The International Politics of Federal Currency Swaps in the Global Financial Crisis

Aditi Sahasrabuddhe

Cornell University, Department of Government

Outline

The Problem

Argument and Hypotheses

Case Analyses

Quantitative Analysis

Results and Implications

Currency Swaps in 2008

The Fed emerged as a *de facto* international lender of last resort

Bilateral arrangements known as ‘Central Bank Currency Swaps’

Highly selective and pretty opaque.

14 foreign central banks received swap lines; 7 denied

Existing Explanations

Exposure of US commercial banks to the foreign economy (Broz 2015; Aizenman and Pasricha 2010).

‘I would like to clarify the purpose of the dollar-swap program recently undertaken by the Federal Reserve, which is to help insulate US market from the pressures in Europe and support the availability of credit to US household and businesses’

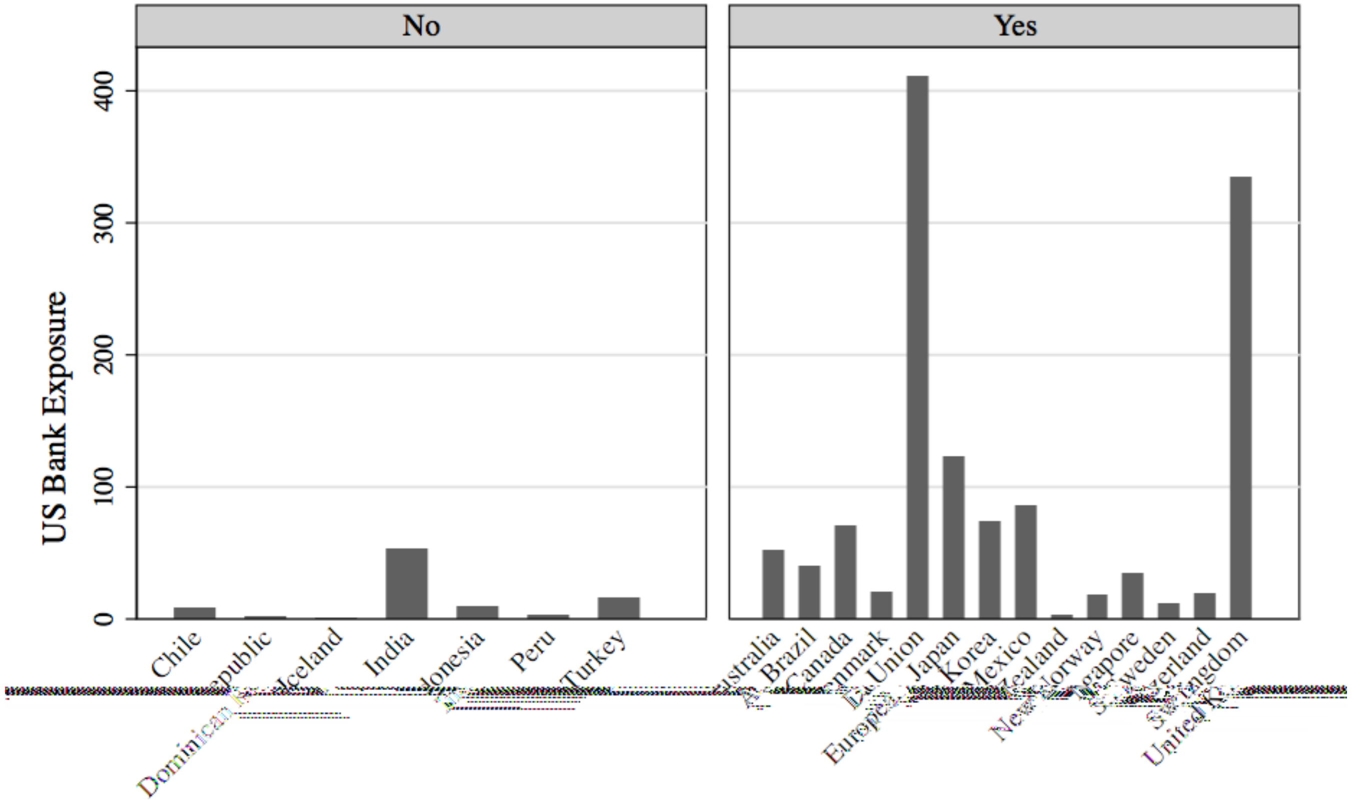
(William Dudley, Federal Reserve Bank of New York 2012)

Other determinants:

- Economic size
- Trade with the US
- ‘Sound’ economic management

Swap Requests and US Bank Exposure

Figure 1. US Bank Exposure (in billions, 2007)



- Note: The first seven countries were denied swaps and the next fourteen were granted swaps

The *International* Politics of Swaps

Fed Preferences for higher levels of capital account openness

Credibility: 'Good Housekeeping Seal of Approval'

Policy lock in as signalling: IMF Restructuring serves 'as a signalling device for governments to establish their reliability within global capital markets' (Bartoli and Drazen 1997; Joyce and Noy 2008)

Collateral benefits of financial liberalisation (Kose et al 2009)

Implication: Economies with relatively **higher** levels of capital account openness should be **more likel** of receiving a Fed swap.

The *International* Politics of Swaps (cont'd)

American responsiveness to global political-economic influence of major economies

Increasing pushback against the US from major economies

Global economic governance influence

National security and diplomatic histories

Implication: **More** economically influential economics are **more likel** to receive a swap line

Case studies

Case selection strategy:

EME swap recipients: Mexico, Brazil, South Korea, Singapore

Non-recipients: India and Chile

Unique source of data: FOMC minutes to catalogue arguments “as they happened” from participants “as they saw it”

Emerging Market Swaps

Four EMEs received swaps: Mexico, Brazil, South Korea and Singapore

'… these are the right four economies and we probably shouldn't do more, both from an economic and diplomatic perspective'

(FOMC 2008, 16)

EME swaps had 'several safeguards' to insure against the political concerns associated with them

Classified as three of the 25 'biggest, most interlinked economies' (IMF)

The Fed was 'increasingly vulnerable to a 'pile-on' effect, which might manifest itself either in a large number of additional swap line requests or in political pressure' (FOMC 2008, 12)

Emerging Market Swaps

Mexico

'I don't see any reason why we should differentiate between them and Canada, for example. It would stigmatize them in a way, and it would be an insult to these people'

(FOMC 2008)

'… they have a sophisticated central bank and have a very good central bank governor'

(FOMC 2008)

Brazil

Unique negotiating history' with the Fed, but also a 'critical part of [the Western] hemisphere'

(FOMC 2008)

'The dodgiest of the lot'

(FOMC 2008)

Emerging Market Swaps

Korea

'An underrepresented country in terms of discussions about developments in that part of the globe, and yet it is inordinately successful'

(FOMC 2008)

Fed rejected its early swap requests, fearing a pile-on effect of more EME requests

Two Developments:

Korea-US Trade Agreement

G-20 Presidency

Singapore

'I doubt that Singapore would ever go to the IMF. It would be beneath Lee Kuan Yew's dignity''

(FOMC 2008)

Protecting this vital international link was important to the US

Financial Stability Board member

Hypotheticals

India

Higher US bank exposure than Brazil

No convertible currency

Calls for reform in governance system

Chile

An ‘almost’ case

Weak economic fundamentals

Small economy

‘Although it is tiny its representation is important and its nature unique’

(FOMC 2008)

Statistical Model

Probit model

Binary Dependent Variable: Swap Line (= 1; 0 otherwise)

Key predictors: Financial Openness

Other controls:

- Economic Significance ← a broader measure encompassing GDP, Trade, Liquid Liabilities and Bank Exposure (all highly inter-correlated)
- Inflation

Results: The Fed's Selection of Foreign Central Banks for Currency Swap Lines

	Model 1	Model 2
	Swap Agreement	Swap Agreement
Financial Openness		
Economic Significance		0.93**
		(0.34)
Inflation		-0.14*
		(0.08)
Constant	-2.68**	-2.08**
	(0.50)	(0. 73)
Observations	154	129
Pseudo R-Squared	.18	0.45
P-Value	0.00	0.00
Log Likelihood	-38.26	-23.18
LR Chi-Squared	17.30	37.95

Standard errors in parentheses
** p<0.01, * p<0.05

Implications

Selectivity of Fed swaps limited to economic allies of the US.

To which emerging markets can we expect the Fed to provide swap lines again in future crises?

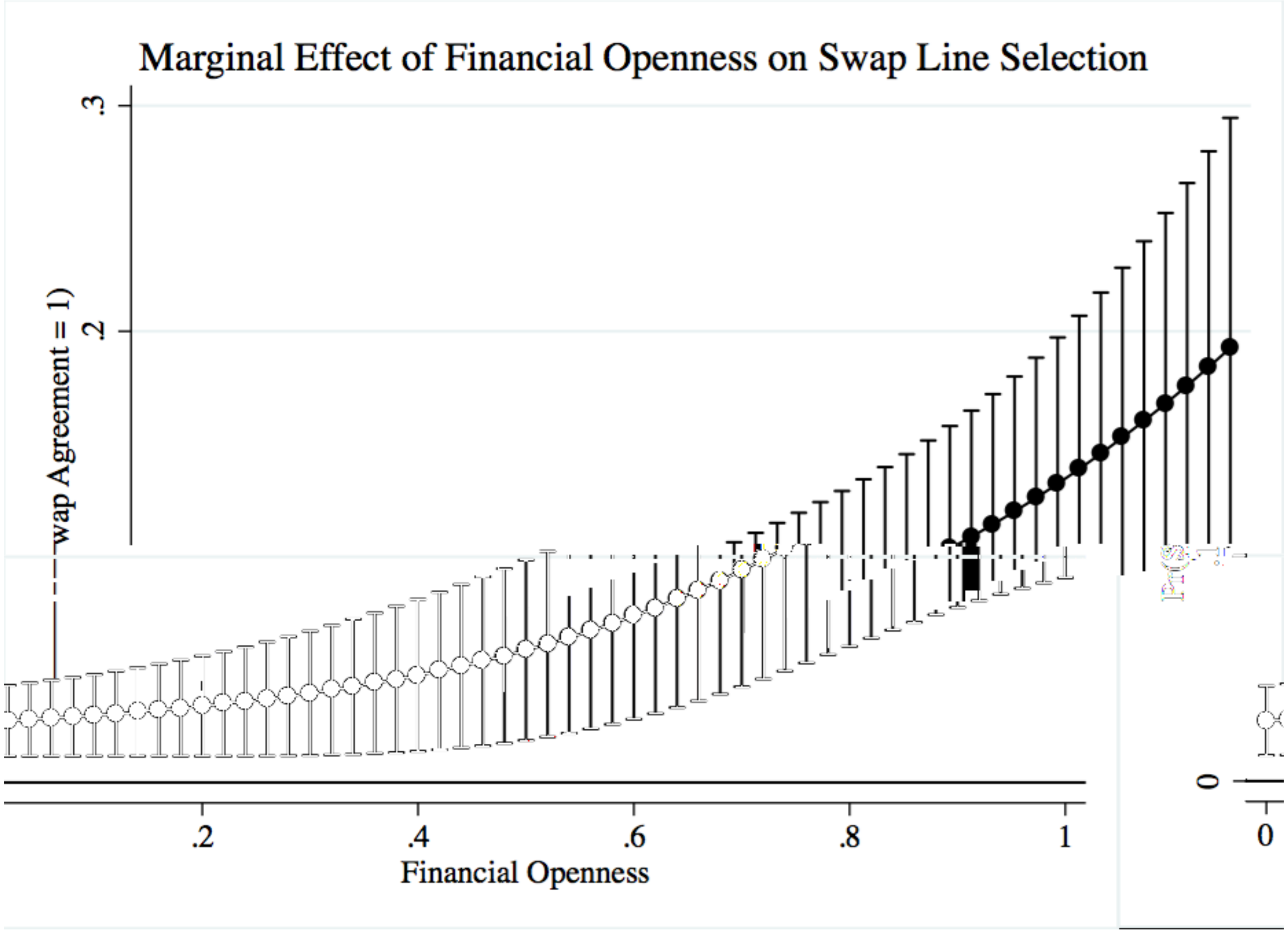
My answer: It depends on both ideological and systemic factors

Going forward: central bank networks as an informal alternative to established international organizations

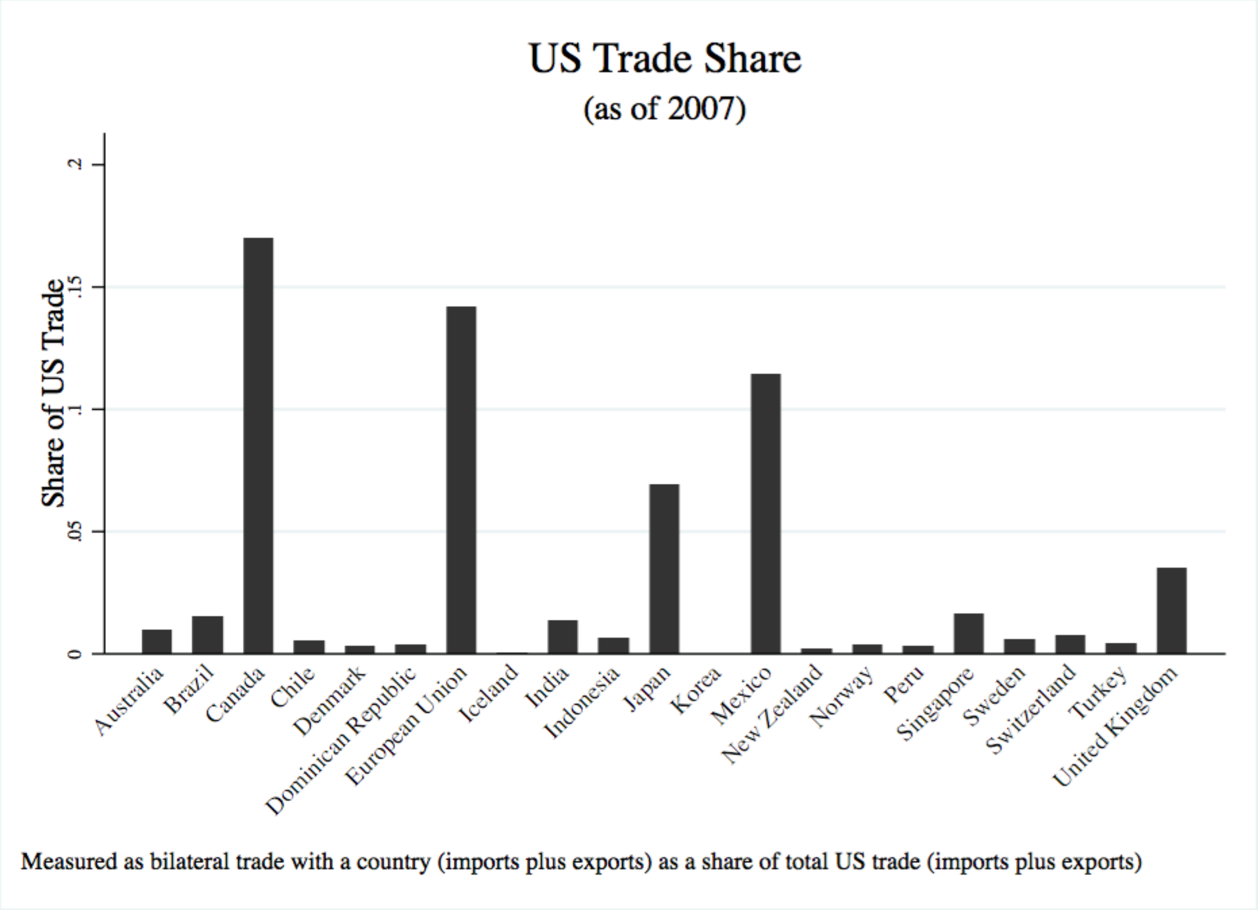
Thank You!

Extra Slides

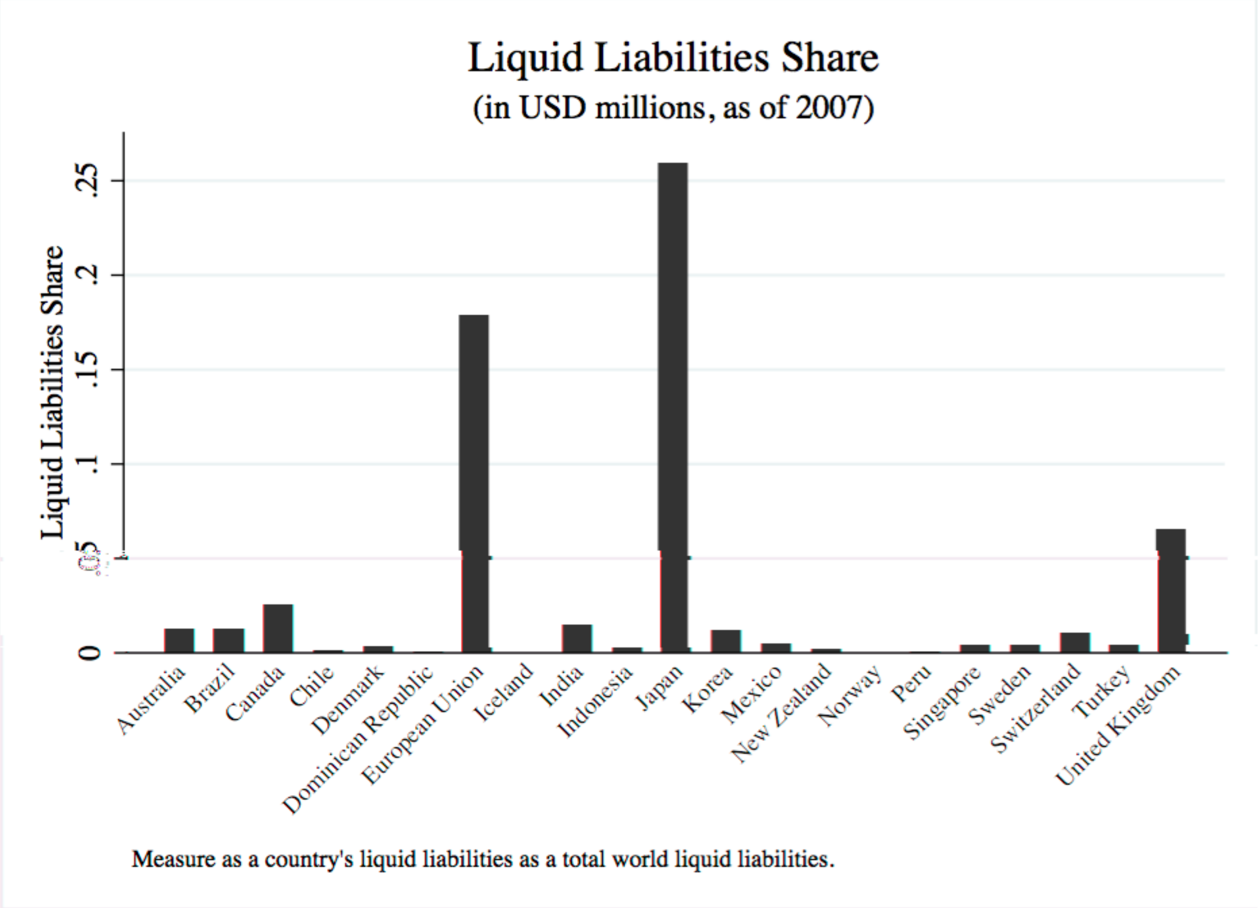
Marginal Effect of Openness



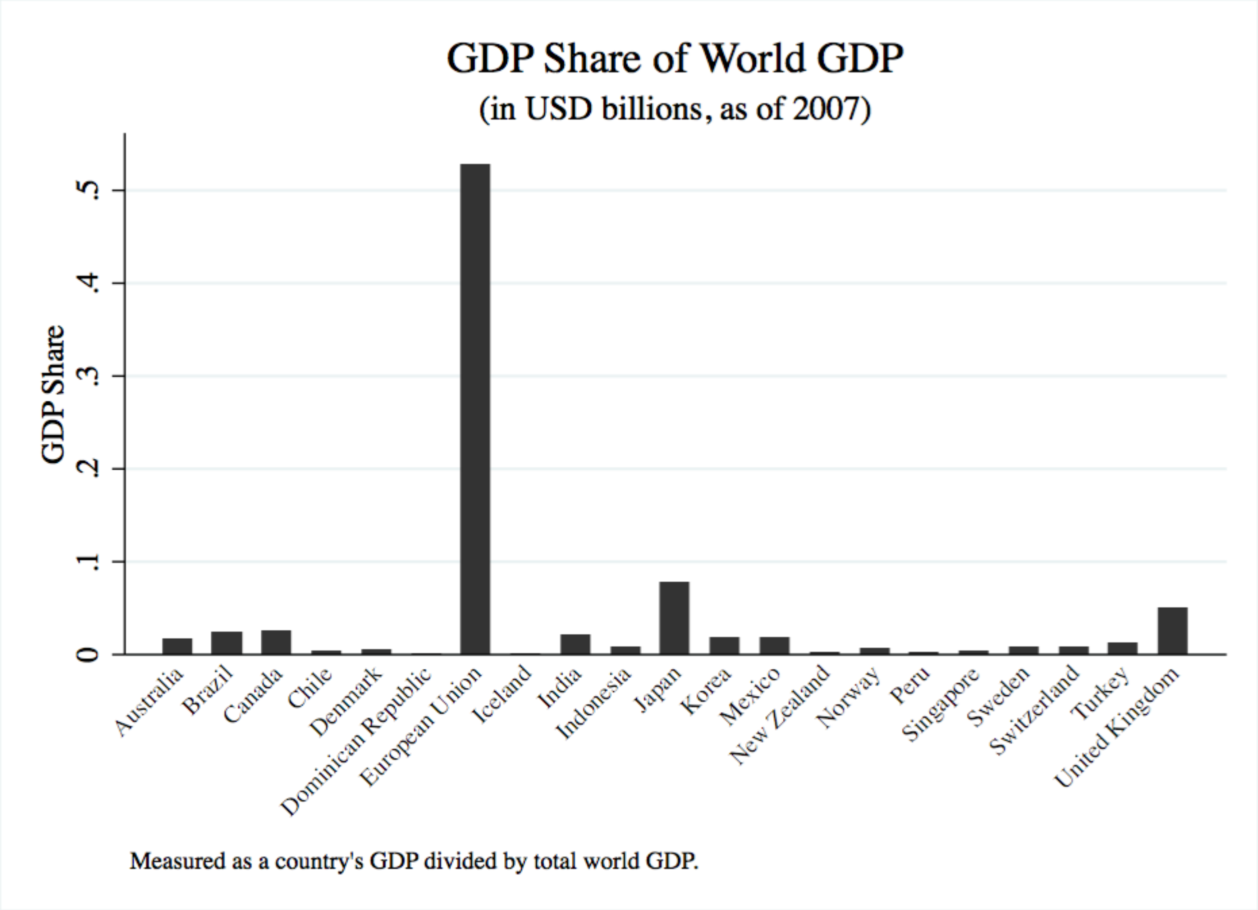
US Trade Share



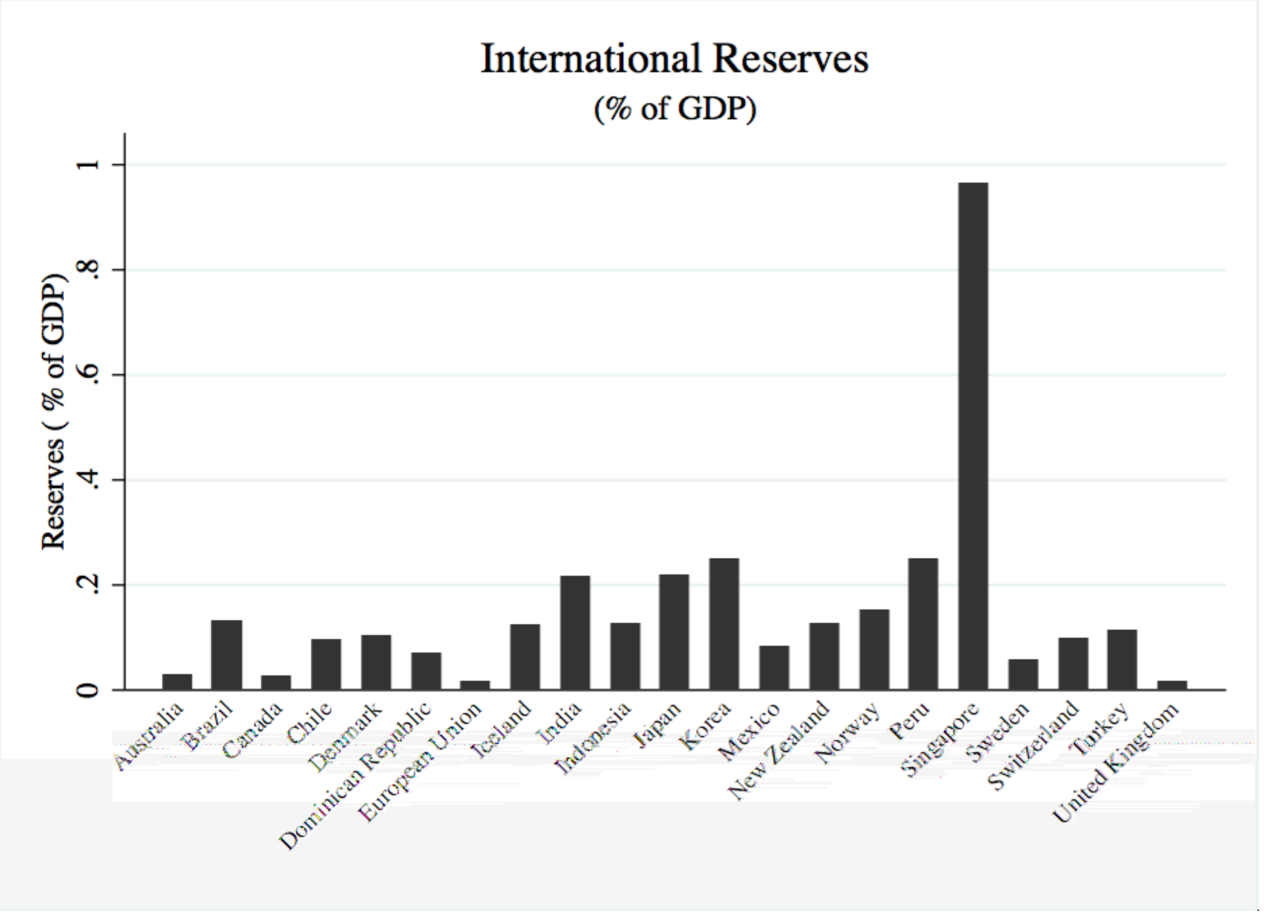
Liquid Liabilities Share



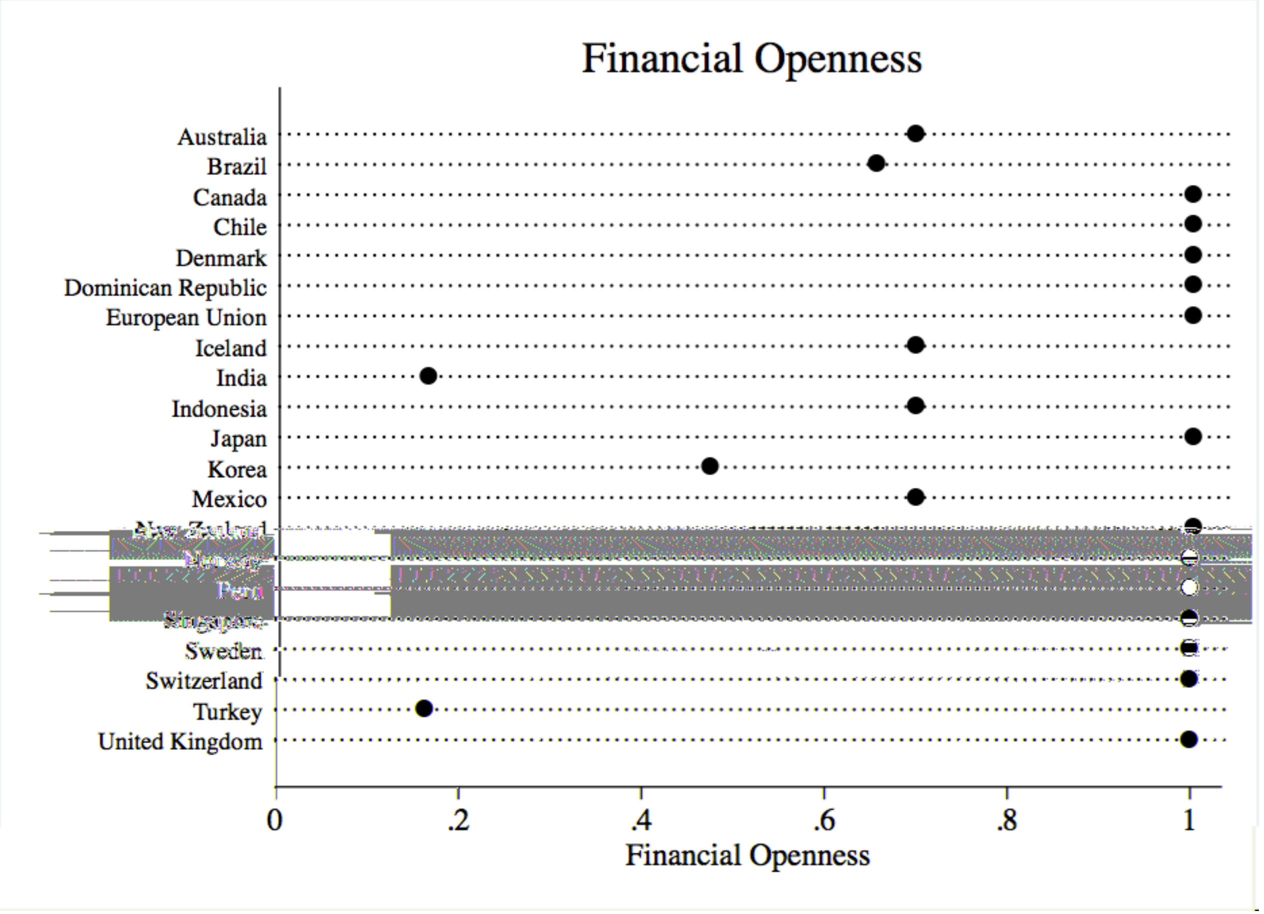
GDP Share


GDP Share of World GDP
(in USD billions, as of 2007)
GDP Share
0
.1
.2
.3
.4
.5
Australia
Brazil
Canada
Chile
Denmark
Dominican Republic
European Union
Iceland
India
Indonesia
Japan
Korea
Mexico
New Zealand
Norway
Peru
Singapore
Sweden
Switzerland
Turkey
United Kingdom
Measured as a country's GDP divided by total world GDP.

International Reserves



Financial Openness



Correlation Matrix for Variables

	Financial Openness	*Bank Exposure*	*GDP Share*	*Liquid Liabilities*	*Bilateral Trade*	**Infla ion**	**Reser es**
Financial Openness	1.0000						
Bank Exposure	0.1873	1.0000					
GDP Share	0. 1264	0.8168	1.0000				
Liquid Liabilities	0.1510	0.6881	0.6762	1.0000			
Bilateral Trade	0.1329	0.6114	0.5952	0.6231	1.0000		
Inflation	-0.1242	-0.0842	-0.0597	-0.0936	-0.0786	1.0000	
Reserves	0.0618	-0.1174	-0.1169	-0.0278	-0.0298	-0.0746	1.0000

Scree Plot: Economic Significance

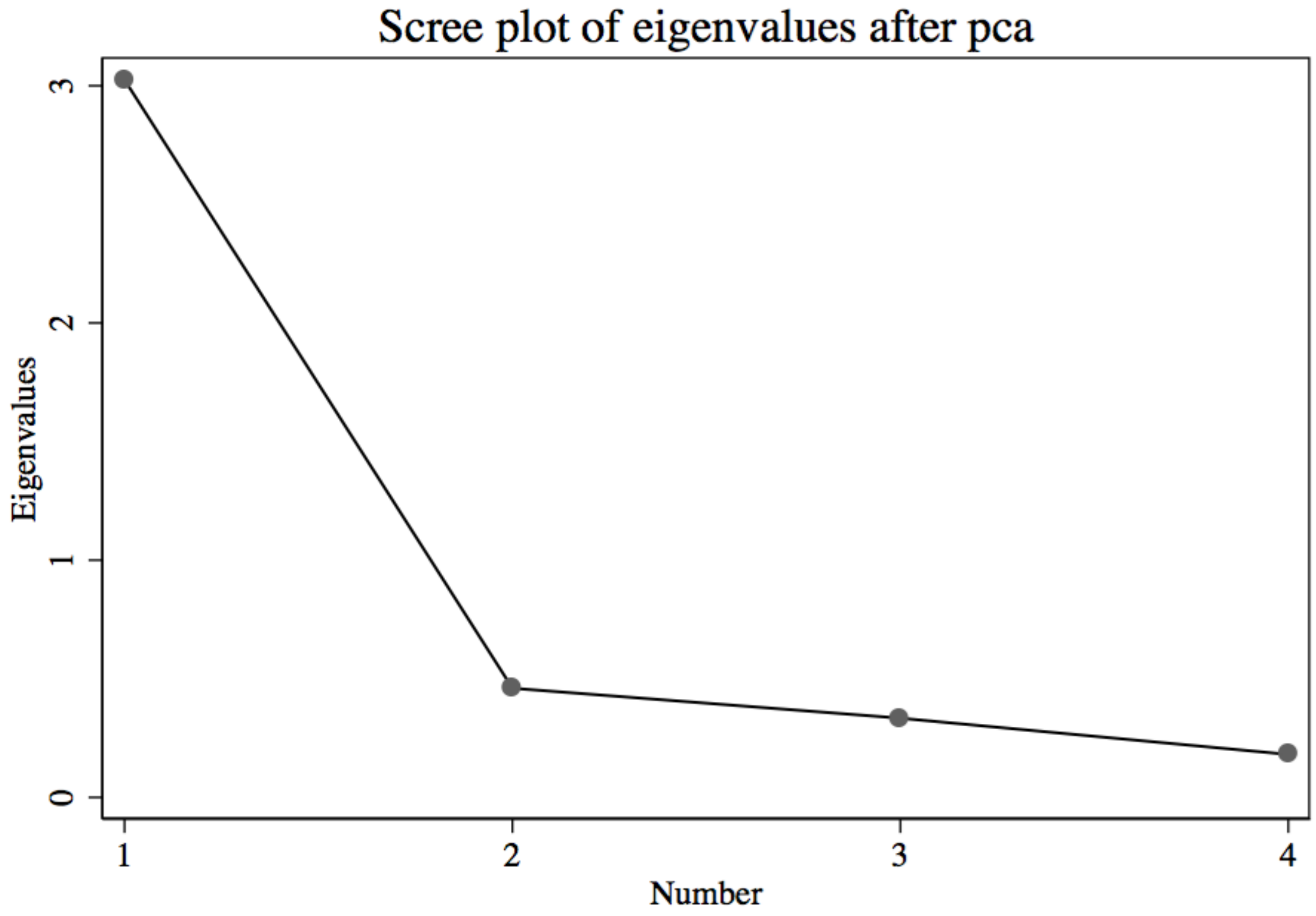


TABLE 2.

Swap Agreement, excluding the EU and the UK

	Model	Model
	S ap Agreemen No E rope	S ap Agreemen No E rope
Financial Openness		
Economic Significance		
Infla ion		
Cons an		
Obser a ions		
Pse do R Sq ared		
P Val e		
LR Chi Sq ared		

Standard errors in parentheses
** p<0.01, * p<0.05

Marginal Effect of Openness, excluding the EU and UK