The Governing Architecture of a Shadow Financial Market

Investigating the Interaction of Legal and Extra-Legal Governance Structures at the Regulatory Event Horizon

By Todd Arthur Bridges
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SOCIОLOGICAL THEORY—This course is designed to provide an overview of key areas in the field of Sociological Theory. The specific learning objectives include: to acquire a thorough understanding of the
field of sociological theory, to appreciate the history of the field and current debates, to understand the main theoretical approaches to social change, to explore the strengths and weaknesses of competing theoretical approaches, and to apply the concepts to grounded research. Syllabus was developed in conjunction with the Sheridan Center for Teaching & Learning at Brown University and is available upon request.

INEQUALITY & SOCIETY—This course is designed to provide an overview of key areas in the field of Social Stratification. The specific goals of this course are to gain knowledge about the inequalities in modern societies, to conceptualize how these inequalities are produced and reproduced, and to understand how the stratification system creates different opportunities depending on class, race, and gender. This course does not have prerequisites, however, a strong interest in sociology, economics, anthropology, and/or politics will be beneficial. Syllabus was developed in conjunction with the Sheridan Center for Teaching & Learning at Brown University and is available upon request.

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PREFACE & ACKNOWLEDGEMENTS:

The idea for this project originated from my theoretical interests at the intersection of sociology and economics, and evolved through conversations with mentors, colleagues, and expert informants in the field. The original aim of my project was to investigate the network governing dynamics within financial organizations in the shadow financial system—where there is an absence of formal law and state regulation. However, as I acquired more knowledge of the governing dynamics and the social forces within the shadow financial market, the more I realized that by focusing on a social structural investigation alone was limiting—both in the descriptive and predictive power. Through conversations with mentors and colleagues at Brown, MIT, Harvard, Oxford, and expert informants in the US hedge fund market, I realized that an accurate and comprehensive model of governance would require an investigation of formal law and regulation, cultural institutions, network relations, and power relations. Luckily, the discipline of sociology allowed me the flexibility to use multiple theoretical perspectives and methodological techniques to investigate the complex social forces at play in the governing architecture of a shadow financial market.

This project would not have been possible without the intellectual leadership and financial support of a number of individuals and organizations—to whom I am eternally grateful. First, I would like to thank my committee members who always pushed me further, inspired me with their ideas, and showed me that there was a light at the end of the tunnel. In particular, I am grateful to Mark Suchman, Susan Silbey, Frank Dobbin,
and Ebony Bridwell-Mitchell. During the evolution of the project I worked for Mark Suchman, the chair of my committee, at Brown as a researcher and learned the unconscious norms and habitus of a true scholar and lover of knowledge. Similarly, I worked closely with Susan Silbey at MIT as a researcher and learned the beauty of grounded theory and qualitative research—how theories are linked to empirical research in the field, what qualitative data analysis looks and feels like, and how to stay focused on the big picture. Beyond my committee members, I would like to acknowledge Jason Beckfield, Mariko Chang, and Ezra Zuckerman for their helpful ideas in the early stages of my project—in its infancy.

At the organizational level, I would like to thank the sociology departments at Brown, Harvard, and Oxford. Additionally, within these universities there are two institutes that were helpful in allowing me to advance my project—The Commerce, Organizations, and Entrepreneurship (COE) program at Brown University and The Extra-Legal Governance Institute (ExLEGI) at the University of Oxford. My research was also enriched by comments from reviewers and conference participants over that last few years both within sociology but also in organizational management, law and society, and socio-economics. For example, I would like to thank reviewers and participants at the National Science Foundation (NSF), INFORMS Organizational Science, the Law & Society Association (LSA) conferences, the Society for the Advancement of Socio-Economics (SASE) conferences, and the American Sociological Association (ASA) conferences.
Finally, I thank the research participants for their generosity, trust, and time. The insights from expert informants in the participating hedge funds, and the larger organizational field in which they operate, grounded my project and allowed me to refine my theoretical ideas on actually existing practices, structures, and institutions in the market. Thereby, the empirical insights gained in the field allowed me to avoid the tendency for economic and theoretical abstraction, which “consists in dissociating a particular category of practices, or a particular dimension of all practice, from the social order in which all human practice is immersed” (Bourdieu 2005).
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CHAPTER ONE

The Rise of a Shadow Financial Market and its Governing Architecture

“Like the rise of China, the even more rapid rise of the hedge fund has been one of the biggest changes the global economy has witnessed since the Second World War.”

Niall Ferguson
The Ascent of Money

The institutional structure of the U.S. financial system has changed fundamentally in the past 20 years. The majority of assets in the financial system are now being held in what has been called a “shadow banking system.” According to Timothy Geithner, the current Secretary of the Treasury and then acting chief executive officer of the New York Federal Reserve, this shadow banking system has developed in parallel with the traditional banking system. The parallel financial system consists of at least four components with totals in excess of $16 trillion in assets in the first quarter of 2010: 1) asset-backed commercial paper conduits; 2) assets financed overnight in tri-party repurchase agreements; 3) hedge funds; and 4) the major investment banks (Geithner 2008; Pozsar 2008; Adrian and Shin 2009; Pozsar et al. 2010). By comparison, in the traditional banking system the top five holding companies have just over $8 trillion in total assets, and the entire traditional banking system has about $12 trillion in assets. In addition to its significant size, this parallel financial system operates outside of the existing U.S. legal and regulatory environment. For example, the organizations that operate within this new financial system operate beyond the reach of most U.S. federal legislative acts, as well as the administrative bodies responsible for protecting investors and regulating the financial markets.

1 See LIST OF TABLES, Table 1: Definition of Financial Market Terms.
The Federal Reserve, Securities Exchange Commission (SEC), global leaders, and our nation’s leading scholars have begun to grapple with the important consequences of how this large and minimally regulated parallel financial system affects both the U.S. economy and society, and the global economic system. The prominent economist Paul Krugman, argues that “the shadow banking system” is at the core of the 2008-2010 global financial crisis. He states that “the growth of the shadow banking system, without any corresponding extension of regulation” has set the stage for a devastating credit crisis and depression economics (Krugman 2009). Similarly, Ben Bernanke, the current chairman of the U.S. Federal Reserve, supports the argument of Gorton (2009) that states that “the ‘shadow banking system’ at the heart of the current credit crisis is, in fact, a real banking system — and is vulnerable to a banking panic” (Gorton 2009). At the 2009 G20 Summit in London, President Obama and British Prime Minister Gordon Brown called for greater transparency in the shadow banking system and for new regulatory reforms.

Before effective regulatory changes can be implemented, however, social scientific research is needed to empirically investigate how particular markets within the shadow banking system have functioned in the absence of formal state regulation. In particular, social scientific research is needed to investigate and conceptualize: 1) how order and governance have been constructed in the absence of a formally institutionalized legal regime; 2) what type of governance mechanisms have been constructed both within organizations and the organizational field; and 3) where the failures are in this socially constructed, order-producing and governing structure of the shadow financial market.

My research does not attempt to explain the entire governing architecture of the shadow financial system. Rather, the goal of my empirical research is to investigate one
of the four major markets within the U.S. shadow financial system—the growing and influential hedge fund market—to uncover what governing mechanisms have been created in the absence of formal regulatory institutions. My investigation uses a systematic application of sociological theory to elucidate both the proximate and distal causes that institutionalize order and governance within hedge fund organizations and the broader organizational field. The U.S. hedge fund market was selected as an empirical research site because it offers three unique characteristics. First, the research site offers qualities of a pseudo-natural experiment wherein the formal regulatory structures that operate in the traditional financial system have been removed or minimized, leaving organizations and their organizational field the opportunity to create governance structures in the absence of law. Second, hedge funds have become one of the most active market participants in both the traditional and shadow financial systems. In the last decade alone, hedge funds have become a central organizational actor in the most important domestic and global financial markets, and have come to dominate a number of smaller more esoteric sectors within the financial sector. For example, a report by Greenwich Associates (2007) indicates that approximately 20-25 percent of all trading volume on the New York Stock Exchange and 30-35 percent on the London Stock Exchange is conducted by hedge funds. Similarly, hedge funds are a dominant organization in the following markets: 1) approximately 75 percent of trading volume in convertible bonds; 2) approximately 45 percent of trading volume in emerging market bonds; 3) approximately 47 percent of the trading volume in distressed debt; 4) approximately 25 percent of trading volume in high-yield bonds; and 5) approximately 55 percent of trading volume in credit derivatives (Greenwich Associates 2007). Finally, the
hedge fund market was selected because it has the power and capacity to cause systemic and catastrophic shocks to the larger U.S. economy and society. For example, in August 1998 the hedge fund Long Term Capital Management (LTCM) recorded total market losses of $1.8 billion and by September 1998 LTCM was leveraged with over $100 billion of borrowed money (Akerlof and Shiller 2009). The financial meltdown of LTCM created such a systemic risk to the overall economic system that the U.S. Federal Reserve was forced to broker a multi-billion dollar rescue package among fourteen Wall Street banks. According to the acting Federal Reserve Chairman Alan Greenspan, this rescue was necessary because if “the failure of LTCM triggered the seizing up of markets, it could have potentially impaired the economies of many nations, including our own” (Greenspan 1998, 1046).

The central paradox that underlies my research is the following: how has the hedge fund market—which has become one of the most influential and powerful markets with the capability to cause systemic shocks—become reasonably ordered and institutionalized in the absence of the kind of legal regime that we often assume to be the key order-producing and institutionalizing force in modern capitalism? In other words, how has the hedge fund industry’s avoidance of the formal requirements and regulations in the U.S. securities law—which traditionally requires investment managers and financial organizations to disclose their portfolio holdings to the broader market, to register with the Securities Exchange Commission (SEC), and to limit risk taking behavior—not resulted in rampant market instability and unchecked market opportunism? This central paradox leads one to question whether the hedge fund industry is in fact unregulated. My investigation posits, to the contrary, that a stable, exponentially
growing, and powerful market in the face of minimal formal regulatory oversight suggests that a more nuanced understanding of economic order and governance is needed. This central paradox establishes the broad parameters in which my investigation seeks to explain: how law and organizations operate at the regulatory event horizon of the traditional financial system; how social interaction takes place between the state and market actors within the grey areas of the existing U.S. regulatory framework; and how formal and informal causal mechanisms interact to form the governing social structure of the U.S. hedge fund market.

The empirical investigation of the governing architecture of the U.S. hedge fund market is organized around four sets of Research Questions: 1) how do hedge fund organizations purposefully avoid formal law and regulation; 2) what are the consequences of purposefully avoiding formal law, and does the purposeful avoidance of law lead to an absence of order within the organizations and the organizational field; 3) if avoidance of law does not lead to an absence of order, then what social governance mechanisms are responsible for creating and maintaining that order, and how do these social governance mechanisms vary among the organizational field; and 4) are there governance failures in this socially constructed governing architecture, and how can these governance failures be mitigated or solved through regulatory and public policy changes.

These research questions are important both for the theoretical concepts and the paradoxes they address, as well as the public policy concerns over how to regulate the organizations operating within the shadow financial markets of the U.S. economic system. The theoretical concepts and insights from my investigation advance academic debates within sociology and economics, which focus on understanding the distinctive features
and dynamics of capitalist economic institutions—what is the changing institutional structure of capitalism, and what are the underlying organizational dynamics that affect how economic action is governed within. In particular, my theoretical findings advance the insights and models developed in economic sociology, the sociology of organizations, the sociology of organizations and law, and institutional economics. Additionally, the empirical results from the investigation have important implications for public policy—which attempts to address one of the most pressing concerns of the U.S. economy and society: how should the large and powerful financial organizations within the shadow financial system—and the secretive pools of capital they manage—be governed?

The empirical results of my investigation are conceptualized using the multilevel causal model developed by the new institutionalism in economic sociology (Nee and Ingram 1998; Nee 2005: Nee and Swedberg 2005). The model for new institutionalism in economic sociology is a direct theoretical response to institutional economics (Coase 1937, 1960; Williamson 1981, 1994; North 1991), new institutionalism in organizational analysis (Meyer and Rowan 1977; DiMaggio and Powell 1983; Powell DiMaggio 1991), and the embeddedness approach in economic sociology (Granovetter 1985). According to Nee, the aim of new institutionalism in economic sociology is to “integrate a focus on social relations and institutions into a modern sociological approach to the study of economic behavior by highlighting the mechanisms that regulate the manner in which formal elements of institutional structures in combination with informal social organization of networks and norms facilitate, motivate, and govern economic action” (Nee 2005: 49).
This theoretical approach makes an important advancement in the sociological analysis of economic institutions by developing a multilevel causal model that focuses on both distal and proximate causal mechanisms, and conceptualizes how they are interrelated. For example, distal causal mechanisms are the deeper institutional forces that constrain and shape incentives for market actors—individuals, organizations, and networks. In particular, the broader “institutional environment—the formal regulatory rules monitored and enforced by the state that govern property rights, markets, and firms—imposes constraints on firms through market mechanisms and state regulation, thus shaping the incentives structure (Nee 2005: 56). The institutional mechanisms that make up the distal causes in turn affect the proximate causes that develop at the micro and meso-levels—the individual or organization, and their interpersonal ties. For example, the legal environment imposes constraints on organizations through formal regulation, and establishes the conditions under which groups of organizations—the organizational field—can exchange to realize their shared interests for profit. By conceptualizing both the distal and proximate causes, and showing how these causes are interrelated, the new institutionalism in economic sociology provides my investigation with an explanatory framework that specifies how the formal legal environment shapes incentives for hedge funds, and constrains the informal rules embedded in the organizations and the organizational field.

This chapter proceeds through four sections. **Section I** defines the financial organization called a “hedge fund” and explains its rise to power in the U.S. economy. In particular, I explain: 1) the distinct characteristics of a hedge fund organization, the

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2 See Chapter Two, Section I for a schematic representation of the multilevel causal model and a detailed description of both the distal and proximate mechanisms.
historical development of the organization, and the basic investment strategy that gives the organization its name; 2) the social forces behind the organization’s tremendous growth over the last 25 years; and 3) the organization’s customary institutional practices. Section II elucidates the new institutional structure of the modern U.S. financial system, focused particularly on the how the economic institution responsible for financial intermediation and credit creation has fundamentally changed. For example, I specify the new market-based institutional structure of the financial system, and document how its growth has eclipsed the traditional bank-based institutional structure as the dominant supplier of credit and liquidity for the U.S. economy. Section III empirically links the hedge fund organization to its role in this new market-based institutional structure, and demonstrates how the hedge fund has purposefully avoided the traditional bank-based mechanisms that have historically limited credit supply and exponential leverage. Section IV concludes the chapter by specifying the organizing logic of the dissertation, and summarizes the content of each chapter.

SECTION I: THE RISE OF A NEW ORGANIZATION

In general, the asset vehicle called a “hedge fund” is an actively managed, “unregulated” pool of capital contributed by high net-worth investors that may employ any investment strategy. What distinguishes a hedge fund from other investment vehicle is its relationship to formal securities law. In order to maximize the range of financial techniques at its disposal, hedge funds are legally structured to limit participation to high net-worth, “accredited investors”—defined as investors with a net worth in excess of one

3 See Chapter Four for a detailed analysis of the legal structures of hedge fund organizations, and the formal laws that operate in the hedge fund market.
million dollars and who have significant investment knowledge. Examples of accredited investors include commercial and savings banks, insurance companies, pension funds, wealthy individuals, family offices, and endowments. Their legal structure frees the hedge fund manager from statutory and regulatory constraints that would apply if the organizations were open to the general public—who are assumed to be less knowledgeable and thus at greater risk of being manipulated by unscrupulous dealing or self-dealing. Such individual investors are protected by disclosure requirements and prohibitions on high-risk market tactics such as short selling, derivatives, futures, distressed debt, and fixed income arbitrage. Despite being formally unregulated, most hedge funds adopt a number of customary structures and institutional practices. For example, the fee structure of a typical hedge fund is referred to as 2 and 20—2 percent of the initial capital and 20 percent of the future profits are given to the hedge fund. Hedge funds typically create rules to restrict the withdrawal of capital by setting parameters on the timing of capital redemptions.

A historical review of the hedge fund reveals where the organization got its name from, and the leading figures and organizations responsible for its creation. The financial market practitioner and historian Francois-Serge Lhabitant (2006), who has arguably written the best historical analysis of the hedge fund market to date, locates the founding ideas of the “hedge” principle in the empirical work of the statistician and mathematician Karl Karsten. In 1931 Karsten published a book entitled Scientific Forecasting, which summarized the central quantitative principle and strategy for running a successful investment hedge fund. Karsten’s approach to the subject can be described as scientific insofar as he was primarily concerned with statistical research and mathematical
reasoning, and secondarily concerned with market performance. In *Scientific Forecasting*, Karsten describes how he created a small fund that contained six models, each of which made statistical predictions on the direction of different asset classes. By June 1931, Karsten’s statistical fund had experienced a 78% growth, which adjusted came to a 250% increase compounded annually (Lhabitant 2005: 7). In addition to the model’s mathematical and financial success, there were three unique statistical patterns that he observed. First, the fund did not experience large losses—it had only a few periods without substantial movement. Second, the fund made large gains that were retained over time. Third, the periods of no movements and large gains seemed to be entirely independent of the direction of the equity market.

These three observed patterns were the result of what Karsten called the “hedge principle.” The hedge principle forms the foundation upon with the traditional hedge fund strategy is built. Karsten explains this hedge principle as, “suppose that motor stocks be the group, and that the prediction for the time is that the average of these stocks will rise out of line from the average of the entire market . . .we should theoretically sell short an equally great (in dollar value) holding of all the stocks in the market” (Lhabitant 2005: 8). In other words, in order to hedge an investment one needs to buy in a group that is predicted to rise the most relative to others in that market or sector, and sell short the leading stocks in the group predicted to fall the most. By implementing the hedge principle, Karsten was able to beat the market with gains from the stocks he bought long and from losses to the stocks he sold short, while minimizing overall risk—this strategy is commonly referred to as a long-short equity strategy.
The second historical source of the “hedge” principles that underlie the traditional hedge fund organization comes from the work of Alfred Winslow Jones. Jones graduated from Harvard University in 1923 and obtained a doctorate in sociology from Columbia University in 1941. In late 1949, Jones was on the editorial staff of Fortune Magazine with responsibility for reviewing the leading practices in the asset management industry. The culmination of this research led to an article called “Life, Liberty, and Property,” which explicitly laid out the technical methods of market analysis, trends in investing, and market forecasting. Convinced that his research provided insight into the most advance practices and ideas in the market, Jones took his knowledge and began the first for-profit hedge fund. Jones launched an equity fund call A.W. Jones & Co. with $40,000 dollars of his own money and $60,000 from investors (Jones, A.W. 1949). His hedge fund consisted of four unique characteristics. First, similar to Karsten, Jones implemented the hedge principle by combining long positions in undervalued stocks and short positions in overvalued ones. Second, he amplified his portfolio’s returns by “leveraging”—that is, he used the proceeds from his short sales to finance the purchase of additional long positions. Third, Jones charged a performance-linked fee—20% of realized profits—but not an asset-based management fee. Finally, Jones acknowledged that it was “unreasonable” for him to receive incentive fees for risking solely his partners’ capital, and therefore, he invested all $40,000 of his personal wealth (Lahbitant 2006: 8).

By combining these four principles into his hedge fund, Jones created the founding institutional practices of the hedge fund and was able to make substantial returns in the financial markets, while simultaneously reducing overall risk through lower amounts of market exposure—i.e. hedging risk while amplifying returns.
Even though the “hedge” principles and the hedge fund as an organizational form showed tremendous promise, it received little attention from the broader financial markets. In fact, according to Tremont Partners, one of the most respected sources of information on hedge funds, in 1984 there were approximately 68 hedge funds in the U.S. financial markets. These 68 hedge funds operated in “secrecy and did not report to anyone beyond their limited partners” (Lhabitant 2006: 13). In the mid 1980s, however, two factors converged to change the status and volume of hedge funds. First, a few star hedge fund managers reported outstanding performances that significantly outperformed the broader market. In 1986, Julian Robertson’s Tiger Fund yielded a compound annual return of 43% during the six years of its existence, net of expenses and incentive fees—as compared to the S&P 500 that returned only 18.7% for the same period. A few years later, George Soros’ Quantum Fund made a billion dollar profit on global currency speculation, which forced the British pound to exit from the European Monetary System.

Beyond the outstanding performance by star hedge fund managers, the second factor that led to the tremendous growth of the hedge fund market resulted from large flows of capital from institutional investors. Over the past four decades institutional investors have become dominant holders in both the domestic and global financial markets. For example, data on equity holdings by individual investors versus the holdings of institutional investors shows a significant shift in ownership structure. As the equity holdings of household and personal trusts decreased from 92.5 percent in 1945 to 44.2 percent in 1998, institutional holdings increased from 1.8 percent in 1945 to 41.5 percent in 1998 (Hawley and Williams 2000). In 1985, institutional investors as a group owned 36.1 percent of the largest 25 U.S. corporations and by 1997 their share had grown to
48.7 percent (Sterns and Mizruchi 2005). While data is limited on the exact holdings of institutional investors in the hedge fund market, all publicly available information suggests that hedge funds have become a significant portion of the institutional investor’s portfolio. In 2004, a report by Merrill Lynch and Ernst & Young reported that 73% of institutional and high net worth investors held hedge fund investments. Similarly, many of “the leading investment banks have hired the best academics to manage sophisticated hedge funds, and even commercial banks followed the trend by creating and marketing funds of hedge funds” (Lhabitant 2006: 18).

Over the last decade, the growth of hedge funds has accelerated dramatically in terms of both assets under management and number of funds. Due to the lack of publicly availability of data and the secrecy inherent in the hedge fund market, precise numbers and figures are difficult to come by. That being said, a 2010 report estimated that there are between 8,000 and 10,000 hedge funds worldwide, managing a total wealth of approximately 2.81 trillion dollars for single manager hedge funds, and approximately 3.87 trillion dollars for single manager funds plus fund of funds (HFM 15th Biannual Assets under Administration Survey). In comparison, in 1990 there were only 600 hedge funds worldwide with less than $40 billion dollars under management (Hedge Fund Research Database).
Even with this tremendous growth over the last 20 years, the hedge fund market represents only a small portion of the global investment portfolio. As of 2006, the hedge fund market had approximately 3-5% of the global securities market share—in terms of assets under management. However, this low percentage is deceiving because hedge funds are one of the most active investment organizations in the world. The cause of this highly active involvement in the financial markets is derived from the underlying premise of a hedge fund. This premise is that the performance of a hedge fund should capture “alpha,” which results from “active management decisions combined with the skills of their advisers rather than from passively holding some asset class and enjoying the free ride of a risk premium, ‘beta’” (Lhabitant 2006: 25). As a result of the hedge fund’s quest
for alpha through active management in the markets, they have become a dominant player in many of the largest domestic and global financial exchanges, and have significant control over the more esoteric markets, such as distressed securities and convertible bonds.

In addition to the tremendous growth and participation by hedge funds in the domestic and global financial markets, there is a large disparity in distribution of capital among the 3,000+ U.S. hedge funds. As of 2006, the average hedge fund managed $87 million and the median size was $22 million. Underlying this large variation in the assets under management—the difference between the average and median size fund—is the empirical reality that a large number of small hedge funds each manage less than $10 million in assets, and a few large established hedge funds manage more than $1 billion in assets. This disparity in the distribution of capital within the hedge fund market is important because the distribution of capital within the organizational field is one of the factors that affect the governing practices and architecture of this shadow financial market.⁴

SECTION II: THE RISE OF A NEW INSTITUTIONAL STRUCTURE

The credit crisis that began in the summer of 2007, escalated to a financial market crisis in the fall of 2008, and escalated further to a housing market crisis in 2009, brought to the forefront the increasingly interwoven and changing institutional structure of the U.S. financial system. In fact, the successive crises and increasingly complex financial structure blindsided the U.S. central bank and administrative bodies of the federal

⁴ See Chapter Five for a detailed analysis of the distribution of capital within the hedge fund organizational field, and its affects on governing practices and structures.
government in charge of regulating the financial markets and banking system. For example, the financial collapse of Lehman Brothers, Bear Stearns, and American International Group (AIG) forced the Federal Reserve and Securities Exchange Commission (SEC) to reconceptualize how non-bank financial organizations that operate outside their regulatory reach had become central to the economy, and how best to regulate the group of organizations that operate in this new institutional structure called the shadow banking system.\(^5\) The following section conceptualizes the complex and changing institutional structure of the U.S. financial system. In particular, there are three aims: 1) to document the rise of a new market-based institutional structure in the U.S. financial system, and define the differences between this new institution and the traditional bank-based institutional structure; 2) to define the regulatory challenges that arise in the market-based institutional structure, where the existing regulatory and legal environment have little authority; and 3) to empirically document the role of the hedge fund organization in this new market-based institutional structure.

The first thing to observe about the changing institutional structure of the U.S. financial system is that there are “increasingly intimate ties between the banking and capital markets” (Adrian and Song Shin 2009: 2). For example, these increasingly intimate ties can best be viewed by investigating how non-bank financial organizations—such as finance companies, investment banks, money market mutual funds, and hedge funds—have coordinated their behavior within a new institutional framework to create, intermediate, and distribute credit to the majority of the U.S. economic system.

\(^5\) The term market-based institutional structure simply refers to the underlying structure of the shadow banking system. The term shadow banking system refers to the fact that the organizations within the market-based institutional structure function outside of the existing U.S. regulatory regime. The terms market-based institutional structure and shadow banking system are used throughout the dissertation based on this definitional distinction.
Changing Institutional Structure and Financial Intermediation Processes:

The relations between money, credit, and banking are increasingly complex and difficult to separate. By breaking down the constitutive parts of this system, however, an observer is able to conceptualize how the institutional structure and financial intermediation processes that underlie the traditional financial system were built and have fundamentally changed. The traditional banking system has historically been the main supplier of credit and liquidity for production and investment generally, and has become one of the most heavily regulated sectors of the U.S. economy in the post-Great Depression era. Within the traditional banking system, there are three sets of actors: borrowers, savers, and the deposit-based banks. Savers deposit their money into their local banks and entrust these organizations with its management—in return, these savers are given interest on their deposited money. Borrowers take out loans from the traditional deposit-based banks (e.g. commercial banks, federal savings banks, and credit unions) — in return, these borrowers are charged interest on their loan. Banks fund the loans to borrowers through savers’ bank deposits, which are facilitated through the use of third-party liquidity and credit guarantees—e.g. the Federal Reserve’s discount lending window and the Federal Deposit Insurance Corporation (FDIC). The process through which “banks ‘recycle saver’s’ deposits into loans is referred to as credit intermediation” (Pozsar et al. 2010: 8).

The traditional bank-based credit intermediation process involves three less apparent transformations, and each transformation is associated with risks that are managed by individual banks. While it may appear to be a slight digression from my
investigation, a detailed explanation of these three obscure transformations is necessary in order to understand the underlying economic processes that structure the two institutional systems. The first transformation that has historically taken place within a bank is called *credit transformation*. Credit transformation refers to a process wherein banks enhance and structure the quality and types of credit (or debt) issued through their organizations. For example, credit transformation involves the ways banks create and structure different qualities of deposits for their clients, and has traditionally been managed by banks’ financial modeling of their underlying loan portfolio. The second process, *maturity transformation*, refers to the “use of short-term deposits to fund long-term loans, which creates liquidity for the saver but exposes the intermediary to rollover and duration risks” (Pozsar et al. 2010: 8). For example, maturity transformation is exemplified in traditional banks managing their long-term home mortgage loans with short-term deposits from savers. With a combination of certificates of deposits, capital reserves, and the Federal Reserve’s discount window, banks have traditionally managed the maturity transformations. The third process is called *liquidity transformation*, and refers to how banks use liquid instruments to fund the illiquid assets. For example, a pool of liquid deposits (short term deposits) is packaged to fund illiquid home loans on the bank’s balance sheet, and has been traditionally managed by bank managers—with safety features from the Federal Reserve’s discount window and insurance from the FDIC. Empirical research has shown that, historically, the credit intermediation processes that take place entirely through each bank, with regard to direct lending, reduce costs in screening and monitoring borrowers and facilitate a more diverse allocation of capital throughout the financial system (Pozsar et al. 2010).
Since the 1980s, the credit intermediation process within the traditional bank-based institutional system has increasingly been supplanted by a market-based institutional system. In contrast to the traditional banking system, which is centered on banks as the main credit intermediation organization, a market-based institutional system is centered on networks of non-bank financial organizations that coordinate their actions to circumvent the traditional credit intermediation mechanism, and avoid costly banking regulations issued by the federal government. The non-bank financial organizations are linked together in what the Federal Reserve Bank of New York calls “vertically integrated intermediation chains” that supplant the credit intermediation process played in the traditional banking system by creating, securitizing, and distributing credit throughout the economic system. For example, networks of non-bank financial organizations intermediate credit through a “wide range of securitization and secured funding techniques such as asset-backed commercial paper, asset-backed securities, collateralized debt obligations, and repo” (Pozsar et al. 2010: 2). Together, these integrated intermediation chains have been organized into networks to form the underlying structure of the market-based institution called a “shadow banking system.”

This market-based institutional structure manages a credit intermediation process through a vast network of unregulated, non-bank financial organizations and innovative financial techniques—without federal oversight, direct access to central bank liquidity, or public sector credit guarantees. It is important to emphasize that the central difference between the market-based and bank-based institutional structures is that the credit intermediation process itself no longer takes place within one organization—the bank—

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6 See LIST OF TABLES, Table 1: Definition of Financial Market Terms.
but instead is broken down by tasks and completed step-by-step by a network of hierarchically linked non-bank financial organizations. The division of labor within this network of non-bank financial organizations can be broken down into a number of steps (though not every step is necessary to produce a financial product), and each step is typically done by an organization that specializes in the particular step in the division of labor: 1) loan origination; 2) loan warehousing; 3) asset-backed security issuance; 4) asset-backed warehousing; 5) asset-backed CDO issuance; 6) asset-backed security intermediation; and 7) wholesale funding (Pozsar et al. 2010). For example, a standard financial product in this new system might include three organizational players in the network of non-bank financial organizations: finance companies who originate loans, broker-dealers who structure and issue asset-backed securities to the market, and money market mutual funds and hedge funds who purchase these asset-backed securities for their investors. At the institutional level, this new market-based institutional structure acts as the main capital allocation mechanism that originates loans, creates financial instruments, and distributes risks and rewards throughout the larger financial system.

A second important difference between the market-based and bank-based institutional structures responsible for the credit intermediation process is that the savers and depositors into the new market-based structure are large investment funds, which purchase the sophisticated financial instruments that were created by the network of hierarchically linked non-bank financial organizations. For example, the dominant depositors in the U.S. shadow banking system are money market mutual funds, structured investment vehicles, and hedge funds. These funds bring together large pools of savings and capital from wealthy and institutional investors, and purchase the financial
instruments of investment banks and security broker dealers. The purchase of these sophisticated financial instruments by savers increases the overall credit in the financial system and allows for these organizations to leverage their existing capital within the new market-based institutional structure. For example, hedge funds and money market mutual funds purchase a wide variety of financial instruments coming out of the networked intermediation chains and include asset backed securities, collateralized debt obligations (CDOs), and repurchase agreements (repos).

This new market-based institutional system, and the network of interconnected chains of non-bank financial organizations that give it structure, has experienced tremendous growth over the last 30 years. Figure 2 below comes from Pozsar et al. (2010) and compares the total liabilities and assets within the market-based institution called the shadow banking system and traditional bank-based institutional system:

**Figure 2:** Shadow vs. Traditional Bank Liabilities

**Figure 3:** Growth of Assets in Four Sectors

*Source: Flow of Funds Accounts of the United States as of 2010Q1 (FRB) and FRBNY.*
The chart on the left empirically documents the historical changes in both institutional structures since the 1950s and shows the rise of the market-based banking system relative to the traditional bank-based system. As of 2010, the shadow banking system had approximately $16 trillion in total assets versus the traditional banking system, which had approximately $12 trillion in total assets. Additionally, the chart empirically documents the effects of the 2008 credit crisis on the shadow banking system. In particular, prior to the financial crisis of 2008 the shadow banking system had grown to almost $20 trillion, and by the end of the crisis the system had lost approximately 25% of its overall size.

**Figure 3** comes from Adrian and Song Shin (2009) and empirically documents the rapid growth and importance of one of the central organizations in the market-based institutional system called a shadow banking system. In particular, the chart on the right shows that starting in the early 1980s the security broker-dealer sector of the economy began experiencing exponential growth—as measured in log scale—relative to other sectors of the economy. Examples of organizations in the security-broker dealer sector of the economy include Goldman Sachs, Morgan Stanley, Bear Stearns, and UBS. The growth in the security broker-dealers sector represents the increasing role these organizations are playing in the shadow banking system and the credit intermediation processes through the creation of new financial innovations and securitized products.

*Formal Law and Regulation in the Market-Based Institutional Structure:*

Legal changes have allowed for the rapid growth in the security broker-dealers sector and the market-based institutional system. In particular, a number of legal changes since the 1980s have slowly broken down the formal regulations and legal rules enacted
in the Glass-Steagall Act of 1932. The Glass-Steagall Act was created in the aftermath of the Great Depression to separate the traditional deposit-based banking sector from the investment banking and security broker-dealer sectors of the financial markets. The goals of the Glass-Steagall Act were to minimize the possibility of traditional banks speculating in the financial markets with depositors’ savings and limit the potential for another destabilizing financial crisis. A changing political climate during the 1980s and 1990s, however, unleashed large-scale legal and regulatory changes to the banking sector and allowed for a new legal environment to emerge. At the center of this new legal environment is the Gramm-Leach Bliley Act, which provided for the development of the financial holding company (FHC), and the indisputable legal language necessary to allow the traditional banking sector to spread into the shadow banking markets—where the majority of the credit intermediation and creation is taking place. Historically, large banks were legally required to operate according to a deposit-based institutional structure and a hold-to-maturity business logic. However, the new FHC legal changes allowed large deposit-based banks to acquire the firms that were broker-dealers and asset managers who had become central players in the market-based institutional system or shadow banking system (Pozsar et al. 2010). For example, the end result of the legal changes has been large financial banks such as Bank of America buying the security broker-dealer Merrill Lynch.

The regulatory environment that looks over the market-based institutional structure, and the networks of non-bank financial organizations that conduct the credit intermediation process within it, is nebulous and has limited reach. That is, the formal laws and regulations that govern the traditional financial markets have little authority
over the organizations in the hierarchically integrated intermediation network of non-bank financial organizations. Additionally, the federal government has a limited number of tools at its disposal to protect the traditional banking system from the events and crises in the shadow market-based institutional structure. For example, the SEC and Federal Reserve had limited power to respond to the 2008 financial crises because they were operating under outdated securities law and had limited regulatory authority over non-bank organizations in the new market-based institution for credit. In particular, the September 2008 collapse of American International Group (AIG), which was one of the key organizational players in the market-based institution for credit intermediation through the issuance of credit default swaps (defined below), caused a credit crisis that the federal government lacked the necessary regulatory authority and tools to deal with. The traditional legal mechanism for resolving troubled companies—the Federal Bankruptcy Code—was not available to the Federal Reserve because it did not have resolution authority over non-bank insurance conglomerations like AIG.

The central regulatory challenge that has developed within the market-based institution structure, which has been solved to a large extent in the traditional bank-based institutional system, is that the credit intermediation process is done by non-bank financial organizations that fund themselves with short-term funding that is not required to be backed by capital reserves. In other words, the networks of non-bank financial organizations involved in the market-based institutional system—the shadow banking system—are not required by the Federal Reserve to hold 10-20% cash reserves for times of financial crisis. Additionally, the non-bank financial organizations that are funding the short-term needs of the system without capital reserves do not have access to a lender of
last resort—the Federal Reserve’s discount lending window—or a guarantee for savers’ deposits in the system—FDIC deposit insurance.\(^7\) Therefore, the absence of formal law, regulation, and the backing of the federal government create a significant institutional void in the shadow banking system.

SECTION III: ORGANIZATION’S ROLE IN NEW INSTITUTIONAL STRUCTURE

My investigation focuses on a central organizational actor in the larger networks of non-bank financial organizations that are responsible for funding the credit intermediation processes in the U.S. shadow financial system—specifically the hedge fund, which is one of the leading organizational actors in this new market-based institutional structure. Hedge fund organizations play three important systemic roles in the market-based institutional structure: 1) they are one of the leading depositors and funders of the investment banks and network of financial organizations responsible for creating new credit products—hedge funds funnel their investor’s savings to the security broker-dealers and investment banks who structure the credit intermediation process and produce sophisticated financial instruments; 2) they help structure the credit intermediation process itself by guaranteeing a market for esoteric and risky financial instruments; and 3) they ensure a secondary market for the products created and issued by the network of non-bank financial organizations.

The most important role hedge fund organizations play in the new market-based institutional structure is to deposit large pools of capital—the organized savings of institutional investors, high net-worth individuals, endowments, family offices, and

\(^7\) One could argue that the credit default swap (CDSs) market acts as an insurance mechanism that guarantees the financial instruments purchased from shadow banks. However, as the 2008 financial crisis has shown, the organizations that issue the CDSs—i.e. AIG—are ultimately not guaranteed.
pension funds—into the network of non-bank financial organizations involved in the credit intermediation process. In particular, hedge funds purchase sophisticated and creative financial instruments created and structured by the investment banks and security broker-dealers at the center of the market-based institutional structure. For example, they purchase the creative financial instruments referred to as asset-backed securities, collateralized debt obligations, credit default swaps, and repurchase agreements.\footnote{See LIST OF TABLES, Table 1: Definition of Financial Market Terms.} It is important to reiterate that in contrast with the traditional bank-based institutional system, where banks are taking the majority of the risks associated with the credit intermediation processes (by managing savers’ deposits and burrowers’ loans), the market-based institutional system divides up the tasks of the credit intermediation processes and slices the associated risks up into different financial instruments. These financial instruments are then sold off to market actors—who receive an economic return in exchange for depositing capital into the system. For example, in return for hedge funds depositing their capital into the market-based institutional system these organizations receive a rate of return—interest—according to the amount of risk that is associated with the purchased financial instruments.

The following example sheds light on the institutional mechanics that underlie the credit intermediation process and creation of financial instruments, and demonstrates the role played by the hedge fund organization. One of the most widely purchased financial instruments to come out of the market-based institutional structure is called a collateralized debt obligation (CDO). At its core, a CDO is simply an instrument that is tied or linked to an underlying security—i.e. loans or bonds. The CDO divides up the risks associated with the underlying security according to the likelihood and duration of...
payback, and distributes these risks throughout the larger market. For example, a CDO that is tied to a package of home loans—as its underlying security—will be divided up into different risk tranches, and each tranche will be sold off to financial investors according to their desired levels of risk and return. The creation, structure, and distribution of CDOs is all done within the network of non-bank financial organizations, and is built on the premise that the market can distribute risk more efficiently than any one banking organization or local group of banks. Hedge funds are a leading purchaser in the CDO market. In particular, hedge fund organizations are a dominant purchaser of the riskiest tranches of a CDO instrument—which includes subprime mortgages—and are willing to assume the additional risk that the underlying securities will be paid back, for which they are rewarded higher returns.

Empirically Link Organization to Market-Based Institutional Structure:

Two recent investigations into the 2008 financial collapse shed light on the important institutional links between hedge fund organizations and the networks of organizations involved in the market-based institution structure responsible for creating credit and leverage throughout the system. The Federal Reserve performed the first investigation, which examines the balance sheet of the collapsed Lehman Brothers—one of the largest investment banks and securities broker dealer in the U.S. financial markets as of 2007. At the end of the 2007 financial year, Lehman Brothers had $691 billion on its balance sheet (Adrian and Shin 2009: 4). The two largest classes of assets on Lehman Brothers’ balance sheet were: 1) long positions in trading assets and other financial

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9 See LIST OF TABLES, Table 1: Definition of Financial Market Terms.
instruments; and 2) collateralized lending instruments. The latter asset class is important because it represents Lehman Brothers’ considerable role in the hedge fund market as a leading provider of credit and leverage to hedge funds, as a prime broker. The large collateralized lending was placed as an asset on Lehman Brothers’ balance sheet because Lehman played a central role as provider of short-term loans and financial instruments to the hedge fund market—through contracts called reverse repurchase agreements or reverse repos. These financial instruments created lines of credit for hedge funds, and allowed them to increase leverage on their portfolios without using the traditional bank-based mechanisms.

Turning to the liabilities on Lehman Brothers’ balance sheet, there is more empirical evidence linking the hedge fund organization to the new market-based institutional structure, illuminating how hedge funds contributed to increasing the supply of credit coming out of the intermediation and securitization processes. The largest liabilities on Lehman Brothers’ balance sheet were collateralized borrowing and short positions. The reasoning behind Lehman’s large collateralized borrowing and short positions was that they played a central role as a prime brokerage to the hedge fund market by providing these organizations repurchase agreements—financial instruments that are contracts for the sale and future repurchase of a borrowed financial assets. At the institutional level, it is important to point out that these financial contracts or instruments offered by Lehman Brothers’ provided large lines of credit for the hedge fund market, and allowed the organizations within this market to increase leverage without using the traditional bank-based mechanisms—loans, etc.

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10 See LIST OF TABLES, Table 1: Definition of Financial Market Terms.
The second empirical investigation that sheds light onto the direct role of hedge funds in this new market-based institutional structure comes from the 2011 Pulitzer Prize winning research done by Jesse Eisinger and Jake Bernstein (2010). Their investigation was centered on a hedge fund that experienced abnormal returns during the liquidity crises and financial market collapse of 2008. In particular, the focus of their investigation was on a Chicago based hedge fund called Magnetar. Their investigation focused on how Magnetar increased its profits while the financial markets were collapsing and most other market players were in free fall. Specifically, the investigation considered whether the hedge fund’s success was the result of legitimate investment practices or another explanation. The investigation was based on interviews with participants throughout the hedge fund market—competing hedge funds, key service providers, and the organizations responsible for creating the purchased financial instruments—and thousands of documents and trade executions tracking Magnetar’s behavior.

Magnetar’s key investment strategy leading up the financial crisis of 2008 was to invest in the riskiest portions of the mortgage-backed financial instruments called CDOs. As a result of being a leading buyer in the riskiest parts of the CDO market, the hedge fund was able to press the network of organizations—JPMorgan Chase, UBS, Merrill Lynch, and Citigroup—in charge of creating the financial instruments to “include riskier assets in the CDOs that would make the investments more vulnerable to failure” (Propublica 2010). The hedge fund Magnetar solved a large problem for the network of financial organizations that produced the high risk CDOs. That is, leading up to the financial and housing crisis, the market for the lowest tranche of the CDOs—consisting predominantly of subprime mortgages—coming out of the financial intermediation
process were very difficult to sell because of their increased default risk. Thus, a hedge fund that wanted to buy all the riskiest tranches of the financial instruments provided an opportunity the banks could not pass up. Interviews with informants close to the Magnetar deals stated that the hedge fund had become such an important voice in the structure and production of these risky financial instruments that they were often called the CDO’s “sponsor.” In fact, according to Smith (2010), ”Magnetar went into the business of creating subprime CDOs on an unheard of scale. If the world had been spared their cunning, the insanity of 2006-2007 would have been less extreme and the unwinding milder” (Smith 2010).

To understand why Magnetar purchased the riskiest tranches of the CDO market during the lead up to the financial housing crisis of 2008-2009, it is necessary to understand the second part of their investment strategy. While Magnetar was pressing the network of financial organizations involved in the credit intermediation process to create CDOs that were riskier and more vulnerable to failure, the hedge fund had simultaneously purchased another financial instrument—called a credit default swap (CDS)—that would insure their purchased CDOs against failure.¹¹ Magnetar had purchased CDSs from a number of organizations within the market-based institutional structure of the shadow banking system, and these financial instruments guaranteed the full value of the underlying assets in the event that the riskiest tranches of the CDOs went into default. It is important to point out that, while Eisinger and Bernstein’s investigation into the hedge fund Magnetar concluded that the hedge fund’s behavior was legal, for the purposes of this section, their research is evidence that hedge funds are significant players

¹¹ An independent analysis commissioned by ProPublica shows that these deals defaulted faster and at a higher rate compared to other similar CDOs. According to the analysis, 96 percent of the Magnetar deals were in default by the end of 2008, compared with 68 percent for comparable CDOs.
in the market-based institutional structure—as an organization that both buys and helps structure the sophisticated financial instruments produced.

SECTION IV: DISSERTATION OUTLINE

The dissertation is organized into seven chapters. Chapter One introduced the main empirical puzzle of the dissertation, and delineated the boundaries of my research on the governing architecture of a shadow financial market. There were three goals for Chapter One: 1) to define the new organization called a hedge fund, and empirically document its rise; 2) to define the new market-based institutional structure responsible for creating and distributing credit to the broader U.S. economy and society, and empirically document its rise; and 3) to link the hedge fund organization to the market-based institutional structure by documenting its three roles in the institutional structure. Chapter Two outlines the underlying theoretical perspectives and propositions that orient my empirical investigation, and delineates the contributions of my research for sociology and economics. In particular, there are three goals for Chapter Two: 1) to review the theoretical perspectives that have the greatest relevance for my investigation into the governing architecture of the hedge fund market; and 2) to ground the insights and models from these perspectives into grounded theoretical propositions, which take into account how the theoretical insights and models would manifest themselves in the hedge fund market. Chapter Three describes the integrative research design and conceptual framework that organized my theoretically led empirical investigation. In particular, Chapter Three specifies: 1) the five design components that constitute my integrative research design, and describes the reasoning behind why these components were
constructed and how they were implemented in the investigation; and 2) the assumptions, meta-theoretical principles, and explanatory mechanisms of my integrative conceptual framework, and describes how this framework has the ability to organized the alternative theoretical perspectives outline in Chapter Two. Chapter Four is the first empirically based chapter that demonstrates how hedge fund organizations avoid formal law and regulation, and yet are significantly affected by the institutional void that results from the avoidance of law. In particular, Chapter Four focuses on: 1) the legal, organizational, and network structures that operate in the hedge fund market; and 2) how hedge fund organizations avoid the formal laws and regulations issued by the federal government and administered by the Securities Exchange Commission (SEC). Chapter Five is the second empirically grounded investigation, and focuses on how the organizational avoidance of law described in Chapter Four does not lead to the absence of law and regulation in the market. Chapter Six is the third empirically grounded investigation, and focuses on the extra-legal governance structure that emerges as a result of organizations purposefully avoiding formal law and regulation. In particular, the chapter demonstrates why an extra-legal governance structure is constructed and describes the structure’s constitutive parts. For example, the extra-legal governance structure consists of: 1) social institutions operating at the intra-organization level; 2) network forces operating at the inter-organizational level; and 3) economic interests and power relations operating within the organization and among particular network actors. Chapter Seven, the final chapter, defines a number of governance failures that arise between the formal and informal mechanisms that constitute the governing architecture of U.S. hedge fund market, and draws out the implications of the empirical results for theory and public policy.
CHAPTER TWO

Theoretical Perspectives & Advancements

“In building on the institutionalists, organizational ecologists, and network analysts, the next steps in the development of the field are likely to occur through recombinations of aspects of each of these perspectives. Such recombinant sociology might be startling to some, so well entrenched are the three camps in economic sociology. But the field’s potential lies as much in exploiting the friction at the overlap among these perspectives as in accumulating further work along well-grooved lines within each of the traditions.”

David Stark
The Sense of Dissonance

Many of our nation’s leading scholars in the social sciences, law, government, and history are attempting to address the changing institutional structure of the U.S. financial system, and the new regulatory challenges this system faces, by bringing together new theoretical models to guide effective policymaking (Stiglitz 2009; Krugman 2009; Greenstone 2009; Moss 2009; Warren 2009; Carpenter 2009; Balleisen 2009). The discipline of sociology has a significant contribution to make to these theoretical and policy oriented debates. The competitive advantage of sociology is its ability to conceptualize: 1) where economic institutions come from; 2) how economic institutions are ordered and structured; 3) why economic institutions change over time; and 4) the formal and informal mechanisms that govern action.

The contemporary scholarship in economic sociology, organizational sociology, and the sociology of law and organization has been at the forefront in applying sociological insight to the analysis of economic institutions and action. Such scholarship has made significant theoretical advancements in specifying and explicating the multiple
social dimensions of economic markets—from the study of how social networks structure economic action (White 1970, Granovetter 1974, 1985, Burt 1982; Baker 1984) to how the underlying institutional framework shapes organizational behavior and the organizational field (Meyer and Rowan 1977; DiMaggio and Powell 1983; Powell and DiMaggio 1991). There is a general consensus among this contemporary scholarship that economic theory significantly underestimates the role of social structure, culture, and power in economic markets. However, this theoretical consensus quickly breaks down into competing factions because each academic field focuses on particular social dimensions. The end result is that the sociological theory of economic institutions is divided by academic fields that focus on different causal mechanisms, which are often empirically investigated to the detriment of others. For example, a review of the theoretical literature reveals that there are at least three competing models that can be used to answer how economic action is governed in the U.S. hedge fund market: 1) the embedded social relations among individuals and organizations; 2) the social institutions within organizations and the organizational field, and their interaction with the formal legal environment; or 3) the interests of powerful organizations and state actors, which create dominant cultural norms that are forced throughout the broader economic field.

This chapter reviews contemporary scholarship in economics and sociology regarding how the social dimensions of economic institutions affect how institutions are structured and governed. In particular, the chapter proceeds through two sections. **Section I** delineates the intellectual fault lines that separate new institutional economics, organizational sociology, economic sociology, and the sociology of law and organizations. Additionally, this section grounds the concepts and models from each
perspective into middle-range theoretical propositions, which capture how the theoretical insights from each perspective would manifest itself within the case study of the U.S. hedge fund market. These middle-range theoretical propositions orient my empirical investigation, and provide potential explanations to the four research questions central to my project—the theoretical propositions and research questions are returned to at the end of each empirical chapter and in the conclusion of the dissertation. Section II specifies where the existing theories are limited in their descriptive and predicted powers in the U.S. shadow market of hedge funds. Additionally, this section explicitly states how my investigation advances new theoretical insight into how the economic action of shadow financial organizations is ordered and institutionalized through the interaction of formal legal and informal extra-legal structures.

SECTION I: The Governance of Economic Institutions and Action

The central paradox of the dissertation, and the four central research questions targeting this paradox, were informed by previous empirical research in the social sciences. In particular, economic and sociological scholarship has been at the forefront of our theoretical understanding of how institutions and social structures affect economic markets, and why governance structures emerge in organizations and the broader organizational field. In the following section, I delineate the intellectual fault lines that separate the four theoretical perspectives within economics and sociology. Additionally, this section grounds the insights from each theoretical perspective into middle-range theoretical propositions. These propositions are constructed by taking into account what the different theoretical models would predict within the social laboratory of the shadow
hedge fund market—where formal law and regulation are absent. These propositions target the organizational and organizational field level of analysis—i.e. middle-range phenomenon.¹

The Economist’s Explanation of Economic Institutions and Governance

Throughout the 19th and 20th centuries economic theory—both classical and neoclassical—focused on the “formal treatments of rational, or optimizing, economic agents joined together in an abstractly conceived free-market, general equilibrium world” (Morgan 2003: 279; MacKenzie 2006). The theory rests on the assumption that the main actor in the economy is the utility-maximizing individual whose rational, calculating behavior allows markets to self-regulate (Smith [1776] 1994). Specifically, all commodities—labor and capital—are bought and sold in competitive markets where price is based on supply and demand. It is assumed that the price mechanism in these competitive markets is based upon all information available to the individual rational actors. The rational actor has stable preferences and enters the market to maximize his utility preferences given a set of constraints or resources. If there is variation in price, the rational actor will buy the cheaper item, assuming he can achieve the same utility. As a result of these economic forces—price mechanism, perfect information, and the rational individual—equilibrium between supply and demand is achieved in the market and all resources in the larger economic system are utilized in the most efficient way possible.

¹ See Chapter Three for a comprehensive description of why the middle-range (as opposed to the macro or micro levels) was targeted, and how the research was designed and implemented to capture middle-range phenomenon.
Economists argue that the benefits of economic theory come from the promise of optimal use of scarce resources and the capacity to respond to change through a dynamic market system. For example, when there are technological advancements that drive production up and labor use down, the market mechanisms will adjust the price so that goods cost less—more supply at lower wage—if demand is steady, and a new equilibrium will be achieved (Block 1990). If labor is unavailable, its price might go up and even if demand is steady, the point of equilibrium may be higher. The implication of the model of self-regulating markets suggests that the equilibrium price mechanism and the rational individual must not be interfered with if the market is to achieve optimal efficiency. Any involvement by an outside force such as the state, social groups, or organizations of market actors hinders the ability of the pricing mechanism and the rational individual, and thereby leads to market inefficiencies. Following this logic, the role of government regulation and law are generally viewed as exogenous to the market, and negatively influencing the economic functioning of the price mechanism by creating artificially high or low prices, which do not allow for full utilization of labor and capital. Government regulation and law are justified only when there are market failures—including “monopoly, information asymmetries together with strategic behavior, free-rider problems (where a good is available to the public without cost so that there is little incentive for private support), and externalities (or costs incurred by parties not directly involved)” (Edelman and Stryker 2005: 527-28).

#1 New Institutional Economics:
In the mid 20th century, the foundations of neoclassical economic theory began to crack as scholars from within economics—organized in groups as institutional economics, behavioral economics, and game theorists—exposed its inability to explain and predict individual behavior and the rise of simple economic structures such as firms. For example, questions were raised about whether the rational capability of individuals is limited—either by their cognitive abilities or by the individual’s institutional setting. Additionally, if rational utility-maximizing individuals create the greatest efficiency in the economic system, then why do institutions and organizations exist? Are institutions and organizations simply creating inefficiency in the market by hindering exchange between rational individuals and the equilibrating of the price mechanism? In order to address these limitations of economic theory, a new branch of economics developed that would attempt to rescue the theoretical model, and later become one of the dominant approaches in the discipline and the broader social sciences. New institutional economics (NIE) was founded by John Commons (1934) and Ronald Coase (1937, 1960), and later developed through the scholarship of Alfred Chandler (1962, 1977), Oliver Williamson (1975, 1985), Richard Posner (1981), and Douglas North (1990).

NIE was founded on the pragmatic observation that markets are imperfect because: 1) individual rationality is limited and/or bounded; 2) individuals and groups do not have perfect information of all potential options; 3) information costs differ and there is often an imbalance of information between parties in an exchange; and 4) opportunism is prevalent—i.e. adverse selection, moral hazard, and sub goal pursuit—and needs to be monitored and controlled. Given these market imperfections, NIE scholars posit that institutions are designed by rational individuals to correct these market imperfections to
create efficiencies in an imperfect system. For example, according to Oliver Williamson, one of the leading voices in the NIE scholarship, institutions develop to form “governance structures” where there are imperfections in the market. These governance structures can be seen as hierarchical, formal rule-bound relations between actors that are geared to minimize transaction costs, protect against opportunism, and create market efficiencies (Williamson 1985).

To understand how Williamson came to the conclusion that institutions and hierarchical organizations, such as firms, act as economic “governance structures”—which resulted in Williamson sharing the 2009 Nobel Laureate in Economics—it is necessary to return to the historical roots of NIE. Commons (1934) and Coase (1937) shifted the lens of economic theory away from individual choice to the transaction itself as the unit of analysis. According to Commons, “the ultimate unit of activity . . . must contain in itself the three principles of conflict, mutuality, and order. This unit is a transaction” (Commons 1932: 4).  

By focusing on the transaction that brings rational individuals together, economic theory can provide key insight into imperfections in economic transactions and why institutions and organizations emerge and what ends are served. According to Williamson, the transaction itself has the potential to be costly independent of what is exchanged, and is prone to conflict. However, institutions and organizations are produced by rational design to act as governance structures—in an organizational form—to minimize transaction costs and control the threat of opportunism and self-dealing. For example, Williamson’s early work focuses on the problem of conflict within bilateral dependency relations in markets (Williamson 1975). As he states,

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2 Quoted by Williamson (1979, 1998).
“parties that are joined in a condition of bilateral dependency (by reason of asset specificity) and are confronted with contractual incompleteness (by reason of bounds on rationality) must confront strains (by reason of opportunism) when faced with the need to adapt cooperatively” (Williamson 1998: 76). He concludes that rational individuals who must navigate the incompleteness and difficulties that arise in contractual exchange relations develop the organizational structures, or more precisely the governance structures, of firms.

In addition to advancing the concept of organizations as governance structures designed to minimize transaction costs and control the threat of opportunism, NIE scholars made the pragmatic observation that the ownership structure of a firm affects what institutional governance structures are designed in the economy. For example, if the owners of a corporation “participated in each decision in a corporation, not only would large bureaucratic costs be incurred, but many would shirk the task of becoming well informed on the issue to be decided, since the losses associated with unexpectedly bad decisions will be borne in large part by the many other corporate shareholders” (Alchian and Demsetz 1972: 788). According to NIE, the solution to this problem has been to hire managers who run the corporations on a day-to-day basis, and who focus on where best to invest the owners’ capital. This ownership structure, according to NIE scholars, exposes another market imperfection which rational strategies and institutions are designed to solve. The specific problem is referred to as the “principal-agent” problem. The principal-agent problem arises from the observation that firms usually have “principals” who own the capital (investors), and “agents” who are hired to manage the resources of firm in the owners’ absence. NIE points out that the division of ownership
and management gives rise to a potential problem: the principal has no guarantee that the agent will act in the principal’s interest to minimize costs and not seek economic opportunism. In response, NIE scholars argue that two strategies—or institutional governance structures—have emerged within firms to solve the principal-agent problem. First, complex monitoring mechanisms arise such as financial reports and administrative checks on the agents’ use of principal resources. Second, the agent can be given shares in the firm as part of his compensation package—thereby, giving him an ownership stake and aligning his interests with the principals.

A third branch of the NIE perspective that speaks directly to my research on economic governance structures in the absence of formal regulation comes from the work of the political scientist Elinor Ostrom—for which Ostrom shared the 2009 Nobel Laureate in Economics. In general, Ostrom (1990, 1999, 2000) develops an institutional theory of collective action that sets aside conventional economic and political wisdom that either privatization or government control is the best arrangement for governing common property. Ostrom argues that what is needed is an integrative theory that bridges the gap “between the theoretical prediction that self-interested individuals will have extreme difficulty in coordinating collective action and the reality that such cooperative behavior is widespread, although far from inevitable” (Ostrom 2000: 138). Her extensive fieldwork on a wide array of economic research sites—watersheds, irrigation systems, and fishing grounds—led to the empirical finding that, while the different research sites did not develop similar governance architectures, rational individuals develop social norms to maintain clearly defined boundaries and collective institutions to monitor inappropriate self-interested behavior. As Ostrom states “in all
known self-organized resource governance regimes that have survived for multiple
generations, participants invest resources in monitoring and sanctioning the actions of
each other so as to reduce the probability of free riding” (Ostrom 2000: 138; Ostrom
1990).

**Theoretical Propositions: New Institutional Economics**

New institutional economics (NIE) was founded on the pragmatic observation that
markets are imperfect and assumes that: 1) individual rationality is limited and/or
bounded; 2) individuals and groups do not have perfect information of all potential
options; 3) information costs differ and there is often an imbalance of information
between parties in an exchange; and 4) opportunism is prevalent—i.e. adverse selection,
moral hazard, and sub goal pursuit—and needs to be monitored and controlled
( Commons 1934; Coase 1937, 1960; Chandler 1962, 1977; Williamson 1975, 1985, and
North 1990). Given these market imperfections, NIE scholars posit that institutions and
economic governance structures are designed by rational individuals to correct these
market imperfections, and create efficiencies in an imperfect economic system.

**Theoretically Oriented Principle:** in the shadow financial market of hedge funds,
where there is an absence of formal state regulation, hedge funds develop governance
structures that seek to reduce transaction costs and protect against opportunism.
Specifically, the new institutional economics approach is linked to the following
predicted governance mechanisms and variation.
Proposition 1a: Predicted Governance—I expect to find that transactions within hedge funds, and between hedge funds and their service providers, are protected by rationally designed organizational controls and monitoring mechanisms to minimize opportunistic behavior and protect investor’s capital. Specific propositions include: 1) I expect to find a positive association between the assets under management and the increase in rational governance controls and monitoring, which protects the investor’s capital from being misused or misappropriated.

Proposition 1b: Predicted Variation—I expect to find variation among the hedge funds according to differing level of transaction costs and asset size. For example, the more capital managed by a hedge fund, the greater number of controls and monitoring mechanisms.

The Sociologist’s Response to Economic Institutions and Governance

The founders of sociology—Karl Marx & Friedrich Engels ([1867] 1978), Max Weber ([1968] 1978), and Emile Durkheim ([1893] 1984)—were all concerned with how economic markets, and more broadly the institutions of capitalism, were shaped by the forces within societies—including class structure, religious beliefs, group solidarity, and power relations. As the discipline evolved, however, it relinquished the intellectual domain over the study of economic institutions to the discipline of economics—see Swedberg (2004), Smelser and Swedberg (2005), Dobbin (2004), Hall (2007), and Stark (2009) for a more comprehensive description of the events that led to this shift in
sociology. Beginning in the late 1970s, a rebirth in the sociological analysis of economic institutions emerged within the subfields of organizational theory and economic sociology. In particular, a number of intellectual trajectories, each stemming from different classical theoretical roots, converged to develop a new sociological conception of how economic markets are institutionally structured and governed. There are at least four theoretical approaches that have advanced the classical sociological insight that economic institutions are structured and governed by social determinants.

#2 New Institutionalism in Organizational Analysis:

The second theoretical approach that was used to inform my empirical investigation into the governing architecture of the U.S. hedge fund market comes from the new institutionalism in organizational analysis. This group of institutional theorists, building on the work of Berger and Luckmann (1967), stresses the importance of deeply embedded and habitual cultural features in organizational environments (Scott 2004). They argue that cultural forces—repetitions of signs and significations—shape the institutional practices and institutional forms within a field by creating taken-for-granted behavioral scripts, rationalized myths, and cognitive frames (Meyer and Rowan 1977; DiMaggio and Powell 1983; Meyer and Scott 1983; Powell and DiMaggio 1991). One of the central insights from this approach is that organizational structures exhibit many similarities, which cannot be explained by the economically rational logic that underlies

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NIE. They argue that the similar institutional practices and forms found within actually existing markets are driven by strategies to control risk, minimize uncertainty, and communicate legitimacy by appearing to play by the rules in the organizational field.

This sociological study of institutions and organizations takes a very different approach than that of NIE with respect to the origins of institutions, and what affects their organizational form. According to DiMaggio and Powell (1991), there are at least two points of divergence or dividing lines between new institutionalism in economics and organizational sociology. First, the conceptualization and definition of an institution takes on a very different meaning in each field. Specifically, in NIE “institutions are the products of human design, the outcomes of purposive actions by instrumentally oriented individuals,” whereas in organizational sociology “while institutions are certainly the result of human activity, they are not necessarily the products of conscious design” (DiMaggio and Powell 1991: 8). For example, the institutions of the state and firm are not traceable to the rational and conscious efforts of specific individuals or groups. They argue that the complexity of these institutions are not easily decomposable into smaller units of analysis, cannot be described by economic aggregation, and are resilient to the idiosyncratic demands of those who wish to influence them. In fact, DiMaggio and Powell state that “the new institutionalism in organization theory and sociology comprises a rejection of rational-actor models, an interest in institutions as independent variables, a turn toward cognitive and cultural explanations, and an interest in properties of supraindividual units of analysis that cannot be reduced to aggregations or direct consequences of individuals’ attributes or motives” (DiMaggio and Powell 1991: 8).
The second point of divergence between new institutionalism in economics and organizational sociology, which is derived from different definitions of institutions, affects how institutions are empirically analyzed and change over time. That is, depending on how one defines institution, they can be seen as reflecting the preferences of rational individuals and corporate actors (which are easily changed by new rational and efficient designs), or representing the collective outcomes that are something more than the simple sum of individual interests (which are difficult to change over time because of cultural norms and historical path dependency). NIE scholars argue that the institutions and organizations that are created in the markets are done so by rational design and attempt to solve the problems inherent in contractual relations and market exchange. This leads to institutions and organizations that are the most efficient within the market in which they operate. Sociological neoinstitutionalists, however, question whether this is the case in actually existing markets. Their empirical research calls into question whether: 1) individuals actually choose freely among institutions, customs, social norms, and legal procedures; 2) individual choice and preference can properly be understood outside of the cultural and historical frameworks in which they are embedded; and 3) institutions adapt to individual interests and respond to exogenous change quickly, or evolve slowly in ways that are not typically anticipated (DiMaggio and Powell 1991).

During the 1990s, new models were advanced by neoinstitutional theorists as a result of careful and systematic investigations that studied how organizations are affected by changes in the formal legal environment (Edelman 1990, 1992; Edelman et al. 1999; Edelman and Suchman 1997; Suchman 1994; Dobbin and Sutton 1998; Kelly and Dobbin 1999). The empirical findings from this group of neoinstitutionalist legal scholars
demonstrated that the legal environment, and changes within it, plays a significant role in shaping the governing structures that are adopted and evolve in organizations, and the broader organizational field. Central to their empirical findings the notion that “the ambiguity of law on-the-books is not an occasional aberration but rather a political fact of life, the practical meaning of any given law-in-action can only emerge through a highly interactive process of social construction” (Edelman and Suchman 1997: 502). This highly interactive process of social construction relies on a sense-making exercise. Edelman and Suchman state that the “sense-making exercise is likely to involve not only the official agents of the legal system (regulators, judges, litigators, and the like), but also the members of the local organizational field (including individual firms, professional groups, trade associations, media observers, and legal advisors)” (Edelman and Suchman 1997: 502). As a result of the ambiguity of law and the sense-making exercise by different organizations, the regulatory environment is best understood as simultaneously determining organizational behavior and being determined by organizational behavior. A number of empirical studies have provided evidence for this multi-directional causality between the law and organizations in the economy (Suchman 1994; Suchman and Cahill 1996; Edelman 1990, 1992, 1996).

Scholars within the sociology of law and organizations argue that law’s relation to the economy should not be seen as a top down process enacted from the state but as a interconnected process in which law shapes and is shaped by the economic system. Sociologists of law and organizations emphasize “a much broader idea of law, including not just codified rules but also social behaviors that mobilize and enact law and ritual and the symbolic (or meaning-making) elements of law…in addition, the ambiguous
boundaries between formal rules and social norms, the role of social context in fixing law’s form and impact, and the interplay between legal language and broader cultural language and ways of thinking” (Edelman and Stryker 2005: 529-30). Therefore, the sociology of law and organizations brings a more comprehensive understanding of law as both the formal rules enacted by the state from above, as seen by scholars in economic sociology, and the informal ideas, norms, and social context of law.

Expanding on the insights from the sociology of law and organizations, Edelman and Stryker (2005) argue that the broader understanding of law should be combined with an understanding of the economy, which can be called the sociology of law and the economy. The sociology of law and the economy would conduct “a sociological analysis of the role law plays in the economy and how it is connected to politics and culture as an interconnected causal dynamic” (Edelman and Stryker 2005: 527). In order to capture the social foundations and processes that take place between law and the economic system more fully, it is suggested that law be thought of as having both a passive and an active component. When the state defines impermissible behavior for firms in the market, this should be thought of as passive construction, insofar as laws are received from above. Moreover, law should be thought of as active insofar as the social interaction of individuals and firms in the market give law meaning.

Theoretical Propositions: New Institutionalism in Organizational Analysis

Organizational theorists have shown that cultural forces affect the institutional practices and institutional form of organizations, and structure the organizational field by creating taken-for-granted behavioral scripts (Meyer and Rowan 1977; DiMaggio and Powell
1983; Meyer and Scott 1983; Powell and DiMaggio 1991). Similarly, contemporary neoinstitutional legal scholars argue that organizations are highly responsive to their legal environments, and that the interactions of organizations and the legal environment play an essential role in shaping the governing structure that evolves (Edelman 1990, 1992; Edelman et al. 1999; Edelman and Suchman 1997; Suchman 1993; Dobbin and Sutton 1998; Kelly and Dobbin 1999; Silbey 2009; Silbey, Huising, and Coslovsky 2008).

*Theoretically Oriented Principle*—in the shadow financial market of hedge funds, where there is a limited role of formal law and state regulation, hedge funds construct governance mechanisms based on the taken-for-granted behavioral scripts of organizations in the field and the formal legal environment that operates outside the field. Specifically, the neoinstitutionalist approach is linked to the following predicted governance mechanisms and variation.

*Proposition 2a: Predicted Governance*—I expect to find the hedge funds’ management implementing governance controls within the organization that comport with the taken-for-granted practices of the hedge fund industry as it currently operates, and mimic the legal environment in the traditional securities markets. Specific propositions include: 1) I expect to find an isomorphism among the organizational field with respect to the legitimate governance practices; and 2) I expect to find the legitimate governance practices of hedge funds being directly shaped by those found within the traditionally regulated financial sector—mutual funds, etc.
**Proposition 2b: Predicted Variation**—the hedge fund's governance mechanisms vary based on coercive, normative, mimetic, and competitive isomorphism. For example, the greater reliance a hedge fund has on their prime broker—for their leverage and financing needs—the more likely that fund will be obliged to adopt governance policies or structures in return.

#3 The Embeddedness Approach in Economic Sociology:

The dominant perspective within economic sociology over the last 20 years has been the embeddedness approach. The embeddedness approach focuses directly on how social structure affects economic markets, and the economic action of individuals and firms. The embeddedness approach, building on the theoretical work of Polanyi (1944), stresses the idea that markets are embedded in social structures and can be investigated through network ties and social relations. For example, the empirical scholarship has demonstrated that economic behavior is affected and governed by the ways in which individuals and organizations are embedded in social relations, and are dependent upon social networks (White 1981, 2002; Granovetter 1973, 1985; Mizruchi 1982; Baker 1984; Burt 1992; Uzzi 1997). The analysis of social relations and networks ties has shown that personal connections directly affect economic action by establishing trust, minimizing malfeasance, channeling information, and securing transactions. The most influential article of the embeddedness approach is “Economic Action and Social Structure: The Problem of Embeddedness” (Granovetter 1985). In this article, Granovetter puts forth a direct response Williamson’s—a leading voice in new institutional economics—argument
that institutions and organizations are rationally designed governance structures that correct market imperfections, and are the most efficient institutional outcome. Granovetter’s counter argument, which was central to economic sociology’s rebirth in the 1980s, was that the institutions that arise are dependent on the interplay between networks of organizations and market structures. According to Portes, Granovetter’s research showed that “social interactions within markets and organizations can modify, condition, and often alter their organizational institutional logic by creating networks, reciprocity expectations, and emergent norms not envisioned originally” (Portes 2010: 69).

The central insights of the embeddedness approach—that social relations and network ties between organizations shape economic behavior—have been advanced by a number of empirical projects. One of the best examples comes from the research of Brian Uzzi’s article titled "The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: The Network Effect" (1996). Uzzi’s research empirically grounds the concept of social embeddedness, and shows how the degree of network embeddedness affects the economic action of firms and their market performance. Uzzi emphasizes that in order to advance the concept of embeddedness beyond the level of a programmatic statement, his research design develops “a scheme based on existing theory and original ethnographic analysis that describes the features, functions, and sources of embeddedness,” and statistically tests the plausibility of this scheme (Uzzi 1996: 675). The underlying thesis of his work is that the structure and quality of social ties among firms shape economic action by creating unique opportunities and access to opportunities. Thus, Uzzi argues that the type of network in which an organization is embedded and the
position of that organization defines the potential economic opportunity structure. The results from the ethnographic and statistical analysis support the plausibility of the embeddedness argument and suggest that “apparel firms organized in networks have a higher survival chance than do firms which maintain arm’s-length market relationships” (Uzzi 1996: 674). The theoretical concepts and empirical findings from the embeddedness approach demonstrate that the type of network in which an organization is embedded, and the position of that organization, affects its economic behavior.

More recent embeddedness scholarship attempts to investigate the important role of law in shaping organizational networks in markets. Of particular relevance for my investigation is Granovetter’s work on business groups in the United States (Granovetter 2005). Granovetter finds that business groups “are sets of legally separate firms bound together in persistent formal and/or informal ways” (Granovetter 2005). These business groups provide insight into the scope of relationships, how larger social units engage in economic behavior, and how law affects these organizational structures. Granovetter’s preliminary analysis focuses on why firms adopt the organizational form of the business group. His research suggests that corporate law “prescribes the bounds or permissible collaboration and regulate ownership concentration” and anti-trust legislation constitutes a serious of obstacles to the formation of business groups in the United States (Granovetter 2005: 444).

*Theoretical Propositions: The Embeddedness Approach in Economic Sociology*

Scholars from the embeddedness approach in economic sociology have empirically demonstrated that firm behavior is affected and governed by the ways in which these
organizations are “embedded” in social relations, and are dependent on their social networks to function in markets (White 1981, 2002; Baker 1984; Granovetter 1985; Burt 1992; Uzzi 1997).

*Theoretically Oriented Principles*—in the shadow financial market of hedge funds, where there is a limited role of formal law and state regulation, hedge funds are governed by their relationships with service providers—prime broker, legal counsel, auditor, and administrator—and their relative position in the network structure of the market. Specifically, the social embeddedness approach is linked to the following predicted governance mechanisms and variation.

*Proposition 3a: Predicted Governance*—I expect to find the network relations among hedge funds and their service providers create reciprocity expectations, and emergent norms, that govern market behavior. Specific propositions include: 1) I expect to find a positive association between network interaction—among hedge funds and their network partners—and informal constrains and expectations; and 2) I expect to find a positive association between network ties and the need to maintain social reputation in the market—which limits the likelihood of malfeasance.

*Proposition 3b: Predicted Variation*—I expect to find a positive relationship between network density and network constraints. For example, those hedge funds with a greater number of network connections—points of social control—are more likely to be constrained by their market relationships.
The fourth theoretical approach that was used to inform my empirical investigation into the governing architecture of the U.S. hedge fund market was developed by a group of economic sociologists focused on reconciling and integrating the theoretical insights of new institutional economics, new institutionalism in organizational analysis, and the embeddedness approach in economic sociology. The integrated theoretical insights are encompassed in the new institutionalism in economic sociology. The new institutionalism in economic sociology argues that to properly understand how markets are structured, and how economic action of individuals and organizations takes place within these markets, a model must be developed that integrates: 1) how the institutional environment—formal rules and regulations issued by the state—structure the incentives and disincentives the market; 2) how institutions interact with the organizational field to shape social networks and the norms that direct the economic action organizations and individuals, and 3) how the interaction of institutions and networks allows particular strategic interests to be realized (Fligstein 1990, 2001; Brinton and Nee 1988; Nee 1998, 2005; Swedberg 1998; Nee and Swedberg 2005). This approach moves beyond the earlier embeddedness perspective in economic sociology because it specifies both the proximate causes—the embedded network ties—and distal causes—larger institutional environment—that structure markets and economic action. In particular, it captures the full range of social mechanisms that determine “the relationship between the informal social organization of close-knit groups and the formal rules of
institutional structures monitored and enforced by organizations and states” (Nee 2005: 55).

To understand this complex theoretical approach, it is necessary to explicate the causal model proposed by the new institutionalism in economic sociology. At the center of this approach is a multilevel causal model that focuses on both distal and proximate mechanisms. In the figure below, the multilevel causal model—adapted from Nee (2005)—is schematically represented.

**FIGURE 4: Model for the New Institutionalism in Economic Sociology**

The multilevel causal model can be broken down into two interrelated parts—the distal and proximate causal mechanisms operating in both directions. The first level of the causal model is represented in the multi-directional arrows between the upper box
According to Nee, “the institutional environment—the formal rules monitored and enforced by the state that govern property rights, markets, and firms—imposes constraints on firms through market mechanisms and state regulation, thus shaping the incentives structure” (Nee 2005: 56). The institutional mechanisms that operate at this level of the model are distal; insofar as they are the deeper causes that shape economic action by establishing the conditions under which the proximate network mechanisms—at the micro- and meso- levels of individuals and their interpersonal ties—operate. The second level of the causal model is represented in the multi-directional arrows between the lower box (labeled Social Group/Individual) and the middle box (labeled Production Market/Organizational Field). This second level represents the proximate causal mechanism of the relations among the individuals and social groups responsible for economic action and monitoring behavior. It is important to emphasize that this causal model works within a competitive market, and thereby operates according to an interest-based logic. For example, the economic action of individuals and groups revolves around securing their interests within the context of the institutional environment. As a result, the two interrelated parts of the multilevel causal model specify the manner in which “the norms of close-knit groups interact with formal rules in the realization of interests” (Nee 2005: 56).

The multilevel model proposed by the new institutionalism in economic sociology has been developed and advanced through a number of empirical investigations (Evans and Rauch 1999; Nee and Lian 1994; White 2001; Fligstein 2001). In *The Architecture of Markets* (Fligstein 2001), Fligstein developed a model to explain how competition in
economic markets takes place. In particular, his model showed how markets are socially constructed around social spaces called fields, which are institutionally ordered by culture, the power of firms, and the broader legal environment established by the state (Fligstein 2001). The proximate causes in Fligstein’s model are located within the social action of firms, and “that social action takes places in arenas, what may be called fields, domains, sectors or organized social spaces” (Fligstein 2001; 15). Within these organized fields firms are in constant competition to create a system of domination to ensure market stability, control, and the reproduction of their dominant position. To create a system of domination within the field, which ensures stability and secures the interests of the firm, actors produce a set of frames or local culture that defines the social relations among the actors in the field. At the broader institutional environment, Fligstein argues that the state operates in two important ways. First, the state “facilitate[s] the opening of, and rule-making in, markets by negotiating rules affecting market access and processes” (Fligstein 2004: 195). Second, the state protects its internal markets and is concerned about the rules that may undermine its sovereignty and authority. Together, the social action of powerful firms and state actors shape how markets are structured, and these market structures reflect the unique political and institutional construction of nations.

Theoretical Propositions: New Institutionalism in Economic Sociology

Theoretically Oriented Principles—in the shadow financial market of hedge funds, where there is a limited role of formal law and state regulation, governance mechanisms are derived from the interaction of the institutions and social relations within the hedge fund field—both within the organizations and among organizational networks. Specifically, the new institutionalism in economic sociology approach is linked to the following predicted governance mechanisms and variation.

Proposition 4a: Predicted Governance—I expect to find the governance mechanisms developed by hedge funds to vary according to the interests found within the organizations. Additionally, dominant hedge funds will force their governance practice on the broader market—to ensure their dominance position and make it difficult for new hedge funds to enter the field. Specific propositions include: 1) I expect to find a positive association between the interests of institutional investors and more sophisticated and complex governance mechanisms; and 2) I expect to find dominant hedge funds more active in trying to force their governance practices on the broader market—through lobbying efforts at the state level—to minimize competition and ensure market stability.

Proposition 4b: Predicted Variation—hedge fund governance varies according to the ability of dominant groups within the organization, and within the organizational field, to establish a set of governing practices that protects their interests and reproduces their position.
SECTION II: Theoretical Limitations and Advancements

New institutional economics (NIE) set out to address the limitations of classical economic theory, and has advanced new theoretical conceptions of economic institutions and organizational governance structures. In particular, the NIE scholarship argues that the institutional environment and governance structures that are developed within economic markets are rationally designed—to control cost, minimizing opportunism, and solve the free rider problem—and create market efficiencies. The limitation of the NIE approach for my investigation into the governing architecture of the hedge fund market is that it does not adequately conceptualize how informal institutions and social structures affect the governance of formally unregulated organizations. Moreover, the theoretical approach does not explain how the formal institutional environment interrelates with the informal governance practices of the organizational field.

The theoretical limitations of the NIE perspective have been explicitly acknowledged by a number of leading scholars in the field. For example, in his presidential speech to the American Economic Association (AEA), Williamson states that the NIE approach needs to further elaborate the “background conditions” that give rise to institutions and “the condition of societal embeddedness” (Williamson 1998: 75). Similarly, the limitations of the NIE approach have forced North (1991) to wonder “what is it about informal constraints that gives them such a pervasive influence upon the long-run character of economies” (North 1991:111; Williamson 2000).

To address the limitation of the NIE perspective, my investigation relies heavily on the theoretical insights and models developed by new intuitionalism in organizational
analysis, the embeddedness approach in economic sociology, and the new institutionalism in economic sociology. Together, these three sociological fields have been successful in specifying and explicating the multiple social mechanisms that structure economic markets, and the formal and informal constrains that structure economic action. For example, the sociological analysis of the economy has empirically shown that an organization’s social relations and network structure affect their economic practices and performance, and that the institutional environment and cultural beliefs affect organizational practices—both within organizations and among the organizational field.

There remain, however, a number of limitations with these theoretical perspectives—both in their internal conceptualization and application to my empirical case study. First, new institutionalism in organizational analysis and the embeddedness approach in economic sociology are limited in their explanatory models because they focus on one particular causal mechanism at the expense of others. For example, neoinstitutionalists have developed rich explanatory models on the sources and consequences of institutions—covering everything from where institutions originate and why institutions are adopted (DiMaggio and Powell 1983), to how institutions shape the formal legal environment and compliance procedures in organizations (Dobbin 1994, 2010; Dobbin and Sutton 1997; Edelman 1990; Edelman and Suchman 1997). However, neoinstitutionalists have been critiqued for their neglect of power and social structure as sources of institutional change (Fligstein 2001, Bourdieu 2005). Similarly, the embeddedness scholarship has developed rich explanatory models on how social network structure affects the behavior of individuals and organizations in economic markets.
(Granovetter 1974, 1985; Burt 1992; Uzzi 1997). However, critiques have been made within the field that the approach ignores the role of institutions in shaping where networks come from and the role of interests is shaping economic action (Fligstein 2001, Nee 2005). As a result of focusing on one set of causal mechanisms at the expense of the other, these two theoretical frameworks present a limited understanding of the multiple social forces at play in economic markets. For example, each theoretical model has difficulty explaining how the institutional environment, the informal practices of organizations, and the power of particular groups interact—and are interrelate—to affect the economic action of hedge fund organizations.

The second limitation in the existing theoretical models is the lack of specificity in the new institutionalism in economic sociology, and its inability to account for how economic action is governed in the new institutional structure of capitalism—the shadow financial system. In particular, the multilevel causal model central to this approach is built on the idea that the institutional environment imposes constraints on organizations through market mechanisms and state regulation, and thus shapes the incentive structure of the organizational field. This does not account for the changing empirical reality that many organizations within the economic system are attempting to purposefully avoid the formal institutional environment, and locate themselves outside of the formal rules and regulations issued by the state. My investigation focuses on this lack of theoretical specificity and the changing institutional structure, and specifies how the multilevel causal model of new institutionalism in economic sociology is operating within the context of a shadow financial market. In particular, my investigation advances the new institutionalism in economic sociology model by explaining how the changing
institutional structure of the financial markets—the market-based institutional structure—affects the institutional environment, social networks, and organizational norms that structure economic action. My research advances the multilevel model proposed by Nee (2005) by specifying and explicating how distal causal mechanism—the formal institutional environment—plays a different role than that found in traditionally regulated economic markets. Moreover, my research empirically links the purposeful avoidance of the formal laws and regulations in the institutional environment to a newly constructed, ambiguously regulated, social space where organizations construct varying institutions and social structures to govern economic action.
CHAPTER THREE

Integrative Research Design & Conceptual Framework

“Economic sociology is not likely to move forward as a field if it continues to insist on ritualistic invocation of its founding assumption accompanied by a growing but disparate set of case studies. The latter support the tenability of the assumption, but do not extend its range, reducing its heuristic power through repetition.”

Alejandro Portes
Economic Sociology: A Systematic Inquiry

The investigation into the governing architecture of the shadow financial market of U.S. hedge funds was organized around an integrative research design and conceptual framework. The integrative research design organizes the multiple components of the empirical investigation, and orients these components towards the targeted research questions and theoretical propositions central to my investigation. In this chapter each research design component is explained in detail—describing the logic and scientific reasoning underlying the steps taken in the investigation. The integrative framework organizes the theoretical perspectives and social mechanisms outlined in Chapter 2, which allows my investigation to conceptualize how the hedge fund market’s multilevel governance processes and mechanisms order and institutionalize the formally unregulated social space. In particular, this integrative conceptual framework explicates the assumptions, orienting principles, and social mechanisms that underlie the theoretical perspectives, and organizes them into a conceptual model of governance. Together, the integrative research design and conceptual framework allow my investigation to empirically investigate multiple dimensions of the governing architecture of the shadow
financial market of hedge funds, and to conceptualize how multiple governance mechanisms interact within the empirical research site.

The construction of the integrative research design and conceptual framework were not developed in the abstract. To the contrary, the integrative design and framework were purposefully developed to respond to a number of well-documented limitations of sociological analysis of economic markets, which have been identified by several leading scholars in economic and organizational sociology (Dobbin 2004; Smelser and Swedberg 2005; Nee 2005; Stark 2009; Portes 2010). For example, the limitations of the sociological analysis of economics—economic sociology or socio-economics—are: 1) its overreliance on the concept of “embeddedness”; 2) its neglect of the role of interests and law in structuring practices of competitive markets; and 3) its lack of a precise understanding of the organizing principles that bring the field together. As a result of these limitations, the field has a tendency to over and under estimate the actual social forces at play in the economy, and to mix the theoretical principles, explanatory mechanisms, and sites of inquiry within the same research project. According to Portes, the pragmatic solution to these limitations starts with an understanding of “the key underlying principles and assumptions that guide the field, and then examining a series of midlevel explanatory concepts that can be applicable in a variety of concrete situations” (Portes 2010: 2). It is to this pragmatic end that my research was designed and directed.

In an effort to avoid the “ritualistic invocation” of the embeddedness framework, and the mixing of principles and mechanisms within my investigation, I organize my investigation around the following logic. First, approach the governing architecture of a shadow financial market from a sociological approach based on the focused application
of midrange theoretical concepts from economic sociology, organizational sociology, and the sociology of law and organizations. Second, refine the midrange theoretical concepts from the literature on the empirical realities of the shadow financial market of hedge funds. In particular, use the empirical realities in the hedge fund market to sharpen my theoretical understanding of how: 1) formal law and regulation passively structure the governance practices of shadow financial organizations; 2) informal institutions and webs of sociability actively structure the governance practices of the organizational field; and 3) governing architecture is constructed by both formal and informal mechanisms within the new institutional structure. Finally, develop a number of midrange concepts that advance the existing theoretical concepts, which can then be used to build a more accurate conceptual model of the interaction of the legal and extra-legal governance structures that form the governing architecture of a shadow financial market.

My investigation uses a multi-stage research design to systematically analyze the institutional, structural, and political forces that affect how governance is constructed within the hedge fund market. Specifically, I conduct qualitative analysis and review the relevant legal doctrines—which are supplemented by social network analysis—to investigate the affects of organizational culture, institutions, networks, and power relations on the governance of hedge fund organizations. This research design was purposefully developed to allow my investigation to empirically capture a larger spectrum of governance mechanisms in the case study. The investigation uses primarily qualitative analysis, supplemented by quantitative analysis. The qualitative data comes from three years of field research with expert informants in the U.S. hedge fund market. Specifically, interviews were conducted with 40 general partners, managing directors,
and managers in both hedge funds and their economic network—the network includes law firms, auditors, brokers, and fund administrators. The quantitative data comes from a nationally-representative hedge fund database that provides important attribute data—economic performance, assets under management, strategy, number of employees, etc.—and relational network data for 3,500+ hedge funds operating in the U.S.

This chapter is presented in two sections. Section I describes in detail the logic and reasoning that underlies my research design. In particular, I define: 1) why and how qualitative research was used in my investigation of the governing architecture of a shadow financial market; 2) why and how quantitative research was used to compliment and enhance the qualitative investigation; and 3) how data analysis was conducted, what difficulties were experienced in the field, and how these difficulties were solved. This section is organized around five research design components—each component summarizes the reasoning behind the specific steps taken to implement this research design in the field. Section II explains the integrative conceptual framework that was developed to organize the different theoretical assumptions and orienting principles that underlie the sociological analysis of the economy. This integrative conceptual framework is built on the premise that the theoretical perspectives outlined in Chapter 2 need not be viewed as competing, but rather as particular lenses through which to conceptualize the multiple mechanisms that structure markets and govern economic action.

SECTION I: AN INTEGRATIVE RESEARCH DESIGN

The investigation into the governing architecture of a shadow financial market was organized around a research design that combines the benefits of qualitative and
quantitative approaches, while attempting to minimize the limitations of each approach (Creswell 2003, 2007). There are numerous benefits gained by combining qualitative and quantitative research. The qualitative data and analysis provided insight into the processes and mechanisms that affect how hedge fund organizations, and the organizational field, construct governance within the confines of a particularly ambiguous legal environment and regulatory space. For example, qualitative interviews allowed insight into how formal laws issued by the U.S. government, and administered by the SEC, filter through particular nodes of the hedge fund’s network to influence and constrain governance practices within the hedge fund. The quantitative data and analysis provided insight into the overarching structure of the hedge fund market, and allowed my investigation to capture a well-balanced and representative final sample of the larger organizational field. For example, social network analysis was used to identify central and peripheral actors in the market, which were then sampled in the latter stage of my investigation—to ensure that first round qualitative interviews accurately captured the most salient governance practices and structures in the market.

The project consisted primarily of a two-stage qualitative investigation, focused on the analysis of 40 expert informant interviews in the hedge fund market. To ensure a well-balance and representative sample, however, the second stage of the qualitative investigation was informed by a mid-stage robustness check using a quantitative data set. This mid-stage quantitative correction was used to ensure a representative sample—based on network structure and organizational attributes—and to minimize the difficulties experienced with the first stage qualitative investigation. The analytical procedures used in this multi-stage research design were primarily qualitative analysis and a review of
relevant legal doctrines (statutes and regulations), and supplemented by social network analysis.

The investigation was organized around five research design components. These components were purposefully developed to comport with the dominant social scientific research methods, which ensure empirically accurate findings and minimize the potential for biased, unrepresentative answers to the investigation’s key research questions. The five components of the research design are the following: 1) level and unit of analysis; 2) multiple stages of investigation; 3) multiple methods; 4) sampling procedure and sample characteristics; and 5) interview questionnaire and methods.

**Research Design Component #1: Unit of Analysis**

The investigation into the governing architecture of the U.S. hedge fund market was conducted at the organizational level. The primary focus was on the governance processes and mechanisms within hedge funds, and the secondary focus was on the governance processes and mechanisms among the hedge fund’s network. Thus, the unit of analysis for my investigation was both the organization—hedge fund—and multi-organizational structure—hedge fund’s social network. The specific details of this organizational level investigation are the following. The hedge fund organization was empirically investigated through a total of 30 semi-structured interviews with the senior management in hedge funds—managers, general partners, managing directors, traders, and portfolio managers. The multi-organizational structure was empirically investigated through a total of 10 semi-structured interviews with senior management at hedge fund network partners—legal counsel, auditors, and fund administrators.
The reasoning behind this organizational and multi-organizational design was that it allowed the investigation to benefit from triangulating the empirical insights from both sets of organizations. For example, by asking both sets of organizations similar questions about the governance processes and mechanisms that operate in the hedge fund market, my investigation was able to observe multiple perspectives of governance. Additionally, the triangulation design could discover potentially conflicting views of governance between the two sets of organizations, which would then be analyzed in greater detail. Specifically, the empirical insights on governance from the 30 hedge fund interviews could be juxtaposed against what was being said about governance in the 10 hedge fund network interviews. The two interrelated parts of the organizational analysis enabled my investigation to capture empirical insights from both the intra and inter-organizational dimensions, thereby limiting the influence of one organization to overly determine the conceptual model of governance that resulted from my investigation.

**Research Design Component #2: Multi-Stage Design**

The first stage of the investigation consisted of 20 qualitative interviews with hedge fund organizations, and the hedge fund network partners—legal counsel, brokers, administrators, and auditors. As indicated in Design Component #1, the 20 interviews were primarily targeted at the hedge fund organization, and secondarily at the multi-organizational structure of the hedge fund network.
In total, STAGE 1 consisted of 15 interviews completed in hedge fund organizations, and 5 interviews with hedge fund network partners. The STAGE 1 qualitative investigation was followed by a MID-STAGE sample correction using a quantitative analytical procedure. The MID-STAGE sample correction ensured that the insights from STAGE 1 were empirically representative of the overall hedge fund market. For example, the mid-stage correction used a quantitative database on the hedge fund market to identify organizations in differing structural positions and with differing attributes—such as size, strategy, geographic location, etc. Social network analysis was used to identify organizations in different structural locations. Specifically, network analysis mapped out the larger structure of the U.S. hedge fund market, and created measures of centrality. The measures of centrality from the MID-STAGE investigation were then integrated into the STAGE 2 qualitative investigation. The STAGE 2 qualitative investigation sampled an additional 20 organizations in under or unrepresented organizations from STAGE 1—based on structural variation and differing organizational attributes. The STAGE 2 qualitative investigation expanded the STAGE 1 insights and empirical findings, thus
allowing for the exposed governance processes and mechanisms to be universally applicable throughout the market.

The reasoning and logic that underlies this multi-stage research design are described in detail in the section below. In particular, this section summarizes the multi-stage design component, the difficulties experienced throughout the investigation, and how these difficulties were solved or mitigated. It is important to acknowledge, however, that the description of how this multi-stage research design was implemented—the particular data methods and analytical procedures used, the sampling strategy and final sample characteristics, and the interview tools and procedures—is presented in the corresponding Research Design Component #3, #4, and #5 sections below.

STAGE 1: Qualitative Investigation

The STAGE 1 qualitative investigation began with data collection in May 2009 and was concluded in October 2009. The first stage of the qualitative investigation focused on five actors in the hedge fund market: 1) hedge funds; 2) brokers; 3) legal counsel; 4) auditors; and 5) administrators. These five organizations were chosen because they are the key actors in the hedge fund market, and collectively make up the important organizations responsible for creating and reproducing the governing institutions and structures of the market. Additionally, these organizations were in the best structural position to understand how governing institutions and structures emerged through their everyday practices and experiences. The observations and insights from individuals in these organizations provided the foundation of my investigation by demonstrating how
formal law and regulation are experienced, and how informal governance practices emerged throughout the organizational field.

The 20 semi-structured interviews with senior management in hedge funds and their network partners were attained through a sampling strategy that used existing sources and colleagues throughout the hedge fund market. This strategy was extended through snowball sampling—wherein the previously interviewed subjects suggest future contacts from among their acquaintances. The general characteristics for the first set of interviewees and organizations were limited to small-to-mid size funds with less than $1 billion under management, and limited to three geographical locations: San Francisco, Boston, and Los Angeles—the 3rd, 4th, and 9th most popular cities for hedge funds. However, as the snowball sampling technique was implemented in STAGE 1, my investigation was able to branch out to sample larger funds with greater than $1 billion under management, and located in New York and Greenwich—the 1st and 2nd most popular cities for hedge funds.

Difficulties and Designed Solutions:

The STAGE 1 qualitative investigation exposed a potential difficulty with my project that had to be solved, or at least mitigated, in the overall research design. Specifically, the representativeness of the empirical observations from the 20 hedge fund market organizations needed to be placed within a larger context, and verified as to their representativeness and universal applicability. For example, the non-random sample selection does not account for variations among organizations throughout the market with respect to structural position, risk, size, and geographic location, etc. Thus, my
investigation had minimal confidence that the empirical insights from STAGE 1 were based on a broad sample of organizations, and were empirically representative of the governance processes and mechanisms throughout the market. The research design solution was to use a quantitative dataset and procedure to map out the larger contours of the hedge fund market. This quantitative component of the investigation was developed to learn about the larger characteristics of the hedge fund market, and specifically to inform the sample selection in the final round of qualitative interviews—to capture organizations in the hedge fund market that were either under or unrepresented in the first stage investigation. This mid-stage quantitative correction ensured that my observations were empirically representative of the larger organizational field with minimal bias introduced by the qualitative research design and researcher.

MID-STAGE: Quantitative Correction

The key components of this MID-STAGE quantitative correction were a hedge fund dataset and the social network analytical procedure—the data and analytical procedure are described in detail in the Research Design Component #3 section below. The quantitative data used to visualize and capture the structurally important organizations in the U.S. hedge fund market came from the HFN database produced by HedgeFund.net. The HFN database is a comprehensive global dataset containing a full range of attribute and relational information on U.S. hedge funds, funds of hedge funds, and managed futures funds.
The HFN database was investigated using social network analysis to visualize the macro network structure of the hedge fund market, and to locate hedge fund organizations based on centrality. Social network analysis is a technique used throughout the social and medical sciences—sociology, social psychology, anthropology, sociolinguistics, organizational studies, and economics—to identify the most important structural positions among individuals and groups in a network. Social network analysis, according to Freeman, is an approach that is “grounded in the intuitive notion that the patterning of social ties in which actors are embedded has important consequences for those actors” (Freeman 2004: 2). More specifically, social network analysis is defined by the following properties: (1) social network analysis is motivated by a structural intuition based on ties linking social actors; (2) it is grounded in systematic empirical data; (3) it draws heavily on graphic imagery; and (4) it relies on the use of mathematical and/or computational models (Freeman 2004).
STAGE 2: Qualitative Investigation

Using the findings from the STAGE 1 qualitative investigation, and the MID-STAGE quantitative robustness check, I conducted a final round of qualitative interviews that attempted to capture the full range of governance processes and mechanisms operating in the hedge fund market. Every effort was made to ensure the final sample would contain a broad spectrum of organizations, and that those captured in the first round sample, which were based on a snowball sampling procedure, were not biased. STAGE 2 consisted of an additional 20 qualitative interviews with expert informants in senior management positions in hedge fund organizations and hedge fund networks. The selection of the 20 organizations was based on the results from the STAGE 1 sample and the MID-STAGE structural output.

The differences between the STAGE 1 and STAGE 2 qualitative investigations were small but important. The main difference of the STAGE 2 investigation was that the sampling strategy was directed by the output of the quantitative database—there was a stratified list of organizations targeted for sampling. Beyond this difference, however, the sampling strategy and data analysis procedures were very similar. In order to gain access to the targeted organizations, I developed two strategies. First, I approached existing sources, colleagues, and previously interviewed informants to inquire if they had contacts in the structurally targeted organizations. Second, and somewhat less successful, I directly contacted the hedge funds on the targeted list of organizations. The final sample characteristics for the STAGE 2 investigation were more heavily weighted to large hedge fund organizations with more than $1 billion under management, in more central
structural positions, and in more important geographical locations: New York, Greenwich, and Boston—the 1st, 2nd, and 3rd most popular cities for hedge funds.

**Research Design Component #3: Data Analysis**

The qualitative analysis was based on the 40 interview transcripts with senior management in hedge funds and the hedge fund network, and the formal legal code and regulations within the U.S. Securities Law—focused on the Securities Act of 1933, Securities Exchange Act of 1934, Investment Company Act of 1940, and Investment Advisers Act of 1940. The quantitative analysis was based on the HFN hedge fund database, and was conducted using a specific analytical procedure to measure network centrality. Together, these methods were designed to allow my investigation to gather the broad spectrum of empirical evidence needed to answer the four sets of Research Questions at the center of my investigation. The specific details and reasoning behind this research design are summarized in the figure below.

**FIGURE 7: Multi-Design**

<table>
<thead>
<tr>
<th>Level of Analysis</th>
<th>Qualitative Data &amp; Analysis</th>
<th>Quantitative Data &amp; Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Source</td>
<td>40 Expert Informant Interviews</td>
<td>HFN Database</td>
</tr>
<tr>
<td>Purpose</td>
<td>Determine Governance Mechanisms, Practices, and Views of Regulation</td>
<td>Determine Structural Location &amp; Organizational Characteristics</td>
</tr>
</tbody>
</table>


**Output**

<table>
<thead>
<tr>
<th>Governance Mechanisms</th>
<th>Measures of Network</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Practices</td>
<td>Centrality</td>
</tr>
<tr>
<td>Internal Practices</td>
<td>Assets Under Management</td>
</tr>
<tr>
<td>Views of Regulation</td>
<td>Performance of Hedge Fund</td>
</tr>
<tr>
<td>Views of Legality</td>
<td>Strategy of Hedge Fund</td>
</tr>
</tbody>
</table>

---

1. **Qualitative Data**

The qualitative data that was used to gain empirical insight into the governance processes and mechanisms in the market come from 40 semi-structured interviews. The further breakdown of the 40 semi-structure interviews by specific characteristics reveals the complexity of the qualitative data. For example, the 40 interviews are further broken down into the 20 organizations from the STAGE 1 qualitative investigation, and 20 organizations from the STAGE 2 qualitative investigation. Further categorical breakdown of the STAGE 1 sample reveals that 15 out of the 20 interviews were completed in hedge fund organizations—which can be broken down by organizational position: 10 senior managers and traders, 3 heads of research, 1 general counsel, and 1 chief operating officer. The remaining 5 out of 20 interviews from STAGE 1 were completed in the hedge fund’s network—3 external counselors and 2 fund administrators.

**FIGURE 8: Final Sample Characteristics**

<table>
<thead>
<tr>
<th>ORG TYPE</th>
<th>STAGE 1</th>
<th>STAGE 2</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hedge Fund Organizations</td>
<td>15</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Hedge Fund Network</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>ORG CENTRAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Centrality</td>
<td>4</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Low Centrality</td>
<td>9</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Not Available*</td>
<td>7</td>
<td>5</td>
<td>12</td>
</tr>
</tbody>
</table>
STAGE 2 interviews shared a similar categorical breakdown but were determined by network structure and organizational attributes. 15 out of the 20 interviews were completed in structurally representative hedge fund organizations—further broken down by organizational position: 10 senior managers and traders, 3 research division heads, 1 general counselor, and 1 chief operating officer. The remaining 5 out of 20 interviews were completed in the hedge fund’s network—3 external legal counsel ors and 2 auditors. The following table gives a summary description of my final qualitative sample characteristics by organizational type, centrality, and location:

<table>
<thead>
<tr>
<th>ORG LOCATION</th>
<th>Centrality</th>
<th>Location</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>New York &amp; Greenwich</td>
<td>6</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Chicago</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Miami</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>San Francisco Bay</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

* Centrality could not be determined for 2 hedge funds because no information was contained in the HFN dataset. Additionally, the 10 hedge fund network partners were not sampled based on centrality—they were predominantly interviewees’ network partners.

The interviews with hedge fund network partners were designed to capture insight into the governance processes and mechanisms at the multi-organizational structure referred to as the organizational set—the project’s secondary unit of analysis. These network partners were predominantly captured through completed interviews with hedge fund interviewees. For example, at the completion of every interview I asked the hedge fund management if it would be possible to put me in contact with one of its key service providers—either legal counsel, auditor, administrator, or broker. There were two
specific reasons why only ten organizations were selected. First, it was difficult to have hedge fund interviewees refer me to their important service providers knowing that I would be investigating the governance practices of the industry. Without the social capital of hedge fund interviewees—explained in greater detail in Research Design Component #4: Sampling Methods—and their willingness to give my project their approval, my sampling procedure had little success in getting professionals to share insights about sensitive topics. Second, as I approached the tenth interview I began to reach a saturation point. Wherein, each additional interview was giving very little new information to my empirical findings. I acknowledge, however, that the distribution of the ten network partners is heavily weighted toward legal counsel and does not capture prime brokers.

ii. Qualitative Analysis

The 40 interview transcripts were analyzed using NVivo 8 qualitative software package. NVivo 8 software is an analytical tool produced by QSR International, “designed for qualitative researchers working with very rich text-based and/or multimedia information, where deep levels of analysis on small or large volumes of data are required” (NVivo 8 manual). The software package enables a researcher to attach labels or codes to any portion of the transcribed interview text. These labels and codes can then be searched and sorted to find trends in the data, and grouped into larger categories. My investigation’s use of this software package can be explained in greater depth by breaking down the three analytical steps contained in the qualitative analysis of the interview transcripts. The first step was to create a codebook with a set of codes and
themes based on the theoretical literature and the early stages of data analysis. The second step was to code the transcripts based on the codes and themes developed in the qualitative codebook. The third step was to analyze the coded text for discernable patterns in the dominant codes and themes, and investigate the organizational attributes that were associated with these discernable patterns.

The first step of the qualitative analysis was to develop a codebook to capture the multiple themes that emerge from a close reading of the first round interview transcripts and the theoretical literature—described in detail in Chapter 2. The codebook was created and refined through an iterative process, which included two researchers independently coding the first 5 qualitative interviews, and developing a detailed list of codes and themes that would capture the important information in the text. These independent codes and themes were then revised through multiple meetings—with the goal of developing a final consensus list that would be used for the remaining qualitative interviews. Throughout this iterative process of constructing the final qualitative codebook, additional codes and themes were added to capture a wide spectrum of organizational attributes, governance processes, and thematic content. The thematic codes were developed to capture the subtleties of the interview process and/or interviewee—by capturing tone and demeanor, etc. For example, if an interviewee expressed a particular statement with great confidence, then the associated text would be coded CONFIDENCE. Based on the iterative process and consensus coding list, we identified approximately 75 codes, which were defined and labeled with one-word mnemonics. Below is a sample of the larger list of codes and themes presented in the Qualitative Codebook (see Appendix III):
The second step of the qualitative analysis was to code the transcripts based on the final consensus list of codes and themes—content analysis on the interviews. This analytical procedure involved associating sentences and paragraphs with one or more codes and themes. For example, a frequent theme that emerged from the qualitative transcripts was the credibility of the organization. Many hedge fund managers mentioned credibility, either the need to form relationships with large service providers to gain credibility or the need to develop internal compliance in an effort to gain credibility from their investors. Any reference to credibility, whether it was an explicit use of the word credibility, or an allusion to credibility that was embedded in a longer narrative, was

---

**FIGURE 9: Sample of Qualitative Codes**

<table>
<thead>
<tr>
<th>Target</th>
<th>Tag</th>
<th>Theme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interviewee Background</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDU</td>
<td>Interviewe</td>
<td>Any reference to education—either formal or informal</td>
<td></td>
</tr>
<tr>
<td>POSITION</td>
<td>Background</td>
<td>Any reference to position—organizational, hierarchy, etc.</td>
<td></td>
</tr>
<tr>
<td><strong>Organizational Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CITY</td>
<td>Organizational Characteristics</td>
<td>Location of the organization</td>
<td></td>
</tr>
<tr>
<td>EMPLOY</td>
<td>Organizational Characteristics</td>
<td>Number of employees of the organization</td>
<td></td>
</tr>
<tr>
<td><strong>Theoretical Derived-</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REGEVDV</td>
<td>Theoretically Derived</td>
<td>Any reference to regulation—either formal or informal</td>
<td></td>
</tr>
<tr>
<td>CREDIBILITY</td>
<td>Theoretically Derived</td>
<td>Reference to credibility or reputation of organization</td>
<td></td>
</tr>
<tr>
<td>NETWORK</td>
<td>Theoretically Derived</td>
<td>Any reference to their network relations—location, size, influence, et.</td>
<td></td>
</tr>
<tr>
<td><strong>Endogenously Derived-</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTROLS</td>
<td>Endogenously Derived</td>
<td>Reference to built-in controls or internal controls</td>
<td></td>
</tr>
<tr>
<td>PEERS</td>
<td>Endogenously Derived</td>
<td>Reference to peers—relational</td>
<td></td>
</tr>
<tr>
<td><strong>Interpretation of Thematic Content</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONFIDENCE</td>
<td>Interpretation of Theme</td>
<td>Interviewee’s degree of confidence</td>
<td></td>
</tr>
<tr>
<td>DIFFICULT</td>
<td>Interpretation of Theme</td>
<td>Interviewee was difficult to talk to</td>
<td></td>
</tr>
</tbody>
</table>
coded [CREDIBILITY]. Examples of other prevalent codes and themes include text that refers to the organization’s social network relations [coded: NETWORK], experiences with the SEC [coded: SEC], and views of the regulatory environment [coded: REGENV].

The following example from a STAGE 1 interview explains in greater detail how this qualitative analysis coding—based on the theoretical literature or endogenously emerged observations—was conducted. In the interview transcript below, a hedge fund manager was asked to explain his network relationship with his fund administrator:

“Given the fact that we’re one of the largest hedge funds, we’re one of the largest clients of [our fund administrator], so we have a very, very large team that’s full-time dedicated to serving us. So, we really view them as partners in that. And we meet with them regularly to discuss any issues that come up, given the size and complexity of both our investment strategies, as well as, our investor base.”

This particular quote was coded [SIZE], [INFLUENCE], [RELATIONS], [INTERACTION] to designate the hedge fund manager’s reference to the size of his fund, the influence his fund has in the market, the relationship his fund has with another organization, and the frequency his fund interacts with other organizations. Once again, it is important to emphasize that qualitative codes need not be mutually exclusive, and multiple codes were used on the same piece of text—sentences and paragraphs.

The third step of the qualitative analysis was to analyze the coded transcripts, and to locate discernable patterns in the content of the qualitative interviews. The analytical procedure was primarily done using the NVivo qualitative software to sort and categorize the dominant codes and themes from the coded transcripts. Additionally, this analytical procedure was achieved through a very close, and repetitive, reading of the transcribed interviews as the coding process took place. The intense familiarity of the text allowed me to conceptualize how the different governance processes and mechanisms that were
operating in the hedge fund organizations, and among the organizational field, interacted and linked together. The table below presents the important output from this analytical procedure—presentation of the findings was modeled after Gordon, Clegg, and Kornberger (2009: 81). In particular, the table presents the most important database themes, respective codes, frequency of occurrence, and whether the theme/code was included in the empirical results chapters.

**FIGURE 10: Discernable Coding Patterns and Final Selection**

<table>
<thead>
<tr>
<th>THEMES</th>
<th>CODE</th>
<th>High (H) or Low (L) frequency of occurrence</th>
<th>Included in Empirical Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORGANIZATION DIMENSION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>H</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>STRUCTURE</td>
<td>L</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>RISK</td>
<td>L</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>STRATEGY</td>
<td>H</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>ASSETS</td>
<td>H</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>INSTITUTIONAL DIMENSION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTROLS</td>
<td>H/L</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>REGENV</td>
<td>H</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>PROFNORMS</td>
<td>L</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>CREDIBILITY</td>
<td>H</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>LAW</td>
<td>H/L</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>ORGVALUE</td>
<td>L</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>COMPLIANCE</td>
<td>H</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>ASSOCIATIONS</td>
<td>L</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>ETHICS</td>
<td>L</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>MANAGEMENT</td>
<td>H</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>STRUCTURAL DIMENSION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NETWORK</td>
<td>H</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>REPUTATION</td>
<td>H</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>EXCHANGE</td>
<td>L</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>FIELD</td>
<td>L</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>WORKGROUPS</td>
<td>L</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>PEERS</td>
<td>L</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>CREDIBILITY</td>
<td>H</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>POWER DIMENSION</td>
<td>OWNERSHIP</td>
<td>BENEFITS</td>
<td>LOBBY</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------</td>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>H/L</td>
<td>H/L</td>
</tr>
<tr>
<td></td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

The first column of the table indicates the central themes that were theoretically targeted in the investigation. The second column indicates the associated codes used to capture dimensions of the theoretically targeted themes. The third column indicates the frequency of the coded dimension. It is important to emphasize that the frequency of occurrence for particular codes resulted in a polarized distribution. For example, particular codes had high frequency in a number of interviews, but had low or no frequency in other interviews. Upon further analysis, this polarizing and contradictory frequency revealed that certain codes had high frequency in organizations with particular attributes, and low frequency in organizations with other attributes. To solidify this point further, take the code [CONTROLS] from the table above. The code [CONTROLS] had a high frequency in hedge fund organizations that managed larger amounts of capital, and a low frequency in hedge fund organizations that managed smaller amounts of capital. This analytical insight was important to my investigation, and was a key analytical tool that allowed me to develop certain theoretical concepts—for example, the entrepreneurial versus bureaucratic institutional structure presented in Chapter 6. The final column of the table indicates whether the coded dimension was included—in one form or another—in the final results chapters.
iii. **Quantitative Data**

The quantitative data used to visualize and analyze the centrality of hedge fund organizations came from the HFN database provided by HedgeFund.net. The HFN database is the “gold standard” within the hedge fund research community and consists of a comprehensive global database containing a full range of qualitative and quantitative information on U.S. and offshore hedge funds. HFN collects and disseminates hedge fund data for nearly 9,000 alternative investment funds (i.e. hedge funds)—over 6,100 of which are currently active. For the purposes of this study, only the hedge funds located within the U.S. were used—N=3,223—because of the particular structure of the American legal and regulatory regime. Included in each hedge fund’s profile is a statement of investment objectives, policies, and biographical information on the principals. Most importantly, however, the HFN database carries the relational data of the hedge fund’s network partners (service providers)—prime broker, legal counsel, auditor, fund administrator, and custodian/trustee.

The HFN database has two limitations that need to be explicitly stated. First, the data that is contained in the HFN database for 3,223 alternative investment funds is self-reported. For example, every quarter requests are made to the hedge fund managers and administrators to fill in any changes in their organization’s performance and attributes to the HFN database. This self-reporting dimension of the HFN database is not in itself a data limitation. The database limitation arises because the final database provided to me has a discernable time lag for hedge fund reporting. For example, a third of the database contains a 6-month time lag. The second limitation of the quantitative data used in my investigation is that the relational database characteristics, which were used to conduct
the social network analysis, did not indicate whether a hedge fund had multiple service providers in a particular node position. For example, if a hedge fund had five prime brokers, then the database only captured the first prime broker. This data limitation does not significantly impact my investigation because the first network relationship listed for each service provider category is the hedge fund’s most important organizational relationship.

iv. Quantitative Analysis

In contrast to standard statistical analysis that treats individuals as discrete units of analysis, social network analysis focuses on how the structure of ties affects individuals and their relationships with others in the network. Similarly, while standard statistical analyses assume that socialization determines individual behavior, network analysis measures the extent to which the structure and composition of ties affect behavior. By visualizing and analyzing structural position of hedge funds, I was able to develop a quantitative measure of the hedge fund’s position in the market, which was then used in the STAGE 2 qualitative investigation to ensure that the sampled organization represented the governance processes and mechanisms for the broader organizational field.

The social network analysis conducted in the MID-STAGE investigation included 4 steps. First, the HFN database was cleaned to ensure that only hedge funds located in the U.S. were included in the final analysis. Second, the cleaned data file was then converted into a data matrix that could be used for social network analysis. In particular, a data matrix was created that had all hedge fund organizations by all service
provider organizations in the market. If the hedge fund had a relationship with a particular service provider, then the corresponding matrix box between the two organizations would be given a 1. If there was no relationship between the hedge fund and a given service provider, then the corresponding box between the two organizations would be given a 0. The following table presents a sample of the data files after step one and step two:

**FIGURE 11: Constructing a Hedge Fund Network Matrix**

<table>
<thead>
<tr>
<th>ID</th>
<th>Fund Name</th>
<th>Legal</th>
<th>Admin</th>
<th>Custodian</th>
<th>Accountant</th>
<th>P Broker</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Austin Capital All Seasons Fund, Ltd.</td>
<td>Akin Gump Strauss Hauer &amp; Feld, LLP</td>
<td>None Listed</td>
<td>None Listed</td>
<td>Rothstein Kass &amp; Company</td>
<td>None Listed</td>
</tr>
<tr>
<td>13</td>
<td>Canyon Value Realization Fund, L.P.</td>
<td>Not Applicable</td>
<td>None Listed</td>
<td>Not Applicable</td>
<td>Deloitte &amp; Touche</td>
<td>None Listed</td>
</tr>
<tr>
<td>14</td>
<td>Canyon Value Realization Fund</td>
<td>Sidley Austin LLP</td>
<td>Fortis Bank</td>
<td>Bear, Stearns</td>
<td>Deloitte &amp; Touche</td>
<td>Bear, Stearns</td>
</tr>
<tr>
<td>25</td>
<td>Double Alpha Partners, L.P.</td>
<td>Arnold &amp; Porter LLP</td>
<td>None Listed</td>
<td>Other</td>
<td>Merrill Lynch</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>Keen Vision Fund LP</td>
<td>Moore &amp; Van Allen</td>
<td>Pinnacle Fund Adm</td>
<td>UBS AG</td>
<td>Rothstein Kass</td>
<td>UBS</td>
</tr>
</tbody>
</table>

The third step involved imputing the data matrix into the social network analysis software program called UCINET and Netdraw. UCINET is a social network analysis program developed by Steve Borgatti, Martin Everett, and Lin Freeman. UCINET is a comprehensive package for the analysis of social network data as well as other 1-mode and 2-mode data. The software program can read and write a multitude of differently formatted text files, as well as Excel files. UCINET is limited to handling a maximum of
32,767 nodes. Social network analysis methods include centrality measures, subgroup identification, role analysis, elementary graph theory, and permutation-based statistical analysis. In addition, the package has strong matrix analysis routines, such as matrix algebra and multivariate statistics. Netdraw is a graphic module within the UCINET software package that allows for visual representations of the social network structure to be produced, manipulated, and analyzed. For example, the figure below is the actual visualization of the social structure of the U.S. hedge fund market.

**FIGURE 12: Network Structure of the U.S. Hedge Fund Market**

* Red Node indicates hedge fund organization and Blue Node indicates hedge fund service provider

The network analysis conducted in this stage of the investigation followed the intellectual lead of Freeman (1977, 1979) and Wasserman and Faust (1994) in their discussion of the most important central actors in a social network. At the organization level, these measures of centrality identify important actors by measuring their prominence within a network, and by summarizing structural relations among the full set
of nodes in the social space. The MID-STAGE correction focused on three of the most widely used measures of actor network centrality: degree, closeness, and betweenness centrality. The three measures of centrality analyzed—degree centrality, closeness centrality, and betweenness centrality—each captured different dimensions of centrality. As a result, these three measures of centrality each have different interpretations and implications for my investigation. According to Freeman (1977, 1979) the three measures of centrality are defined as follows: 1) actor-level degree centrality is simply each actor’s number of degrees in a non-directed graph; 2) actor closeness centrality is the inverse of the sum of geodesic distances from actor i to the g-1 other actors; and 3) actor betweenness centrality for actor i is the sum of the proportions, for all pairs of actors j and k, in which actor i is involved in a pair’s geodesic(s). These formal mathematical definitions, however, can be more generally stated in the following manner. First, degree centrality is how well connected (direct influence) an actor is. Second, closeness centrality is how far from all others, or how long information takes to arrive. Third, betweenness centrality is the ability to be a network broker and control information.

**FIGURE 13: Sample of Network Centrality Output**

<table>
<thead>
<tr>
<th>ID</th>
<th>Degree Centrality</th>
<th>Closeness Centrality</th>
<th>Betweenness Centrality</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0.011</td>
<td>0.759</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>0.011</td>
<td>0.758</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>0.014</td>
<td>0.589</td>
<td>0</td>
</tr>
<tr>
<td>25</td>
<td>0.014</td>
<td>0.77</td>
<td>0</td>
</tr>
<tr>
<td>44</td>
<td>0.014</td>
<td>0.595</td>
<td>0</td>
</tr>
<tr>
<td>54</td>
<td>0.011</td>
<td>0.718</td>
<td>0</td>
</tr>
<tr>
<td>58</td>
<td>0.014</td>
<td>0.571</td>
<td>0</td>
</tr>
<tr>
<td>67</td>
<td>0.014</td>
<td>0.76</td>
<td>0</td>
</tr>
<tr>
<td>68</td>
<td>0.014</td>
<td>0.775</td>
<td>0</td>
</tr>
<tr>
<td>70</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Of the three most widely used measures of actor network centrality, degree centrality was chosen because it had meaningful empirical output, and the interpretation of this measure was appropriate given the targeted goal for the STAGE 2 representative sample. In particular, the reasoning behind the selection of degree centrality over the other two measures of centrality can be explained by using the output table above. First, the 2-mode structure of the HFN database and data matrix did not allow for output to be created for the betweenness centrality measure. In other words, the database is not organized by the connections between hedge funds—the betweenness centrality between any two hedge funds is zero. In the HFN database, the network of service providers are the organizations between hedge funds, and form the brokerage and bridging nodes in the overall network structure of the market. Upon further analysis of the output, a decision had to be made as to whether degree centrality and closeness centrality should be selected as the final measure for my investigation. In contrast with betweenness centrality, both centrality measures had meaningful empirical output. These two measures, however, had very different interpretations within the context of the hedge fund market. The interpretation of degree centrality is that it captures the opportunity to influence and be influenced directly. The interpretation of closeness centrality is that it captures the extent to which a node is close or far from all other nodes, and it is an index of expected time until arrival of information that is flowing through the network. Taking into account the pragmatic reason as to why social network analysis was used in my investigation—to select organizations for STAGE 2 and ensure the full range of governance processes and mechanisms were captured—the interpretation of degree centrality was more appropriate. Specifically, my investigation needed to capture the overall popularity of a hedge fund
organization, and the degree centrality captured this organizational and structural dimension.

The degree centrality output presented in column one needed to be further broken down in order to inform the selection of organizations that would be included in the STAGE 2 sample. Degree centrality measurements ranged from 0 to 0.014. The network analysis placed all organizations into only four measurements within this range: 0, 0.007, 0.011, and 0.014. These four values were strongly determined by the mathematical properties of the data set. For example, each hedge fund was limited in the number of direct connections to five service provider nodes in the network structure. If a hedge fund did not have a legal counsel specified in the dataset, then the degree centrality would be lowered as a result. The intuitive interpretation of these four values is that hedge fund organizations that had higher measures of degree centrality did in fact have a greater number of network partners—hedge funds with .014 had a greater number of service providers specified in the dataset.¹ Collapsing the four measures into two groups was appropriate, given the limited validity of these degree centrality measurements. The first group captured relatively high degree centrality, which includes the organizations with 0.011 and 0.014 degree centrality. The second group captured relatively low degree centrality, which includes the organizations with 0 and 0.007. These two measures of

¹ Degree centrality, as measured here, is strongly influenced by how many of the fund's partner-positions contain missing values in the HFN dataset—it is of limited validity as a measure of overall network embeddedness. Indeed, it seems likely that in many cases, the missing partners are merely unreported and not truly absent. Thus, the degree centrality measure may not gauge the true number of direct service-provider ties. To the degree that this critique has merit, the second phase of the research should be seen not as a re-balancing of the interview sample based on the systematic selection of under-represented network positions, but rather simply as a quasi-random supplement to the initial snowball sample. This would not invalidate the second-round interviews, but it would argue for greater caution in assuming that they adequately filled the gaps of the initial round.

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relative degree centrality were then used to select the list of organizations to approach for the final round of qualitative interviews.

Research Design Component #4: Sampling Methods

STAGE 1 sampling strategy was designed to overcome two sampling difficulties—the “organizational access” and the “sharing information” problem. The first difficulty I faced in the STAGE 1 sampling was gaining access to elites located within opaque and secretive—closed off to the public—hedge fund organizations, and their private network partners. For example, how would a researcher with limited contact and experience in the hedge fund market get access to the senior management of hedge funds and their key network partners? The research design solution developed to mitigate this difficulty consisted of contacting existing contacts and colleagues in the hedge fund market to request that they personally introduce me to their professional networks—friends, associates, and colleagues. Once my existing contacts and colleagues in the hedge fund market had been contacted, the sampling strategy then turned into a referral strategy through previously interviewed informants—formally categorized as a snowball sampling strategy. This informal socializing strategy was successful because it used the social capital from existing contacts and informants, and presented my project and investigation to future interviewees as worthy of their time and energy. In particular, the existing relationships gave my project legitimacy, and reassured the potential interviewee that I was not a risk, which allowed them to let down their professional guard.

The second solution to the “organizational access” problem was to directly contact hedge fund employees using alumni databases at three research universities.
Specifically, I used the three alumni databases to search for the contact information of individuals working in the hedge fund industry—hedge fund management, legal counsel, brokers, and administrators—and to locate individuals in senior and partner level positions within these organizations. The information contained in the alumni databases allowed me to sample on specific details of the individuals and organizations. For example, the databases gave the characteristics of organization, and the years of experience that each contact had in the hedge fund industry. This second sampling strategy was very successful, in part, because the individuals contacted—in hedge funds and hedge fund networks—had an institutional obligation to the alumni of their university, even though we had no direct, social affiliation.

The second difficulty I faced in the STAGE 1 sampling was getting the expert informants to share information with me regarding some of their organization’s private practices. In particular, I needed to find a way to allow the interviewees to share their individual backgrounds, organizational governance practices, and organizational network dynamics. The solution I developed was comprised of three steps. First, I began every interview with full disclosure that my university requires that all information discussed remains private, and that the specific organization and individual names would never be disclosed. Additionally, interviewees were reassured that the information gathered would only be used by me for academic purposes—to produce the dissertation, journal articles, and book manuscript. The second step taken to allow the informants to openly share information with me was to informally begin every interview with a little background about my investigation and myself. Every effort was made to ensure that all questions—about my investigation and their hesitations—were addressed prior to the interview. The
third, and final, step was to present my interview questions in an unassuming manner, and to present myself as a graduate student trying to learn about the hedge fund market and its governance practices.

STAGE 2 sampling strategy was more structured than STAGE 1. In particular, the second sampling strategy was directed by the output from the MID-STAGE correction, which gave the list of hedge fund market organizations by their measures of centrality and organizational attributes. As described in detail in the *Research Design Component #3: Data Design*, the organizations targeted for sampling were divided into high and low centrality based on the network analysis output. Additionally, the HFN database contained the contact information for each hedge fund organization. The selected organizations were initially approached by email. This direct email strategy, however, had limited results. The problem was that contrary to the STAGE 1 sampling strategy, where I had existing contacts and previously interviewed individuals present my work to their professional network, the direct strategy did not play on existing social capital.

The solution to this direct contact difficulty was to rely on the successful social capital mechanism experienced in STAGE 1. That is, the important lesson learned from the STAGE 1 sampling success was that existing relationships, either from existing contacts or previously interviewed informants, provided my project with legitimacy and allowed hedge fund professionals to let their guard down. With this success in mind, I developed a similar approach to the STAGE 2 direct sampling difficulty. In particular, I began by reaching out to my existing contacts and interviewees to see if they knew anyone in the MID-STAGE targeted organizations. The result was again very successful. Using this strategy, I was often given a name and an email address at a MID-STAGE
targeted organization, and was told to contact them directly and use their name as a conversation starter. This strategy was the most successful at getting into the STAGE 2 organizations because it once again tapped into existing social capital, and gave me a shared social reference point in my direct interview requests. Thus, even though there was not the social introduction by existing sources and interviewees, as I had experienced in STAGE 1, the point of reference was enough to get access to individuals in the targeted organizations.

**Research Design Component #4: Interview Questionnaire**

The interview methods and techniques used in the data collection process—both in STAGE 1 and STAGE 2—consisted of semi-structured interviews with expert informants in both hedge funds and hedge fund network partners. The interviews followed the outline established in my interview questionnaire (see APPENDIX II). Substantively, the interview questionnaire can be divided into four broad sections. At the beginning of every interview, I introduced who I am, described what institution I am from, explained why I am intellectually interested in the hedge fund market, and explicitly stated the strict privacy policy that my investigation adheres to with respect to the information, names, and organizations disclosed in the interview. The first section gathers the general characteristics of the organization—for example, size, level of risk, age, and structure, etc. The second section focuses on broad questions regarding the role of the interviewee within the organization, how long they have been in the organization, their views on the network partners of their organization, and the laws that affect their organization. The third section focuses on the specific organizational practices, cultures,
interactions within their network, and structural characteristics. For example, questions regarding how laws and regulations are actually interpreted and conveyed through their social network, whether their network partners have the ability to influence their behavior, what happens if there is a conflict among those in the social network, and how the hedge fund can push back against network partners or laws that are contrary to the organization’s interests. The fourth section focuses on how the regulatory environment and formal law directly impact the hedge fund organization.

One of the central sets of questions within this interview covers the governance practices of hedge funds and their network partners. For example, network governance practices were captured through questions 2, 3, 4, 6, 7, 10, 12, and were followed—if needed—by 6 probing questions (see APPENDIX II). One possible combination of questions regarding the relationship between the hedge fund and prime broker is the following: can you tell me about the relationship with your fund’s prime broker, how often do you interact with your prime broker, what does a successful interaction with your prime broker look like, how do you know whether your prime broker is doing a good job, what problems arise between you and your prime broker, can you tell me a story about a particular problem that comes up, and how are these problems solved.

SECTION II: AN INTEGRATIVE CONCEPTUAL FRAMEWORK

The observation that economic sociology provides many alternative perspectives but suffers from the absence of an organizing framework has been floating around for many years. Over the last 10 years in the economic sociology literature a number of scholars have observed the fragmented nature of the subfield, and have point to potential
solutions to move the academic field forward. In 2005, the second edition of *The Economic Sociology Handbook* was published, edited by Neil J. Smelser and Richard Swedberg (2005, 1994), wherein scholars extensively outlined the dominant perspectives and theoretical concepts of the field. Within the *Handbook*, leading voices in the field argued that economic sociology could move forward by embracing everything from the role of law in economic markets (Swedberg 2005) to the role of interests in shaping institutional structures (Nee 2005). During the same time period, *The New Economic Sociology Reader*, edited by Frank Dobbin (2004), once again extensively outlined the dominant approaches in economic sociology—network, institutional, power, and cognition. Further, Dobbin identified the ways in which a number of scholars in the field had attempted to integrate these alternative approaches. In 2009, David Stark argued in *The Sense of Dissonance* that the field’s potential “lies as much in exploiting the friction at the overlap among these perspectives as in accumulating further work along well-grooved lines within each of the traditions” (Stark 2009: 164). His task, however, was not to create a new map of the field but to find a “narrative of retrospection and projection,” which echoes the strategy of DiMaggio and Powell (1991), into where the field has been and where future developments would hold promise (Stark 2009: 165).

*Philosophy of Science and An Organizing Framework*

In 2010, Alejandro Portes (2010) in *Economic Sociology: A Systematic Inquiry* took a more systematic and formal approach to how these different perspectives in the field could be integrated. Portes states that the promise of economic sociology “has never been quite fulfilled as texts in the field return, time and again, to the founding notions,
and as a growing number of empirical studies invoke them as mantras, but without cumulating into theoretical advancement” (Portes 2010: 6). He states that this unfulfilled promise or “impasse is not due, in my view, to the absence of an overarching theoretical framework, but to the lack of a precise understanding of the character and role that ideas at different levels of abstractions play in the organization of a given field” (Portes 2010: 1). Portes points out that this lack of understanding in the field has lead to some of the leading scholars in the field mixing theoretical concepts, theoretical assumptions, and explanatory mechanisms within the same research project. In response to the misunderstanding in the field, Portes dedicates himself to developing the broad parameters of what an organizing conceptual framework of economic sociology would look like.

According to Portes, the constitutive elements of economic sociology as a field of inquiry can be summarized into three broad categories: 1) meta-theoretical principles; 2) explanatory mechanisms; and 3) strategic sites of inquiry. He states, “the first component establishes the cognitive “lens” through which a particular field sees the world. This lens is neither superior nor inferior to others, it is simply distinct in privileging certain areas of empirical reality as worth investigating and in orienting ways of going about this enterprise” (Portes 2010: 1). In particular, he argues that there are three key meta-assumptions that guide economic sociology. First, economic sociology has a general recognition that economic transactions do not occur in a vacuum but are inserted into cultural systems and webs of sociability. Second, economic sociology has an appreciation of the fact that rational means directed toward explicit goals frequently end up producing consequences different or even opposite to those originally intended. Finally, economic
sociology has an overall rejection of the image of the economy as a level playing field and emphasizes the role of power.

Stemming from these meta-theoretical principles, there arise a set of orienting strategies or general assumptions, and midlevel explanatory mechanisms that can be invoked by the researcher to explain and predict actual socio-economic events. In particular, Portes identifies three orienting strategies and explanatory mechanisms within the organizing framework of economic sociology, which have origins in the classical sociological theory of Max Weber (1922) and Robert K. Merton (1936). First, stemming from meta-theoretical principle #1—economic transactions do not occur in a vacuum but are inserted into cultural systems and webs of sociability—the orienting strategy of *socially embedded economic exchange* has developed in the field, and has been explored extensively through explanatory mechanisms such as social networks and social capital. Second, stemming from meta-theoretical principle #2—rational means directed toward explicit goals frequently end up producing consequences different or even opposite to those originally intended—the orienting strategy of *unexpected consequences of purposive action* has developed in the field, and has been explored through the explanatory mechanisms of social capital and social institutions. Finally, stemming from meta-theoretical principle #3—rejection of the image of the economy as a level playing field—the orienting strategy of *social power* has developed, and has been explored through the explanatory mechanisms of social class and social capital. Together, these three orienting strategies comprise “the three conceptual pillars of economic sociology” (Portes 2010: 26).
The third constitutive element of economic sociology as a field of inquiry consists of the chosen “locations for investigation and theoretical expansion” within the field, which are not selected at random but reflect the guiding orientations or the “lens through which the field sees the world” (Portes 2010: 2). It is important to emphasize that research sites of inquiry are specifically selected based on particular characteristics. That is, research sites need to be considered an “ideal type” location—based on the Weberian concept—wherein explanatory mechanisms such as social capital, social institutions, and power can be applied. Portes emphasizes that the strategic research sites themselves are ideal types—along with explanatory mechanisms—because they exhibit the “concepts at a midlevel of abstraction applicable to concrete historical phenomenon and modifiable by the latter” (Portes 2010: 4). He identifies three strategic research sites of inquiry that exhibit the ideal type characteristics—the informal economy, ethnic enclaves and middleman groups, and transnational communities. To fully comprehend his point, consider the strategic research site of transnational or immigrant communities. An immigrant community can be thought of as an ideal type “because of their recency in the host society, their lack of institutionalization, and their paucity of material resources, immigrant groups are commonly forced to rely on their own networks for a host of needs—from sheer survival to entrepreneurial initiatives” (Portes 2010: 42). Thus, the strategic research site is chosen because it provides a social laboratory in which the explanatory theoretical mechanism of social capital and network can be applied, and these mechanisms can then offer insight into the meta-theoretical principle of socially embedded economic action.
An Integrating Framework Tailored to the Research Site

My theoretical model was organized using a similar logic to that proposed by Alejandro Portes (2010). This conceptual framework organizes the alternative theoretical perspectives reviewed in Chapter Two. This integrative framework allows my investigation to advance a number of new theoretical important questions that have not been addressed in the sociological literature, which include: 1) how does informal network embeddedness interact with formal law and institutional embeddedness; 2) to what degree is formal law seen as a social construct within groups of organizations and network actors, versus a power process within interdependent organizational relationships; 3) how do organizational boundaries—inter versus intra organizational—either mitigate or intensify the impact of law and culture on governing behavior; 4) is the governance of formally lawless economic activity primarily a reflection of shared cognitive challenges and cultural beliefs, or of conflicting economic and political interests?

The pragmatic benefits of the organizing conceptual framework outlined above are that it creates a framework to understand and use the array of tools economic sociology has to offer—it defines the broad spectrum of theoretical concepts, the level at which they operate, how they can be used, and where they can be used to gain the greatest insight. In other words, it does not provide a grand theory of economic sociology but provides an organizing logic for concepts to be used in theoretically led and empirical focused research. Additionally, by having an organizing framework that defines all the moving parts in economic sociology—meta-theoretical assumptions, explanatory mechanisms, and strategic research sites—my research can integrate competing
theoretical perspectives and explanatory mechanisms. For example, by applying the organizing conceptual framework to my research I have the potential to explain how the embeddedness of an organization (a meta-theoretical assumption), explored through social networks (explanatory mechanisms) within the shadow financial market of hedge funds (strategic research site), gives rise to external social pressures, which in turn condition and modify different institutional blueprints within the hedge fund organizations.
CHAPTER FOUR

The Purposeful Avoidance of Law

“You’ve got to be able to explain to the hedge fund manager what the rule is, why the rule is there, how it’s smart, how it’s stupid, what they’ve got to do to comply with it. In a rapidly changing environment like we’re in now, where there’s quite a lot of gray, you’ve got to be able to tell them what they can do, what they can’t do, what’s unclear, what they ought to do within the unclear, and what the regulators think they ought to be doing.”

Hedge Fund Legal Counsel
New York, New York
50+ Hedge Fund Clients

At first glance, hedge funds have many similarities to traditional investment companies such as mutual funds. Both organizations manage large pools of capital for investors, and in return the investors are offered a percentage of the returns. However, these organizations have significant differences in their legal, organizational, and network structures. As a result of these differences, hedge funds operate with greater control over their organizational practices, escape the registration requirements generally applicable to investment companies, and avoid the institutional environment—the formal regulatory rules monitored and enforced by the state—that imposes constraints on the traditional financial markets. This chapter is focuses on answering the first central research question of my project: how do hedge fund organizations purposefully avoid formal law and regulation. In particular, this chapter specifies and explicates exactly how hedge fund organizations, and the broader organizational field, maneuver around the formal legal requirements in U.S. securities law.
The answer to the first central research question is based on the analysis of relevant legal doctrines, statutes, regulations, and the review of secondary sources. The findings are presented in three sections. Section I defines the hedge fund’s formal legal, organizational, and network structures. In particular, this section explains: 1) what legal structures hedge fund managers and legal counselors use to create hedge fund organizations; 2) how hedge funds are organizational structure, and what each organizational divisions entails; and 3) how hedge funds are tied to a broader network of service providers (brokers, administrators, legal counsel, and auditors), and what function each network provider plays in the market. Section II explicates the institutional environment of the U.S. hedge fund market, and identifies the specific formal laws and regulatory bodies that have potential authority over hedge fund organizations. Section III demonstrates how hedge fund organizations purposefully avoid the institutional environment, by maneuvering around the formal rules, definitions, and legal exemptions built into the federal securities code. In particular, this section analyzes: 1) what regulatory acts and current securities law have potential jurisdiction in the U.S. hedge fund market; 2) which administrative bodies of the federal government have potential authority over the hedge fund’s practices; and 3) how the hedge fund organizations maneuvers around the formal rules, registration requirements, and disclosure requirements of the traditional institutional environment.

SECTION I: THE FORMAL STRUCTURES

This section establishes the three formal structures—legal, organizational, and network—that define the hedge fund organization, and which are used by the
organization to avoid formal law and regulation. The \textit{legal structure} of a hedge fund establishes the organization in a particular legal form, and creates the formal rules that govern the organization—i.e. the organization’s constitution. The \textit{organizational structure} of a hedge fund delineates the multiple divisions within the organization, and establishes the institutional rule-making authority that governs interaction within. The \textit{network structure} of a hedge fund is the set of contractual relations that the organization has with five key service providers, and defines a set of institutional expectation played by each organization in the everyday economic exchanges in the market.

\textbf{FORMAL STRUCTURE \#1: LEGAL STRUCTURE}

The legal structure defines and differentiates the hedge fund organization from other types of investment funds operating in the U.S. financial markets. For example, the legal structure of a hedge fund differs significantly from the well-known mutual fund. The formal legal structure of a mutual fund takes the form of an investment company with a simple domestic investment vehicle structure, and limits the range of investment strategies that the mutual fund manager can implement—they are restricted to stocks, bonds, and cash accounts. The hedge fund, in contrast, is legally structured as a limited partnership with a complex domestic and international investment vehicle structures, and frees the hedge fund manager to invest in any asset they desire—the only limits are those explicitly stated in the private placement memorandum (PPM).\footnote{The PPM is an overview document designed to provide a summary of the key elements needed to make an investment decision. The information disclosed in a PPM often includes: 1) executive summary; 2) the fund and organization investment philosophy and objective; 3) the biographies of key investment professionals and members of the board of directors; 4) summary of the terms and conditions, including fees and expenses; 5) the investment track record and prior fund performance; 6) legal and tax matters; 7) investment risks and potential conflicts of interest; 8) accounting and reporting standards; and 9) information concerning affiliated service providers.} As a result of this formal
legal structure, hedge fund managers have more flexibility and freedom than a mutual fund to control their organization.

Beyond the basic juxtaposition of a hedge fund and mutual fund, the legal structure of a hedge fund is the explicit decision—embodied in organizational form—of the hedge fund founder and its legal team to create an organization that avoids direct federal regulation. Specifically, a hedge fund creates complex legal structures that shield its organization from liabilities and federal statutes, and its investors from the federal tax code, depending on where its high net-worth accredited investors are geographically located. For example, “an onshore private investment vehicle formed for the benefit of US residents will be organized completely differently from an onshore investment vehicle formed for the benefit of non-US residents” (Lhabitant 2006: 85). The primary forms of onshore business organizations are sole proprietorships, partnerships (either general or limited), corporations (C or S types), and limited liability companies. However, many of these legal forms of organizations are in conflict with the desires of hedge fund managers and their high net-worth sophisticated investors. For example, sole proprietorships have no separate legal identity, the partners of general partnerships must assume unlimited liability, C-type corporations are separately taxable entities, and S-type corporations are restricted to no more than 75 shareholders and cannot have non-U.S. residents as shareholders (Lhabitant 2006: 85). As a result of the disadvantages of particular legal forms, hedge funds in the United States are commonly organized as limited partnerships or limited liability companies. These two legal structures offer similar benefits to onshore hedge funds. Both are separate legal entities that are created by a state filing. Both offer the same limited liability protection—the owners are typically
not personally responsible for the debts and liabilities of the business. Both are pass-through entities—“no tax is payable at the fund level, and the tax attributes of the various investments are passed directly through to the investors” (Lhabitant 2005: 86).

Limited partnerships and limited liability companies, however, create different management structures and liabilities for owners of the organizations. The preferred structure of most hedge funds is the limited partnership (LP) structure, which has one or more general partners and takes on investors who are “limited partners.” The general partners are responsible for running the fund and can be held responsible for any debts the partnership incurs. The limited partners, in contrast, have no responsibility for making investment or management decisions, and are not liable for the partnerships debts beyond their individual investment. The second legal structure is the limited liability company (LLC). This organizational form of the hedge fund is considered property and “members” are able to buy ownership stakes in the LLC. A member is similar to a limited partner in a limited partnership legal form in that they own an economic interest in the organization and are not liable for the debts and obligations of the company. Unlike limited partners, however, members can manage and control assets in the LLC form of hedge funds.

The disadvantage of an on-shore limited partnership and limited liability company organizational form is that they both withhold tax on any distributions made to non-U.S. investors. Thus, in response to the U.S. tax code structure, hedge funds often create a further level of complexity within their legal structure that allows for both on-shore and off-shore funds within the same organization. Hedge funds create funds that are domiciled outside the United States and are structured as “offshore open-ended companies” (Lhabitant 2006: 87). For example, these offshore funds are registered in the
Cayman Islands, British Virgin Islands, Bahamas, Bermuda, Ireland, Hong Kong, and Singapore. These offshore legal structures allow hedge funds, which are predominantly managed and controlled in the U.S., a number of benefits; 1) easy registration; 2) a reasonable level of confidentiality; 3) limited reporting responsibilities; and 4) minimal level of taxes. The latter benefit significantly affects where hedge fund managers and their legal counsel decide to domicile their offshore open-ended funds.

**FORMAL STRUCTURE #2: ORGANIZATIONAL STRUCTURE**

The formal organizational structure of a limited partnership hedge fund—the most common legal form—establishes the roles and divisions within the organization. The central roles within the organization are the sponsor, the board of directors, the investment advisor, the investment manager, research analysts, and the investors in the fund. The sponsor or general partner of the hedge fund is usually the creator and either a former trader, stock analyst, or portfolio manager who left large investment banks or investment management firms to start their own fund. The board of directors of the hedge fund oversee the way the fund operates and ensures that corporate polices are followed. The investment advisor is often closely related to the sponsor or creator of the fund, and has the very important role of organizing and running the fund. Additionally, the investment advisor is the main research and strategy specialist who chooses the investments for the fund. The investment manager is primarily responsible for the management of a portfolio of the fund in its day-to-day operations and the implementation of the advisor’s recommendations. Finally, the limited partners or
investors are those who contribute capital and receive a form of ownership in the fund, which depends on the legal structure of the fund.

**FIGURE 14: Hedge Fund Organizational Structure**

Based on $100+ million assets under management and three investment strategies

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The organizational structure within the hedge fund is similar to most complex economic organizations and is generally divided into multiple divisions with a hierarchical structure. These divisions generally include the: 1) hedge fund management; 2) investment managers and traders; 3) investment research analysts; 4) internal legal counsel; and 5) compliance and back office administration. The division of labor within the organization corresponds to a hierarchical ordering, which is heavily structured according to their relevance for investment decision-making decisions. It is important to note that the organizational structure presented in Figure 2 is based on a hedge fund with $100+ million assets under management and three investment strategies. The empirical reality is that hedge funds have variation in divisions and hierarchical ordering that are heavily affected by the assets under management—organizations with more than $100
million of assets under management take on a more complex divisions as a result of managing risk, demands from investors, and the complexity of investment strategy.

**FORMAL STRUCTURE #3: NETWORK STRUCTURE**

The formal network structure of a hedge fund consists of, on average, five service providers or nodes: 1) the brokers—both prime and executing broker; 2) the fund administrator; 3) the legal counselor; 4) the custodian or trustee; and 5) the auditor. Prior to defining how these organizations are linked together to form the network architecture, and to understand how it functions on a day-to-day basis, it is necessary to have concrete examples of who these actors are. The following is a brief description of the five service providers, and empirical summary of the market share held by organizations within each field.

**Central Node: The Hedge Fund**

The exponential growth in assets under management by the hedge fund market has been driven by a number of large Wall Street investment banks, often with their own proprietary trading hedge fund divisions, and a few independent hedge funds with legendary money managers. Prior to the 2008 economic crisis, Alpha Magazine—the leading source of information on hedge fund rankings—ranked the top 100 hedge funds in the industry.
FIGURE 15: Top 10 Hedge Funds
Source: Alpha Magazine, November 2008

<table>
<thead>
<tr>
<th>2008 Rank</th>
<th>2007 Rank</th>
<th>Fund Name</th>
<th>Location</th>
<th>AUM ($ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>JPMorgan Asset Mgmt</td>
<td>New York, NY</td>
<td>44,700</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Bridgewater Associates</td>
<td>Westport, CT</td>
<td>36,000</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>Farallon Capital Mgmt</td>
<td>San Francisco, CA</td>
<td>36,000</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>Renaissance Technologies Corp.</td>
<td>East Setauket, NY</td>
<td>33,300</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>Och-Ziff Capital Mgmt Corp.</td>
<td>New York, NY</td>
<td>33,200</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>D.E. Shaw Group</td>
<td>New York, NY</td>
<td>32,240</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>Goldman Sachs Asset Mgmt</td>
<td>New York, NY</td>
<td>29,206</td>
</tr>
<tr>
<td>8</td>
<td>69</td>
<td>Paulson &amp; Co.</td>
<td>New York, NY</td>
<td>28,979</td>
</tr>
<tr>
<td>9</td>
<td>8</td>
<td>Barclays Global Investors</td>
<td>London, UK</td>
<td>26,227</td>
</tr>
<tr>
<td>10</td>
<td>11</td>
<td>GLG Partners</td>
<td>London, UK</td>
<td>23,900</td>
</tr>
</tbody>
</table>

At the top the 2008 Alpha List was JP Morgan Asset Management with $44.7 billion under management, which was almost $9 billion more than its closest competitor. The remaining top four funds on the Alpha’s List were: 2) Bridgewater Associates with $36 billion under management; 3) Farallon Capital Management with $36 billion; 4) Renaissance Technologies Corp. with $33.3 billion; and 5) Och-Ziff Capital Management Group with $33.2 billion. (Alpha Magazine’s Top 100 Hedge Funds).

Network Node #2: The Brokers

There are two specific categories of brokers that hedge funds interact with in order to implement their investment strategies. The first is the executing broker. The executing broker is simply the organization that submits the equity, debt, derivative,
and/or futures trade to the market exchanges. An average hedge fund will have network relations with anywhere from 1 to 10 executing brokers, depending on the complexity of the hedge fund’s trading strategy and the type of asset they are investing in. The second type of broker is the prime broker. The average hedge fund will have network relations with approximately 1-3 prime brokers. The prime broker relationship is the most important relationship for any hedge fund because they reconcile and manage the hedge fund’s trades, they maintain the hedge fund’s assets, and they provide the hedge fund with leverage and credit. In particular, the prime broker clears and reconciles all hedge fund trades done in a number of financial markets, whereby they bring together all trades done by a hedge fund’s executing brokers into a single account, and consolidate the information into reports for the hedge fund manager and investment advisers. Additionally, the prime broker allows a hedge fund to leverage its investments through the use of revolving lines of credit, loans, and a securities-lending network. The securities-lending network, in particular, is fundamental to the traditional hedge fund’s investment strategy of “hedging” or selling short a security—which consists of: 1) borrowing securities that the fund does not own; 2) selling these borrowed securities to buyers in the market; 3) waiting until the borrowed securities have lost value in the market; and then 4) buying the same number of borrowed securities in the market at a lower price and returning those to their prime broker—often referred to as “covering the short sell.” The securities-lending network is made up of banks, large institutional holders, and other brokers who hold a large number of securities in their portfolios.
Figure 16: Prime Brokerage Market Share in the Hedge Fund Market
Source: CogentHedge database, November 2008

Figure 3 shows that the prime brokerage market is dominated by a few large investment and commercial banks. The reasoning behind this market dominance is that the primary role of prime broker’s is to offer hedge funds lines of credit, and provide hedge funds with an securities lending networks—which is needed to sell short securities. The large investment and commercial banks are in an advantages position because they have an extensive asset management infrastructure, access to capital, and access to securities lending network. Leading the field, Goldman Sachs has a little over 24 percent of the hedge fund prime brokerage market. Following closely behind, Morgan Stanley has 19 percent and Bear Stearns has 12 percent. Moving down the ranks, the competition within the field becomes tighter with UBS holding 9 percent, Bank of America with 7 percent, Deutsche Bank with 6 percent, and Citigroup with 5 percent.
**Network Node #3: The Fund Administrator**

The third node in the network structure of a hedge fund is the fund administrator. The fund administrator is primarily responsible for back-office support, such as taking responsibility for operations, administrative tasks, accounting and valuation of services, and investor relations. The most important function of the fund administrator, however, is the independent pricing and accurate calculation of the funds net asset value. This independent function allows investors, who need accurate and unbiased information, to make informed decisions about where to keep there invested capital. Historically the hedge fund retained this pricing and calculation function within the organization. As the market has grown in size, however, the need for transparency and independence from investors has made it a requirement to hire this function out to fund administrators. That is, to leave the accurate and unbiased reporting about the hedge fund’s performance to the organization itself would create a disincentive for investors, as well as create a moral hazard stemming from the fund’s desire to attract more capital from investors. The fund administrator acts to validate the information that investors need regarding the valuation of the hedge fund, which in turn act to mitigate the misappropriation of the investor’s capital by holding the hedge fund responsible.
Figure 4 shows that there are a few organizations with a concentrated market share, and the remaining market share is captured by small organizations with approximately 1 to 4 percent market share. CITCO Fund Services has the largest share within the field at 14 percent. HSBC’s Alternative Fund Service comes in second with 11 percent followed closely by Citigroup with 9 percent, Fortis Prime Fund Solutions with 7.7 percent, and Northern Trust with 7.3 percent. A final observation of the fund administrator field is that approximately 49 percent of the market is divided up to “other” organizations in the field. The large percentage of the market that uses “other” sources of fund administrators is the result of small hedge funds still relying on either in-house administrators—back office—or small local administrators. In recent years, however, there has been an enormous shift away from this historical practice as high net-worth sophisticated investors have begun to demand network transparency, independent verification, and accountability.
Network Node #4: The Legal Counsel

Turning to the fourth node in the hedge fund’s network structure, the legal counsel originally sets up the fund, assists with any tax code and legal matters, and attempts to comply with domestic and foreign regulations pertaining to the hedge fund’s investment strategy. The legal counsel is responsible for the formal documentation of the hedge funds, and prepares the private placement memoranda, new fund offering documentation, partnership contracts, investor contracts, and service provider contracts. Additionally, the legal counsel is routinely brought in to give advice on specific transactions that are outside the main financial exchanges—i.e. for advice on legal ramifications and tax issues on real estate, bankruptcies, and more esoteric assets.

Figure 18: Legal Counsel Market Share in the Hedge Fund Market
Source: CogentHedge database, November 2008

<table>
<thead>
<tr>
<th>Firm</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seward and Kissel</td>
<td>9%</td>
</tr>
<tr>
<td>Simmons and Simmons</td>
<td>8%</td>
</tr>
<tr>
<td>Dechert</td>
<td>7%</td>
</tr>
<tr>
<td>Schulte Roth &amp; Zabel</td>
<td>5%</td>
</tr>
<tr>
<td>Sidley Austin Brown and Wood</td>
<td>3%</td>
</tr>
<tr>
<td>Akin Gump Strauss Hauer and Feld</td>
<td>3%</td>
</tr>
</tbody>
</table>

Looking at the top ten legal counsels in the hedge fund field, Figure 5 shows that the market is competitive, and lacks a dominant organization. Specifically, Seward and Kissel has 9 percent market share. Following closely behind Seward and Kissel,
Simmons & Simmons has a little greater than 8 percent and Dechert has 7 percent market share. Rounding out the top five, Schulte Roth has a little greater than 5 percent and Sidley Austin has 3 percent market share. Similar to the fund administrator market share profile, the market for legal counsel has a large number of “others” organizations that represent hedge funds.

*Network Node #5: The Custodian*

The fifth node in the network structure of the hedge fund is that of the custodian or trustee. The custodian is primarily responsible to take into custody the assets and investments of the hedge fund. For example, the custodian properly records the sell or purchase of equities in the fund’s name and ensures that legal ownership is properly ascertained. In addition, the custodian is in charge of providing payment when securities are bought, receiving payment when securities are sold, and monitoring corporate dividend payments and related information. Finally, the custodian is responsible for providing periodic reports on the transactions within the account and ensuring the operations of the fund are in accordance with regulations.
Within the custodian field, Figure 6 shows a highly competitive field that has roughly a two-tier structure. The first tier has HSBC, one of the largest banking and financial services organizations in the world, with a dominant market share of 17.3 percent of hedge fund organizations under custody, and CITCO with just over 10 percent market share. Within the lower tier, Fortis has 7 percent, Goldman Sachs has 6 percent, and Morgan Stanley has 5.8 percent of the market share.

**Network Node #6: The Auditor**

The final node in the hedge fund’s network structure is the auditor. The role of the auditor is to ensure that the hedge fund is in compliance with accounting practices, the appropriate accounting laws and regulations, and to verify the financial statements of the hedge fund. In comparison with the fund administrator, the auditors are usually only responsible for an annual audit that is in conformity with state and federal legislation.
The auditor does not normally review the fund valuations in detail and thus acts more as a high level regulatory entity removed from the day-to-day investment holdings of the fund.

**Figure 20: Auditor Market Share in the Hedge Fund Market**

Source: CogentHedge database, November 2008

Figure 7 shows that the big four accounting firms have approximately 75 percent market share in the hedge fund market. The leader in the field is PricewaterhouseCoopers (PWC) with approximately 26.3 percent market share of the overall hedge fund market. Coming in behind PWC in second and third is Ernst & Young with 20.9 percent market share and KPMG with 16.4 percent market share. Rounding out the top five, Deloitte has approximately a 10 percent market share and Rothstein Kass has 5 percent.

**Network Architecture**

The role of each player in the network structure is best understood by simply walking through a simple trade execution, which depending on a hedge fund’s strategy can take place intermittently or thousands of times a day.
First, the hedge fund chooses a particular investment based upon the fund’s strategic goals, quantitative models, and research analysts. The investment managers and traders of the hedge fund then place the order with an executing broker—step #1. The executing broker then submits the trade to the market and notifies the fund’s prime broker of its completion—step #2. The fund’s investment managers and traders also communicates the executed trade to the prime broker directly, who processes the trade into its system and reconciles the executed orders and completed transaction by the executing brokers—step #3. The prime broker then conducts a series of financial delivery and payments to ensure that the trade is processed and secured in the market. Additionally, the prime broker reconciles the trade execution order with the processed transaction, and reports the information back to the hedge fund manager—step #4. Finally, the prime broker, often acting as the fund’s custodian, takes possession of the assets and sends financial reports.
to the fund administrator—step #5. It is important to note that, the separation of duties of each service provider in the network structure has been purposefully engineered—based on the lived experience of organizations in the field—to ensure that trades are properly executed and that each party checks the others. Errors and conflicts within this network structure occur regularly—usually referred to as trade breaks—and are constantly being resolved among network partners.

SECTION II: THE INSTITUTIONAL ENVIRONMENT

In comparison with traditional financial organizations—such as banks, mutual funds, and brokerage houses—hedge funds operate in a more ambiguous institutional environment, and leave open to interpretation a large number of grey areas in the formal law. Viewed from one perspective, hedge funds are “excepted from regulation as mutual funds under the Company Act and as a result are not constrained by the Company Act’s rigid and often obtuse rules about such matters as hedging, leverage and diversification” (Shartsis Friese LLP, Hammer et. al. 2005: 2). Viewed from another perspective, however, hedge fund managers are subject to many of the requirements and constraints issued by the state. For example, all hedge fund managers are required by the SEC to disclose their large public equity positions—as specified in sections 13(d) and 13(g) of the Securities Exchange Act. Additionally, all hedge fund managers, who exercise investment discretion over $100 million or more of equity securities, are required to disclose their long positions on a quarterly basis—as specified in section 13(f) of the Securities Exchange Act. To further complicate this ambiguous institutional environment, hedge funds are managed by both registered investment advisors—and must abide by all
the formal regulations in the Securities Act of 1933, Securities Exchange Act of 1934, and Investment Company Act 1940 (see below for a description of each act)—and non-registered investment advisors. As a result of these ambiguities in the institutional environment, and the different requirements placed on hedge funds run by registered vs. non-registered investment advisors, the hedge fund organizational field has significant variation in the constraints governing economic action.

To comprehend how this regulatory environment evolved, it is important to take into account the political ideology that underlies the current regulation in the U.S. financial markets and the historical shocks that the economic system has experienced since the great depression. The regulation of U.S. financial markets, in comparison to other nations, has developed from both historical experiences in the markets and a “free market” ideology. According to this form of market ideology, the government should intervene only in rare circumstance where market forces fail to protect public investors and where these market forces fail to regulate harmful market competition. However, looking at the historical shocks to the U.S. financial markets—market crashes of 1929-1932, 1973-74, 1987, and 2000-2002, etc.—inadequately regulated financial markets have led to rampant speculation, eventual market bubbles, and financial ruin for the broader American economy and society. As a result of the historical shocks to the economy, the free market ideology that pervades public and economic policy has been restrained and limited. For example, after the Great Depression there were a number of regulatory acts put forth by the Federal Government to regulate and control capital, investment vehicles, and financial institutions with regard to the types of investment
activities they can undertake, while protecting investors by ensuring information is properly disclosed to them in the market.

There are three federal regulatory divisions—which include 5 administrative agencies—responsible for overseeing financial markets, institutions, advisers, and their dealings with the U.S. public (see Table 3). First, the Securities and Exchange Commission (SEC) is concerned with public issues or trades of securities. Second, the Commodity Futures Trading Commission (CFTC) monitors futures and commodities. Third, the Federal Reserve, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision are in charge of banks. These regulatory agencies have three general objectives in the financial markets. The first objective is to protect small investors and depositors from abuse and default through licensing, registrations, minimum disclosure requirements and increased transparency. Secondly, their objective is to reduce systemic risks and ensure soundness and integrity of the financial system by imposing capital adequacy and margin requirements. The third objective is to ensure that customers were provided with quality service at competitive prices.

The SEC derives its regulatory powers from a series of Acts (see Table 4) that were passed in the wake of the Great Depression. The Securities Act of 1933 authorizes the SEC to regulate the issuance of securities to the public, as well as the necessary information disclosures. The primary objectives of the Securities Act are to ensure that all investors receive all necessary information concerning securities being offered for public sale, and to prohibit deceit, misrepresentation and fraud in the sale of securities (Shartsis Friese LLP, Hammer et. al. 2005). The Securities Exchange Act of 1934 authorizes the SEC to regulate brokerage firms, transfer agents, clearing agencies, and the U.S.
securities self-regulatory organizations, including stock exchanges (Shartsis Friese LLP, Hammer et. al. 2005). The primary objectives of the Securities Exchange Act are the governance of securities transactions on the secondary market and the regulation of exchanges and broker-dealers in order to protect the investing public. The Investment Company Act of 1940 empowers the SEC to regulate the organization of companies that engage primarily in investing, reinvesting, or trading in securities. The main goal of the Investment Company Act is to protect the general public and prevent abuses by regulating (1) the registration of investment companies, (2) transactions between an investment company and its affiliate, (3) purchases and sales of investment company shares, and (4) the responsibilities of the investment company’s directors and trustees (Shartsis Friese LLP, Hammer et. al. 2005). Finally, the Investment Advisers Act authorizes the SEC to regulate firms or individual practitioners remunerated for advising others about securities investments. Specifically, its primary objective is to regulate the actions of investment advisers by requiring them to register with the SEC.

SECTION III: PURPOSEFUL AVOIDANCE OF FORMAL LAW

The purpose of identifying and explicating the hedge fund’s legal, organizational, and network structures in Section II was to uncover the main apparatus through with these organization are able to avoid many of the formal laws issued by the federal government and administered by the SEC. This section demonstrates how hedge funds avoid the formal-law-on-the-books by taking advantage of three well-established regulatory exemptions and loopholes in the institutional environment that governs the traditional financial markets. In particular, I show how hedge funds maneuver their

The first example of a well-established exemption and regulatory loophole that a hedge fund organization uses to avoid the formal law-on-the-books is Regulation D of the Securities Act of 1933. The Securities Act, as described above, regulates the issuance and sale of securities to the general public. For example, its “primary objective objectives are to ensure that all investors received all necessary information concerning securities being offered for public sale, and to prohibit deceit, misrepresentation and fraud in the sale of securities” Lhabitant (2006: 39). A security is broadly defined in the Securities Act to include instruments such as stocks, bonds, notes, certificate of deposit, etc. However, interests in partnerships and limited liability companies—the interests sold to investors in hedge funds—are not specifically identified in the definition and are only alluded to as “investment contracts.” An “investment contract” is an arrangement where individuals are “led to invest money in a common enterprise with the expectation that they would earn a profit solely through the efforts of the promoter or of some one other than themselves” (Shartsis Friese LLP, Hammer et. al. 2005: 111). Thus, given that investment contracts include the ownership interests offered to limited partners—investors in the limited partnership legal form—and members—investors in the limited liability company legal form—of hedge funds, these interests can be thought of as securities and are covered under The Securities Act.

The Securities Act prohibits the public offering or sale of securities without registration. However, hedge funds avoid the expensive and time-consuming registration
process, and its associated disclosure requirements, by structuring offerings as a private placement, which is exempt from registration. This exemption is commonly referred to as the “private placement offering” exemption (Shartsis Friese LLP, Hammer et. al. 2005: 113). The private placement offering exemption arises under Section 4(2) of the Securities Act, which allows the SEC to exempt from registration certain offerings of securities that do not involve a public offering. In order for hedge funds to avoid direct regulation by The Securities Act and the SEC, their offerings must be restricted to and personally directed to accredited investors—in unlimited number—and up to 35 other purchasers. According to rules specified in The Securities Act, examples of accredited investors are the following: (1) a bank, insurance company, registered investment company, (2) an employee benefit plan with total assets in excess of $5 million, (3) a charitable organization, corporation, or partnership with assets exceeding $5 million, (4) a director, executive officer, or general partner of the company selling the securities, (5) a natural person who has individual net worth, or joint net worth with spouse, that exceeds $1 million, and (6) a natural person with income exceeding $200,000 in the two most recent years or joint income exceeding $300,000 (Securities Act, Rule 501-Regulation D). Moreover, those investors that are not considered accredited investors must be sophisticated investors, i.e. “they must have sufficient knowledge and experience in financial matters to make them capable of evaluating the merits and risks of the prospective investment” (Lhabitant 2006: 40). The restriction to only offer securities to a private group of accredited and sophisticated investors, implies that to avoid direct regulation, hedge fund offerings cannot be publicized by general soliciting or
advertising—whether in the form of advertisements, newspapers, general mailings, broadcasts, or seminars or meetings with invited attendees.

The inability of the hedge fund to make offerings to the public at large, leads to the necessity of the organization to rely on its existing network structure to market securities, if it wishes to avoid direct regulation. The hedge fund must rely on its substantive pre-existing relationships with investors in the fund currently and must form stronger relationships with the managers of capital in its network structure. For example, a hedge fund relies on the five nodes of its network structure—brokers, administrator, legal counsel, custodian/trustee, and auditors—to inform their existing clients to invest in the fund. As a result of this avoidance strategy by hedge funds, by only offering a private placement and relying on their existing network structure to make these offerings, the organizations must now rely on forming a reputation within its network structure that signals that they are legitimate, secure, and trustworthy to investors. In addition to the reliance on the network structure, the hedge fund’s avoidance of formal law and regulation leads to a more complex organizational structure, which creates divisions to seek out private capital. For example, hedge funds create divisions within the back offices of the organization who directive it is to find and attract capital from sophisticated investors.

The second example of how the hedge fund organization interacts with formal law-on-the-books and maneuvers their dynamic, purposefully-structured organizations to avoid legal and regulatory requirements can be seen through an investigation of The Securities Exchange Act of 1934. The Securities Exchange Act “aims at providing governance of securities transactions on the secondary market (after issue) and regulating
exchanges and broker-dealers in order to protect the investing public” (Lhabitant 2006: 44)

In particular, the Securities Exchange Act created the SEC and assigned it with broad regulatory and oversight powers on securities markets, self-regulatory organizations including stock exchanges, and the conduct of personnel such as brokers, dealers, and investment advisers involved in security trading. Under the Securities Exchange Act, all companies listed on stock exchanges must follow certain requirements. The main requirements include the registration of securities, periodic reporting requirements, proxy requirements, and insider reporting and short swing profit provisions (Lhabitant 2006: 44).

Once again, however, the Securities Exchange Act has a number of well-established exemptions and historically constructed loopholes that hedge fund organizations take advantage of and utilize to their advantage. One of the main requirements in the Securities Exchange Act requires dealers to register with the SEC, which is a costly and administratively time consuming requirement. The SEC defines a dealer as a person who is “engaged in the business of buying and selling securities for his own account”, while a trader is a person who “buys and sells securities, either individually or in a trustee capacity, but not as a part of a regular business” (Shartsis Friese LLP, Hammer et. al. 2005). In order to avoid registration with the SEC and specific reporting requirements of the Exchange Act, the hedge fund executes trades solely through its broker and prime broker, and never executes trades directly for clients or investors. In particular, “the fund’s adviser as well as ay of the fund’s employees must not receive any transaction-related compensation when buying or selling securities from or to US investors, since this would qualify them as dealers, therefore requiring
registration” (Lhabitant 2006: 44). In addition to this dealer v. trader loophole, hedge fund organizations avoid registration and reporting requirements by taking advantage of Section 12(g) of the Securities Exchange Act. Section 12(g) requires any issuer having 500 or more holders of a class of equity security and assets in excess of $10 million at the end of the most recent fiscal year to register its securities under the Exchange Act. However, in order to avoid this requirement and the costly registration process, hedge funds in practice limit their funds to 499 investors.

The third, and final, example of a well-established exemption and regulatory loophole that a hedge fund organization uses to avoid the formal law-on-the-books is Sections 3(c)(1) and 3(c)(7) of the Investment Company Act of 1940. The Investment Company Act regulates the organization of companies that engage primarily in investing, reinvesting and trading securities, and whose own securities are offered to the general public. In particular, the Investment Company Act defines an investment company as “any issuer which is or holds itself out as being engaged primarily, or proposes to engage primarily, in the business of investing, reinvesting or trading in securities” (Investment Company Act, Section 3(a)(1)(A)). In practice, this means that any investment pool that meets the definition of an investment company should register with the SEC under the Investment Company Act and should abide by its regulations. This registration with the SEC would restrict the investment company from investing capital in particular investments and particular investment strategies that are higher risk—such as highly leveraged and concentrated positions, the use of derivatives, and short selling.

In the day-to-day experience of law in the market, Hedge fund organizations take advantage of an exemption and loophole in the Investment Company Act of 1940 and
avoid many of its requirements and restrictions. In particular, hedge funds avoid the Company Act by using the exemptions in Sections 3(c)(1) and 3(c)(7). Section 3(c)(1) “excludes from the definition of investment company any issuer whose outstanding securities (other than short-term paper) are owned by not more than 100 US beneficial owners” (Lhabitant 2006: 46). Section 3(c)(7) “excludes from the definition of investment company any issuer whose outstanding securities are owned exclusively by persons who, at the time of acquisition of such securities, are qualified purchasers” (Lhabitant 2006: 47). In practice, hedge fund organizations are structured in such a way as to restrict the number of investors to 100 US based investors—but can take in more capital from off shore investors—and are limited to private sophisticated investors as defined in the Securities Act.

DISCUSSION: EMPIRICAL FINDINGS

The empirical findings in this chapter answer the first central research question of my project: how do hedge fund organizations purposefully avoid formal law and regulation. Hedge fund organizations use a number of formal structures to purposefully avoid the formal legal environment. For example, hedge funds are legally structured as limited partnerships with complex domestic and international investment vehicle structures, and only offer private placements to accredited investors. The specific legal structure allows hedge fund managers to avoid a large number of SEC regulations by taking advantage of legal exemptions and regulatory loopholes in the existing securities law—historically put in place to protect the average investor. For example, the legal structure allows the hedge fund manager to avoid the investment advisor registration and
Disclosure requirements that have been formally institutionalized throughout organizations in the traditional financial markets. The hedge fund’s network structure enables its manager to maneuver around the regulatory environment and the traditional banking sector by connecting to large networks of non-bank financial organizations that can provide all required market services. These networks of non-bank financial organizations largely operate beyond the reach of federal administrative agencies, and together make-up the market-based institutional structure called a shadow banking system. The network of non-bank financial organizations is highly insular and restricts participation to large institutional money managers such as hedge funds. Through the use of the legal, organizational, and network structure hedge funds are able to maneuver the organizations around three specific loopholes in the formal securities law—Securities Act of 1933, Securities Exchange Act of 1934, and Investment Company Act of 1940. The result of this purposeful avoidance of law is that the formal law and regulations in the institutional environment have limited impact on the hedge fund market and the organization’s economic action. The role of the institutional environment, however, is still significant and is explained in greater detail in Chapter Five.
CHAPTER FIVE

The Purposeful Avoidance of Law Does Not Lead to an Absence of Order

“The opinion from many hedge funds is that they’re operating in the most regulated unregulated space in the world. Such that, as long as you comply with the volumes and volumes of tax laws, SEC regulation, ERISA regulation, state blue sky laws, and other federal regulation, as long as you comply with all these items, you’re not regulated. So it’s really, I think, a little bit of a fallacy to say that hedge funds are not regulated.”

Hedge Fund Auditor
Boston, Massachusetts
50+ Hedge Fund Clients

In the previous chapter, my investigation specified how hedge funds are structured—legally, organizationally, and relationally—and demonstrated how these structures are used to avoid the formal laws and regulatory requirements of the federal government. For example, the hedge fund organization is structured as a limited partnership and only offers its services to private high net-worth accredited investors, which are brought in by existing network relations and organizational divisions that are legally prohibited from marketing to the public. This chapter begins where the previous chapter leaves off by investigating whether there are institutional consequences to purposefully avoiding formal law and regulation. In particular, this chapter answers the second central research question of my project: what are the consequences of purposefully avoiding formal law, and does the purposeful avoidance of law lead to an absence of order in the organizations and organizational field.

This chapter presents evidence—based primarily on my qualitative interview data, supplemented by relevant legal doctrines and secondary legal sources—that even though
hedge funds purposefully avoid many of the formal regulatory rules in the traditional institutional environment, the organizations and the organizational field become ordered and institutionalize. In particular, the analysis of the interview data revealed that the *avoidance of law does not lead to an absence of order* in hedge fund organizations and the organizational field. In fact, the data revealed multiple mechanisms through which order is constructed and economic action is governed. The first mechanism is, ironically, the formal institutional environment that regulates the traditional financial markets. In particular, the hedge fund’s purposeful avoidance of law moves the organizations into an ambiguously regulated social space (with a minimal number of formal rules and no formally designated enforcement/monitoring agent), which poses a number of institutional consequences that must be addressed. In response, hedge funds develop varying organizational strategies to establish order, and institutionalize governance practices in the ambiguously regulated space. For example, the organizational response of hedge funds managing more that $1 billion in assets under management is to voluntarily register with SEC, and succumb to the constraints established in the formal institutional environment. The second mechanism—which is elaborated in detail in Chapter Six—is an informal social structure that constructs order and governance through social institutions (within the organization) and network relations (among organizations).

Chapter Five proceeds through three sections. **Section I** describes the institutional consequences of purposefully avoiding formal law and regulation. In particular, the data analysis revealed that there are at least two institutional consequences for the hedge fund market that must be addressed by hedge funds and the organizational field. **Section II** specifies how the organizations respond to these institutional consequences by
developing different strategies to establish order and govern economic action. For example, this section focuses on the first organizational response, and explicates how this organizational response allows the formal institutional environment to directly structure the governance practices of a particular group of organizations in the market. Section III briefly outlines the second organizational response to constructing order and governing economic action, and explicates the particular characteristics of the organizations in this second group.

SECTION I: THE AVOIDANCE OF LAW HAS CONSEQUENCES

Unlike other organizations operating in the traditional financial markets, hedge funds have purposefully been structured to avoid the formal laws and regulations issued by the federal government. As a result, the organizations have greater control over their practices, investments, and strategies. According to the managing partner at one of the largest hedge fund legal counsels in New York City:

“Relative to mutual funds, hedge funds are less regulated, significantly. That means they can do more things. That means they are inherently riskier. Hedge funds encompass a wildly, more varied range of investment practices than mutual funds, so they might be much more leveraged or not leveraged. They might trade futures, derivatives, swaps. They might use very esoteric trading strategies. They might use fairly boring trading strategies.”

Hedge Fund Legal Counsel, Managing Partner
New York City, New York
50+ Hedge Fund Clients

By purposefully locating their organizations in a less regulated space, wherein they have greater freedom to choose investment strategy and do not have to be constrained by
federal requirements, the organizations are forced to deal with a number of unintended consequences. The first consequence for the market is a rise in market uncertainty and overall investment risk. For example, investors experience additional risk as a result of hedge funds taking concentrated positions in esoteric, complex, and unregulated investment products. In addition to the risks associated with the hedge fund’s complex investment strategies and products, which are difficult to understand even for sophisticated investors, investors have an additional risk from the lack of transparency in how the organization manages their capital and no formally regulated monitoring agent.

In practice, the institutional consequences of additional market risk, a lack of transparency, and no formal monitoring agent force hedge funds to respond and mitigate to the loss of formal rules and regulations. For example, hedge fund managers and their legal counsels appropriate sections of the law to construct limited partnership agreements and offering memorandums. These agreements and memorandums attempt to do two things. First, they provide a certain level of transparency to the market by giving investors insight into how the organization is run, what will be done with their capital, what type of volatility to expect, and when can their capital be redeemed. Second, the organizations use the agreements and memorandum to limit the potential risk of future litigation—by limiting their liability and disclosing the necessary information to investors. The use of formal law to minimize risk and liability by an unregulated and unregistered organization was conveyed to me throughout a number of conversations with informants in my data. The following conversation with a New York principal and managing partner shows how important these documents and contracts are for the organizations:
“Where the law is helpful is in the construction of those hedge fund documents so if there is ever a dispute or there is a dispute with the limited partners of the fund, that law firm you know, their most important assignment for that hedge fund in the creation of the private placement memorandum. Ultimately all court rulings or all potential legal negotiations or interpretations are going to be born from that private placement that we are in.”

Hedge Fund Principal & Managing Partner
New York City, New York
1+ Billion Under Management

A second consequence of purposefully avoiding formal law, and operating within an institutionally ambiguous social space, is that there is little assurance that hedge fund managers are whom they say they are and that the organization will do as it says with the investor’s capital. In particular, there is no specific institutional mechanism in place to verify hedge fund managers and their organizational credentials. There is no formal institution or administrative body that checks, verifies, or monitors the hedge fund organizations at the federal level. In practice, the consequence of this institutional absence leads to easy entry into the market for a number of unqualified or questionable money managers. That is, if money managers have access to large pools of capital and can convince investors that they can successfully manage their money, then these managers will experience minimal institutional and regulatory barriers to set up a hedge fund. According to an experienced managing partner at a hedge fund legal counsel, who currently helps hedge fund managers set up their organizations, the lack of an institutional mechanism leads to low barriers to entry for money managers and is a central concern that has plagued the hedge fund market:
“There’s not an inherent evil around the hedge fund world, just like there’s not an inherent evil around a lot of things. What there was in the hedge fund world – and to some extent still is – is the lower barriers to entry. It’s very tough to become a fraudulent brain surgeon, because first you’ve got to become a brain surgeon, right? It’s just tough to fool people. It’s a hell of a lot easier to become a hedge fund manager, or at least it was until a couple of years ago. If you could get a few people to round up $50 million, you’re in business.”

Hedge Fund Legal Counsel, Managing Partner
New York City, New York
50+ Hedge Fund Clients

SECTION II: ORGANIZATIONAL RESPONSE TO ESTABLISH ORDER

The lack of any formal mechanism to govern the risky investment practices, or to verify and monitor hedge managers and their organizational behavior, poses a number of institutional voids—which traditionally is regulated by the institutional environment—that must be addressed by the organizational field. To fill the institutional void, hedge funds respond through varying organizational strategies and mechanisms. In the following section I explicate the first organizational strategy and mechanism revealed from the data analysis, and specify how this organizational response allows the formal institutional environment to directly influence the governance practices of the hedge fund market.

Organizational Strategy #1: Voluntary State Registration

The first organizational response to the intuitional absence has been to voluntarily register with the U.S. federal regulators. In particular, the majority of well-established hedge fund managers, who run organizations with $1+ billion under management, have voluntarily registered with the SEC or are currently in the process of voluntary
registration. Thus, ironically, even though their organizations have been structured to avoid many of the registration and disclosure requirements by formal law, a group of hedge fund managers have registered and are adopting the regulatory practices issued by the federal government. While there is no official data that reports what percentage of managers in the overall hedge fund market—or particular segments of the market—are voluntarily registered, a number of experienced and knowledgeable informants agree that registered investment advisors are managing a large percentage of the capital in the overall market. According to a managing partner at a New York law firm:

“I don’t know what the numbers are, but in terms of total assets in the industry, I would guess a high percentage, probably 75 percent if not more of all assets are already managed by registered investment advisors. So there are a lot of rules that already apply to hedge funds, in most cases, and that’s what we spend a lot of our time trying to keep people in compliance with and out of trouble with.”

Hedge Fund Legal Counsel, Managing Partner
New York City, New York
50+ Hedge Fund Clients

These voluntarily registered managers are subject to SEC registration, are required to comply with many additional requirements and structure their organizational practices accordingly. The registration process includes at least four sets of requirements and restrictions on the organizations’ practices. First, the investment advisor must file a Form ADV with the SEC. This registration form consists of two parts and includes: 1) information regarding the firm, the firm’s business practices, the person who own and control it, the person who provides investment advice on the firm’s behalf, the minimum investment commitment, current value of assets, and other information regarding private funds; and 2) a brochure that provides to all clients that covers information about the
advisory services offered by the firm, the fees being charged, the ways securities are analyzed, the discretion the adviser has over clients’ investments, and background information on adviser and his potential conflicts of interest (Lhabitant 2006: 50). Second, once the investment adviser has registered with the SEC by filing the Form ADV, he must then comply with all the requirements of the Investment Advisors Act of 1940. In particular, they must have a: 1) written compliance manual in place; 2) must designate a competent and knowledgeable chief compliance officer; 3) must adopt a code of ethics; and 4) must maintain books and records for almost everything they do regarding the management of clients’ money for a five year period, which need to be in a secure location and accessible by the SEC upon request (Lhabitant 2006: 50). Third, registered investment advisors face restrictions on performance fees. For example, registered advisors may only charge performance fees to qualified investors that have a net worth of at least $1.5 million or have a least $750,000 of assets under management with them. Finally, investment advisors are subject to periodic on-site examinations by the SEC, which can occur as frequently as every two years and last from one week to several months.

The question arises, however, as to why a hedge fund manager would voluntarily register with the SEC, and place himself under the watchful eye of federal regulators and increase the administrative costs associated with registration? The data analysis revealed that large hedge fund organizations are dependent on large institutional investors—such as pension funds, foundations, and endowments, etc.—and are increasingly feeling the pressure to register to address the interests and demands of institutional clients. A general manager of a large, sophisticated hedge fund based out of New York explains that over
the last few years, his organization’s management has felt the institutional demands for increased verification and security, and has adjusted their practices accordingly:

“We were unregistered previously because we felt it was in our business interest to do so, but times have changed. We have been operating ourselves as if we were a registered investment advisor with a compliance team in place for about a year and a half previously. So, we saw the writing on the wall. And we prepared for this. We’ve also gone out – we started reaching out to new investors, especially large international institutions or ERISA-type investors that demand that you be registered. So, if we wanted to ever take their money, and we do, then you basically have to play their ballgame.”

Hedge Fund, Macro-Trading General Manager
New York City, New York
$4+ Billion Under Management

For large hedge fund organizations, the increased costs of registering and creating an extensive compliance infrastructure has become an institutional expectation and a normal part of doing business. In fact, this new institutional expectation, based on the interests and demands of institutional investors, has begun to structure the broader practices of the organizational field. In the following statement by a general manager of trading at a New York hedge fund, the informant describes how this institutional expectation was experienced in his fund:

“It’s basically a cost of doing business. Once we got to a certain size and once we – our business strategy evolved to the point where we moved away from, you know, clientele that was willing to accept us as an unregistered advisor and to a new client base that demands that you be registered, we made the business decision that we had sufficient scale and desire to grow in that direction to warrant registration. So, we hired the people, put the program in place and registered.”

Hedge Fund, Macro-Trading General Manager
New York City, New York
$4+ Billion Under Management
The result of these organizations voluntarily registering with the state—which is driven by both the absence of a formal institutional mechanism to ensure market verification, and the interests and demands of institutional investors—is that the institutional environment operating in the traditional financial markets has direct influence on a large number of hedge fund organizations. For example, the regulations and requirements established in the U.S. securities laws directly structure the practices of an important group of hedge funds. In particular, the majority of invested capital is managed by large hedge fund organizations that have the financial resources to absorb the additional costs associated with registering, and have the organizational infrastructure and service provider networks in place to meet federal requirements. Thus, formal law is clearly present for this subset of organizations, and can be seen through the institutions and day-to-day practices of these organizations. According to the managing partner at a large hedge fund legal counsel, the law is ubiquitous in organizations managed by registered investment advisors. For this group of organizations, the law:

“regulates every aspect of what you do. I mean, I could send you a Compliance Manual and you could read it, and read all the things that you’ve got to do to be in compliance with rules governing all aspects of what you do – how you allocate trades, what brokers you use, how you advertise your services, how you get clients, what you can say in agreements with clients, how you calculate and charge fees to clients, how you present your past performance, what you can say in offering documents, marketing documents, where you keep custody of assets, and how you calculate fees.”

Hedge Fund Legal Counsel, Managing Partner
New York City, New York
50+ Hedge Fund Clients

In addition to the formal institutional environment directly structuring the economic action of hedge funds managed by voluntarily registered advisors, the
institutional environment also structures the relations between the hedge funds and the state—the institutional environment conditions state-market relations. In particular, the relations between the hedge fund organization and the government become formalized, and interactions are more numerous and rigorous. For non-registered advisors, their organizations have limited relations with the SEC, and rarely interact with the regulatory agency on an annual basis. Interaction between non-registered advisors and the SEC only takes place if the non-registered adviser: 1) commits fraud; 2) holds large public equity positions—5% long positions relevant to corporate control and its transfer; and/or 3) holds long equity positions in excess of $100 million. Registered investment advisors, on the other hand, are required to file numerous documents and formally interact with the SEC throughout the process of registration. Additionally, hedge funds run by registered investment advisors have a high probability of an audit from the SEC within one to three years of becoming registered.

The formal relations and interactions between the SEC and registered investment advisors is difficult to empirically verify but a number of my informants have shared insights into the interaction and practices that take place behind the closed doors of a federal audit. The interaction in a federal audit reveals how formal law and regulation reach into a subset of organizations, and structures organizations and economic action. It is important to note that the insights for this section are drawn from a smaller sample of very knowledgeable and experienced informants. The small number of observations stems from a lack of direct interaction with the SEC by many of the expert informants in my sample, and the hesitation to disclose details of a federal audit to an outsider observer. Taking into account this caveat, however, these observations offer important insight into
an minimally unobserved regulatory process, wherein state-market interaction orders and institutionalizes a formally unregulated space.

My data analysis revealed that the majority of employees—portfolio managers, traders, and analysts—in registered hedge funds have little knowledge about the formal institutional environment and formal relations between their organization and federal regulators. The reason this lack of knowledge exists is because particular organizational divisions, such as internal legal counsel and back office compliance, are delegated the responsibility of filling documents and ensuring the formal requirement are implemented throughout the organization. As a result, when asked how the formal law impacts his hedge fund, a portfolio manager states that according to his knowledge they “had to maintain books and following the organization’s compliance manual.”

The knowledge of the formal institutional environment and interactions with state regulators, however, differs dramatically for hedge fund veterans, general counsel, and external auditors. For example, in the following conversation with a 30+ year veteran and manager in a New York hedge fund, the relations between the SEC and his hedge fund are best exemplified in following manner:

“Normally it revolves around maintaining systems of books and records and doing required training, having compliance manual that compiles all, you know, all of your operating procedures and accords with the law. And then, basically when the SEC shows up once in a while to audit you, you go into the audit and you lay it all out for them. They do checking. They do tests of the things that you assert. They do private interviews of many different people, sometimes randomly – random people within each firm in various categories of job role, and you end up having to respond to whatever the outcome of the final report looks like.”

Hedge Fund, Manager
New York City, New York
$2+ Billion Under Management
Among the expert informants in my sample who had knowledge of the federal audit, little was known as to why or how the SEC decides to audit particular registered advisors and their organizations. According to one informant, who has extensive experience with the SEC, and has helped many of his clients respond to the audit requests by the federal regulators, he states that:

“The SEC won’t tell you who they’ve picked to examine and why. Examinations can range from a two-day visit, which is unusual, to a one- to two-week visit which is usual, to a three-month visit, which is not all that unusual. It’s all random, somewhat secretive. I mean, literally they are using a risk-based analysis where they focus on, in part, random testing, in part they’re focusing on the biggest managers, and in part focusing on managers who they think are most at risk, but they don’t tell you how they pick them, within any of those, or how they break it down. You just get a phone call – “Hi there, we’re coming next week. Set aside an office for us.””

Hedge Fund Legal Counsel, Managing Partner
New York City, New York
50+ Hedge Fund Clients

Once the SEC has decided to enter the registered investment adviser’s hedge fund organization the auditing process is very time intensive, and takes on a number of formal procedures that directly affect the hedge fund’s practices. Interaction between the SEC and audited hedge fund is formally scripted, and has a number of formal proceedings. A managing partner at a leading New York law firm described this scripted and formal interaction in the following manner:

“So the SEC shows up. They want to be left alone in an office, they want hordes and hordes and hordes and hordes of paper, and keep asking for it and you keep giving it to them, and they pore through it endlessly. They come back and ask sometimes very
intelligent questions, sometimes incredibly stupid questions. You answer them. They don’t like to have you answer them in question. They like to give you a written question; you give them written answers. So the client will talk to me about what they should be answering in those written answers.”

Hedge Fund Legal Counsel, Managing Partner
New York City, New York
50+ Hedge Fund Clients

Once the SEC audit is complete, the interactions between the registered adviser and the administrative agency take on a number of formal written interactions. The content of these formal written documents describes in detail how the hedge fund has responded, or plans to respond to, the federal audit. For example, the hedge fund must describe how their organization has changed their governance practices, or plans to change their practices going forward. In a limited number of cases, for those hedge fund managers and organizations that want to defend their practices, advisors respond through formal written documents that explain why their organizational practices are not outside the formal regulations. According to the managing partner at a leading New York legal counsel:

“And at the end of the examination process the SEC produces a deficiency letter and then we help them write the response to the deficiency letter, explaining either how they changed their processes to comply with the SEC’s suggestions, or why they didn’t think they did anything wrong, or why they didn’t, in fact, do anything wrong and actually did everything in accordance with the rules – whatever the answer is. It’s kind of a strange process and it’s one of the reasons why the SEC was capable of missing Madoff.”

Hedge Fund Legal Counsel, Managing Partner
New York City, New York
50+ Hedge Fund Clients
FORMAL LAW THROUGH NETWORK PARTNERS: LEGAL COUNSEL AND AUDITORS

Moving beyond the formal institutional environment directly structuring hedge funds managed by registered advisors, there are two important relational or network pathways through which these organizations becomes ordered and institutionalized. In particular, the data analysis revealed that formal law and regulation are transmitted throughout the hedge fund organization—both registered and non-registered advisors—by the day-to-day interaction with service providers. Specifically, there are two actors who share the organizational responsibility of interpreting and implementing the formal legal requirements throughout the hedge fund organizations. First, the interpretation and implementation of formal law is handled by the hedge fund’s legal counsel, and if the circumstances require it, by an external legal counsel. Within the hedge fund organization, legal counsel has a wide array of duties that include ensuring that: 1) internal organizational practices are in compliance with the formal law and regulation—assuming they are a register adviser or are attempting to become registered; 2) the investments are protected by existing law; 3) investment strategies minimize the future risk of litigation; and 4) vendor and employee contracts are in compliance with the law. According to the general counsel at a Boston hedge fund, his organizational responsibility forces him to interact and interpret the formal law in the following manner:

“We do everything that a lawyer would do in any organization. Anything from vendor contracts to HR contracts to employee compensation . . . and then with respect to the industry-specific, to the extent that we have private deals or deals where we had invested in public companies and they're now private, or if we've got a company that's distressed; we're in a bankruptcy proceeding—all of that stuff. I'll either do the legal work or bring in the right experts to help us with that. That's kind of the operational side of the investment side.”

Hedge Fund General Counsel, CCO
On the transaction side of the organization, the general counsel is focused on what buying a set of legal rights in a company allows the hedge fund to do in certain circumstances, and what it precludes them from doing in others. For example, the hedge fund manager and traders may want to take a position in a private company but do not have the knowledge about their legal rights as an outside investor to structure the company’s management decisions. The general counsel is necessary to navigate the particular laws and outline when, where, and under what conditions the hedge fund can exercise its formal legal rights. According to one general counsel,

“Maybe somewhere where you're stuck in a big position and you want to do some activism; maybe not take over the board but be the catalyst for change, you know. How can we write this letter? What do we have to be mindful of? Are we paying attention to the proxy rules? You know, for the public company. When can we send the letter? When can we make the demand? Are our shares registered?”

Hedge Fund General Counsel, CCO
Boston, Massachusetts
$500+ Million Under Management

Turning to the client side interaction, the legal counsel of the hedge fund is responsible for ensuring that the fiduciary duties to the limited partners or investors in the fund are being monitored and represented. In particular, the counsel must balance how law interacts with the organization’s experiences in the market, multiple divisions, and ensure that all legal interactions are minimizing the organization’s risk, and maximizing profitability. According to the legal counsel of a Boston hedge fund, he must constantly
manage legal risk from within—in the most efficient manner possible—and must know when to hire the risk out to external legal counsel. He states,

“Really, my job as general counsel is a bit of a risk function, in that I’m looking out for those risks that apply to our firm, and looking out how best to deal with them. And if I can do that internally, in an efficient and complete manner, then I’ll do that.”

Hedge Fund General Counsel, CCO
Boston, Massachusetts
$500+ Million Under Management

In practice, once a hedge fund hires a general counsel, the organization becomes more cognizant of the formal law and interacts with the institutional environment at a greater frequency. Specifically, the data analysis revealed that as the hedge fund organizations grow in size, they must manage internal risks to a much greater degree and more legal issues develop. The hedge fund legal counsel is the particular actor inside the organization who’s responsibility it is to ensure that governance practices are in accordance with the formal law, or take advantage of the regulatory loopholes in the formal law. This insight is embodied in the following quote from a managing partner at a hedge fund legal counsel—based out of New York:

“One of the funny things is, the first lawyer someone hires actually increases our work rather than decreases our work... Up until that point, some legal issues don’t get noticed, some legal issues just get dealt with a little less formally. Once you’ve got an in-house lawyer, more issues are going to get flagged, more time is going to be spent making sure procedures are up to date and quote-unquote best practices, just overall more issues will be flagged. Certainly as often as not, our work goes up when a fund hires in-house counsel.”

Hedge Fund Legal Counsel, Managing Partner
New York City, New York
50+ Hedge Fund Clients
Shifting from a hedge fund’s legal counsel to their auditor, the data analysis revealed a second direct pathway through which formal law orders and structures hedge fund organizations, and their economic action. In general, the formal interaction between an auditor and a hedge fund organization takes place once a year. Informal interaction, however, takes place often between the annual audits. The informal interaction between the hedge fund and their auditor are focused on: 1) how to align particular investment strategies with the existing tax code; 2) how to adjust their accounting practices to conform to changes in the tax code or to take advantage of these changes; and 3) how to protect investors profits from being taxed by existing tax structures. According to a managing partner at one of the big three accounting firms based out of Boston:

“The actual audit itself happens once a year usually on a calendar year basis. So the year ends and the audit process kicks into gear and its, in our terminology, busy season on the tax side. What happens outside of that interaction, there’s a tremendous amount just before and after year-end process. But throughout the year numerous items come up. Either accounting questions, which would be focused on the audit side, and probably more so on the tax, operational, and structural side that kind of fit in my wheelhouse.”

Hedge Fund Auditor, Managing Partner
Boston, Massachusetts
50+ Hedge Fund Clients

In practice, the day-to-day interaction with the formal tax code takes on multiple forms within the organization. For example, if the hedge fund is investing in an exotic or esoteric security, then the auditor will be called in to discuss how a particular section of the tax code applies, and how the hedge fund can adjust their practices to ensure maximum returns and minimize litigation. The interaction with the auditor and formal tax
code is dynamic and depends on the hedge fund’s circumstance and investment strategies.

An informant at a Boston accounting firm states that:

“There are some items within certain types of funds, depending upon what type of financial instruments they trade, where an election could be made as of the close of each trade day as to what type of tax treatment they would like to have apply to a certain investment. So, for instance, certain trades in foreign currencies, you can elect as of the end of day to receive capital treatment of that foreign currency or if you don’t elect, the general rule is that it will be treated as an item of ordinary income or loss.”

Hedge Fund Auditor, Managing Partner
Boston, Massachusetts
50+ Hedge Fund Clients

Changes to the tax codes give rise to a number of corresponding opportunities and difficulties, which the hedge fund organizations must deal with quickly by adjusting their practices. The data analysis revealed that many hedge fund managers and auditors see the tax code as a structure through which they must maneuver their organizations around to maximize profit—quickly before other market competitors have the chance to. One particularly insightful informant, who was well versed in the minutia of the US tax code and how it has changed over the years, gives the following example of how interaction is constantly taking place to adjust the hedge fund’s practices. He states:

“On March 18 of this year, HIRE Act was signed into law and the HIRE Act contained numerous provisions that impact the hedge fund industry, a lot of them tax-driven, but I’m working with a couple of new funds now, and I saw the first draft of the legal documents come in, and there’s a whole section about the new requirements under the HIRE Act, and these are already baked into the newest sets of documents that are coming out, so just like giving tax advice and accounting advice, you’ve got this constantly shifting and iterating framework with which to deal with. . . your different advisors will probably need to be
contacted and as funds – they’re very small, nimble organizations. They’re always iterating and tweaking and figuring out a different spin on their strategy to be able to try and benefit their investors.”

Hedge Fund Auditor, Managing Partner
Boston, Massachusetts
50+ Hedge Fund Clients

SECTION III: THE INFORMAL ORGANIZATIONAL RESPONSE

The data analysis revealed that the organizational response to voluntarily register with the federal government, and thereby be directly structured by the formal regulatory rules in the institutional environment, only affects a small number of important hedge fund organizations—who manage the majority of capital in the overall market. The majority of hedge fund organizations, in contrast, are not directly influenced by the formal governance mechanisms outlined above because these funds do not have the resources to voluntarily registered with the SEC, take on general counsel, and have repeated consultations with auditors. Thus, formal law and regulation—as transmitted through the SEC, legal counsel, and auditors—does not directly order and institutionalize this second group of hedge fund organizations, and does not directly govern their economic actions. My investigation into the order and governance practices of these smaller hedge fund organizations has revealed not anarchy but a informal extra-legal governance structure—consisting of informal institutional structures within the organizations and relational ties/constraints among network partners.

While this extra-legal governance structure will be articulated in greater detail in Chapter Six, this section explicates the organizational profile of these smaller, formally unregulated organizations. As of 2008 the average hedge fund was not registered, had
approximately $87 million under management, and had a median size of $22 million. The three dominant organizational types by market share are the following: 29% of hedge funds manage $25-$100 million, 16% manage $10-$25 million, 17% manage less than $10 million. The figure below breaks down the overall hedge fund market by assets under management.

**Figure 22: Market Share by Hedge Fund Size**

Source: Chart is adapted from Lhabitant (2006) and data come from the Hedge Fund Research database

The importance of this empirical break down is to point out that the “average” hedge fund organization in the market is not registered with the SEC and manages, relatively speaking, a small pool of capital. For this group of hedge fund organizations, the avoidance of law and the lack of a formal mechanism to deal with the institutional void in which law usually operates leads my investigation to grapple with a more complex and nuanced mechanism that constructs order and institutionalizes governance.
The purposefully avoidance of formal law and regulation, and the unintended institutional consequences described above, have paradoxically allowed this group of organizations to survive in large numbers. The reasoning behind this success can be explained by looking into the particular qualitative characteristics of the organizations. These hedge fund organizations can be broken into two subgroups. The first subgroup consists of organizations that are run by a small number of employees (usually less than 10 individuals), have a small number of outside investors, predominately manage money for friends and family, and implement a simple trading strategy. According to a Boston hedge fund manager, this group of hedge funds is not what is usually thought of when you hear reports on the structure and power of hedge funds. He states,

“The distribution of those 3,500 hedge funds is really weird because a thousand of them are a single guy with Uncle Joe’s ten million bucks. I think those thousand guys each has their own weird little setup where partly they’re just managing Uncle Joe’s account at Fidelity but they set up their own little company and they’re calling that a hedge fund. They don’t have separate books and they don’t have an outside auditor. They just have Uncle Joe’s account at Fidelity. So, I think the vast majority—the modal hedge fund operator has none of that other stuff. That’s the most common situation, but, of course, none of those guys matter ’cause they’re all tiny and they don’t do anything and many disappear after two years.”

Hedge Fund Manager and Principal
Boston, Massachusetts
$50 Million Under Management

The second subgroup consists of organizations that predominately manage money for large, successful, and well-established hedge funds. This second group of hedge funds is often referred to as a “managed account” hedge fund. These hedge fund organizations are run by a small number of employees, who are highly educated, technically trained, and are very successful in using a complex investment strategy. A defining characteristic
of these organizations is that they are not ready, or willing, to create an independent hedge fund, which must account for the interests and demands of large institutional clients. Analyzing the smaller organizations in my data revealed an archetype example of this type of organization. According to a hedge fund manager, who runs a successful managed account hedge fund with five employees in the suburbs of Boston, his organization is “not unrepresentative of the thousands of tiny places.” This managed account hedge fund is run by a manager with a PhD in physics—from one of the leading research universities in the world—and learned his quantitative modeling techniques at the top investment banks on Wall Street. The fund manager explains that he wanted to go out on his own after many negative experiences with large, bureaucratic Wall Street life but did not want to take on all the organizational and financial responsibilities that come setting up his own hedge fund. For him, the independence of running his own successful quantitative strategies without the additional stresses was the right fit. He states:

“Setting up and running a hedge fund is a large and expensive enterprise. Requiring limited partnership subscription documents and if you are to be deemed reliable enough for significant outside investment you have to invest a lot in infrastructure—back and middle office stuff and so on. So there are a number of shops that have as their business model, you know, basically they’ll give you money and you trade. They handle all the operational aspects. Millennium in New York funds external groups. SAC Capital funds external groups. Paloma Partners funds external groups. Tudor. Soros. They all fund external groups and handle the operations for them.”

Hedge Fund Manager and Principal
Boston, Massachusetts
<$100 Million Under Management

The larger, well-established hedge funds in the market are willing (and able) to hand over millions of dollars to these successful managers because of two reasons. First, the success
and reputation of the multi-billion dollar funds puts them into a position where their ability to raise capital exceeds their capacity for managing it internally. Second, as a result of the transportability of running quantitative models from any location in the world, large hedge fund organizations can extend their geographic reach beyond Manhattan or Greenwich to include a number of successful portfolio managers around the country.

DISCUSSION: EMPIRICAL FINDINGS & THEORETICAL IMPLICATIONS

The empirical findings in this chapter answer the second central research question of my project: what are the consequences of purposefully avoiding formal law, and does the purposeful avoidance of law lead to an absence of order in the organizations and organizational field. The evidence presented in Chapter Four and Five reveals the paradoxical finding that hedge funds operate in one of the most regulated unregulated spaces in the U.S. financial markets. It was shown that these organizations are structured in such a way as to avoid a number of the formal laws—Securities Act of 1933, Securities Exchange Act of 1934, and the Investment Company Act of 1940—issued by the federal government, and avoid traditional institutional environment that regulated financial market organizations. The purposeful avoidance of law and regulation, however, does not create an absence of order in the organizations or in the organizational field. The hedge fund market, to the contrary, is ordered and institutionalized by a number of social processes and mechanisms.

The empirical evidence in this chapter revealed that order is constructed in the market, to varying degrees, as a result of hedge funds purposefully locating themselves in
an ambiguously regulated social space, which presents a number of institutional consequences. That is, by avoiding the traditional institutional environment—which includes the formal regulatory rules monitored and enforced by the federal government—hedge funds must address a formal institutional void (absence in formal rules) in the market if they are to survive. The absence of formal rules is mitigated, and partially solved, by a number of different strategies within the organizational field. Large hedge fund organizations voluntarily register, or are currently in the process, with the SEC. This voluntary registration enables formal law to directly structure the governance practices of an important group of hedge fund organizations—those organizations managing the majority of capital in the market. Additionally, large hedge funds are ordered and institutionalized through network interactions with their legal counsel and auditors. Together these two network partners enforce and monitor the rules specified in the institutional environment. Finally, it was revealed that the formal law and regulations do not directly affect the majority of hedge fund organizations—the purposeful avoidance of the institutional environment is maintained. For this group of organizations, a more complex and nuanced extra-legal governance structure functions to order and institutionalize economic action in the absence of a order-producing formal legal regime—this extra-legal governance structure is analyzed in detail in Chapter Six.

Linking the Empirical Findings to Theory:

The empirical findings in this chapter offer important theoretical insights that can be used to refine and advance the theoretical perspectives, and the corresponding propositions, explicated in Chapter Two. In particular, the empirical insight that the
purposeful avoidance of law does not lead to an absence of order in the organization—or the larger organizational field—speaks directly to new institutional economics, new institutionalism in organizational analysis, and new institutionalism in economic sociology. In this discussion I review what concepts and insights from the theoretical perspectives are supported by the empirical findings presented in this chapter—the theoretical advancements from my investigation are presented in the final chapter of this dissertation.

New institutional economics provides a number of theoretical insights and concepts that are supported by this chapter—as embodied in theoretical propositions 1a and 1b. New institutional economics posited that in the shadow financial market of hedge funds, where there is an absence of formal state regulation, hedge funds would develop rationalized governance structures that seek to reduce transaction costs and protect against opportunism. My empirical findings presented in this chapter support the NIE insights by showing that large institutionalized hedge funds respond to market imperfections by creating rational strategies and complex governance structures—as specified in the institutional environment. Additionally, my findings provide support for the NIE concept that the ownership structure of a firm affects what institutional governance structure is designed. Specifically, my analysis revealed that the ownership structure of large hedge funds directly affects their response to the ambiguously regulated space by voluntarily registering with the federal government.

The NIE perspective, however, has difficulty explaining a number of empirical results presented in this chapter. First, the theoretical perspective cannot explain why the majority of hedge fund organizations purposefully avoid the formal laws and regulations
issued by the state. From the NIE perspective, this market behavior is irrational, and creates the institutional conditions for increased market uncertainty and opportunism. Second, the perspective has difficulty explaining why the organizational field adopts different strategies and mechanisms to respond to market uncertainty, and the absence of formal institutions regulating economic action. For example, the NIE perspective has difficult answering why particular groups respond “rationally” by developing complex governance structures, while others groups respond “irrational?”

The empirical findings presented in this chapter provide support for and against the insights from new institutionalism in organizational analysis—as embodied in theoretical proposition 2a and 2b. The neoinstitutional theoretical perspective posited that in the shadow financial market of hedge funds, where there is a limited role of formal law and state regulation, a hedge funds’ management would implement governance controls within the organization that comport with the taken-for-granted practices of the hedge fund industry as it currently operates, and mimic the legal environment in the traditional securities markets. My empirical findings support the theory by showing that the formal legal environment operating in the traditional financial markets directly affects how particular groups of hedge funds are structured and governed. In addition, the neoinstitutionalist prediction that the organizational field would adopt similar strategies and practices— isomorphism—is partially supported by the evidence. For example, large groups of similarly positioned hedge funds copied the voluntary registration strategy, and have similar governance practices—which is the new institutional norm in the market. Finally, the central insight that the resulting legal environment is the result of a highly interactive process of social construction that involves not only the legal system and state
actors but also the broader organizational field is supported by the empirical findings. In particular, the analysis revealed that not only is the SEC and hedge fund field engaged in the social construction of the new institutional environment but also the legal counsel and auditors are directly involved in the process.

The neoinstitutionalist perspective, however, has difficulty explaining two empirical results presented in this chapter. First, while the neoinstitutionalist model partially explains why organizational strategies are similar across particular groups in the organizational field, it does not get at the underlying economic reason. For example, the underlying economic reason that large hedge fund organizations are adopting voluntarily registration is that they must address the demands and interests of their investors—large institutional investors. Related to this limitation, the neoinstitutionalist perspective has difficulty explaining how institutional investors exert power over the hedge fund’s governance practices to achieve their demands and interests. It is important to acknowledge, however, that this limitation can be partially addressed by the neoinstitutionalist concept of coercive isomorphism (DiMaggio and Powell 1983). Coercive isomorphism is one mechanism through which institutional isomorphic change occurs, and “results from both formal and informal pressures exerted on organizations by other organizations upon which they are dependent and by cultural expectations in the society within which organizations function” (DiMaggio and Powell 1983: 150). The empirical findings from this chapter offer insight into how the concept of coercive isomorphism can be advanced—within the context of an ambiguously regulated financial market—to explain how the institutional investor’s demands have become the dominant expectation within the hedge fund organizational field. The second difficulty faced by the
neoinstitutionalist perspective is that it cannot conceptualize why large numbers of organizations in the hedge fund market purposefully avoid interactions with the federal regulators at the SEC. As revealed in the data, the majority of hedge fund organizations are not registered with the federal government, and do not mimic the legal environment of the traditional securities markets, or the complex governance structures of large registered hedge funds. In other words, the neoinstitutionalist perspective cannot explain why these organizations take a defiant stance in relation to the institutional expectations of the market.

The empirical findings presented in this chapter also provide limited support for the insights of the embeddedness approach in economic sociology—as embodied in theoretical propositions 3a and 3b. To be fair, the embeddedness approach is addressed in greater detail in Chapter Six but it is worth noting here the role of network relations. In particular, the theoretical approach posits that in the shadow financial market of hedge funds, where there is a limited role of formal law and state regulation, hedge funds are governed by their relationships with service providers—prime broker, legal counsel, auditor, and administrator. The results from this chapter support the notion that the hedge fund’s network relations affect how they are governed. For example, interaction with legal counsel and auditors directly affects the hedge fund’s interpretation of the formal requirements, response to the formal law, and avoidance of the formal definitions and federal administrative bodies.

Finally, the empirical findings presented in this chapter provide support for the insights from new institutionalism in economic sociology—as embodied in theoretical proposition 4a and 4b. The new institutionalism in economic sociology perspective
posited that in the shadow financial market of hedge funds, where there is a limited role of formal law and state regulation, governance mechanisms would come from the interaction of the institutions and social relations within the hedge fund field—both within the organizations and among organizational networks. Specifically, the perspective posits that governance mechanisms developed by hedge funds would vary according to the *interests* found within the organizations, and that dominant hedge funds would force their practices on the broader market to ensure market position and control the field. The empirical findings provide support for the former concept by showing that large hedge fund organizations voluntarily register in response to the demands and interests of institutional investors. The latter concept is not explained in the present chapter but is examined by the empirical evidence presented in Chapter Six.
CHAPTER SIX

The Extra-Legal Governance Structure

“Even though the organizations themselves may not be regulated the way a bank is . . . every time we do a trade in the securities markets we are subjected to enormous amounts of implicit regulation.”

Hedge Fund Managing Director
New York, New York
$10+ Billion Under Management

In the previous chapter, it was shown that the purposeful avoidance of formal law and regulation by hedge fund organizations has institutional consequences—institutional voids—that are managed through a number of different organizational strategies and mechanisms. The majority of large hedge fund organizations—who have the economic resources at their disposal, and must appease the interests and demands of their dominant institutional investors—have voluntarily registered with federal regulators. As a result, the formal institutional environment, which is enforced and monitored by the U.S. state, directly affects the structure and economic action of these organizations. Additionally, it was shown that formal law directly structures the economic action of these hedge funds through particular network partners—the day-to-day interactions with legal counsel and auditors. There remain, however, a large number of smaller organizations that avoid the formal institutional environment, and are not directly affected by the formal mechanisms revealed in Chapter Five. For the majority of hedge funds, a more complex and nuanced understanding of governance has been discovered.

The focus of this chapter is to answer the third central research question of my project: if avoidance of law does not lead to an absence of order, then what social
governance mechanisms are responsible for creating and maintaining that order, and how do these social governance mechanisms vary among the organizational field. This chapter identifies and explicates the social governance mechanisms that are constructed within organizations and the organizational field. I empirically demonstrate how the underlying institutional and structural conditions affect the governance mechanisms, and how these mechanisms converge to form an *extra-legal governance structure* in the hedge fund market. Further analysis of this extra-legal governance structure reveals that it is not a-legal. That is, the formal legal constraints in the heavily regulated traditional financial markets percolate through social institutions and network relations within shadow financial organizations to shape their practices and behavior—even though law formally ignores those organizations. To understand and conceptualize how this extra-legal governance structure is constructed, I investigate two constitutive parts or mechanisms within this structure. It is important to note, however, that the two constitutive parts of this governing structure are heuristically presented in this chapter as analytically distinct. In the actual market, however, these two parts are interrelated and often interact simultaneously in the everyday practices of organizations in the hedge fund market.

This chapter proceeds through three sections. **Section I** focuses on the first informal governance mechanism observed in the data, and explicated how this mechanism structures the hedge fund organization and governs its economic action. In particular, I identify two distinct institutional logics and specify how they are organizationally embodied in two different governance structures. **Section II** focuses on the second informal governance mechanism observed in the data, and explicates how this mechanism structures the hedge fund organization and governs its economic action. In
particular, I identify three network related social forces that constrain and order market interactions among the organizational field. In general, these social structures are derived from the relations between hedge funds and their service network partners, and are mediated by power relations within. Section III summarizes the findings from my investigation, and links the empirical results to the theoretical models and propositions reviewed in Chapter Two.

SECTION I: Institutionalized Governance

The analysis of governance structures at the intra-organizational dimension of the hedge fund market revealed that there are two dominant organizational forms within the field, and each has a competing institutional logic and associated governance structure. The first and most prevalent organizational form in the market has the following characteristics: operated by fewer than 20 employees; predominantly owned by the hedge fund manager or principal (either a limited number of colleagues or family offices funds); and manages less than $500 million in assets. These organizations are founded upon an institutional logic that values the ability to specialize in a particular sector of the market, move quickly into a concentrated investment position, and minimize administrative hurdles to outperform the market. As a result of this institutional logic, this group of organizations constructs a governance structure that can best be described as an entrepreneurial governance structure.

The second organizational form observed in the data has a different set of characteristics: operated by more than 25 employees; predominantly owned by institutional investors (pension, endowment, and large family offices); manages in excess
of $1 billion in assets. According to a number of expert informants in my sample, the second organizational form accounts for the majority of the top 100 funds and manages in excess of 70% of the assets in the overall hedge fund market. This second organizational form is founded upon an institutional logic that values the ability to focus on any profitable market around the world, provide investors with a broad spectrum of investment strategies, and take advantage of its size to influence and shape markets. As a result of this institutional logic, this group of organizations constructs a different set of governance practices and rules, which can best be described as a *rationalized governance structure*. It is important to emphasize that these two institutionalized governance structures are not simply driven by economics—i.e. it is not true that the more successful funds inevitably end up in the later category—but instead tend to be the historical derivation of their founder’s original motivations, the organization’s formal institutional structure, and the interests of different ownership groups.

#1 Entrepreneurial Governance Structure

An entrepreneurial governance structure is constructed according to a particular institutional logic. In particular, the data suggest that this institutional logic may derive from the conjunction of three historical and social factors: 1) the historical motivation of the founders; 2) the formal institutional foundations of the organization; and 3) the power relations within the organization. The first factor that significantly affects the entrepreneurial logic is the historical motivations of the organization’s founders. In

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1 Although the contents of this logic mapped fairly neatly onto the formal coding scheme that I employed in the interview analysis, the sources of the logic did not. Thus, some caution is required in assessing the conditions that lead hedge funds to adopt the entrepreneurial form. Nonetheless, several emergent themes recur in the transcripts.
general, successful traders and investment managers who left large investment banks, investment funds, and trading firms to start their own organization founded these hedge funds. Their motivations for starting a new organization were in part the quest for profit but also a desire to move away from the large bureaucratic, political, and hierarchical organizations found on Wall Street. These entrepreneurs wanted to have greater control over their economic success by building smaller organizations that were flexible to market conditions, had distinct cultures that were of their own making, and had minimal bureaucracy. In the following conversation a New York hedge fund manager—with twenty years experience in large organizations such as Morgan Stanley and Goldman Sachs, and founder of his own hedge fund—shares his insight into why this type of entrepreneurial hedge fund is attractive to him:

“I think some of the smartest people that I know are in this market and that’s why I’m here because I just like being in the environment where there’s other very smart, very non-political people. The theory of a hedge fund is it’s just simply focused on making the highest return on its own capital where big corporations have many, many different motivations, right, market the sales, stock prices, and all sorts of things that aren’t necessarily focused on return. I love the fact that a good hedge fund focuses simply on what it measures itself by, its absolute return.”

Hedge Fund Manager and Principal
New York, New York
$500 Million Under Management

Similarly, a PhD trained physicist who now runs his own entrepreneurial hedge fund in the Boston market states that:

“I’m not naturally at home in big organizational environments where you have to play a lot of political games, manage upward and so on . . . There are some for whom that’s their natural
Hedge Fund Manager and Founder
Boston, Massachusetts
$250 Million Under Management

These smaller and more nimble entrepreneurial organizations, in theory, have the ability to focus on specialized knowledge, move quickly into an investment position, and reap the financial benefits by “beating the market”—often referred to as capturing alpha.²

The second factor that significantly affects the institutional logic, and ultimately the governance practices of the entrepreneurial structure, is the formal institutional foundations of the organization. Extending the insights from Chapters Four, which detailed the formal legal structures foundations of the hedge fund, I observed that the institutional logic is shaped by the particular legal structure chosen by the hedge fund manager and his legal counsel—typically private or limited partnerships. In general, the legal structure not only establishes the formal hedge fund organization but also sets out the broader institutional rules that are embedded in the organization. For example, the legal documents broadly specify how the hedge will be governed, delineates the roles of all those involved in the fund, demarcates the boundaries of eligible investors, and the liabilities of management. The legal document defines who is allowed to invest in the fund, who will manage the fund, and what limits will be placed on hedge fund management. Interviews with hedge fund managers and general legal counsel within the entrepreneurial funds revealed that these documents are constructed in such a way as to free the hedge fund manager from formal disclosure requirements, limit organizational

² Alpha is the performance measure of a portfolio after adjusting for risk. Alpha is calculated by comparing the volatility of the portfolio to some benchmark. Thus, alpha is the excess return of the portfolio achieved by an active hedge fund manager over the benchmark—beating the market.
liability, and give the investment team the legal authority to pursue any investment they see fit. For example, in the following conversation with a New York hedge fund manager he emphasizes that the hedge fund’s institutional rules are established in the legal documentation, and these institutional rules establish the flexible organizational structure:

“It’s the structure that gives a manager the most flexibility to try to maximize returns. So, other than whatever guidelines or limits you set out in your partnership papers, there is almost no constraint on putting a portfolio together. In other words, there’s no position size limits or leverage limits. Again, depending on how you set up the legal structure, it’s really a blank slate.”

Hedge Fund Manager and Partner
New York, New York
$100 Million Under Management

In addition to delineating the rules and limitations put on the organization, the private partnership agreement establishes the relations between the hedge fund management and the investors in the fund—and potential investors who are interested in entering the partnership. Once investors become part of this legal partnership, they lose their protected status as an investor by the federal government, and are protected and governed only by the institutional rules specified by the partnership documents. This notion of a self-governing private partnership where knowledgeable individuals enter into contractual agreements is embodied in the following conversation with the general counsel of a New York hedge fund:

“If you’ve got sophisticated investors who are capable of making decisions about their money and they want to enter into a partnership, as a limited partner or a general partner then, it’s going be guided by the rules that are in the partnership documents. Then, you have a bunch of consenting adults entering into a contract.”
Beyond the historical motivation and the formal institutional structure, the data revealed that a third social force affecting the institutional logic and entrepreneurial governance structure is the power relations within the organization. The power relations within the fund are defined by the ownership structure of the organization—who has control and who will establish the vision of the fund. Conversations with expert informants revealed that the majority of these entrepreneurial hedge funds are funded by the hedge fund managers themselves, or the investment advisors and principals of the organization. As a result of the concentrated ownership by a small group of managers and principals, this group has significant control over the organization, has legal authority to what it wants with the organization, and construct governance practices around their interests. In an interview with an entrepreneurial hedge fund manager based out of Boston, he conveys the importance of this private concentrated ownership for shaping the incentives of the organization and how it governs investment decisions throughout the market:

“Part of it has to do with most hedge funds being privately owned. That's actually a big part of it in the sense that the incentive of an owner of a company is to build long-term value, to stay employed, to have a company that you can make money, and not just this year, but the year after that and the year after that, to hold on to clients. In the banking industry, where you work for a very large company, your incentive is to maximize a bonus one year after another, because your decisions have very little impact on the health of the company. Your decisions have very little impact on whether the company stays solvent. And so, as an individual at a bank, it might behoove you to make very risky decisions to maximize your bonus opportunity, whereas the
owner of a hedge fund would not necessarily want to make those same choices.”

Hedge Fund Manager
Boston, Massachusetts
$100 Million Under Management

In fact, the ownership structure of the hedge fund not only affects how the organizational is govern within but also affects it roles in the larger financial markets. According to conversations with a number of hedge fund managers, the ownership structure of the hedge fund organization benefits the market in the following way:

“As a hedge fund manager or owner, you have more control over the company’s future. You have more skin in the game to keep that company alive, whereas if you’re a cog in the wheel you want to maximize profit. And the issue is that every cog in the wheel is trying to maximize risk to maximize return, and that causes something that’s not sustainable. That has a lot to do with the ownership structure, and private ownership adds a lot of stability to the financial markets.”

Hedge Fund Portfolio Manager
Boston, Massachusetts
$300 million Under Management

It is important to note that the concentrated ownership structure gives the managers of a entrepreneurial hedge fund greater control over the organization and gives them the direct authority shape how the organization sees itself and its role in the larger market—the power to shape the cognitive framing within the organization. In particular, the ownership structure gives the hedge fund manager the power to create organizational beliefs, whether those beliefs are empirically true or not, and determine the day-to-day practices of the organization. The control by the entrepreneurial hedge fund manager leads to an institutional culture that is distinct and transmitted throughout all levels of the organization, which affects the day-to-day governance practices of the fund.
Consequences of an Entrepreneurial Institutional Logic

Turning from the three factors underlying the entrepreneurial institutional logic (historical motivations, formal institutional structure, and organizational power relations), in this section I link the entrepreneurial logic to a specific governance structure and set of organizational governance practices. The difficulty of this task lies in the need to find particular market situations wherein the formal legal rules are limited and cannot guide the organizations in their day-to-day experiences. Additionally, this task required situations wherein the formal legal environment, which hedge funds avoid by taking advantage of the well-established exemptions and loopholes constructed into the formal legal regime, has limited authority to regulate the day-to-day actions of organizations. For purposes of clarity, the following question guided this section of the analysis: what situations arise in the market wherein formal rules and regulatory oversight are limited, leaving organizations to construct their own informal institutional rules?

The conversations with expert informants in the entrepreneurial hedge funds all centered around the idea that their organizations are forced to deal with a number of “grey areas” or formal institutional voids wherein the law is ambiguous and they are left to come up with their own solutions. An experienced New York hedge fund manager and registered broker dealer explained how these formal institutional voids, and the possibilities they introduces, are managed within his entrepreneurial organization:

“Really at the end of the day, the tone is set by the person or the people who are running the firm. And because there’s certainly, you know, lots of gray areas. There’s a lot of room for people to do stuff that is not quite legal . . . So that ultimately even if you’re taking, regulatory mandated ethics courses those are all so kind of weak and silly that would not be the reason you would
choose to do the right thing. You do the right thing because you know that’s part of your organization.”

Hedge Fund Manager and Partner
New York, New York
$100 Million Under Management

Two concrete examples emerged from the data that provide insight into how an entrepreneurial institutional logic shapes the informal institutional rules and practices that are constructed in the entrepreneurial governance structure: 1) the governance of insider information; and 2) the informal hiring practices within small networks of experts. The first example comes from how these organizations manage or govern insider information. The problem originates from absence of the federal government within the entrepreneurial organization, which was structured specifically to achieve flexible organizations with the greatest amount of freedom—to serve the concentrated ownership partners of the fund. As a result of this absence of federal oversight, the entrepreneurial organization has a minimally required number of formal checks on its internal practices, and allows employees the freedom to manage the decisions that arise within the grey areas of the day-to-day interactions in the market. The following conversation gives insight into how this flexible and free entrepreneurial organization, which gives the hedge fund management great freedom, leaves the individuals within the organization to grapple with the governance gaps that arise:

“There are times when it could be some minor, regulatory issue or something like that where, you just say to yourself, oh, boy, I’m not really quite sure what happened there, but let’s just sort of keep moving and not get worried about it. Because every time you call in your legal counsel or your accountant you’re guaranteed to stir up the dust.”
The lack of federal oversight and transparency within the entrepreneurial organization allows greater freedom for individuals to make their own decisions when it comes to managing insider information. It is important to note that the extent of this governance gaps is not infrequent. Insider information arises within the hedge fund often and it is necessary to emphasize that a hedge fund’s survival is dependent on the acquisition of new information that the organization can trade on. That is, a defining characteristics of the entrepreneurial hedge fund is that they specialize in particular sectors of the market—usually where the founders have extensive knowledge—and focus on acquiring better information in those sectors than any other organization in the market. This specialized knowledge comes from a number of sources. For example, hedge fund managers and analysts often fly around the world to speak with the CEOs of companies that will potentially be acquired by the hedge funds. Additionally, hedge fund managers and analysts gather all available information on companies from the leading Wall Street brokerage houses and investment banks. In order for the hedge fund to beat the market, they must make predictions based on this specialized knowledge as to the direction of particular investments and bet on those predictions. If the predictions are correct, then the hedge fund has the potential for profits—and if not, then losses. Thus, a problem arises as to what employees within the entrepreneurial organizations should do when confronted with the acquisition of information that is not publicly available. According to the interviews, individuals within the entrepreneurial hedge fund organizations are informally required to put a restriction on trading the investment in which they have insider
information on—which is regulated through a number of internal controls within the organization. A hedge fund manager running an entrepreneurial organization based out of New York conveys how this informal institutional rule is followed within his fund:

“You’ve talked to company A, and the CEO of company A has told you stuff that, the rest of the world probably doesn’t know. You are theoretically in possession of insider information. Then, you have to put a restriction on that stock within the firm and say, “Look, you know we’re restricted on trading in this stock until further notice.” Then when the news becomes publicly disclosed you have to restrict yourself. Those are the kind of things you just have to do, you know there are multiple cases like that.”

Hedge Fund Manager and Partner
New York, New York
$100 Million Under Management

The second example of how the institutionalized logic affects the governance structures in the entrepreneurial organization was revealed in the hiring practices within entrepreneurial hedge funds. Hiring within the entrepreneurial hedge fund takes place predominately by informal institutional processes, and operates through informal networks and localized decisions-making teams. The entrepreneurial organization has a need for highly specialized knowledge of particular markets, sectors, and financial instruments, and this specialized knowledge limits the potential applicant pool. Knowledgeable employees are hired from within a small circle of known people—either through friends of friends or colleagues in the hedge fund community. These entrepreneurial organizations put potential job candidates through a rigorous vetting by the entire organization before they are hired because these small organizations need to ensure the “right fit” between employee and organization. For example, the majority of the partners and founders of the fund take part in the hiring process, and act as the
gatekeepers into the organization. In the following conversation with a hedge fund principal based out of San Francisco, he gives insight into informal networks and rigorous vetting processes that take place within his organization:

“The most important thing is that you hire the best people. And the vast majority of people that work here knew each other before they joined our fund. You’re generally hiring people that you have a prior history with, and too, if you don’t have that prior history or in addition to having a prior history you probably interview with 25 people before you get the job. It’s a small organization. Everyone needs to have buy-in that you’re the right guy for the job.”

Hedge Fund Principal
San Francisco, California
$1 Billion Under Management

The consequences of this institutionalized vetting practice on the resulting governance structure is two fold. First, the intense vetting process within small groups of gatekeepers ensures that new employees are groomed in the ways of the hedge fund organization—what is acceptable and who sets the agenda. Second, the vetting of new employees revolves around how their specialized information and analytical skills will benefit the hedge fund’s bottom line. That is, the acquisition of information and analytical skills is central to the acceptance into the organization, and has the affect of forcing employees to ensure their professional reputation for information acquisition and analysis.

#2 Rationalized Governance Structure

The second institutional logic observed in the data was found in large hedge funds that have more than 25 employees, are primarily owned by institutional investors, and manage in excess of $1 billion. The data analysis revealed that the three social forces
found in the entrepreneurial logic—the founder’s motivations, the formal institutional structure, and the interests of dominant owners—similarly affect the rationalized institutional logic. These three social forces, however, converge in a different pattern to form a different governance structure. In particular, while the founder’s motivation for creating a hedge fund are similar to the entrepreneurial organization—increasing flexibility, distinct culture, freedom to choose investment opportunities, and profit—these historical motivations quickly become altered by the increasing demands of capital and the interests of institutional investors—who are the dominant owners of this group of organizations. The increasing demands and interests of institutional investors was a prevalent trend in among the large hedge fund organizations. This shift from an entrepreneurial logic to a rationalized logic is expressed in the following conversation with a 20+ year veteran of the hedge fund market, and who currently helps manage one of the largest funds in the United States:

“When my boss set up the firm, I think his goal was to take all the good things about the old Goldman partnership culture and bring none of the bad things. That was his informal goal. Obviously, the larger you become, the more regulated you become.”

Hedge Fund Chief of Staff
New York, New York
$12+ Billion Under Management

Similarly, the managing partner of a top 10 law firm based out of New York City, who provides legal counsel to 50+ hedge funds clients, expresses this shift in the following manner:
“One of the ironies in life is a lot of hedge fund managers are the people who left big organizations because they couldn’t stand big organizations, iconoclastic types who like to do what they wanted to do. Now some of the same people are running organizations of 200 people, which look a lot like the places they left, some of which the people have trouble dealing with.”

Hedge Fund Legal Counsel, Managing Partner
New York, New York
50+ Hedge Fund Clients

A discernable difference between the entrepreneurial and rationalized organizational structure is that the latter develops a complex set of institutional controls and a formal divisions. For example, the legal structure of highly rationalized organizations creates a number of divisions and subgroups within the larger hedge fund structure. These hedge funds have funds within funds that are targeted to suit the needs of different institutional investors—investors who want to invest in different strategies, geographic locations, and/or currencies—and each of these specialized funds have a set of internal controls, rules, and practices. A veteran of the hedge fund market, who was trained in law and managed the hedge fund division of one of the largest investment banks on Wall Street, gave me insight into what the complex legal structure of this group of hedge funds looks like:

“Virtually all large fund complexes have both types of funds [on shore and offshore investors—or US taxpayers versus non US taxpayers]. . . . Large firms typically have multiple vehicles. They have different flavors of hedge funds. Which might even be completely different investment styles. Or they might have heavily related hedge funds, you know one is for offshore investors, one is for onshore investors, one is for investors who want to invest using Japanese Yen, one is for people that want to invest in dollars and so on.”

Hedge Fund Senior Managing Director
New York, New York
$12+ Billion Under Management
Similar to the entrepreneurial form, the interests of different ownership groups affect the rational institutionalized logic of these organizations. Institutional investors predominantly own this group of hedge funds. As a result, these rationalized organizations are forced to develop institutional practices that assure large institutional investors that their capital is being managed and protected. These organizations become highly rationalized with the goal of creating greater transparency and accountability through many institutionalized rules and practices. A hedge fund manager on the Gold Coast of Connecticut conveys the rational institutionalized system that is prevalent within this group of organizations, and hints at the reasons why organizations are constructing this type of institutional structure:

“You’re going to have a much more institutionalized culture as you get bigger, because you essentially become – you know, you’re no longer two guys, a dog and a telephone. You have to develop a reputation. And the defense of reputation is very important in this business because that’s all you really have to go on in terms of investors, confidence in your ability to make them money, as well as in your integrity that you’re not going to steal their money.”

Hedge Fund Portfolio Manager Greenwich, Connecticut $4+ Billion Under Management

Similarly, a general partner at one of the largest hedge funds in the U.S. expresses the increased expectations of the institutional investors—the dominant owners in this group of hedge fund organizations:

“The greater scale you have, the greater ability you have to invest on your business side, outside of the investment team. And, on the institutional side, there is a greater expectation that if you’re $12+ billion you have a full business side of things that’s a different expectation than if it’s ten guys with $1 billion.”
In fact, the largest hedge funds in the organizational field have created such complex institutional rules, controls, and divisions within their organizations that they appear to the outside observer as a Fortune 500 corporation. This insight was gained from a number of conversations with large hedge fund managers, and is embodied in the following quote from a managing director of one of the largest hedge funds in the world:

“We use a rigorous feedback or reprocess. We have training, we have best practices, both for everything from trading to managing people to performance. I think largely speaking, most of the hedge funds are sort of one senior guy and a bunch of monkeys running around, right, whereas we’re much more on the institutional side. I think if you walked into our office and looked at our systems and programs, they’d feel like General Electric, like a big company. Our fund will be on the extreme of conformity and institutionalization. Meaning 95 percent of the people that you’re going to talk to are not like us.”

Hedge Fund Managing Director
Chicago, IL
$15+ Billion Under Management

Consequences of a Rational Institutionalized Logic on Practices

Turning from the three identified factors that shape the rational institutionalized logic, this section links the institutional logic to the actual informal governance rules and practices that develop within the organizations. The way in which these three factors converge in the organization affects rationalized governance structure that is constructed within this group of hedge funds. For example, the general counsel at one of the largest hedge funds in the U.S. points out that his organization has developed a number of
divisions within the organization to manage the increasingly complex risks and relationships in the markets:

“Each incremental prime broker that you have increases the complexity of it because you have to manage where your assets are and the risk limits that they impose upon you. Most hedge funds don’t have a treasury function. Only the larger funds would have that, and we have a four-person treasury function, and all they do is manage the financing arrangements with both the prime brokers, as well as the sub non-prime brokers that we borrow money from.”

Hedge Fund General Counsel
New York, New York
$14+ Billion Under Management

In particular, the rational institutionalized structure are observed in the complex set of controls and rules over the movement of money (both within the fund and among external service providers), limitations on employees to conduct trades in their personal accounts, and requirements of multiple signatures to transfer money, etc. In the following conversation, the chief of staff at a large New York hedge fund walks me through just a few of the informal governance rules created within his fund:

“We have very, very tight controls. You have to get preapproval for essentially any trade that you do in advance. And we also verify that by getting the trading statements directly from the brokers, people’s personal brokers sent to the firm directly—not via the person. You depend upon them, but you also check to make sure that it’s in compliance.”

Hedge Fund Chief of Staff
New York, New York
$12+ Billion Under Management
**SECTION II: Governance Through Network Interaction**

By shifting the analytical lens from the explanatory mechanism of social institutions to social networks, my investigation revealed that informal governance structures evolve and are modified through the social interactions among network partners. In general, these governance structures arise from the hedge fund’s social interaction with network service providers, which introduce a number of social dynamics that influence the organizations’ economic practices. I focus on three specific social dynamics within the inter-organizational dimension: 1) legitimacy through network structure; 2) power within network structure; and 3) density and variation of network structure. I conclude this section by showing the consequences of the social interactions and network dynamics on informal governance practices.

#1. Legitimacy Through Network Structure

The most prevalent trend that emerged from the investigation of network governance mechanism was that hedge funds struggle for legitimacy in a market that has very little legal accountability and federal regulatory oversight. Specifically, a central organizational goal for most hedge funds is to build credibility in the field and signal trustworthiness to investors. Other than a hedge fund’s market reputation, investors have little assurance about its trustworthiness or investment plan. To establish the credibility and trust needed for success, a hedge fund relies on the status and reputation of their network partners. For example, funds make a conscious, explicit effort to sign contracts with the most well-established broker, legal counsel, administrator, and auditor that they can find and afford. The signaling of trustworthiness is prevalent regardless of
organizational size and geographic region within the United States—New York, Chicago, Los Angeles, San Francisco, or Miami, etc. A principal and owner of a Boston hedge fund explained this struggle for credibility and trust through network partners in the following statement:

“In order to have credibility in this industry, you need to be with one of these bulge bracket firms. Whether it’s a Goldman, whether it’s a Morgan Stanley, a UBS, is really important in order to establish credibility, because no successful institutional investor is going to want to talk to you if you are basically running an e-trade hedge fund or some no-name brokerage firm hedge fund.”

Hedge Fund Principal and Managing Director
Boston, Massachusetts
$100 Million Under Management

It is important to emphasize, however, that the desire to cultivate credibility and trust is driven by their desire for capital from sophisticated and large institutional investors. Thus, similar to the insights of the previous section, the investor demands by pension funds, endowment funds, family offices, and wealthy individuals—those who predominantly make up the ownership structure of the rational organizational form—significantly affect the governance practices in the market, even at the inter-organizational level. The interests of large capital are driving hedge fund managers to seek network partners who signal their organization’s credibility and trustworthiness. This desire for a credible network partner is captured in the following statement where the managing director of a rising fund argues that particular network partners are a chosen because they allow investors to feel comfortable, which is a central desire for investors who place millions of dollars in these hedge funds:
“In the post Bernard Madoff environment, it is absolutely critical that you are with counter parties that are sanctified by somebody, right, so in this case, the top three or four prime brokers are Goldman Sachs, Credit Swiss, JP Morgan, and Morgan Stanley. Those four are the four that people feel, I think, most comfortable with.”

Hedge Fund Senior Managing Director
New York, New York
$7+ Billion Under Management

In addition to their reliance on network partners for legitimacy and credibility, hedge funds are increasingly being forced to open up or become more transparent about their entire network structure. In particular, accredited and sophisticated institutional investors are hiring due diligence teams to verify the reputation and trustworthiness of hedge fund management and their service providers. For example, conversation with expert informants conveyed the idea that many of the largest institutional investors, such as large pension funds and funds of funds (which account for approximately 35% of the capital coming into the hedge fund market), have their own due diligence teams who perform periodic checks on hedge fund managers, administrators, accounting firms, and prime brokers. These periodic checks include everything from independent verification of assets and holdings throughout a hedge fund’s network, to background checks of hedge fund managers. The thoroughness of these network checks are conveyed in the following conversation with a very successful New York fund of funds manager:

“We’re doing due diligence on these funds, so we’re like an inspection control service in some ways. We want to make sure that we’ve got the best legal department, to analyze the document and to make sure the document protects our investors. We’re doing rigorous due diligence on the managers. In a group of fund managers, we are going to basically allocate capital to those guys that we think have the best practices in the industry . . . We’re doing a tremendous amount of work in terms
of analyzing their portfolios and also analyzing personnel and the strategic decisions these fund managers are making.”

Fund of Fund Managing Director
New York, New York
$5+ Billion Under Management

#2. Power Within Network Structure

A second factor that emerged through the inter-organizational dimension—using the social network as the explanatory mechanism—is that network partners have greater and lesser power over hedge funds. The greater power a network partner has the greater degree of influence they have over what hedge fund clients can do and what practices they can take part in. The most important, and thus most powerful, network partner for hedge funds is their prime broker. Before going into the specific details of the relationship between the prime broker and the hedge fund, the power relations between these two organizations is observe in the following conversation with a veteran managing director of a New York hedge fund:

“The is a relationship business and I think most people are on pretty good terms, frankly because they need to be on good terms with their prime broker. It’s like you’re the student in the elementary school, you can only push the teacher so far, right? She’s got a lot of power over you, right?

Hedge Fund Managing Director
New York, New York
$7+ Billion Under Management

The prime broker’s first source of power over the hedge fund is financing. Prime brokers are the hedge funds’ main source of financing—credit and leverage—and borrowing of securities in the market. The hedge fund’s reliance on the prime broker for financing and borrowing creates a particular power relation. For example, the prime
broker has the power to call in lines of credit at will, or liquidate the position of a hedge fund were it to become too risky—for example, an overly-leveraged position. Second, the prime broker controls and retains the assets of the hedge fund and ensures payment is made on the transaction. The prime broker’s power is articulated in the following statement:

“There are points of control. The prime broker has a lot. They can liquidate your account for you at any price. So for instance, in the Lehman’s bankruptcy, a lot of hedge funds had Lehman as their prime broker, so their assets were effectively with Lehman, and to some extent, it was determined that upon bankruptcy those assets were Lehman’s. Funds lost a lot of money because Lehman controlled them and they couldn’t get their money back, or they couldn’t get it back for a set amount of time. That’s because the prime broker controls those assets, even though on a normal day-to-day there’s no real control exerted.”

Hedge Fund Portfolio Manager
Boston, Massachusetts
$1 Billion Under Management

Similarly, as the 2007-2009 financial crisis brought to the forefront, the prime broker relationship has become a critical partnership to manage leverage and market risks. According to a hedge fund managing director, the importance and power of the prime broker stems from the ability to make changes to the lifeline of hedge funds—credit and leverage.

“Your prime broker relationship, one of the critical elements is, at this point in the cycle, where people are so worried about risk, you have to have a very good hands on interactive relationship with those people because they are the lifeline of that fund. They could pull their credit line. They could do things that are negative as it relates to, I mean paring your business . . . I would say that prime brokers were giving anywhere from three to seven times leverage prior to the crisis and now it’s sort of like one to three times leverage. ”
This power can be exerted on the hedge fund and cause tremendous negative effects for the organizations. For example, if a hedge fund experiences economic shocks, or one of their predicted investments goes terribly wrong, and the prime broker is not willing to supply them with additional credit, then they are out of business. This exact situation occurred in the recent market turmoil and is conveyed in the following conversation:

“Yeah, just look at what happened to that guy [], his prime broker started pulling his credit line which led to the failure, I mean, it was game over for that fund once Merrill Lynch and a couple of the other prime brokers said, hey look we don’t like the collateral you are posting in your account.”

Hedge Fund Senior Managing Director  
New York, New York  
$7+ Billion Under Management

Taking a step back from the particular day-to-day relations of financing and borrowing between the hedge fund and prime broker, there are two other ways in which the prime broker exerts power through the network relations. The prime broker acts as the gatekeeper and guarantees the transaction between buyer and seller by securing payment and delivering the assets. Thus, for example, the broker connects a seller of 5,000 shares of Microsoft with the hedge fund buyer, ensures that the purchase price is agreed upon by both parties, and transfers the assets accordingly. Finally, the prime broker is a central source of information for the hedge fund. The hedge fund relies on the prime broker’s research teams for their extensive coverage of the securities markets, their traders for the best trade executions, and their sales teams for access to sophisticated financial
products—such as credit default swaps, derivatives, etc. A New York quantitative fund manager comments on the importance of the information that flows between the prime broker and hedge fund trader:

“The large-size trades that we do are typically taken out of the hands of the machine and worked by a human trader to get best execution. And that’s really what we strive for. The traders, over time, have gotten to know brokers, salespeople in the industry, and they will decide they wish to trade a certain product or products with given brokers and specific desks and individuals on those desks within those firms. And you frequently find that a good salesperson will have their customers follow them around from firm to firm if they move employers over time. . .So, our traders are given discretion to decide who they want to have as their executing brokers, and they’re usually looking for somebody who they have a proven track record with.”

Hedge Fund Quantitative Manager
New York, New York
$4 Billion Under Management

The prime broker has control over information and the power to pass insights through their network depending on their relations with the hedge fund—socially dependent market opportunities. As a result of the prime broker’s power within the network structure of a hedge fund, they are in a structural position to be a facilitator and discipliner of hedge funds. That is, the structural position of the prime broker gives them the power to ensure that hedge funds operate according to traditional market institutions and cooperate in the market transaction.

The fund administrator is a second network partner with power over the hedge fund. In addition to their standard day-to-day function of verifying assets and positions of the funds, and communicating these positions to investors, the administrator also has the important task of pricing the hedge fund’s assets. The power of the pricing administrator
is derived from their structural position in the network as the organization with the capability and authority to price illiquid assets—those assets not traded on the public exchanges. For example, if a hedge fund deals in more exotic financial instruments or assets that are not traded on the NYSE or NASDAQ, prices cannot be determined by market participants, and the administrator steps in to fill this pricing mechanism role. The pricing of illiquid and exotic assets, as the following statement gives insight into, leaves much room for subjective decision making:

“A pricing agent has, on illiquid securities, some power. For example, there could be issues for hedge funds out there that will invest in extremely illiquid securities, and then if the price goes up they market the new price, and if it doesn’t go up then they keep it at the same price, because it’s illiquid and you can kind of cheat that. So whoever prices your securities has some power in those cases.”

Hedge Fund Portfolio Manager
Boston, Massachusetts
$1 Billion Under Management

Ultimately, due to the rather ambiguous and subjective method of the pricing illiquid assets, and the lack of third party verification of the pricing, the fund administrator has the power to make the hedge fund’s holdings look more or less profitable—and thereby make the fund dependent on those pricing decisions.

*The Reversal of Power Relations*

The data analysis has revealed, however, that the power of particular network partners decreases as the large institutionalized hedge funds take on more capital, and exert their preferences on the market. That is, for a limited number of hedge funds that grow in excess of $10 billion under management, they start to have sway over the framing and
practices within the market. In a few revealing interviews, I was able to gain insight into the multiple ways in which hedge funds can use their power and knowledge of the field to guide or shape network partners and the federal government. For example, in the following conversation with a very confident, experienced hedge fund managing director, he conveys that because of the size of his fund it has the power to critique the leading prime brokers in the market:

“Our balance sheet is about $50 or $60 billion U.S. dollars, down from north of $100. And so because of that, the sheer volume is that we’re everyone’s favorite prime brokerage client, just because of the dollar fees and the commissions that are generated. So we prime broker with probably a dozen guys for a lot of work, and then another 80 for less. What I mean by that is we buy stocks all around the world so we’ll work with dark pools and other pockets of mini-brokers, just to make sure that if we're buying a stock, we can basically find liquidity globally from people. Meaning we don’t just rely on one prime broker. . . We give feedback to these people, written every year. We literally write letters to the major investment banks and say, look, this is what you’re good at, this is what you suck at. Now, we can do that because our dollars and commissions are so high.”

Hedge Fund Managing Director
$15+ Billion Under Management (hedge fund)
$60+ Billion Under Management (organization)

In addition to shaping the practices of the leading network partners, these hedge funds are very active in shaping the regulators’ opinions of the organizational field and practices within the hedge fund market. For example, large hedge funds have frequent interactions with the U.S. congress and federal regulators. The following conversation gives insight into this reverse feedback loop from the hedge funds to the U.S. government:

“We take a very proactive approach. . . so the whole issue of going from being non-transparent to transparent is something we’re very familiar with. I think for other hedge funds that have
had a locked door for 10 years it’s quite different, so for us, as part of that, we think that spending time with regulators, since we believe in fair and efficient competition, is that we don’t think we have anything secret, right? So we’ve been spending a lot more time in Washington. You can check on Bloomberg last November. My boss testified during Congress.

Hedge Fund Managing Director
$15+ Billion Under Management

In addition to star hedge fund managers testifying before Congress, a number of powerful hedge funds use their size and influence to lobby, inform, and educate federal regulators through their professional association:

“We’re real active in the Managed Futures Association, which is the closest thing to lobbying for alternatives, and so we think that – not to sound too corny – we think smarter and more informed regulators make more informed decisions. We think that the industry is going to regulation, so we might as well embrace it.”

Hedge Fund Managing Director
$15+ Billion Under Management

#3. Variation in Network Density:

A third factor that emerged through the inter-organizational analysis—using the social network as the explanatory mechanism—is that network density varies according to particular characteristics and historical experiences of the hedge fund organizations. The importance of this finding is that the network density creates greater or lesser points of control over the hedge fund’s internal practices and economic behavior, which affects their informal governance structure. A hedge fund’s network becomes increasingly dense as the organization: 1) increase assets under management; 2) increase the complexity of investment strategies; and 3) experience economic shocks. The first driving force of network density is a hedge fund’s asset under management. In order to attract more capital, hedge funds create multiple funds within the master fund—this type of
organization is referred to as a multi-strategy fund or feeder funds. A multi-strategy hedge fund creates independent funds within the umbrella fund that focus on different investment strategies—long-short equity, statistical arbitrage, macro trading—and geographic regions—emerging markets, etc. Additionally these multi-strategy funds within the organization are set up to bring in capital from off-shore investors who wish to invest without the tax requirements of the U.S. federal government, or who wish to invest in a foreign currency. In the following conversation, a senior managing director at a hedge fund based out of New York gives insight into why his fund was structured as a multi-strategy fund to bring in capital from a larger number of investors:

“Large firms typically have multiple vehicles, not always, but typically have multiple vehicles. They have different flavors of hedge funds. Which might even be completely different investment styles. They might have heavily related hedge funds. You know one is for off-shore investors, one is for on-shore investors, one is for investors who want to invest using Japanese Yen, and one is for people that want to invest in dollars.”

Hedge Fund Senior Managing Director  
New York, New York  
$10+ Billion Under Management

With the growth of each new fund within the larger hedge fund organization there is a corresponding increase in the number of legal issues, investment complexities, and risk management concerns that require expertise from external service providers. For example, a fund that was originally set up as a long-short equity but now wishes to create an additional fund focused on a global macro strategy, will need to hire additional legal counsel and brokers who specialize in that global sector of the market. This increasing complexity ultimately creates hedge funds with large dense networks that extend over the entire financial system:
“We essentially have relationships with all of the major law firms, but whether it’s a management-company-related issue, an investor-related issue, a litigation issue, a bankruptcy issue, a private investment in, you know, a foreign jurisdiction, we’ll really retain who we think is the best lawyer and law firm for that specific issue.”

Hedge Fund Chief of Staff
New York, New York
$12+ Billion Under Management

The final factor driving the increasing density of the hedge fund’s network structure is the historical experiences of economic shocks by the organization. Specifically, the insight that emerged from the data was that the network structure becomes part of the institutional memory of the organization to manage risk during economic shocks. For example, the 2008 financial crisis brought to light the need for hedge funds to focus on diversification of risk and multiple financing sources among network providers. The unimaginable fall of Lehman Brothers and Bear Stearns—two large and well respected prime brokers who were connected to hundreds of hedge funds—exposed how vulnerable the hedge fund organizational field is to counterparty risk and the need to take on multiple prime brokers for funding sources and leverage. This institutional learning from economic shocks is captured in the following conversation with the senior managing director of a New York hedge fund:

“We interact with our prime brokers every day, multiple times a day. At launch, we chose to have two prime brokers who are the most established in the marketplace, and then that slowly grew to three. And then, in the crisis of last year where there was much more focus on diversification of counterparty risk and funding sources, that increased to five.”

Hedge Fund Senior Managing Director
New York, New York
$10+ Billion Under Management
There are three distinct consequences of the variation in network density on the actual *informal governance* that develop within the organizations. First, hedge fund organizations with greater assets under management or with multi-strategy funds have a greater number of networks partners—which increases the points of control within their network structure and allows for more oversight by powerful network partners. Second, hedge fund organizations that have been in the market for a longer time period and have experienced economic shocks have denser networks to manage the increased market volatility—which increases the points of control within their network structure and allows for more oversight by powerful network partners. Finally, the organizational attributes and historical experiences are important predictors of a hedge fund’s network position. For example, the strategy of a hedge fund directly affects the likelihood of the organization ending up in a particular network position—i.e. statistical arbitrage funds run very complex strategies and must have network ties with a large number of prime and executing brokers to successfully run their strategies in the market. This empirical finding has important implications to the embeddedness scholarship insofar as it shows that network position is predominantly affected by the organizational attributes—type of investment strategy—and historical experiences of organizations in the market. Thus, these findings suggest a refinement of theoretical propositions 3a and 3b: while network position may exert some direct effect on the informal governance practices of the hedge funds, it is not the primary direct determinant. The organizational attributes and historical experiences of the fund clearly play at least as pervasive a role. These attributes and experiences directly influence governance, independent of network position. More importantly, these attributes and historical experiences indirectly affect governance by
affecting to whom the hedge fund is connected, how many connections are needed, how
often network interaction takes place, and what type of informal constraints are placed on
the organizations. Thus, although network position matters, its independent effect may be
relatively small, in comparison to its effect as a mediator for the indirect influence of
organizational attributes and historical experiences.

CONCLUSION: EMPIRICAL FINDINGS & THEORETICAL PROPOSITIONS

The empirical findings in this chapter answer the third central research question of
my project: what are the consequences of purposefully avoiding formal law, and does the
purposeful avoidance of law lead to an absence of order in the organizations and
organizational field. Specifically, the empirical finding revealed that order and
governance is constructed throughout the broader hedge fund market, which includes
non-registered advisors and smaller organizations with limited resources, by an extra-
legal governance structure. This extra-legal governance structure consists of multiple
social mechanisms, which includes the social institutions found within the organization
and relational dynamics among network partners. The investigation of the institutional
mechanisms identified distinct institutional logics operating within two organizational
forms of hedge funds. These two distinct institutional logics create what I call an
entrepreneurial governance structure and a rationalized governance structure within
hedge fund organizations. Further explication of these informal governance structures
revealed that they are affected by the historical motivations of the entrepreneurs founding
the hedge funds, the interests of the dominant investors in the hedge fund, and the power
dynamics within these organizations and among network partners.
By shifting the analytical lens of the investigation to the social network mechanisms, my research identified three social structural forces that affect how economic action is ordered and governed. In particular, the data revealed that the majority of hedge funds struggle for credibility in an unregulated market, and rely on their network partners to establish legitimacy in the field and signal trustworthiness to investors. Additionally, it was shown that particular nodes within the hedge fund’s network structure have the power to control and constrain economic action in the field—as a result of relying on network partners for credit, information, and the pricing of assets—and can use their power to discipline hedge funds. These power relations, however, are reversed in a small number of cases where hedge funds have accumulated large assets under management and have the power to shape the practices of the field through communication and lobbying feedback—to both network partners and the U.S. congress. Finally, the data revealed that the density of network ties varies significantly within the organizational field. The network ties increase as a hedge fund increases its assets under management, creates more complex investment strategies, and experiences economic shocks. This increasingly dense network structure creates additional points of control in the market, which allows for more influence and oversight by powerful network partners.

Linking the Empirical Findings to Theory:

The empirical findings in this chapter offer important theoretical insights that can be used to refine and advance the theoretical perspectives, and the corresponding propositions, explicated in Chapter Two. In particular, the empirical finding that an extra-
legal governance structure—which consists of both institutional mechanisms and network mechanisms—establishes order and governance in the hedge fund market speaks directly to all four theoretical perspectives—as embodied in propositions 1a, 1b, 2a, 2b, 3a, 3b, 4a, 4b. The discussion in this section not only links the empirical findings of the investigation to the theoretical insights and concepts but also specifies where these theoretical propositions fail to explain the observations in the U.S. hedge fund market.

New institutional economics provides a number of theoretical insights and concepts that are supported by this chapter—as embodied in theoretical propositions 1a and 1b. New institutional economics posited that in the shadow financial market of hedge funds, where there is an absence of formal state regulation, hedge funds would develop rationalized governance structures that seek to reduce transaction costs and protect against opportunism. The empirical findings presented in Section I—focused on the institutional mechanisms in the extra-legal governance structure—support the NIE perspective by showing that rationally designed institutional structures are developed within particular groups of hedge fund organizations, and that these rational structures create bureaucratic checks and complex internal controls to minimize opportunism. For example, hedge funds with rationalized governance structures have created such complex institutional rules, norms, controls, and divisions within their organizations that they appear to the outside observer as a Fortune 500 corporation. Additional support for the NIE propositions comes from the empirical finding that the ownership structure affects the governance structure of the firms. It was shown that the large institutional clients are demanding greater transparency and accountability within the hedge fund organizations.
The NIE perspective has difficulty explaining a large number of empirical findings presented throughout this chapter. First, the theoretical perspective has no explanatory power with respect to social network mechanism component of the extra-legal governance structure—explained in detail in Section II. For example, NIE insights completely neglect the informal constraints placed on hedge fund organizations by embedded social structures. The three network-related social forces that constrain and order market interaction among the organizational field are not even captured in the NIE model. Second, because the NIE perspective does not capture the network governance dimensions it cannot adequately explain how the institutional mechanisms are interrelated with the network mechanisms. As a result, the perspective cannot make the conceptual link between the finding that an organization’s purposeful avoidance of the formal institutional environment, its struggle for network legitimacy in a unregulated space, and its governance structure are related.

The empirical findings presented in this chapter provide support for the insights and concepts proposed by new institutionalism in organizational analysis—as embodied in theoretical proposition 2a and 2b. The neoinstitutional theoretical perspective posited that in the shadow financial market of hedge funds, where there is a limited role of formal law and state regulation, a hedge funds’ management would implement governance controls within the organization that comport with the taken-for-granted practices of the hedge fund industry as it currently operates, and mimic the legal environment in the traditional securities markets. My empirical findings support the theoretical perspective in its prediction that particular groups of hedge funds would mimic the legal environment in the traditional securities markets. For example, large hedge funds— who predominantly
manage capital of institutional investors—have created rationalized governance structures that abide by the formal legal and regulatory requirements issued by the federal government and administered by the SEC. A second insight from the neoinstitutional perspective that is supported by my empirical findings is that hedge fund organizations struggle for legitimacy in a ambiguously regulated market—with little formal accountability and regulatory oversight. In particular, it was show that hedge funds build market legitimacy by relying on the status and reputation of their network partners. For example, funds make a conscious, explicit effort to sign contracts with the most well-established broker, legal counsel, administrator, and auditor they can afford.

The neoinstitutionalist perspective has difficulty explaining two empirical results presented in this chapter. First, similar to the NIE perspective, the neoinstitutionalist model completely neglects the social network mechanism component of the extra-legal governance structure—explained in detail in Section II. For example, neoinstitutionalism cannot explain the informal constraints placed on hedge fund organizations by embedded social structures. Their model cannot capture the three network-related social forces that constrain and order market interaction among the organizational field. Second, as a result of the neoinstitutionalist perspective’s neglect of social relations and networks, the model cannot capture the interrelations among the institutional environment, the institutional governance structures, and the social network constraints. Finally, the neoinstitutionalist perspective does not capture the economic interests that structure the two institutionalized governance structures revealed in Section I. In particular, it was shown that the entrepreneurial and rationalized governance structures result from the economic interests of different ownership groups—institutional investor’s interests shape the rationalized
governance structure, and the limited partner’s interests shape the entrepreneurial governance structure.

The empirical findings presented in this chapter provide support for the embeddedness approach in economic sociology—as embodied in theoretical propositions 3a and 3b. The theoretical approach posits that in the shadow financial market of hedge funds, where there is a limited role of formal law and state regulation, hedge funds are governed by their relationships with service providers—prime broker, legal counsel, auditor, and administrator. The results from Section II of this chapter strongly support the embeddedness insight that the hedge fund’s network relations directly affect how its governed. For example, the empirical analysis showed that the hedge fund’s most important, and thus most powerful, network partner is their prime broker. This network power comes from the fact that the prime broker is a hedge fund’s main source of financing (credit and leverage), and for gaining access to a large securities lending network—which allows hedge funds to short sell securities.

Finally, the empirical findings presented in this chapter provide support for the insights from new institutionalism in economic sociology—as embodied in theoretical proposition 4a and 4b. The new institutionalism in economic sociology perspective posited that in the shadow financial market of hedge funds, where there is a limited role of formal law and state regulation, governance mechanisms would come from the interaction of the institutions and social relations within the hedge fund field—both within the organizations and among organizational networks. Specifically, the perspective posits that governance mechanisms developed by hedge funds would vary according to the interests found within the organizations, and that dominant hedge funds
would force their practices on the broader market to ensure market position and control the field. The empirical findings show that the entrepreneurial and rationalized governance structures result from the economic interests of different ownership groups—institutional investor’s interests shape the rationalized governance structure, and the limited partner’s interests shape the entrepreneurial governance structure. Furthermore, the data analysis revealed that powerful hedge funds—who manage in excess of $10 billion under management—exert a significant influence on the market and lobby to have their governance practices adopted by the market.
Discussion of Research Findings & Policy Recommendations

“An economic sociology of capitalism needs to endogenize the state and market by examining the concrete interconnections between political and economic actors and the manner in which, actors compete and cooperate to shape the structure of property rights, influence the workings of financial institutions, and give form to incentives for investment and entrepreneurship through the tax laws, interest rates, and other regulatory mechanisms governing economic activity.”

Victor Nee and Richard Swedberg
The Economic Sociology Of Capitalism

The empirical results at the core of this dissertation have revealed that hedge fund organizations: 1) purposefully avoid many of the formal laws and regulations issued by the state by structuring their organizations—both form and practices—to fall outside their purview; 2) must respond to the unintended consequences of locating themselves in an ambiguously regulated social space—wherein the formal legal environment does not specify the formal rules or specify a state regulatory body—by constructing various organizational strategies and informal governance mechanisms; and 3) are reasonably ordered and institutionalized by an informal extra-legal governance structure, which is shaped by social institutions, social networks, and the power of particular groups to realize their interests. These empirical results are based on the observations and data analysis of my multi-stage integrative research design. Together, these findings help demonstrate how multiple governance processes and mechanisms converge to order, structure, and institutionalize economic action in the U.S. hedge fund market.
The empirical results have important implications for existing theory, and provide an excellent grounded case study from which to develop pragmatic public policy recommendations. In particular, my investigation offers a number of new theoretical concepts, such as the *extra-legal governance structure*, which advance both the institutional and social structural approach within economic sociology and the sociology of law and organizations. These theoretical concepts are not developed in the abstract but are directly informed by the empirical data and observations. Similarly, the public policy recommendations that are developed, and presented in section III of this chapter, are directly linked to the empirical observation that the interaction of the formal legal structure and the informal extra-legal structure gives rise to a number of *governance failures*. The empirically grounded policy recommendations specify the exact location of the governance failures, and offer three potential solutions—assuming a willing political system—to one of the most important problems facing the U.S. economy: how shadow financial organizations can be governed in such a way as to spur entrepreneurial growth and economic profits, yet minimize the systemic risks they pose to the broader U.S. economy and society.

This final chapter proceeds through four sections. **Section I** explicitly addresses the leading critique of my investigation, and demonstrates how my empirical findings and theoretical insights provide a nuanced and comprehensive answer. The additional benefit of explicitly addressing this critique in Section I is that it gives me the opportunity to expose a number of *governance failures* that have developed within the revealed governing architecture of a shadow financial market—these governance failures are institutional and social structural break-downs at the intersection of the legal and extra-
legal governance structures. **Section II** draws out the implications of my research findings for existing theory in economic sociology, sociology of law and organizations, and institutional economics. In particular, I demonstrate how the empirical results both contribute to the existing theoretical perspectives (insights, concepts, and models), and allow me to advance the new intuitionalism in an economic sociology model that mitigates the friction between these theoretical perspectives. **Section III** offers three public policy recommendations that specifically address the governance failures observed in the governing architecture. These policy recommendations are not only grounded in the empirical observations of the investigation, but are also pragmatic with respect to political and economic feasibility. That is, the recommendations take in to account the limited resources of federal regulators and the social institutions, structures, and technologies that already exist in the market. **Section IV** briefly elaborates on how future research can advance the empirical findings of this project, and introduces my future research agenda. In particular, future research needs to expand the empirical results of the U.S. hedge fund market by conducting a comparative institutional analysis of global shadow financial markets. This form of comparative institutional analysis would investigate the institutional and structural differences in regulatory regimes among nations competing for unregulated pools of global capital. This would allow sociologists to understand how state-market relations are constructing multiple governance regimes within the shadow financial system, which is increasingly responsible for the majority of credit creation and market liquidity, and is the new institutional structure of modern capitalism.
Section I: Importance of Responding to Critiques

Taking a step back from the empirical findings and theoretical insights of my investigation into the governing architecture of a shadow financial market, an informed reader who has knowledge of financial markets, the economic crisis of 2008, and the current legal system should ask the following questions: If the interaction of formal and informal mechanisms—i.e., legal and extra-legal—create so much governance in your case study, then how were hedge fund organizations allowed to contribute to the increasing systemic risk and leverage that brought down the financial system in 2008-2009? Furthermore, why have there been an increasing number of cases of fraud and insider information brought against hedge fund organizations by the SEC? These are excellent critiques levied at my research findings that require a highly detailed response to show how these two events are explained—and potentially predicted—by my empirical findings and theoretical model. To answer this critique, I show how the central findings of my investigation not only demonstrate the formal and informal governance mechanisms, but also illuminate a number of governance failures—a unique set of blind spots in the governing architecture. These governance gaps are the structural locations where governance fails, and hedge funds are able to increase systemic risk and fraudulent market behavior. Therefore, although my investigation demonstrates that hedge funds are governed by multiple social mechanisms, the spaces between mechanisms have allowed hedge funds to engage in unchecked and unregulated behavior.
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A Review of the Central Findings: Answers to the Central Research Questions

My investigation of the governing architecture of the U.S. hedge fund market has answered the first three research questions central to my project. Prior to addressing the fourth question, however, it is important to review the central empirical findings. The empirical results from Chapter Four revealed how organizations use specific structures and practices to purposefully avoid the formal institutions of law and the regulatory environment. In particular, it was shown that hedge funds are legally structured as limited partnerships with complex domestic and international investment vehicle structures, and only offer private placements to accredited investors. This specific legal structure allows hedge fund managers to avoid a large number of SEC regulations by taking advantage of legal exemptions and regulatory loopholes in the existing securities law—historically put in place to protect the average investor. For example, the structured avoidance of formal law allows the hedge fund manager to avoid investment advisor registration and disclosure requirements—which have been formally institutionalized throughout organizations operating in the traditional financial markets. In additional to the formal legal structure, a hedge fund’s network structure enables its manager to maneuver around the traditional institutional environment, and the traditional banking sector, by connecting to large networks of non-bank financial organizations that provide credit and liquidity. These networks of non-bank financial organizations largely operate beyond the reach of federal administrative agencies, and together make-up the market-based institutional structure called a shadow banking system. The network of non-bank financial organizations is highly insular and restricts participation to large institutional money managers such as hedge funds—that manage a large number of savings from accredited
and institutional investors, and move capital throughout a vast number of economic
markets. The final section of Chapter Four concluded by demonstrating three specific
loopholes and exemptions in the formal securities law—Securities Act of 1933, Securities
Exchange Act of 1934, and Investment Company Act of 1940—that hedge fund
managers use to maneuver their organizations around the traditional institutional
environment.

The empirical insights from Chapter Five revealed that the purposeful avoidance
of law by hedge funds, and their legal counsel, does not lead to an absence of order
within the organizations. To the contrary, hedge fund organizations that purposefully
avoid formal law, and embed themselves in networks of non-bank shadow financial
organizations, are structured and institutionalized by a number of formal and informal
mechanisms. First, their organizational structure and practices are defined in direct
relation to a number of formal laws that cannot be avoided. For example, all hedge fund
managers are required by the SEC to disclose their large public equity positions—as
specified in sections 13(d) and 13(g) of the Securities Exchange Act. As a result of the
direct relation between hedge funds and the state, the formal institutional environment in
the traditional financial market sets the broad parameters—or institutional constraints—
over what a hedge fund manager can and cannot do, who can and cannot invest in his
organization, and what taxes are and are not applicable.

The second empirical insight from Chapter Five revealed that the purposeful
avoidance of the law—those laws that can be interpreted and maneuvered around—forces
the hedge fund organization into a new ambiguously regulated social space that operates
at the traditional institutional environment’s regulatory event horizon. The consequence
of this purposeful avoidance of law, by maneuvering the organization into an ambiguously regulated social space, is that a number of institutional voids develop within the market. These institutional voids develop as a result of an absence in the formal rules governing economic action, both within and among organizations, and the loss of a formal authority responsible for oversight and monitoring. For example, the ambiguously regulated social space leaves market actors—mainly investors and service providers—with very little institutional assurance that hedge fund managers are who they say they are, or that managers will do as they say with invested capital. No institutional actor is formally delegated to regulate this new regulatory space. It is important to note that these institutional voids have historically been mitigated and solved in the traditional financial system by federal agencies—including the SEC and Federal Reserve. In response to these institutional voids, hedge fund organizations and the organizational field are forced to construct a number of organizational strategies and mechanisms to mitigate the loss of formal rules and a regulatory authority. Ironically, one of the dominant strategies by large hedge fund organizations—as measured by assets under management—is to voluntarily succumb to the requirements specified in the formal institutional environment. As a result of this organizational response, the largest organizations in the field—those that manage the majority of the capital in the market—have adopted many of the requirements specified in the formal laws. The reasoning why large hedge fund organizations voluntarily register with the federal government is that they must address the demands and interests of institutional investors who want greater transparency and accountability.

The empirical insights from Chapter Six revealed that the majority of hedge fund organizations are not ordered and institutionalized by the formal institutional
environment describe in Chapter Five. The “average” hedge fund—as define by the average assets under management in the over all hedge fund market—is governed by a set of overlapping formal and informal governance structures. To understand how the majority of hedge fund organizations are governed in the absence of formal law and regulation, a more complex and nuanced conception of governance is needed. In order to conceptualize this more complex and nuanced governance structure I developed the concept of an extra-legal governance structure. The extra-legal governance structure consists of two social mechanisms, and is mediated by distinct power relations. The first mechanism within this extra-legal governance structure is the social institutional mechanisms within the hedge fund organization. My investigation identified two discernable institutional structures that constrain and govern hedge fund practices, which are mediated by the interests of institutional investors and hedge fund principals—the private partners in the funds. The first is an entrepreneurial governance structure. The entrepreneurial structure revolves around the logic that the hedge fund organization should maximize freedom and avoid highly rationalized and bureaucratic structures. An entrepreneurial structure gives the hedge fund management the greatest organizational freedom, minimizes rules, disperses decision-making authority throughout the organization, and gives the traders the ability to quickly respond to market opportunities. The second discernable institutional structure that was identified is a rationalized governance structure. The rationalized structure revolves around the logic that hedge fund organizations should attract as much capital as possible, and take advantage of their size to create market opportunities. The rationalized structure gives the interests of institutional investors a greater voice in the organization and, as a result, creates a large
number of organizational divisions responsible for responsibly managing their capital through complex internal controls. The complex set of organizational controls in the rationalized governance structure assures large institutional investors that their capital is being properly managed and signals trustworthiness to the market.

The second component of the extra-legal governance structure is the *social network mechanisms*, which organize and govern social relations among actors in the organizational field. The investigation into the social network mechanisms revealed that hedge funds are embedded in stable market relations, and that these embedded relations affect how the organizations govern economic action. In particular, I found three specific governing dynamics within the networks of hedge funds that directly constrain market behavior and affect organizational practices. First, the majority of hedge funds struggle for legitimacy in a market that has minimal oversight by the state, federal courts, and administrative bodies. As a result, hedge fund organizations must do a number of things to signal to the market that their organization is legitimate, credible, and trustworthy. For example, the predominant strategy within the organizational field is for hedge funds to rely on the status and reputation of their network partners to signal legitimacy to the market. Hedge fund organizations make a conscious, explicit effort to sign contracts with the most well established service providers—broker, legal counsel, administrator, and auditor—that they can find and afford. Second, particular network partners have power and control over a hedge fund’s practices and economic behavior. For example, prime brokers were shown to have significant power over a hedge fund because they provide the main source of financing for the organizations, and have the power to call in lines of credit and force the hedge fund to liquidate positions if it becomes too risky. The third,
and final, governing dynamic within the social network mechanism is the overall structure of network ties—as defined qualitatively. The analysis revealed that a hedge fund’s network density varies according to its assets under management, complex investment strategy, and experience with economic shocks. For example, large hedge funds that manage in excess of $1 billion, and have multi-strategy funds within the larger organization, have large dense networks of service providers—which help managed the rationalized governance structure. As a result of these dense network ties, the organizational field has greater points of control over large hedge funds, strategically complex hedge funds, and veteran hedge funds.

**Responding to Critiques: Governance Failures in the Formal and Informal Structures**

Taking into account the empirical insights and conceptual tools summarized above, it is now possible to address the main critiques of my research findings. Specifically, if the interaction of formal and informal mechanisms—i.e., legal and extra-legal—create so much governance in the case study, then how were hedge fund organizations allowed to contribute to the increasing systemic risk and leverage that brought down the financial system in 2008-2009, and why has the SEC brought a number of cases of fraud and insider information against hedge fund organizations in the aftermath of the economic collapse? My investigation and conceptual model of governance not only expose what formal and informal governance mechanisms are operating, but also where these governance mechanisms fail—which allows for increased systemic risk and the possibility of fraudulent behavior. The specific locations where the governance mechanisms fail are best described as governance gaps. For example,
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governance gaps are located at specific locations in the governing architecture of the shadow financial market, and are created by a unique set of blind spots and pressure points in the formal and informal governance structures. Governance gaps are the structural weaknesses in the socially engineered governing architecture where social control and constraints are missing. There are no social institutions or social structures designed within these governance gaps.

My research has exposed two discernable gaps in the governing architecture of the shadow financial market of hedge funds: 1) a failure in the entrepreneurial governance structure within the organization; and 2) a failure in the network governing structure among organizations. The first governance gap is located at the intra-organizational level, and is the result of a large number of hedge fund organizations avoiding formal law, and informally governing themselves by an entrepreneurial governance structure. The entrepreneurial governance structure is constructed in such a way as to allow managers the freedom to operate without bureaucratic and administrative hurdles, and to make decentralized, localized decisions on the day-to-day happenings in the market. The social consequences of this entrepreneurial governance structure is that individuals within the organization are forced to make a number of decisions that fall into the ambiguous, grey-areas of what is legal and illegal, and what is organizationally acceptable and unacceptable. When individuals operating under this entrepreneurial governance structure are faced with particularly ambiguous or abstract situations, which according to my data happens often, there is no central authority within the organization and no formal institutions enacted by the state to oversee the individual entrepreneurs—therefore, they are left to their own devices. Because the majority of hedge fund
organizations in the market are governed by an entrepreneurial structure, the magnitude of this governance gap is significant for the broader economy.

The failures in the entrepreneurial governance structure are directly linked to the critical observation that the SEC has brought a number of legal cases against hedge fund organizations in the last few years. Small to medium sized hedge funds do not have the hierarchical and bureaucratic internal controls in place to govern individuals in constant interaction with sensitive, private information and investor’s capital—which lie at the center of the hedge fund organization. This lack of internal institutions of governance leads to an increased probability of market opportunism, and is the first place federal regulators look to when reports of misconduct are reported or abnormal market behavior is observed. For example, in the first half of 2011, numerous federal prosecutions were brought against small to medium sized hedge fund organizations for embezzlement and insider trading. In March 2011, the SEC brought civil cases against four hedge fund managers for embezzlement. In May 2011, the SEC won an insider-trading case against the hedge fund manager Raj Rajaratnam—who was convicted on 14 counts of securities fraud, insider information, and conspiracy.

The second governance gap that was exposed by my investigation is located at the inter-organizational level, and is the result of a failure in governance among hedge funds and their network service providers. It was shown in Chapter 5 that hedge funds are increasingly becoming more connected to the organizational field by forming relationships with a greater number of service providers. For example, hedge funds are forming relationships with multiple prime brokers—as a result of experiencing economic shocks, diversifying risk, and growing in size. The benefit of taking on additional prime
brokers for a hedge fund organization is that it minimizes the risk that all of the fund’s holdings will be held by, and financed from, the same network partner—who in economic crisis might have a realistic chance of going bankrupt. Additionally, the benefit of having multiple prime brokers is that hedge funds can take out additional lines of credit and leverage up their portfolios for each account at each broker. The problem with this increasingly connected and dense network—which diversifies risk, and increases the sources of credit and leverage throughout the organizational field—is that information sharing becomes more difficult among the additional network ties, and there is no network actor responsible for oversight or limiting overall leverage throughout the network structure. Thus, the consequences of this network governance failure is that during market crisis, when hedge fund organizations experience substantial losses and have to burrow money to cover their positions, the organizational field becomes highly leveraged and no institution exists to limit or rescue struggling organizations within the field. The increase in leverage among large numbers of hedge fund organizations, and more broadly among shadow financial organizations, results in an increased systemic risk that can spread to the traditional bank-based institutional system.

For those readers not familiar with the intricacies of the financial markets just described, let me briefly take a step back and walk through a simple scenario that will clarify the main points. Take a simple hedge fund organization that has 3 prime broker accounts—note that this scenario is occurring simultaneously in thousands of hedge funds throughout the market. Under normal market conditions, a hedge fund manager minimizes risk to his portfolio by diversifying his holdings across strategies and securities, and manages the holdings through the three prime brokerage accounts. Lets
assume the hedge fund manager maintains safe levels of leverage in each account during stable market conditions. When market difficulties arise, however, the hedge fund manager increases the leverage in each brokerage account—to either cover market losses or to take advantage of new opportunities—up to the maximum level. The benefit of having multiple accounts to leverage up during market crisis is that the hedge fund manager always has access to more credit. The negative consequence for the broader field is that all network partners do not know the magnitude of the leveraged accounts by the hedge fund manager. All three prime brokers in this case, and the other service providers, do not have knowledge of all the hedge fund’s leveraged accounts. Each individual prime broker has limited knowledge of the amount of leverage each hedge fund is holding throughout its entire network. As the market crisis worsens, each prime broker reevaluates the holdings of each hedge fund account, and forces the struggling hedge fund to increase collateral—sell off positions and deleverage—in their brokerage accounts. This forces the hedge fund manager to sell off his market positions in order to come up with the additional capital requirements by their multiple prime brokers. The consequence of this simple scenario is that the hedge fund organization is forced to escalate the instabilities and downturns in the markets by selling large, coordinated positions, which in-turn forces the markets into further difficulties.

The simple scenario just articulated is similar to the events that led up to the financial market collapse in late 2007 and early 2008, and is directly linked to the critical observation that hedge fund organizations were allowed to contribute to the increasing leverage throughout the financial system and magnified the market losses that brought down the economic system. In particular, in late 2007 large numbers of hedge fund
organizations experienced unprecedented losses, were forced to liquidate positions, and pulled their capital from the leading prime brokers in the market. These events resulted in significant capital withdraws and losses at the leading prime brokers (investment banks) throughout the US economy. Prior to the financial crisis, the leading prime brokers—who where the central actors in the market-based institutional system called the shadow banking system—overextended credit products and leverage to large numbers of hedge funds and non-bank financial organizations throughout the global economy. The investment banks that were responsible for the increased credit and leverage were firms such as Bear Stearns, Morgan Stanley, Lehman Brothers, and Merrill Lynch, which in the aftermath of the economic collapse have all gone bankrupt and/or were purchased for cents on the dollar. Hedge funds were one of the leading non-bank financial organizations that took advantage of the credit products and leverage offered by these investment banks, and withdrew their capital as soon as markets began to experience difficulties. Large numbers of hedge fund organizations were forced to sell their positions and liquidate their accounts at each prime broker. The end result was a run on the market-based institutional system called a shadow banking system, which does not have access to FDIC insurance and cannot access the Federal Reserve’s discount window.

**Section II: Theoretical Insights and Advancements**

My research findings offer insight into the relatively unknown day-to-day practices of organizations in the shadow financial system, and provide an opportunity to expand existing theory and develop new theoretical advancements in the sociological analysis of the economy. In particular, my theoretical finding that the governing
architecture of a shadow financial market is constructed by the interaction of both formal legal mechanisms and informal social mechanisms speaks directly to new institutional economics, new institutionalism in organizational analysis, the embeddedness approach in economic sociology, and new institutionalism in economic sociology. My theoretical approach is oriented around the idea that it is only by breaking down the arbitrary intellectual walls between these academic fields and theoretical perspectives that an understanding of the governing architecture of the shadow financial market can be conceptualized. Formal mechanisms—such as the institutional environment—partially explain how the hedge fund market is ordered and economic action is governed. However, most hedge fund organizations purposefully avoid the formal mechanisms by structuring their organization in a particular way, and by locating themselves in a market-based institutional system called the shadow financial system—which operates at regulatory event horizon of the traditional institutional environment. This market-based institutional system is a unique social space wherein the U.S. government has limited authority to regulate organizational practices through formal law and federal administrative bodies. As a result of formal institutional ambiguities and voids, the hedge fund organizations operating within this new institutional structure are forced to respond by creating an extra-legal governance structure. For example, hedge fund organizations become constrained by a web of social institutions and social structures, which in-turn affects their organizational form and economic behavior. Both institutional and social network mechanisms converge to form the overarching informal extra-legal governance structure that is responsible for order in the shadow financial market.
The insights and concepts from my investigation have a number of implications for the existing theoretical perspectives in economic and sociology, which have been explicitly stated in the concluding discussion section of Chapter Five and Six. In this section of Chapter Seven, however, I focus on the specific theoretical advancements my research brings to the new institutionalism in economic sociology theoretical perspective, and the conceptual framework offered by economic sociology.

#1. Advancements to the New Institutionalism in Economic Sociology

The empirical findings from my investigation support a number of theoretical insights and concepts that can be used to advance the new institutionalism in economic sociology theoretical model. Specifically, the theoretical insight that the governing architecture consists of interacting legal and extra-legal governance structures allows me to refine and advance the multilevel causal model proposed by Nee (2005) within the context of the new institutional structure of financial markets. The multi-level causal model of new institutionalism in economic sociology—which was defined and explained in Chapter Two, Section I, Part 4—focuses integrating the distal causal mechanisms in the economic system with the proximate causal mechanisms found in market. Simply put, the model focuses on specifying and explicating how the institutional environment—distal mechanism—that constrains economic systems is interrelated with the organizational institutions, norms, and networks—proximate mechanisms—found within particular economic markets. The limitations of this model, which my research helps mitigate by advancing new theoretical concepts, is that it lacks specificity and does not account for how economic action is ordered and governed the new institutional structure.
of capitalism, where the formal institutional environment plays an ambiguous role in governing shadow financial markets.

My investigation offers three theoretical advancements to the multilevel model of new institutionalism in economic sociology. First, the theoretical concept of the extra-legal governance structure allows me to specify exactly how the proximate causal mechanisms—the informal social institutions and social networks—converge to govern the ambiguously regulated hedge fund market, and the economic actions of organizations within this market. For example, the two mechanisms that are responsible for the “social work” taking place in the extra-legal governance structure operate at the organizational level, and directly order and institutionalize the organizational field. The social institutional mechanisms were found in two distinct forms—the entrepreneurial and rationalized governance structure—and govern behavior within organizations. The social network mechanisms were found in three distinct forms—legitimacy through network structure, power within network structure, and density of network structure—and govern behavior among organizations. Both of these informal social mechanisms converge in the organizational field of the hedge fund market, and specify exactly how the proximate causal mechanisms of the multilevel models in new institutionalism in economic sociology explain the empirical findings.

The second theoretical advancement my investigation makes to the multilevel model of new institutionalism in economic sociology is that it specifies how interests and power affect the proximate causal mechanisms. In particular, my empirical finding that the interests and demands of particular actors shape what institutionalized governance structure emerge directly specifies how economic interests affect the proximate causal
mechanisms that structure economic behavior. Additionally, my empirical finding that the power of particular network actors shape what a hedge fund can and cannot do directly specifies how power affects the proximate causal mechanisms that structure economic behavior.

The third, and final, theoretical advancement my investigation makes to the multilevel model of new institutionalism in economic sociology is that it specifies how the distal causal mechanism is interrelated with the proximate causal mechanism. In other words, my empirical findings show the purposeful avoidance of the formal institutional environment—distal mechanism—leads to hedge funds locating themselves in a ambiguously regulated space. Within this ambiguously regulated space, governance structures are developed to address the loss of formal institutions—institutional void—and a formal monitoring agent. The response by the organizational field is to construct a set of overlapping legal and extra-legal governance structures. The extra-legal governance structure is the set of informal institutional and social structural mechanisms. Thus, the proximate causal mechanisms—the social institutions and social networks—that order and institutionalize economic action in the hedge fund organizational field are directly related to the distal causal mechanisms—the ambiguous formal institutional environment—that orders and constrains the broader hedge fund market.

#2. Organizing the Conceptual Tools Offered by Economic Sociology

My theoretical model advances the conceptual framework developed by Portes (2010)—described in detail in Section II of Chapter Two—by integrating economic sociology’s meta-theoretical principles and explanatory mechanisms within an specific
empirical case study. In particular, my empirical investigation of the governing architecture of a shadow financial market demonstrates how the full spectrum of tools and concepts from economic sociology can be organized within an explanatory theoretical model. For example, the theoretical model that is developed to explain the governing architecture of the shadow financial market focuses on middle-range phenomenon, and integrates a complex set of interacting social mechanisms within the strategic research site of the new market-based institutional structure of capitalism. This theoretical model is built on the premise that any explanatory model that does not account for the full range of conceptual tools offered by the sociological analysis of the economy—which includes tools from economic sociology and organizational analysis—runs the risk of overly simplifying the complex social phenomenon that structure and govern economic markets and action. The organizing conceptual framework developed by Portes (2010) allows my model to focus and capture the meso-level causal dimensions that govern economic action, and also explicates how the meso-level dimensions are interrelated to the macro dimensions. In other words, my theoretical model and organizing conceptual framework—which uses the full spectrum of tools offered by economic sociology—allow me to avoid giving greater weight to one causal mechanism versus another mechanism, and either over or under-socializing the roles of these mechanisms in economic markets (Granovetter 1985).

My advancements to the new institutionalism in economic sociology theoretical model focuses on balancing and integrating the full spectrum of conceptual tools presented by Portes (2010). In particular, my theoretical model focuses on integrating and explaining the relationship between the broader institutional environment, the
in institutional mechanisms within the organizations, and social network mechanisms among the organizational field within the strategic research site of a shadow financial market. The institutional environment—the distal causal mechanism according to the new institutionalism in economic sociology model—establishes the broader formal rules and constraints in the ambiguously regulated space that hedge funds purposefully operate within. The institutional and network mechanisms are constructed in direct relation to the organizations purposefully avoiding the traditional institutional environment. These informal governance mechanisms operate at the organizational and individual levels—the proximate causal mechanisms according to the new institutionalism in economic sociology model—and structure the economic action of individuals and their social relations. By investigating the multiple causal levels and multiple social mechanisms, my theoretical models advances the tools provided by economic sociology—as conceptualized by Portes (2010)—by demonstrating how they can be organized and integrated to explain the governing architecture of a shadow financial market.

**Section III: Public Policy Implications and Recommendations**

My research findings offer a number of implications for public policy. In this section, I explicate three policy recommendations focused on how best to regulate the non-bank financial organizations and minimize the systemic risks posed by the market-based institutional structure called a shadow financial system. These three policy recommendations are grounded in—and derived from—the empirical findings of the project, and focus on mitigating the governance gaps that were revealed in the overall governing architecture. I acknowledge the political and financial reality that US federal
administrative bodies, such as the SEC, are underfunded and are under considerable political constraints. Therefore, every effort was made to ensure that these policy recommendations were developed in light of political and economic feasibility. The three pragmatic policy recommendations take in to account the limited resources of federal regulators and the social institutions, structures, and technologies that already exist throughout the market.

Grounded Policy Recommendation #1

The first policy recommendation is derived from the governance failure in the entrepreneurial structure of hedge fund organizations, and is directed at mitigating the potential harm cause by this intra-organizational governance failure. The first discernable governance gap that my research exposed was that the majority of hedge fund organizations informally govern themselves in such a way that management has the greatest freedom from internal administrative constrains and federal regulators have as little authority within the organizations as possible. While this governance structure has many benefits for the entrepreneurial organization, there are a number of negative consequences for the broader market—increased probability for market opportunism through insider trading and embezzlement. For example, individuals operating within hedge funds are forced to deal with ambiguous or abstract governance situations everyday. Under the entrepreneurial governance structure, where there is minimal central authority within the organization, individuals are forced to make decisions themselves in an institutional setting that provides the right conditions for market opportunism. The institutional structure creates organizations that have minimal oversight, lowers the
probability that individuals will be caught, and increases the probability of market opportunism and personal profit.

In order to mitigate this governance gap and institutional failure within the entrepreneurial hedge fund organization my research recommends that all hedge fund managers must register with the SEC. Registration with the SEC would force entrepreneurial hedge fund managers, legally referred to as investment advisors, to comply with additional requirements and to adjust their organizational practices accordingly. As described in greater detail in Chapter Four, the registration process includes at least four sets of requirements and restrictions on the organization’s practices. First, the investment advisor must file a Form ADV with the SEC. Second, once the investment adviser has registered with the SEC by filing the Form ADV, he must then comply with all the requirements of the Investment Advisers Act of 1940. Third, registered investment advisers face restrictions on performance fees. Finally, investment advisers are subject to periodic on-site examinations by the SEC, which can occur as frequently as every two years and last from one week to several months. These additional requirements that will be placed on the entrepreneurial hedge fund manager and his organization will have a significant affect on the number of grey areas that individual employees are forced to deal with on their own—by creating more internal institutional controls in preparation for federal audits—and, thereby, decreasing the probability of market opportunism.
**Grounded Policy Recommendation #2**

The second policy recommendation is derived from the governance failure in the network structure of the organizational field, and is directed at mitigating the potential harm cause by this inter-organizational governance failure. My empirical findings revealed that a governance failure has developed as a result of hedge fund organizations taking on a greater and greater number of prime brokers as network partners. The benefits of taking on additional prime brokerage relationships for the hedge fund organization are that it minimizes the likelihood that all assets are held at one broker during economic crisis, and increases the sources of leverage and credit available. While this increasingly dense network structure has benefits for the hedge fund organization, there are a number of negative consequences for the broader market. For example, as hedge fund organizations take advantage of the additional sources of credit and leverage being issued by their prime brokers—investment banks—there is no network actor responsible for governing the overall leverage throughout the network or the broader market. The dense network has increased the overall credit and leverage in the shadow financial market, and has created a governance failure to the broader market. There is no network, organizational field, or federal actor responsible for limiting the overall credit and leverage in the system.

In order to mitigate this network governance failure among the organizational field my research recommends that hedge fund prime brokers—the investment banks at the center of the shadow financial system—be required by the SEC to report the amount of credit and leverage extended to hedge fund organizations—and more broadly shadow financial organizations. Requiring prime brokers to report levels of credit and leverage to
the federal government will create more transparency in the market, and will enable the organizations throughout the shadow financial system to have a better assessment of systemic risk, which will in theory help the organizations manage future crises. The required information would not be burdensome to the prime brokers and investment banks at the center of the shadow financial system. The specific implementation of this recommendation could take the form of electronic filings with the SEC on a regular basis, wherein the information is generalized and does not reveal the clients and their holdings. The required information in-turn can be used by the SEC to diagnose systemic problems—by bringing together information from all the leading organizations and developing a global perspective—and can release a quantitative measure of systemic credit and leverage in the shadow financial system. The information that the SEC has required can in-turn be disclosed to market actors to reallocated resources, take advantage of opportunities, and sell off risky positions.

*Grounded Policy Recommendation #3*

The third policy recommendation is derived from the governance failure in the market-based institutional structure called the shadow banking system, and is directed at mitigating the potential harm cause by this systemic governance failure. In Chapter One and Five it was shown that the new market-based institutional structure called the shadow financial (banking) system is financed predominately through short-term loans and credit products, and that the federal government does not offer organizations in the system access to FDIC insurance or the Federal Reserves’ discount lending window during economic crisis. As a result of these two factors, the market-based institutional system
that is increasingly becoming responsible for providing the US economy with credit and liquidity is prone for economic collapse because there are no proper capital reserves or federal safety nets—which support and ensure the traditional banking system during crisis. It can be argued that this governance structure, or lack of a governance structure, has been built by private organizations that are managing the capital of wealthy institutions, endowments, and pension funds. These organizations operate outside of formal law and are not the responsibility of the federal government. This argument, however, is built on a flawed conception of private versus public financial organizations, and fails to grasp the size of the shadow financial system and complex group of investors in these markets. For example, the non-bank financial organizations within the shadow financial market are intimately interwoven into the main stream US economy, and these organizations are managing capital from thousands of retirees (CALPERS) and the leading educational institutions (both private and public universities/colleges).

In order to mitigate this systemic governance failure in the market-based institutional structure called the shadow banking system my research recommends the federal government specify capital requirements for organizations throughout the market, and explicitly state under what conditions the Federal Reserve will and will not offer support. Forcing shadow financial organizations to hold greater capital reserves will enable the markets to manage economic crisis better, and will not cause large ripple affects to the traditional bank-based financial system. Furthermore, by explicitly specifying the role the Federal Reserve will play during economic collapse, should one arise even with the increased capital reserves, will establish the institutional rules during crisis and ensure that a loss of confidence is minimized. As for the specific policy details,
like the level of capital reserve and institutional rules issued by the Federal Reserve, I leave those up to the actors responsible for policy implementation.

Section IV: Future Research Agenda

The empirical findings from my investigation into the governing architecture of a shadow financial market have the potential to be expanded through two research projects. First, future research can expand the current findings—the purposeful avoidance of law, the avoidance of law does not lead to an absence of order, and the extra-legal governance structure—by investigating whether these institutional and structural patterns are operating outside of the U.S. context. In particular, a future investigation should aim at demonstrating the similarities and differences that develop within shadow financial organizations operating under competing governance regimes. The investigation would demonstrate how governments around the globe are attempting to govern non-bank financial organizations within the new market-based institutional system of capitalism.

I plan to develop a research proposal over the next six months that will advance the empirical findings from this dissertation by conducting a comparative institutional analysis of governance is constructed by shadow financial organizations operating under different regulatory regimes—research findings from the United States will be compared with new research in the United Kingdom, Germany, and China. The empirical data at the core of this future project will come from 60 interviews—20 based in each new country—with expert informants in hedge fund and private equity organizations. Preliminary contacts have been made with a number of expert informants. Data will be centered on the geographic locations of New York, London, Frankfurt, and Hong Kong—
which are the financial capitals of the respective nations. This comparative institutional and organizational analysis will investigate the following research questions: 1) how do non-bank shadow financial organizations respond to different formal regulatory regimes; 2) how does an organization’s social structure and cultural institutions interact with, and filter, the different regulatory regimes; and 3) what are the social and political consequences of competing regulatory regimes on the organizational fields’ informal practices and formal structure.

A second line of future research could expand on the role of technology used by hedge fund organizations, and the organizational field, to govern internal practices and external market relations. In particular, while my research did not specifically focus on technology as a social governance mechanism, a number of expert informants emphasized that the ubiquitous use of technology has consequences for how these organizations are structured and controlled. Technology is not only being used in the standard ways—to implement trades, manage internal holdings, and communicate with network partners—but has become such a dominant actor in shaping how these organizations are structured, operate on a daily basis, and behave in the market. Technology becomes such a dominant force within the organization that it becomes a social driver—insofar as it actively affects the hedge fund’s institutional rules and organizational form. For example, the technology organizes the divisions within the hedge fund, and determines when and how these organizational divisions will act in accordance with the technological feedback. Additionally, hedge funds use technology to gather the social dimensions of the organizational field, which in-turn affects the computer algorithms and organization’s behavior in the market. Quantitative hedge funds
use technology to capture and summarize the human dimension and cognitive dimensions of actors throughout their networks and the broader market. This technology is used to create reflexive systems that gather social consensus views throughout networks of organizations, on everything from the direction of a particular stock to the direction of sectors and currencies, and this social consensus determines the movement of the hedge fund organization in particular markets.
**Table 1: Definition of Financial Market Terms**

<table>
<thead>
<tr>
<th>TERM</th>
<th>DEFINITION</th>
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<tr>
<td>Accredited Investor</td>
<td>A term used by the Securities and Exchange Commission (SEC) under Regulation D to refer to investors who are financially sophisticated and have a reduced need for the protection provided by certain government filings. In order for an individual to qualify as an accredited investor, he or she must accomplish at least one of the following: 1) earn an individual income of more than $200,000 per year, or a joint income of $300,000, in each of the last two years and expect to reasonably maintain the same level of income. 2) have a net worth exceeding $1 million, either individually or jointly with his or her spouse. 3) be a general partner, executive officer, director or a related combination thereof for the issuer of a security being offered.</td>
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<tr>
<td>Alpha</td>
<td>1. A measure of performance on a risk-adjusted basis. Alpha takes the volatility (price risk) of a mutual fund and compares its risk-adjusted performance to a benchmark index. The excess return of the fund relative to the return of the benchmark index is a fund's alpha. 2. The abnormal rate of return on a security or portfolio in excess of what would be predicted by an equilibrium model.</td>
</tr>
<tr>
<td>Arbitrage</td>
<td>The simultaneous purchase and sale of an asset in order to profit from a difference in the price. It is a trade that profits by exploiting price differences of identical or similar financial instruments, on different markets or in different forms. Arbitrage exists as a result of market inefficiencies; it provides a mechanism to ensure prices do not deviate substantially from fair value for long periods of time.</td>
</tr>
<tr>
<td>Asset-Backed Commercial Paper</td>
<td>A short-term investment vehicle with a maturity that is typically between 90 and 180 days. The security itself is typically issued by a bank or other financial institution. The notes are backed by physical assets such as trade receivables, and are generally used for short-term financing needs.</td>
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<tr>
<td>Beta</td>
<td>A measure of the volatility, or systematic risk, of a security or a portfolio in comparison to the market as a whole. Beta is used in the capital asset pricing model (CAPM), a model that calculates the expected return of an asset based on its beta and expected market returns. Also known as &quot;beta coefficient&quot;.</td>
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<tr>
<td>Collateralized Debt Obligation (CDO)</td>
<td>An investment-grade security backed by a pool of bonds, loans and other assets. CDOs do not specialize in one type of debt but are often non-mortgage loans or bonds.</td>
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<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Counter Party Risk</td>
<td>The risk to each party of a contract that the counterparty will not live up to its contractual obligations. Counterparty risk as a risk to both parties and should be considered when evaluating a contract. In most financial contracts, counterparty risk is also known as &quot;default risk&quot;.</td>
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<tr>
<td>Credit Default Swap</td>
<td>A swap designed to transfer the credit exposure of fixed income products between parties. Thus, the buyer of a credit swap receives credit protection, whereas the seller of the swap guarantees the credit worthiness of the product. By doing this, the risk of default is transferred from the holder of the fixed income security to the seller of the swap.</td>
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<tr>
<td>Derivative</td>
<td>A security whose price is dependent upon or derived from one or more underlying assets. The derivative itself is merely a contract between two or more parties. Its value is determined by fluctuations in the underlying asset. Futures contracts, forward contracts, options and swaps are the most common types of derivatives.</td>
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<tr>
<td>Distressed Securities</td>
<td>A financial instrument in a company that is near or is currently going through bankruptcy. This usually results from a company's inability to meet its financial obligations. As a result, these financial instruments have suffered a substantial reduction in value. Distressed securities can include common and preferred shares, bank debt, trade claims (goods owed) and corporate bonds.</td>
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<tr>
<td>Family Offices</td>
<td>Family offices are private wealth management advisory firms that serve ultra-high net worth investors. Family offices are different from traditional wealth management shops in that they offer a total outsourced solution to managing the financial and investment side of a affluent individual or family. For example, many family offices offer budgeting, insurance, charitable giving, family-owned businesses, wealth transfer and tax services.</td>
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<tr>
<td>Futures</td>
<td>A financial contract obligating the buyer to purchase an asset (or the seller to sell an asset), such as a physical commodity or a financial instrument, at a predetermined future date and price. Futures contracts detail the quality and quantity of the underlying asset; they are standardized to facilitate trading on a futures exchange. Some futures contracts may call for physical delivery of the asset, while others are settled in cash. The futures markets are characterized by the ability to use very high leverage relative to stock markets. Futures can be used either to hedge or to speculate on the price movement of the underlying asset.</td>
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<tr>
<td>Hedge Fund</td>
<td>An aggressively managed investment vehicle that uses advanced investment strategies such as leverage, long, short and derivative positions in both domestic and international markets with the goal of generating above market returns (either in an absolute sense or over a specified financial benchmark).</td>
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<tr>
<td>Hedge Strategy</td>
<td>Making an investment to reduce the risk of adverse price movements in an asset.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Normally, a hedge consists of taking an offsetting position in a related security, such as a futures contract.</td>
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<tr>
<td><strong>Mutual Fund</strong></td>
<td>An investment vehicle that is made up of a pool of funds collected from many investors for the purpose of investing in securities such as stocks, bonds, money market instruments and similar assets. Mutual funds are operated by money managers, who invest the fund's capital and attempt to produce capital gains and income for the fund's investors. A mutual fund's portfolio is structured and maintained to match the investment objectives stated in its prospectus.</td>
</tr>
<tr>
<td><strong>Offering Memorandum (or Private Placement Memorandum)</strong></td>
<td>A legal document stating the objectives, risks and terms of investment involved with a private placement. This includes items such as the financial statements, management biographies, detailed description of the business, etc. An offering memorandum serves to provide buyers with information on the offering and to protect the sellers from the liability associated with selling unregistered securities.</td>
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<tr>
<td><strong>Option</strong></td>
<td>A financial derivative that represents a contract sold by one party (option writer) to another party (option holder). The contract offers the buyer the right, but not the obligation, to buy (call) or sell (put) a security or other financial asset at an agreed-upon price (the strike price) during a certain period of time or on a specific date (exercise date).</td>
</tr>
<tr>
<td><strong>Repurchase Agreement (REPO)</strong></td>
<td>A form of short-term borrowing for dealers in government securities. The dealer sells the government securities to investors, usually on an overnight basis, and buys them back the following day. For the party selling the security (and agreeing to repurchase it in the future) it is a repo; for the party on the other end of the transaction, (buying the security and agreeing to sell in the future) it is a reverse repurchase agreement.</td>
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<tr>
<td><strong>Shadow Banking System</strong></td>
<td>The financial intermediaries involved in facilitating the creation of credit across the global financial system, but whose members are not subject to regulatory oversight. The shadow banking system also refers to unregulated activities by regulated institutions. Examples of intermediaries not subject to regulation include hedge funds, unlisted derivatives and other unlisted instruments. Examples of unregulated activities by regulated institutions include credit default swaps.</td>
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<tr>
<td><strong>Short Selling</strong></td>
<td>The selling of a security that the seller does not own, or any sale that is completed by the delivery of a security borrowed by the seller. Short sellers assume that they will be able to buy the stock at a lower amount than the price at which they sold short. Selling short is the opposite of going long. That is, short sellers make money if the stock goes down in price.</td>
</tr>
</tbody>
</table>
Table 2: Legal Forms of a Hedge Fund

<table>
<thead>
<tr>
<th>LEGAL FORM</th>
<th>BENEFITS</th>
<th>PREDOMINATE LOCATION</th>
</tr>
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<tbody>
<tr>
<td>Domestic Hedge Fund</td>
<td>Limited Partnerships</td>
<td>New York, NY</td>
</tr>
<tr>
<td></td>
<td>Limited Liability Company</td>
<td>Greenwich, CT</td>
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<tr>
<td></td>
<td></td>
<td>Boston, MA</td>
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<tr>
<td></td>
<td></td>
<td>San Francisco, CA</td>
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<tr>
<td></td>
<td></td>
<td>Chicago, IL</td>
</tr>
<tr>
<td>Offshore Hedge Fund</td>
<td>Corporation</td>
<td>Cayman Islands, British Virgin Islands,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bahamas, Ireland, Mauritius, Hong Kong,</td>
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<tr>
<td></td>
<td></td>
<td>Singapore</td>
</tr>
</tbody>
</table>

Source: Shartsis Friese LLP, Hammer et. al. 2005

Table 3: Regulatory Agencies Governing the Hedge Fund Market

<table>
<thead>
<tr>
<th>GOALS OF ADMINISTRATIVE AGENCY</th>
<th>SECTORS OF THE ECONOMY</th>
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<tbody>
<tr>
<td>Securities and Exchange Commission (SEC)</td>
<td>Monitor the public issue of securities or trades of securities</td>
</tr>
<tr>
<td>Commodity Futures Trading Commission (CFTC)</td>
<td>Monitors futures and commodities</td>
</tr>
<tr>
<td>The Federal Reserve, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision</td>
<td>Monitor banks and currency</td>
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Source: Shartsis Friese LLP, Hammer et. al. 2005
### Table 4: Federal Regulatory Acts Governing the Hedge Fund Market

<table>
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<tr>
<th>Act</th>
<th>AUTHORIZES THE SEC</th>
<th>OBJECTIVES</th>
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<tbody>
<tr>
<td>Securities Act of 1933</td>
<td>to regulate the issues of securities to the public, as well as the necessary information disclosures</td>
<td>to ensure that all investors receive all necessary information concerning securities being offered for public sale, and to prohibit deceit, misrepresentation and fraud in the sale of securities</td>
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<td>Securities Exchange Act of 1934</td>
<td>to regulate brokerage firms, transfer agents, clearing agencies, and the U.S. securities self-regulatory organizations, including stock exchanges</td>
<td>to govern securities transactions on the secondary market and the regulation of exchanges and broker-dealers in order to protect the investing public</td>
</tr>
<tr>
<td>Investment Company Act of 1940</td>
<td>to regulate the organization of companies that engage primarily in investing, reinvesting, or trading in securities</td>
<td>to protect the general public and prevent abuses by regulating the (1) registration, (2) transaction, (3) purchase/sale, and responsibilities of investment companies</td>
</tr>
<tr>
<td>Investment Advisers Act of 1940</td>
<td>to regulate firms or individual practitioners remunerated for advising others about securities investments</td>
<td>to regulate the actions of investment advisers by requiring them to register</td>
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</tbody>
</table>

Source: Shartsis Friese LLP, Hammer et. al. 2005
APPENDIX I:

Visual Diagram of the Data, Sampling Procedure, and Products

STAGE 1: Exploratory Research
Form: Qualitative Data Collection
Qualitative Data Analysis

Procedures: Semi Structured-Questionnaire Interviews (n=20)
Content Analysis

Products: Transcribed Interviews
Tables of Qualitative-Responses

STAGE 2: Explanatory Research
Form: Qualitative Data Collection
Qualitative Data Analysis

Procedures: Semi Structured-Questionnaire Interviews (n=20)
Content Analysis

Products: Transcribed Interviews
Tables of Qualitative-Responses

MID-STAGE: Quantitative Analysis
Form: Quantitative Data
Quantitative Data Analysis

Procedures: Social Network Analysis
Measures of Centrality

Products: Visual Map of Social Network
Tables of Social Network Measurements

Key:
Observe Governance Processes & Mechanisms
Representative Sample

Key: Observe Governance Processes & Mechanisms
Representative Sample
APPENDIX II:

Exploratory Interview Outline

Introduction– This research is part of my doctoral dissertation. My research project attempts to address some of the limitation of existing economic theory, which often neglects the role of social relationships in market behavior. As a case study I’m talking to people in the hedge fund industry—hedge funds, law firms, auditors, brokers, and regulators—in the hope of getting a better sense of how these organizations—and the professionals in them—relate to one another and coordinate action. And I’m also very interested in how people in this industry develop business practices—both how people develop a professional feel for what’s effective and what isn’t, and also how people develop a set of understandings about what’s appropriate and what isn’t.

Consent & Privacy- As part of my requirements, I would like to ask you for your consent to interview you and to quote anonymously from our interview. Let me assure you that your privacy is my utmost concern and that I will never release your name or information—unless you authorize me to.

Interview Format- Today’s interview is targeted for around 45 minutes. It includes 17 questions and covers three broad areas of interest. The first area covers information on your organization and the hedge fund industry. The second section covers the relationship among your organization and the key players in this market. The final section covers professional values, norms, and practices.

Section I – Industry, Org & Individual Characteristics

Individual Characteristics—

1. To get started, I’m wondering if you could tell me a bit about your own trajectory? How did you come to this fund?
   Probes:
   • How long have you been in the hedge fund market?
   • What is it about the hedge fund market that attracted you?
   • How long have you been working for this hedge fund?

2. Can you give me a little insight into what you do?
   Probes:
   • How did you get into this part of the business?
   • What makes you good at this job? For example, what determines your success?
   • Do other people succeed at this type of work in other ways, or is there pretty much only one way to do this job well?

Organization Characteristics–

3. Can you tell me a bit about your fund – it’s history, what kind of fund it is, and so on?
   Probes:
   • How is your hedge fund different/similar from other hedge funds in the market?
   • What is the history of your hedge fund? When did it start?
• How would you characterize your hedge fund with respect to risk?
• Is your fund registered with the SEC? Why or why not?
• How large is your hedge fund?
  1. Number of employees and division?
  2. Assets under management?
• How successful has your hedge fund been?
  1. How do you measure success?
  2. What accounts for your success? How do you evaluate?

Market Characteristics –
  4. Moving up to the bigger picture, could give me a brief insight into the unique characteristics of the hedge fund market, and what is the role of the hedge fund in the larger financial markets?

Probes:
• What’s the role of a hedge fund in our economic system?
• How does a hedge fund compare to a mutual fund or private equity?
• Is there just one kind of hedge fund, or several, or is every hedge fund entirely unique?
• Could you put that in terms that my students would understand?

Section II – Network Characteristics
Next I’m hoping that you can give me a better sense of your service providers might affect how your firm operates.

Node #1—Broker
  5. Can you tell me a bit about your firm’s prime broker?

Probes:
• How did your hedge fund choose its prime broker?
• How often do you interact with your prime broker?
• What do successful dealings with your broker look like?
• How do you know whether your prime broker is doing a good job?
• What problems come up with your broker? Can you tell me a story about a particular problem that comes up?
• From the other side, are there things that hedge funds do that can cause difficulties or irritation for the broker?

Node #2—Administrator
  6. Can you tell me a bit about your firm’s administrator?

Probes:
• How did your hedge fund choose its administrator?
• How often do you interact with your administrator?
• What does a successful interaction with your administrator look like?
• How do you know whether your administrator is doing a good job?
• What problems come up with your administrator? Can you tell me a story about a particular difficulty you have had with your administrator?
• From the other side, are there things that hedge funds do that can cause difficulties or irritation for the administrator?
Node #3--Legal Counsel
7. Can you tell me a bit about your firm’s legal counsel?

Probes:
- How did your hedge fund choose its legal counsel?
- How often do you interact with your legal counsel?
- What does a successful interaction with your legal counsel look like?
- How do you know whether your legal counsel is doing a good job?
- What problems come up with your legal counsel? Can you tell me a story about a particular difficulty you have had with your legal counsel?
- From the other side, are there things that hedge funds do that can cause difficulties or irritation for the lawyer?

Node #4--Investors
8. Can you tell me a bit about your relationship with your investors?

Probes:
- How does your hedge fund find investors?
- How often does your fund interact with investors?
- What does a normal interaction with your investors look like?
- How do you know whether your investors are not pleased with you?
- What problems come up with your investors? Can you tell me a story about a particular difficulty you have had with your investors?
- From the other side, are there things that hedge funds do that can cause difficulties or irritation for the investors?

Node #5--SEC
9. Can you tell me a bit about your firm’s relationship with the SEC?

Probes:
- How often is your hedge fund in communication or contact with the SEC?
- Can you give me an example of how your fund deals or interacts with the SEC?
- If a problem were to arise, how would you communicate and interact with the SEC?
- From the other side, are there things that hedge funds do that can cause difficulties or irritation for the SEC?

Relationship Among Network Partners (Nodes)
10. How much contact or communication is there among your service providers?

Probes:
- For example, does your broker have contact with your legal counsel?
- For example, does your investors have contact with your administrator?
- For example, does the SEC contact your broker, investors, or legal counsel?
• How frequently do they encounter one another on unrelated matters, beyond their work for your fund specifically?

Section III – Professional Norms, Values, and Enforcement
In this final section, I’m hoping that you can give me some insight into the professional values, norms, and enforcement practices in the industry.

Values:

11. How do you know whether your organization is doing a good job? What do you use as your guide?

Probes:

• If answer is “money”: Are there other things that are important too, or is money really the last word?
• Is it simply a benchmark? Or something more? Investor retention? Reputation? Status?
• What are the top three things that your organization values the most?

Norms:

12. The press sometimes depicts the hedge fund world as though it’s the Wild West and anything goes. Is that how things really are, or does your organization implement professional norms and standards?

Probes:

• Are there mandatory classes or workshops? What form do they take?
• Are there professional tests that need to be taken?
• What role does the principle of the fund play? What is the role of the fund manager?

13. Does your organization have standards in the way the treat competitors? What about standard conduct among service providers—administrator, legal counsel, auditors, prime brokers? How are the rules determined?

Probes:

• How do people learn these rules?
• Why do people follow these rules?
• Is that view shared broadly in your firm, or do other people see things differently?

Enforcement:

14. Can you tell me a bit about how things play out when something goes wrong or someone goes over the line?

Probes:

• How do you know whether there has been improper behavior in your hedge fund?
• How do you know whether there has been improper behavior among your service providers?
• How do people react when they find a problem? Do they tend to be confrontational or conciliatory?
• Do things usually get resolved and put back on an even keel? How does this happen?
• Who would usually be involved in this process?
1. Who within your firm?
   2. Anyone from outside the firm?
      • When, if at all, do the courts and regulators get involved?

15. Have there ever been conflicts among your service providers—broker, auditor, and legal counsel?

   **Probes:**
   • If so, how are these conflicts communicated and how are they resolved?
   • How often do you change service providers? Broken contracts?
   • Can you give me an example?

**Section IV – Views of Regulation & Law**

16. (Tie into Previous Answers) Hedge funds are conventionally regarded as pretty loosely regulated; in your opinion do you think this is a correct interpretation?

   **Probes:**
   • Who is in charge of the regulation and how do they do it?
   • Can you give me a specific example of how regulation is implemented?
   • How does this regulatory environment restrict or constrain your fund’s behavior?
   • In your opinion, are there too many restrictions on hedge funds?
   • Do you think there needs to be more constraints on hedge funds?
   • How does this compare to other parts of the financial sector?

17. How does the law impact your hedge fund?

   **Probes:**
   • How do they impact your day-to-day behavior in the market?
   • Can you give a specific example?
   • Are your service providers involved in this process?
   • How is your legal counsel involved in the process?
   • How is your broker involved in the process?
   • How is your auditor involved in the process?

**Section V – Conclusion**

• I am very grateful for your time and insight.
• I will contact you when the dissertation research is completed and will give you an executive summary of the findings.
• In the meantime, can you think of anyone else [or anyone in a specific role] who it would be good for me to talk to? I’d particularly like to talk to someone who…[whatever]
   ⇒ If I contact X, would it be okay if I mentioned that you gave me their name?
• Thank you.
### Qualitative Codebook

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BIBLIOGRAPHY


