How do borrowers find their banks?

The value of individuals in bank relationship formation

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SFI Research Days

June 9, 2020

Anecdotal evidence

> [CEO Dan Ariens] approached his lender, LaSalle Bank, to see if it would ramp up his credit line. But LaSalle […] would never get the additional business.

(Chicago Tribune, February 18, 2008)

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> Ariens, in fact, ended up moving nearly all of his banking relationships to PrivateBancorp. The Chicago-based bank hired 56 managing directors in the fourth quarter, most of them from LaSalle, and posted a 12% increase in loans compared with the year-ago quarter.

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Ariens, in fact, ended up moving nearly all of his banking relationships to PrivateBancorp. The Chicago-based bank hired 56 managing directors in the fourth quarter, most of them from LaSalle, and posted a 12% increase in loans compared with the year-ago quarter.

"It felt natural to stay with the people we knew," [the CEO] said. ❞

(Chicago Tribune, February 18, 2008)

Motivation

Lending relationships:

- have a large impact on borrowers, e.g., impacting both the availability (Ioannidou, Ongena (JF, 2010)) and pricing of credit (Khwaja, Mian (AER, 2008))
- are a channel through which shocks to the banking system are transmitted to the real sector (e.g. Chodorow-Reich (QJE, 2014), Chodorow-Reich, Falato (2019))

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- hence, they ought to play a key role in matching borrowers to banks
- and frictions in the labor market for bankers have consequences in capital markets

Preview of findings

1. Banks recognize the ability of bankers to bring clients and poach them strategically:

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2. Bankers succeed in bringing their clients with them
   - After a banker switches to another bank, the likelihood of borrowers following the banker increases by 14% (ca. $3\times$ uncond. average)
   - These clients have significant value: Deal volume with these clients increases by 35%
   - New relationships are long lasting and extend to other financial products

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3. Frictions in the labor market have spillover effects into capital markets
    - Use gender discrimination lawsuits and absence of female directors as a proxies for less female friendly cultures
    - Banks with such culture lose female bankers and their clients

Literature review - Relationship lending

Relationship lending plays a key role for both banks and firms:

- The ability of banks to create information about their borrowers is at the core of banking (e.g. Berger and Udell, JofB 1995; Diamond, REStud 1984; Petersen and Rajan, JF 1994)
- The soft information of lending relationships is concentrated in individual bankers

  (e.g. Berger and Udell, EJ 2002; Liberti and Petersen, RCFS 2019; Herpfer, 2020)

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- The soft information of lending relationships is concentrated in individual bankers (e.g. Berger and Udell, EJ 2002; Liberti and Petersen, RCFS 2019; Herpfer, 2020)
- Banking relationships influence loan conditions and availability (e.g. Bharat, Dahiya, Saunders, Srinivasan, RFS 2011; Ongena and Smith, JFE 2001)
- Banking relationships transmit shocks from the financial to the real sector (e.g. Chava, Purnanandam, JFE 2011, Chodorow-Reich, QJE 2014, Chodorow-Reich, Falato, 2019)

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  (e.g. Chava, Purnanandam, JFE 2011, Chodorow-Reich, QJE 2014, Chodorow-Reich, Falato, 2019)

Therefore crucial to understand how these relationships form - we know surprisingly little !
What drives the formation of relationships between firms and banks?

- Endogenous matching between banks and borrowers (Schwert, JF 2018; Petersen and Rahan, QJE 1995)
- "Life cycle" of banking relationships (Ioannidou and Ongena, JF 2010)

Contribution - Role of bankers

Nascent literature on commercial bankers for large U.S. borrowers:

- Bankers play an important role in the lending process and form personal relationships with borrowers (Bushman, Gao, Martin, Pacelli (2019), Herpfer (2020))
- Spillover from lending to bankers' labor markets (Gao, Kleiner, Pacelli (RFS, 2020))
- Bankers curate their portfolio of clients (Frattaroli, Herpfer (2020))

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Our contribution:

- Show the important interactions between the labor market for bankers and capital markets for borrowers
- Contribute novel explanation how lending relationships are formed

Data

Data - Individual bankers

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the date first written above.

COMPANY:

[redacted] CORPORATION

By: /s/ K[redacted] P. A[redacted]

Name: K[redacted] P. A[redacted]
Title: Vice President and Chief Financial Officer

Notice Address:

[redacted]
San Francisco, CA 94111
Attention: Mr. K[redacted] P. A[redacted]
Vice President and Chief Financial Officer
Fax: (415) 398-1905

LENDERS:

WELLS FARGO BANK, NATIONAL ASSOCIATION, individually and as Administrative Agent

By: /s/ D[redacted] A. N[redacted]

Name: D[redacted] A. N[redacted]
Title: Vice President

Notice Address:

420 Montgomery Street, 9th Floor
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- Loans considered "material events"
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- Scrape all 8-K, 10-K, and 10-Q filings and use algorithm developed by Herpfer (2020) to obtain loan information:
  - Bank Name
  - Person Name
- Obtain personal relationships between banker and clients and identify bankers that switch their employer.
- From 1996 to 2013, we retrieve some 20,000 bankers that switch 1,047 times.
- ▸ Quality-check

Data - Example

Yr	*Banker*	*Bank*	*Firm*	*Banker hired*	*Client portfolio*
2000	*Joe*	*BofA*	*GM*	0	*GM*
2001	*Joe*	*BofA*	–	0	*GM*
2002	*Joe*	*BofA*	–	0	*GM*
2003	*Joe*	*BofA*	*HP*	0	*GM*; *HP*
2005	*Joe*	*JPMorgan*	*GM*	1	*GM*; *HP*
2006	*Joe*	*JPMorgan*	–	0	*GM*; *HP*
			...		
2009	*Joe*	*JPMorgan*	*3M*	0	*GM*; *HP*; *3M*

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2003	*Joe*	*BofA*	*HP*	0	*GM*; *HP*
2005	*Joe*	*JPMorgan*	*GM*	1	*GM*; *HP*
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			...		
2009	*Joe*	*JPMorgan*	*3M*	0	*GM*; *HP*; *3M*

In 2005 banker Joe switches from BofA to JPMorgan.
Crucially, he will bring over his "personal relationships" to GM and HP.

Finding I

Which bankers are being poached?

Finding I - Bankers with a more valuable client portfolio are more likely to switch

Dep. variable:	Banker hired (%)	
#Clients-Total$_{t-1}$	0.15***	
	(3.87)	
#Clients-Single contact$_{t-1}$		0.58***
		(4.14)
#Clients-Mult. contact$_{t-1}$		-0.14**
		(-2.10)
Observations	39,992	39,992
R-squared	0.21	0.22
Bank-Year FE	Yes	Yes

Dependent var.: Indicator for first year banker appears at new bank

Explanatory vars.: #Clients that a banker has in her portfolio at switch

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Bankers that have
relationships to more clients
are more likely to switch

+1 SD #Clients (4.29)
increases the chance that this banker switches to a competing bank by 0.65%
(+40% of the unconditional likelihood)

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This is especially true for single-contact clients where the banker is their only relationship

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The same holds for #Deals at the old bank

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Bank-Year FE	Yes	Yes

Banks seem to recognize the ability of bankers to bring new business

and are strategic in hiring the most valuable ones

Finding II

Does the new bank profit from the switch?

The perspective of the bank

- Take the perspective of the bank that hires the banker
- Define *Rel_acq* as an indicator for all firms with whom the hired banker has a connection from past employment, i.e., for whom the bank "acquires" a relationship
- Define *Initiation* as the first time, or the first time in more than 5 years, that a bank closes a deal with a firm
- *Deals* will be either syndicated loans (Dealscan), bond or SEO underwriting, or M&A advisory (CapitalIQ) for which the volume is available

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Do bankers succeed in bringing their previous clients with them at the new bank?

Finding IIa - Initiation

Dep. variable:	Initiation
Rel_acq	0.07**
	(2.37)
Observations	861,444
R-squared	0.03
Year FE	Yes
Firm & Bank FE	Yes
Firm-Bank FE	No
Bank-Year FE	No
Firm-Year FE	No

Acquiring a personal contact to a client makes it 7% more likely to initiate a new business relationship with him

This is economically meaningful, compared to the unconditional probability of 5.2%

Finding IIa - Initiation

Dep. variable:	Initiation	
Rel_acq	0.07**	0.09**
	(2.37)	(2.38)
Observations	861,444	861,444
R-squared	0.03	0.08
Year FE	Yes	Yes
Firm & Bank FE	Yes	No
Firm-Bank FE	No	Yes
Bank-Year FE	No	No
Firm-Year FE	No	No

Firm-Bank FEs absorb time-unvarying characteristics on the firm & bank level (size, culture, geography) and pair-specific characteristics (e.g., bank specialized in the firm's industry)

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Bank-Year FE	No	No	Yes
Firm-Year FE	No	No	No

Bank-Year FEs absorb changes in loan supply, e.g., a bank is hiring bankers because it wants to expand its operations

Finding IIa - Initiation

Dep. variable:	Initiation			
Rel_acq	0.07**	0.09**	0.13***	0.14***
	(2.37)	(2.38)	(3.58)	(3.80)
Observations	861,444	861,444	861,444	861,444
R-squared	0.03	0.08	0.10	0.42
Year FE	Yes	Yes	Yes	No
Firm & Bank FE	Yes	No	No	No
Firm-Bank FE	No	Yes	Yes	Yes
Bank-Year FE	No	No	Yes	Yes
Firm-Year FE	No	No	No	Yes

Firm-Year FEs absorb changes in loan demand, e.g., a firm taking out new loans to finance an acquisition

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Firm-Bank FE	No	Yes	Yes	Yes
Bank-Year FE	No	No	Yes	Yes
Firm-Year FE	No	No	No	Yes

Bankers are successful in bringing their old clients to the new bank

Finding IIb - Deal volume

Dep. variable:	Log Deal Volume			
Rel_acq	0.66***	0.72***	0.62***	0.35***
	(6.78)	(3.79)	(4.58)	(3.85)
Observations	809,173	809,173	809,173	809,173
R-squared	0.07	0.14	0.16	0.51
Year FE	Yes	Yes	Yes	No
Firm & Bank FE	Yes	No	No	No
Firm-Bank FE	No	Yes	Yes	Yes
Bank-Year FE	No	No	Yes	Yes
Firm-Year FE	No	No	No	Yes

But do these new clients also bring deals for the bank?

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Firm-Year FE	No	No	No	Yes

+1 SD in Rel_acq (0.06) correlates to an increase in deal volume of ca. 2%

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The boost in deals is attributable to both syndicated lending & bond underwriting.

The relationships acquired by the bank are long lasting and extend for years after the first deal.

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Bank-Year FE	No	No	Yes	Yes
Firm-Year FE	No	No	No	Yes

Robust to tight FE structure, to different definitions of *Rel_acq* (5yrs and absorptive), and to dropping the first observation of the banker at the new bank.

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Firm-Bank FE	No	Yes	Yes	Yes
Bank-Year FE	No	No	Yes	Yes
Firm-Year FE	No	No	No	Yes

The relationships a lender can acquire by poaching a banker have significant commercial value.

Finding III

Bankers' labor market frictions spill overs into capital markets

Labor market frictions

Do labor market frictions spill over into financial markets?

- Use gender as an example
- Particularly important in financial services where there are large gaps between the representation of men and women in leadership positions in banks (IMF, 2018)
- E.g., in our sample, none of the banks have a female CEO and only 19% of bankers are women
- Use labor discrimination lawsuits and an indicator for not having female directors as a proxy for a bank culture that is unfriendly towards women

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- E.g., in our sample, none of the banks have a female CEO and only 19% of bankers are women
- Use labor discrimination lawsuits and an indicator for not having female directors as a proxy for a bank culture that is unfriendly towards women

➔ Expect female bankers to leave unfriendly banks and take their client relationships with them.

Finding IIIa - Labor market frictions

Dep. variable:	Banker hired (%)
Empl. discrimination$_{t-1}$ $\times$ Female	2.79
	(0.96)
Empl. discrimination$_{t-1}$	-22.92*
	(-1.76)
Gender discrimination$_{t-1}$ $\times$ Female	
Gender discrimination$_{t-1}$	
No female director$_{t-1}$ $\times$ Female	
No female directorI_{t-1}	
Female	0.42
	(0.23)
Observations	3,308
R-squared	0.86
Prev. Bank FE	Yes
Bank and Year FE	Yes
Banker controls	No

Employment discrimination lawsuits have a positive but insignificant effect on female banker turnover

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	(0.96)	
Empl. discrimination$_{t-1}$	-22.92*	
	(-1.76)	
Gender discrimination$_{t-1}$ $\times$ Female		4.71**
		(2.08)
Gender discrimination$_{t-1}$		-17.90
		(-1.21)
No female director$_{t-1}$ $\times$ Female		
No female directorI_{t-1}		
Female	0.42	0.68
	(0.23)	(0.43)
Observations	3,308	3,308
R-squared	0.86	0.86
Prev. Bank FE	Yes	Yes
Bank and Year FE	Yes	Yes
Banker controls	No	Yes

Gender discrimination lawsuits have, as expected, a strong positive effect on the probability of female bankers leaving the bank...

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Empl. discrimination$_{t-1}$ $\times$ Female	2.79		
	(0.96)		
Empl. discrimination$_{t-1}$	-22.92*		
	(-1.76)		
Gender discrimination$_{t-1}$ $\times$ Female		4.71**	
		(2.08)	
Gender discrimination$_{t-1}$		-17.90	
		(-1.21)	
No female director$_{t-1}$ $\times$ Female			3.06*
			(1.74)
No female directorl_{t-1}			0.88
			(0.76)
Female	0.42	0.68	0.72
	(0.23)	(0.43)	(0.86)
Observations	3,308	3,308	552
R-squared	0.86	0.86	0.94
Prev. Bank FE	Yes	Yes	Yes
Bank and Year FE	Yes	Yes	Yes
Banker controls	No	Yes	Yes

... the same holds for having no women on the board of directors.

Finding IIIa - Labor market frictions

Dep. variable:	Banker hired (%)		
Empl. discrimination$_{t-1}$ $\times$ Female	2.79		
	(0.96)		
Empl. discrimination$_{t-1}$	-22.92*		
	(-1.76)		
Gender discrimination$_{t-1}$ $\times$ Female		4.71**	
		(2.08)	
Gender discrimination$_{t-1}$		-17.90	
		(-1.21)	
No female director$_{t-1}$ $\times$ Female			3.06*
			(1.74)
No female directorl_{t-1}			0.88
			(0.76)
Female	0.42	0.68	0.72
	(0.23)	(0.43)	(0.86)
Observations	3,308	3,308	552
R-squared	0.86	0.86	0.94
Prev. Bank FE	Yes	Yes	Yes
Bank and Year FE	Yes	Yes	Yes
Banker controls	No	Yes	Yes

Banks with a less friendly culture towards women are more likely to lose female bankers.

Finding IIIb - Capital market implications of the labor market frictions

Dep. variable:	Log Deal Volume		
	All	Lawsuit	No lawsuit
	(1)	(2)	(3)
Rel_acq $\times$ Female	0.19		
	(0.44)		
Rel_acq	0.36***		
	(3.75)		
Observations	809,173		
R-squared	0.51		
Firm-Bank FE	Yes		
Bank-Year FE	Yes		
Firm-Year FE	Yes		

In the full sample there is no significant difference between the deal volume generated with relationships of female and male bankers

Finding IIIb - Capital market implications of the labor market frictions

Dep. variable:	Log Deal Volume		
	All	Lawsuit	No lawsuit
	(1)	(2)	(3)
Rel_acq $\times$ Female	0.19	-0.40	0.84*
	(0.44)	(-0.76)	(1.85)
Rel_acq	0.36***	0.55*	0.35***
	(3.75)	(2.26)	(3.27)
Observations	809,173	79,918	647,276
R-squared	0.51	0.61	0.53
Firm-Bank FE	Yes	Yes	Yes
Bank-Year FE	Yes	Yes	Yes
Firm-Year FE	Yes	Yes	Yes

... however, banks that are not involved in a gender discrimination lawsuit, profit more when a woman is hired.

Finding IIIb - Capital market implications of the labor market frictions

Dep. variable:	Log Deal Volume		
	All	Lawsuit	No lawsuit
	(1)	(2)	(3)
Rel_acq $\times$ Female	0.19	-0.40	0.84*
	(0.44)	(-0.76)	(1.85)
Rel_acq	0.36***	0.55*	0.35***
	(3.75)	(2.26)	(3.27)
Observations	809,173	79,918	647,276
R-squared	0.51	0.61	0.53
Firm-Bank FE	Yes	Yes	Yes
Bank-Year FE	Yes	Yes	Yes
Firm-Year FE	Yes	Yes	Yes

It seems that, on the margin, having a female friendly culture allows banks to hire the more valuable female bankers.

Conclusion

We investigate the role of individual bankers in the formation of bank-borrower relationships.

- After bankers switch to a new bank, their former clients are $3\times$ as likely to initiate a new lending relationship with that lender, compared to the unconditional mean
- The newly acquired borrowers bring an increase in deal volume across various product groups, and this increase is long-lasting
- We provide one specific application using gender culture as labor market friction: Female bankers are leaving banks with female-unfriendly cultures and shift significant business to competing banks.

Thank you!

Appendix

Data - Individual bankers: Quality assurance

Randomly sample 100 contracts to check quality of data:

- 65% of contracts feature signatures, other contracts are dropped
- 80% of signatories are extracted successfully

Talk to various bankers in commercial lending

- Authorization of signature only for high ranking bankers
- Bankers that sign are the ones negotiating
- Titles are at the level of junior seniors
- LinkedIn search: Relationship bankers, commercial bankers

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