



The Total Costs of Corporate Borrowing: Don't Ignore the Fees

(Tobias Berg, Anthony Saunders, Sascha Steffen)

May 2013

Cost of borrowing = Interest rate ?

Motivation

- Fees are an important part of syndicated loans
 - >80% of syndicated loan contracts contain at least one fee type
 - Fees can exceed interest payments for some loans

- Prior research focuses on All-In-Spread-Drawn (AISD)
 - Ignores several important fee types
 - Only aggregate

Research questions

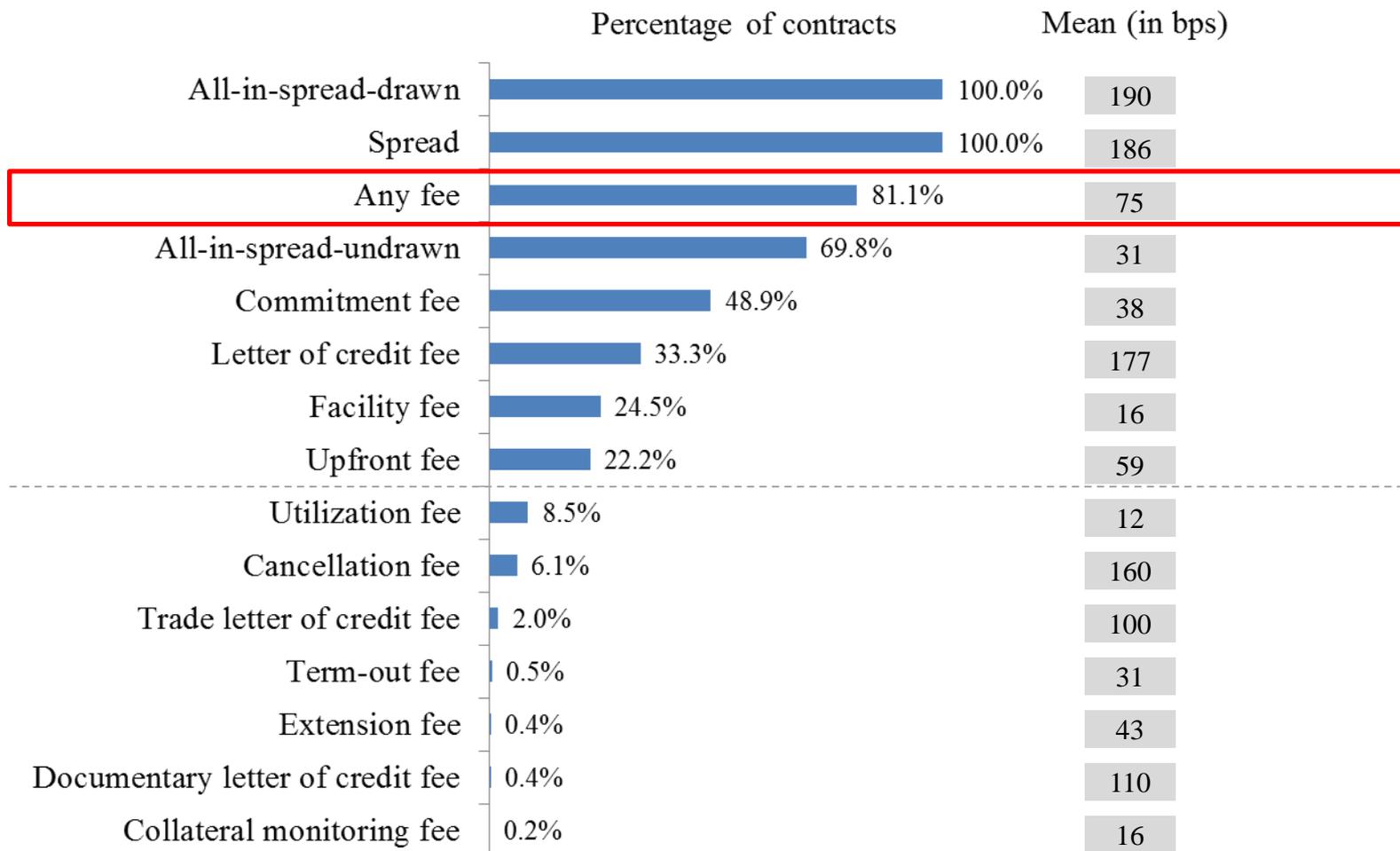
1. How does the „anatomy“ of syndicated loan fees look like?
2. Do relationship benefits extend to fees?
Are relationships relevant for the pricing structure (fees versus spread)?
3. What is a good measure for the total cost of borrowing?

Agenda

- The “anatomy” of syndicated loan fees
- Fees and relationship lending
- A novel measure: „Total Cost of Borrowing“

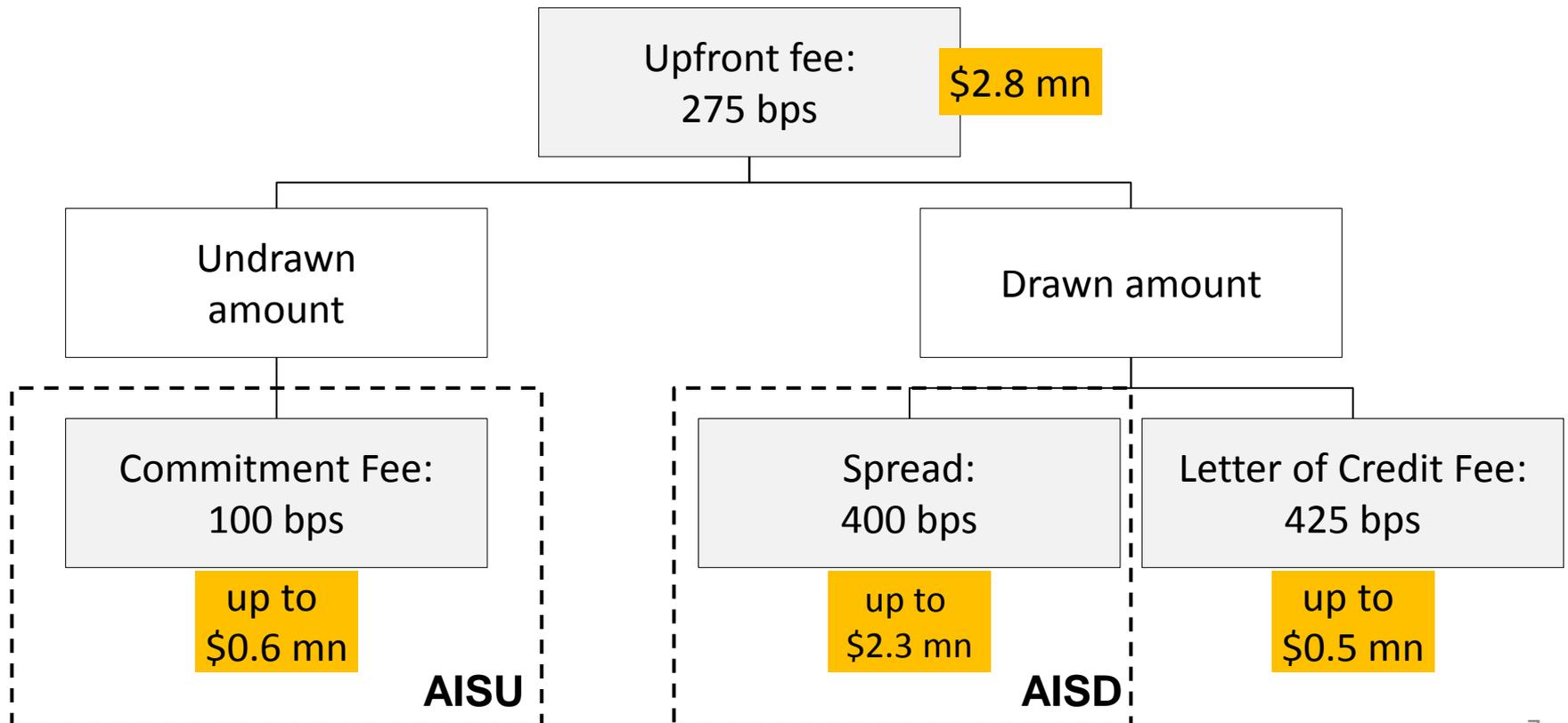
Frequency and magnitude of fees

U.S. syndicated loans, 1986-2011



Example: Eddie Bauer

Eddie Bauer, 18Jun2009, 7-months USD 100mn revolving loan,
USD 20mn letter of credit sublimit



Generic example of revolver fees

Setting up line of credit: Upfront fee

Use line of credit: Spread

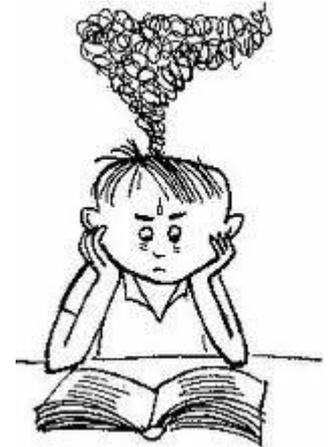
Not use line of credit: Commitment fee

Fee independent of usage: Facility fee

Usage above/below certain threshold: Usage fee

Extending line of credit: Extension fee

Cancelling line of credit: Cancellation fee



Fees / Stylized facts: Company size

	(1)	(6)
Variable	AISD	Upfront fee
Size		
Total assets < median	217.56	54.39
Total assets > median	148.18	59.33
Difference	-69.38*** (-44.08)	4.94*** (2.66)

- AISD decrease with size
- Inverse relation for upfront fees: Upfront fees increase with size
→ syndication and concentration risk

Agenda

- The “anatomy” of syndicated loan fees
- Fees and relationship lending
- A novel measure: „Total Cost of Borrowing“

Hypothesis 1:

Do relationship borrowers pay lower fees?

Data: LPC Dealscan and Compustat

- 24,719 syndicated loan facilities from 1986-2011
 - U.S., LIBOR based, borrower characteristics and key price terms available
 - 7,760 term loans, 16,959 revolver loans
- Mean price terms
 - AISD = 190 bp, AISU = 31 bp, Spread = 186 bp
 - Facility fee = 16 bp, Commitment fee = 38 bp, LC fee = 177 bp, Upfront fee = 59 bp
- Mean non-price terms
 - Facility amount: USD 355 mn, Maturity: 49 months
- Mean borrower characteristics
 - Total assets: USD 4.3 bn, Rated: 0.44, IG-rated: 0.49

Regression set-up

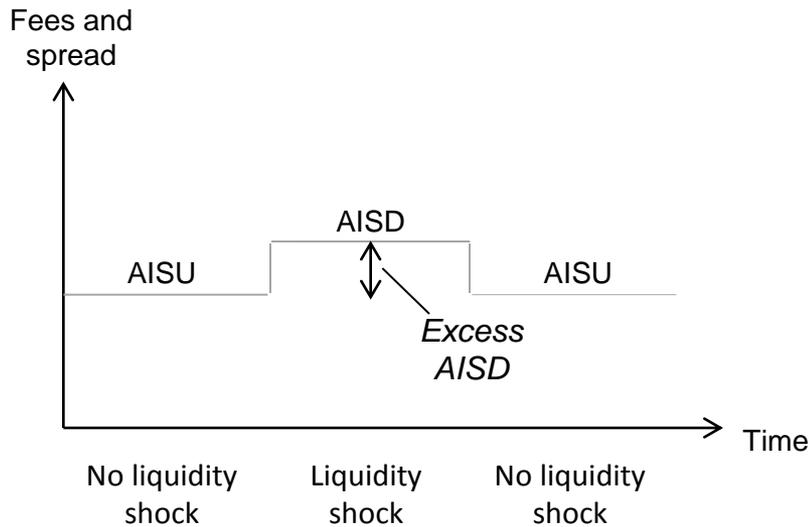
- Multivariate regression
 - Dependent variables: AISD, AISU, Spread, FacFee, CommFee, UpfrontFee, LCFee
 - Key variable of interest: Relationship dummy
 - Sample: 1) All facilities, 2) Term loans, 3) Revolver
 - Regressions on facility level, SEs clustered by borrowing firm
- Definition of relationship loan as in Bharath et al. (2009)
 - Binary measure, equal to 1 if lead arranger of the current facility has provided a syndicated loan to the same borrower during the prior five years
- Control variables
 - Non-Price terms: $\text{Log}(\text{FacilityAmount})$, $\text{Log}(\text{Maturity})$, Secured, SoleLender, SyndicateSize, LeadSize
 - Borrower characteristics: $\text{Log}(\text{TotalAssets})$, $\text{Log}(1+\text{Coverage})$, Leverage, Profitability, Tangibility, Current ratio, Market-to-Book
 - Fixed effects: Year, LoanPurpose, LoanType, OneDigitSIC, Rating

Relationship effects: All facilities

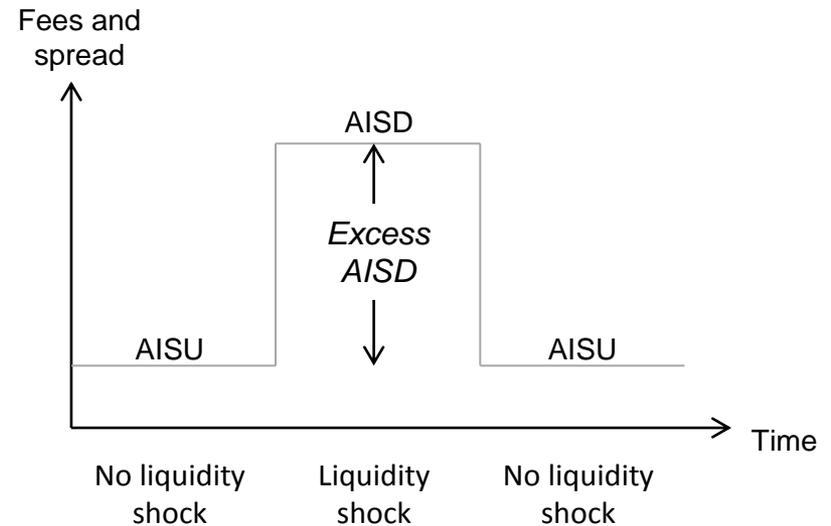
Dependent	AISD	AISU	Spread	FacFee	ComFee	UpfrFee	LC-Fee
Rel(Dummy)	-10.63***	-0.24	-10.95***	1.01**	-0.64	-15.99***	-6.29***
<i>Uncond. Mean</i>	190 bps	31 bps	186 bps	16 bps	38 bps	59 bps	177 bps
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.61	0.57	0.62	0.51	0.40	0.34	0.57
N	18,433	13,451	18,433	5,134	8,987	3,987	6,361

- Relationship effect on AISD very similar to prior literature (eg Bharath et al. (2009)).
E.g. 11 bps translate into USD 0.4mn per annum for average loan size of 355 mn
- Effect on facility fee and commitment fee much lower (→ see liquidity insurance)
- Scope of relationship benefit extends beyond spreads: Upfront fees → appr. USD 500,000 relationship benefit for average loan size

Research Question 2: Liquidity insurance



(A) High level of smoothing

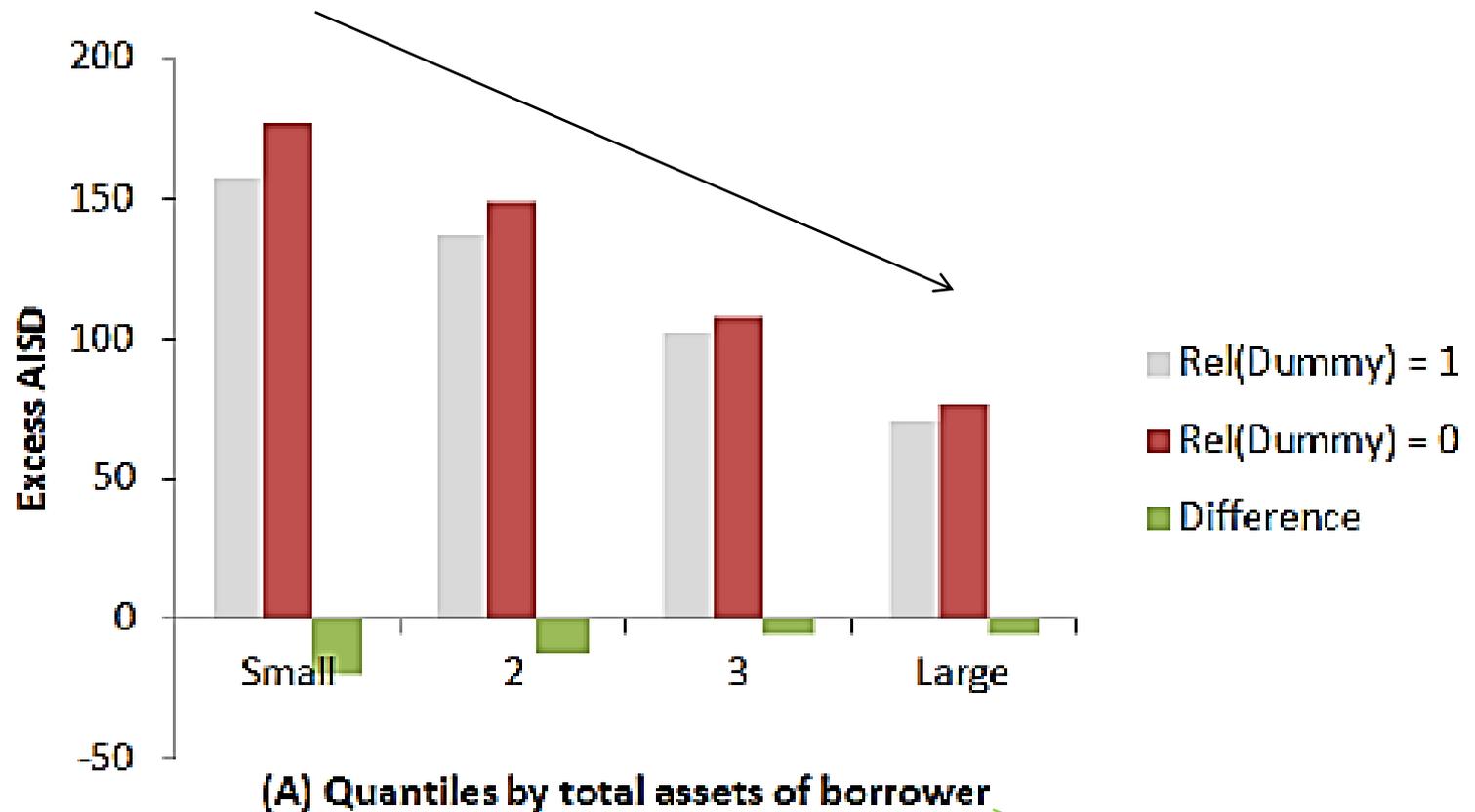


(B) Low level of smoothing

Relationship customers

Non-Relationship customers

Liquidity insurance hypothesis: Univariate



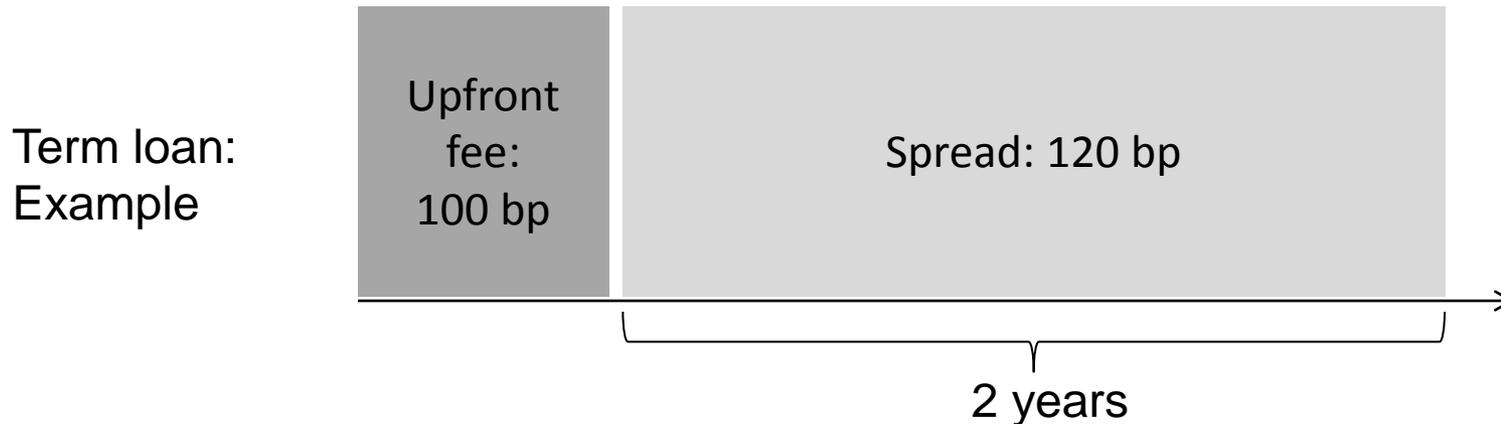
Liquidity insurance hypothesis: Regression

Variables	(1) Excess AISD	(2) Excess AISD	(3) Excess AISD	(4) Excess AISD
REL(Dummy)	-4.728*** (-3.18)	-30.068*** (-5.64)	1.142 (0.52)	-8.306*** (-4.33)
REL(Dummy) x Log(Total Assets)		4.257*** (5.19)		
REL(Dummy) x Not rated			-9.119*** (-3.11)	
REL(Dummy) x No. of analysts				0.749*** (3.94)
Log (Total Assets)		-8.648*** (-7.45)		
Not rated			-20.294** (-2.34)	
No. of analysts				-0.955*** (-4.85)
Controls for price terms	Yes	Yes	Yes	Yes
Controls for borrower characteristics	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Loan purpose fixed effects	Yes	Yes	Yes	Yes
Loan type fixed effects	Yes	Yes	Yes	Yes
One-digit SIC code fixed effects	Yes	Yes	Yes	Yes
Borrower credit rating fixed effects	Yes	Yes	Yes	Yes
Loan type fixed effects	Yes	Yes	Yes	Yes
Observations	13,257	13,257	13,257	13,257
R-squared	0.61	0.61	0.61	0.61
Adj. R-squared	0.61	0.61	0.61	0.61

Agenda

- The “anatomy” of syndicated loan fees
- Fees and relationship lending
- A novel measure: „Total Cost of Borrowing“

Total cost of borrowing: Term loans



AISD

$$\text{AISD} = 120 \text{ bp}$$

Total cost of
borrowing (TCB)

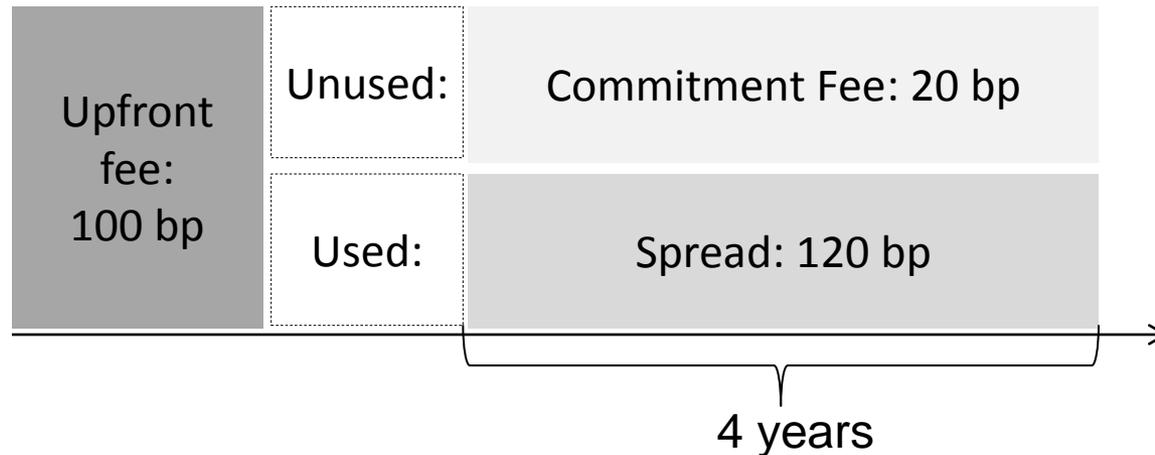
$$\text{TCB} = 100 / 2 + 120 = 170 \text{ bp}$$

Predictions:

- $\text{TCB} > \text{AISD}$
- Relationship benefits $\text{TCB} > \text{Relationship benefits AISD}$

Total cost of borrowing: Revolver

Revolver :
Example



AISD

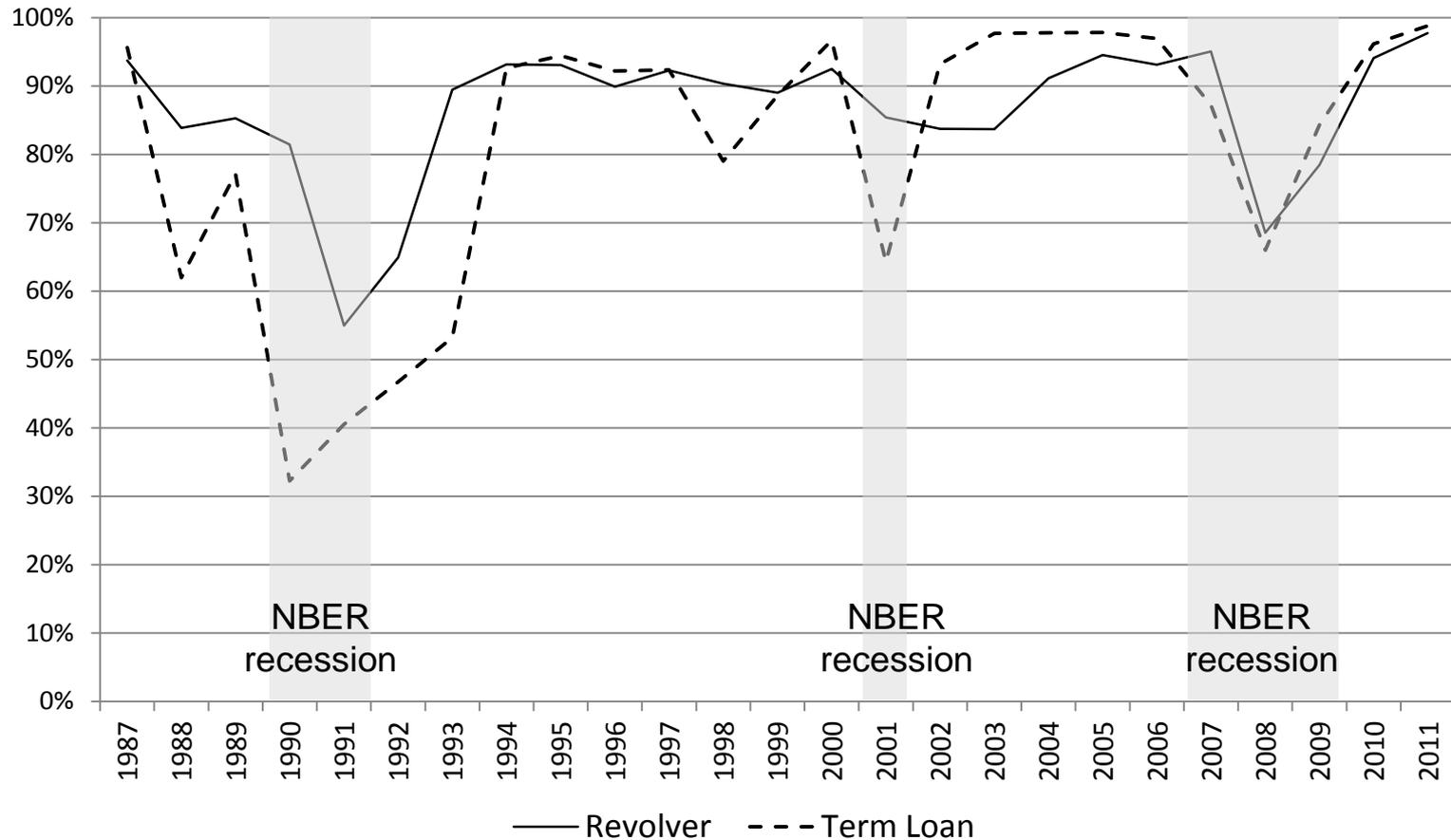
$$\text{AISD} = 120 \text{ bp}$$

Total cost of
borrowing (TCB)

$$\text{TCB} = 100 / 4 + 43\% * 20 + 57\% * 120 = 102 \text{ bp}$$

Drawdown ratio = 57% based on Mian and Santos (2012)

TCB and AISD: Cross-sectional correlation



Loan cost differentiation occurs to a significant extent through fees, in particular during recessions

Conclusions

- Fees are an important part of corporate borrowing
- Ignoring fees underestimates the benefits of relationship lending
- Evidence for a liquidity insurance hypothesis, stronger for opaque borrowers
- We develop a new measure for the total cost of borrowing („TCB“-measure). TCB produces higher costs of borrowing than has hitherto been recognized in the academic literature to date

In short: Don't Ignore the Fees