Heterogeneous and Asymmetrical Relationships in Global Networks: The Hedge Fund Industry

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Abstract

The global hedge fund industry, a technology-based network of varied organizational forms and relationships, was chosen as the context for this research in order to gain theoretical insight into relationships, networks and markets.

Hedge funds are investment vehicles which are global, privately owned, based off-shore, and not required to reveal their investment strategy. There are approximately 8,000 hedge funds globally, managing $1.225 trillion (Hedge Fund Research, Inc.). Hedge funds are performance-driven and their managers share the profits generated through active investment skills, with the highest earning $1.5bn in one year (Institutional Investor, 2006).

This research used qualitative methodology to investigate the perceptions primary relationships and of relationships in the network. The dyadic relationship investigated was that of the hedge fund manager with the prime broker, usually an investment bank. Qualitative research, based on 21 face-to-face in-depth interviews with hedge fund managers and industry informants, was tape recorded and transcribed. Respondents volunteered through contacts provided by the global hedge fund trade association, The Alternative Investment Management Association, Ltd. (AIMA), London.

Results from the qualitative research show that hedge fund relationships are characterized by heterogeneity, asymmetry and "multiplicity, variety, and ambiguity" (Hakansson & Lundgren 1995: 296). The relationships are driven by performance and profitability. Hedge fund managers demonstrate aggressive competition for control of resources, which in this network are intangible services, e.g., ideas and information flow. The relationships demonstrate ambiguity. The relationships are both cooperative, working together to close a large deal which they are incapable of managing independently, and competitive, in seeking advantage through investment ideas and information. Time linked to information is a critical factor. The relationship investigated in this research, the hedge fund manager and the prime broker, an investment bank such as Goldman Sachs or Salomon Smith Barney, demonstrates the multi-level ambiguity of the network: it is on one level purely transactional and institutionalised, as the prime broker fulfils execution, settlement and back office functions for the hedge fund manager, and relational, in the exchange of ideas, information flow, and trading functions. Hedge fund managers have tiers of different types of relationships in the same firm in order to extract maximum value. Models of the network and relationships are provided from the perspectives of the enactants.

Keywords: hedge funds; networks; relationships; time

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Introduction

The global hedge fund industry, a technology-based network of heterogeneous organizational forms and relationships, was chosen as the context for this research in order to gain theoretical insight into relationships, networks and markets. The global hedge fund network [GHFN] is a particularly rich context for network research because it has heterogeneous organizational forms and relationships, global reach in extensity and intensity, underpinning technological systems, increasing importance in financial markets and is characterized by rapid change. These factors make it particularly suitable for investigation from an IMP perspective.

The business relationship and network framework of the Industrial Marketing and Purchasing (IMP) Group (Gemünden, Ritter and Walter, 1997; Håkansson 1982; Håkansson and Snehota, 1995; Hallén, Seyed-Mohamed and Johanson, 1989; Möller and Wilson, 1995; Naudé and Turnbull, 1998) provides a means to examine change. This is achieved by holding business relationships and the networks formed by these connections as stable artefacts.

However, many questions remain about the nature of exchange in business relationships. Business relationships are necessarily two sided. Two parties implicitly or explicitly coordinate their activities and resources to achieve self-interest gains (Medlin, 2006). The two parties operate according to different codes (Halinen, 1998). Yet the two parties interact and work together to some degree to manage change and bring a degree of stability, and achieve the intended exchange.

The purpose, techniques and manner of interaction of business relationships deserves closer attention. This has been recognised within the IMP literature, where the single perspective of market management has long been questioned (Håkansson, 1982; Håkansson and Waluszewski, 2005). Within the interaction perspective, business relationships are seen to be the result of ongoing transactions, where two parties exchange resources and communicate concerning their exchange. A number of constructs have been considered important in examining interaction: time, subjectivity, joint action, interdependence, and relative position (Ford and Håkansson, 2006). When two parties interact, the very nature of these constructs is opened to negotiation between the parties.

However, the interaction perspective also opens to question the very nature of exchange as conceptualised in a marketing management view of the world. Unlike in the 4P approach of managerial marketing, no single product is exchanged from an interaction perspective. Both parties exchange different resources. Both parties place different values on the resource they exchange, so that each considers the exchange worthwhile. This means there is no single product that defines an exchange relationship; rather the relationship is defined by joint activity through time between two entities with different world views (i.e., subjectivity); that is, by forms of interaction that depend on degrees of interdependence and resource heterogeneity (i.e., relative position in a network). In the interaction perspective of a business relationship, there is a natural asymmetry between the parties that allows for a juxtaposition of the parties, and so a joining of different networks through a complementarity of activities and resources (Medlin, 2003).

In this paper we seek to understand at a deeper level the interaction perspective of business relationships within networks. We do this by taking an exchange network that is radically different from a standard product exchange view of the world. The exchanges we study are within the global hedge fund network, a technology-based network of heterogeneous organizational forms and relationships.

The paper is structured in the following manner. First, we consider the theoretical nature of business relationships by applying an interaction perspective in a rigorous manner, where time, subjectivity, interdependence, relativity and joint action are negotiated concepts. Next, we provide an industry analysis to provide a contextual foundation for our study. Our results examine relationships in the global hedge fund network and provide four propositions as conclusions and indications for further research. We conclude by suggesting future research directions. Our research is inherently exploratory and seeks to understand and elaborate the implications of an interaction perspective of business relationships and the implications for understanding business networks in the context of theoretical development.

Literature Review

All business relationships are different as a result of the heterogeneous nature of firms and their resources. The result is that no firm can work alone to complete a product for consumption; rather firms coordinate their activities and resources and so form networks (Håkansson and Snehota, 1989). Each firm in the network undertakes relationships to sell a good/service to another firm, in order that an end-user -- a person or group, can undertake a consumption process (cf Seto and Honda, 2001). In effect, future consumption draws the firms together into networks. These networks do not have boundaries.

The connections between relationships through a network are the cause of exchanges, and these exchanges depend on the firms' resources and communication. A distinction can be drawn between the business relationship and the interactions between the parties. The interaction between firms in a business relationship concerns two aspects, first, an exchange of resources, and second, the communication required to arrange that exchange. In industrial networks the exchange concerns physical products or services for financial resources (i.e., money) and the communication usually concerns on-going adaptation of the product or service (Hallén, Johanson, and Seyed-Mohamed, 1991). This conceptualisation of exchange relies upon heterogeneity of resources and/or capability, with relationships formed to provide either access to resources or to markets (Håkansson and Snehota, 1995).

There is an asymmetry of resource and/or capability between the two parties to a business relationship. Each party has different resources and/or capability, and there is a complementarity that provides a rationale for the relationship. This heterogeneity of resources/capability and complementarity leads to firms having different relative positions in a network of relationships.

The relative network position of a firm leads to managers having their own subjective understanding of each business relationship (Ford and Håkansson, 2006). The asymmetry across a relationship will naturally exist with regard to information. The different connections between firms in a network, naturally results in asymmetry of information between the firms in a specific relationship. Each firm is connected to different other firms who have separate information sources. Further, the information passing through the network has a different meaning according to the strategic imperative given by a firm's relative position in the networks.

That information has different meaning according to network position is apparent when the nature of new information is considered. What is new for one party is not necessarily new for another (Nonaka, 1994). Each manager will have a different starting point in understanding the nature of his or her business relationships and network logics. This means that the same piece of information can be new for one manager and not indicate anything new at all for another. Clearly, the past history of each manager and their degree of connectedness within networks are factors influencing the level of information arriving for processing. However, the most important source of new information is likely to arrive through trusting relationships, where the degree of mutual knowledge is likely to be higher (Solberg, 2001). In these relationships the value of new information for another party is known, or at least partly understood. This means information can be traded to build the relationship or to create a debt for future reciprocity.

Trade in information has not been strongly considered in past research of relationships and networks. It is known that a higher level of communication quality and information sharing is associated with more successful partnerships (Mohr and Spekman, 1994). In addition, it has been suggested that appropriate communication may alleviate distrust when environmental events threaten a mutual venture (Anderson and Narus, 1990).

Within the IMP stream of research authors have considered the role of information as a part of interactions. Bergman, Andrésen, and Roxenhall (2002) categorize information according to technical, commercial and administrative content. Solberg (2001) suggests that a firm attributes different value to information according to the source and the quality of the relationship and network. Relationship ‘atmosphere’ (Håkansson, 1982), also has a bearing on perception of information quality. Here the idea has been that high levels of trust and commitment to a relationship result in the conditioning of the interaction between the parties so that each works collaboratively with the other to coordinate resources and activities in their mutual interest.

However, underlying the concept of atmosphere is the way each party provides meaningful information. In effect, a strong relationship results in a form of dialogue where the meanings and value of information are tested by each party, for themselves and the other party, and even in conjunction with the other party so that new mutual understandings are developed. Heide and John (1992) come close to this idea when they discuss the openness of communication as relationships become more trusting, but we take the idea a step further. The value of information is known because of the mutual understanding developed over time.

The importance of time (Halinen, 1998; Halinen and Törnroos, 1995; Medlin 2004; Stanley and Tyler, 2002) and timing (Hedaa and Törnroos 2002) in understanding interactions now comes to the fore when information trade is considered. The timing of interactions creates the understandings of relationships. Time and timing allow the construction of cause and effect and lead to the attribution of a specific relationship form.

All business interaction is on the basis of future intention (Medlin, 2004). Firms can create many different relationships, so long as there is a complementarity of resources and/or capabilities with a range of other firms. Each different relationship is presupposed on different and connected futures. Different relationships will have greater and lesser degrees of willingness to analyse the importance of information for the other party, and different willingness to communicate relevant information in a timely manner (Heide and John, 1992). The result is that networks of firms are composed of variety in relationships where different degrees of closeness determine the flow of information and the ability to adapt to change.

Industry Context

Hedge funds are investment vehicles which are global, privately owned, based off-shore, and not required to reveal their investment strategy. There are approximately 8,000 hedge funds globally, managing $1.225 trillion (Hedge Fund Research, Inc.). Hedge funds are performance-driven and their managers share the profits generated through active investment skills, with the highest earning $1.5bn in one year (Institutional Investor, 2006).

Hedge funds are “private investment vehicles where the manager has a significant personal stake in the fund and enjoys high level of flexibility to employ a broad spectrum of strategies involving use of derivatives, short selling and leverage in order to enhance returns and better manage risk” (Agarwal and Naik, 2006, p.1).

The hedge fund concept was first created by Alfred Winslow Jones in 1949 (Barra RogersCasey, 2002, p.3) and has undergone both rapid and slow development during different time periods. During recent years, hedge funds have experienced tremendous growth and are increasingly recognized for the wide variety of investment strategies they employ, which enables increased diversification benefits, good performance in falling markets, and which are not correlated with traditional investment (MFA, 2003, p.3).

Hedge fund managers also enjoy high return from their strategic investment, usually receiving a 1 percent annual management fee and 14 percent of the annual profits (Ackermann, McEnally and Ravenscraft, 1999, p.834). The characteristics that may influence hedge funds’ performance are: Flexible investment strategies, strong managerial incentives, substantial managerial investment, sophisticated investors, and limited government oversight (Ackermann, McEnally and Ravenscraft, 1999, p.822).

Hedge funds are mostly concentrated in the US, as there were no direct regulations in the US until April, 2006, and they are often exempt from many investor-protection and disclosure requirements there, as well as elsewhere(Hedgeworld.com). Hedge funds with a capital base of over \$25m were only required to register with the US Securities and Exchange Commission (SEC) from 2006. Those under \$25m are not required to register. Hedge funds are registered in offshore financial centres, such as the British Virgin Islands, the Bahamas, Bermuda, Dublin, Luxembourg, Cayman Islands and Guernsey, where the investors can minimize their tax liabilities (Agarwal and Naik, 2006, p.3; Hedgeworld.com). Offshore registration also means that hedge funds are lightly regulated, and due to the lack of regulation they are highly secretive.

Despite the offshore location of the main fund, most hedge fund managers trade out of major financial centers, such as New York and London (Hedgeworld.com). Around 70 per cent of European hedge funds are run from London, while almost 90 percent bank in London. Alongside New York, London runs the majority of the approximately 8,000 hedge fund vehicles managed globally (Money Marketing, 22 Feb 2007).

The size of the hedge fund industry is hard to estimate, as the US Securities and Exchange Commission (SEC) imposed restriction on the advertising and reporting of hedge funds’ performance (Agarwal and Naik, 2006, p.2). Further, hedge fund operations are usually opaque, as one of their key characteristics is that they dislike revealing information about their investment process and market bets (Lhabitant, 2004). There are also few uniform reporting standards, due to the lack of regulation (Fung, Hsieh, Naik and Ramadorai, 2006).

The average growth rate of the hedge fund industry is over 17% over the last decade and it is expected that the significant growth will continue (Greenwichai.com). Figure 1 shows the estimated increase in hedge fund assets and the number of hedge funds from 1988 through 2008 (Greenwichai.com).

There are a wide variety of hedge funds, basically divided according to different strategies: Non-Directional or Directional (Agarwal and Naik, 2006, p.5) (see Table 1). The purposes of hedge funds are to:

1. Enhance market liquidity, helping to absorb shocks in volatile markets, reducing the severity of

price fluctuations and fostering smaller bid-ask spreads and lower transaction costs;
2. To increase liquidity and efficiency, foster financial innovation and the allocation of financial risk in financial markets;
3. Provide a critical source of liquidity to relatively illiquid markets and structured investments. (MFA, 2003, p.7-8).

Traditionally, hedge fund investors are mostly 'high-net-worth' individuals, taking up about 80% of the whole group (Agarwal and Naik, 2006, p.2). However, since 2003, there is a new trend in which the majority of assets in hedge funds belong to investment banks and institutional investors, investing via fund-of-hedge-funds or fund-of-funds (Fung, Hsieh, Naik and Ramadorai, 2006). Charitable endowments, pension funds, insurance companies, universities, banks and other investment funds are among the most significant investors in US hedge funds (MFA, 2003, p.3).

Hedge funds are secretive, not held to the formal rules of disclosure in financial services business markets that, say, investment institutions or mutual funds are. However, hedge funds are now becoming main stream investment vehicles for both the business and retail markets, and recognized as having a major impact on businesses and the financial markets.

Methodology

The methodology used was Exploratory Research, based on Grounded Theory, which generated qualitative data. The objectives were to:

1) Obtain a global view of the hedge fund industry and its network,
2) Understand the structure of the industry,
3) Provide a contextual analysis of the industry;
4) Determine major themes of the global hedge fund industry network;
5) Map hedge fund company structure and network structure, from different perspectives;
6) Ascertain how the network "works" and the relationships and interactions.
7) Develop propositions to guide further research.

This research was facilitated by the Alternative Investment Management Association, Ltd., (AIMA), London, UK, the global hedge fund trade association. Respondents were from AIMA, hedge fund managers, fund managers who work closely with hedge funds, investment bankers, and relevant others who provided secondary research for the industry context.

This paper analyses results for interviews with 13 hedge fund managers and three relevant others which were conducted between April, 2006 and April 2007. The relevant others were one institutional fund manager of a pension fund and two investment bankers, for a total of 16 respondents. Names of hedge fund managers were provided by AIMA and through researchers' personal contacts. The sample was a convenience sample of AIMA's global members who volunteered for the research in response to AIMA's invitation, and further contacts made through networking.

The interviews were conducted face-to-face, or on the telephone, and recorded and transcribed. The 13 respondents were hedge fund managers based in London in the UK. Of these, there were two key informants who provided further interviews, industry background, and triangulation of data. Some respondents were interviewed more than once, for a total of 21 interviews with 16 respondents.

The interviews lasted from 30 minutes to 1.5 hours. The interviews were in-depth, free-ranging, and exploratory, and covered all aspects of the industry, perceptions, relationships and networks, and other relevant information. The respondents and their firms were guaranteed that all data would be confidential, non-attributable and anonymous.

The research methodology was Grounded Theory, which is a rigorous, empirical procedure for the collection and analysis of data and one of the most suitable methodologies for problem definition, hypothesis generation and theory construction (Glaser, 1978; Glaser, 1992; Glaser, 1994; Glaser and Strauss, 1967).

Therefore, interviews were conducted until no new information was obtained. The transcribed interviews were coded using the comparative coding technique, first using open coding determined by the data, followed by selective coding. The main variables were compared and insights were noted in theoretical memos, which were successively integrated. The analysis stages of selective coding and memoing were triangulated with the key informants for confirmation (Glaser, 1978; Glaser, 1992; Glaser, 1994; Glaser and Strauss, 1967).

The result of Grounded Theory analysis is the generation of hypothesis or propositions which provide a conceptual understanding of the phenomena studied, and which “fit”, “work”, and are capable of being understood and applied by the respondents (Glaser, 1994).

Results

These results are examined in two theoretical memos and four diagrams. The theoretical memos delineate the core variables, explore the relationships between the core variables, and explain the industry relationships from the different network perspectives of the participants. The four diagrams depict the industry from the differing perspectives of the respondents. Theoretical Memo I examines the heterogeneity of relationships, multi-level relationships in the same entity, and relationships as a value-creating device. Theoretical Memo II examines the closeness and interconnectedness of the network, the purpose and use of information, and information linked to time.

Theoretical Memo I

“Heterogeneity relationships; multi-level relationships; relationships create value”
“Relationships are performance and remuneration driven”

The GHFN is driven by relationships and these relationships are characterised by heterogeneity. The actors are all well known to each other and comprise a “gated community” which is secretive and not required to disclose its activities to regulatory bodies or the market. The actors are (usually) hedge fund managers who are former investment bankers, and investment bankers and others in global capital financial markets, such as money traders or brokers in securities houses.

The management structure of a global hedge fund and its subsidiary companies, from the perspective of the hedge fund, derived from interviews in this research, is given in Figure 2. The flow of funds and diagram of relationships is also shown in Figure 2.

The Hedge Fund Manager has three different important relationships: The prime broker, the clients, and the other brokers, as well as sources who are gatekeepers for the information flow, and agents of funder funds. Brokers and clients might be in the same institution, for example, different branches of an investment bank, but they are different people and they have different kinds of relationships.

The same actors will have not only multiple relationships, but also tiered relationships in the same entity, each with different functions and purposes. For example, all hedge funds outsource all their trading, dealing, brokering, research and back office activities, so that an investment bank may run the back office functions for many hedge funds, in pure, transaction-based relationships. The same investment bank may serve as the prime broker for any number of the hedge funds, giving bespoke investment advice and services in a highly personal, long term, relational relationship. These relationships are all ring-fenced in terms of confidentiality and leakage of information. In regulatory terms, "Chinese Walls" exist between different areas of the same firm to protect confidentiality; perhaps ill-named, because "Chinese Walls" were traditionally made of paper so the master of a household was always aware of what was going on.

The network is not only one of close relationships, but also transactional and purely performance-driven relationships. One hedge fund manager may be managing many heterogeneous tiers of relationships in the same entity, and/or different types of relationships in different entities, simultaneously. This heterogeneity is the main source of value creation, with information as the key resource determining performance.

The relationships are the conduits and means of value creation. Value creation determines the strength and duration of the relationship so value creation and performance are primary, and social bonding is secondary. The relationship gets you in the door, and performance keeps you there. When the value creation ceases, the social bonding may continue in other contexts, but the strength of the network relationship declines or ceases altogether. The relationships are intense and performance-driven, and the failure rate of hedge funds is very high, and therefore the active network and relationships are very strongly "performance-driven". Social relationships may continue when the "performance-driven" relationship is terminated.

The remuneration structure of the industry drives the money around, and the ability of the hedge fund manager to manage heterogeneous relationships simultaneously is the means for value creation. The industry network seen from the perspectives of hedge fund managers is shown in Fig. 3 [see Data Table 2 for Theoretical Memo I]**.**

Figure 3 shows the Intermediary Hedge Fund Management, which is the hedge fund, located in London, New York, Tokyo or other major financial centre. This is where the hedge fund manager is based, and makes the investment decisions. The actual hedge fund, the legal entity, is based offshore, in, for example, the Cayman Islands or Guernsey. The relationship between the Intermediary and the Hedge Fund is a legal one; the day-to-day operations take place in the Intermediary Hedge Fund. It is the Intermediary Hedge Fund, and within it, the hedge fund managers, who make all the day-to-day investment decisions and effectively manage the fund and the network of tiered relationships.

The hedge fund manager, who maintains the heterogeneous relationships, gathers information from the relationships, and makes the investment decisions. The hedge fund intermediary may be comprised only of a hedge fund manager and a colleague in a small office in Mayfair, Central London, with screens and telephones. This is a very slim business model: All administration and organisation, apart from trading and investment decisions, are usually outsourced to investment banks. This is made possible through sophisticated electronic trading systems, which are interfaced with each organization's own systems, as outlined in the discussion below. The hedge fund manager is totally reliant on his ability to maintain heterogeneous relationships to operate the business.

The hedge fund manager's main long term relational relationship is with his prime broker, who is a broker in an investment bank. The hedge fund manager/prime broker relationship is a tiered relationship. The brokerage function itself is purely transactional, and an investment bank may perform prime brokerage services for many hedge funds, which are all confidential. This transaction link is usually institutionalized through integrated electronic systems (see Figure 4). On other tiers of relationships in the same investment bank, the prime broker will have value-creating relationships offering ideas and information for investments to the hedge fund manager, as well as being a major client for the hedge fund's services in risk management, the latter especially since 2003 (refer to Fig. 1).

These relationships are maintained through face-to-face contact, frequent telephone communication and emails. A fund manager usually receives upwards of 300 emails per day offering information about the market. The actual global trading in equity securities is based on a global network electronic trading platform run by the stock exchanges. The hedge fund manager's portfolio management system can be linked automatically to the prime broker's on-line management system, so that changes can be made to the hedge fund manager's portfolio in real time. The model for this trading technology is shown in Figure 4. The transaction-based relationship therefore becomes institutionalized by the linkages of technology.

Theoretical memo II

"Interconnected network, information and time"

The GHFM is a very tightly interconnected, even "incestuous", network. The actors all know each other. They work independently and there is great competition, but when the opportunity for profit emerges, they will also gang up together to pull off massive deals. So they are both aggressively competitive and co-operative depending on the situational contingencies. Killer whales also exhibit the same combination of competitiveness and co-operation in hunting behaviours. For hedge fund managers, both these behaviours create liquidity and market opportunities for other investors. Evidence of these behaviours can be detected by market professionals and other fund managers through unusual and unpredicted share price movements, from which they can discern what is happening and take advantage of investment opportunities.

In some sectors, for example, food and tobacco, the market is very small, and they all know each other very well, and all the other main actors are also well known throughout the network. There is an extremely close relationship founded upon many tiers of relationships, between hedge funds and investment banks, who sit on their boards, are their prime brokers, and major clients. The hedge fund and investment bank network, seen from the investment banks' perspective, is shown in Fig. 5.

Hedge funds outsource all their operations, trading, research and organization, mainly to investment banks, and also to securities houses and boutiques, known as "The Street". They have to "network like mad" to run their business, and to get the information that it takes to make their investment decisions. Hedge funds do not do their own research, but are totally reliant on the "other side", known as "the street", wherever it is in the world, after Wall Street. The "other side" is the investment banks and securities houses, or investment boutiques, which generate research. In fact, all their business activities are outsourced except for the investment decisions.

The hedge funds are highly leveraged and the investment process may not be subject to strict scrutiny, as it is lightly regulated. The market is highly time sensitive, based on information. The value of information erodes over time and diffusion within a population. There is an extremely high value on being first to know, and therefore the "first call" by a broker with new information can provide market opportunities for investment. Relationships are developed in order for the hedge fund manager to make sure that he gets the "first call". Information value deteriorates over time, because over time general market knowledge increases and the opportunities to make profitable investments declines proportionately to the number of people who know about it. "Old" or widely-known information has no value, and is known in the industry as "the Grandma effect" – i.e, when everyone knows, even one's Grandma, the information is valueless.

Information, timing and market performance drive the industry, as analysts in investment banks are rewarded by the business they generate, which not only determines their bonus, but also whether they get to keep their job. Independent rating associations, Greenwich Associates and Investor's Chronicle, run surveys in which fund managers rank analysts' performance. These data are provided for all market interactants, and determine the analyst's bonus and tenure. Many investment banks make "hire and fire" decisions based on these rankings.

Information creates market opportunities, which may generate investment performance above market performance, and therefore profits, so the GHFN is performance, profit and bonus driven [see Data Table 2]. The ability of the hedge fund manager to manage "tiers" of relationships successfully, and to manage asymmetrical relationships, is a key performance indicator of his success.

Discussion

This paper presents an exploratory mapping of the global hedge fund network from three perspectives: The internal organizational structure of the global hedge fund, the hedge fund managers' perceptions of the network, and the investment bankers' perceptions of the network.

These perceptions show a different view of the focal nets and networks. The investment banks, for example, view the hedge fund managers as having far more information sources and multiple relationships with other, competing, investment banks.

These relationships are asymmetrical, in the sense of unbalanced. The relationships are vital conduits for information, which is extremely time-sensitive. The relationships are used in a brutally instrumental way throughout the industry to create value. It appears that these heterogeneous relationships and the ability to engage in multiple, varied relationships, as well as the ability to engage in heterogeneous investment opportunities is a major value-creating strategy and capability in the global hedge fund network.

These data enable the formation of four propositions to guide further research:

Proposition 1: There may be a link between relationship heterogeneity and value creation. The larger variance in heterogeneity, may lead to the potential of greater value creation.

Proposition 2: There may be a link between relationship redundancy and value creation. The larger the amount of redundancy, may lead to lesser or no value creation.

Proposition 3: Openness to information provided by the network may be linked positively to investment performance.

Proposition 4: Timing of information is a core variable in financial markets, and is manipulated through relationships.

Conclusions

This is a research project into a global network of a secretive industry which is not required to publish accounts, company records, or pay taxes and is only regulated lightly. The purpose of the research was to map the industry network from perspectives of the dyads and to formulate propositions which explain conceptually how the industry "works". The propositions may also serve as a basis for future research.

This study revealed asymmetrical, heterogeneous relationships, which were highly varied and tiered, from institutionalized technological information transfer systems, and transaction-based processing, to long-term relational relationships. The relationships were used to create value. The ability of the hedge funds to attract, manage and manipulate resources, in terms of money, relationships, information, time, and technology may be a major reason for their success in "morphing the market", as one institutional fund manager stated. The hedge fund managers excel in managing "tiered" relationships, extracting value from every tier in the relational exchange relationship offered by its counterpart, for example, the investment bank. Hedge funds have not only changed the market, but also their influence has extended to transformation of other markets, such as the rise in London house prices fuelled by city bonuses.

Limitations and further research

These data are limited to a 21 interviews of global hedge fund managers, investment bankers and fund managers based in London, UK. It was only possible to interview two investment bankers and therefore the dyad perspective is not completely represented. A larger dataset of global hedge fund managers from all the major markets, plus their counterparts as prime brokers, the investment bankers, needs to be undertaken to extend and confirm these findings. These data may additionally be distorted by "survival bias", as it is only possible to contact hedge fund managers who are still in business, as the failure rate is very high.

It would be useful to use these data to construct a research instrument which is a large scale cross-sectional survey. The objectives of such a survey would be to examine the relationships of hedge fund managers with their prime brokers as dyadic pairs. The aims could be to analyze the types of relationships, relationship longevity, and value creation and performance over time.

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Figure 1: Hedge Fund Growth (Greenwichai.com)

Table 1: Classification of hedge funds by investment strategy (Agarwal and Naik, 2006)

Non-Directional Strategies	
Fixed Income Arbitrage	A strategy having long and short bond positions via cash or derivatives markets in government, corporate and/or asset-backed securities. The risk of these strategies varies depending on duration, credit exposure and the degree of leverage employed.
Event Driven	A strategy which hopes to benefit from mispricing arising in different events such as merger arbitrage, restructurings etc. Manager takes a position in an undervalued security that is anticipated to rise in value because of events such as mergers, reorganizations, or takeovers. The main risk in such strategies is non-realization of the event.
Equity Hedge	A strategy of investing in equity or equity-like instruments where the net exposure (gross long minus gross short) is generally low. The manager may invest globally, or have a more defined geographic, industry or capitalization focus. The risk primarily pertains to the specific risk of the long and short positions.
Distressed Securities	A strategy of buying and occasionally shorting securities of companies under Chapter 11 and/or ones which are undergoing some form of reorganization. The securities range from senior secured debt to common stock. The liquidation of financially distressed company is the main source of risk in these strategies.
Merger Arbitrage	A strategy of purchasing securities of a company being acquired, and shorting that of the acquiring company. The risk associated with such strategies is more of a "deal" risk rather than market risk.
Convertible Arbitrage	A strategy of buying and selling different securities of the same issuer (e.g. convertibles/common stock) seeking to obtain low volatility returns by arbitraging the relative mispricing of these securities.
Directional Strategies	
Macro	A strategy that seeks to capitalize on country, regional and/or economic change affecting securities, commodities, interest rates and currency rates. Asset allocation can be aggressive, and leverage and derivatives may be utilized. The method and degree of hedging can vary significantly.
Emerging Markets	A strategy that employs a "growth" or "value" approach to investing in equities with no shorting or hedging to minimize inherent market risk. These funds mainly invest in the emerging markets where there may be restrictions on short sales.
Equity Non-Hedge	A strategy similar to equity hedge with significant net long exposure.
Short Selling	A strategy that focuses on selling short over-valued securities, with the hope of repurchasing them in the future at a lower price.

Table 2: Data Table for Theoretical Memo I

"Incestuous relationships [HF managers sit on the main board of the contrafund]" [HFM1]

"HF manager and client investors less relationship driven" [HFM1]

"Different relationships in every sphere" [HFM1]

"Family clients [are] very relationship driven" [HFM1]

"Funder funds market not relationship driven, but driven by performance" [HFM1]

"…it's a very, very aggressive industry in terms of personal behaviour, [and] in terms of investment behaviour" [HFM1]

"I have different relationships with everybody I can, the same bank, everywhere…I trade anything that trades…I want to fish where the promises have already failed" [HFM 13]

"They [hedge fund managers] can be very, very demanding of their intermediaries, their counterparts in terms of what they will expect in performance from their point of view and they also tend to operate a number of systems whereby they're trying to suck the best ideas out of investment banks or brokers" [HFM1]

"…your own view of the world is coloured by your own experience and I wonder whether if you ask people who had, you know high profile successful funds their view, whether it would be markedly different and I suspect it might well be, just your logical questions on relationships whether it would be markedly different from those people who had had a problematic experience. So that would be a… to some extent you have a problem with survivor bias, which is you're more likely to ask questions of people who are still around… *(Both laugh)* and therefore you're more likely to find people who have been successful….The death rate is very high, yeah." [HFM1]

"I work everybody, and everybody differently…my blackberry is never silent…I am always on the case 16 hours a day" [HFM 9]

"I mean to a certain extent, yeah certainly in the beginning that was the case [personal relationships are important] and I suppose… I think the whole world revolves around personal relationships so I'm… you know I buy the thesis, I'm a card carrying member of that particular thesis but as I say I think hedge funds is the one area I have found where the personal relationship thing is very interesting because personal relationships will get people through the door……but they won't keep them there." [HFM1]

"If a relationship does not produce, you drop it and move on, you might still see them around…if it picks up, you pick it up again, we all know each other." [HFM 10]

"So the premise I would have is if it only revolved around relationships, you know you'd gone there because of the relationship in the first place, you'd heard the story, you'd bought the ticket and you had a performance which was entirely, you know logical and in line with what you had thought…[you] signed up for and therefore why did the money leave? So you'd have to say well the money left clearly because there's something else driving the flows of money and as I say my own personal view is it's about the remuneration structure of the industry which actually is what drives the money around the industry because you know it's not going to last forever,…[HFM1]

“…you know as the Hedge Fund Manager is concerned you’ve got three different important relationships, the relationship with your prime broker, the relationship with your clients and the relationship with your brokers, you know your information flow and so these might be the same institution but they’re different people…it’s tiers and tiers of relationships.” [HFM1]

“…some relationships are good for one thing, others for another, you exploit all the angles, all the time, seek out the advantages, they have different things to offer” [HFM 7]

“The funder fund is an agent. **…**and he’s got clients out there….Yeah the agent principles means that the performance is, you know 75% of the game… you know how ever much you like him, how long you might have known him, whether you went to school with him or not, you know the performance is……is what’s key, yeah.” [HFM1]

“Importance of relationships related to special information… you use different people for different specialist information.” [HFM4]

“Relationships move prices…make markets.” [HFM4]

“Everyone has access to market information and technology; it’s the relationships and the psychology which make the difference...how you manage all the different relationships” [HFM4]

“Hedge funds provide liquidity.” [HFM 8]

“I have tiers and tiers of relationships in the same investment bank, which I exploit for different purposes at different times…it makes your head swim…they manage all aspects of our business…everything is outsourced…at the same time.” [HFM 13]

Table 3: Data Table for Theoretical Memo II

“Hedge funds outsource everything, including research, to investment banks – “the street” – they have to network like mad to get that information” [HFM10]

“Hedge fund banks are now taking on investment banks’ risk and investment banks are paying them to do it. It’s a very interconnected world” [HFM 8]

“For example, Hedge Fund B is a giant black box who trades massively. It is plugged into analysts [in investment banks] and has a huge system for gathering information. As soon as information gets nominal clearance [analysts] put information in Hedge Fund B systems…if it works, Hedge Fund B pays the house reflected in the analyst’s bonus, if it does not work, the analyst gets dropped. This has a big effect on the market”. [HFM 10]

“They create liquidity in the market, generate noise around the trend, and create investment opportunities for other people” [HFM 6]

“They are desperate for ideas and work in a very close network. They work together and collude and that is illegal, but you can’t prove it, although the market shows you that is happening” [HFM 7]

“Hedge funds control about $1 trillion. They gang together from time to time, they all know each other. In some areas the market is very small and they all know each other well…” [HFM 7]

“After 2003 investment banks are focusing much more on hedge fund clients than on say pension funds, because the investment banks are their prime brokers as well.” [HFM 9]

“Investment banks are prime brokers as well as clients for hedge funds, so they have multiple level relationships, varied relationships” [HFM 13]

“They [hedge funds] are desperate for ideas” [HFM 6]

“Information is money” [HFM 9]

“Time is money. You have to have the ‘first call’, be the first to know” [HFM 12]

“It’s the ‘Grandma effect’ …once everybody knows it [information] it has no value” [HFM 10]

“Its an incestuous network. Investment bankers sit on the main boards of hedge funds, they are hedge funds prime brokers, and hedge funds’ main clients as well” [HFM 13]

“Most hedge funds are started up by people who leave investment banks who want to make more money” [HFM 7]

“If you are a hedge fund manager, and in one hedge fund I know that $55 bn was in accounts receivable and accounts payable in one year, and you have 2% of that, you can see how much money is made and how the market is driven by information, relationships and remuneration” [HFM 11]

“…and they also tend to operate a number of systems whereby they’re trying to suck the best ideas out of investment banks or brokers or anyone" [HFM1]

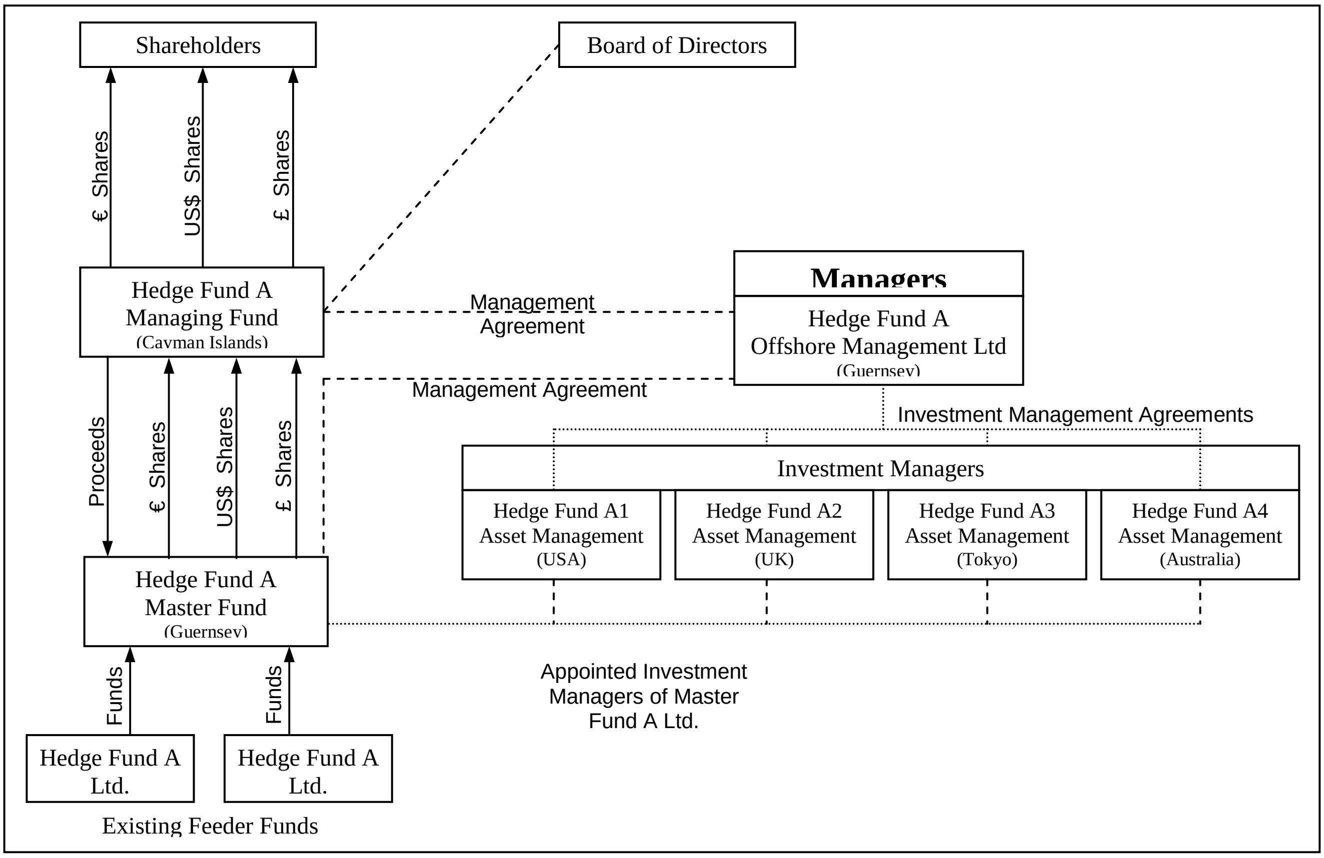

Figure 2: Theoretical management structure chart of a global hedge fund and its subsidiary companies, from the perspective of the hedge fund, derived from this research.

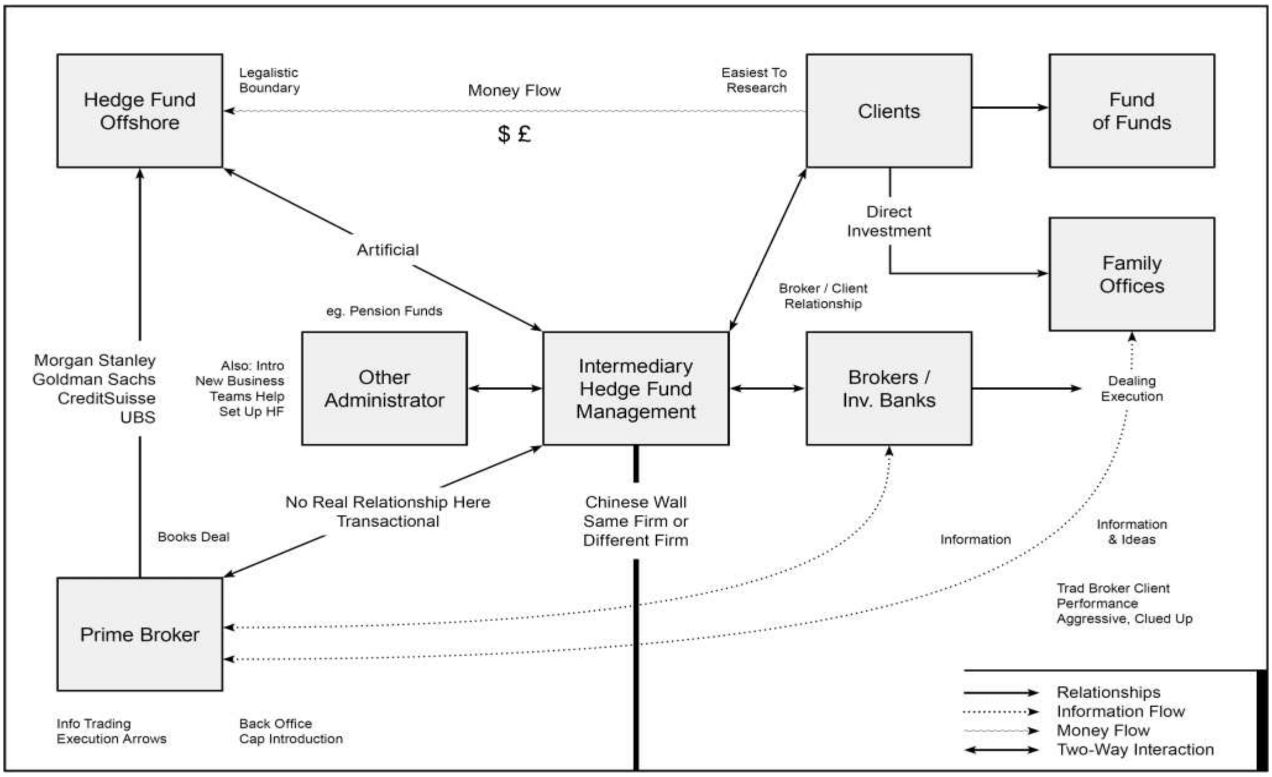

Figure 3: Hedge fund and investment bank global network, from the hedge fund managers' perspectives.

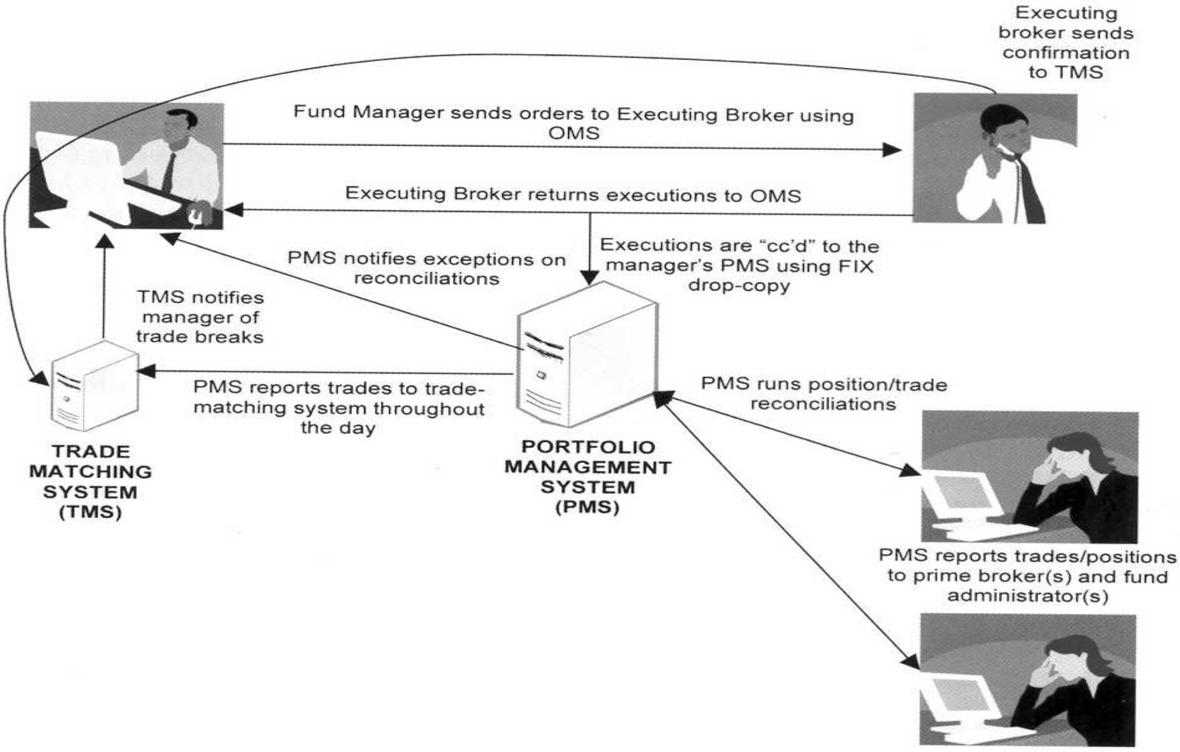

Figure 4: The hedge fund – prime broker electronic trading system.

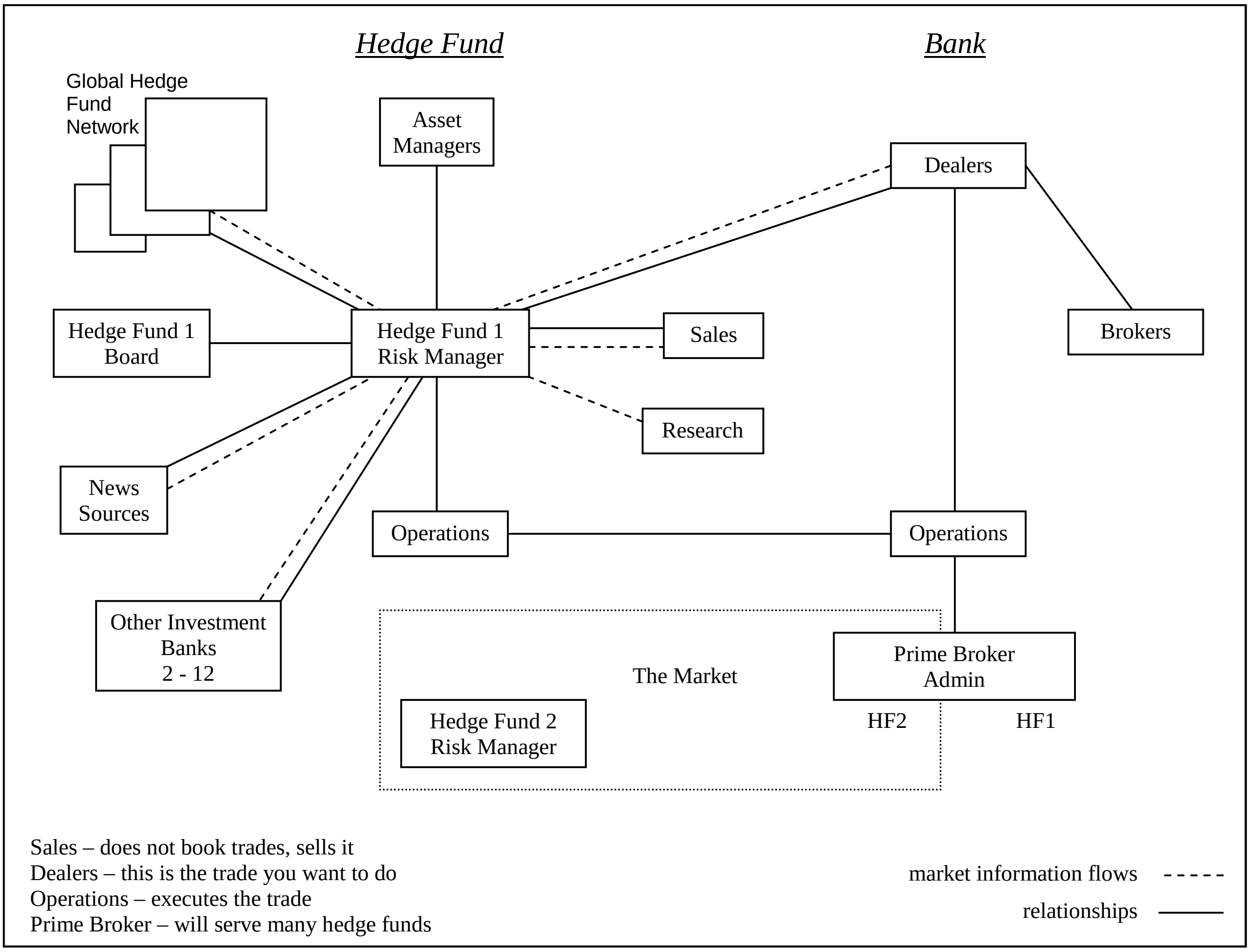

Figure 5: The hedge fund and investment bank global network, from the banks' perspectives.