Why are almost all ABCP vehicles sponsored by non-U.S. banks?

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These slides discuss very preliminary results of ongoing work. They represent only the authors' current opinions as of mid-December 2007, not those of the Board of Governors or the Federal Reserve System.

What does "all ABCP Vehicles" Mean?

- *NOT* "all"
- Almost all of those that engage primarily in fixed-income arb investment strategies.
- We ignore multi-seller and single-seller vehicles, some others.

Flight from ABCP → Global money market shock

- ABCP vehicles have formal and informal funding backstops, mostly from sponsors.
  - "Sponsor" is entity, usually a bank, creating vehicle.
- We focus on ABCP vehicles that invest largely in asset-backed securities.
  - Securities arb, hybrid, SIV. $485b CP. $785b assets.
- At least 2/3 of the CP they issue is in USD
- But 80% of assets are in European-sponsored vehicles. Without Citi, over 90%.
- Sponsors not naturally funded in USD suddenly needed large amounts of USD to downstream to their vehicles. Big money market disruption.

Q: Why the geographic imbalance in sponsorship of vehicles?

- Only somewhat of an exaggeration:
  - European banks (and Citi) set up fixed-income arb hedge funds to invest in U.S. ABS
  - Funding was largely in the U.S. CP market
- If it was a fundamentally attractive USD business, why not more U.S. sponsors?
- Important to know:
  - Policy response to money market disruption arguably easier if most sponsors had been U.S. banks.
  - Without knowing more about why vehicles were sponsored, it is hard to project the impact of potential policy proposals (we know of none yet, but it's early).

Empirical Setup

- Probit:
  SponsorBankYN = f(bank chars, country chars)
- Only Sec. Arb., Hybrid, SIV vehicles (35% of global ABCP outstanding)
  - Ignore Canada, unusual domestic market.
- Only bank-sponsored vehicles
- Only U.S. and EU15+NOR,CHE banks with $25 billion or more total 2006 assets (captures nearly all global sponsors)

Country distribution of banks

	Banks by Country		
	Not sponsoring ABCP programs	***Sponsoring ABCP programs***	***Total***
Austria	6	0	6
Belgium	2	2	4
Denmark	1	1	2
Finland	2	0	2
France	14	2	16
Germany	15	13	28
Greece	5	0	5
Ireland	4	0	4
Italy	14	2	16
Luxembourg	1	0	1
Netherlands	5	3	8
Norway	1	0	1
Portugal	3	0	3
Spain	6	1	7
Sweden	4	0	4
Switzerland	7	0	7
United Kingdom	4	6	10
United States	29	7	36
Total	123	37	160

Who are those guys?

- ABN Amro, Santander, Barclays, Commerzbank, Danske, Deutsche, Dresdner, Fortis, HBOS, HSBC, Natixis, Nordbank, ING, Intesa SanPaolo, Lloyds TSB, Rabobank, RBS, Societe Generale, Standard Chartered, Unicredito and 9 Landesbank or similar
- BofA, BoNY, Citi, JPMC, Marshall&Isley, State Street, Zions, (Wachovia)

Global banks that refrained

- BBVA, BNP Paribas, Credit Agricole, Credit Suisse, Nordea, UBS
- Why not more? Because arguably other large banks in the sample are not global in the same way as those named.

Preview the conclusion

- Evidence most consistent with:
  – Large banks that are prolific debt underwriters found the vehicles profitable at spreads prevailing in the market.
  – Therefore most of them did it.
  – Relatively few such banks are from the U.S.
- We are still striving to understand why only some had large vehicles.

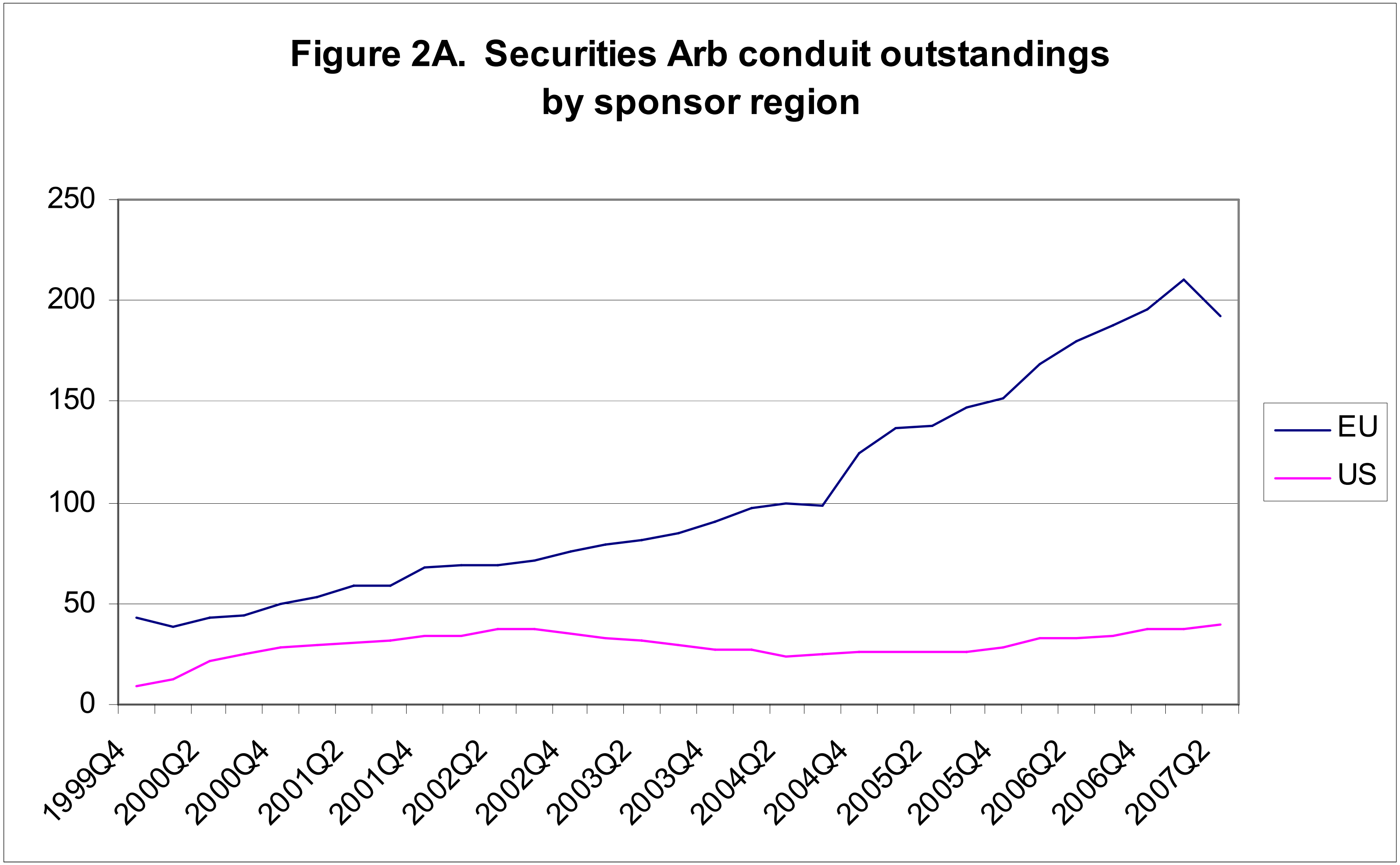
Sketch Hypotheses

- Note: We wish to explain the geographic imbalance of sponsorship, not the existence of the vehicles.
- Differing accounting or regulatory treatment
- Low profitability in Europe, reach for yield
- Economies of scale and scope
- Country-level financial structure & bank supervision

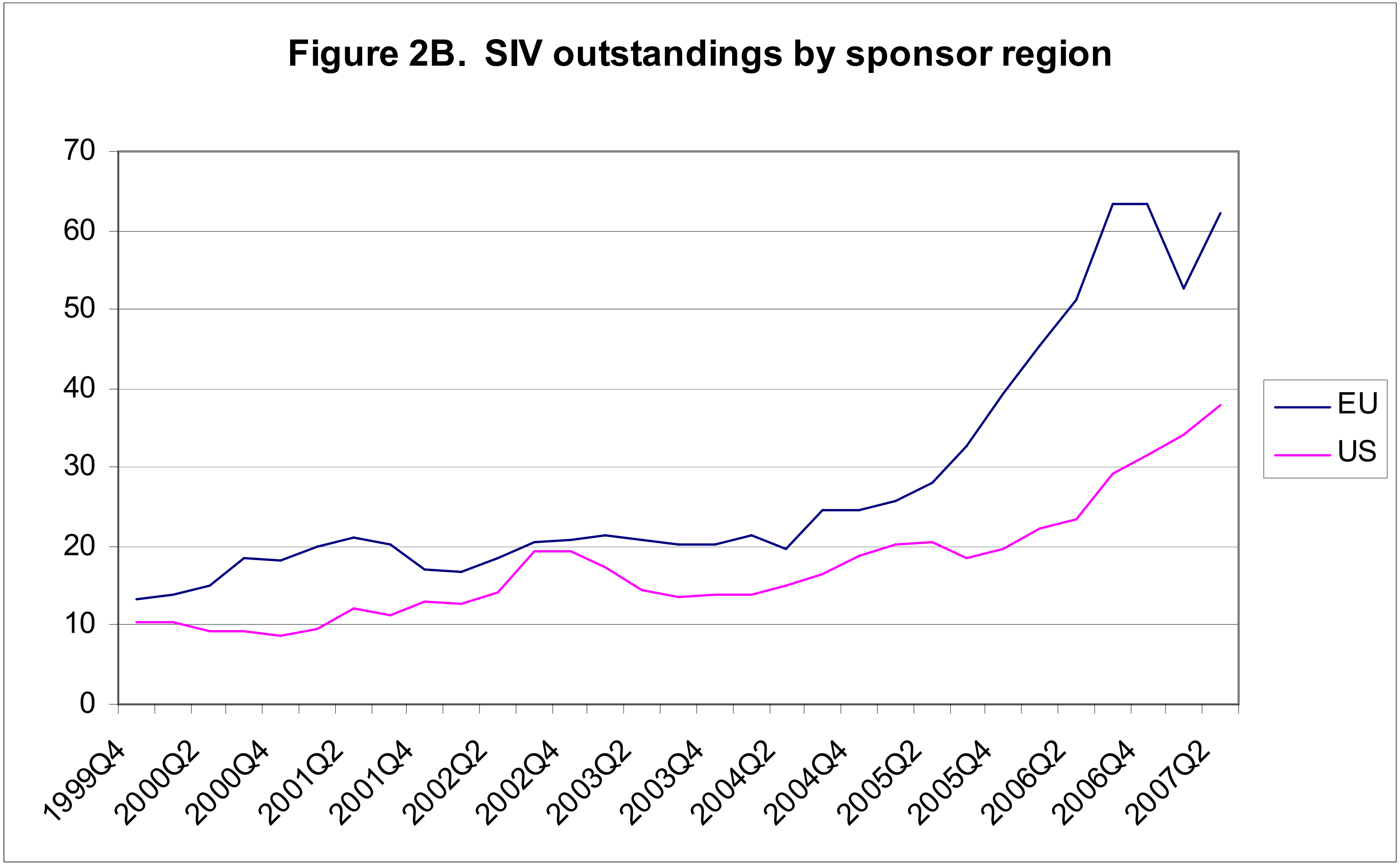
Accounting or Regulatory? Sniff tests

- Not accounting. Vehicles are consolidated in Europe much more frequently than in U.S.
- The U.S. did implement much more stringent regulatory capital requirements for backstops (2004) and credit enhancements (2001).
  - But Citi was able to structure to get low requirement
  - And Basel 2 will implement in EU treatment roughly similar to current U.S. regulations.
  - Geographic imbalance in vehicle growth accelerated after Basel 2 agreement; should have slowed if capital treatment is the explanation.

Securities arb growth path (hybrid similar)



SIV growth path



Probit results

Dependent Variable:	Sponsoring an ABCP Program=1							
Profitability Measure:	***ROA***	***ROE***	***ROA***	***ROE***	***ROA***	***ROE***	***ROA***	***ROE***
	(1)	***(2)***	***(3)***	***(4)***	***(5)***	***(6)***	***(7)***	***(8)***
Profitability	-0.048	-0.011*	0.015	-0.008*	-0.118	-0.012***	-0.027	-0.006*
	[0.094]	[0.006]	[0.067]	[0.004]	[0.104]	[0.004]	[0.051]	[0.003]
Log of Assets	0.175***	0.184***	0.166***	0.174***	0.164***	0.168***	0.163***	0.167***
	[0.044]	[0.046]	[0.045]	[0.050]	[0.044]	[0.045]	[0.038]	[0.039]
Equity to Assets	-0.001	-0.004	-0.016	-0.013	-0.01	-0.022*	-0.013	-0.016
	[0.013]	[0.013]	[0.014]	[0.015]	[0.013]	[0.013]	[0.012]	[0.012]
Loans to Assets	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]
Dum. Global Bonds Ranking	-0.174***	-0.166***	-0.143***	-0.144***	-0.140***	-0.130***	-0.123***	-0.123***
	[0.051]	[0.053]	[0.039]	[0.043]	[0.034]	[0.036]	[0.037]	[0.039]
Dum. Global ABS Ranking	0.631***	0.617***	0.575***	0.557**	0.547**	0.534**	0.532**	0.525**
	[0.223]	[0.239]	[0.212]	[0.229]	[0.235]	[0.256]	[0.246]	[0.259]
Dummy US					0.289**	0.287***	0.863***	0.851***
					[0.143]	[0.110]	[0.219]	[0.233]
Priv. Credit Dep. Banks to GDP			0.001	0.001			0.003*	0.003
			[0.001]	[0.001]			[0.002]	[0.002]
Stock Market Cap.			0.000	0.000			-0.001	-0.001
			[0.001]	[0.001]			[0.001]	[0.001]
Private Bond Market Cap.			0.003***	0.003***			-0.001	-0.001
			[0.001]	[0.001]			[0.002]	[0.002]
Real GDP Growth			-0.057	-0.035			-0.071**	-0.059**
			[0.040]	[0.035]			[0.030]	[0.026]
Observations	159	159	158	158	159	159	158	158
Countries	18	18	17	17	18	18	17	17
Pseudo R2	0.376	0.392	0.41	0.417	0.404	0.422	0.451	0.456

Robust standard errors in brackets
*** p<0.01, ** p<0.05, * p<0.1

Main probit points

- Dummy for U.S. should be negative and significant if regulatory capital is the main cause, but it is positive and usually not significant. We view as strong evidence against regulatory hyp.
- Profitability has a negative effect, but not robust.
- Size matters a lot, but maybe not among the very large (minimum scale)
- Prolific underwriters of ABS much more likely to sponsor (economies of scope). Of bonds?

Some robustness checks

- Same if just European banks in sample. But no predictability if just U.S. banks.
- Same if eliminate all German banks, or all the Landesbanken.
- Few significant variables if dependent variable is just SIV sponsorship.

The story we see at the moment

- The great majority of global banks viewed the vehicles as offering good risk-adjusted returns through mid-2007, so they sponsored. The U.S. has relatively few such banks (U.S. investment banks are not in our sample).
- Fixed costs make vehicles unprofitable for small banks (fixed costs of setup and operation, plus most sponsors do not want their conduits to be large relative to bank).
- Debt underwriting activity gives skills that can be applied in running vehicles (economy of scope).

Preliminary preliminary preliminary

- We are early in the empirical analysis. Some predictors are not yet in the data.
- The data are still dirty.
- There are econometric problems.
- We have not yet modeled vehicle size choices. Obviously big vehicles are much more important than tiny ones.