WHY HIRE YOUR RIVAL? THE CASE OF BANK DEBT UNDERWRITING

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U.S. Debt Market & Financial Firms

- U.S. debt market – $33 trillion from 1979 to 2014
- Financials underwrite & place debt for other firms
  - Underwriting & advisor choice for non-financials studied
  - Reduce transaction and information costs
  - Certifies deals through reputation (Fang, 2005)
- Underwriting relationship for financials is unknown
  - ~32% of all U.S. debt is issued by financial firms
  - Most studies exclude financial firms' own issuances

Advisor Choice for Banks

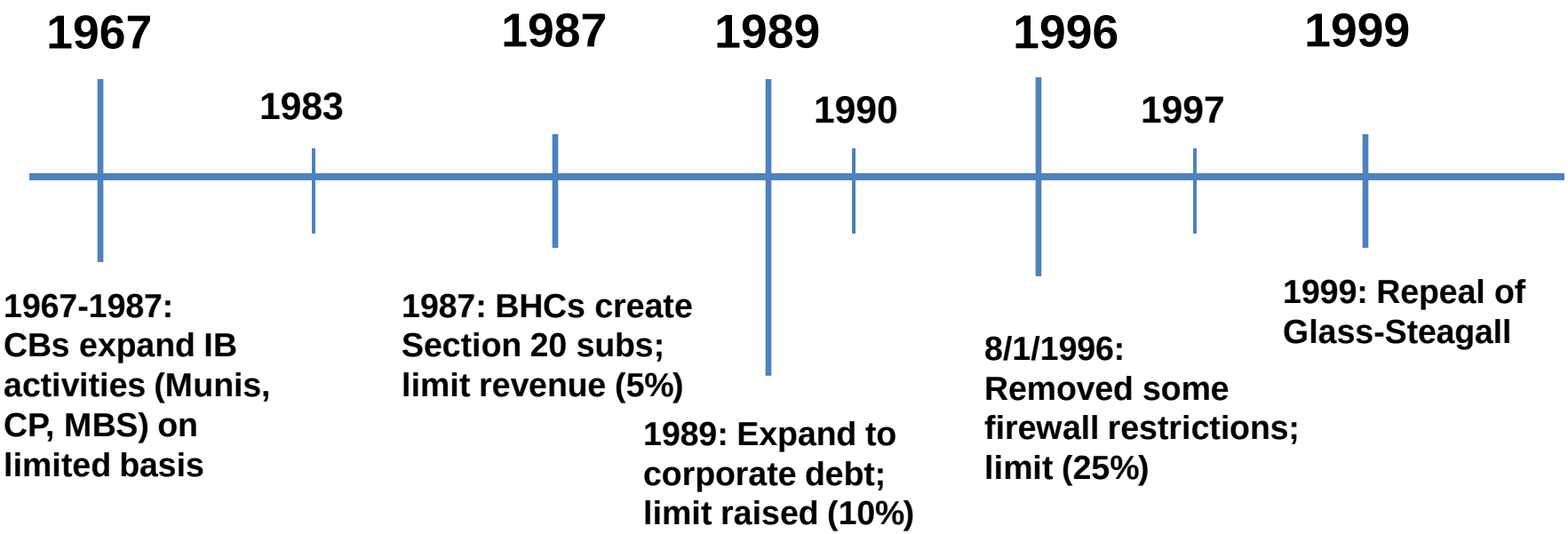
- Commercial and investment banks (“banks”) are different from other issuers
  - Only firms with the ability to self-underwrite
- Underwriting is a core business line for many banks
  - Constitutes between 10%-20% of non-interest revenue
- When banks do not self-underwrite → *hiring rival* (direct or indirect) to underwrite own debt
  - In 29% of debt deals, banks choose to hire a rival (largely not involved in *any* role)
  - Not limited to small, low-reputation, or commercial banks

Advisor Choice for Banks (cont.)

- Hiring a rival can be costly for bank issuers
  - Loss of market share and reputation rankings
  - Information-related costs
    - Hold-up problems (Rajan, 1992)
    - Reveal internal business strategies (Asker and Ljungqvist, 2010)
  - Underwriting fees
- Given costs, why do banks pervasively hire rivals?
  - Use deregulation to examine impact on bank behavior
  - Extant reasons categorized into expertise or information
  - Test these motivations, plus new bank-driven reasons

Ability and Capability

- **Ability**: legal/regulatory approval to underwrite debt
  - All investment banks have ability; post-1999 all CBs do



- **Capability**: Underwrite ≥ 1 debt offering for other firm
  - Removes banks unlikely to be proficient in debt underwriting

Deregulation

- Before deregulation, issuing debt for CBs costly
  - Commercial banks required to hire a rival
- After deregulation, cost of issuing debt declined
  - Increased competition from CBs (Gande, Puri, and Saunders, 1999; Kim, Palia, and Saunders, 2008; Song, 2004)
- Anticipated effects of regulatory shifts:
  - Banks more likely to increase debt issuances
    - Frequency of issues, total proceeds raised, bank leverage
  - Banks more likely to self-underwrite
- Examine debt issuances for all public firms
  - Identify if large CBs change behavior after deregulation

Impact of Deregulation

	Leverage		# Deals		Total Proceeds		Average Deal Size	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Intercept	0.366	0.406	0.084	0.125	3.818	3.897	3.734	3.772
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Large CB * pre 8/1/96	-0.057		0.987		2.288		1.300	
	(0.00)		(0.00)		(0.00)		(0.00)	
Large CB * post 8/1/96	0.057		2.107		4.073		1.965	
	(0.01)		(0.00)		(0.00)		(0.00)	
Large CB * pre 1999		-0.053		1.073		2.374		1.301
		(0.00)		(0.00)		(0.00)		(0.00)
Large CB * post 1999		0.091		2.257		4.499		2.242
		(0.00)		(0.00)		(0.00)		(0.00)
Year and Issuer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	15,356	15,356	22,824	22,824	22,824	22,824	22,824	22,824
Adjusted r^2	0.204	0.204	0.088	0.088	0.134	0.134	0.130	0.130
H_0: Pre-Deregulation	23.93	26.67	32.83	36.68	51.60	73.12	11.14	14.97
= Post-Deregulation	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)

Results robust to +/- 5 years around regulatory shifts and excluding non-financials

Data and Sample Construction

- Debt issuances from SDC, 1979-2014
  - U.S. domiciled publicly traded banks (CBs and IBs)
    - Initial sample: 17,311 debt deals; 1,117 firms
- Apply filters
  - Combine same day / type / advisor deals (Burch et al, 2005)
  - Remove deals with missing values / underwriters
  - Match to CRSP and Compustat
- Must be lead underwriter at least once
  - Sample firms all able and *capable* to underwrite debt
- Final sample: 9,760 debt deals for 60 banks
  - 57% IB versus 43% CB

Example of Banks

Firm Name	1st Lead	# Deals	Lead	Other	No Role	Type	Status
Bank of America Merrill Lynch	16-Nov-98	472	78.6%	4.2%	17.2%	CB	Still exists
Chase Manhattan Corp	15-Nov-82	198	37.9%	0.5%	61.6%	CB	Merged with JPM to form JPM Chase, 12-31-2000
Citigroup Inc	2-Nov-98	316	91.5%	3.2%	5.4%	CB	Still exists
Goldman Sachs	20-Jan-70	669	89.2%	0.0%	10.8%	IB	Still exists
JPMorgan Chase & Co	25-Jan-01	419	74.0%	0.0%	26.0%	CB	Still exists
Lehman Brothers	15-Jan-70	522	94.1%	0.2%	5.7%	IB	Filed for bankruptcy; acquired by Barclays, 9-22-2008
NationsBank Corp	1-Jun-91	306	26.8%	0.0%	73.2%	CB	Merged with Bank of America to form BankAmerica, 9-30-1998
Wells Fargo & Co	21-May-82	195	35.4%	0.0%	64.6%	CB	Still exists

What Motivates Advisor Choice?

- Prior literature focuses on non-financial firms
  - Expertise
    - Specialization (Boot and Thakor, 2000; Fang, 2005)
    - Reputation (Krigman, Shaw, and Womack, 2001)
  - Information
    - (+) Certification (Booth and Smith, 1986)
    - (+) Reduced information asymmetries (Sharpe, 1990; Bharath et al, 2007)
    - (-) Information spillover to competitors (Asker and Ljungqvist, 2010)
    - (-) Hold-up problem (Sharpe, 1990; Rajan, 1992; Ongena and Smith, 2000)

→ Motivations likely to apply to bank issuers as well

Hiring a Rival – Base Model

	All Banks		Issuer Ranked Top 10		Issuer Ranked Non-Top 10		
	(1)	(2)	(3)	(4)	(5)	(6)	
Intercept	0.446	0.466	0.025	0.064	0.873	0.990	
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	
International Deal	0.070	0.070	0.060	0.058	0.068	0.068	E
	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	
Private Deal	-0.143	-0.142	-0.032	-0.017	-0.205	-0.194	
	(0.00)	(0.00)	(0.25)	(0.53)	(0.00)	(0.00)	
Relative Deal Size	-0.500	-0.505	-0.828	-0.850	-0.415	-0.424	I
	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	
Log(Maturity)	0.024	0.024	0.024	0.024	0.017	0.019	
	(0.00)	(0.00)	(0.00)	(0.00)	(0.03)	(0.02)	
Debt Market Share$_{t-1}$		-0.005		-0.013		-0.089	E
		(0.05)		(0.00)		(0.00)	
Post-1999		-0.405		0.079		-1.093	
		(0.00)		(0.01)		(0.00)	
Year and Issuer FE	Yes	Yes	Yes	Yes	Yes	Yes	
N	9,760	9,760	6,199	6,199	3,561	3,561	
Adjusted r^2	0.573	0.573	0.220	0.224	0.400	0.402	

E = Expertise **I = Information**

Do Expertise and Information Matter?

Probability of Hiring a Rival	All Banks	Top 10	Non-top 10
	(1)	(2)	(3)
Panel A: Expertise			
Issuer International Expertise	-0.238 (0.00)	-0.185 (0.02)	-3.857 (0.04)
N	8,502	5,812	2,690
Adjusted r^2	0.598	0.233	0.410
Panel B: Certification			
Stock Volatility$_{t-1}$	0.392 (0.00)	0.469 (0.00)	-0.237 (0.41)
N	9,372	6,013	3,359
Adjusted r^2	0.576	0.239	0.405
Panel C: Relationship			
Rival Use$_{t-6m}$	0.232 (0.00)	0.096 (0.00)	0.124 (0.00)
N	9,760	6,199	3,561
Adjusted r^2	0.586	0.227	0.407
Panel D: Information			
Proprietary Trading	-0.223 (0.00)	-0.185 (0.00)	-0.685 (0.00)
N	9,515	6,193	3,322
Adjusted r^2	0.565	0.224	0.415

Controls: *int'l deal, private deal, maturity, relative deal size, prior year market share, post-1999, firm & year FE*

Bank-Specific Hypotheses

- Distributional network
  - Banks may not have sufficient ability to market an issue (Hansen and Torregrosa, 1992; Huang et al., 2008)
- Capacity constraints
  - May be limits to size or # deals banks can underwrite (Asker and Ljungqvist, 2010)
- Reputation (Rank manipulation)
  - Rankings important for banks
    - Based on underwriter proceeds or # of deals (Rau, 2000)
  - Underwriting own debt → raise own reputation?

Testing Bank-Specific Hypotheses (1)

	All Banks		Top 10		Non-Top 10	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Distributional Networks						
Asset Management Arm	-0.188		-0.185		-0.717	
	(0.00)		(0.00)		(0.00)	
Syndicate Size$_{t\text{-}6m}$		-0.004		-0.007		0.002
		(0.04)		(0.04)		(0.42)
N	9,515	9,760	6,193	6,199	3,322	3,561
Adjusted r^2	0.564	0.573	0.225	0.225	0.412	0.402
Panel B: Capacity and Reputation Decline						
Financial Debt Capacity$_{t\text{-}6m}$	-0.053		0.065		-0.015	
	(0.01)		(0.00)		(0.73)	
Rank$_t$ < Rank$_{t\text{-}1}$		0.028		0.021		0.089
		(0.00)		(0.00)		(0.00)
N	9,760	9,760	6,199	6,199	3,561	3,561
Adjusted r^2	0.573	0.574	0.225	0.225	0.402	0.406

Controls: *international deal, private deal, maturity, relative deal size, prior year market share, post-1999 period, firm and year fixed effects*

Testing Bank-Specific Hypotheses (2)

	All Deals	Rank 5 or 6	Rank 5, 6, 10, or 11	Rank 5, 6, 10, 11, 20, or 21
	(1)	(2)	(3)	(4)
Self > Difference	-0.001	-0.105	-0.072	-0.129
	(0.93)	(0.03)	(0.08)	(0.00)
N	9,760	1,339	1,762	1,914
Adjusted r^2	0.573	0.349	0.563	0.626

Controls: *international deal, private deal, maturity, relative deal size, prior year market share, post-1999 period, firm and year fixed effects*

Which Motivations Matter Most?

- Expertise, information, and bank-specific reasons all affect the decision to hire a rival
  - How important is each reason in determining advisor choice?
- Compute odds ratios from logistic regressions
  - For Top 10 banks
    - Prior stock volatility and financial debt capacity
  - For Non-Top 10 banks
    - Relative deal size and past rival use
- All banks benefit from rival use in international deals and when League Table ranking declines

Explicit Costs of Rival Use

- Are gross spread higher when using a rival?
  - On average, all banks (Top 10) pay 21 (40) bps more
  - Increases underwriting fees for all banks (Top 10) by 33% (63%) relative to unconditional gross spread (64 bps)

  → Suggests substantial costs to hire rival

- Do banks self-deal better terms?
  - Self-underwritten deals vs. underwriting client offerings
    - Approach used for real estate (Levitt and Syverson, 2008)
  - No difference in spreads, coupons, or yields for self-underwritten vs. PSM matched financial clients

Conclusion

- Explore undocumented advisor choice for banks
  - Examine reasons why U.S. banks hire rivals to underwrite their own debt offerings (~29% use rivals)
- Find evidence for expertise, information, and bank-specific hypotheses
  - Relative importance depends on bank quality
- Document evidence costly to use rivals
  - Alter behavior after deregulation, increase self-underwriting
  - Issuing bank faces potentially higher fees

→ Despite potential costs, banks extensively hire rivals