DOES TRADE BENEFIT GROWTH?

– EVIDENCE FROM THAILAND

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Introduction

- Any nation hopes to get benefits from globalization.
- The easiest part of global integration to observe is increasing trade
- Nations that have learned to export manufactured goods/services seem to develop much faster than those produce mainly for their own home markets
- The effect of trade on economic growth is a recurring issue in economics

BAIYOKE HOTEL (Bangkok, Thailand)

Trade-led growth

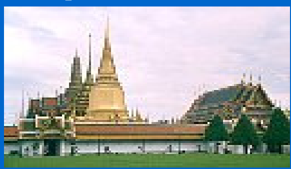
- Vohra (2001): exports have a positive impact on economic growth when a country pursues export expansion strategies.
- Lee and Pan (2000): little evidence of causal relations from exports to GDP on eight East Asian developing countries (Hong Kong, Indonesia, South Korea, Malaysia, the Philippines, Singapore, Taiwan, and Thailand).

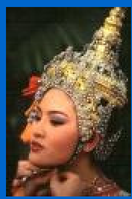
Or not?

- Ekanayake (1999): no strong evidence for causality from export growth to economic growth in eight Asian countries India, Indonesia, Korea, Malaysia, Pakistan, Philippines, Sri Lanka and Thailand)
- Siddique and Selvanathan (2002):
  - refute a positive relationship between exports and economic growth
  - economic growth leads to exports increase
  - export growth causes import growth
  - import growth causes economic growth

Introduction

- This study examines the example of Thailand, a developing country with the time span of 1950-2000





Thailand brief

- In the 1970s, its industrial sector was started based on import substitution
- in the 1980s the export-oriented manufacturing sector, based on labor-intensive output such as textiles and garments
- after 1990 the fastest growth was in higher-technology goods as computer accessories and motor vehicle parts
- import capital goods, intermediate goods and raw materials, consumer goods and fuels

THAILAND BRIEF

- Located in Southeast Asia
- population: about 65 million
- a free-enterprise economy
- one of the most diverse economies in South-east Asia in the 25 years to 1998, based traditionally on agricultural products export
- Recovered from financial crisis 1997-1998, it maintains the export surplus in recent years

Theoretical basis

- Trade openness $T(\%) = \dfrac{X+M}{Y} * 100$
  - $Y = GDP$
  - $X = X(e, Y^*)$ = *export revenue*
  - $M = M(e, Y)$ = *import expenditure*

=> T= f (e, Y, Y*)

Inverse the above function to get Y function

$\Rightarrow Y = f(T, e, Y^*)$ *e: exchange rate,*
Y: foreign GDP*

Theoretical basis

Assume Y* is constant, Y = f (T, e)

For per capita measure, *y = f (T, e)* (1)

- Neo-classical economic growth theory

  $y = f(k) = Ak^{\alpha}$ *(2)* *y: per capita GDP*
  k: per capita capital

Combine (1) and (2), getting

$$\boxed{y = f\,(T, e, k)}$$

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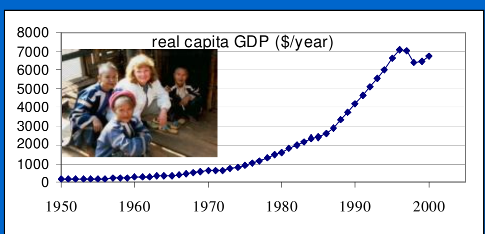
Real per capita GDP of Thailand



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- Per capita capital of Thailand

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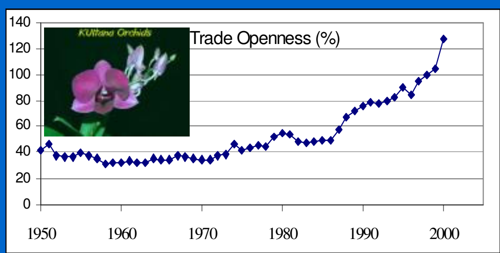
Trade of Thailand $T(\%) = \frac{X + M}{Y} * 100$



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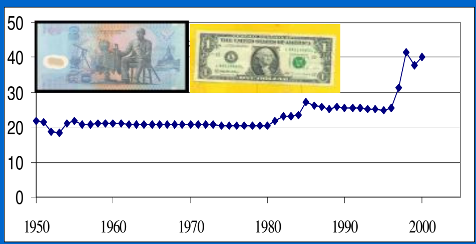
Exchange rate of Thai currency (baht/US$)



Results
(1950-1980)

dlnyt = 0.07 – 0.16dlnTt + 1.44dlnkt – 0.72dlnkt-1 + 1.23dlnlnet

(1981-2000)

dlnyt = 0.07 + 0.07dlnTt + 1.44dlnkt – 0.72dlnk t-1 – 0.65dlnlnet

Results

- Effect of exchange rate on per capita GDP
  - Before 1980: Devaluation by 10% would have raised per capita income by 3.92%.
  - After 1980: a 10% depreciation would lower per capita income by 2.07%.
- Effect of capital on per capita GDP $\varepsilon_{yk} = 0.72$

  over 2 periods of the current and one year lag.

  ► The very important role of capital in growth of Thailand.

  ► A 10% increases in capital raises the GDP 7.2%.

Trade effect on per capita GDP

Before 1981, $\varepsilon_{yT} = -0.16$

an increase of 10% in trade lowers per capita income by 1.6%

Reasons:

- decrease in exported agri-products
- oil dependence and oil shock 1973-1979

Trade effect on per capita GDP

- After 1981, $\varepsilon_{yT} = 0.07$
  - ► the shift from exported agri-products and import substitution to exported manufactured goods
  - ► The terms of trade declined from 102 in 1982 to 77 in 2003 as shown in Figure 3 suggesting the increased export revenue only offsets rising import prices, especially oil price.

Immiserizing growth?

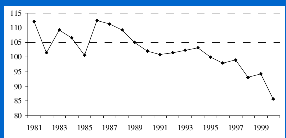
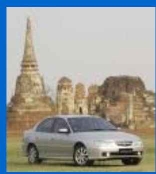


Figure 3. Terms of trade of Thailand 1981-2000

Discussion

- Adams, Ichino and Prazmowski (2000): an energy balance model found that growth in Thailand is based on export promotion so that foreign earnings tend to offset the cost of imported fuel.



Discussion

- Doric and Golley (2004) state
  - – specialization in primary exports is bad for growth
  - – since 1980 the benefits of trade accrued mostly to the richer economies, with little benefit to the less developed economies.

Thai trade 1981-2000

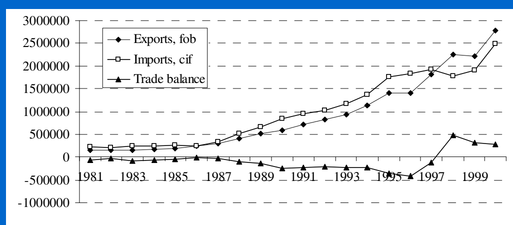
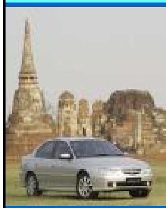


Figure 4. International trade of Thailand 1981-2003 (million baht) Source: ADB

Discussion

- Yamada (1998):
  - capital flows from agriculture have not been as large as is typically assumed.
  - Since the 1970s, Thai government has adopted an export-oriented policy emphasizing labor-intensive light industry, and investments to promote labor-intensive industries in rural areas have created jobs for rural people.
  - developing industrial sectors is an effective policy to boost the economy of Thailand since 1980s.

Does trade benefit economic growth of a country?



The role of foreign investment

The role of FDI in economic growth

- Marwah and Tavakoli (2004):
  - Thai production elasticity of foreign capital is 0.044
  - 20.3% of the productivity of total capital stock is generated by growth in FDI in Thailand.
- Kohpaiboon (2003):the growth impact of FDI tends to be greater under an export promotion trade regime compared to an import-substitution regime.

As FDI is included in import expenditure, import will create positive effects to GDP growth of Thailand.

THANK YOU !