Macroeconomic Preconditions For Investing Abroad

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Suggested Readings

Andrew Berg & Catherine Pattillo, "The Challenges of Predicting Economic Crises" *IMF Economic Issues* no. 22, July 2000.
http://www.imf.org/external/pubs/ft/issues/issues22/index.htm

Michael W. Klein, "Capital Account Openness and the Varieties of Growth Experience" NBER Working Paper no. 9500, February 2003.
http://fletcher.tufts.edu/faculty/klein/pdfs/CapAcctGrowth.pdf

Dani Rodrik and and Arvind Subramanian, "The Primacy of Institutions (and what this does and does not mean)," *Finance and Development*, June 2003, pp. 31-34.
http://www.imf.org/external/pubs/ft/fandd/2003/06/pdf/rodrik.pdf

Macroeconomic Preconditions for Investing Abroad:

Questions to confront

1. Why?

2. What?

3. How?

Macroeconomic Preconditions for Investing Abroad:

Questions to confront

1. Why are there preconditions for investment (and not trade)?

2. What are these preconditions?

3. How do these matter?

but first

0. A Deeper Why

Why Should Countries Have an Open Capital Account?

Why an Open Capital Account? Why Not?

- Does an open capital account promote **economic growth and development**?
  - Importance for investing abroad – long-run attractiveness of opportunities
- Does an open capital account add to the likelihood of a **financial crises**?
  - Importance for investing abroad – asset price or exchange rate collapse.

Some Influential Opinions on *Should Countries Have an Open Capital Account?*

Lawrence Summers (2000) "…to the extent that international financial integration represents an improvement in financial intermediation,... it offers a potentially significant increase in economic efficiency."

IMF (2000) "…[the Executive Board] has emphasized the substantial benefits of capital account liberalization, but stressed the need to carefully manage and sequence liberalization in order to minimize risks

Kenneth Rogoff (2001) "These days, everyone agrees that a more eclectic approach to capital account liberalization is required."

Jagdish Bhagwati (1998) "substantial gains [from open capital accounts] have been asserted, not demonstrated …"

J.M. Keynes (1933) "I sympathize … with those who would minimize rather than those who would maximize economic entanglements among nations. … above all, let finance be national."

Open Capital Accounts

Benefits	Costs

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• Discipline Policy • Attract Foreign Investment • Domestic Finance	

Open Capital Accounts

Benefits

- Discipline Policy
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Open Capital Accounts

Benefits

- Discipline Policy and promote stability through greater credibility
- Attract Knowledgeable Foreign Investment and aid technology transfer.
- Develop Domestic Finance and help domestic consumers of finance.

Costs

- Discipline Policy but hamper stabilization policies.
- Attract Footloose Foreign Investment and whipsaw the economy.
- Threaten Domestic Finance with foreign competition

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- Smooth Consumption
- Diversify Risk

1. Why?

Macroeconomic Preconditions for Investing Abroad:

Question to confront

1. Why are there preconditions for investment (and not trade)?

   Answer: Loans require an infrastructure to be effective.

The Need for Infrastructure: Inherent Risks in Finance

- Concerns with Financial Systems because of
  - information asymmetries
  - transactions costs
- These lead to **adverse selection** & **moral hazard**.
- Adverse Selection – don’t join a club that would have you as its member
- Moral Hazard – why bother?

Risks in an International Setting

- Concerns with Financial Systems more pronounced in international lending and borrowing;
  - Regulation more difficult
  - Information sketchier
  - Exchange Rate Concerns
    - Lender of last resort may be limited.
    - Mismatch of assets & liabilities

Ways to Limit Capital Mobility

1. Administrative or direct controls

   Chile – minimum stay requirement on inflows

   Malaysia – prohibit non-resident purchases

2. Market-based or indirect controls

   Multiple exchange rate regime

   Brazil – “entrance” tax on capital inflows

   Chile, Colombia, Thailand – Unremunerated Reserve Requirements (URR)

Efficacy of Capital Controls

Less efficacious if

- Sophisticated financial markets (Brazil)
- Not comprehensive
  - Chile – efforts to avoid inflow controls led to expansion of coverage.
  - Malaysia – most comprehensive outflow controls, but also cut off FDI and led to high risk premium for ringgit

- Administrative Costs, Scope for Corruption.

2. What?

Macroeconomic Preconditions for Investing Abroad:

Question to confront

2. What are these preconditions?

Answers:

a. Macroeconomic Stability (Crisis)

b. Institutions (Growth)

Macroeconomic Stability and Investing Abroad

- Possible Macroeconomic Risks
  - Exchange Rate risk
  - Asset Price risk
- Either of these can have adverse consequences at time of a crisis and may not be fully hedged.
- Consideration, if not Precondition for investing abroad

Institutions and Investing Abroad

- Role of Institutions for Growth
  - Economic Infrastructure
  - Financial Institutions
  - Clear Legal Rules
  - Enforceable Rules and Contracts
- Long-Run Growth, and Desirability of Investment, Promoted by Institutions.
  - Interaction of Institutions with Liberalization.
- Consideration for long-horizon placement.

3. How?

Macroeconomic Preconditions for Investing Abroad: Questions to confront

3. How do these matter (empirics)?

Answers:

Leading Indicators of Crises

Institutions and Growth

Leading Indicators of Exchange Rate Crises

Leading Indicators of Crises

Common “Early Warning Signs” include measures of

- Fundamentals:
  - Real Exchange Rate Overvaluation
  - High Money Growth
- Vulnerabilities
  - Low level of International Reserves
  - High level of External Debt Commitments
  - Banking System Fragility
- Market Sentiment
  - Widening Interest Differentials

Success of Leading Indicators

Pre-Asian Crisis: Best models predicted ½ of crises "in sample" and ⅓ "Out of Sample." (but "False Positives").

Asian Crisis – some indicators (e.g. CA deficits, banking failures, asset price bubbles) pointed towards crisis, but not many people predicted the crisis. With Leading Indicators;

- **Thailand** and **Malaysia** – crises driven by fundamentals.
- **Korea** and **Indonesia** in *zone of vulnerability*, crises not driven exclusively by fundamentals.
- **Philippines** – crisis not predicted by model.

Capital Account Openness, Institutions and Growth

A ∩-Shaped Relationship Between Open Capital Markets and Economic Growth

<u>Background:</u>

- **Empirical determinants of economic growth.**
- **Mixed results concerning open capital accounts**
- **Recent Research: Open capital markets significantly beneficial for "needy" (i.e. middle income, but not rich) countries that have institutions in place**

Rational for a ⋂-Shaped Relationship

- **Poor countries** may not have the constellation of regulatory, political and institutional structures needed to properly intermediate capital flows.
- **Rich countries** - capital account openness is relatively "small potatoes" (with some exceptions, e.g. Norway develops oil extraction in 1970s).
  - Already well-diversified, as compared to emerging market countries, so less to gain from an increase in global risk-sharing.
  - Little to gain from "indirect effects" of open capital accounts, e.g. technology transfer, financial depth, good governance.

Empirics Analysis

Estimate Cross Country relationship

$$\Delta lnY_{76\text{-}95,i} = \beta_1 K_i + \beta_2 (K_i \bullet lnY_{76,i}) + \beta_3 (K_i \bullet lnY_{76,i}{}^2)$$
$$+ \boldsymbol{\beta_0}\, \mathbf{Z_i}' + + \varepsilon_i$$

Consider partial derivative w.r.t. capital account openness indicator, K_i

$$B_i = \beta_1 + \beta_2\, lnY_{1976,i} + \beta_3\, lnY_{1976,i}{}^2$$

(Income is a proxy for institutional quality; later consider indicators of institutional quality.)

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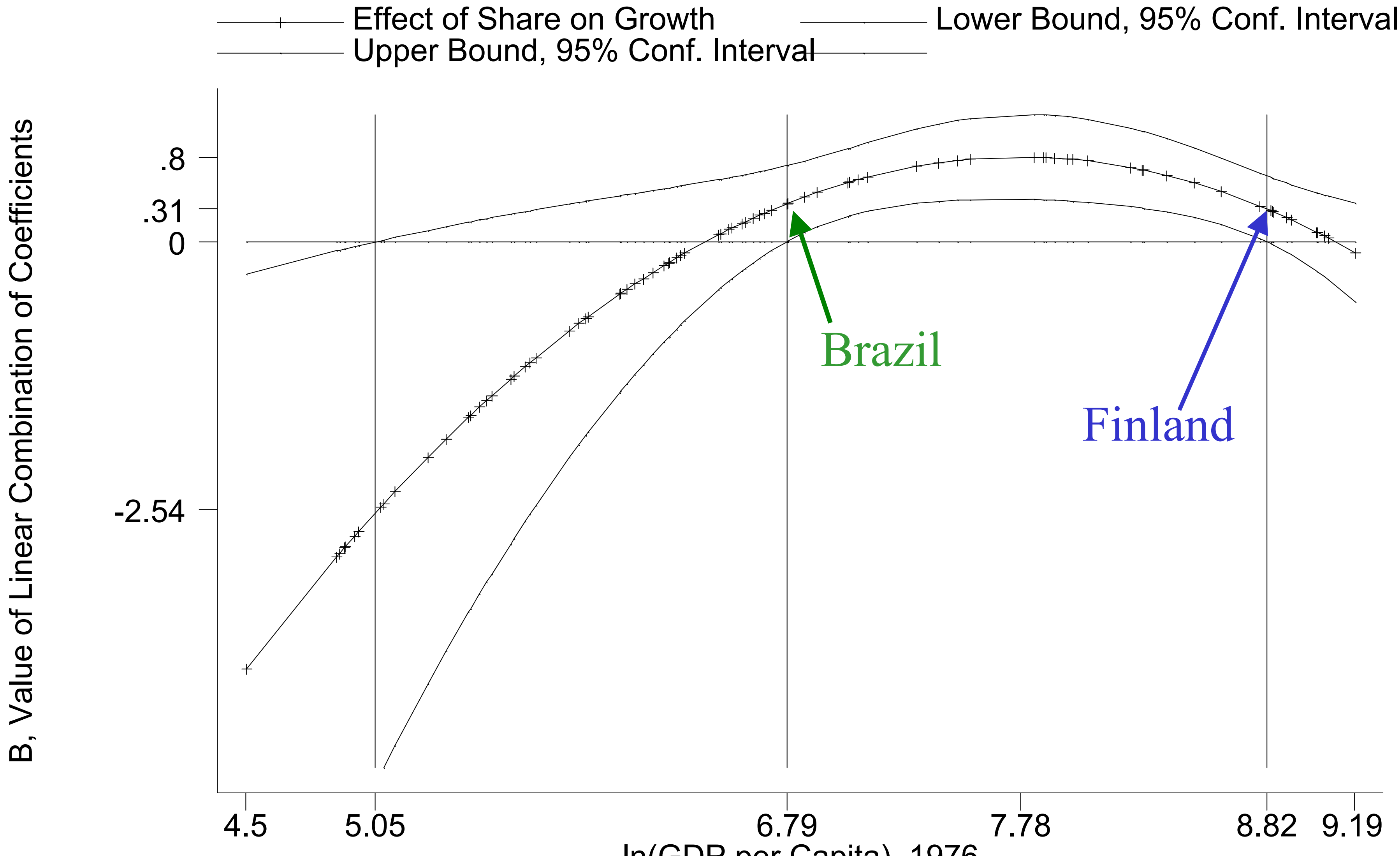

FIgure 1, Share, Quadratic Interaction w/GDP per capita

Cross-Country Indicators of Institutional Quality

- Rule of Law
- Government Efficiency
- Control of Corruption

These are all significantly correlated with income per capita.

Correlation of Government Quality Indicators with Initial Income per Capita

Regressions $G_i = \alpha_0 + \alpha_1 \, lnY_{1976,i} + \varepsilon_i$

G_i	Rule of Law	Government Efficiency	Control of Corruption
α_1	**0.594**	**0.598**	**0.648**
(s.e.)	(0.036)	(0.039)	(0.046)
R^2	0.663	0.693	0.713
# of Obs	84	79	78

Bold = significant at better than 95% level of confidence.

Estimated B_i

(Effect of Cap. Acc't Openness on Econ. Growth)

for various indicators of Institutional Quality

$$B_i = \beta_1 + \beta_2 \, lnY_{1976,i} + \beta_3 \, lnY_{1976,i}{}^2$$

Rule of Law

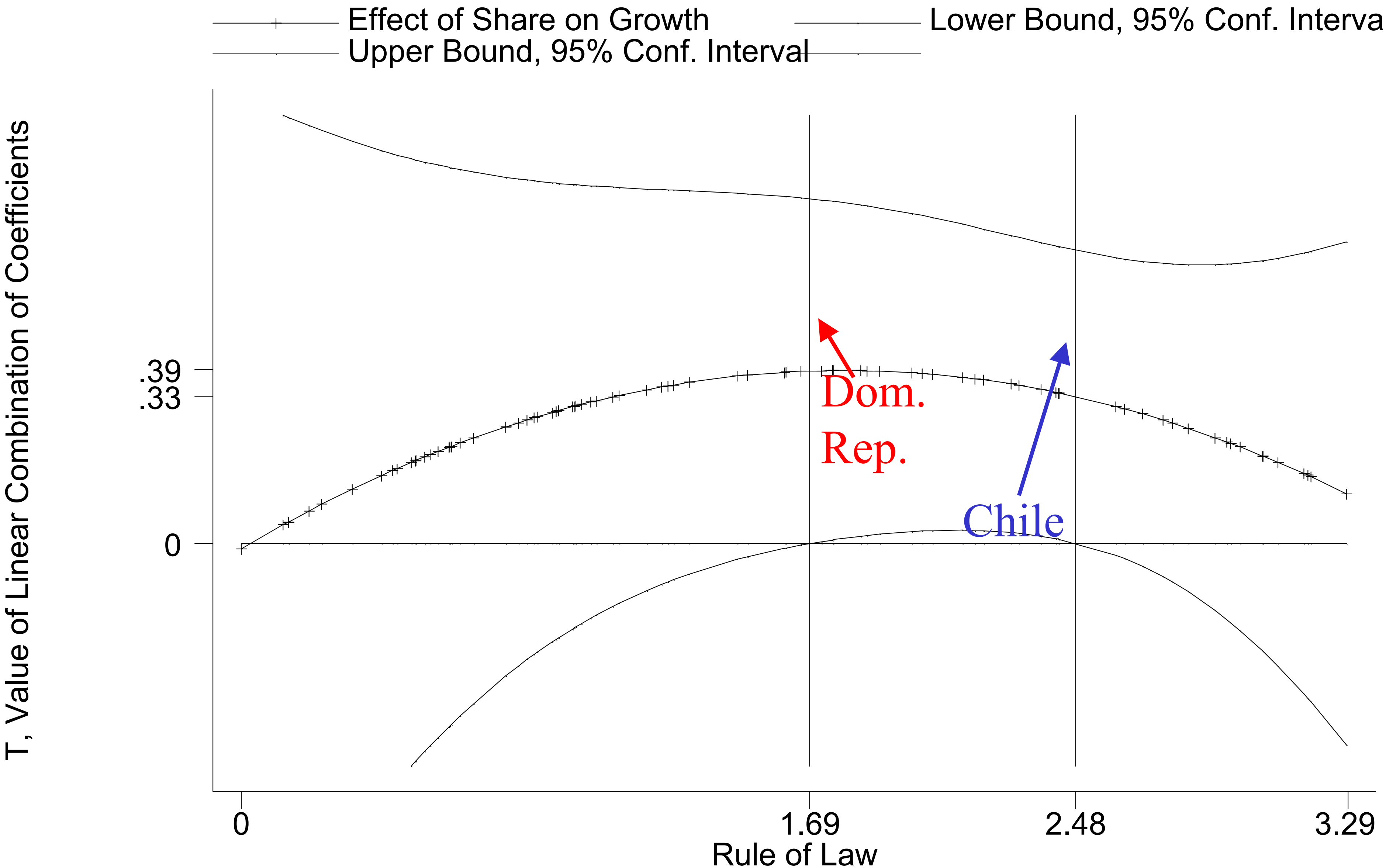

Figure 3, Share, Quadratic Interaction with Rule of Law

Government Efficiency

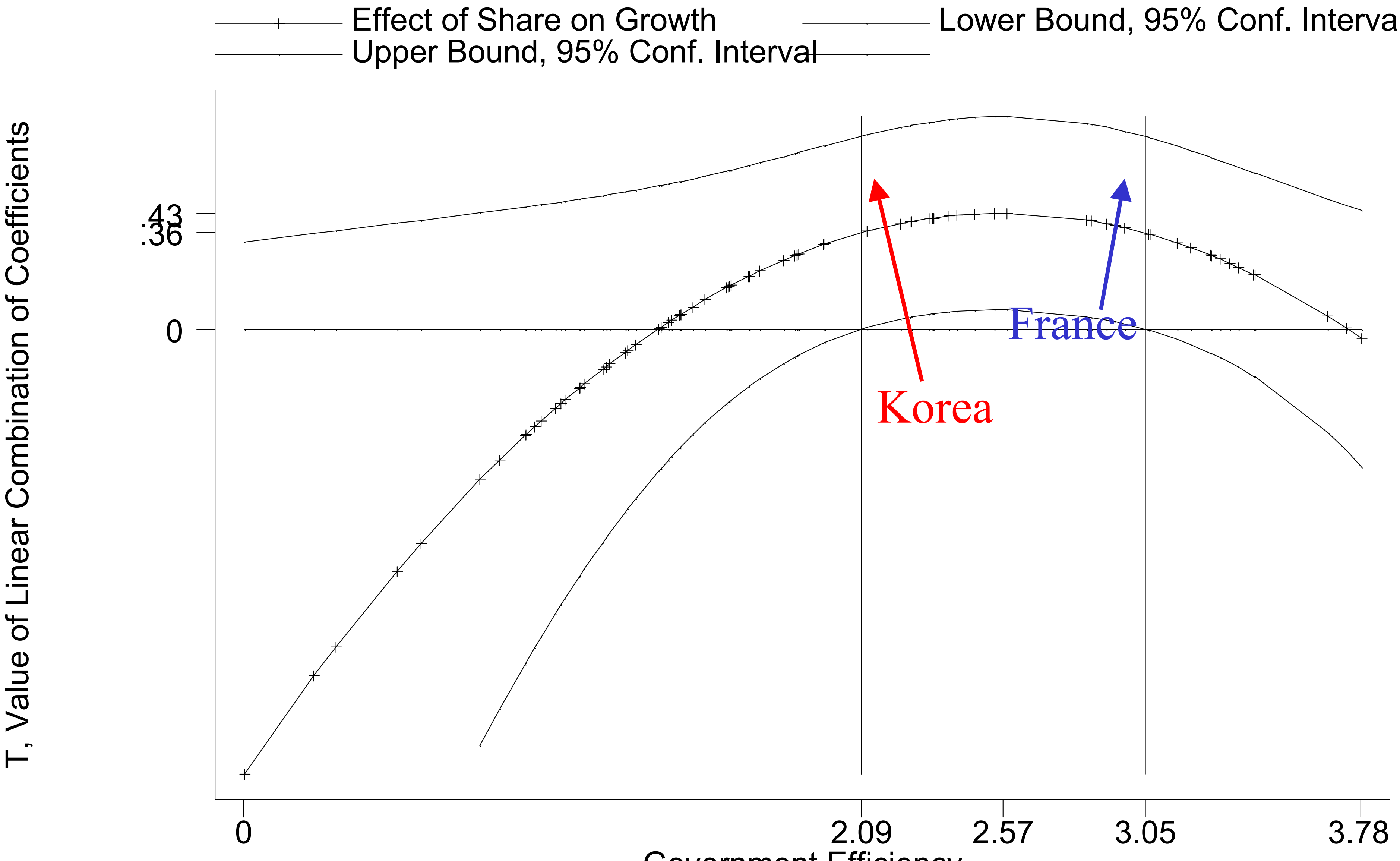

FIgure 5, Share, Quad. Int. with Government Efficiency

Control of Corruption

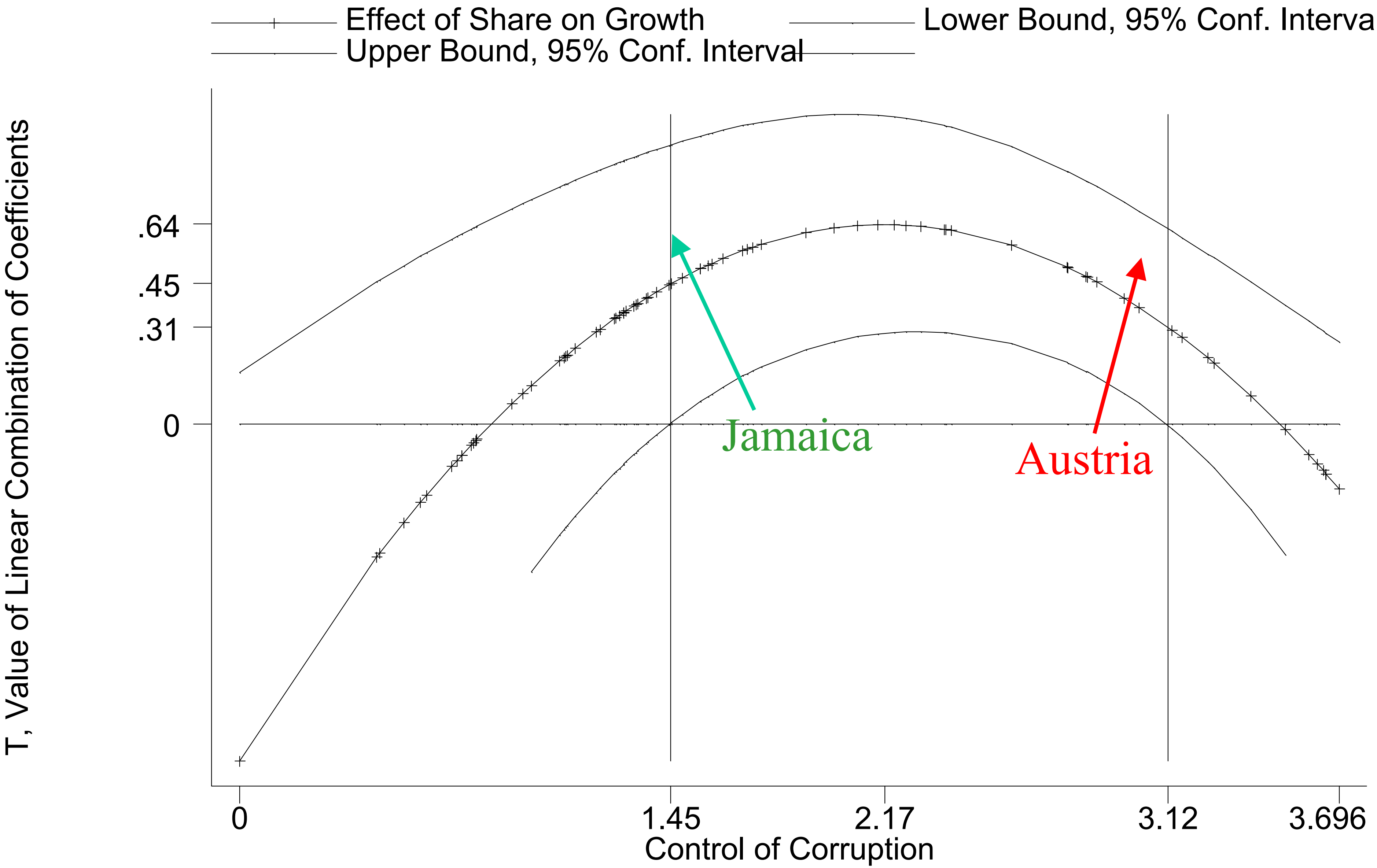

Figure 7, Share, Quadratic Interaction w/Control of Corruption

Conclusions

- Macroeconomic and Institutional Preconditions important for translating capital flows into productive investment.
  - Capital flows distinct from goods flows.
- Macroeconomic Stability promotes productive investment.
  - Early Warning signals may help predict crises
- Open Capital Accounts can promote growth if institutional frameworks in place.
  - Broad constellation of factors may be needed.