Effects of Financial Crises On Foreign Bank Ownership

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Introduction

- The **Global Financial Crisis** began the Great Recession in 2007 which saw economic decline worldwide into 2009. The effects of the recession varied however; developed economies in North America and Europe experienced severe GDP loss whereas developing economies and emerging markets were far less impacted e.g. China, India, and Indonesia actually saw substantial GDP growth (4%-14%). The loss of value in invested assets led to widespread bank failures.
- The **1997 Asian Financial Crisis** was jumpstarted by speculative attacks on the Thai baht and subsequently saw severe currency depreciation and GDP loss in several emerging Asian economies, most notably Thailand, Malaysia, Indonesia, and South Korea. Domestic banks suffered lowered investment rates as a result of currency depreciation.
- **We hypothesize that these disruptions led to major changes in bank ownership worldwide**.

Research Questions

- How do the changes in proportion of banks majority-owned by foreign entities from 2006 to 2010 differ between national **income groups**?
- How do major macroeconomic variables determine the proportion of banks majority-owned by foreign entities among **income groups** and **crisis periods** in terms of impact and directionality?

Methods

Sample

- **N=1768** observations of proportions of foreign-majority-owned banks (measured as a percentage) were drawn from 136 countries over 1995-2000 and 2004-2010 from an IMF Economic Review (Claessens and Van Horen 2015).

Measures

- Countries are grouped into one of two income groups: **1. Developing Economies & Emerging Markets, 2. Organisation for Economic Co-operation and Development (OECD) Countries and Other High Income Economies.**
- Each observation is grouped in 4 time periods in relation to the Asian Financial Crisis and the Global Financial Crisis: 1. **Pre-Asian Financial Crisis** 1995-1996, 2. **Post-Asian Financial Crisis** 1997-2000, 3. **Pre-Global Financial Crisis** 2004-2006, 4. **Post-Global Financial Crisis** 2007-2010.
- The following macroeconomics variables are provided by the World Bank Development Indicators: **Net Foreign Direct Investments (Outflow - Inflow), Net Investment in Non-Financial Assets, GDP, Current Account, Inflation, and Real Interest Rate**.

Results

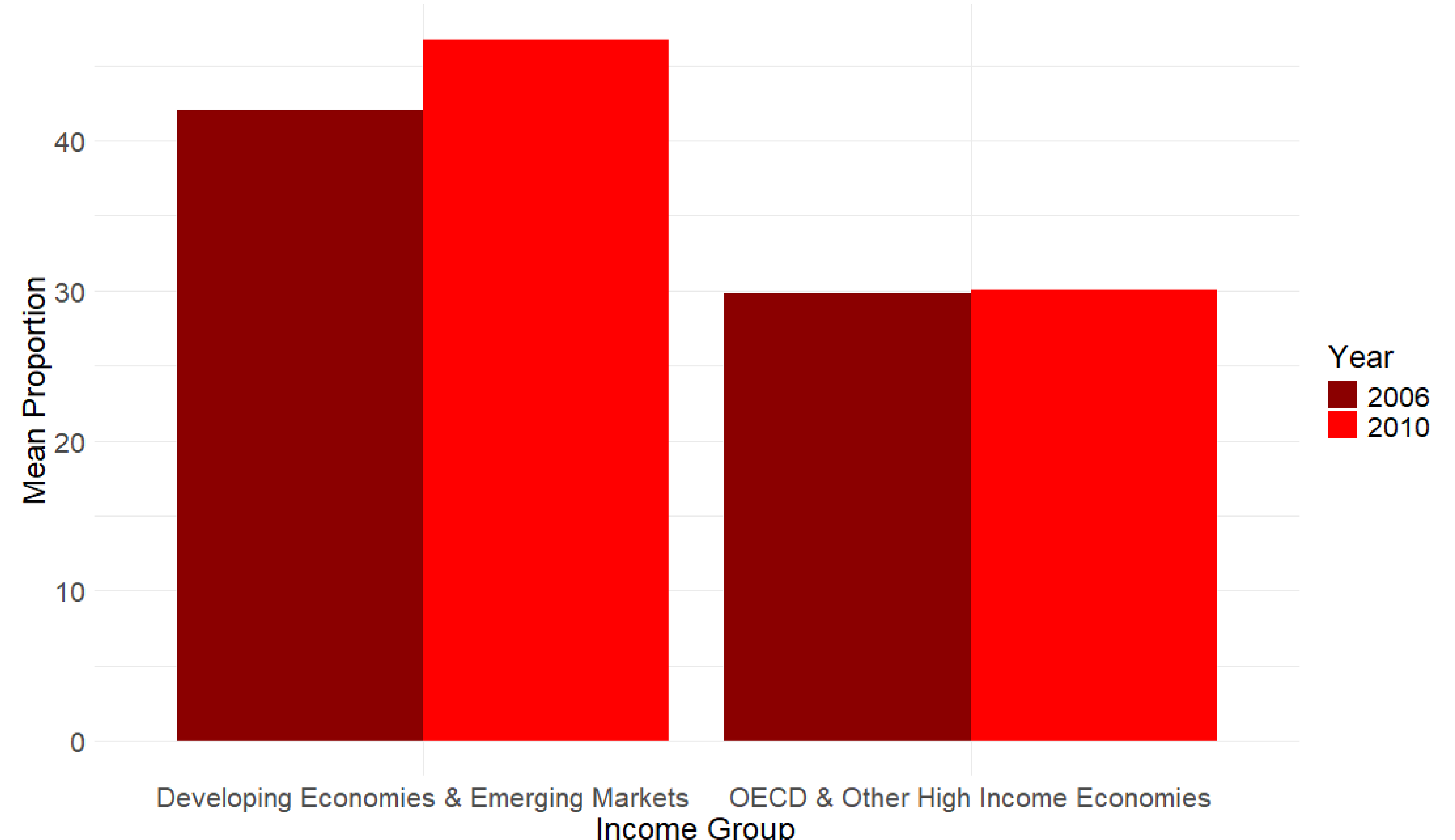
Univariate

- **77.2%** or **105** of economies observed are **Developing Economies & Emerging Markets**.
- **22.8%** or **31** of economies observed are **OECD & Other High Income Economies**.

Bivariate

- A two-sample t test showed that the proportion means between **Developing Economies & Emerging Markets** (mean = **36.90**) and **OECD & Other High Income Economies** (mean = **27.94**) are significantly different **(p<0.0000)**.
- ANOVA analysis showed a significant association between countries' **proportion of banks majority-owned by foreign entities** and **income groups (F(1, 1766)=34.92, p=0.0000)**.
- Despite Developing Economies & Emerging Markets showing a higher mean proportion increase (4.7%) from 2006 to 2010 in comparison to OECD and Other High Income Economies (0.3%), a two-sample t test shows that the former group's 2010 and 2006 means are **not significantly different (p=0.11)**.

Figure 1: Mean Proportions Among Income Groups in 2006 vs. 2010



Multivariate

- There seems to be **no significant differences** in ownership proportion before or after either the Asian Financial Crisis or the Global financial crisis among the **OECD & Other High Income group**. As for the **Developing Economies & Emerging Markets group**, there are also no significant global effects from the Asian Financial Crisis, however **ownership proportion is significantly higher after the Global Financial Crisis compared to 2004-2006 (B=5.85, p<0.027)**.
- Significant macroeconomic predictors of foreign ownership proportion are **GDP (B=-0.002, p<0.001), Net Foreign Direct Investment % GDP (B= -0.388, p<0.005), Current Account Balance % GDP (B=-0.288, p<0.01), and Real Interest Rate (B=0.167, p<0.05)**.

Discussion

- Income levels affected how bank ownership by foreign entities changed following the **Global Financial Crisis**. Specifically, **Developing Economies & Emerging Markets** saw a marked **increase in the mean proportion** whereas the **OECD & Other High Income Economies** saw little to no change. This was likely due to banks in lower income countries being **less expensive** to invest in than banks in higher income countries and the crisis providing a "discount" on the investment.
- Greater **GDP** predicts lower proportions as is consistent with the difference between the **Developing Economies & Emerging Markets group** and the **OECD & Other High Income group**. This is likely due to the higher cost of investment in developed economies. **Net Foreign Direct Investment % GDP** predicting lower foreign bank ownership shows that bank ownership coincides with general investment inflow. **Current Account Balance % GDP** is negatively associated with foreign bank ownership, possibly indicating that greater imports suggest a higher demand for loans and, subsequently, draw in investments in banks. Similarly, greater **Real Interest Rates** also make bank investments more attractive as they promise greater returns on loans.
- Further research into main crisis-afflicted economies in the **Asian Financial Crisis** is needed to verify significant differences in foreign bank ownership between before and after the start of the crisis.

Claessens and Van Horen, 2015, "The Impact of the Global Financial Crisis on Banking Globalization," IMF Economic Review, 63, 868-918.
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