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"Governing Shades of Grey: The Emergence of Market Governance in the Absence of a Formal Institutional Environment"

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Governing Shades of Grey:
The Emergence of Market Governance in the Absence of a Formal Institutional Environment[*]

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How do governance structures emerge in the new institutional structure of the financial system? Since the 1980s, a market-based institutional structure has been developing in parallel with the traditional bank-based structure and has supplanted the traditional system as the dominant source of credit and liquidity for the US economy. The growth of this new parallel system, however, has not been accompanied by a corresponding expansion of the formal laws and regulations that govern economic action. As a result, large sectors of the US economy operate beyond traditional law and regulation and pose systemic risks to the broader economy and society. This article identifies and explicates the governance mechanisms that have emerged in one of the four major markets in the new parallel system—the U.S. hedge fund market—and the failures thereof. The empirical data for this study come from three years of fieldwork, 40 semi-structured interviews with expert informants, and eVestment|HFN database. This article advances the multilevel causal model developed by new institutionalism in economic sociology, with research findings that suggest that (1) the emergence of a governing social order is the result of interactions between the formal institutional environment regulating the traditional financial system and the social relations, informal norms, and institutionalized practices of interest-driven parallel financial organizations, and (2) governance failures emerge at specific locations where the formal institutional environment and the informal set of institutional and social structural governance mechanisms break down.

Past studies in economic theory have shown that the neoclassical rationality postulate fails to explain how market imperfections are created and why institutions and hierarchical organizations such as firms exist in economic markets (Commons 1934; Coase 1937, 1960; Chandler 1962, 1977). More recent literature on institutional economics shows that market imperfections are created by cognitive failures, asymmetrical information, and differing transaction costs and can be solved—or at least mitigated—by creating rationally designed institutions and collective norms to monitor inappropriate self-interested behavior (Williamson 1975, 1985; North 1990; Ostrom 1990, 2000). However, these studies overestimate the degree of rationality that is embedded in actual economic institutions, organizations, and markets. Sociological analysis of the economy has demonstrated that institutions in actual markets do not

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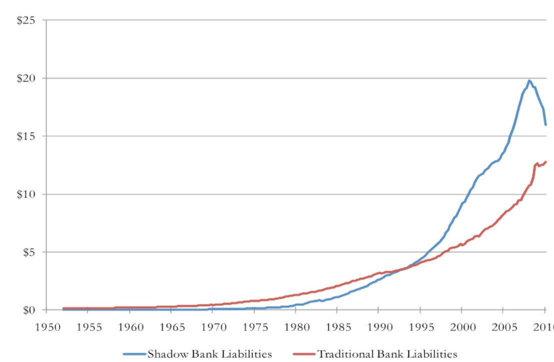
predominantly arise through rational design, but rather emerge because they fulfill social requirements for economic exchange; this analysis ranges from how social networks establish trust and shape the economic actions of individuals and firms (White 1970; Granovetter 1974, 1985; Burt 1982; Baker 1984) to the ways in which institutional environments and cultural beliefs shape the rules and legitimate practices of organizations and their organizational fields (Meyer and Rowan 1977; DiMaggio and Powell 1983; Scott and Meyer 1983; Powell and DiMaggio 1991). In this article, I argue that current understanding—both in economics and sociology—of the origins of economic institutions and the emergence of mechanisms capable of governing economic action needs to be refined to account for the new institutional structure of the US economy and the limited authority of the state to regulate new organizational forms in the financial system. Contemporary theoretical models need to place greater importance on market-based governance mechanisms emerging within entrepreneurial financial organizations and the networks of innovators who are changing the institutional structure of markets (Nee and Opper 2012; Nee and Ingram 1998; Nee 2005), and on the notion that new governance structures must include both the formal laws promulgated by the state and the reactions of market actors to the formal laws governing the economy (Swedberg 2003, 2005; Edelman and Stryker 2005).

The current theoretical understanding of the emergence of economic institutions and governance mechanisms rests on the assumption that markets operate within a well-defined institutional environment, governed by clearly articulated legal regulations for economic organizations that are created by the state and monitored and enforced by federal administrative agencies. This assumption is no longer valid, as the US financial system's institutional structure has undergone significant change over the last 30 years. Since the early 1980s, the architecture of the financial system has shifted from a traditional bank-based system in which banks are the central organizational actors to a new market-based system that is organized around networks of nonbank financial organizations. This market-based structure has developed in parallel and in direct competition with the traditional banking structure, allocating capital and risk throughout the entire economic system. According to Timothy Geithner, the current Secretary of the Treasury and former acting chief executive officer of the New York Federal Reserve, the market-based financial system consists of at least four financial products and actors—with significant assets that were in excess of $16 trillion in March 2010 (see **Figure 1**): (1) asset-backed commercial paper, (2) assets

Figure 1: Growth in Traditional vs. Parallel (Shadow) Systems (in trillions)



Source: Flow of Funds Accounts of the United States as of 2010:Q1 (FRB) and FRBNY.

financed overnight in repurchase agreements, (3) hedge funds, and (4) the major investment banks (Geithner 2008; Pozsar et al. 2010). By comparison, the top five holding companies in the traditional banking system have slightly more than $8 trillion in total assets, and the entire traditional banking system has approximately $12 trillion in assets. The market-based structure operates in the "grey areas" of the traditional institutional environment, where the state has limited power and authority to govern economic actions, and the organizations operating within this structure have created financial vehicles, products, and strategies to purposefully avoid the traditional financial regulations and legislative acts that are responsible for protecting investors.

The US Federal Reserve, the Securities Exchange Commission (SEC), global leaders, and our nation's leading scholars all recognize the significant social and economic implications of the market-based structure for the broader US economy and society. The Nobel Prize-winning economist Paul Krugman has argued that this system—"the shadow banking system," as he calls it—was at the core of the 2008–2010 global financial crisis and that the stage has been set for a devastating credit crisis and "depression economics" by the growth of the shadow banking system, without any corresponding extension of regulation (Krugman 2009). Similarly, Ben Bernanke, the current chairman of the Federal Reserve, has contended 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 Group of Twenty Finance Ministers and Central Bank Governors (G20) Summit in London, US President Barack Obama and British Prime Minister Gordon Brown called for greater transparency in the shadow banking system and new regulations to govern it.

Before regulatory reforms can be implemented, however, there is a need for social scientific research that empirically investigates and theoretically conceptualizes how organizations within the market-based financial system have institutionalized governance in the ambiguous grey areas of the existing regulatory framework—where the formal law and state have limited authority to regulate organizations and economic action. This article explains how economic action in the changing institutional structure of markets has become reasonably ordered and institutionalized without the kind of formal institutional environment that is often assumed to be necessary in modern capitalism. The empirical investigation seeks to explain: (1) how formal law, the state, and parallel financial organizations interact within the ambiguous grey areas of the existing regulatory framework that governs the traditional financial system, and (2) how formal and informal governance mechanisms emerge in this ambiguously regulated space to produce a governing architecture with well-defined governance failures.

Changing Institutional Structure of Financial Markets

As the structure of the US financial system has changed, increasingly intimate ties have emerged between the banking system and capital markets (Adrian and Song Shin 2009). The relations between money, credit, and banking are increasingly complex, making these factors difficult to separate. By breaking down the constituents of this system, however, it is possible to analyze how the institutional structure and financial intermediation processes that underlie the traditional financial system evolved and how they have fundamentally changed. Historically, the traditional banking system has been the main supplier of credit and liquidity for production and investment generally, and it has become one of the most heavily regulated sectors of the US economy in the post-Great Depression era. There are three sets of actors in the traditional banking system: savers, borrowers, and deposit-based banks such as commercial banks, federal savings banks, and credit unions. Savers deposit their money in local banks, entrusting these organizations with its management, and in return, they receive interest on their deposits. Borrowers obtain loans from the traditional deposit-based banks, and in turn, they are charged interest on their loans. Banks fund these loans through the savers' bank deposits, facilitated by third-party liquidity and credit guarantees as provided by the Federal Reserves' discount lending window and the Federal Deposit Insurance Corporation (FDIC), for example. The process through which banks "recycle saver's" deposits into loans is known as credit intermediation (Pozsar et al. 2010).

Since the 1980s, the credit intermediation process within the traditional bank-based system has increasingly been supplanted by a market-based system. In contrast to the traditional banking system, which is centered on banks as the main credit intermediation organization, the parallel market-based system is centered on networks of nonbank financial organizations that coordinate their actions to circumvent the traditional credit intermediation mechanisms and avoid costly banking regulations issued by the federal government. The nonbank financial organizations in the networks are linked together with what the Federal Reserve Bank of New York calls "vertically integrated intermediation chains" that supplant the credit intermediation process of the traditional banking system. For example, networks of nonbank financial organizations intermediate credit though 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).

The market-based institutional structure manages credit intermediation processes through a vast network of unregulated, nonbank 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 in the former, the credit intermediation process no longer takes place within one organization—the bank—but instead is broken down by tasks that are completed step-by-step by a network of hierarchically linked nonbank financial organizations. The steps involved in this division of labor, each of which is typically done by a specialized organization, may include loan origination, loan warehousing, asset-backed security issuance, asset-backed warehousing, asset-backed collateralized debt obligation (CDO) issuance, asset-backed security intermediation, and 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 nonbank 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 fund managers who purchase these asset-backed securities for their investors.

Hedge fund organizations[1] play three important systemic roles in the new market-based institutional structure: (1) collectively, they are one of the leading depositors and funders of investment banks and financial organizations that are responsible for creating new credit products—hedge funds funnel their investors' savings to 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 that are created and issued by the network of nonbank financial organizations.

The most important role that hedge fund organizations play in the new market-based institutional structure is that they deposit large pools of their investors' capital into the network of nonbank financial organizations that are involved in the credit intermediation process. In particular, hedge funds purchase sophisticated and creative financial instruments such as asset-backed securities, collateralized debt obligations, credit default swaps, and repurchase agreements that are designed and structured by the investment banks and security broker–dealers at the center of the market-based institutional structure. It is important to emphasize that in contrast with the traditional bank-based institutional system, where banks take the majority of the risks associated with credit intermediation processes, the market-based

[1] In general, a hedge fund is an actively managed, unregulated pool of capital contributed by high-net-worth investors, and it can employ any investment strategy. Formally, hedge funds are defined by—and distinguished from other investment vehicles—their relationship to formal securities law. In order to maximize the range of financial techniques at their disposal, hedge funds are legally structured to limit participation to high net-worth "accredited investors"—investors with a net worth in excess of $1 million who have significant investment knowledge. Examples of accredited investors include commercial and savings banks, insurance companies, pension funds, wealthy individuals, family offices, and endowments. Despite being formally unregulated, most hedge funds adopt a number of conventional 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.

institutional system divides the tasks involved in credit intermediation processes and divides the associated risks between different financial instruments. In the empirical case study, these financial instruments are then sold to hedge fund actors who receive an economic return that is related to the amount of risk that is associated with the purchased financial instruments.

CONCEPTUALIZING GOVERNANCE IN THE PARALLEL FINANCIAL SYSTEM

This article uses the multilevel causal model developed by new institutionalism in economic sociology (Nee and Ingram 1998; Nee 2005; Nee and Swedberg 2005; Nee and Opper 2012) to conceptualize the emergence of institutions and social structures that are capable of coordinating the interests of different economic actors in a parallel financial market. The model for new institutionalism in economic sociology was developed as 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 and DiMaggio 1991), and the embeddedness approach in economic sociology (Granovetter 1985). According to Nee (2005), the aim of the 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” (p. 49).

This article refines and advances the multilevel model by investigating how both distal and proximate causal mechanisms, along with their interrelations, produce the structure of social organization that has emerged from the parallel financial market. The empirical evidence for this study suggests that *distal causal mechanisms* are the deeper institutional forces that constrain and shape incentives for organizations in a parallel financial market at the organizational and field levels. In particular, the institutional environment that operates in the traditional banking system and securities markets imposes constraints on parallel financial organizations through distinct market mechanisms and state regulations. As a result, the broader institutional environment shapes the incentive structure for organizations operating at the boundaries of the traditional financial system. The distal causes in turn affect the *proximate causal mechanisms* that develop at the meso- and micro-levels, that is, at the organizational and individual levels. For example, the traditional institutional environment imposes constraints on parallel organizations by establishing formal regulations that these organizations purposefully avoid, and it also establishes the conditions under which the organizational field develops alternative strategies, informal practices, and relationships to realize its economic interests.

This article contributes to several important theoretical debates at the intersection of economic sociology, institutional economics, organizational sociology, and the sociology of law and economy. First, it offers a detailed empirical critique of new institutional economics (Coase 1937, 1960; Williamson 1981, 1985, 1994; North 1991) by specifying the historical, social, and institutional origins of governance structures in the parallel financial system. In particular, this article shows that the emergence of governance structures is only partially explained by organizations that are rationally designed to correct for market uncertainties and minimize opportunistic behavior. For example, Williamson's (1985) finding that institutions develop to form "governance structures" where imperfections exist—institutions based on hierarchical, formal rule-bound relations between actors that are geared to minimize transaction costs, protect against opportunism, and create market efficiencies—is partially accurate in explaining a small number of organizations in the parallel financial market. The theoretical understanding of governance structures by Williamson, and the NIE approach more broadly, has difficulty explaining why particular governance structures emerge in one group of organizations and not others throughout the organizational field. In particular, the NIE approach does not adequately conceptualize how informal institutions and social structures affect the governance of formally unregulated organizations, and it does not explain how the formal institutional environment interacts with the informal governance practices found within the organizational field.

This article draws insight from, and contributes to, the sociological literature on the role of social structures and social institutions in economic markets. The structural approach to understanding economic markets, which builds on the theoretical work of Polanyi (1944), demonstrates that economic markets are embedded in and affected by social structures and therefore can be investigated through network ties and social relations (Granovetter 1973, 1985; White 1981, 2002; Mizruchi 1982; Baker 1984; Burt 1992; Uzzi 1996, 1997). The institutionalist approach within organizational theory and sociology stress 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 behavioral scripts, rationalized myths, and cognitive frames that are taken for granted (Meyer and Rowan 1977; DiMaggio and Powell 1983; Meyer and Scott 1983; Powell and DiMaggio 1991). The contemporary neoinstitutionalist literature has advanced the insights of institutional theory by systematically investigating how organizations are affected by changes in the formal legal environment (Edelman 1990, 1992; Suchman 1994; Edelman and Suchman 1997; Dobbin and Sutton 1998; Edelman et al. 1999; Kelly and Dobbin 1999). The neoinstitutionalist literature demonstrates that the legal environment and changes within that environment play a significant role in shaping the governing structures that are adopted and emerge in organizations and their broader organizational fields. For example, they Edelman and Suchman (1997) argue that "because 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," a process that comes about through a "sense-making exercise [that] 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 advisers)" (p. 502).

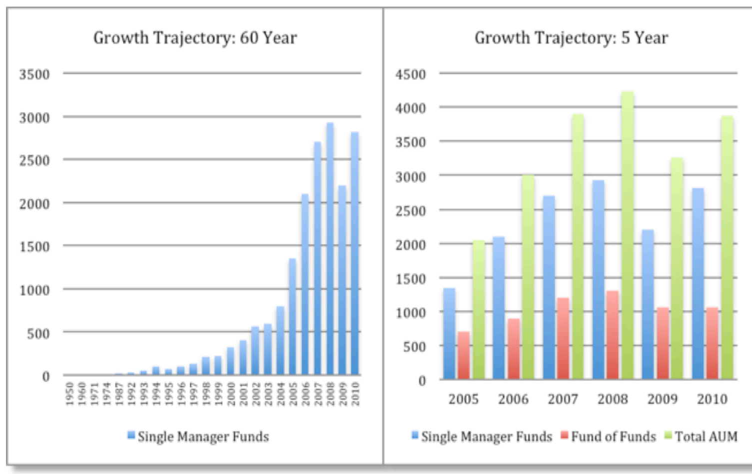
Finally, the third theoretical area of scholarship to which this research contributes is the economic sociology of law, as developed by Richard Swedberg (2003, 2005), and the sociology of law and economy developed by Lauren Edelman and Robyn Stryker (2005). These theoretical approaches begin with the pragmatic observation that the relation of law to the economy should not be seen as a top-down process initiated by the state, but rather as an interconnected process in which law both shapes and is shaped by the economic system. According to Swedberg (2003), what is needed is an "economic sociology of law—that is, a sociological analysis of law in economic life" (p. 1). An economic sociology of law extends the notion of law as formal laws promulgated by the state so that it also includes law as it is constructed by the reactions of actors to the formal laws governing the economy. An economic sociology of law strikes a balance between a law-centered view and a socioeconomic-centered view of law. Giving greater weight to one view of law or the other would distort the relationship among law and the economy. After all, "it is not what the law says that is of primary interest to the economic sociologist, but the role law plays in the way that the economy operates on an everyday basis" (Swedberg 2003:29). In a similar theoretical trajectory, Edelman and Stryker (2005) 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 … [and] 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" (pp. 529-30). That is, the sociology of law and economy provides a more comprehensive understanding of law as both the formal rules enacted by the state from above and the informal ideas, norms, and social context of law.

In what follows, I first describe why the US hedge fund market was chosen as my research site and empirically document the rise of the hedge fund organization. Next, I document how hedge funds purposefully avoid the formal institutional environment that regulates the traditional financial markets by maneuvering around existing laws. I show that this purposeful avoidance leads to institutional consequences and necessitates the emergence of a new set of institutionalizing structures. Specifically, the institutional failures that result from the absence of a formal institutional environment lead to the emergence of an informal set of institutional and social structural mechanisms. Finally, I incorporate the notion that the purposeful avoidance of the formal institutional environment and the emergence of informal structures of social organization capable of coordinating the interests of actors are interrelated, thus advancing a new conception of how economic institutions emerge and how economic action is governed within the theoretical framework of new institutionalism in economic sociology.

EMPIRICAL RESEARCH SITE & RESEARCH METHODS

This article does not attempt to explain the entire governing architecture of the parallel financial system. Rather, it investigates one of the four major markets within the parallel financial system—the US hedge fund market—to uncover the governing mechanisms that have been created in the absence of a formal institutional environment and regulatory framework, as well as the gaps in these mechanisms that have further shaped informal governance systems. The hedge fund market was selected as an empirical research site because it offers three unique characteristics. First, the research site is located at a strategically important institutional position wherein the formal regulatory structures that operate in the traditional financial system have been removed or minimized, leaving organizations and their organizational field with an opportunity to create governance structures that do not need to conform to law. Second, the hedge fund market has experienced tremendous growth (see **Figure 2**) and become one of the most active market participants in both the parallel and the traditional 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 and more esoteric sectors within these financial markets. For example, a report by Greenwich Associates (2007) indicates that 20 to 25 percent of the trading volume on the New York Stock Exchange and 30 to 35 percent of the volume on the London Stock Exchange is conducted by hedge funds.[2] Third, the hedge fund market has the power

Figure 2: Growth of the Hedge Fund Market
(in billions)



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[2] Hedge funds are the dominant actors with the following volumes in the specified markets: approximately 75 percent of the trading volume in convertible bonds, approximately 45 percent of the trading volume in emerging

and capacity to cause systemic and catastrophic shocks to the larger US 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). LTCM's financial meltdown created such a systemic risk to the overall economy that the US Federal Reserve was forced to broker a multibillion-dollar rescue package among 14 Wall Street banks.

The empirical data come from three years of fieldwork conducted between 2008 and 2011, 40 semi-structured interviews with expert informants in the hedge fund industry, and the eVestment|HFN hedge fund database.[3] The sampling strategies used to select organizations and informants within the hedge fund industry were a stratified sampling of organizations with a broad variation of organizational attributes (size, assets under management, and location) and snowball sampling based on colleagues and previously interviewed informants. The 40 semi-structured interviews were recorded, transcribed, and coded according to 60+ qualitative codes and themes. The emerging economic institutions and governance structures in hedge funds were empirically investigated through a total of 30 semi-structured interviews with the senior management in hedge funds: fund managers, general partners, managing directors, traders, and portfolio managers. The emerging economic institutions and governance structures in the multi-organizational structure of the parallel market-based system were 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 two interrelated parts of this organizational analysis enabled me to capture empirical insights from both the intra- and the inter-organizational dimensions of the parallel market, thereby minimizing the possibility that one of these organizational structures might over determine the resulting conceptual model of governance at the expense of the other.

The investigation was primarily a two-stage qualitative investigation. The first stage focused on the analysis of 20 expert informant interviews from the hedge fund market—consisting of both hedge funds and their network partners—and the legal doctrines that influenced organizations in the parallel market. To ensure a well-balanced and representative sample, the second stage of the qualitative investigation was informed by a mid-stage robustness check using the hedge fund database. This mid-stage correction was designed to capture a representative sample based on varying organizational

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market bonds, approximately 47 percent of the trading volume in distressed debt, approximately 25 percent of the trading volume in high-yield bonds, and approximately 55 percent of the trading volume in credit derivatives.

[3] eVestment|HFN has created the world's largest database of active hedge funds, funds of funds and CTA/Managed Futures investment products.

attributes, geographic locations, and network positions. The second stage focused on the analysis of an additional 20 expert informant interviews from a broad spectrum of organizations throughout the larger hedge fund market. The final sample included organizations based in New York, Boston, Chicago, San Francisco, and the Gold Coast of Connecticut that manage assets from $1 million to more than $15 billion. All interviewees willingly agreed to participate and were guaranteed anonymity of both the individual and the organization.

PURPOSEFUL AVOIDANCE OF THE INSTITUTIONAL ENVIRONMENT

Hedge fund organizations use a number of formal strategies to purposefully avoid the traditional institutional environment regulating markets. For example, hedge funds are legally structured as limited partnerships with complex domestic and international investment vehicle structures, and they only offer private placements to accredited investors. This 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 that were historically designed to protect the average investor. For example, hedge fund managers can avoid investment adviser registration and disclosure requirements. The network structure linking hedge funds to the broader markets enables their managers to maneuver around the traditional banking sector's regulatory environment because they are connected to large networks of nonbank financial organizations that can provide all the market services they require. These networks, which are highly insular and restrict participation to large institutional money managers such as hedge funds, collectively comprise the market-based institutional structure of the parallel financial system. Through the use of their legal, organizational, and network structure, hedge funds are able to maneuver their organizations around three specific loopholes in the formal securities laws: the Securities Act of 1933, the Securities Exchange Act of 1934, and the Investment Company Act of 1940.[4] 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 organizations' economic activities.

One clear example of a regulatory loophole that hedge fund organizations use to avoid formal regulations is Regulation D of the Securities Act of 1933. The Securities Act regulates the issuance and sale of securities to the general public. Its primary goal is to ensure that investors receive all necessary information concerning the securities being offered to the public, and to prohibit deceit, misrepresentation, and fraud in the sale of these securities. Securities are broadly defined in the Securities Act to include instruments such as stocks, bonds, notes, certificates of deposit, etc. However, interests in

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[4] See "The Laws That Govern the Securities Industry" at: http://www.sec.gov/about/laws.shtml

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 in which 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 someone other than themselves" (Hammer et al. 2005:111). Thus, given that investment contracts include 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 viewed as securities covered under the Securities Act of 1933.

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 their offerings as private placements that are exempt from registration under Section 4(2) of the Securities Act because they do not involve public offerings. This exemption is commonly referred to as the "private placement offering" exemption. To avoid direct regulation by The Securities Act and the SEC, hedge funds restrict and personally direct their offerings to "accredited investors"—an unlimited number—and up to 35 other purchasers. The Securities Act defines accredited investors to include the following: (1) a bank, insurance company, or 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 a 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, which are investors who have sufficient knowledge and experience in financial matters that makes them capable of evaluating the merits and risks of the investment. The restriction that securities can only be offered to a private group of investors entails that to avoid direct regulation, hedge funds cannot publicize these offerings by general soliciting or advertising, whether in the form of advertisements, newspapers, general mailings, broadcasts, or seminars or meetings with invited attendees.

AVOIDANCE OF LAW LEADS TO INSTITUTIONAL CONSEQUENCES

Even though hedge funds purposefully avoid many of the formal regulatory rules for the traditional institutional environment, the organizational field has distinct patterns of social order and institutionalized governance. In particular, my data analysis reveals multiple mechanisms that create order and govern economic action, and shows how heterogeneity in governance structures emerges within the organizational field. Ironically, some mechanisms arise in reaction to the formal institutional environment that regulates traditional financial markets. Through their purposeful avoidance of law, hedge fund organizations move into an ambiguously regulated social space with a minimal number of formal rules and no formally designated enforcement or monitoring agents. This ambiguous social space presents these organizations with a number of problems that must be addressed, and the hedge fund field has become reasonably ordered through two distinct institutionalizing mechanisms. First, large organizations—those managing assets in excess of $750 million—are pressured to voluntarily register with the SEC as a result of the demands of large institutional investors. Second, small- to medium-size entrepreneurial organizations—those managing less than $750 million—are forced to endogenously develop a set of overlapping informal social structures, including social institutions within the organization and network relations among organizations.

Hedge fund organizations must address a number of unintended consequences of purposefully locating themselves in an ambiguously regulated space. The first consequence is an increase in market uncertainty and overall investment risk for investors. For example, investors must incur 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 incur additional risks because hedge funds do not manage their capital in a transparent way and there are no formally designated monitoring agents or administrative agency.

In practice, all of these additional market risks force hedge funds to find a way to mitigate these unintended consequences of avoiding 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, which have two purposes. First, they provide a certain level of transparency by giving investors some insight into how the organization is run, what will be done with their capital, what type of volatility to expect, and when their capital can be redeemed. Second, they limit the potential risk of future litigation by limiting the hedge fund's liability and disclosing necessary information to investors. This use of formal law to minimize unregulated and unregistered organizations' risks and liabilities was emphasized repeatedly throughout my conversations with informants. A New York hedge fund principal and managing partner explained how important these documents and contracts are for his organization:

> 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 is 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. (Personal interview, New York, NY)

As a second consequence of hedge funds' operating within an institutionally ambiguous social space, there is little assurance that hedge fund managers are who they say they are or that the organization will do as it says it will with investors' capital. There is no specific institutional mechanism in place to verify the credentials of hedge fund managers or their organizations. There is no formal institution or administrative body at the federal level that checks, verifies, and monitors hedge fund organizations. In practice, this provides a number of unqualified and questionable money managers with easy entry into the market. Money managers who have access to large pools of capital and can convince investors that they can successfully manage their money will experience minimal institutional and regulatory barriers to setting up hedge funds. According to an experienced managing partner at a hedge fund legal counsel who currently helps hedge fund managers set up their organizations, this 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. (Personal interview, New York, NY)

Distal Causal Mechanism: Formal State Regulation

The lack of any formal mechanism to govern risky investment practices or to verify and monitor hedge fund managers and their organizational behavior creates an institutional void that must be addressed by the organizational field, and hedge funds respond through various organizational strategies and mechanisms. This section presents the first social mechanism that the analysis revealed and shows how the formal institutional environment directly influences governance practices within a particular group of hedge funds.

The majority of hedge fund managers who run organizations with $1 billion or more under management have addressed the institutional void by voluntarily registering with the SEC. Thus, ironically, even though their organizations were structured to avoid many of the federal registration and disclosure requirements, these hedge fund managers have registered and are adopting the regulatory practices issued by the federal government. While there are no official data that report the percentage of managers in the overall hedge fund market—or particular segments of the market—that are voluntarily registered, a number of experienced and knowledgeable informants agreed that registered investment advisers manage a large percentage of that market's capital. 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 advisers. 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. (Personal interview, New York, NY)

These voluntarily registered managers are subject to SEC registration and are required to comply with the additional requirements and structure their organizational practices accordingly. The registration process includes at least four sets of requirements and restrictions on organizations' practices. First, the investment adviser must file formal documents with the SEC that specify firm information, business practices, and owners and controllers, along with a brochure that is provided to all clients and that provides information about the advisory services offered by the firm. Second, once the investment adviser has formally registered with the SEC, he or she must then comply with all the requirements of the Investment Advisers Act of 1940. In particular, the investment adviser must have a written compliance manual in place, designate a competent and knowledgeable chief compliance officer, adopt a code of ethics, and maintain books and records for a five-year period (Lhabitant 2006:50). Third, registered investment advisers face restrictions on performance fees. For example, registered advisers may only charge performance fees to qualified investors that have a net worth of at least $1.5 million or have at least $750,000 assets under management with them. 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.

As a result of large hedge fund organizations voluntarily registering with the SEC, the formal institutional environment operating in the traditional financial system also structures relations between this group of hedge funds and the state, with more frequent and rigorous social interactions. These market-state interactions are noticeably different than those of smaller entrepreneurial organizations. For example, smaller hedge fund organizations with nonregistered advisers have limited relations with the SEC, rarely interacting with the regulatory agency on an annual basis. Interaction between nonregistered advisers and the SEC only takes place if the nonregistered adviser commits fraud, holds large public equity positions (five percent long positions relevant to corporate control and its transfer), or holds long equity positions in excess of $100 million. Registered investment advisers in large hedge fund organizations, on the other hand, are required to file numerous documents and formally interact with the SEC throughout the registration process, and hedge funds run by these registered advisers have a high probability of SEC audits within one to three years of becoming registered.

The formal relations and interactions between the SEC and registered investment advisers revealed in the data analysis reveals how formal law and regulations reach into a subset of hedge fund organizations, structuring those organizations and their economic actions. The majority of employees in registered hedge funds—portfolio managers, traders, and analysts—have little knowledge about the formal institutional environment and the formal relations between their organization and federal regulators. This is because the responsibilities of filing documents and ensuring that formal requirements are implemented throughout the organization are delegated to organizational divisions such as internal legal counsel and back-office compliance. As a result, when asked how the formal law impacts his hedge fund, one portfolio manager stated that according to his knowledge, the hedge fund "had to maintain books and follow the organization's compliance manual" (Personal interview, Boston, MA).

Knowledge about the formal institutional environment and interactions with state regulators, however, differs dramatically for hedge fund veterans, general counsel, and external auditors. For example, a veteran and manager of a New York hedge fund for more than 30 years described the relations between the SEC and his fund as follows:

> Normally it revolves around maintaining systems of books and records and doing required training, having a 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. (Personal interview, New York, NY)

Even among the expert informants in my sample who had knowledge of the federal audit, little was known about why or how the SEC decides to audit particular registered advisers and their organizations. According to one informant who has extensive experience with the SEC and has helped many of his clients respond to federal regulators' audit requests:

> 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." (Personal interview, New York, NY)

Once the SEC has decided to enter a registered investment adviser's hedge fund organization, the auditing process is time-intensive and involves a number of formal procedures that directly affect the hedge fund's practices. A managing partner at a leading New York law firm described the scripted formal interaction as follows:

> So the SEC shows up. They want to be left alone in an office, they want hordes and 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 person. 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. (Personal interview, New York, NY)

Upon completion of the SEC audit, there are a number of formal written interactions between the registered adviser and the administrative agency, describing in detail how the hedge fund has responded or plans to respond to the audit. For example, the hedge fund must describe how its organization has changed or plans to change its governance practices. In a limited number of cases, hedge fund advisers who want to defend their organizations' practices respond with documents that explain why these practices do not fall 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. (Personal interview, New York, NY)

Proximate Causal Mechanism(s): Isomorphism, Network Relations, and Legal Consciousness

The following question arises: Why would hedge fund managers voluntarily register with the SEC, placing themselves under the watchful eye of federal regulators and incurring the administrative costs associated with registration? The analysis revealed a form of institutional isomorphism operating within the hedge fund organizational field. In particular, what DiMaggio and Powell (1983) have called "coercive isomorphism." This form of institutional isomorphism occurs as a result of "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). In my case study, large hedge fund organizations are dependent on large institutional investors such as pension funds, foundations, and endowments, and are feeling increased pressure to register in order to address the interests and demands of their institutional clients. A general manager of a large sophisticated hedge fund based in New York explained that during the last few years, his organization's management has felt increased demands for institutional verification and security and has adjusted management's 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 adviser 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[5]-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. (Personal interview, New York, NY)

For large hedge fund organizations, the increased costs associated with registering and creating extensive compliance infrastructures have become an institutional expectation and a normal part of doing business. In fact, this new institutional expectation has begun to structure the broader practices of the organizational field. A general manager of trading at a New York hedge fund stated,

> 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 adviser and to a new client base that demands that you be registered,

[5] The Employee Retirement Income Security Act of 1974 (ERISA) is a federal law that sets minimum standards for most voluntarily established pension and health plans in private industry to provide protection for individuals in these plans.

> 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. (Personal interview, New York, NY)

As a result of these organizations' voluntary registration with the state, the institutional environment operating in the traditional financial markets has a direct influence on particular hedge fund organizations. The regulations and requirements established in US securities laws directly structure the institutions and day-to-day practices of this group of hedge fund organizations, which 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. According to the managing partner at a large hedge fund legal counsel, the law is ubiquitous in organizations managed by registered investment advisers:

> 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. (Personal interview, New York, NY)

In addition to the coercive isomorphism and formal state interaction that directly govern hedge funds managed by registered advisers, there are important relational or network pathways through which these organizations become ordered, institutionalized, and increase their legal consciousness. The analysis revealed that formal laws and regulations are transmitted throughout hedge fund organizations with both registered and nonregistered advisers through day-to-day interactions with service providers. Specifically, there are two actors who share a hedge fund's organizational responsibility to interpret and implement formal legal requirements: the fund's legal counsel and the fund's auditor.

A hedge fund's legal counsel handles legal requirements, and if necessitated by the circumstances, an external legal counsel will also be involved. Within a hedge fund organization, legal counsel has a wide array of duties that include ensuring that internal organizational practices are in compliance with the formal law and regulations (in the case where the hedge fund is a registered adviser or is attempting to become registered), the fund's investments are protected by existing law, its investment strategies minimize the risk of future litigation, and vendor and employee contracts are in compliance with the law. The general counsel at a Boston hedge fund reported that his organizational responsibility forces him to interact and interpret formal law as follows:

> 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. (Personal interview, Boston, MA)

On the transaction side of the organization, the general counsel focuses on what the purchase of a set of legal rights in a company allows the hedge fund to do in certain circumstances and what it precludes the hedge fund from doing in others. For example, the hedge fund manager and traders who want to take a position in a private company might not know what legal rights the fund, as an outside investor, would have in structuring the company's management decisions. The general counsel will navigate the applicable laws and determine what the formal legal rights are, outlining when, where, and under what conditions the hedge fund can exercise them. According to one general counsel,

> Maybe . . . 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? (Personal interview, Boston, MA)

Turning to client-side interactions, the hedge fund's legal counsel 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 determine how the law affects the organization's interactions in the market and its multiple divisions and must ensure that all legal interactions minimize the organization's risk and maximize its profitability. The legal counsel of a Boston hedge fund reported that he must constantly manage legal risk from within, in the most efficient manner possible, and must know when to hire external legal counsel to manage the risk. He stated,

> 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. (Personal interview, Boston, MA)

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 more frequently. Specifically, the analysis revealed that as a hedge fund organization grows, internal risks must be managed to a much greater degree, with more legal issues developing. The hedge fund legal counsel is the actor inside the organization who is responsible for ensuring that governance practices are in accordance with the formal law, while taking advantage of the regulatory loopholes. A managing partner at a hedge fund legal counsel based in New York reported:

> 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 formalistically. 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. (Personal interview, Boston, MA)

GOVERNING SOCIAL STRUCTURE: INFORMAL MARKET MECHANISMS

The majority of hedge fund organizations are not directly governed by the mechanisms discussed above because they are not large enough to voluntarily register with the SEC, they do not feel pressure from large institutional clients, and they do not have repeated consultations with general counsel and auditors. Thus, formal laws and state regulations do not govern these organizations in the same manner. My investigation into the emergence of governance in this group of organizations revealed a set of overlapping informal social structures consisting of social norms within the organizations and network ties between market actors.

The purposeful avoidance of formal law and regulation and the unintended institutional consequences—as described in the two previous sections of this article—have paradoxically allowed the majority of hedge fund organizations to survive outside of the formal institutional environment. This success can be explained by examining the particular qualitative characteristics of these hedge fund organizations, which can be divided into two subgroups. The first subgroup consists of organizations that are run by a small number of entrepreneurial employees (usually less than ten individuals), have a small number of outside investors, predominantly manage money for friends and family, and implement simple trading strategies. According to a Boston hedge fund manager, this group of hedge funds is not what we usually think of when we hear reports about the hedge fund market:

> The distribution of those 3,500 hedge funds is really weird because a thousand of them are a single guy with Uncle Joe's 10 million bucks. I think those thousand guys each has [sic] 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. (Personal interview, Boston, MA)

The second subgroup consists of organizations that predominantly manage money for large, successful, and well-established clients. These hedge funds are often referred to as "managed account" hedge funds. They are run by a small number of employees who have successful investment records, are technically trained, and are highly proficient in using complex investment strategies. A defining characteristic of these organizations is that they are either not ready or not willing to create independent hedge funds that must account for the interests and demands of large institutional clients. An excellent example of this type of small organization appears in my data: a successful managed account hedge fund with five employees in the suburbs of Boston whose manager claimed that his organization is "not unrepresentative of the thousands of tiny places" found in the market (Personal interview, Boston, MA). The manager, who has a PhD in physics from one of the world's leading research universities, learned his quantitative modeling techniques at top investment banks on Wall Street. He explained that he wanted to strike out on his own after many negative experiences with large, bureaucratic Wall Street life, but did not want to take on all of the organizational and financial responsibilities that would come from setting up an independent hedge fund. The independence of employing his own successful quantitative strategies without the additional stresses associated with setting up his own independent fund was perfect for him:

> 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. (Personal interview, Boston, MA)

The larger, well-established hedge funds in the market are willing (and able) to hand over millions of dollars to these successful managers for two reasons. First, because of their success and reputation, these multibillion-dollar funds are able to raise a volume of capital that exceeds their internal capacity for managing it. Second, because quantitative models are transportable and can be run from any location, large hedge fund organizations can extend their geographic reach beyond Manhattan or Greenwich to include a number of successful portfolio managers around the country.

Informal Governance Mechanisms: Intra-Organizational Governance

Further analysis of this group of hedge funds, which are managed by formally unregistered investment advisors, shows that governance and social order emerge from the underlying social structure and organizational characteristics found within the field. In particular, two *ideal* institutional logics and governance structures emerge within the hedge fund field. These two ideal types of governance are the result of the *social ties* that organizations have with their service providers, the *organizational norms* established by the founding entrepreneurs, and the *interests* of different ownership groups. It is important to note, however, that although I present these social structures and institutions as analytically distinct throughout this section, they are interrelated and often interact simultaneously in the actual everyday practices of organizations in the market.

The first and most prevalent organizational form found in the data analysis has the following characteristics: the organization is operated by fewer than 20 employees, it is predominantly owned by the hedge fund manager or principal (either a limited number of colleagues or family offices funds), and it manages less than $500 million in assets. The institutional logic behind these organizations values the ability to specialize in a particular sector of the market, moving quickly into a concentrated investment position with minimal administrative hurdles in order to outperform the market. Their governance structure can therefore best be described as an *entrepreneurial governance structure*.

The second dominant organizational in my data has the following characteristics: the organization is operated by more than 25 employees, it is predominantly owned by larger investors (pension funds, endowment funds, and large family offices), and it manages in excess of $750 million in assets. According to several expert informants in my sample, this second organizational form accounts for the majority of the top 100 funds and manages more than 70 percent of the assets in the overall hedge fund market. The institutional logic behind this group of organizations values the ability to focus on any profitable market around the world, providing investors with a broad spectrum of investment strategies and taking advantage of its size to influence and shape markets. As a result of these social and economic forces, these organizations construct a different set of governance practices and rules that can best be described as a *rationalized governance structure*.

Entrepreneurial Governance Structure: An entrepreneurial governance structure is constructed according to a particular institutional logic. As mentioned, the first factor that significantly affects the choice of an entrepreneurial governing structure is the motivation of the organization's founders. In general, these funds are founded by successful traders and investment managers who left large investment banks, investment funds, and trading firms to start their own organizations. They were motivated in part by a quest for profit but also by a desire to move away from the large bureaucratic, political, and hierarchical organizations found on Wall Street. These entrepreneurs wanted to give themselves greater control over their economic success by building smaller organizations that were flexible with respect to market conditions, had distinct cultures that were of their own making, and had minimal bureaucracy. A New York hedge fund manager who had twenty years' experience in large organizations such as Morgan Stanley and Goldman Sachs and who founded his own hedge fund explained why he found this type of entrepreneurial hedge fund attractive:

> 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 nonpolitical 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. (Personal interview, New York, NY)

Similarly, the physics PhD manager who now runs his own entrepreneurial hedge fund in the Boston market stated,

> 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 milieu. Most, I would imagine. You just deal with it. But I found myself in a position to try something different. (Personal interview, Boston, MA)

In theory, these smaller and more nimble entrepreneurial organizations have the ability to focus on specialized knowledge, to move quickly into an investment position, and to reap the financial benefits by beating the market—often referred to as "capturing alpha."[6]

The second factor that significantly affects the entrepreneurial governance structure is the organizational form chosen by the hedge fund manager and legal counsel, typically, a private or limited partnership. In general, the organizational form and legal structure not only establish the formal hedge fund organization but also set out the broader institutional rules that are embedded in the organization. A legal document broadly specifies how the hedge fund will be governed, delineates the roles of all who are involved in the fund, demarcates which investors are eligible, and defines the management's responsibilities and liabilities. My interviews with hedge fund managers and general legal counsel within the entrepreneurial funds revealed that these documents are constructed in a way that frees the hedge fund manager from formal disclosure requirements, limits organizational liability, and gives the investment team the legal authority to pursue any investment it sees fit. For example, a New York hedge fund manager emphasized that hedge funds' institutional rules are established in the legal documentation and that these rules establish a flexible 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. (Personal interview, New York, NY)

In addition to delineating the rules and limitations placed upon the organization, the private partnership agreement establishes the relations between management and investors, particularly potential investors who are interested in joining the partnership. When investors become part of the legal partnership, they lose the protected status that the federal government had given to them as investors and are only protected and governed by the partnership's institutional rules. The general counsel of a New York hedge fund described these self-governing private partnerships where knowledgeable individuals enter into contractual agreements:

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[6] Alpha is the performance measure of a portfolio after adjusting for risk; it 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.

> 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. (Personal interview, New York, NY)

The third factor that affects the entrepreneurial governance structure is the power relations within the organization. These power relations are defined by the organization's ownership structure: who has control and whose interests will be represented. The analysis revealed that the majority of the entrepreneurial hedge funds are funded either by the hedge fund managers themselves or by the organizations' investment advisers and principals. As a result of this concentrated ownership, these funds have significant control over their organizations, have legal authority to do what they want with their organizations, and consequently construct governance practices around their interests. A Boston-based entrepreneurial hedge fund manager conveyed how important this private concentrated ownership is for shaping an organization's incentives and the way 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. (Personal interview, Boston, MA)

It is important to note that the concentrated ownership structure gives the managers of an entrepreneurial hedge fund direct authority to shape how the organization sees itself and its role in the larger market, that is, the ownership structure gives them the power to shape the organization's conceptual framework. The fund manager has the power to create organizational beliefs, whether or not those beliefs are empirically true, leading to a distinct institutional culture that is transmitted through levels of the organization and that affects the fund's day-to-day practices.

Expert informants in the entrepreneurial hedge funds repeatedly expressed the idea that their funds are faced with a number of "gray areas," or formal institutional voids where the law is ambiguous, and they are thus 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, along with the possibilities they introduce, 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. (Personal interview, New York, NY)

As a result of the absence of federal oversight, the entrepreneurial organization has a minimal number of required formal checks on its internal practices, and it allows employees the freedom to manage decisions that arise within the gray areas of day-to-day interactions in the market. Another hedge fund manager noted:

> 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. (Personal interview, New York, NY)

One example of how the entrepreneurial governance structure operates in the day-to-day practices of the organization is in the governance of insider information. The lack of federal oversight and transparency within the entrepreneurial organization gives individuals greater freedom to make their own decisions about how to manage insider information. Insider information frequently arises within these hedge funds, and their survival may be dependent on acquiring such new information. A defining characteristic of entrepreneurial hedge funds is that they specialize in particular sectors of the market—usually where the founders have extensive knowledge—and focus on acquiring better information in these sectors than any other organization in the market has. The 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 they may potentially acquire. Hedge fund managers and analysts also gather all available information about these companies from leading Wall Street brokerage houses and investment banks. In order for their hedge funds to beat the market, they must use this specialized information to make predictions about the directions of particular investments and then bet on those predictions.

Thus, a problem arises: What should employees within the entrepreneurial organizations do when they are confronted with information that they have acquired that is not publicly available? My interviews revealed that individuals in entrepreneurial hedge fund organizations are informally required to place a restriction on trading the investment about which they have insider information and that this informal requirement is regulated through a number of internal organizational controls. A hedge fund manager running an entrepreneurial organization based in New York explained how his fund follows this informal institutional rule:

> 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. (Personal interview, New York, NY)

II. Rationalized Governance Structure: The second organizing logic that I observed in the data, that of the rationalized governance structure, occurred in large hedge funds that have more than 25 employees, that are primarily owned by larger investors, and that manage assets in excess of $750 million. As in the case of entrepreneurial organizing logic, the founder's motivations, the organizational form, and the interests of dominant owners also affected the rationalized logic. However, while the founder's motivations for creating these hedge funds are similar to the motivations for entrepreneurial organizations—increasing flexibility, distinct culture, freedom to choose investment opportunities, and profit—the historical motivations are quickly altered by the increasing demands of capital and the interests of institutional investors, who are the dominant owners of the organizations in this group. The shift from an entrepreneurial logic to a rationalized logic was summarized by a 20-year veteran of the hedge fund market who currently helps manage one of the largest funds in the US:

> 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. (Personal interview, New York, NY)

Similarly, the managing partner of a "top ten" law firm based in New York City who provides legal counsel to more than 50 hedge fund clients expressed 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. (Personal interview, New York, NY)

One discernable difference between the entrepreneurial and rationalized governance structures is that the latter develops a complex set of institutional controls and formal divisions, such as divisions and subgroups within the larger hedge fund structure. These hedge fund organizations 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 has its own 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 described this complex legal structure:

> Virtually all large fund complexes have both types of funds [onshore and offshore investors—or US and 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 dollar, and so on. (Personal interview, New York, NY)

As with entrepreneurial organizations, the interests of different ownership groups shape the logic of the rationalized institution organizations. These hedge funds are predominantly owned by institutional investors. As a result, the rationalized organizations are forced to develop institutional practices that assure large institutional investors that their capital is well managed and protected. These organizations must therefore create greater transparency and accountability through many institutionalized rules and practices. A hedge fund manager on Connecticut's Gold Coast described the situation as follows:

> 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. (Personal interview, Greenwich, CT)

Similarly, a general partner at one of the largest hedge funds in the US expressed the increased expectations of 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 10 guys with $1 billion. (Personal interview, New York, NY)

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 outside observers to be Fortune 500 corporations. This was confirmed by a number of conversations with large hedge fund managers; as a managing director of one of the world's largest hedge funds said,

> 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. (Personal interview, Chicago, IL)

Additionally, the rationalized institutional structure can be observed in complex sets of rules and controls over the movement of money (both within the fund and in relation to external service providers), restrictions on employees conducting trades in their personal accounts, and requirements of multiple signatures for transactions such as money transfers. The chief of staff at a large New York hedge fund walked 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. (Personal interview, New York, NY)

Informal Governance Mechanisms: Inter-Organizational Governance

My investigation also revealed that informal governance structures evolve and are modified through the social interactions of hedge funds with their network service providers. I focus on two specific aspects of inter-organizational social dynamics that influence hedge funds' economic practices: (1) acquisition of legitimacy through the network structure, and (2) power within the network structure.

Acquiring legitimacy through the network structure. Hedge funds struggle for legitimacy in a market that has very little legal accountability or federal regulatory oversight, and a central organizational goal of 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 the fund's trustworthiness or its investment plan. To establish credibility and trust, hedge funds rely on the status and reputation of their network partners. For example, these funds make a conscious effort to sign contracts with the most well-established brokers, legal counsel, administrators, and auditors that they can find and afford. Efforts aimed at establishing trustworthiness are prevalent among hedge funds, regardless of their organizational size or geographic location within the United States. As a principal and owner of a Boston hedge fund said,

> 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. (Personal interview, Boston, MA)

It is important to emphasize that the desire to cultivate credibility and trust is driven by the desire to acquire capital from sophisticated and large institutional investors. That is, once again we can see that investor demands coming from pension funds, endowment funds, family offices, and wealthy individuals—those who predominantly make up the ownership of the rational organizational form of hedge fund—significantly affect governance practices in the market, in this case at the inter-organizational level. The managing director of a rising fund argued that particular network partners are chosen because they allow investors to feel comfortable and thus enhance credibility in the eyes of investors who place millions of dollars in these hedge funds:

> In the post-Bernard Madoff environment, it is absolutely critical that you are with counterparties that are sanctified by somebody, right, so in this case, the top three or four prime brokers are

> Goldman Sachs, Credit Suisse, JP Morgan, and Morgan Stanley. Those four are the four that people feel, I think, most comfortable with. (Personal interview, New York, NY)

In addition to their reliance on network partners for legitimacy and credibility, hedge funds are increasingly pressed to become more transparent about their entire network structures. Accredited and sophisticated institutional investors are hiring due-diligence teams to verify the reputation and trustworthiness of hedge funds' management and their service providers. My expert informants indicated that many of the largest institutional investors, such as large pension funds and funds of funds (which account for approximately 35 percent of the capital that comes 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 to background checks of hedge fund managers throughout the hedge fund's network. The manager of a very successful New York fund of funds described the thoroughness of these checks:

> 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. (Personal interview, New York, NY)

Power within the network structure. A second factor that emerged along the inter-organizational dimension is that network partners can have greater and lesser power over hedge funds. The greater the power a network partner has, the greater the degree of influence that partner has in determining what hedge fund clients can do and in which practices they can participate. The most important, and thus most powerful, network partner for a hedge fund is its prime broker. As a veteran managing director of a New York hedge fund stated,

> This 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? (Personal interview, New York, NY)

The prime broker's primary source of power over a hedge fund is through financing. Prime brokers are hedge funds' main source for financing (credit and leverage) and borrowing securities in the market. The prime broker controls and retains the hedge fund's assets and ensures that payment is made on transactions, with the power to call in lines of credit at will and to liquidate the position of a hedge fund if it becomes too risky (such as an overly-leveraged position). A portfolio manager articulated the prime broker's power as follows:

> 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. (Personal interview, Boston, MA)

The financial crisis of 2008 highlighted the extent to which the prime broker's relationship to a hedge fund has become a critical partnership for managing leverage and market risks. As the managing director of one hedge fund put it, 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. (Personal interview, New York, NY)

This power can be exerted on the hedge fund and cause tremendous negative effects for the organization. For example, when a hedge fund experiences economic shocks or one of its predicted investments goes terribly wrong, the fund will be out of business if the prime broker is not willing to supply the fund with additional credit. Exactly this situation occurred in the recent market turmoil:

> Yeah, just look at what happened to [so and so]; 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." (Personal interview, New York, NY)

In addition to the day-to-day financing and borrowing between a hedge fund and its prime broker, there are two other avenues through which the prime broker exerts power through network relations. One avenue is through the prime broker's role as the gatekeeper who guarantees transactions between buyer and seller by securing payment and delivering the assets. Thus, for example, a broker may connect a seller of 5,000 shares of Microsoft with a hedge fund buyer, ensure that the purchase price is agreed upon by both parties, and transfer the assets accordingly. The other avenue through which the prime broker can exert power arises because the prime broker is a central source of information for the hedge fund. A hedge fund relies on its prime broker's research teams for their extensive coverage of the securities markets, the prime broker's traders for the best trade executions, and the prime broker's sales teams for access to sophisticated financial products such as credit default swaps and derivatives. A New York quantitative fund manager described the importance of the information that flows between the prime broker and a 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. (Personal interview, New York, NY)

The prime broker has control over information and the power to pass insights through the network, depending on the prime broker's relations with the hedge fund—these are socially-dependent market opportunities. As a result of the structural position of prime brokers within hedge fund networks, they are facilitators and discipliners of hedge funds, with the power to ensure that hedge funds operate according to traditional market expectations and cooperate in market transactions.

DISCUSSION

The empirical findings from my analysis have shown that hedge fund organizations (1) purposefully avoid many of the formal laws and regulations issued by the state by structuring their organizations to fall outside of the purview of these laws and regulations, (2) construct various organizational strategies and informal governance mechanisms in response to the unintended consequences of locating themselves in an ambiguously regulated social space in which the formal legal environment does not specify formal rules, and (3) are reasonably ordered by informal governance structures that are shaped by social institutions, social networks, and the power of particular groups to realize their interests.

The empirical findings offer insight into the relatively unknown governance practices of organizations in a parallel financial system, and provide an opportunity to expand existing theory and advance new theoretical concepts in the sociological analysis of the economy. In particular, the finding that there emerges a structure of social organization that is more or less capable of coordinating the interests of actors in the new market-based institutional structure for financial markets offers empirical insight that allows us to refine a number of concepts and models from new institutional economics, new institutionalism in organizational analysis, and new institutionalism in economic sociology.

New institutional economics provides a number of theoretical insights and concepts that are supported by the empirical findings. The perspective of new institutional economics posits that in a parallel financial market, where there is an absence of formal state regulation, organizations would develop rationalized governance structures that seek to reduce costs and protect against opportunism. My analysis supports this insight by demonstrating that large institutionalized hedge funds respond to market imperfections by creating rational strategies and complex governance structures. Additionally, the analysis provides support for the NIE prediction that the ownership structure of an organization affects the institutional governance structure it adopts. For example, the ownership structure of highly rationalized, bureaucratic hedge funds directly affects their response to the ambiguously regulated space: they voluntarily register with the federal government to meet the demands of their large institutional clients.

However, the NIE perspective has difficulty explaining two empirical results that my investigation found. First, the theoretical perspective cannot explain why the majority of hedge fund organizations purposefully avoid the formal laws and regulations issued by the state and do not create sophisticated governance structures within their organizations. From the NIE perspective, this market behavior is irrational and creates the institutional conditions for increased market uncertainty and opportunism. Second, the NIE perspective cannot explain why the organizational field adopts different strategies in response to market uncertainty and why there are not formal institutions regulating economic action. The NIE perspective cannot explain why particular groups respond “rationally” by developing complex governance structures, while others groups respond “irrationally.”

The empirical findings presented in this article advance a number of insights of the new institutionalism in organizational analysis. The neoinstitutional theoretical perspective posits that in a parallel financial market, where there is a limited role of formal law and state regulation, an organization's management would implement governance controls that comport with the taken-for-granted practices of the hedge fund industry as it currently operates and mimic the legal environment of the traditional securities markets. My analysis supports this 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 view that the organizational field would adopt similar strategies and practices—forging an isomorphism—is partially supported by the evidence. In particular, my analysis identified large groups of similarly positioned hedge funds that adopt the similar strategy of voluntary registration with the SEC and the adoption of similar governance practices, thereby becoming a new institutional norm in the field. Finally, my analysis demonstrates how a highly interactive process of social construction, which involves not only the legal system and state actors but also the broader organizational field, creates the governing social structure that institutionalizes order within the parallel financial market. For example, my analysis revealed that the federal regulators and hedge fund organizations interact with a larger number of organizations—legal counsel, brokers, and auditors—to socially construct a new governing institutional environment.

The neoinstitutionalist perspective, however, has difficulty explaining two empirical results found in the investigation. 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, which is that large hedge fund organizations are adopting voluntary registration as a result of wanting to address the demands and interests of their investors: large institutional investors, endowments, and pension funds. Similarly, the neoinstitutionalist perspective cannot adequately explain how institutional investors exert power over a hedge fund's governance practices to achieve their demands and interests. It is important to acknowledge, however, that this limitation is partially addressed by the neoinstitutionalist concept of coercive isomorphism (DiMaggio and Powell 1983). My empirical findings advance the concept of coercive isomorphism—within the context of an ambiguously regulated financial market—by explaining how the institutional investors' demands have become the dominant expectation within segments of the hedge fund market. The second difficulty for the neoinstitutionalist perspective is that it cannot conceptualize why large numbers of organizations in the hedge fund market purposefully avoid interactions with federal regulators at the SEC. As revealed in my analysis, the majority of hedge fund organizations are not registered with the federal government and do not mimic the regulatory environment of the traditional securities markets or the complex governance structures of large registered hedge funds.

Advancing an Integrative Explanatory Framework

The integrative explanatory framework developed by the new institutionalism in economic sociology best explains my investigation's empirical findings. Specifically, the multilevel causal model proposed by Nee (2005), and empirically tested in Nee and Opper (2012), accurately predicts that the governing structure of the parallel financial market consists of interacting formal and informal governance structures. The multilevel causal model of the new institutionalism in economic sociology focuses on integrating distal causal mechanisms in the economic system with the proximate causal mechanisms found in the market, specifying and explicating how the institutional environment, which is the distal mechanism that constrains economic systems, is interrelated with the organizational institutions, norms, and networks, which are the proximate mechanisms that are found within particular economic markets. My research helps mitigate this model's limitations by advancing new theoretical concepts where the model lacks specificity: my research explains how economic action is ordered and governed within the new institutional structure of the modern financial system, where the formal institutional environment plays an ambiguous role in governing parallel financial markets.

My investigation advances the multilevel model of the new institutionalism in economic sociology in three ways. First, the theoretical concept of an *informal governance structure* allows me to specify exactly how proximate causal mechanisms—informal social institutions and social networks—converge to govern the ambiguously regulated hedge fund market and the economic actions of organizations within this market. *Institutional mechanisms* were found in two distinct forms—the entrepreneurial and rationalized governance structure—that govern behavior within organizations. *Network mechanisms* were found in three distinct forms—the acquisition of legitimacy through network structures, the power within network structures, and the density of network structures—that govern behavior among organizations.

The second theoretical advance that my investigation makes to the multilevel model of the 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 the emerging institutionalized governance structure shows 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 shows how power affects the proximate causal mechanisms that structure economic behavior.

The third theoretical advancement is that my investigation specifies how the distal causal mechanisms are interrelated with the proximate causal mechanisms. Specifically, my empirical findings show that the purposeful avoidance of the formal institutional environment—the distal mechanism—leads hedge funds to locate themselves in an ambiguously regulated space. Within this ambiguously regulated space, governance structures are developed to address the absence of formal institutions—the institutional void—and the absence of a formal monitoring agent. The organizational field responds by constructing a set of overlapping legal (formal) and extralegal (informal) governance structures. The extralegal governance structures are the 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 mechanisms within the formal institutional environment—that order and constrain the broader financial system.

CONCLUSION

My empirical investigation supports the notion that to gain a full understanding of the governing architecture of the parallel financial market, we must break down the arbitrary intellectual walls between academic fields and theoretical perspectives. Formal mechanisms such as the institutional environment that are traditionally analyzed by economics and law only partially explain how the hedge fund market is ordered and how its economic action is governed. Most hedge fund organizations purposefully avoid these formal mechanisms by structuring their organization in a particular way and by locating themselves in a market-based institutional structure that operates at the regulatory event horizon of the traditional institutional environment, in a unique social space over which the US government has limited authority to formally regulate organizational practices through law and federal administrative bodies. The purposeful avoidance of formal institutional rules and the creation of institutional voids give rise to the emergence of a new organizing social structure, the informal and extralegal governance structure. This governance structure constrains hedge fund organizations within an overarching web of social institutions and social structures, affecting both their organizational form and their economic actions. Ultimately, formal institutional mechanisms and informal social mechanisms interact to form the emerging structures of social organization that are capable of coordinating the interests of actors in this parallel financial market.

While the governance of the parallel financial market functions relatively well under normal market conditions, it is important to acknowledge that there are structural weaknesses where social control and constraints are missing. These governance failures are institutional and social structural breakdowns at the intersection of the formal and informal governance structures. Specifically, my investigation exposed two governance gaps that are created by a unique set of blind spots and pressure points in the parallel market's formal and informal governance structures: one is a structural weakness of the entrepreneurial governance structure that individual hedge fund organizations have adopted, and the other is a structural weakness of the overarching governing structure of the network of organizations.

The entrepreneurial governance structures are constructed in a manner that gives managers the freedom to operate without bureaucratic or administrative hurdles and to make decentralized, localized decisions about day-to-day events in the market. As a result, individuals within the organization are forced to make decisions that fall into ambiguous gray areas concerning what is legal and what is illegal, and what is organizationally acceptable and what is not. When individuals operating under this entrepreneurial governance structure are faced with particularly ambiguous or abstract situations—which, according to my analysis, happens often—there is no central authority within the organization or formal institution enacted by the state that oversees the individual entrepreneurs, and they are therefore 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 and society.

The second governance gap that my investigation exposed appears in the governance structure linking hedge funds and their network service providers. The analysis discovered that hedge funds are becoming increasingly connected to the organizational field by virtue of forming relationships with a greater number of service providers. For example, as a result of experiencing economic shocks and a desire to diversify risk and to expand, hedge funds are forming relationships with multiple prime brokers. It is beneficial for a hedge fund organization to take on additional prime brokers because this minimizes the risks that arise when all of a fund's holdings are held by and financed from the same network partner, who might have a significant risk of bankruptcy during economic crises. Multiple prime brokers are also beneficial because they allow hedge funds to take out additional lines of credit and to leverage their portfolios with accounts at each broker. However, there is also a problem with this increasingly connected and dense network: information sharing with the additional network ties becomes more difficult, and there is no network actor responsible for overseeing or limiting overall leverage throughout the network structure. As a consequence, during market crises, when hedge fund organizations experience substantial losses and have to borrow money to cover their positions, the organizational field becomes highly leveraged, with no institution to limit or rescue struggling organizations within the field. The increase in leverage among large numbers of hedge fund organizations, and more broadly among parallel financial organizations, results in an increased systemic risk that can also spread to the traditional bank-based institutional system.

The governance gaps that my investigation exposed provide insight into why organizations in the parallel financial system have the potential to take part in opportunistic behavior and increase systemic leverage and credit in the economy. For example, many organizations in the parallel financial system, which was not being monitored by any institutional mechanism or federal organization, were highly leveraged prior to the 2008 financial crisis. As the crisis deepened, a large number of parallel financial markets, including hedge funds, were forced to deleverage and therefore pulled their capital from the leading investment banks on Wall Street. These events resulted in significant capital withdrawals and losses for leading investment banks and hedge fund prime brokers throughout the US economy. The impacted group of investment banks included Bear Stearns, Morgan Stanley, Lehman Brothers, and Merrill Lynch. All of these organizations either went bankrupt in the aftermath of the economic collapse or were purchased for cents on the dollar. Hedge funds were some of the leading nonbank financial organizations that took advantage of the credit products and leverage offered by these investment banks, and they withdrew their capital as soon as markets began to question the quality of the financial products created in the new market-based institutional structure of US financial markets. 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 financial system, which has no access to FDIC insurance or the Federal Reserve's discount window, on the part of actors throughout a large number of markets.

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