Intermediaries, Mediators, and Market Change in the Hedge Fund Industry

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“Market stuff” (Podolny 2001) is both tangible (goods and capital) and intangible (codes of conduct, concerns about status, identity, legitimacy, etc).

Both tangible and intangible market stuff “flows” through networks (i.e., market relations).

A change to a market’s relational network, whether the nodes or the edges, should effect not only the accumulation (or depletion) of tangible market stuff, but also the application (or non-application) of intangible market stuff.

The specific (less abstract) goal of the paper is to offer a theory of market change and emergence of new organizational identities that recognizes the importance of consumer expectations for structuring a market but does not depend on shifts in expectations themselves (cf., Ruef and Scott 1998, Lounsbury and Rao 2004, Dobbin and Dowd 2000, Haveman and Rao 1997, Thornton and Ocasio 1999, Fligstein 1990).
“Institutions (formal or informal) channel social demands that condition/constrain the behavior of social actors.” Consumer expectations constrain Producer behavior.

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With respect to cultural-cognitive “institutions,” see Powell and DiMaggio, 1991; Davis 1991; Edelman 1992; Zuckerman 1999 (and many many papers that cite him); Rao, Greve, and Davis 2001; Hsu 2006, etc). Interestingly, P & D (and Scott 2003) describe cultural-cognitive institutions as “processes” but they are processes only in the way they are formed, not applied.
An audience, A, develops expectations about what should and should not be in the market. May be based on experience, ignorance, cognitive capacity, or any other number of factors. These expectations function as a constraint on the behavior of producer, B. Constraint C:

1. Potential problems with this view
   - Type I error (see Lounsbury & Rao, 2004)
   - Very difficult to explain rapid changes as A's expectations should take a long time to change
   - Great for explaining means, less great for explaining outliers

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Potential problems with this view

1 – Type 1 error.
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Social actors channel social institutions that condition the nature of social demands.

An audience, A develops expectations about what should and should not be in the market. May be based on experience, ignorance, cognitive capacity, or any other number of factors. These expectations function as a constraint on the behavior of, B, if and when the social process of transferring expectations to B is functioning. Primacy is afforded to social processes that are carried out through relations.

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...relational flows in markets are more than conduits for goods and capital. Embedded in these flows are expectations held by one party with respect to another...by identifying places in the market where expectations are least likely to flow, we should be able to pinpoint segments primed for change (i.e., deviation from expectations). When the (network) structure responsible for circulating constraints in the market is rewired (edge or node) such that the flow of a given constraint is distorted, the result should be visible changes in the application of the constraint.
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An intermediary transports meaning or force without transformation: defining its inputs is enough to define its outputs. (Latour 2005, p. 39) …If some ‘social factor’ is transported through intermediaries, then everything important is in the factor, not in the intermediaries. For all practical purposes, it can be substituted by them without any loss of the nuances.”(p. 105) [e.g., BBC, matchmaker, farmer’s market, tertius iungens, early and late funds of funds]

For Mediators, on the other hand, …their input is never a good predictor of their output; their specificity has to be taken into account every time. Mediators transform, translate, distort, and modify the meaning or the elements they are supposed to carry. (Latour 2005, p. 39) [e.g., FOX, strategic partner, grocer, tertius gaudens, middle period funds of funds]

[intermediary + critic]
An audience,

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[intermediary + critic]

At t1 the market broker is acting as an intermediary and A’s expectations are flowing unadulterated to constraint the behavior of B, C, and D. At t2, the broker is acting as a mediator and blocks the flow of A’s expectations, allowing B, C, and D more agency with which to behave. Expectations flow once more in t3 when the broker reverts to playing an intermediary role. According to this model, change may happen quickly and need not be preceded by a change in expectations.
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At \( t_1 \) the market broker is acting as an intermediary and A’s expectations are flowing unadulterated to constraint the behavior of B, C, and D. At \( t_2 \), the broker is acting as a mediator and blocks the flow of A’s expectations, allowing B, C, and D more agency with which to behave. Expectations flow once more in \( t_3 \) when the broker reverts to playing an intermediary role. According to this model, change may happen quickly and need not be preceded by a change in expectations.
Empirical setting: The hedge fund industry

Unregulated, pooled investment funds open to a small or limited range of high-net-worth investors (standard minimum investment of $1 mil). Relative to long-only investment funds (e.g., mutual funds), hedge funds utilize a wider range of investment activities and methods, including short selling, leverage, and derivatives investing. Relative to private equity and VC funds, hedge funds tend to invest in liquid assets and have no expiration date. Managers receive both management (~1-2% TNA) and performance (~20% R) fees. Investors are subject to liquidity restrictions with respect to invested capital.

“The fund industry is a laboratory in which to study the actions of individual investors who buy fund shares.” (Sirri and Tufano 1998, The Journal of Finance)

"The hedge fund industry is the Galapagos Islands of the economy because of the remarkable speed and clarity with which evolution occurs in that business, and because of this fact, I believe that a new theory of economic dynamics will eventually emerge from the study of hedge funds." (Lo, p. xxiv).
Empirical setting: The hedge fund industry

Following the 1998 collapse of the hedge fund, Long Term Capital Management, Funds of Hedge Funds, which up to that point played the role of market intermediaries, began to take on the role of market mediators. The new funds of funds were instrumental in tempering the constraints posed by investors on individual hedge fund managers. This shift was in part responsible for a dramatic growth of product diversity in the industry. The shift proved to be a fragile one, however. Following the Madoff affair and recent financial crisis, funds of funds lost their ability to act as mediators and reverted largely to intermediary status. Atypical hedge funds were disproportionately selected out of the market (despite performing better, on average) as a result of the same investor constraints that once checked the amount of heterogeneity in the market.
Empirical setting: The **hedge fund industry**

**Qualitative**
- 4+ (and counting) semi-structured, key-informant interviews
- North America (New York/CT, San Francisco, Los Angeles, Chicago), Asia (Singapore, Hong Kong), Europe (London)
- Fund managers, Fund of Fund managers, Fund personnel (e.g., marketing), Consultants, Cap-intro specialists, Institutional/Endowment Investors, Industry commentators
- Content accumulation from major financial press outlets (WSJ, FT), several industry periodicals (II, SA, etc), marketing docs.

**Quantitative**
- Tremont (TASS) Hedge Fund database (~40% of all hedge funds)
  - 10,000+ unique funds, Global, All primary styles
  - 40+ years; 1994-2012Q1 data includes graveyard set
- Key time-variant variables: rate of return, assets (flows, size), fees, entry/exit, indexes/benchmarks, liquidation
- Key time-invariant variables: Name, location, primary style, sub-styles, investment focuses, targets (e.g., geographic, industrial), kinds of assets, terms, management co., service providers
The empirical puzzle: Change in the hedge fund industry denotes investment “style,” e.g., long/short equity, event driven, dedicated short bias, multi-strategy, etc.

High within-style clustering/homogeneity (i.e., new funds look like incumbent funds)  
Low within-style clustering/homogeneity (i.e., new funds use new and different combinations of assets and strategies)
The empirical puzzle: Change in the hedge fund industry

**Styles (N = 11)**
- Convertible Arbitrage
- Dedicated Short Bias
- Emerging Markets
- Equity Market Neutral
- Event Driven
- Fixed Income Arbitrage
- Fund of Funds
- Global Macro
- Long/Short Equity Hedge
- Managed Futures
- Multi-Strategy

**Approach and Focus (N = 33)**
- Arbitrage
- Bottom up
- Contrarian
- Directional
- .
- Bankruptcy
- Capital Structure Arbitrage
- Distressed Bonds
- Distressed Markets
- .

(Also computed using 100+ indicators)

\[
p = \begin{bmatrix} 1 & 0 & 0 & 1 & \ldots & 0 & 0 & 1 & 0 \end{bmatrix}
\]

\[
\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & \ldots & 0 & 1 & 1 & 0 & 1 & 1 & 1 \end{bmatrix}
\begin{bmatrix}
A_1 \\
A_2 \\
A_3 \\
A_4 \\
A_5 \\
A_6 \\
A_7 \\
A_{29} \\
A_{30} \\
A_{31} \\
A_{32}
\end{bmatrix}
\]

33 x N rectangular matrix, where N = number of funds in a given style during a given time period.

Measure “change” as increasing within-style heterogeneity with respect to funds’ combinations of investment approaches and focuses.


2 – Correlation-based measure of within-style homogeneity.
The empirical puzzle: **Change** in the hedge fund industry, brief mathematical aside

<table>
<thead>
<tr>
<th>3 funds</th>
<th>Cluster Index</th>
<th>Correlation Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1 1 1]</td>
<td>[1 0]</td>
<td>[1 0]</td>
</tr>
<tr>
<td>[0 0 0]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[1 1 1]</td>
<td>[2.7]</td>
<td>[0.80 0.77]</td>
</tr>
<tr>
<td>[0 0 0]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[1 1 1]</td>
<td>[2.1]</td>
<td>[0.63 0.22]</td>
</tr>
<tr>
<td>[1 0 1]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[0 0 0]</td>
<td>[1.7]</td>
<td>[0.47 -0.49]</td>
</tr>
<tr>
<td>[1 0 0]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$A = \begin{pmatrix} a_{1,1} & \cdots & a_{1,n} \\ \vdots & \ddots & \vdots \\ a_{32,1} & \cdots & a_{32,n} \end{pmatrix} = UDV^T$

$ClusterIndex = \left[ \left( \sum_{i} \frac{d_i}{\max(d)} \right) / N \right]^{-1}$

$CorrelationIndex = \left( \sum_{\text{lower.tri}(\text{cor}(A))} \right) / N$
The empirical puzzle: Change in the hedge fund industry

Why do new funds look like incumbent funds?

Why the turn towards heterogeneity?

Average Within-Style Clustering Index (circles) and Correlation Index (squares), by Year

RBV
Technology
Organizational
Ecology / Niche
Neo-Institutionalism
Legitimacy
Due to selection biases, there is really no way to know whether the constraint, as I describe it, is functioning, in the way I’ve described it, during this period (Zuckerman 1999).
Having said that, atypical fund prior to 1999 were the ones less exposed to investor constraints. Prior to 1999, funds in the bottom quartile of typicality vs. the top...

34% smaller (p<.001)

57% vs. 85% open-ended (p<.001)

33% lower minimum investment (p<.10)

38% vs. 31% high-water mark (p<.05)

46% vs. 81% leveraged (p<.001)

“Why do new funds look like incumbent funds?

“It’s kind of a sad part of our industry, the gap between what managers do and the knowledge from the management side and the knowledge of either a consultant or an investor. It’s pretty big. I’m usually fairly disappointed when I walk of the room in terms of that person’s ability to truly grasp what we’re up to. British pensions especially, which are sort of the least sophisticated in the world. With family offices it’s even worse. We’ve done the pitch down to the point of absurdity. You know, it’s ‘We buy high-quality companies at good value and we short the ones that are expensive and not profitable’.”

“Here’s a word you’ll probably like as a sociologist, group think. I’m consistently not impressed with the independence of thought among investors. When it comes to independent thinking, there’s not so much. And the big institutions and pensions aren’t really any better. I’m not at all impressed.”

(1) Where does the constraint come from?
Why do new funds look like incumbent funds?

Due to selection biases, there is really no way to know whether the constraint, as I describe it, is functioning, in the way I’ve described it, during this period (Zuckerman 1999). Having said that, atypical fund prior to 1999 were the ones less exposed to investor constraints. Prior to 1999, funds in the bottom quartile of typicality vs. the top…

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“They want to see stuff they recognize.”

“We can’t really set out to create a product that’s the most efficient based on any of our reasoning. We are kind of constrained to build products that are going to sell.”

“We trade this GTAA product…We decided to start trading single stocks within Euroland…and the consultants did not want that bolted into the GTAA strategy. They wanted it as a separate product, because we wouldn’t fit as nicely into their GTAA box. Now we felt it was a much better offering for the clients, in fact, both theoretically and empirically it kind of has to be…They can’t understand that.”

(1) How does it work? Expectations by audiences (investors) constrain the behavior of market actors (fund managers).
The year 1998 was a pivotal one for the hedge fund industry. Russia’s August 17 default began a chain of events that grew into the first major stress test for the industry. The Russian crisis spread to financial markets around the globe, resulting in a global “flight to quality” whereby investors traded in higher risk positions for low-risk, high-quality debt instruments, such as high-grade corporate debt and U.S. Treasury bonds. Depressed demand for medium- to high-risk debt coupled with increased demand for high-quality institutional and government debt resulted in a widening of credit spreads just when a significant number of hedge funds were betting on (and significantly invested in) continued convergence in yield spreads. The poster fund for the ensuing collapse, the Nobel laureate–inspired hedge fund Long Term Capital Management (LTCM), required a $3.63 billion Federal Reserve-orchestrated bailout to stave off a potential Wall Street implosion. To compound matters, because yields from betting on credit spreads are typically small, the hedge funds facing the most pressure were also the ones most highly leveraged. The resulting deleveraging of funds meant that credit spreads widened further, causing hedge fund lenders to tighten credit and ultimately forcing a large number of funds to liquidate.

(For more, read Lowenstein 2001, When Genius Failed; for more on shocks precipitating change, see e.g., Fligstein 2001, Quinn 2008)
Fund of Funds…

1 – Aggregate and allocate capital.

2 – Educate investors.

3 – Diversify risk, both financial and operational.

**Intermediating** Funds of Funds are forced to transmit expectations in tact from investors to fund managers. Moreover, investors demand increased transparency with respect to specific fund holdings in the FoF’s portfolio.

**Why the turn towards heterogeneity among funds?**
1. “We ARE investors too, Ned!”

2. A “Real risk is bad shit happening. We tell our clients that—well, not quite like that—and make them realize that they can’t keep bad shit from happening. We can.”

2.B “We don’t believe that volatility is a particularly useful risk characteristic. If you go and talk to you friends on the finance faculty, you know, their premise is that volatility is a mathematical shorthand for risk… What is a risk in hedge funds is the risk of losing money, and we like that because it’s gloriously simple. My cleaning lady can understand that one. So, risk in hedge funds is something bad that you hadn’t expected happens, and, uh, very very difficult to control for that, um, and there is not single way that, um, that you can institutionalize understanding that.”

1. “We ARE investors too, Ned!”

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Mediating Funds of Funds may block the transmission of investor expectations before they more to fund managers. Investors need not alter their expectations about the appropriateness of fund manager behavior or fund “typicality.”

(2) Audience constraints may be applied differentially as a function of the way they are circulated in the market.
Average Within-Style Clustering Index (circles) and Correlation Index (squares), by Year

Why do new funds look like incumbent funds?

Why the turn towards heterogeneity among funds?
Pull - “The big chunk of what funds of funds need to do is look for diversification. The typical funds of funds wants to deliver pretty low volatility return streams to investors. The best way to do that is to have a very diversified portfolio so the funds of funds will naturally look for different strategies and the market will supply that.” (FOF manager)

Push - “When funds of funds really started controlling a significant bit of the capital in the market, I think hedge fund managers all of a sudden had a lot more discretion about what they were doing. You weren’t answering anymore to the individual investors and the consultants they worked with. So, yeah, it was kind of liberating in that way. I had a lot more power as a portfolio manager.” (HF manager)
**Funds of funds still shrinking**

*November 01, 2010*

The funds-of-funds industry fell another 4.8% in the first half of 2010 & is down 46% from its peak.

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**Why does any of this matter? Pt. 1:** Why isn’t this about investors changing their expectations? What happens when FOFs, on average, lose their ability to act as mediators and revert to being intermediaries?

"Madoff was a real body blow to the accepted wisdom of funds of funds…I think what you will find going forward is that a lot of the funds of funds will need to deliver their services differently. So, you will have fund of funds like now but I think you’ll have an increasing amount of that skill set delivered to end investors as consulting advisories where the end investor retains more control or oversight of the process."

"It’s definitely not the industry norm to offer transparency to investors. But sometimes you have to. The more active investors can be pretty specific about what they like and what they don’t like. You know, it’s always dangerous to listen to your investors because they don’t have the full picture, but we are very well aware that keeping a manager in the portfolio that has a position that a bunch of investors have said they’re not comfortable with, well, then we better have a pretty good reason."
Sink or swim: Funds of funds face investor demands

February 01, 2011 Anastasia Donde

To survive these days, funds of funds have to meet investors’ needs for customized accounts, risk management & even advise on investing directly in hedge funds.

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In other words, the kinds of hedge funds that funds of funds were responsible for “allowing” to enter the market offered significantly (statistically speaking) better Sharpe ratios to investors. Holding constant returns and volatility, these are also the funds that were disproportionately selected out of the market during the recent crisis.

Recognizing the importance of product diversity and the fragility on which the change from 1999-2008, funds of funds have made dramatic changes in the way they are operating their businesses.
Institutions channel social demands that condition the behavior of social actors. Social actors channel social institutions (i.e., cognitive constraints) that condition the nature of social demands.

(1) Blocking/distorting audience expectations as a mode of “institutional work” (e.g., Lawrence and Suddaby 2006)

(2) Two images of market clustering. Failure of information vs. failure of design. Role of market brokers in un-clustering the market.

(1) (Good) Funds of Funds serve, in part, a public good. The cost for that good, however, is privatized.

(2) Given the effect of investor-born constraints, is it possible to have both transparency and heterogeneity at the same time? (Education? “White space” vs. “Black space” incubation?) Bespoke arrangements and seed funds.
Entry, Exit, and Churn
[Note: The halt to increasing heterogeneity is not about fewer entries]
Five-Firm Concentration & Herfindahl
[Note: Not the reaction to increasing consolidation]
We know that beginning in 1999, “atypical” funds were increasingly entering the market. While this may imply that investors abandoned their expectations, models 4-6 suggest otherwise. A one-standard deviation increase in fund “typicality” reduced the odds of fund failure by > 10% in the period after LTCM – and especially during the financial crisis. I argue that this was the result of many funds of funds continuing in (reverting to) intermediary status.
"No lockup" is a rough proxy for funds that are, ceteris paribus, more likely to receive capital via funds of funds. These results show that the relationship between fund typicality and failure is somewhat concentrated in this category of funds.

<table>
<thead>
<tr>
<th></th>
<th>1 [Lockup]</th>
<th>2 [No Lockup]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of Typicality</td>
<td>-0.459</td>
<td>-0.538*</td>
</tr>
<tr>
<td></td>
<td>(0.401)</td>
<td>(0.249)**</td>
</tr>
<tr>
<td>Age</td>
<td>0.490</td>
<td>0.519</td>
</tr>
<tr>
<td></td>
<td>(0.068)**</td>
<td>(0.042)**</td>
</tr>
<tr>
<td>Age Squared</td>
<td>-0.042</td>
<td>-0.040</td>
</tr>
<tr>
<td></td>
<td>(0.007)**</td>
<td>(0.004)**</td>
</tr>
<tr>
<td>ln(Net Asset Value)</td>
<td>-0.048</td>
<td>0.042</td>
</tr>
<tr>
<td></td>
<td>(0.028)</td>
<td>(0.016)*</td>
</tr>
<tr>
<td>Scope</td>
<td>0.042</td>
<td>0.197</td>
</tr>
<tr>
<td></td>
<td>(0.083)</td>
<td>(0.056)**</td>
</tr>
<tr>
<td>Rate of Return</td>
<td>-0.143</td>
<td>-0.218</td>
</tr>
<tr>
<td></td>
<td>(0.039)**</td>
<td>(0.042)**</td>
</tr>
<tr>
<td>Volatility</td>
<td>0.095</td>
<td>0.064</td>
</tr>
<tr>
<td></td>
<td>(0.020)**</td>
<td>(0.014)**</td>
</tr>
<tr>
<td>Relative Returns</td>
<td>-0.576</td>
<td>-0.560</td>
</tr>
<tr>
<td></td>
<td>(0.122)**</td>
<td>(0.095)**</td>
</tr>
<tr>
<td>Relative Volatility</td>
<td>0.129</td>
<td>0.007</td>
</tr>
<tr>
<td></td>
<td>(0.119)</td>
<td>(0.083)</td>
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<tr>
<td>Redemption Notice Period</td>
<td>0.001</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.001)**</td>
</tr>
<tr>
<td>Constant</td>
<td>-4.442</td>
<td>-3.753</td>
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<tr>
<td></td>
<td>(0.485)**</td>
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Robust standard errors in parentheses; Fixed effects for years and fund styles included in all models

* significant at 5%; ** significant at 1%
Table 2

Average of "Central Tendency Fund Vector as Computed for All Convertible Arbitrage Funds in TASS during Q1, 1994-2008, Using the Strategic and Investment Focus Attributes"

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(Smith, 2011)