

# Do Investment Banks Have Skill? Performance Persistence of M&A Advisors

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# Introduction

- M&A is among the most important decisions a CEO can make
  - \$2.1tr of M&A by a US acquirer in 2007, 15% of GDP
  - Lehn and Zhao (2006): bad acquisitions can cost CEO his job
- Since CEOs make M&A decisions rarely, they often hire advisors
- But existing research suggests that they don't help:
  - Bowers and Miller (1990), Michel, Shaked and Lee (1991): no association between advisor reputation and returns
  - Rau (2000): advisor market share associated with *lower* returns
  - Servaes and Zenner (1996): no benefit of hiring an advisor in the first place
- Contradicts *skilled advice* hypothesis, supports *passive execution* hypothesis

# This Paper's Contribution

- Perhaps skill exists, but is not correlated with market share or reputation
- ① Do banks exhibit differential returns in the first place?
  - Yes, significant fixed effects to 3-day CAR
- ② Can these differential returns be predicted?
  - Yes, based on past returns
  - Top quintile based on past 2-year CAR outperforms bottom quintile by 0.92% over next 2 years
    - \* Mean CAR is 0.73%, mean bidder size is \$10b
- ③ Do clients exploit this persistence?
  - No, they ignore past returns and select on market share
    - \* Not because of relationship-specific capital
  - Possible explanation: association of market share with quality
  - Policy implication: league tables based on past returns

# Measuring Performance

- Persistence analyses also used for mutual funds, hedge funds, security analysts
- Our setting shares two challenges:
  - ① Performance attribution
    - Here, the problem is not risk adjustment (short-horizon returns) but that returns may be the responsibility of the bank or client
      - \* Bank-initiated deal: bank selects inappropriate targets, or negotiates poorly
      - \* Standard client-initiated deal: bank does not turn down bad deal
      - \* Fixated client deal: skilled or empire-building client uses bank as execution house
    - Bowers and Miller (1990), Michel Shaked and Lee (1991), Rau (2000), Hunter and Jagtiani (2003) attribute entire CAR to the bank
    - Servaes and Zenner (1996), Kale, Kini and Ryan (2003) control for deal characteristics, but acknowledge this may go too far the other way
    - We control for acquirer characteristics, e.g. governance, performance

## Measuring Performance (cont'd)

### 2. Average returns depend not only on skill, but also scale

- See Berk and Green (2004) for mutual funds, Maksimovic and Phillips (2002) for conglomerates
- *Limited capacity* hypothesis: banks differ not in skill, but capacity to accept mandates
- We show low CARs arise from value destruction, not small but positive-NPV transactions
- Also, less likely for banks owing to weaker capacity constraints
  - \* Gleacher employs 50 staff and advised on BoS/Halifax (\$40b)

# Literature Review

- ① Effect of advisor choice on deal returns
  - Positive question: do banks have skill?
  - Normative question: how should acquirers select advisors?
  - Bowers and Miller (1990), Michel et al. (1991): no effect of reputation
  - Rau (2000), Hunter and Jagtiani (2003): negative effect of market share
  - Kale, Kini and Ryan (2003): positive effect of market share for contested takeovers
- ② Determinants of advisor choice
  - Positive question: how do acquirers select advisors?
  - Rau (2000): according to past completion rate, but not past CAR
  - To interpret these results, must know what acquirers *should* be doing
- Other persistence studies in investment banking:
  - Jaffe, Pedersen and Voetmann (2009): M&A acquirers
  - Hoberg (2007): equity underwriting
  - Mikhail, Walther and Willis (2004): security analysis

# Data and Performance Measures

- M&A data from SDC, 1980-2007. Restrictions:
  - Acquirer must have CRSP stock returns and mandate at least one advisor
  - Stake in target must rise from below 50% to above 50%
  - 15,423 deals
- CAR over CRSP VW calculated over a  $(-1, + 1)$  window, decomposed into
  - CAREXP: portion predicted by acquirer characteristics
    - \* Masulis, Wang and Xie (2007) governance measures: institutional ownership, leverage, product market competition
    - \* MWX quality measures: Tobin's q, pre-announcement stock price runup, operating performance
    - \* Other MWX measures: size (Moeller, Schlingemann and Stulz (2004), free cash flow
    - \* Other measures: inside ownership, repeat acquirer dummy, industry, acquirer diversity
  - CARRES: residual

## Data and Performance Measures (cont'd)

- Bank is responsible for total CAR if deal initiated by itself or a standard client, CARRES only if initiated by a fixated client
- *RET* is average CAR to a bank, calculated over past  $j$  years; *RETEXP*, *RETRES* defined analogously
- Other measures: completion ratio (*CR*) and speed (*TIME*)

# Fixed Effects Analysis

- Do banks exhibit differential announcement returns in the first place?
  - Does not require hypothesizing what variable skill is correlated with

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**Panel A: Investment Bank Fixed Effects**

Controls	Bank FE F-test	N	Adj-Rsqd (%)
(1) Time FE	1.86(0.0000, 92)	15,423	0.85
(2) Acq chars, time FE	1.70(0.0000, 92)	11,477	3.50
(3) Acq chars, acq FE, time FE	1.77(0.0000, 92)	11,477	30.76

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**Panel B: Distribution of Bank Fixed Effects**

	Std Dev	25 <sup>th</sup>	75 <sup>th</sup>
(1)	1.52%	-0.77%	0.75%
(2)	1.77%	-0.67%	0.80%
(3)	2.62%	-0.60%	1.01%

## RET Quintile Analysis

- Can acquirers exploit this fixed effect? Existence of FE implies permanent component to *RET*
  - Motivates us to predict future *RET* using past *RET*, vs. prior measures

Panel A: Persistence in Raw Returns			
Quintiles Measured Over	Future RET Measured Over		
	1yr	2yrs	3yrs
1yr RET			
Q1	0.59%	0.65%	0.65%
Q5	1.16%	1.05%	1.13%
Q5 - Q1	0.57%	0.41%	0.48%
	(1.77)*	(1.37)	(1.67)*
2yrs RET			
Q1	0.76%	0.63%	0.67%
Q5	1.51%	1.55%	1.42%
Q5 - Q1	0.74%	0.92%	0.75%
	(2.00)**	(2.38)**	(2.01)**
3yrs RET			
Q1	0.51%	0.57%	0.51%
Q5	1.53%	1.43%	1.32%
Q5 - Q1	1.01%	0.86%	0.82%
	(2.62)***	(2.31)**	(2.23)**

# RETRES Quintile Analysis

<b>Panel C: Persistence in Unexplained Returns</b>			
Quintiles Measured Over	Future RETRES Measured Over		
	1yr	2yrs	3yrs
1yr RETRES			
Q5 - Q1	0.92%	0.85%	0.69%
	(2.30)**	(2.55)**	(2.03)**
2yrs RETRES			
Q5 - Q1	0.71%	0.95%	0.54%
	(1.65)*	(2.29)**	(1.30)
3yrs RETRES			
Q5 - Q1	0.87%	0.97%	0.72%
	(1.88)*	(2.04)**	(1.63)

- Persistence in both explained and residual returns

# The Source of Low RET

- Could be low skill, but also high scale or high deal leakage

<b>Panel D: Percentage of Positive CAR deals, by RET Quintile</b>			
	RET Measured Over		
	1yr	2yrs	3yrs
Q1	33.39%	33.98%	35.64%
Q5	67.32%	66.63%	65.30%
Q5 - Q1	33.93%	32.65%	29.84%
	(18.60)***	(17.10)***	(14.93)***

- Low *RET* is due to high proportion of value-destructive deals

## Other Performance Measures

- Completion ratio and time persistent (CR not persistent after controlling for acquirer characteristics)
- Completion ratios and speed are slightly positively correlated with future *RET*
  - Suggests no trade-off between “superior deal hypothesis” and the “deal completion hypothesis” (Rau (2000))
- Market share is strongly negatively correlated with future *RET*
- In sum, future performance is
  - Positively related to past performance (value creation, completion ratio, speed)
  - Negatively related to past market share
- Suggests a new measure of advisor quality: past returns

# Determinants of Future CAR

- Dependent variable: a particular deal's CAR. Only for deals with one advisor

<b>Determinants of Announcement Returns</b>						
	1yr	1yr	2yr	2yr	3yr	3yr
RET	0.0856 (1.98)*	0.0445 (0.91)	0.1720 (3.24)***	0.1096 (1.83)*	0.1792 (3.50)***	0.1274 (2.29)**
CR		0.0112 (1.26)		0.0162 (1.38)		0.0317 (2.11)**
TIME		-3.7e-05 (1.68)*		-8.0e-06 (0.27)		-2.7E-05 (0.87)
SHARE		-0.0523 (4.06)***		-0.0684 (5.14)***		-0.0338 (4.14)***
Obs	10,241	9,944	10,616	10,405	10,659	10,345
R-sqd (%)	0.60	0.72	0.70	0.82	0.69	0.88

# Do Clients Exploit Persistence?

Dependent variable is the market share by deal value

	1yr	2yrs	3yrs	1yr	2yr	3yrs
Constant				0.0042 (0.69)	-0.0044 (0.71)	-0.0002 (0.04)
RET	-0.0094 (0.47)	0.0049 (0.19)	-0.0097 (0.36)	-0.0256 (1.08)	-0.0119 (0.56)	-0.0320 (1.91)*
CR	0.0004 (0.05)	0.0050 (0.55)	0.0040 (0.41)	-0.0001 (0.01)	0.0085 (1.24)	0.0044 (0.85)
TIME	1.5E-05 (0.68)	1.7E-05 (0.68)	2.0E-06 (0.10)	6.6E-05 (2.18)**	9.2E-06 (0.67)	-3.1E-06 (0.35)
SHARE				0.6680 (11.22)***	0.7977 (20.48)***	0.5193 (27.98)***
Bank FE	Yes	Yes	Yes	No	No	No
#obs	755	955	1025	755	955	1025
R-squared	0.69	0.69	0.70	0.57	0.66	0.70

## Do Clients Exploit Persistence? (cont'd)

- Clients appear to do the opposite of what they should (cf. Rau (2000))!
  - Ignore past performance
  - Select according to past market share
- Caveat: lagged dependent variable is a predictor, but may not be a determinant
- Possible explanations:
  - Relationship-specific capital. Evaluate using repeat acquirers:
    - \* Retaining an old advisor reduces CAR by 0.30%
    - \* Retaining an old advisor with negative past performance reduces CAR by 0.76%
  - Investment banking industry's association of market share with quality
  - Legitimacy: “no-one gets fired for buying IBM”
    - \* In turn, banks have incentives not to be selective

## Do Clients Exploit Persistence? (cont'd)

- Potential policy implication: promotion of league tables based on value creation
  - Currently done for IPO returns, which are also persistent (Hoberg (2007))
- Irrelevance of past performance is fully consistent with persistence results:
  - If clients chased past returns, performance would not be persistent (if diminishing returns to scale)
- May reconcile persistence in M&A returns with lack of persistence in mutual funds

## Remaining Caveats

- $R^2$  of regression on acquirer characteristics is low (consistent with literature). Controls are not exhaustive of all relevant variables; *RETRES* over-attributes to banks
  - (Only) a problem if fixated client deals are sufficiently prevalent
  - Past performance is relevant for boards, if certain banks are being systematically mandated to push through bad deals
- Limitations of CAR as a performance measure
  - Only measures unexpected value of transaction
    - \* Results still go through with the conditional expectation
  - Cannot observe counterfactual
  - Relies on market efficiency

# Conclusions

- Significant bank fixed effect to a deal's CAR
- Fixed effect is predictable, using past returns; persistence is robust to acquirer characteristics
  - Reputation *does* matter, but only when reputation is measured according to value creation
  - Suggests a new measure of advisor quality
- But clients ignore past performance and select on the basis of market share, even though it is negatively related to future returns
  - Potential remedy: publication of league tables based on value creation

## Open Questions / Extensions

- Why are clients choosing advisors incorrectly?
  - “Innocent” use of market share league tables, or agency problems
- What do high *RET* banks get out of it? Why are returns to skill low? (vs. underwriting, mutual funds)
- Similar analysis for target persistence
- Are “M&A advisor of the year” awards granted on past performance, and do winners generate strong future performance?
  - Similar to Malmendier and Tate’s (2009) “superstar CEOs”