

# Financial Globalization and Domestic Regulatory Adoption of Basel I

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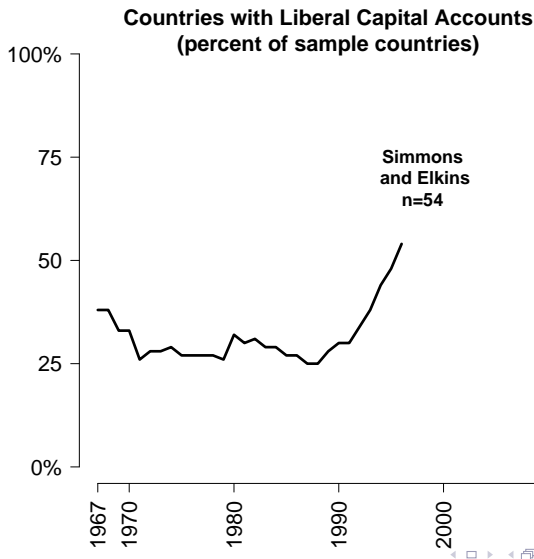
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# Financial liberalization and financial regulation

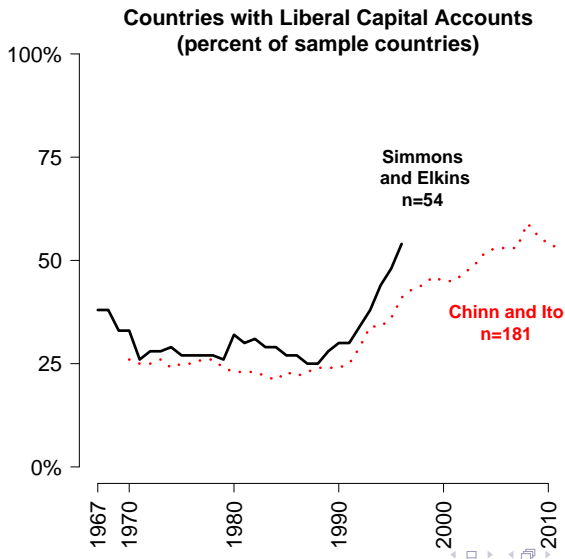
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- Era of “financial liberalization” (capital control liberalization)

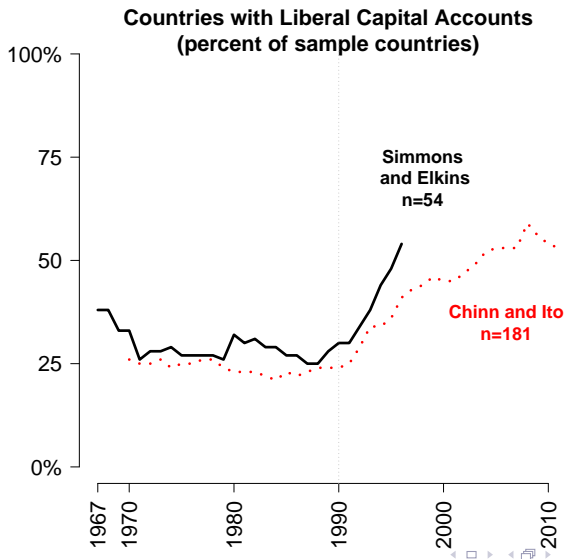
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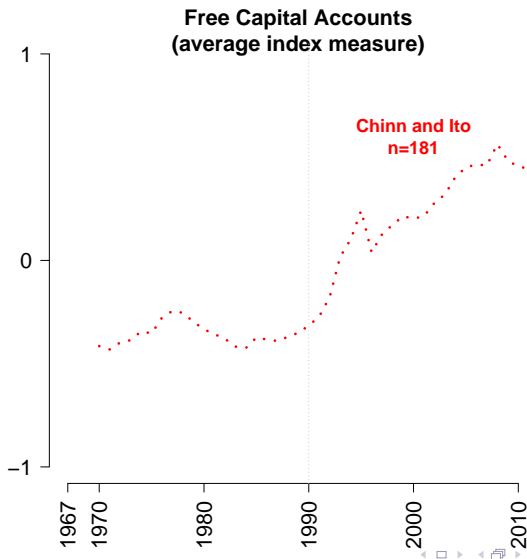
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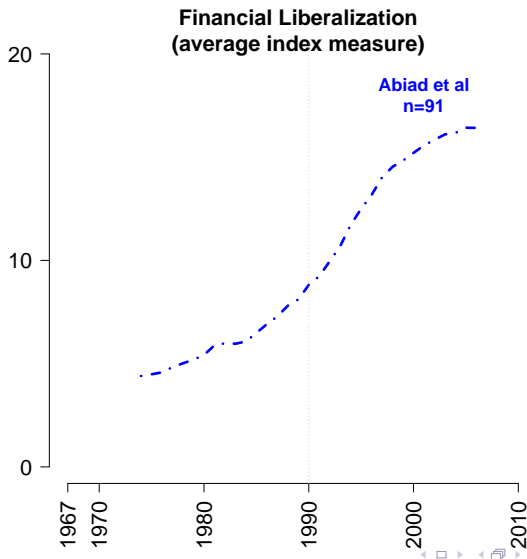
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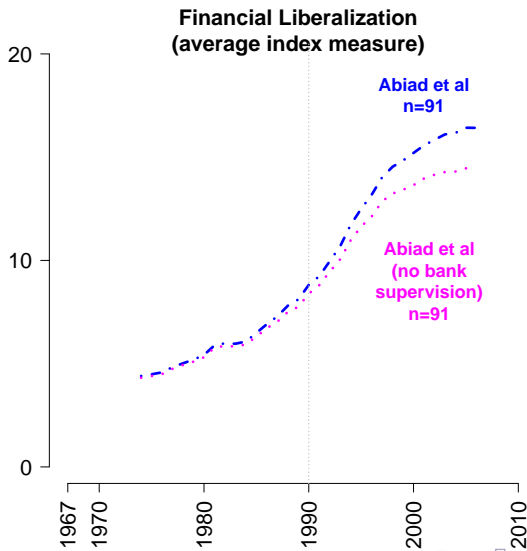
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# Financial liberalization and financial regulation

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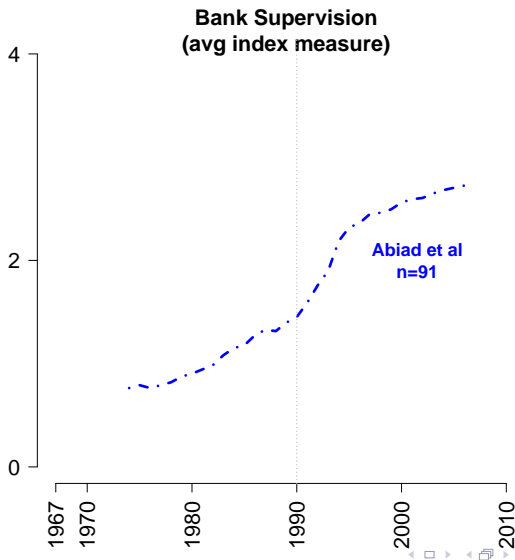
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But:

- Indications that more countries adopt financial regulations

# Financial regulation, too!



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But:

- Indications that more countries adopt financial regulations

Puzzle: Why do countries adopt international financial regulations?

# Why do countries adopt international financial regulations?

## **Dilemma:**

Meaningful measures of financial regulations are difficult to document

- Set at national level
- No international reporting
- (Largely) non-comparable

## **Solution / opportunity:**

Draw evidence from widespread adoption of Basel I (1988)

# Overview

- Puzzle: widespread adoption of Basel I
- Argument: international organizations' shadows (e.g. IMF)
- Existing arguments: "reputation"

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- Original data
  - Basel I adoption year, 143 countries, 1988–2013

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- Analysis
  - Conditional importance of IMF (over full period only)
  - Less evidence of systematic role of reputation



# Overview

- Puzzle: widespread adoption of Basel I
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- Analysis
  - Conditional importance of IMF (over full period only)
  - Less evidence of systematic role of reputation
- Conclusions
  - Call to specify mechanisms of diffusion

# Basel I background

Solved a cooperation problem

- 1988 coordinated **increase** of regulatory stringency
- Basel Committee on Banking Supervision (BCBS) members
  - 12 rich, *advanced* countries
  - Neglected non-BCBS countries (Goodhart 2011)
  - No BCBS expansion, formal ratification, etc.

Why did non-BCBS members adopt Basel?

# Logic of Basel I adoption

Regulatory jurisdictions:

- International regulation exists (Basel I)
- Home country rule (Kapstein 1994)
  - Each bank's headquarter location determines its regulator
  - To operate abroad, a bank complies with *both* home country regulations *and* required host country regulations

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Country regulatory decision:

- Adopt Basel I into domestic regulations? (y/n)
  - If adoption, then all national banks **must comply**
  - If no adoption, then **each bank decides** whether or not to comply

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Banks:

- May decide to comply even without home country regulation
- Compliance imposes costs, but enables international operations
- **To comply, banks do not need their home country to adopt!**

# Logic of Basel I adoption

- **Bank-level compliance** determines international operations
- Competitive preferences among different types of banks
- Puzzle: If banks can decide to comply on their own...  
...why would *countries* adopt at the **national level**?

# Why do *countries* adopt at the national level?

- 1997 Basel Core Principles (BCP)
  - Package of international best practices includes Basel I
  - International Monetary Fund (IMF) monitors, reports on BCP
- Non-BCBS countries still have no obligation to adopt

## **Argument: International organizations encourage adoption**

- Countries with IMF interactions systematically adopt
- More broad than direct conditionality
- Ongoing interactions, cooperation with IMF

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*H1: Countries engaged with international development organizations are more likely to adopt international rules.*



# Why do *countries* adopt at the national level?

- **Alternative / existing argument:**  
**Adopt to avoid reputation as weakly regulated**
  - Simmons (2001), Ho (2002), Tarullo (2008), Goodhart (2011)

Simmons (2001, 62):

*“once the dominant financial center has adopted a clear standard [i.e. Basel Capital Accord / Basel I], there is very little incentive [for **countries**] to reduce standards and **risk developing a reputation as ‘poorly regulated.’**”*

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  - Adopt to avoid reputation as weakly regulated**
    - Simmons (2001), Ho (2002), Tarullo (2008), Goodhart (2011)

Ho (2002, 647):

*“Market forces partially explain **national decisions to implement the Basle Accord [sic], lending support to the interpretation of international law as a reputational mechanism.**”*

# Why do *countries* adopt at the national level?

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    - Simmons (2001), Ho (2002), Tarullo (2008), Goodhart (2011)

Tarullo (2008, 65–66):

*“The voluntary implementation of an arrangement to which [non-BCBS member] states were not party appears to have been motivated by the **expectation that both capital markets and other banks would look less favorably upon banks that did not meet [Basel I minimum standards].***

*“Thus... domestic regulatory standards elaborated in a non-legally binding international arrangement among a dozen countries have been adopted by more than 100 countries that did not participate in the formulation of the standards.”*

# Why do *countries* adopt at the national level?

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Puzzles: If reputational mechanism...

- Why is Basel I status not readily available?
- Why would *countries* adopt if bank-level reputation?

# Why do *countries* adopt at the national level?

- **Alternative / existing argument:  
Adopt to avoid reputation as weakly regulated**
  - Simmons (2001), Ho (2002), Tarullo (2008), Goodhart (2011)

Two possible interpretations of “reputation”:

- Reputation as international banking center
- Reputation for creditworthiness / capital destination

# Why do *countries* adopt at the national level?

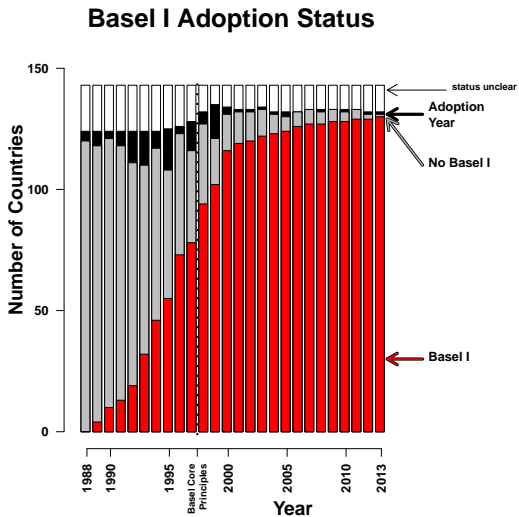
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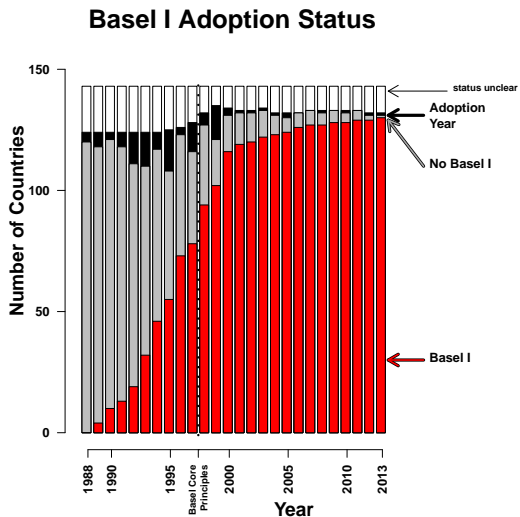
- Reputation as international banking center
- Reputation for creditworthiness / capital destination

*H2: Higher levels of international banking are associated with higher likelihood of adopting international rules.*

# Coded time-varying Basel I status



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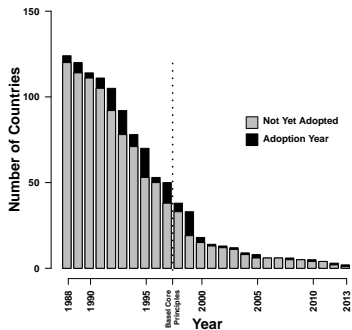


- 143 countries, 1988 through 2013

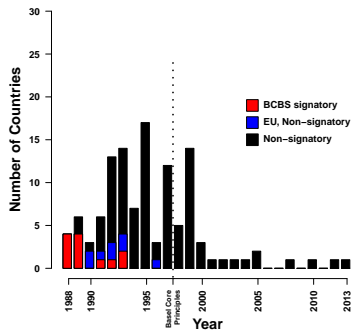


# Ability to statistically analyze Basel I adoption

## At Risk Distribution



## Adoption Year Distribution



- 109 countries, 1988–2011

# Model inputs

## Survival analysis

- Time-varying, Cox proportional hazards model
- Country-year unit of analysis
- Countries enter dataset in 1988; “at risk” until Basel I adoption

# Model inputs

**Dependent Variable:** Adoption in a given country-year

**Explanatory Variables:**

● **H1: international organizations**

- IMF programs in a given year

● **H2: reputation**

- Own banks abroad? (y/n)
- Own banks abroad in BCBS countries? (y/n)
- Host country to internationally-headquartered banks? (y/n)
- Host country to BCBS-headquartered banks? (y/n)
- External debt as percent of GDP

**Control Variables:**

$\ln(\text{GDP})$ ,  $\ln(\text{GDPPC})$ , capital openness (Chinn Ito index), Common Law Legal Origin, BCBS member, OECD member, continental percent adoption, level of democracy, political constraints, systemic bank crisis

# Model results

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	PRE-BCP	
							Model 7	Model 8
<b>H1: International organizations</b>								
IMF program year	1.961**							
	[1.16, 3.31]							
<b>H2: Reputation</b>								
Own abroad								
Own abroad in BCBS								
Host int'l banks								
Host BCBS banks								
External debt (% GDP)								
<b>country-year observations</b>	878							
<b>countries in sample</b>	109							
<b>country failures</b>	109							
<b>year coverage</b>	109							

Point estimates are presented as hazard rates.  
95% confidence intervals in brackets.

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<b>H2: Reputation</b>								
Own abroad		1.192						
		[0.74, 1.93]						
Own abroad in BCBS								
Host int'l banks								
Host BCBS banks								
External debt (% GDP)								
<hr/>								
<b>country-year observations</b>	878	878						
<b>countries in sample</b>	109	109						
<b>country failures</b>	109	102						
<b>year coverage</b>	109	1988–2011						

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<b>H2: Reputation</b>								
Own abroad		1.192 [0.74, 1.93]						
Own abroad in BCBS			0.643 [0.28, 1.50]					
Host int'l banks								
Host BCBS banks								
External debt (% GDP)								
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<b>country-year observations</b>	878	878	878					
<b>countries in sample</b>	109	109	109					
<b>country failures</b>	109	102	102					
<b>year coverage</b>	109	1988–2011	1988–2011					

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Own abroad		1.192 [0.74, 1.93]						
Own abroad in BCBS			0.643 [0.28, 1.50]					
Host int'l banks				1.182 [0.63, 2.20]				
Host BCBS banks								
External debt (% GDP)								
<b>country-year observations</b>	878	878	878	878				
<b>countries in sample</b>	109	109	109	109				
<b>country failures</b>	109	102	102	102				
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Host BCBS banks					0.874 [0.52, 1.46]			
External debt (% GDP)								
<b>country-year observations</b>	878	878	878	878	878			
<b>countries in sample</b>	109	109	109	109	109			
<b>country failures</b>	109	102	102	102	102			
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Own abroad in BCBS			0.643 [0.28, 1.50]					
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External debt (% GDP)						1.000 [1.00, 1.00]		
<b>country-year observations</b>	878	878	878	878	878	686		
<b>countries in sample</b>	109	109	109	109	109	75		
<b>country failures</b>	109	102	102	102	102	69		
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<b>countries in sample</b>	109	109	109	109	109	75	104	
<b>country failures</b>	109	102	102	102	102	69	60	
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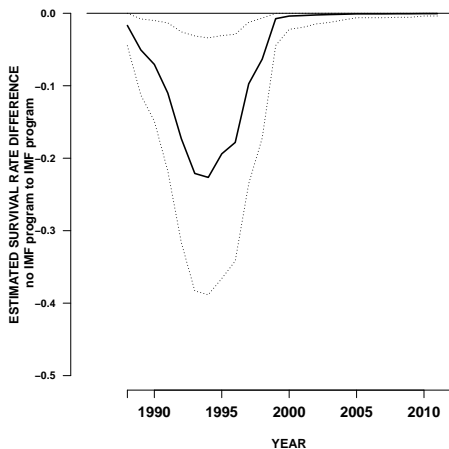
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External debt (% GDP)						1.000 [1.00, 1.00]		
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<b>countries in sample</b>	109	109	109	109	109	75	104	104
<b>country failures</b>	109	102	102	102	102	69	60	60
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# Magnitude of IMF program effect (first difference)



- Each year's estimate is negative and statistically significant
- Maximum estimated effect -22.6% in 1994

# Initial findings

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## Interpretation:

- Reputation is an overstated mechanism
- Important, unstated role of the IMF



# Initial findings

- Period-specific effects and 1997 international best practices
  - Reputation inconsistently significant, pre-1997 only
  - IMF involvement consistently significant over full period (driven by post-1997)

## Interpretation:

- Reputation is an overstated mechanism
- Important, unstated role of the IMF
  - Especially for laggard countries
  - Through international best practices

# Overview and contributions

- Alongside financial liberalization, many countries have quietly adopt basic (more robust) financial regulation
- **Puzzle:** in the absence of obligation to do so, many countries adopted Basel I
- **Existing arguments emphasize role of “reputation”**, but country reputation distinct from bank reputation
- **Instead**, logic and evidence for the role of **international organizations and international best practices**

## Contributions:

- Systematic analysis of financial regulations
- Original data
- Understand, operationalize, test competing diffusion mechanisms