

Purchasing IPOs with commissions:  
Theoretical predictions and empirical results

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# Tale of Two (Other) Papers

- Reuter (2006)
  - **Findings:** annual commissions paid by mutual fund family **j** to lead underwriter **k** in year **t** predict **j**'s holdings of **k**'s hot IPOs  
⇒ *long-term business relationships influence IPO allocations*
  - **Shortcomings:** reported holdings proxy for allocations; cannot distinguish between ex ante and ex post commission payments
- Nimalendran, Ritter, and Zhang (2006)
  - **Findings:** TAQ data reveal that short-term trading in 50 most liquid stocks is related to level of IPO underpricing ⇒ *short-term trading commissions influence IPO allocations during “bubble”*
  - **Shortcomings:** no direct evidence on who earns the brokerage commissions or who receives the IPO allocations

# What Does This Paper Do?

- Develops model to reconcile existence of both long-term and short-term investors in equilibrium
- Uses Abel/Noser trade execution database to explore role of short-term traders in 769 IPOs between 04.01.99 and 12.31.01
  - Examines aggregate commission payments to lead underwriters in days surrounding hot and cold IPOs
  - Tests whether commissions from short-term trading influence IPO allocations

# The Model

- **Challenge:** “short-term and long-term views of IPO allocation seem paradoxical”
- **Response:** Static optimization problem that takes L-T investors as given and considers allocation to S-T
- **Intuition:** If L-T investors catch lead allocating too many shares to S-T investors, L-T reduce future commissions; threat (and probability of being caught) limits role of S-T
- Reminds me of the “Fidelity Rule”:  
*When allocating IPOs, give Fidelity all the shares they request or twice as much as anyone else... or else*

# The Model (cont.)

- I'm not sure the “paradox” merits a model
  - One large payment = good substitute for lots of little payments
  - Robertson Stephens used commissions paid over past 18 months to rank investors, but gave more weight to more recent payments  $\Rightarrow$  *investors can sort themselves into L-T and S-T*
  - May be constraints on magnitude of S-T trades  $\Rightarrow$  *role for L-T relationships*
  - L-T relationships about more than IPOs (Goldstein et al, 2006)
- I like hypothesis that more concentrated L-T client bases are more likely to catch and punish allocations to S-T investors but I'd like it just as much without the model

# Leads Receive More Commissions

*Table 1*

<b>Top 10 Brokers</b>	<b>Commissions per Day</b>	<b>Commission per Share</b>	<b>Above Average Commission per Share?</b>	<b>Lead Underwriter?</b>
Merrill Lynch	583121	0.036	Yes	Yes
Goldman Sachs	561572	0.034	Yes	Yes
Salomon Smith Barney	508253	0.033	Yes	Yes
Morgan Stanley	494777	0.034	Yes	Yes
CSFB	477495	0.036	Yes	Yes
B-Trade	423475	0.020	--	--
Sanford Bernstein	377455	0.067	Yes	Yes
Lehman Brothers	360482	0.035	Yes	Yes
Bank of America	332070	0.034	Yes	Yes
Bear Stearns	287491	0.035	Yes	Yes
Average		0.033		

Note: Based on trades by 609 institutions in Abel/Noser, between 01.01.99 & 03.31.02.

# Analysis of Commissions

- Analysis at IPO-level while daily commissions measured at lead underwriter-level
- Break IPOs into quartiles based on money left on table
  - *Clustering of underpricing through time  $\Rightarrow$  quartiles reflect different time periods*
- Positive correlation between money left on the table, offer size, and commission payments to leads (T2)
- Focus on Commissions/Day, Comm./Share, Trades/Day, and frequency of Comm. > \$.10/Share (T3 & T4)
  - *Comm./day = Comm./Share  $\times$  Shares/Trade  $\times$  Trades/Day*
  - *Do Shares/Trade increase? Leave no stone unturned...*

# Commissions – Univariate

## Tables 3 & 4

Days Since IPO	Commissions per Day				Trades per Day			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
-20 to -11	+	-			+			
-10 to -1				+				
+1 to +10		-						+
+11 to +20								
-20 to +20		-						+

  

Days Since IPO	Commission per Share				Frequency Commission > \$0.10			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
-20 to -11								
-10 to -1								
+1 to +10						+		+
+11 to +20								-
-20 to +20		+			+	+		

Note: Q4 is top quartile of IPOs based on money left on the table

# Univariate Findings and Caveats

- Estimate commission payments to lead underwriters increase by \$1.7 million in 10 days before a hot IPO
  - *Small compared to both \$221 million left on table and \$22 million in underwriting fees for average IPO in Q4*
  - *Lack of excess commission payments for Q2 & Q3 suggest role of short-term traders unique to bubble period*
- CSFB alleged to have received ex post commissions, some as high as \$3.15 per share
  - Evidence of ex post payments in sample of CSFB's 101 IPOs but no evidence of high per-share commissions
  - **Important Caveat:** *high per-share commission trades are “both readily identifiable and apparently illegal” ⇒ institutions may not have sent them to Abel/Noser for analysis*

# Commissions – Multivariate

## *Table 5*

- Regress abnormal commissions **[t-10,t-1]** on Profits, HHI, Offer Size, Scarcity, and two year dummies
  - Abnormal commission scaled by non-event comm.
  - Profits = actual first-day return + (offer - mid) / mid
    - *Why not treat as two separate variables?*
  - HHI = concentration of commission client base
- Commissions decrease with HHI (in all 8 spec.) and increase with Profits (in control sample)
  - Control sample restricted to 309 IPOs that fall outside [-10,-1] of event window of lead's other IPOs

# Calendar Time?

- Clustering of IPOs at lead underwriters through time  $\Rightarrow$  event dates are contaminated
  - Using execution data before 04.01.99 and after 12.31.01 to calculate non-event commissions ignores IPOs that occurred
  - Control sample approach not fully satisfying
- I'd like to see a calendar time specification
  - Aggregate across IPOs so that unit of observation is total commissions paid to lead underwriter  $k$  on day  $t$
  - Define profits as total profits of all IPOs during  $[t+1, t+10]$
  - Replace year fixed effects with month fixed effects
  - Add lead underwriter fixed effects (or cluster on lead?)

# Commissions and Allocations

## *Table 6*

- Most of the paper asks whether lead underwriters receive elevated commissions around hot IPOs
- Table 6 examines relative importance of L-T and S-T commission business in securing IPO allocations
  - IPO allocations do not appear as trades. However, if institution sells shares it didn't purchase, shares likely from IPO allocation
- Find evidence L-T and S-T both influence allocations, but that S-T most important for small institutions
- *“Small institution” defined based on payments from institution  $j$  to underwriter  $k$ . Why not use all trades?*
- *Should make some effort to control for bookbuilding*

# Things I'd Still Like to Know

- Do lead underwriters lose market share in post-bubble period?
- Do lead underwriters whose allocations respond more to S-T commissions lose more long-term relationships?
- Do lead underwriters that receive greater fraction of commissions from S-T investors leave more money on table / allow more underpricing? (Model assumes no.)
- Can you say anything about who the S-T traders are?
  - CalPERS vs. Putnam vs. Vanguard vs. Hedge Funds?
  - L-T traders with other lead underwriters?
- What stocks do S-T traders chose to trade?

# Conclusions

- Should you read this paper? **Yes**, but more for empirical results than theoretical predictions
- Provides new, more direct evidence on role of short-term trading dollars in IPO allocations
  - Incremental commissions focus on **[t-10, t-1]**
  - Little evidence of ex post or high per-share payments
  - Composition of L-T client base matters
- Need to place more emphasis on multivariate analysis and better control for clustering