Career Risk and Market Discipline in Asset Management

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Motivation

- Careers in finance, especially in asset management:
  - high compensation relative to non-finance workers
  - large discretion in risk taking $\rightarrow$ moral hazard
  - performance-related pay, but mostly indexed to upside risk
- Do asset managers also face downside risk? Are negative firm-level events followed by permanent drops in position and compensation?
- Do the managerial labor market and reputation play a role in shaping such career setbacks?
  - Does the labor market provide incentives that complement those provided within the firm?

▸ Literature: firm-level events ▸ Literature: macroeconomic events

Our focus: hedge funds

- In hedge funds, all of these features are particularly salient:
  - very high compensation, even within the finance sector
  - high risk taking and great discretion $\rightarrow$ strong moral hazard
  - performance-based fees with option-like features
- This paper:
  - Do professionals suffer **career setbacks** following the **liquidation** of the fund they work for?
  - Are such "scarring effects" result from
    - "reputation losses" due to updated beliefs about the professional's ability?
    - "accidental losses", such as human capital disruption?

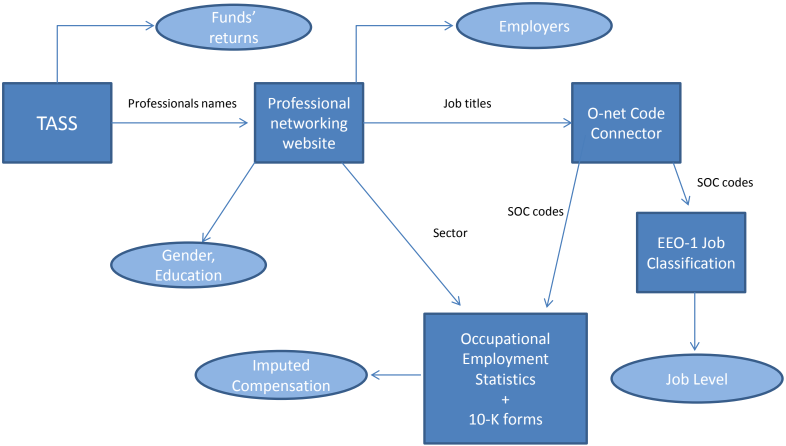
Preview of results

- Hedge fund liquidations are followed by "scarring effects"
  - sharp and persistent drop in job level and compensation
  - more frequent switches to a new employer
  - especially for high ranking employees
- These effects are present only when
  - fund liquidation is preceded by poor relative performance
  - such under-performance persists for the 2 previous years

  $\rightarrow$ evidence of reputation losses for asset managers

Data

- Career histories of 1948 professionals spanning from 1963 to 2016



▸ Compensation ▸ Job levels

Careers after fund liquidations

- After a liquidation, do professionals experience career setbacks ("scarring effects")?
- We combine diff-in-diff with matching to compare the career paths of "similar employees" before and after liquidation:

$$y_{it} = \alpha_i + \lambda_t + \sum_{k=-5}^{+5} \theta_k L_{it}^k + \epsilon_{it},$$

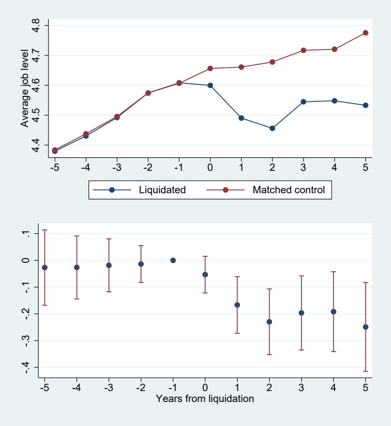
  - y_{it} is the outcome of interest: job level, compensation, job switch
  - α_i and λ_t are individual and time fixed effects
  - L_{it}^k are leads and lags of the 1^{st} liquidation faced by employee i (working for fund at any time in the 2 years before liquidation)

▸ Definition of liquidation ▸ Histogram of liquidations

Empirical strategy

- Individual fixed effects α_i account for any unobserved characteristic with time-invariant impact on career outcomes
- Time effects λ_t control for shocks that are common to individuals affected by liquidations and unaffected ones
- Matching $\rightarrow$ λ_t's are estimated off individuals "similar" to those who face liquidations (valid counterfactual)
- Each individual is matched with a control who works in asset management in the year before liquidation, with a propensity score based on education level and quality, experience, pre-liquidation job level and change

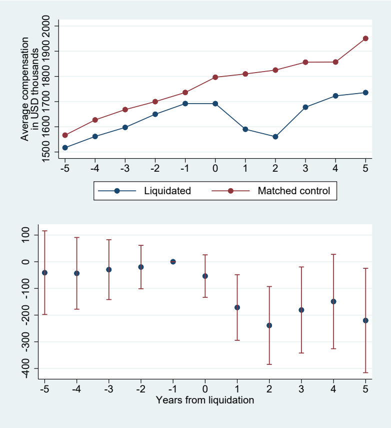
Persistent drop in the job level



- Point estimates of θ_k = diff-in-diff in period k relative to the pre-liquidation year (θ_{-1} is normalized to 0)
- No pre-trends: job level growing in sync prior to liquidation
- The **job level drops by 0.2 notches**: significant and persistent

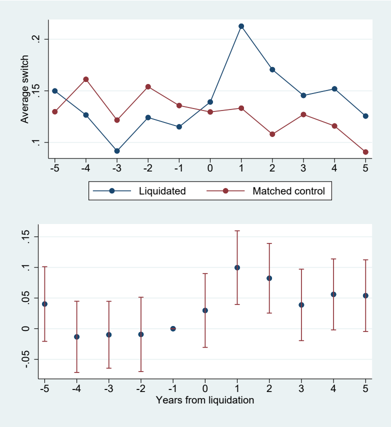
Persistent drop in imputed compensation

- **Imputed compensation drops by about $200,000**



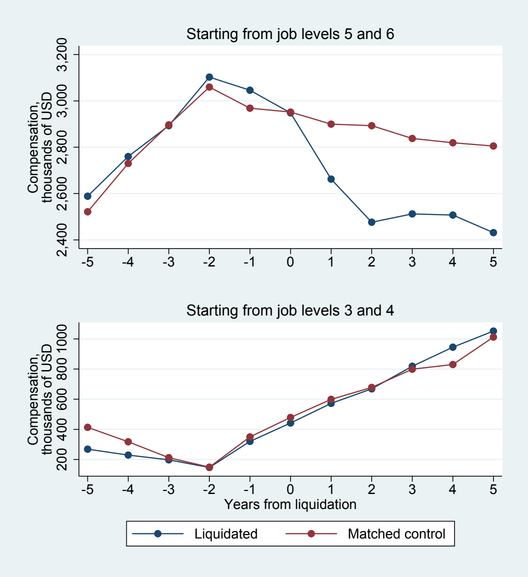
Increase in probability of switching company

- The **probability of switching company rises by 10 percentage points** in the year following liquidation



Are scarring effects larger for high-ranking employees?

Career paths by initial job level around liquidation



Note: 76 employee pairs at level 3, 166 at level 4; 81 at level 5 and 211 at level 6

Scarring effects by initial job level

$$y_{it} = \alpha_i + \lambda_t + \beta_1 L_{it}^{post} + \beta_2 L_{it}^{post} \times Top_i + \epsilon_{it}$$

	Job Level	Compensation, thousands of USD	Switch
	(1)	(2)	(3)
L^{post}	-0.059	81.550	0.051**
	(0.091)	(102.585)	(0.021)
$L^{post} \times Top$	-0.202*	-450.668***	0.019
	(0.116)	(140.575)	(0.026)
Observations	11026	10808	11026

$L_{it}^{post} = 1$ for 5 years after liquidation, 0 otherwise

Standard errors clustered at individual level in parentheses

- Consistent with different explanations:
  - top guys are held responsible for the liquidation ("reputation losses")
  - they have more fund-specific human capital at stake or face higher search frictions ("accidental losses")

Causes of scarring effects

Pre-liquidation performance helps assess to what extent post-liquidation scarring effects result from

- **"reputation losses"**: liquidation is preceded by
  - **poor** performance **relative** to the relevant benchmark
  - such under-performance is **persistent** over time
- **"accidental losses"**: also liquidations preceded by **normal** relative performance (e.g., it is caused by overall market turbulence or reorganization of parent company)

Reputation or accidental losses?

Scarring effects are present only for funds with **persistently poor** relative performance (P^-) before liquidation

$$y_{it} = \alpha_i + \lambda_{gt} + \delta_1 L_{it}^{post} + \delta_2 L_{it}^{post} \times P_i^- + \epsilon_{it}$$

	Job Level	Imp. compensation, thousands of USD	Switch
	(1)	(2)	(3)
L^{post}	0.118	158.613	0.047*
	(0.123)	(159.313)	(0.028)
$L^{post} \times P^-$	-0.349**	-420.808**	0.010
	(0.141)	(179.519)	(0.032)
Observations	10687	10492	10687
No. professionals	1028	1023	1028

Pre-liquidation performance: relative or absolute?

- The results are driven by negative *relative* performance, not absolute performance
- They hold if one retains *only* liquidations that follow positive *absolute* performance:

	Job Level	Imp. compensation, thousands of USD	Switch
	(1)	(2)	(3)
L^{post}	0.197	224.994	0.027
	(0.127)	(165.042)	(0.029)
$L^{post} \times P^{-}$	-0.426***	-571.148***	0.047
	(0.162)	(202.948)	(0.035)
Observations	7464	7315	7464

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Are reputation losses larger for top employees?

Top managers are held **responsible** for persistently poor relative performance

	Job Level	Imp. compensation, thousands of USD	Switch
	(1)	(2)	(3)
	Panel A: starting from job levels 5 and 6		
L^{post}	0.083	134.787	0.043
	(0.136)	(185.985)	(0.037)
$L^{post} \times P^{-}$	-0.437***	-663.634***	0.032
	(0.160)	(218.858)	(0.041)
Observations	5512	5475	5512
No. professionals	524	524	524
	Panel B: starting from job levels 3 and 4		
L^{post}	0.029	109.933	0.068
	(0.194)	(243.862)	(0.044)
$L^{post} \times P^{-}$	0.000	26.780	-0.031
	(0.219)	(271.245)	(0.051)
Observations	4238	4117	4238
No. professionals	410	406	410

Summary and conclusions

1. Asset managers face significant career setbacks and job reallocation following the liquidation of the fund they work for

2. These **scarring effects** apply only to
   - high-ranking employees
   - following persistently poor performance
   - relative to the fund's benchmark
   - consistent with **reputation loss**

3. Dynamic career model featuring moral hazard and adverse selection predicts that such scarring effects incentivize asset managers:
   - labor market discipline complements firm-level incentives
   - it may compensate for the tendency of pay packages to reward success rather than penalize failure

Thank you!

Literature: adverse firm-level events

- Career effect of bankruptcy:
  - Eckbo, Thorburn and Wang (2016): only 1/3 of CEOs keep job after bankruptcy, and departing ones suffer large income and equity losses
  - Graham, Kim, Li and Qiu (2017): rank & file workers' subsequent salary drops by 15%, based on US census data
  - but note that firm bankruptcy $\neq$ fund liquidation
- Career concerns and labor market discipline:
  - Chevalier and Ellison (1999): in mutual funds termination of young managers is more performance-sensitive than that of older managers
  - Griffin, Kruger, Maturana (2018): senior executives of top banks who signed RMBS deals entailing large losses and misreporting rates or implicating the bank in lawsuits experienced no setbacks in their career
  - Gao, Kleiner and Pacelli (2017): managers whose loan portfolios are hit by negative credit events are more likely to switch to lower-rank banks and face subsequent demotion

Literature: macroeconomic events

- Stock market:
  - Oyer (2008): stock market boom encourages Stanford MBAs to go into investment banking, which is associated with a persistent increase in their subsequent earnings
- Recessions:
  - Schoar and Zuo (2017): careers of CEOs are persistently affected by recessions at time of labor market entry (hired by smaller companies, but faster rise to CEO status)
  - Oreopoulos, von Wachter and Heisz (2012): employees graduating in recessions suffer earnings declines lasting 10 years, using Canadian university-employer-employee panel data

Go back

Job levels

6. CEOs, or other positions at the head of the corporate hierarchy (e.g. executive director, managing partner)
5. Top Executives (e.g. CFO)
4. First/Mid Officers and Managers (e.g. investment manager)
3. Professionals (e.g. analyst)
2. Technicians, Sales Workers, and Administrative Support Workers (e.g. trader)
1. Craft Workers, Operatives, Labors and Helpers, and Service Workers (e.g. intern)

Go back Employee characteristics

Compensation

- Compensation varies across occupations and sectors:
  - (i) asset management, (ii) commercial banking; (iii) financial conglomerates; (iv) insurance; (v) other finance; and (vi) non-financial firms and institutions
- For job levels 1-4: only fixed compensation, drawn from OES data
- For levels 5 and 6: also variable component, drawn from 10-Ks and proxy statements
- No time-series variation in compensation

▸ Go back ▸ Job levels and compensation ▸ Characteristics of careers ▸ HF Entry
▸ Compensation profile ▸ Career path by cohort

Employee characteristics

- They all have a university degree, but of different qualities
- Sample is dominated by males (83%), consistently with much evidence about gender imbalance in finance

	Obs.	Mean	Median	St. Dev.
Education Level				
High school	1948	0.00	0	0.05
College	1948	0.39	0	0.49
Master	1948	0.41	0	0.49
JD or PhD	1948	0.03	0	0.18
Subject of highest degree				
Econ or Finance	1948	0.59	1	0.49
Science or Engineering	1948	0.08	0	0.27
Quality of highest degree institution				
Ranked top 15	1948	0.16	0	0.37
Ranked 16-40	1948	0.06	0	0.24
Ranked below 40	1948	0.44	0	0.50
Cohort				
1962-1979	1948	0.04	0	0.20
1980-1989	1948	0.22	0	0.41
1990-1999	1948	0.46	0	0.50
2000-2013	1948	0.28	0	0.45
Male	1889	0.83	1	0.37

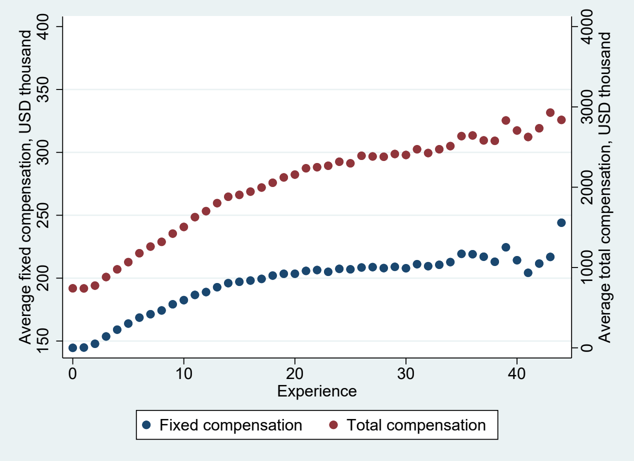
Go back

Job levels and compensation

Job Level	Description	Average Compensation	Examples of job titles
6	CEOs	3,707,831	CEO, executive director, founder, managing director, managing partner
5	Top executives	1,590,858	CFO, CIO, COO, CRO, deputy CEO, partner, vicepresident
4	First/Mid Officers & Managers	158,150	director of sales, head of investor relations, investment manager
3	Professionals	105,694	analyst, portfolio manager
2	Technicians, Sales Workers, Administrative Support Workers	101,851	trader, credit officer
1	Craft Workers, Operatives, Labors & Helpers, Service Workers	53,845	assistant, intern

Go back

Compensation profile



Go back

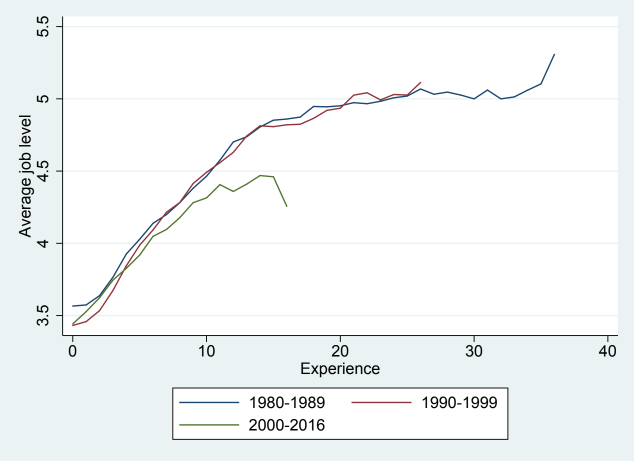
Characteristics of career paths

- By construction, careers are dominated by positions in asset management: 75% of person-year observations
- Some individuals spent part of their careers in commercial banking (7% of person-year observations) or outside finance (17%)

	Obs.	Mean	Median	St. Dev.
Sector				
AM	42027	0.75	1	0.43
CB	42027	0.06	0	0.23
CO	42027	0.01	0	0.09
IN	42027	0.01	0	0.10
NF	42027	0.15	0	0.36
OF	42027	0.02	0	0.15
Career variables				
Job level	41775	4.42	4	1.41
Compensation ($ thou)	40558	1,582	221	1,639
Level-6 Position	42339	0.33	0	0.47
Switch company	42339	0.13	0	0.34

Go back

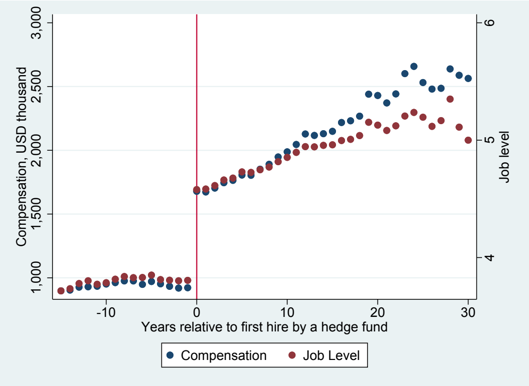
Career paths by cohort



Go back

Entry in the hedge fund industry

- Upon entering the hedge fund industry, average compensation rises by about \$700,000 (left axis) and the job level by almost 1 notch (right axis)



Job Level Compensation Go back

Career advance upon entry differs across individuals

- Having a graduate degree from a top-15 university is associated with greater career advancement
- Positive and strong relation with the employee's experience, especially in asset management
- Women advance less than men: consistent with Bertrand, Goldin and Katz (2010) and Bertrand and Hallock (2001)
- Job level change is positively and significantly correlated with the previous relative performance of the hedge fund...
- ... but not with the performance of the fund's class or with the fund's size

Entering the hedge fund industry: job level

	Dependent variable: Job Level upon hiring			
	(1)	(2)	(3)	(4)
Education quality	0.320***	0.402***	0.300**	0.251*
	(0.090)	(0.148)	(0.145)	(0.144)
Experience	0.017***	0.026***	0.020**	-0.006
	(0.006)	(0.008)	(0.008)	(0.011)
Exp. in AM	0.025***	0.024**	0.029***	0.030***
	(0.007)	(0.010)	(0.010)	(0.010)
Female	-0.731***	-0.512***	-0.520***	-0.508***
	(0.074)	(0.101)	(0.105)	(0.105)
Previous Job Level	0.117***	0.130***	0.134***	0.128***
	(0.018)	(0.027)	(0.028)	(0.029)
Past Performance		0.090***	0.063**	0.058**
		(0.025)	(0.024)	(0.024)
Past Benchmark		0.122	0.075	-0.020
		(0.078)	(0.076)	(0.074)
log(AUM)			0.005	0.005
			(0.026)	(0.026)
Constant	3.990***	3.554***	4.251***	4.545***
	(0.060)	(0.124)	(0.517)	(0.515)
Cohort FEs	No	No	No	Yes
Fund Style	No	No	Yes	Yes
Observations	1936	779	720	720

Go back

Entering the hedge fund industry: compensation

Dependent variable: Compensation upon hiring, in thousands of USD				
	(1)	(2)	(3)	(4)
Education quality	306.030***	285.250	171.269	121.665
	(118.122)	(203.333)	(200.284)	(200.609)
Experience	15.433**	23.979**	19.330*	-5.401
	(6.764)	(9.618)	(10.097)	(13.055)
Exp. in AM	23.712**	27.274**	34.403**	36.030***
	(9.476)	(12.838)	(13.472)	(13.618)
Lagged Compens.	0.000***	0.000***	0.000***	0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Female	-800.309***	-592.172***	-603.455***	-588.781***
	(76.738)	(103.821)	(108.377)	(108.075)
Past Performance		75.960**	53.033*	48.121
		(31.258)	(31.027)	(30.693)
Past Benchmark		130.133*	94.356	4.730
		(72.668)	(73.527)	(76.321)
log(AUM)			23.002	22.767
			(30.629)	(30.193)
Constant	1283.220***	831.663***	1042.022*	1326.247**
	(59.455)	(110.709)	(614.588)	(610.438)
Cohort FEs	No	No	No	Yes
Fund style dummies	No	No	Yes	Yes
Observations	1864	752	696	696

Go back

What is a fund liquidation?

- Identified using the “dropreason” variable in the TASS database
- 8 reasons why funds exit the TASS population of “live” funds:

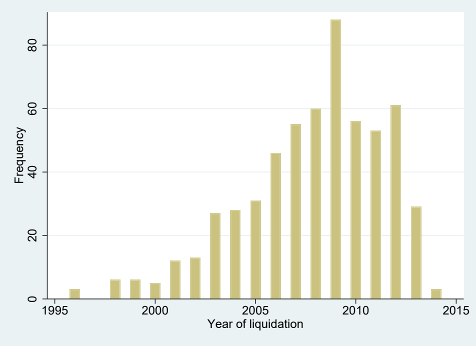
  1. “fund liquidated”: 48.44%
  2. “fund no longer reporting”: 22.33%
  3. “unable to contact fund”: 18.58%
  4. “fund has merged into another entity”: 6.02%
  5. “fund closed to new investment”: 0.96%
  6. “fund dormant”: 0.59%
  7. “programme closed”: 0.54%
  8. “unknown”: 2.54%

- We find no significant career changes after funds are terminated for reasons 4, 5, 6 and 7

Go back

Variation in timing of liquidation events

- We also exploit variation in the timing of our 582 liquidations
- External validity of the estimates: any scarring effect is not simply the reflection of financial crisis



- Many liquidations also before and after the Great Recession
- Indeed our results are robust to the exclusion of 2008-09

Go back