Terms of Trade Shocks
Economic Policy and Institutions

Jan Willem Gunning
Vrije Universiteit Amsterdam and FERDI

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Introduction

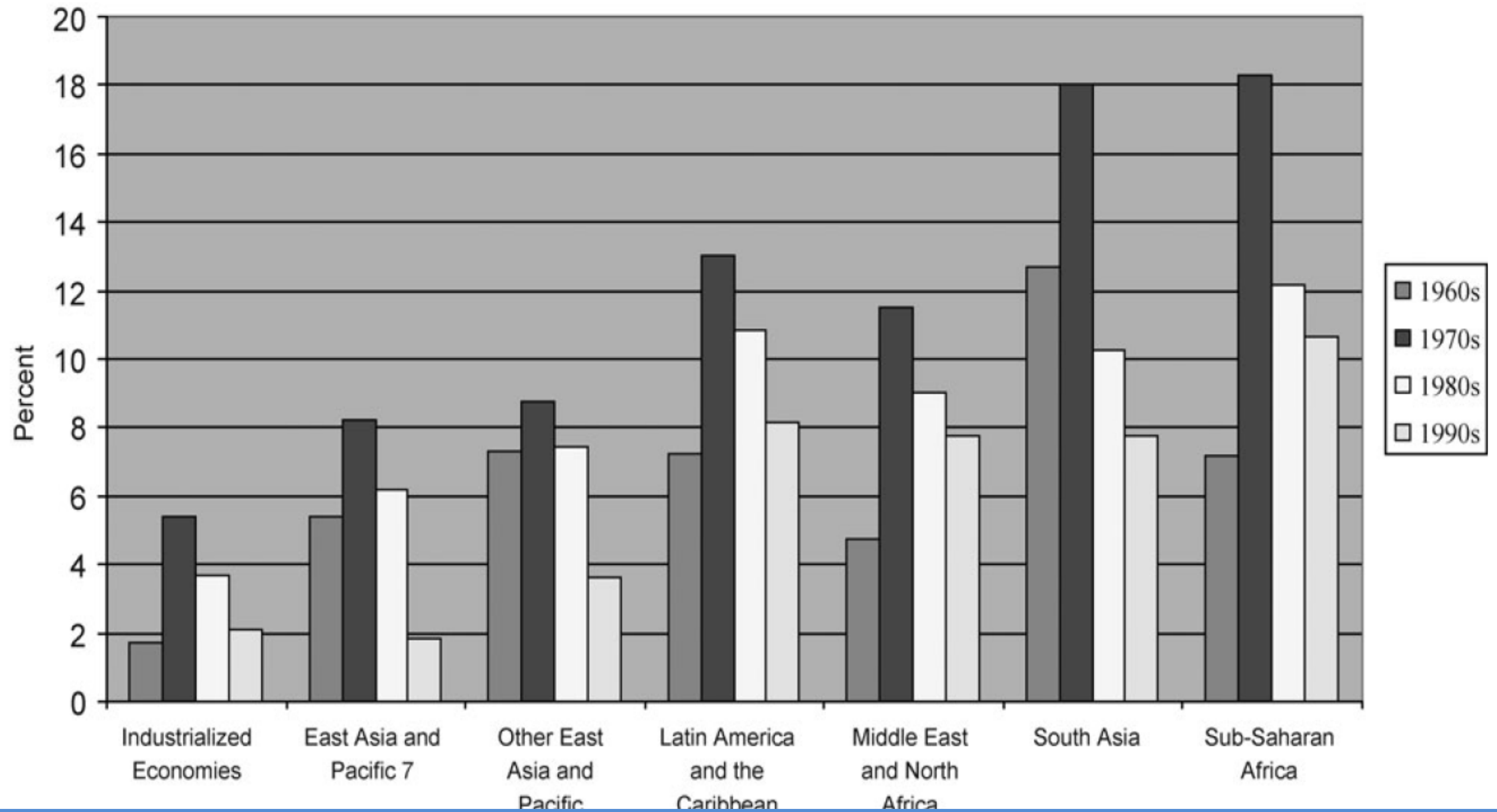
- an old problem:

  One of the greatest evils in international trade before the war was the wide and rapid fluctuations in the world prices of primary products ..
  It must be the primary purpose of control to prevent these fluctuations ..

  J.M. Keynes, *EJ*, 1942

- terms of trade volatility enormous for developing countries
- volatility peaked in the 1970s, but still very high in Africa and South Asia

FIGURE 3. Volatility of Terms of Trade Growth (regional medians)



Loayza *et al.*, *WBER*, 2007

Terms of trade shocks

- obvious reasons for volatility:

  reliance on a few primary exports
  exposure to climate shocks

- made worse by inappropriate policy responses
- what policies are appropriate?
- the Lucas question: does it matter?

Lucas, *Models of Business Cycles*, 1987

Development Economics

- not very helpful: models in which consumption smoothing cannot be analysed realistically
- growth models without risk
- micro models with risk, borrowing constraint, but perfect assets

Deaton, *Econometrica*, 1991

Policies in Shock-Prone Economies

- self-protection: lower exposure to risk

  macro: reduce openness, international price stabilization (buffer stocks)
  Keynes in the 1940s, New International Economic Order in the 1970s

  micro: export taxation and producer price stabilization,
  shield private producers, shift shocks to government

- self-insurance: saving and dissaving using foreign assets

  indeed enormous rise in assets/imports

- insurance or contingent credit lines: international risk pooling

Ehrlich and Becker, *JPE,* 1972
Newbery and Stiglitz, *The Theory of Commodity Price Stabilization*, 1981

Private Shocks: Domestic Price Stabilization

- custodial role for government: export taxes, stable producer prices
- rationale: private producer (African farmer) will not save windfalls
- fact free policy consensus
- evidence: private agents do save

  .. and governments often do not
- price stabilization flawed: compulsory insurance with full cover

Newbery and Stiglitz, *The Theory of Commodity Price Stabilization*, 1981

Bevan, Collier, Gunning, *Peasant and Governments*, 1989

Collier and Gunning, *Trade Shocks in Developing Countries*, 1999

Public shocks

- economic issue: use of windfall savings: domestic and foreign assets
- 1970s oil booms squandered
- mismanagement of positive shocks becoming rare
- but the issues remain

    policy maker may no be able to resist spending demands (oil funds)

    poltical economy literature: policy maker has no incentive to save

International risk pooling: insurance, credit, aid

- Guillaumont and Chauvet: aid in response to negative shock is very effective: “aid as insurance”

  one of the few robust results in growth regressions ..

- but donors have abandoned schemes like Stabex, a major policy error

- national policies inefficient: no pooling of reserves
- need for international finance: credit and insurance

Growth and risk: the dog that did not bark ..

- trade shocks literature focused on the effect of *actual* shocks
- so does the micro literature on shocks at the household level
- shocks matter, not only when they occur but also when they can occur: *ex post* and *ex ante* effects
- *ex ante* effects can be very large

Elbers et al., *WBER*, 2007

How serious is the problem?

- we do not really know
- growth regressions literature estimates effect of risk (*ex ante* and *ex post*)
- no distinction between two reasons for macroeconomic volatility:
  - exposure to high risk
  - poor risk coping

Lucas, *Models of Business Cycles*, 1987
Barlevy, *JEP*, 2005
Ramey and Ramey, *AER*, 1995
Van der Ploeg and Poelhekke, *OEP*, 2009