CEE Growth & Development

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Lecture 15

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Growth in the Open Economy

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- goods
- factors of production
- of ideas
- of international aid

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How openness affects economic growth?
Through which channels openness effects economic growth?
Why some people oppose openness?

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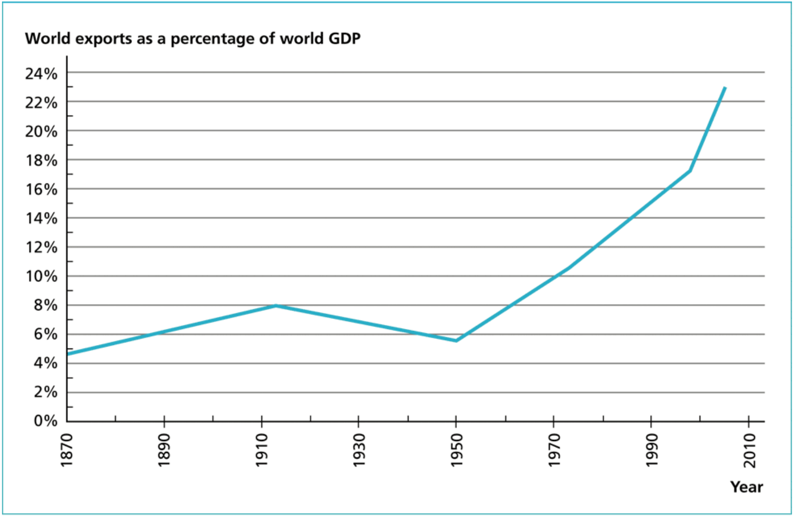
How to measure openness?

We can use the *rule of one price*. Markets of two countries are more integrated if prices of same goods are similar.

Share of trade in GDP (Weil, 2012)



Source: Maddison (2001), World Bank (2007a).

The effect of openness on economic growth

Capital is more mobile than labor.

In last two decades Japan is the highest exporter of capital (4.7% of GDP).

Historically, labor movement decreased: in 1910 15% of US population was foreign born, in 2005 11.7%.

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More open countries are on average richer than those which are not. (*Note: Reverse causality problem.*)

To solve the endogeneity problem we observe

- I) How growth rates (rather than levels) compare in open vs. closed economies?
- II) How growth rates of an economy change once the country changes policy from closed to open?
- III) How geographical factors affect economic growth? (we use an IV for openness)

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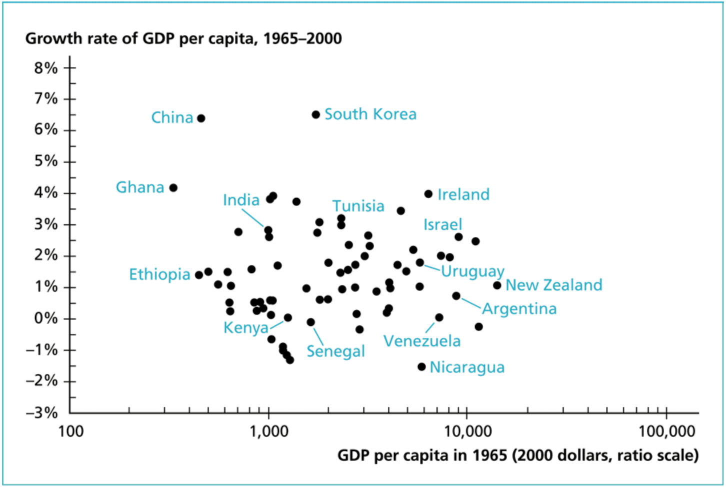

Sources: Sachs and Warner (1995), Wacziarg and Welch (2003), Heston et al. (2006).

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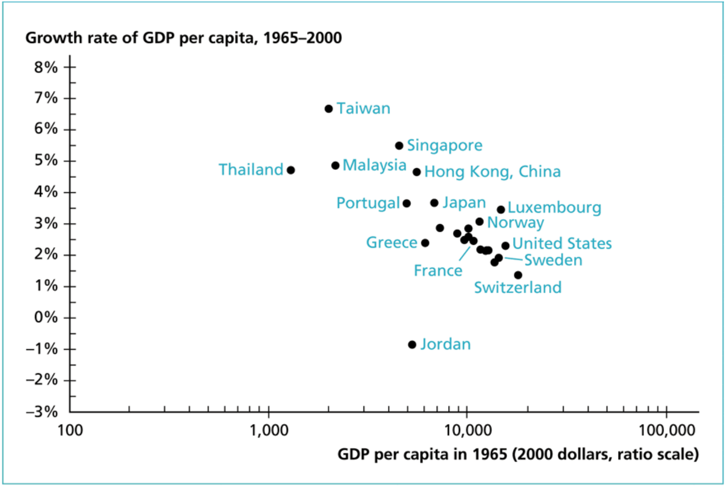

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Conclusions:

1. growth rate in *closed* economies is lower than in *open* economies.
2. Among *open* economies - poor countries tend to grow faster than rich. While, in the cluster of *closed* economies, poor countries grow slower than rich ones.

As for approach II) Japan serves as an historical example of an economy where change of openness directly effected economic growth.

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III) Geographical instrument variables (IVs) are used in order to to capture variation of trade that affects economic growth.

Through which channels openness affect economic growth?

Opnness of an economy (measured through trade) affects economic growth through two channels:

1. *Factor Accumulation*; and
2. *Productivity*

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How does economic growth change with capital mobility?

Production function $y = Ak^{\alpha}$ where,

- y is output per worker
- A is TFP/constant
- k capital per worker

1. Factor Accumulation - continued

$$MP_k = \alpha A k^{\alpha-1}$$

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  This result implies that with perfect capital mobility, K/L ratio depends on the world rental rate of capital.

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NO!

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- In an OPEN ECONOMY, increase in savings is used to invest in countries where MP_k is larger. This investment 'outflow' will persist until marginal products equalize. Therefore, as savings increase GNP (ownership of capital abroad increases)

Openness and Productivity

Through which channels openness affects productivity?

1. Trade
   - 'works' of comparative advantage
     (natural resources, abundance of labor, earlier specialization)
2. Technological progress
   - FDI (technology)
   - know-how as spill-over and expanding the incentives for new technology
3. Efficiency
   - Openness increases competition, which in turn increases efficiency.(graph 11.6.)

Opposition to Openness

If openness of the economy is so beneficial for the economy, why are some against it?
Not everyone benefits from the inflow of technology.

Examples

- Barriers of entry in developing countries
  (USA - sugar, EU -most of agricultural products)
- Open trade increased skill differential in the US wages.