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

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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

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

(FOEC 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’ (FOEC 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)

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)

‘... they have a sophisticated central bank and have a very good central bank governor’

(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

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Swap Agreement</td>
<td>Swap Agreement</td>
</tr>
<tr>
<td><strong>Financial Openness</strong></td>
<td></td>
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<tr>
<td>Economic Significance</td>
<td>0.93**</td>
<td>0.93**</td>
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<tr>
<td></td>
<td>(0.34)</td>
<td>(0.34)</td>
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<tr>
<td>Inflation</td>
<td>-0.14*</td>
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<td></td>
<td>(0.08)</td>
<td>(0.08)</td>
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<tr>
<td>Constant</td>
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<td>(0.50)</td>
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<td>Observations</td>
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<td>129</td>
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<tr>
<td>Pseudo R-Squared</td>
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<td>.45</td>
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<tr>
<td>P-Value</td>
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<td>0.00</td>
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<tr>
<td>Log Likelihood</td>
<td>-38.26</td>
<td>-23.18</td>
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<td>LR Chi-Squared</td>
<td>17.30</td>
<td>37.95</td>
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</tbody>
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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

Measured as bilateral trade with a country (imports plus exports) as a share of total US trade (imports plus exports)
Liquid Liabilities Share

The diagram illustrates the liquid liabilities share of various countries, measured as a fraction of total world liquid liabilities. It shows the share of each country's liquid liabilities in USD millions as of 2007.

Countries included in the diagram are: Australia, Brazil, Canada, Chile, Dominican Republic, European Union, Iceland, India, Indonesia, Japan, Korea, Mexico, New Zealand, Norway, Peru, Singapore, Switzerland, Turkey, and United Kingdom.
GDP Share

GDP Share of World GDP
(in USD billions, as of 2007)

Measured as a country’s GDP divided by total world GDP.
International Reserves

![International Reserves Chart]

The chart shows the international reserves as a percentage of GDP for various countries. The reserves are significantly higher for some countries compared to others, indicating varying levels of financial preparedness and stability.
Financial Openness
## Correlation Matrix for Variables

<table>
<thead>
<tr>
<th></th>
<th>Financial Openness</th>
<th>Bank Exposure</th>
<th>GDP Share</th>
<th>Liquid Liabilities</th>
<th>Bilateral Trade</th>
<th>Inflation</th>
<th>Reserves</th>
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<td><strong>Bank Exposure</strong></td>
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<td><strong>GDP Share</strong></td>
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<td><strong>Liquid Liabilities</strong></td>
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<td><strong>Bilateral Trade</strong></td>
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<td><strong>Inflation</strong></td>
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<tr>
<td><strong>Reserves</strong></td>
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<td>-0.1169</td>
<td>-0.0278</td>
<td>-0.0298</td>
<td>-0.0746</td>
<td>1.0000</td>
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Scree Plot: Economic Significance
Swap Agreement, excluding the EU and the UK

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<tbody>
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<td>Swap Agreement</td>
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<tr>
<td>No Europe</td>
<td>No Europe</td>
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<thead>
<tr>
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<th>Economic Significance</th>
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</thead>
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<tr>
<td>** 1.76** (0.57)</td>
<td>0.901* (0.359)</td>
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<td>2.031** (0.787)</td>
<td>-0.141 (0.0754)</td>
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</table>

<table>
<thead>
<tr>
<th>Constant</th>
<th>Constant</th>
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<tbody>
<tr>
<td><strong>-2.62</strong> (0.49)</td>
<td><strong>-2.055</strong> (0.725)</td>
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<table>
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<tr>
<th>Observations</th>
<th>Pseudo R-squared</th>
<th>P-Value</th>
<th>Log Likelihood</th>
<th>LR Chi Squared</th>
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</thead>
<tbody>
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<td>152</td>
<td>.16</td>
<td>0.00</td>
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<td>127</td>
<td>0.45</td>
<td>0.00</td>
<td>-23.18</td>
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Marginal Effect of Openness, excluding the EU and UK