006).

However, Malkiel (2003) indicated that the media supported market euphoria. The author asserted that the bubble in the late 1990s was pumped by the media. The media covered the economic boom positively, which in turn urged readers to fuel the boom. Investment magazines covered hot topics on investing in Internet companies to respond to investors’ information needs. The Internet became the medium of choice since investors could do everything at the click of the mouse: read news, get investment tips and stock quotes, etc. CNBC,
Bloomberg, and CNNfn also helped abet the stock market bubble. CNBC’s Maria Bartiromo usually interviewed optimistic analysts who predicted stock prices would increase tremendously.

In contrary, some researchers suggested media “overemphasize bad economic news” (Harrington, 1989, p. 1). Since recession and financial crisis are usually periods when national output falls, unemployment rates rise, or companies go bankrupt etc., the next section will discuss media influence in these periods.

**Media Influence in Times of Recession and Financial Crisis**

At the initial stage of the crisis, there are several reasons why it is difficult for most business reporters to predict the extent of an economic slowdown and therefore, warn the public in advance: inability to access experts, lack of economic information, lack of in-depth analysis, etc.

Bow (1980) analyzed the daily “Financial Market” column of the *New York Times* for a 1-month period right before the 1929 stock market collapse and found that reporters and editors failed to find experts who could interpret indicators of the crash. Reporters and editors usually had difficulty interpreting events on their own unless they could find experts or analysts who could provide more facts and interpretations about the events. According to Bow, even if the reporters could have had access to experts who were able to predict the crash, the experts’ opinions on complicated economic issues may have conflicted with the media’s perceptions about what was good for the economy in the long run.

Griggs (1968) suggested that because the U.S. Department of Commerce began releasing the Business Cycle Developments, a monthly economic report in 1961, the media are more informed to report on economic factors. However, most
of the media coverage of the 1990’s recession failed to meet Griggs’s expectation (Gill, 2005).

Since the economy usually booms before it bursts, the focus on the routine market beat when the market was bullish in the 1980s generated unimportant and inadequate business coverage, which contributed to the 1987 stock market collapse. The traditional interviewing approach of a familiar group of sources for daily stories did not gain an in-depth analysis about the impending risk (Lawrence, 1988).

Reporters and editors also face challenges when making judgments and interpretations about the future of the economy. Given their stint of covering daily stories of the stock market, editors on the market beat are reluctant to take on the responsibility to warn the public about the possible collapse of the stock market. Wu et al. (2002) suggested that because the public could withdraw from a market when news stories indicate that the future of the market is gloomy, the media’s negative economic stories were criticized for further weakening the fragile economy in the early 1990s.

In the middle of the crisis. Early research suggested the social responsibility role of the media in informing and stressing the importance on issues when the economy declines (Griggs, 1968). Since these early studies of media coverage during crises, researchers have continued to examine the role the media play during financially declining times.

In 2005, Gill (2005) examined media coverage during the dot.com crisis and found that news organizations covered the economic issues pertaining to the crisis but that the stories tended to be more negative. Similarly, apart from tracing the 2008 financial crisis by chosen quotations published in the Financial Times,
De Cock (2009) explored how the 2008 financial crisis was portrayed in the newspaper by counting the number of stories by month using key words such as “credit squeeze,” “credit crunch,” and “global financial crisis.” Clear patterns in the findings were found. They showed that from July 2007 to December 2008, the greatest number of Financial Times’ stories including these words changed from those that had “credit squeeze” to “credit crunch” to “global financial crisis.” According to the literature review, the financial situation was worsening during the period.

The literature review has examined the definition of a recession: terms, timeline, and key areas of a financial crisis. It has also reviewed the agenda-setting theory, which best explains how the media transfer salience of issues and attributes to the public. The author has also reviewed the research that has examined the influence the media’s coverage of the economy has on the public. The theory and early studies serve as the theoretical foundation and explanation of how the media spread key terms during an economic period. Inspired by De Cock’s findings, the author of this thesis adopts similar search keywords in this study: “credit squeeze,” “credit crunch,” and “financial crisis.” Though a recession is distinct from a financial crisis in definition, they usually happen in association with each other. Most recently, the recession was taking place by both NBER and traditional definition when the peak of the financial crisis occurred from October 2008 to December 2008. For that reason, it is justifiable to add “recession” to the search terms. Since the “Great Depression” is the worst period of economic downturn (“Great Depression,” n.d.) and the most severe financial failure in the U.S. (Mishkin, 1991), it is worth being included in the search terms. Based on previous research on media coverage of recessions and financial crises and the
influence the coverage has on the public, the current study attempts to answer the following research questions:

RQ1: How many times did newspapers use the terms “credit squeeze,” “credit crunch,” “financial crisis,” “recession,” and “Great Depression” per month from September 2008 to December 2008, the peak period of the 2008 financial crisis plus the month when Lehman Brothers collapsed?

RQ2: How did the media portray the financial and economic situation during that period?

RQ3: When did the term “recession” first appear in the 2008 financial crisis?
Chapter 3

METHODOLOGY

Sample

The purpose of this research is to examine news coverage of the 2008 U.S. financial crisis by newspapers. In order to examine the media coverage, several newspapers within the U.S. were examined: the New York Times, the Detroit News, Houston Chronicle, and Los Angeles Times.

The sample selection of newspapers was chosen based on several factors. The four newspapers were first selected from around the U.S. to represent geographical regions of the country. In addition, the newspapers were selected based on their ranking within the top 100 U.S. newspapers. Specifically, the four daily newspapers were all within the top 50 out of 100 rankings by circulation in the U.S. in 2008.

The New York Times and the Los Angeles Times, ranked third and fourth on the list (Burrelles, 2008), have their headquarters in the east and the west coast, respectively, and target mass readers from across the U.S. The second-ranked Wall Street Journal was not selected because of its specialized focus of primarily business and is therefore specifically written for those who are knowledgeable about business issues (Gill, 2005). Since energy and auto industries were among top issues in the economic downturn, the other two newspapers that were selected represented the popular publications in Texas and Michigan. The Houston Chronicle was chosen because it was the Texas-based daily newspaper that has the highest readership on the list. Although the Detroit News was far behind the
Detroit Free Press in terms of readership, the former was the only Michigan-based newspaper in the top 50 that could be retrieved from the library’s online database.

**Unit of Analysis**

In order to examine the news coverage of the financial crisis, only the stories on the front pages of the newspapers were chosen because the front page stories tend to reflect the newspaper’s overall tone on business and other areas. Stories on the front pages are those that editors consider “most important and interesting” for the public’s knowledge (Fogarty, 2005, p. 154). In addition, readers are more likely to read front page rather than other pages (Fogarty, 2005; Peake, 2007).

Library online databases were utilized to search the stories of the selected newspapers. Stories from the *New York Times* and *Houston Chronicle* were picked from LexisNexis Academic and articles from the *Los Angeles Times* and the *Detroit News* were retrieved from Proquest Newsstand Complete. The author used key words to search for stories on the front pages of newspapers that talked about the financial situation. Three out of five key search words were chosen based on De Cock’s (2009) study and two were added given the economic reality in the U.S. These words included “credit squeeze,” “credit crunch,” “financial crisis,” “recession,” or “Great Depression.” After stories were selected using the keyword search, only those stories that related to the economy or financial situation were saved as part of the sample. Finally, the stories were downloaded and copied into Microsoft Word files and saved by month and newspaper name.

At the conclusion of the search for all relevant stories, a total of 493 stories were collected that included one or a combination of the key words in the four newspapers between September 2008 and December 2008. Specifically, 179
stories were selected from the *New York Times*, 77 stories from the *Detroit News*, 86 stories from the *Houston Chronicle*, and 151 stories from the *Los Angeles Times*.

The time period was extended from June 2007, 6 months prior to the onset of the recession announced by NBER to find the earliest stories on the front page that have “recession” on the headlines or decklines. According to the literature review, the second half of 2007 saw a credit squeeze, which led to the 2008 financial crisis. It is assumed that the stories on the front pages that have these key words in the headlines and decklines are likely to discuss the ailing economy.

**Procedures**

The researcher used the “find and replace” function of Microsoft Word to count the frequencies of each search word within the selected newspaper stories each month. After counting the frequency of use of the words used within the stories, the researcher coded the stories for the following elements: tone, primary source, and story origin (see Appendix).

To code the “tone” of the stories, headlines and deckheads were coded to decide if the overall tone of the story was positive, negative, or neutral. Although Althaus, Edy, and Phalen (2001) suggested an individual headline may not reflect all aspects of a particular story, they found that headlines may be a substitute to the whole story to provide a “broad contour” of a newspaper reporting on an issue (p. 707). After doing a content analysis of tones of each idea and sentence in a story, Peake (2007) found that this method of coding was “problematic” and adopted the approach of coding a combination of both headlines and leads to examine the tones of U.S. newspapers’ coverage of the Bush administration. Su (2008) argued that it is more difficult to have acceptable intercoder reliability
when coding each sentence or paragraph in a story because the tones can be changed several times. The headline was suggested as a coding unit since deciding the tone of the headline is less complicated (Su, 2008). Therefore, given the suggestions of past research, the author of this study chose to code the headlines and decklines to decide the tone of a story, given that intercoder reliability is very important in the sense that it validates the research conclusions.

Since Peake (2007) and Su (2008) found it difficult to determine the tones, a guideline was adapted to code various tones: negative, neutral, and positive based on the coding suggestions by Hester and Gibson (2003), Fogarty (2005), and Su (2008).

Negative: When the headlines and deckheads express pessimism about the economic and financial situation, the situation is getting or has become worse, or a negative indicator is more important than a positive indicator. Examples of phrases that reflected negative tones included “downturn deepening,” “day of chaos,” “concerns about the economy,” “global worry,” “financial meltdown,” “clump coming to town,” “historic fiscal crisis,” “shocked by crisis,” or “grim outlook,” etc.

Positive: Stories were coded as positive when the headlines and deckheads expressed optimism about the economic and financial situation, stated that the situation was or had been improving, or reflected that a positive indicator was more important than a negative indicator. The words that guide coders to decide that the tone was positive included “calm market fears,” “steady Citigroup,” “credit markets’ aid,” “life raft,” “create job,” “sweet dream,” “best hope,” “lift confidence,” or “cheer Wall Street.”

Neutral: Stories were coded as neutral when the headlines and deckheads had both positive and negative indicators at the same level of importance, as
defined by the coding rules, or when there was no positive or negative indicator of
the financial and economic situation.

The rules of coding were established based on previous research on
Business Week’s coverage of the economy during recession and nonrecession
periods from 1997 to 2006 by Su (2008). According to this research, the most
important indicators are demand, growth, GDP, and economy. Employment and
labor market are the second most important indicators. The third most important
group includes inflation, price, tax, and interest rate (Su, 2008). After the third
group, the following indicators and categories are of the same importance:
“consumer spending, business investment or spending, manufactory output,”
housing, bond market (Su, 2008, p. 19), stock market, financial sector, banks,
credit, bail out, stimulus, and rescue plan.

After the stories were coded, the tone, story origin, and primary source per
newspaper and month were tabulated and analyzed in order to draw conclusions
about how newspapers portrayed the economic and financial situation.

The author and a graduate assistant (second coder) coded 50 stories to
establish intercoder reliability. The second coder was trained about the coding
rules and categories and ways to look for the story origin and primary source in an
entire story. The intercoder reliability of stories’ tones was 82% and story origin
and primary source was 88%, which are acceptable levels. The two coders then
discussed the differences in coding to come to a mutual agreement and increase
the intercoder reliability to 100%.
Chapter 4

RESULTS

In response to RQ1 about the frequency of “credit squeeze,” “credit crunch,” “financial crisis,” “recession,” and “Great Depression” per newspaper per month, the data were inputted into Tables 1-4.

As shown in Tables 1-4, between September and December 2008, the frequency of “financial crisis” overwhelmingly outnumbered that of “credit squeeze” and “credit crunch” used in each newspaper per month except in the Detroit News in September. “Credit crunch” was used three times while “financial crisis” was found twice in the Detroit News that month. However, “financial crisis” appeared totally 483 times in all selected stories while “credit squeeze” and “credit crunch” appeared 14 and 86 times, respectively.

Although a newspaper used “financial crisis” more frequently than “recession” in a month and used the latter more than the former in another, the frequency of “recession” used in December by each newspaper exceeded that of “financial crisis.” “Recession” appeared 192 times while “financial crisis” appeared 59 times in all selected stories in December while “financial crisis” was used more frequently than “recession” by all the newspapers in September, October, and November. While the Detroit News used “Great Depression” one time more than either “recession” or “financial crisis” in September, the former was much less used than the latter by the Detroit News in other months and by each of three remaining newspapers during the whole period. Totally, the four newspapers used “recession” and “Great Depression” 507 and 123 times, respectively.
Table 1

Frequency of Key Words Used in the *New York Times* from September to December 2008

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of Stories</th>
<th>CS</th>
<th>CC</th>
<th>FC</th>
<th>R</th>
<th>GD</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>44</td>
<td>2</td>
<td>0</td>
<td>54</td>
<td>27</td>
<td>13</td>
</tr>
<tr>
<td>October</td>
<td>57</td>
<td>1</td>
<td>3</td>
<td>56</td>
<td>62</td>
<td>26</td>
</tr>
<tr>
<td>November</td>
<td>35</td>
<td>1</td>
<td>4</td>
<td>29</td>
<td>33</td>
<td>6</td>
</tr>
<tr>
<td>December</td>
<td>43</td>
<td>0</td>
<td>2</td>
<td>28</td>
<td>70</td>
<td>5</td>
</tr>
</tbody>
</table>

*Note:* CS = credit squeeze, CC = credit crunch, FC = financial crisis, R = recession, GD = Great Depression.

Table 2

Frequency of Key Words Used in the *Detroit News* from September to December 2008

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of Stories</th>
<th>CS</th>
<th>CC</th>
<th>FC</th>
<th>R</th>
<th>GD</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>6</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>October</td>
<td>25</td>
<td>1</td>
<td>16</td>
<td>25</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>November</td>
<td>21</td>
<td>0</td>
<td>10</td>
<td>17</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>December</td>
<td>25</td>
<td>0</td>
<td>6</td>
<td>13</td>
<td>42</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note:* CS = credit squeeze, CC = credit crunch, FC = financial crisis, R = recession, GD = Great Depression.
Table 3

Frequency of Key Words Used in the *Houston Chronicle* from September to December 2008

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of Stories</th>
<th>CS</th>
<th>CC</th>
<th>FC</th>
<th>R</th>
<th>GD</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>14</td>
<td>2</td>
<td>0</td>
<td>16</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>October</td>
<td>33</td>
<td>2</td>
<td>9</td>
<td>39</td>
<td>40</td>
<td>11</td>
</tr>
<tr>
<td>November</td>
<td>23</td>
<td>1</td>
<td>4</td>
<td>10</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>December</td>
<td>16</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>31</td>
<td>4</td>
</tr>
</tbody>
</table>

*Note.* CS = credit squeeze, CC = credit crunch, FC = financial crisis, R = recession, GD = Great Depression.

Table 4

Frequency of Key Words Used in the *Los Angeles Times* from September to December 2008

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of Stories</th>
<th>CS</th>
<th>CC</th>
<th>FC</th>
<th>R</th>
<th>GD</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>42</td>
<td>1</td>
<td>6</td>
<td>62</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>October</td>
<td>48</td>
<td>2</td>
<td>13</td>
<td>74</td>
<td>57</td>
<td>15</td>
</tr>
<tr>
<td>November</td>
<td>35</td>
<td>0</td>
<td>4</td>
<td>40</td>
<td>26</td>
<td>13</td>
</tr>
<tr>
<td>December</td>
<td>26</td>
<td>0</td>
<td>4</td>
<td>10</td>
<td>49</td>
<td>7</td>
</tr>
</tbody>
</table>

*Note.* CS = credit squeeze, CC = credit crunch, FC = financial crisis, R = recession, GD = Great Depression.
As shown in Figure 1, among the five search words, “financial crisis” and “recession” were the most used by all four newspapers per month. “Recession” was the most repeated term compared with the remaining four terms during the period. The frequency of each of the five key words peaked in October, the month when the number of selected stories was the biggest.

Figure 1. Frequency of key words used in the four newspapers

Coding on story origin, primary story source, and story tone was done to answer RQ2 about how the newspapers portrayed the financial and economic situation in the 493 stories selected during the time period.

Results for RQ2 showed that staff writers and reporters of the New York Times, the Detroit News, and the Los Angeles Times wrote all selected stories for these newspapers. However, some of the Houston Chronicle’s stories also originated from the Associated Press, Bloomberg, and other newspapers as shown in Table 5. A majority of the selected stories in the Houston Chronicle in September, October, and November originated from the Associated Press and other newspapers. However, the Houston Chronicle’s own staff writers and
reporters published stories more in December. Their stories outnumbered those originated from Associated Press, Bloomberg, and other newspapers that month. The *Houston Chronicle*’s own reporters published totally 38 stories out of 86 selected stories.

Table 5

*Houston Chronicle*’s Story Origin

<table>
<thead>
<tr>
<th>Month</th>
<th>Associated Press</th>
<th>Bloomberg</th>
<th>HC’s Staff Writers/Reporters</th>
<th>Other Newspapers</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>6</td>
<td>0</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>October</td>
<td>8</td>
<td>0</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>November</td>
<td>3</td>
<td>0</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>December</td>
<td>4</td>
<td>1</td>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note.* HC = *Houston Chronicle*

The primary sources of the selected stories varied among the four newspapers each month; there was no single dominant source a newspaper used during the period as illustrated in Tables 6-9.

The number of stories with negative tone outpaced the number of stories with either positive or neutral tone by the *New York Times* and the *Los Angeles Times* each month. This pattern was the same for the *Detroit News* and the *Houston Chronicle* during the period except in October and in November. The number of neutral stories in the *Houston Chronicle* and the *Detroit News* was the biggest in October and November, respectively. The number of negative tone stories exceeded that of positive tone stories per month per newspaper except in
Table 6

Primary Story Sources Used by the *New York Times*

<table>
<thead>
<tr>
<th>Month</th>
<th>Corporate Source</th>
<th>Expert/Analyst</th>
<th>Government</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>6</td>
<td>4</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>October</td>
<td>7</td>
<td>10</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>November</td>
<td>6</td>
<td>1</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>December</td>
<td>7</td>
<td>5</td>
<td>4</td>
<td>27</td>
</tr>
<tr>
<td>Four Months</td>
<td>26</td>
<td>20</td>
<td>32</td>
<td>101</td>
</tr>
</tbody>
</table>

Table 7

Primary Story Sources Used by the *Detroit News*

<table>
<thead>
<tr>
<th>Month</th>
<th>Corporate Source</th>
<th>Expert/Analyst</th>
<th>Government</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>October</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>November</td>
<td>8</td>
<td>2</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>December</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Four Months</td>
<td>18</td>
<td>8</td>
<td>6</td>
<td>45</td>
</tr>
</tbody>
</table>
Table 8

Primary Story Sources Used by the *Houston Chronicle*

<table>
<thead>
<tr>
<th>Month</th>
<th>Corporate</th>
<th>Expert/Analyst</th>
<th>Government</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>October</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>November</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>December</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Four Months</td>
<td>8</td>
<td>11</td>
<td>15</td>
<td>51</td>
</tr>
</tbody>
</table>

Table 9

Primary Story Sources Used by the *Los Angeles Times*

<table>
<thead>
<tr>
<th>Month</th>
<th>Corporate</th>
<th>Expert/Analyst</th>
<th>Government</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>2</td>
<td>8</td>
<td>5</td>
<td>27</td>
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<tr>
<td>October</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>34</td>
</tr>
<tr>
<td>November</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>22</td>
</tr>
<tr>
<td>December</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Four Months</td>
<td>12</td>
<td>23</td>
<td>19</td>
<td>96</td>
</tr>
</tbody>
</table>
November when they were equal in the *Detroit News*. The number of total stories with negative tone per month during the period exceeded that of entire stories with either positive or neutral tone as presented in Tables 10-14.

As Figure 2 shows, the number of stories with negative tones was much bigger than those with positive or neutral tones each month. The number of stories with negative tones, neutral tones, and positive tones all peaked in October.

Table 10

Tones of Selected Stories in the *New York Times* from September to December 2008

<table>
<thead>
<tr>
<th>Month</th>
<th>Positive</th>
<th>Negative</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>13</td>
<td>19</td>
<td>12</td>
</tr>
<tr>
<td>October</td>
<td>13</td>
<td>28</td>
<td>16</td>
</tr>
<tr>
<td>November</td>
<td>10</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td>December</td>
<td>9</td>
<td>23</td>
<td>11</td>
</tr>
</tbody>
</table>

Table 11

Tones of Selected Stories in the *Detroit News* from September to December 2008

<table>
<thead>
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<th>Month</th>
<th>Positive</th>
<th>Negative</th>
<th>Neutral</th>
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</thead>
<tbody>
<tr>
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<td>3</td>
<td>2</td>
</tr>
<tr>
<td>October</td>
<td>5</td>
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<tr>
<td>December</td>
<td>6</td>
<td>6</td>
<td>13</td>
</tr>
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</table>
Table 12
Tones of Selected Stories in the *Houston Chronicle* from September to December 2008

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<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
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<td>4</td>
</tr>
<tr>
<td>October</td>
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</tr>
<tr>
<td>December</td>
<td>3</td>
<td>12</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 13
Tones of Selected Stories in the *Los Angeles Times* from September to December 2008

<table>
<thead>
<tr>
<th>Month</th>
<th>Positive</th>
<th>Negative</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
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<td>6</td>
</tr>
<tr>
<td>October</td>
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<td>November</td>
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<td>18</td>
<td>12</td>
</tr>
<tr>
<td>December</td>
<td>6</td>
<td>15</td>
<td>5</td>
</tr>
</tbody>
</table>
Table 14

Tones of Selected Stories in the Four Newspapers from September to December 2008

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<th>Month</th>
<th>Positive</th>
<th>Negative</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>October</td>
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<td>November</td>
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<td>38</td>
</tr>
<tr>
<td>December</td>
<td>24</td>
<td>56</td>
<td>30</td>
</tr>
</tbody>
</table>

Figure 2. Story tones of the four newspapers
To answer RQ3 about how early recession headline or deckline stories appeared, the author searched stories of the four newspapers to find the earliest mention of the term “recession” in either headlines or decklines from June 1, 2007 to December 31, 2008. The earliest story of the four newspapers was published on July 25 in the *Los Angeles Times* headlined “Foreclosures in state hit record high; The housing crisis spreads to middle-class buyers. The economic outlook ranges from a slowdown to recession.” The latest story among the earliest ones in the four newspapers during that period was “Fed Acts to Shore Up Edgy Economy; Recession fears prompt rate cuts” dated January 23 by the *Detroit News*. Both the *New York Times* and the *Houston Chronicle* published their earliest stories including “recession” in the headline on September 8. The two stories in the *New York Times* and the *Houston Chronicle* were the same. However, while the *New York Times*’s story was reprinted in the *Houston Chronicle*, its headline was changed. The *New York Times*’s headline was “Unexpected Loss of Jobs Raises Risk of Recession” while the *Houston Chronicle*’s headline was “Job Cuts Increase Odds of Recession; Unexpected turn Also Puts Pressure on Fed.”
Chapter 5

DISCUSSION

The discussion will first summarize the results and discuss final conclusions. Next, the discussion section will examine the strengths and weaknesses of this study and suggested areas for future research. This section will close with final conclusions.

Significance of Results

Frequency of Key Words Used in the Four Newspapers

During the selected 4 months, “financial crisis” was used almost 35 times and approximately six times as much as “credit squeeze” and “credit crunch,” respectively. Since the period between September and December 2008 saw the collapse of Lehman Brothers that marked a contagion of financial turmoil to the economy and the peak of the financial distress, the newspapers’ preferred use of the term “financial crisis” rather than “credit crunch” and “credit squeeze” is understandable given the severity of the financial turmoil. As Investopedia suggested, terms such as “credit squeeze” (“Credit Squeeze,” n.d.) and “credit crunch” (“Credit Crunch,” n.d.) define economic situations in which it is difficult to obtain credit due to high interest rates stemming from lenders’ caution over insolvency possibility of borrowers. The background literature showed these financial situations preceded and also happened during the peak of the 2008 financial crisis. According to the definition of a financial crisis, it is a more
strongly loaded term in which asset prices plummet apart from fund allocation problems.

The findings of the search of the four newspapers showed they used the words “financial crisis” more than “credit squeeze” and “credit crunch” during the last 4 months. These results coincided with De Cock’s (2009) results that found that the term “global financial crisis” surpassed other words, including the remaining two terms in the same period in the *Financial Times*. These similarities were found despite the slight differences in counting methods between the current study and De Cock’s. While this study counted frequency of the terms, De Cock (2009) counted one point for each term if two or three different terms appear in an article and counted one point for a term even if it appears more than once in a story (C. De Cock, personal communication, April 1, 2010). Thus, the four newspapers and the *Financial Times* may have viewed the financial outlook during that period as a crisis rather than credit constraint in the financial system.

Although financial crisis and recession were co-happening during the selected 4-month period, the term “recession” was used at least 2.5 times more than “financial crisis” in December by each of the four newspapers. These results may be due to the announcement made by NBER on December 2, 2008 to call the economic situation “recession,” which started in December 2007. The announcement was reported in all of these newspapers and may have been treated as a newsy theme for some reporters in December. By emphasizing “recession” rather than “financial crisis” in December, all the four newspapers may have set a tone of a declining outlook for the national output and job loss, two of the most important indicators that reflect the economy is in recession by NBER.

Since “financial crisis” and “recession” were repeated the most among the five key words, they may have been considered the most salient words among the
search terms by newsmen to convey to readers. In addition, although some stories compared the financial crisis and recession as one of the most severe or its bailout as the biggest since Great Depression, the total number of uses of “financial crisis” and “recession” per month by all newspapers overwhelmingly exceeded that of “Great Depression.” The author assumes that because the economic and financial turmoil was happening at the time of the reporting, reporters and editors may have decided to call them by terms with clear and no-jargon definitions such as financial crisis and recession. Clore (2010) suggested that the newly-coined term “Great Recession” by the Associated Press was reluctantly used or avoided by some editors who argued that it is economists’ and historians’ job to decide a name for the recession from a historical perspective. In contrast, the limitation of frequency counting of exact terms may lead to the smaller number of the term “Great Depression” used in comparison with “financial crisis” and “recession.” Clore (2010) indicated some editors use the term “Depression” with a capitalized D instead of “Great Depression.” However, it would have been more complicated to pick relevant stories discussing economic situation if “depression” had been added to the search key words given its large connotation.

By using the terms “financial crisis” and “recession” more frequently, this may influence public opinion and resonate more salience with them, according to the tenets of agenda-setting theory. Given the use of certain words by the reporters of the stories during this time period, they played a gatekeeping role and helped to influence how the public perceived the financial situation.

Stories Framed During the Period

The total number of stories that were framed negatively in the four selected newspapers largely outnumbered those with positive or neutral tones per month
during the peak period of the financial crisis. The dominance of negative stories during the period may have influenced the public view about the economy. As the framing tenet of the agenda-setting theory suggests, the negatively framed stories may have made people think pessimistically about the financial and economic situation during the period.

However, that period of analysis also saw increasing unemployment, a collapse of big investment banks, rising foreclosures, etc. Therefore, it raises questions as to whether the stories themselves influenced further decline or if the public’s actions and perceptions about the economy influenced how journalists framed their stories.

There is a vast array of contradicting literature that discusses the causal relationships among news media, economic reality, and public perception about the economy. Stevenson et al. (1994) found that while controlling for economic indicators, public attitude indicates news media coverage of the economy, not vice-versa. They suggested a cyclical model in which public perceptions influence news coverage that in turn has an effect on public views. Similarly, Haller and Norpoth (1997) suggested that major views about the economic situation of people exposed to news media were similar to views of those who were not. Su (2008) indicated that during a downturn period, media coverage about economic issues has more influence on the consumer confidence index than during nonrecession, but economic fundamentals still have primary influence on the public. Su explained people paid more attention to news reports about the economy during that period. In contrast, some found that the media exerted influence on the public especially during recession. Wu et al. (2002) controlled economic realities and found that media reports indicated public opinion about the economy during recessions, which could lead to performance of the economy.
A finding of the current research is that October saw the biggest number of negatively framed stories in the four newspapers during the period, the highest fear by investors in almost a decade and the biggest decline of the Dow Jones Industrial Average Index in more than two decades. According to Yahoo! Finance (n.d.b), the CBOE Volatility Index was at its highest since 1990 in October 2008. Because the index value stems from options that provide insurance for investors against losses in trading and investing in Standard & Poor’s 500 stocks, the CBOE Volatility Index is considered the fear index (Kisling, 2010). The Dow Jones Industrial Average Index lost 7.87% to 8577.91 on October 15, the biggest loss since 1987 (Egan, 2008).

It is still controversial to answer the chicken-or-egg questions of which influenced which. Based on some previous studies and the second agenda-setting theory, a possible explanation for this finding could be that overwhelming prevalence of negatively framed stories in October may have pushed investors’ fears to the highest. Researchers suggest that people update economic news from media more often during economic downturn and the public is more subject to economic news influence during the period (Su, 2008; Wu et al., 2002). The second-level agenda-setting theory also indicates how a story is framed influences on how the public think about the issue. It means that negative tones of stories may have led to investors’ pessimism and fears about the market. One could argue that the majority of investors have expertise to analyze the performance of the market and obtain a great deal of personal information about listed companies because most of the players in the market are institutional investors. Thus, real economic indicators and personal experience may exert more influence on investors than news reports. However, during a crisis when fear and uncertainty
dominates the market, negative news reports may play a bigger role in investors’ sentiments rather than financial fundamentals and personal experience.

Another question raised about this explanation is investors’ possibly limited exposure of print newspapers since some of them need real time information and read online reports. Though newspapers report yesterday’s news, all the selected newspapers are major national or regional publications by circulation, and according to McCombs (2004, p. 117), the agenda of “high status news organizations,” including the New York Times, was adopted and adapted by others.

**Story With “Recession” Headlines and Decklines Prior to the National Recession**

Three newspapers, except the Detroit News, published stories with “recession” on the headlines and decklines on their front pages before its onset by NBER’s definition in December 2007.

The Los Angeles Times reported about foreclosures exceeding a record high and predicted that the economy would slow down or end up in a recession. The story in the New York Times and the Houston Chronicle warned the public of the 50% possibility that the recession would start in 2008, given an indicator of 4,000 jobs lost from July to August on top of a housing mortgage disturbance. All of these stories cited economists who foresaw the possibilities of an upcoming recession.

It was surprising to find that the earliest front page story headlined by “recession” in the Detroit News was the latest among the stories found during the selected period. Given that Michigan has been in an 8-year recession (Hornbeck & Heinlein, 2008), perhaps the newspaper had run many headlines that included the word “recession” well prior to June 1, 2007. However, the January story still
raised awareness about a coming national recession at that time since NBER only announced the onset of the recession in December 2008 and the national economy was not in recession by traditional definition until the third quarter of 2008.

Past research suggests that negative terms about the recession may influence public sentiments (Blood & Phillips, 1995). Given this, the front page stories that found the word “recession” in the headlines may have reduced public confidence about the economy and influenced consumer sentiment.

Strengths and Weaknesses

This study, like all research, has both strengths and weaknesses, which may help guide future studies.

Strengths

Since the terms “financial crisis” and “recession” are usually associated, a large number of studies in the past only focused on the relationships between news media reports and public perceptions about the economy during recession. By making differences between the concepts of financial crisis and recession, the current research contributes to the existing literature by including the financial crisis as a separate issue to investigate in media coverage of the ailing financial and economic situation. Secondly, this research had a good representative sample of newspapers that target large U.S. audiences. Thirdly, since the public seem to pay more attention to and be more influenced by media during downturn period, as suggested by previous studies, the period between September and December 2008 was a good pick for the study as it saw both recession and the peak of the financial crisis.
Weaknesses

Although this study was an examination of printed newspapers, given the growth in the Internet, one area of weakness of this study was in not including online versions of the selected newspapers. The sample would be more representative if it had included the online news coverage.

Secondly, because frequency of key search words was found in chosen texts in the selected period, the results of key words’ frequency cannot be generalized to an extended period of the 2008 financial crisis or in previous economic and financial downturns.

Suggestions for Future Research

Although the economy and recession have been widely considered by researchers as obtrusive issues (Stevenson et al., 1994; Wu et al., 2002), the financial crisis has not been included in the debate of its magnitude in intruding into people’s daily lives. One suggestion for future research is to examine if the financial crisis is an obtrusive or unobtrusive issue. For example, unemployment is widely considered an obtrusive issue because people can know in reality that their family members or neighbors lose jobs, but national trade deficits can be deemed an unobtrusive issue since the people do not know about it from their daily experience.

Future research could operationalize the two concepts, recession and financial crisis, and examine how many news stories were discussed under each category to indicate the salience of each issue in the media agenda during a period when both were happening.

Another area for future research is the need to build financial crisis index, which is the number of stories including “financial crisis” in newspapers over time to examine the relationship between media coverage of financial situations and the
financial realities. While the recession index has been built for more than a decade, the financial crisis index has been rarely tracked by researchers. According to “Rrrrrrrrecession?” (2001), the recession index was built by the magazine by counting the number of stories having the word recession in all newspapers every quarter in Britain since the 1990s, and it reflected economic fundamentals quite closely. The recession index of the New York Times and the Washington Post was usually able to predict recession too.

It is suggested that future researchers should examine the relationships among news reports that are read or watched by investors and the stock market performance. According to Kieffer’s study in 1983 (as cited in McCombs, 2004, pp. 132-133), Fortune magazine reports about companies and their stock performance and found evidence that investors’ behavior was influenced by the magazine’s agenda. Few agenda-setting studies have focused on media news and stock market performance of companies covered by media since then.

**Conclusion**

This research provides insight into how the New York Times, the Detroit News, the Houston Chronicle, and the Los Angeles Times covered the peak of the 2008 financial crisis from September to December. The content analysis of 493 front page stories was done to find frequency of key words and decide story tones. It appears that “financial crisis” was perceived as a more salient term for reporters and editors to convey to readers than “credit squeeze” or “credit crunch” during that period. Negatively framed stories were dominant in newspapers and October saw the largest number of stories with negative tones. Skimming front page stories from June 2007 to December 2008 found that newspapers ran headlines including
“recession” prior to either its onset or NBER’s announcement that a recession was in place.

The most repeated words (“financial crisis” and “recession”) among the five search keywords may become salient in the public’s mind as the agenda-setting theory suggests, though according to Clore (2010), editors are cautious about using “inflammatory language” to describe the crisis. Stories headlined by recession appear to influence public confidence about the economy though the recession either did not start or was not officially announced. That investors’ fear grew to the highest level since 1990 in October 2008 could probably be explained by the most numerous negative reports about the economy found that month.

Although it is difficult to determine if the media influenced the economic decline or if they simply reflected the financial and economic conditions of the country, the four newspapers played a role in aligning the financial crisis and recession as important issues in public mind. In addition, the newspapers may have partly influenced the public’s perception of a pessimistic outlook by reporting a majority number of stories with negative tones.
REFERENCES
REFERENCES


Yahoo! Finance. (n.d.a). *Dow Jones Industrial Average*. Retrieved from http://finance.yahoo.com/echarts?s=^DJI#chart1:symbol=^dji;range=5y;indicator=volume;charttype=line;crosshair=on;ohlcvalues=0;logscale=on;source=undefined


APPENDIX
## Coding Sheet

1. **Story number**

2. **Newspaper name**
   - 1-New York Times
   - 2- Detroit News
   - 3- Houston Chronicle
   - 4- Los Angeles Times

3. **Month of publication**
   - 1- September
   - 2- October
   - 3- November
   - 4- December

4. **Story origin**
   - 1-Associated Press
   - 2-Bloomberg News
   - 3-Newspaper’s own reporter/ staff writer
   - 4- Other newspapers

5. **Main story source**
   - 1-Corporate source
   - 2- Expert s or analysts
   - 3- Government source
   - 4- Others
   - 5- None

6. **Story tone**
   - 1-Positive
   - 2- Negative
   - 3- Neutral
   - 4- None
California State University, Fresno

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Type full name as it appears on submission

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Date