

International Trade and FDI

Bhanupong
Lecture 18

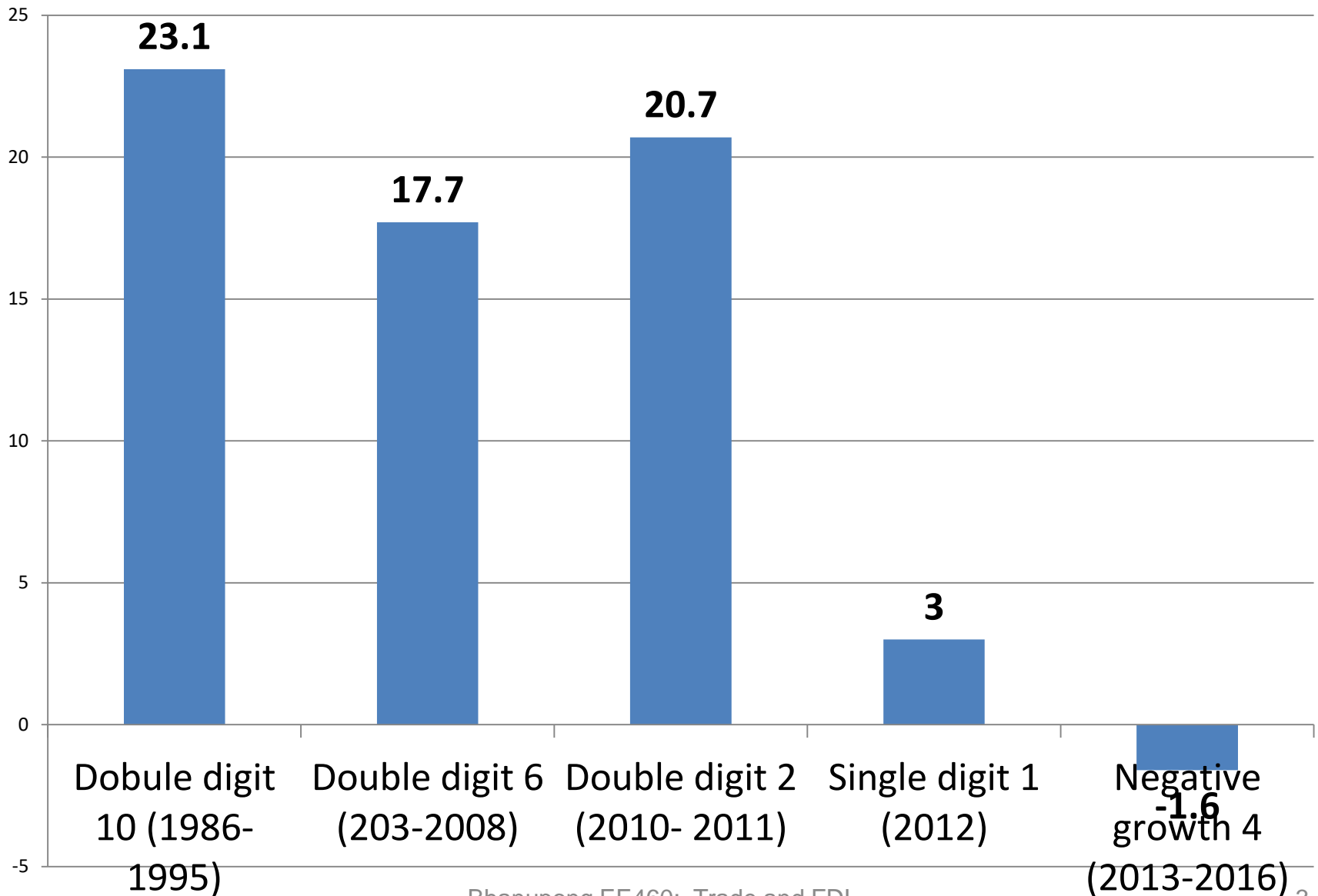
*“The propensity to truck, barter and exchange one thing for another is common to all men and to be found in no other race of animal” **Adam Smith.***

Main Themes

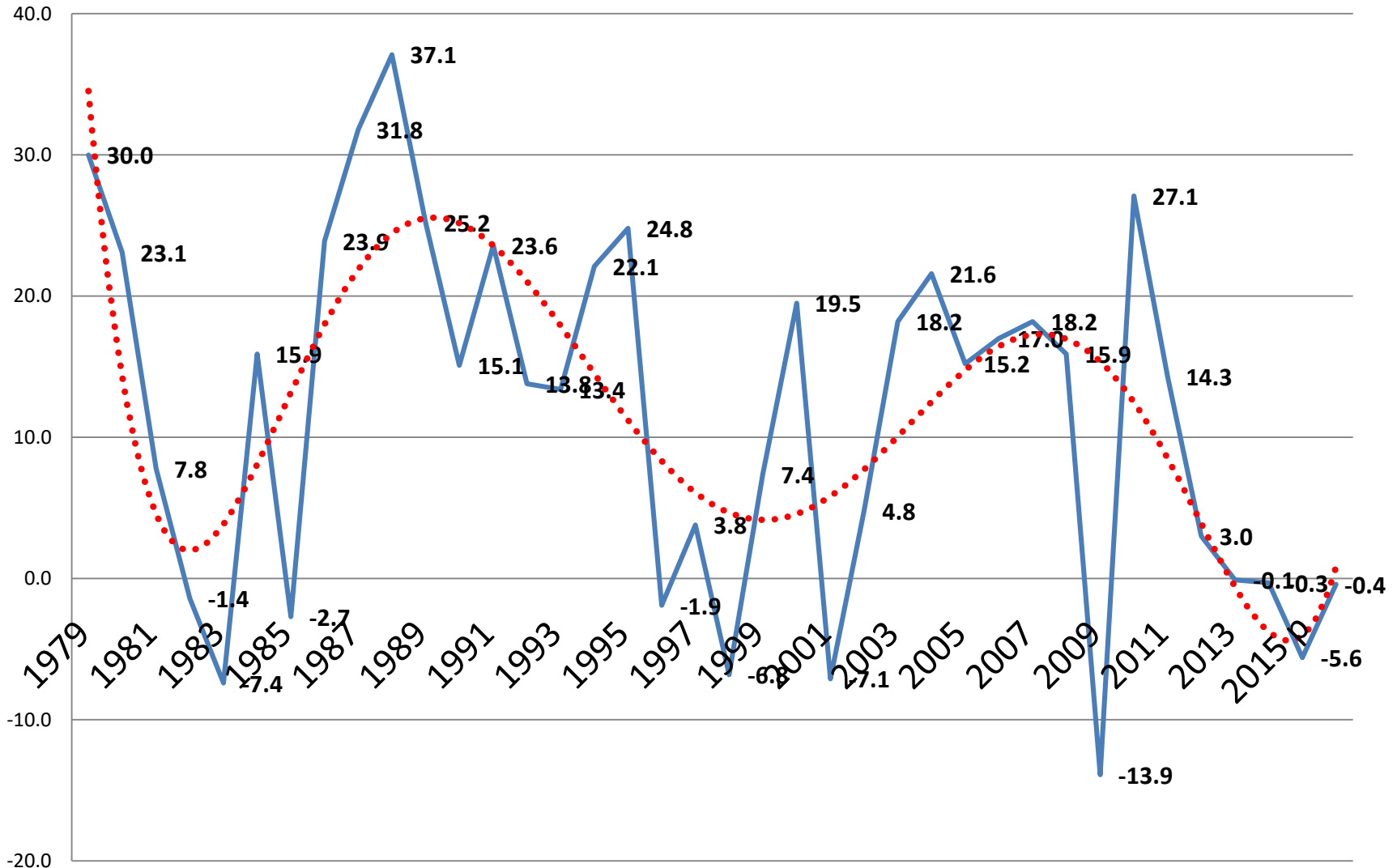
- Trade exposure and trade liberalization
- Food crisis and international trade
- Trade and output growth
- FDI and network trade
- Trade structure
- GFC and trade contraction
- FDI and export capability

Thailand's Exports

From double digit to negative growth rates



Thailand's Exports Cycles (% change)



Note down: South Korea's economy

- The Republic of Samsung, as some locals call their country, is in a fragile state: two of the sectors on which its economy relies—smartphones and shipping—has been hit hard.
- Samsung, which accounts for one-fifth of South Korean exports, slashed estimates for third-quarter operating profit at its flagship electronics division by one-third after it killed its line of Galaxy Note 7 phones, which had been catching fire.

Half steam ahead



South Korea

GDP, % increase on a year earlier



Source: Bank of Korea

*Forecast

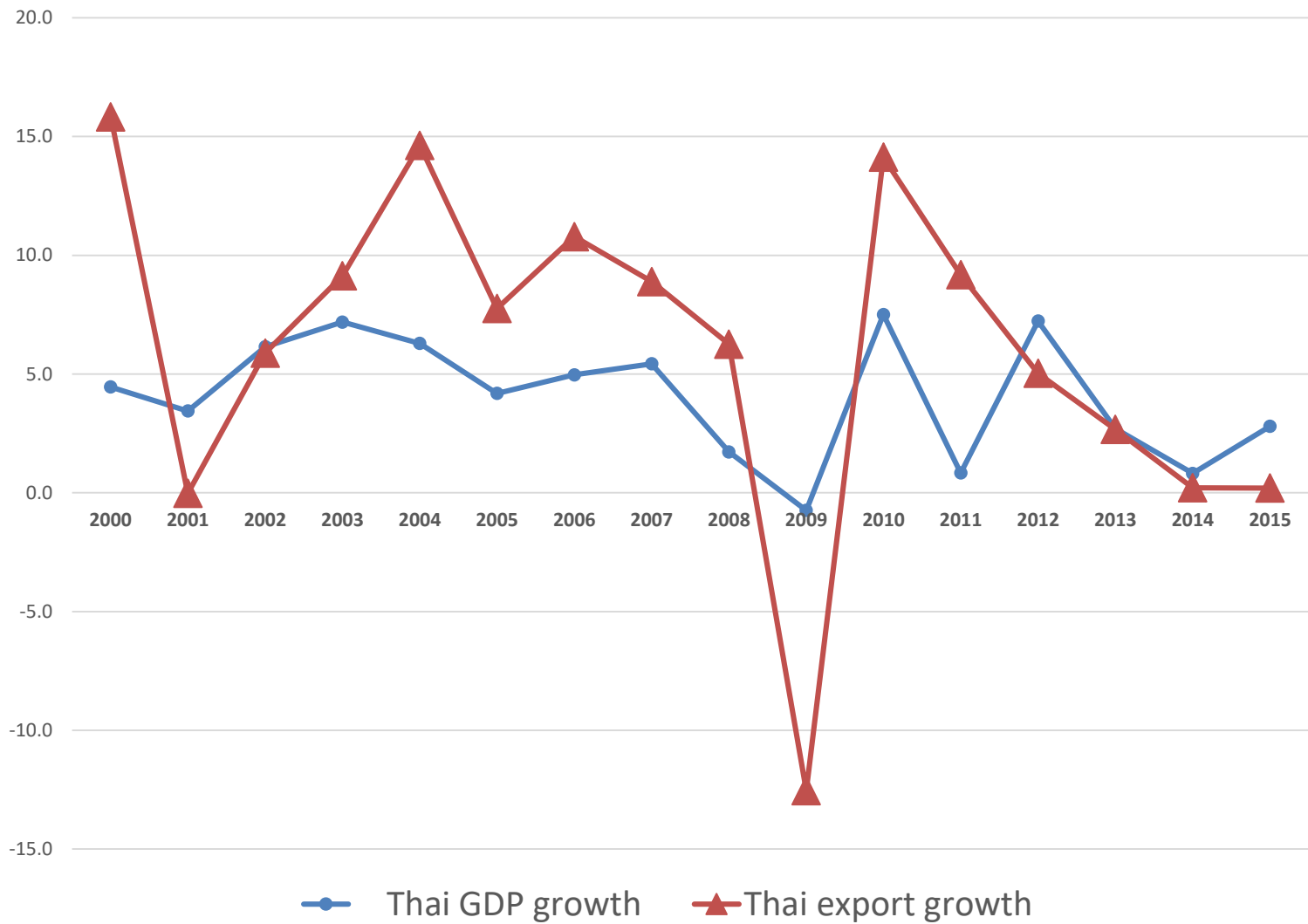
Note down: South Korea's economy

- Hanjin Shipping, a local container line, has gone bust and Daewoo Shipbuilding & Marine Engineering, another maritime heavyweight, is shedding a quarter of its workforce; the IMF expects South Korea will need a decade to recoup 31trn won (\$27bn) in debt-restructuring costs for the ailing sector.
- No wonder the central bank has trimmed its growth forecast for 2017 from 2.9% to 2.8%. Expect third-quarter GDP was a modest 0.6% up on last year—and yet more anemic rates to come.

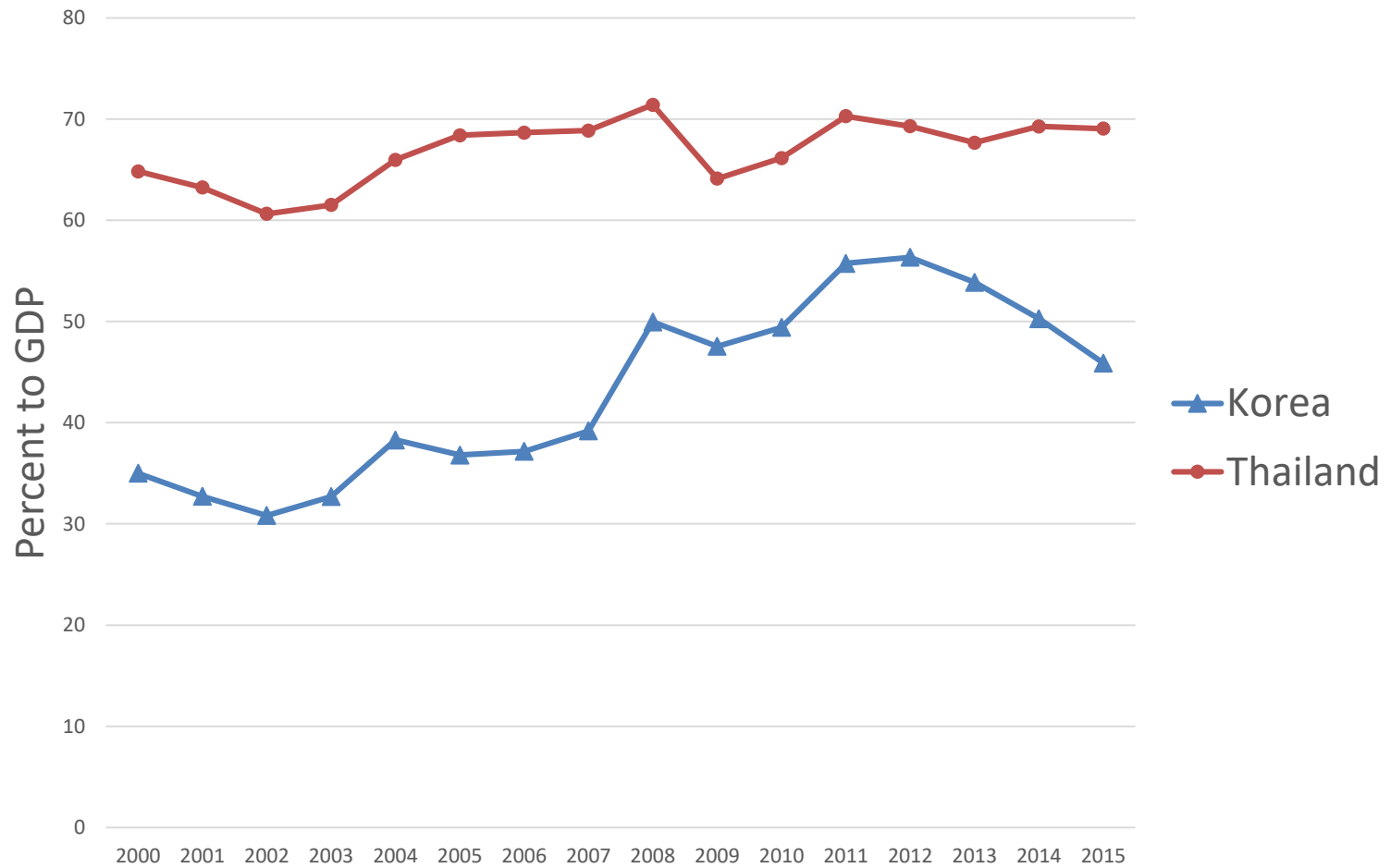
Co-movement of exports: Korea and Thailand



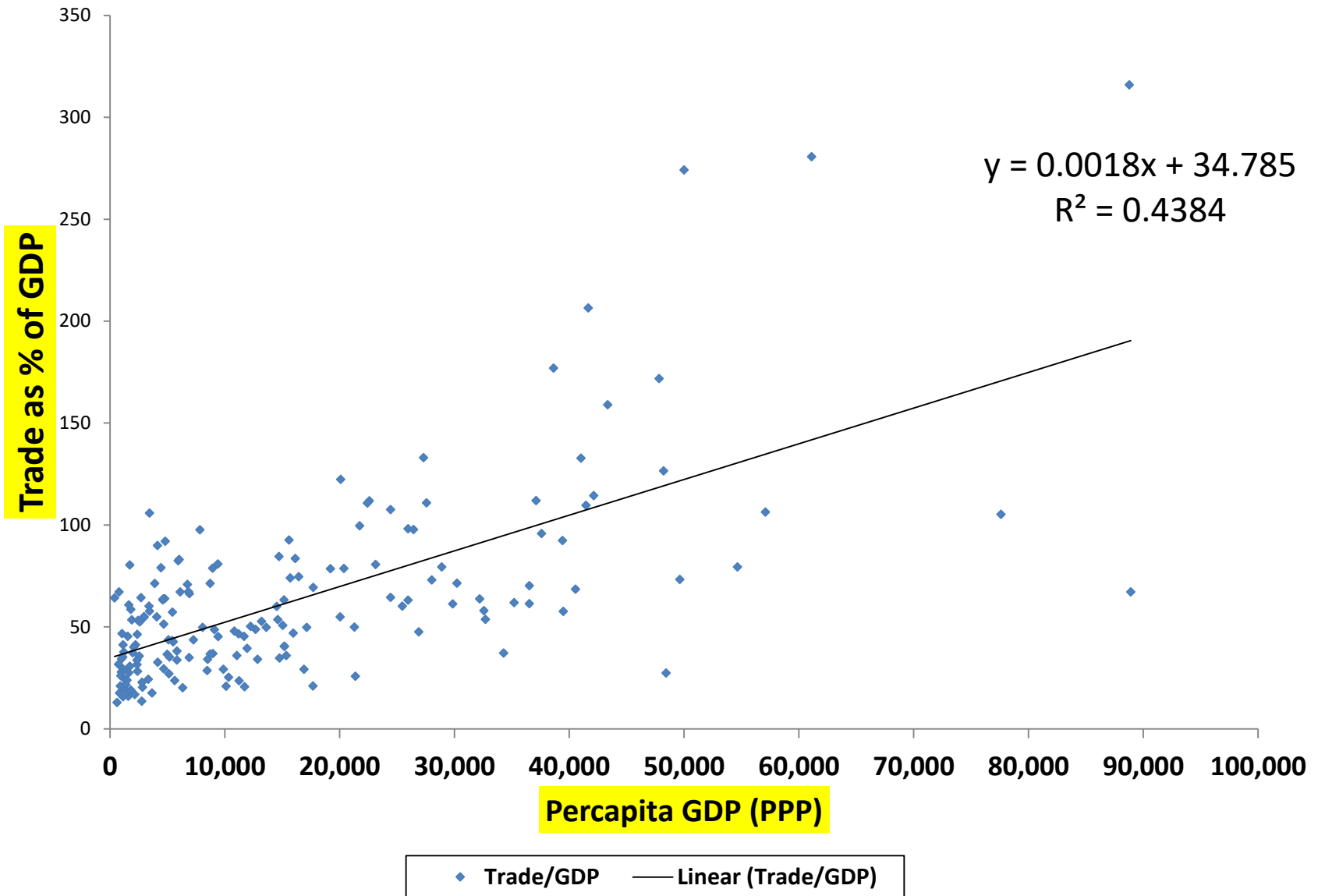
An Export-driven Economy: Thailand



Export Dependency in Comparison



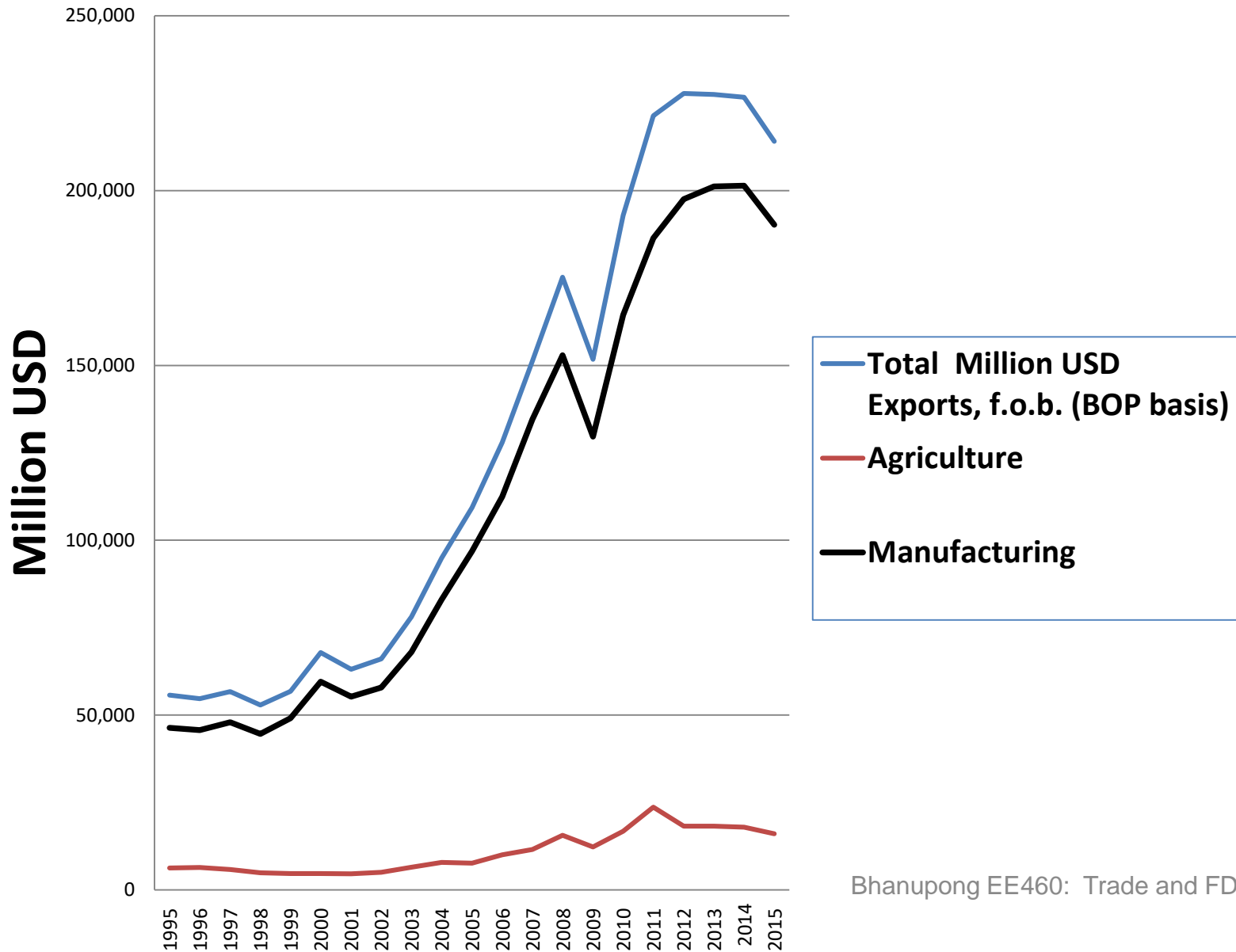
Trade and Economic Development



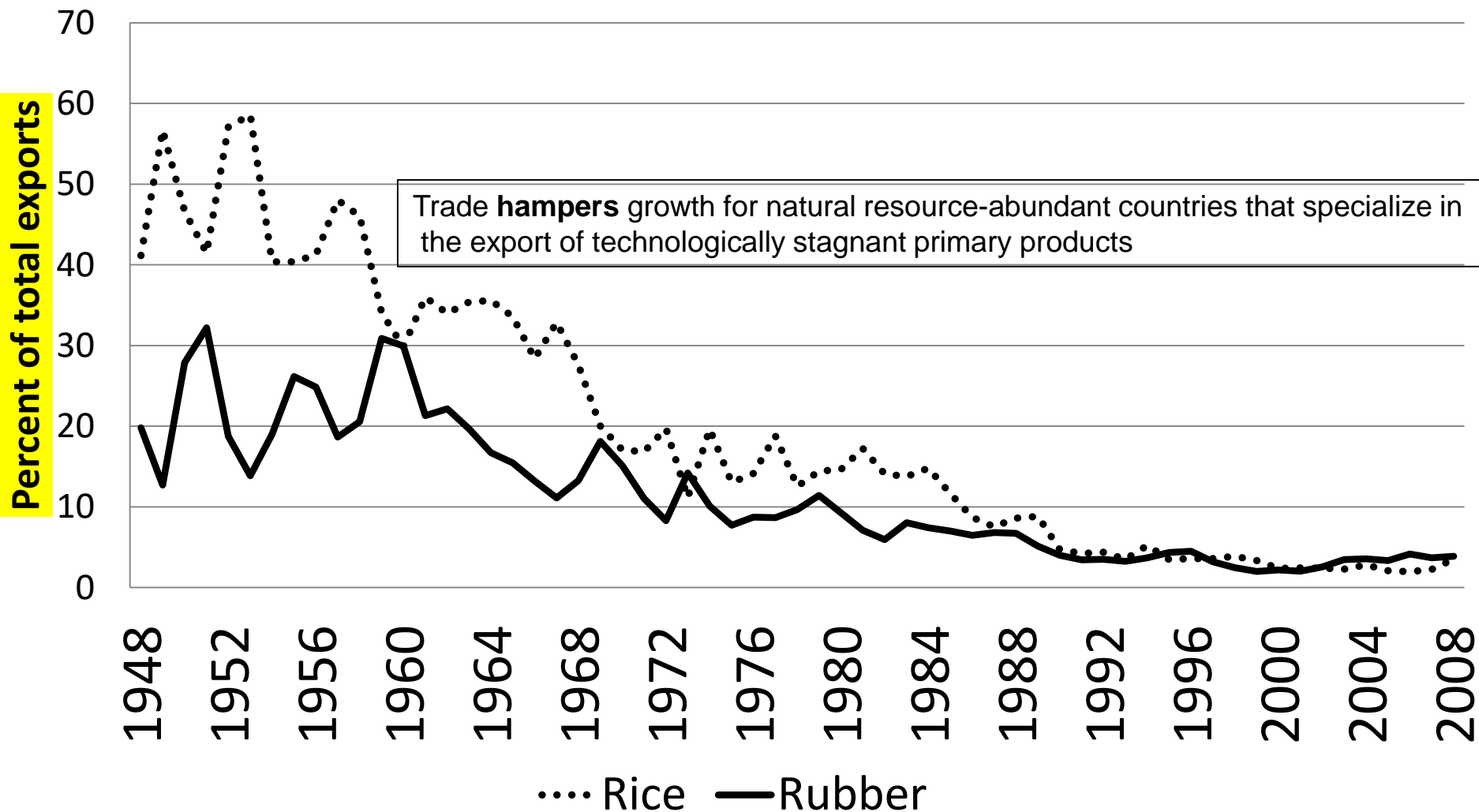
Three views on international trade and economic growth

- Trade **hampers** growth for natural resource-abundant countries that specialize in the export of technologically stagnant primary products;
- Trade acts as the '**handmaiden**' of growth by improving the quality of investment and slowing the tendency of its return to fall
- Trade acts as the **engine of growth** by providing a conduit for technology transfer.

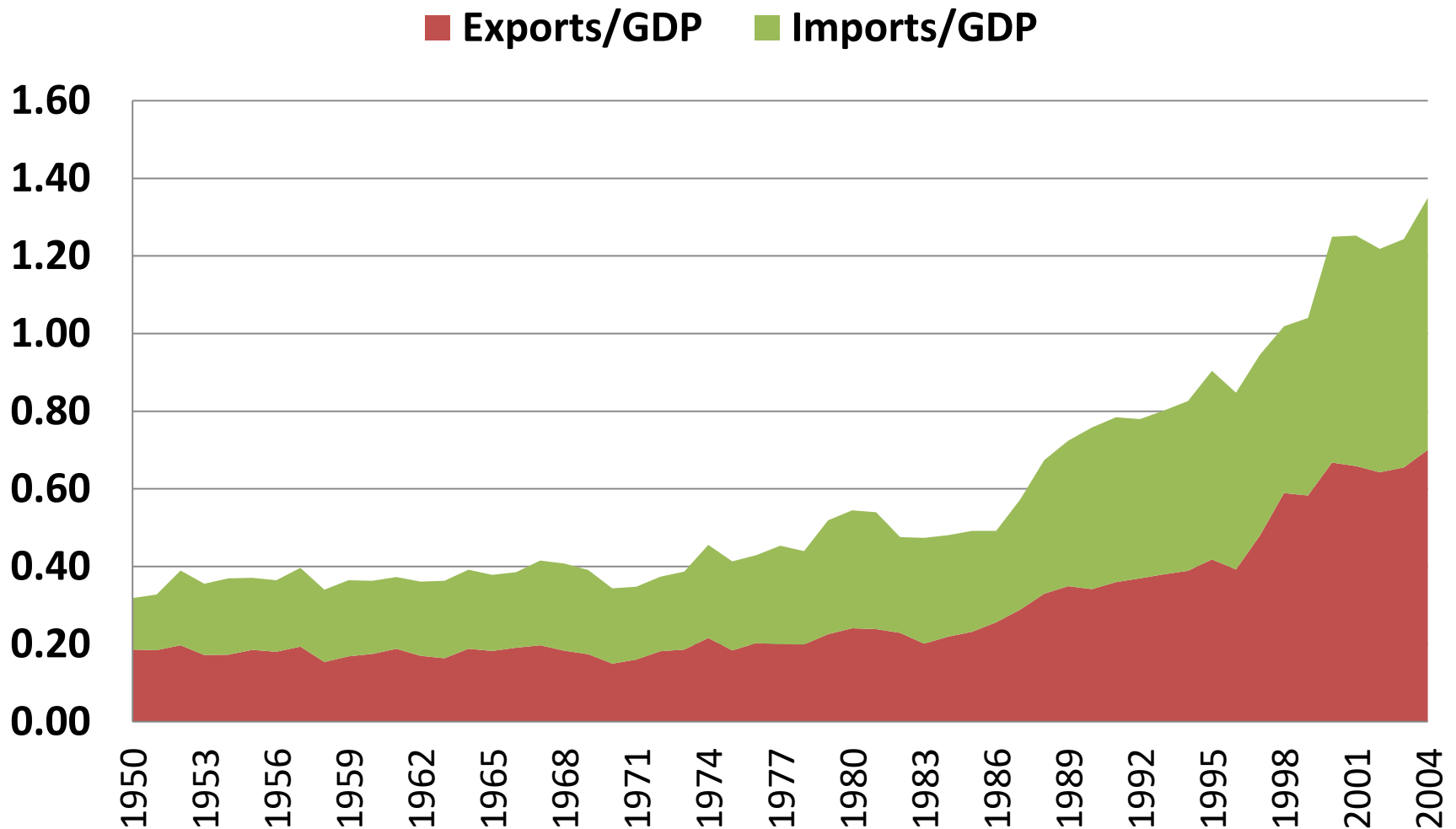
Thailand's export growth engine: A complete shutdown?



Shares of traditional primary exports: 1948-2008



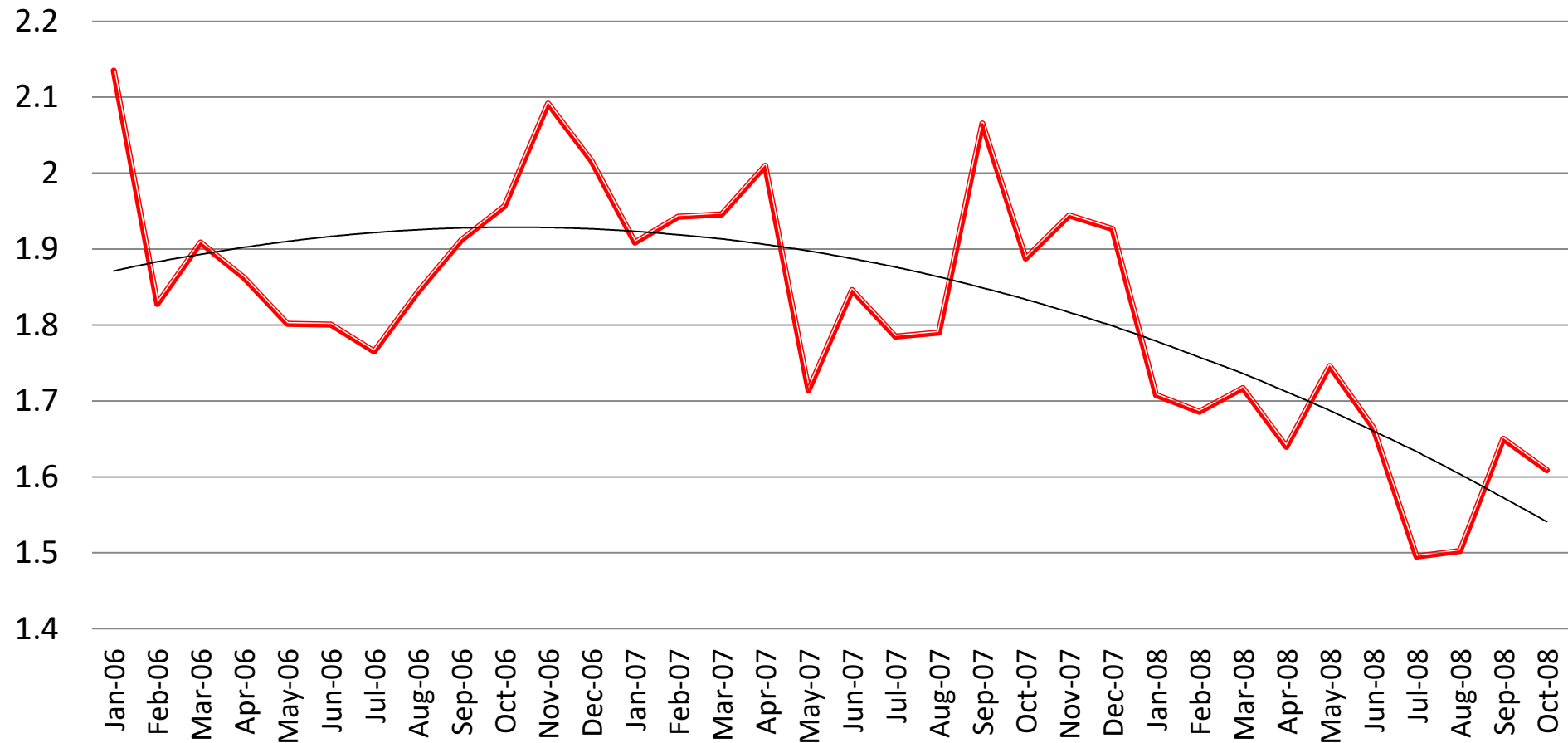
Gradual Trade Liberalization: 1950-2004



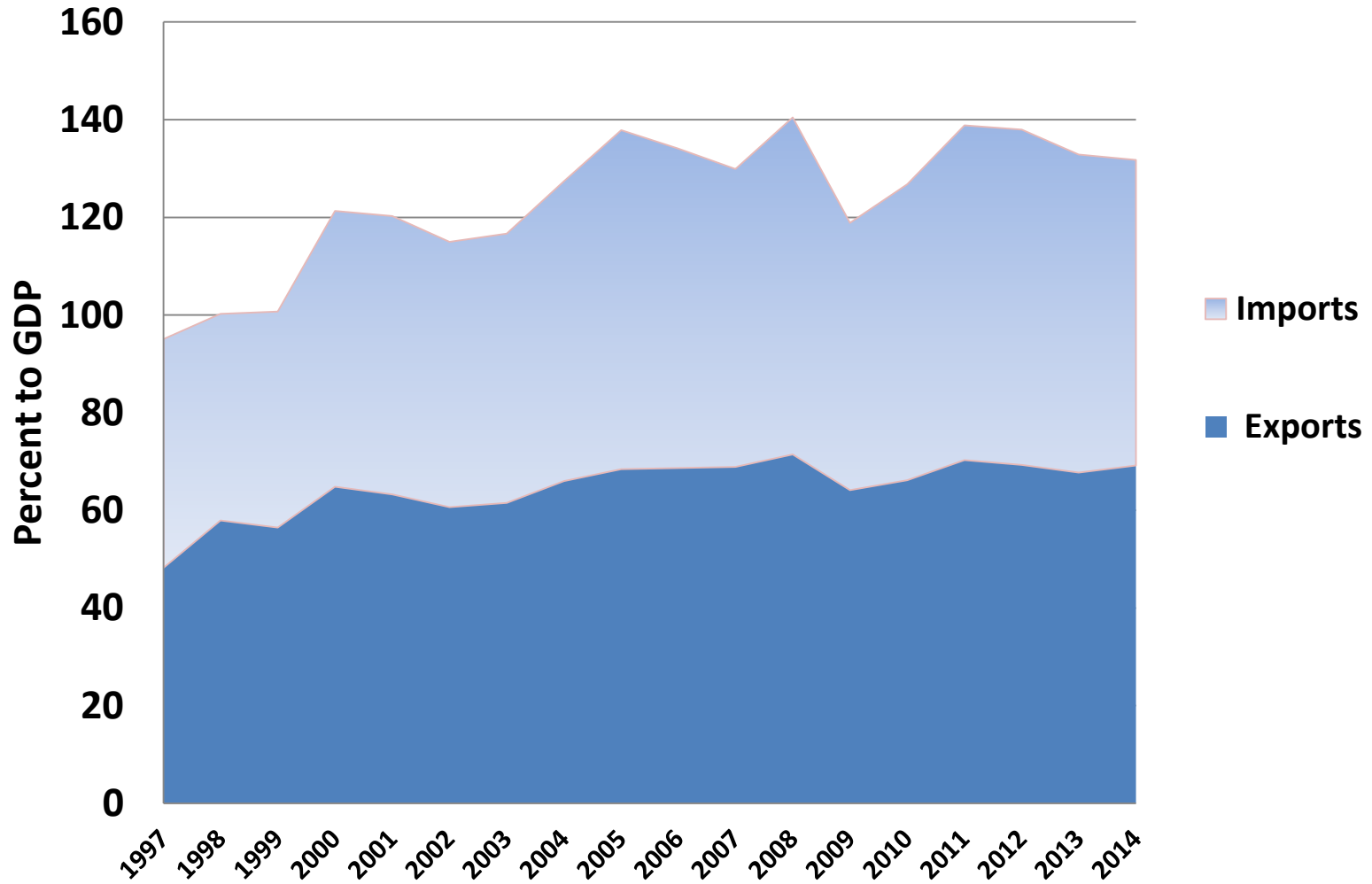
Trade Reform: Reducing tariff rates

Thailand's implied tariff rate

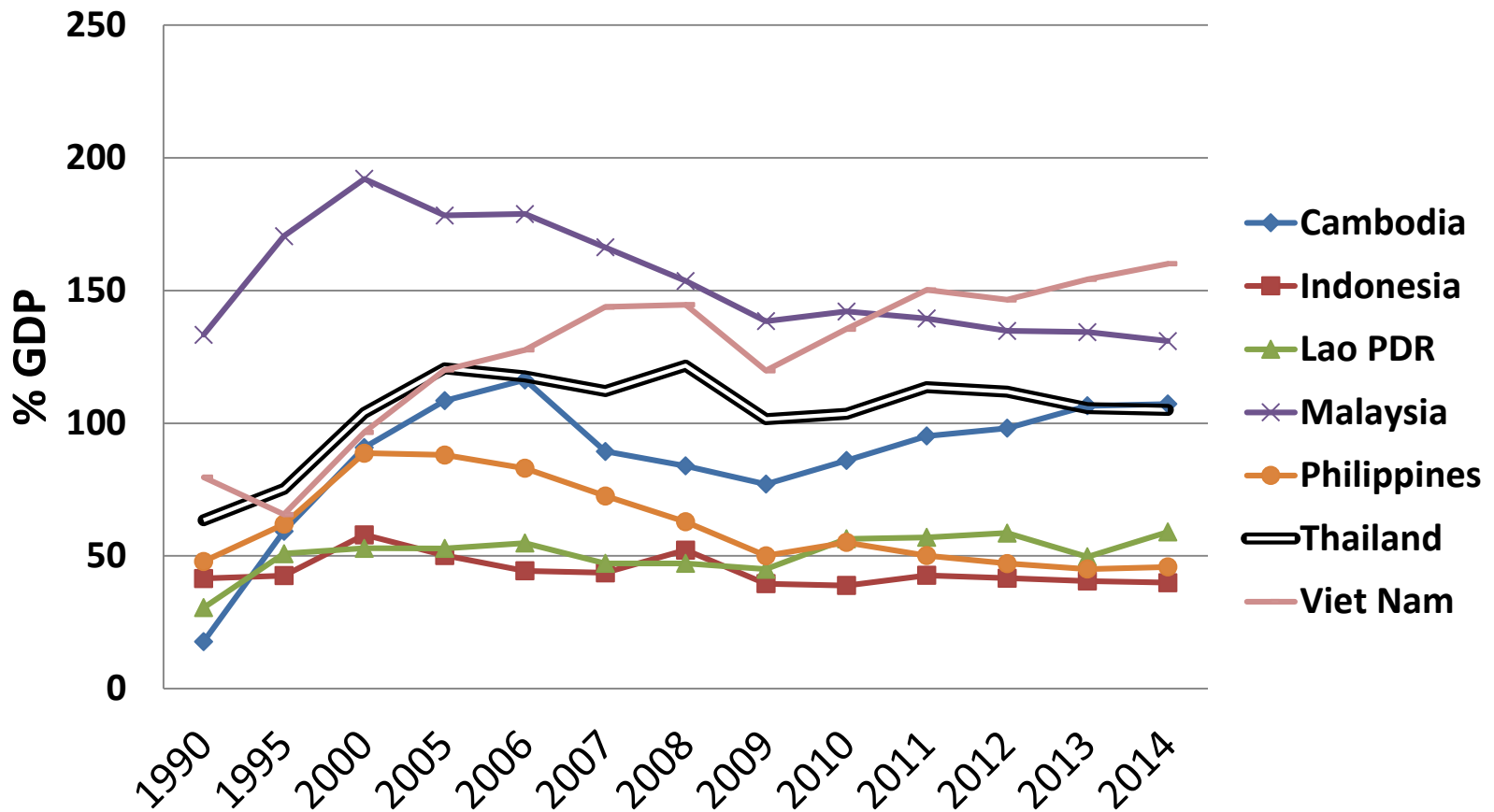
customs revenue to total imports(%)



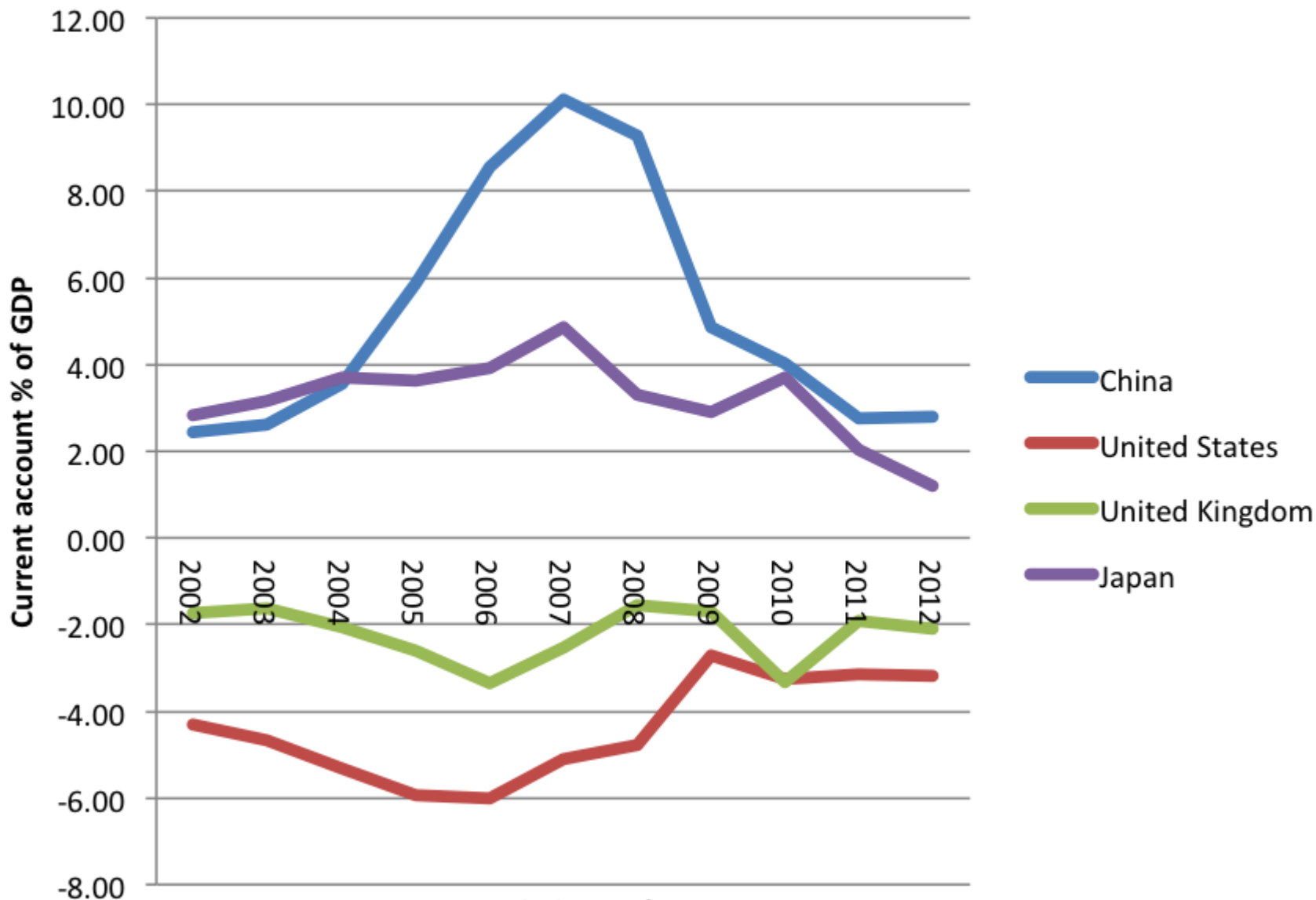
Thailand's Trade Exposure After AFC 1997-2014



Trade Exposure: Sum of merchandise exports and imports (% GDP)
Sometimes called Degree of Trade Openness



Current Account Deficit - East / West



www.economicshelp.org | Source: ONS

Bhanupong EE460: Trade and FDI

Should we worry about a current account deficit?

- If a current account deficit is financed from long term capital inflows then this can be beneficial for the economy. Inward investment can increase the productive capacity of the economy.
- In an era of globalization it is much easier to attract sufficient capital flows to finance the deficit.
- If the deficit gets too large it will cause a devaluation which helps to reduce the deficit. Also when there is a slowdown in consumer spending the deficit will fall.
- A current account deficit provides an outlet for domestic demand and prevents inflation.

Reasons to Worry about a Current Account Deficit

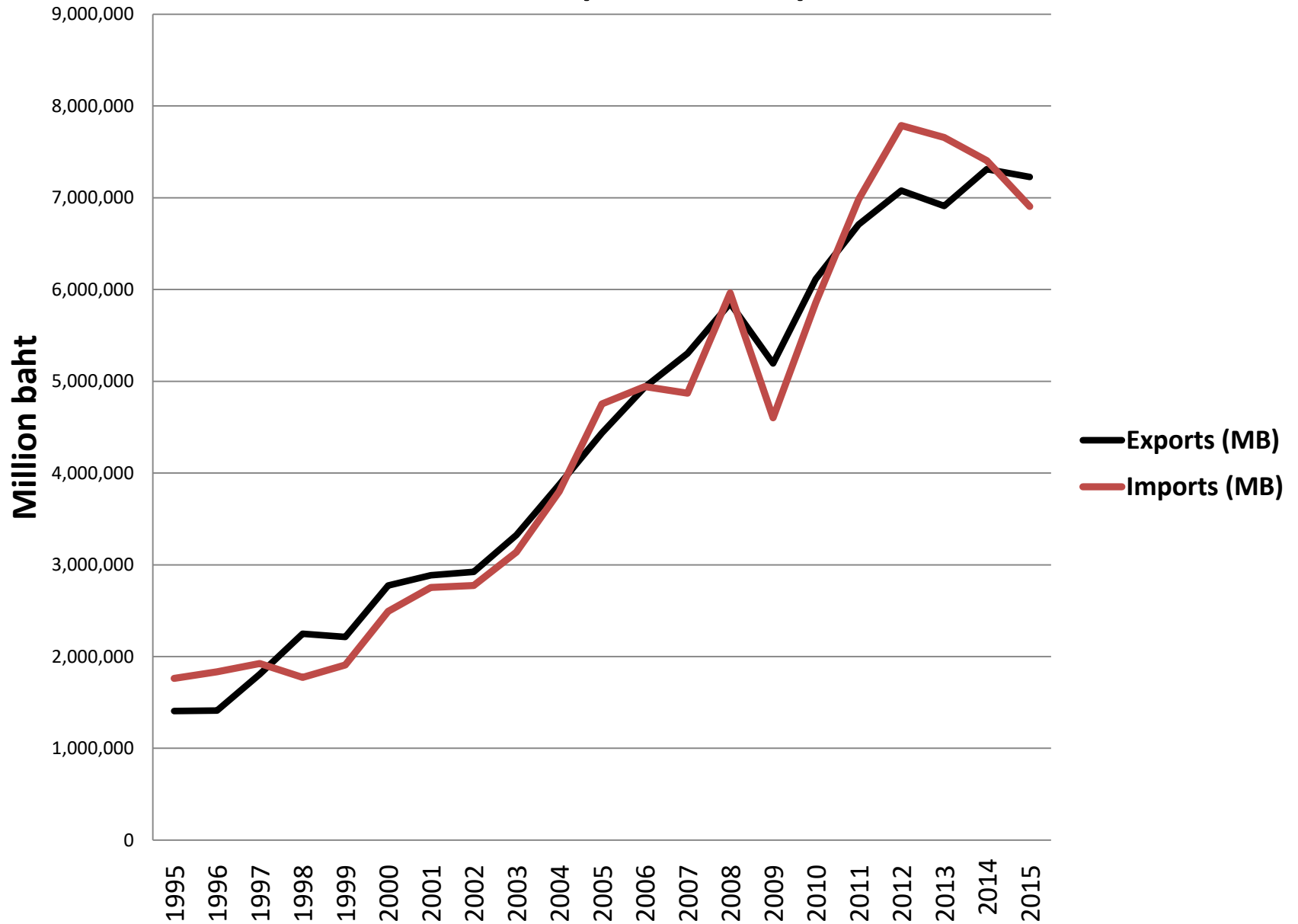
There could be problems financing the deficit in the long term. A short term deficit is not a problem, but if we have a deficit of over 6% of GDP then it is a problem if we rely on capital flows.

A significant part of the current account deficit in US is financed by Chinese investors buying US securities, at relatively low interest rates.

Most countries would not be able to borrow such large amounts at low interest rates. The US currently can because the US is seen as the World's reserve currency.

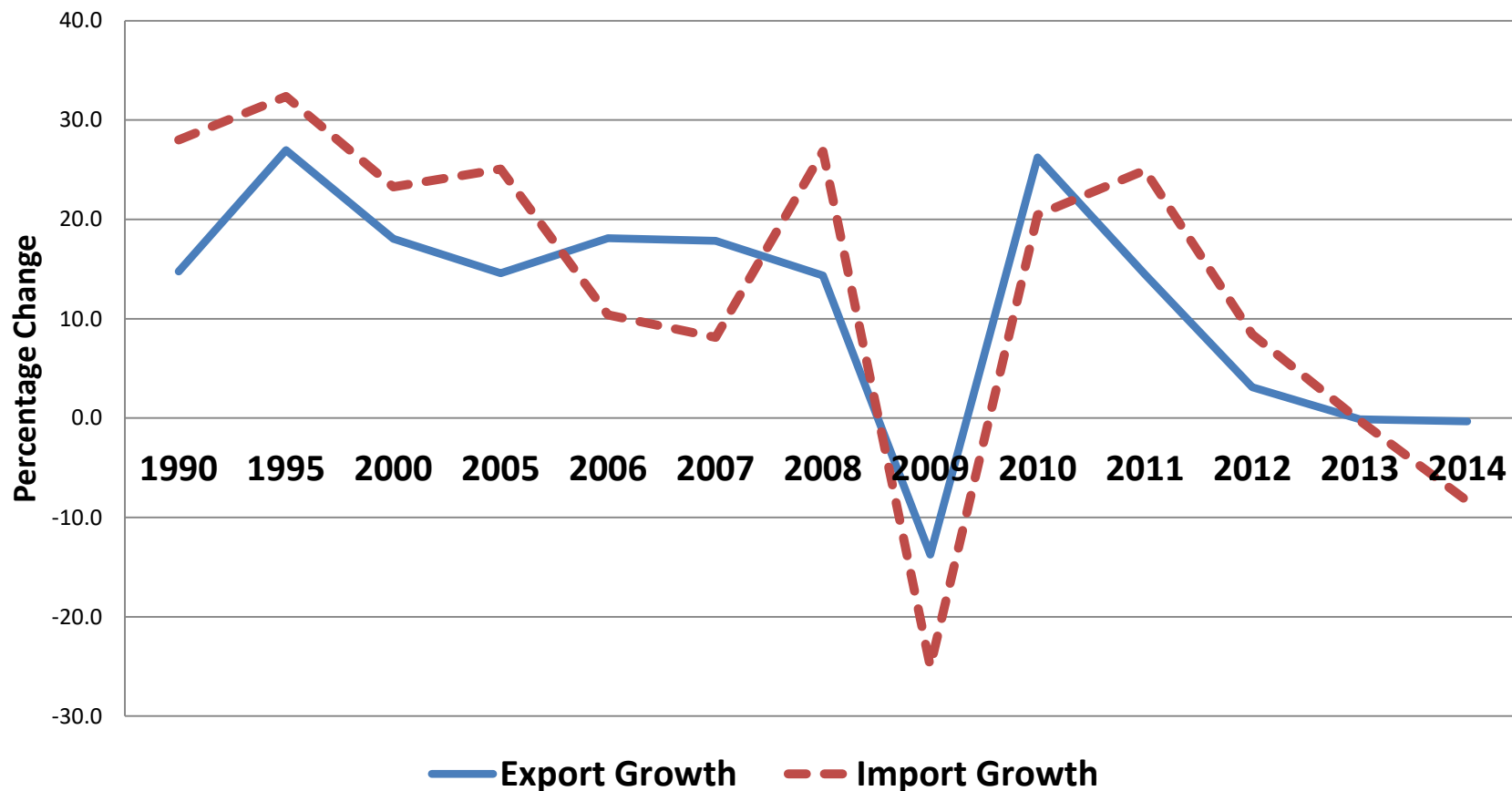
However if attitudes to the US economy change and investors lose their confidence in the US economy, they will stop buying US debt

Co-movements of exports and imports levels: Causation?

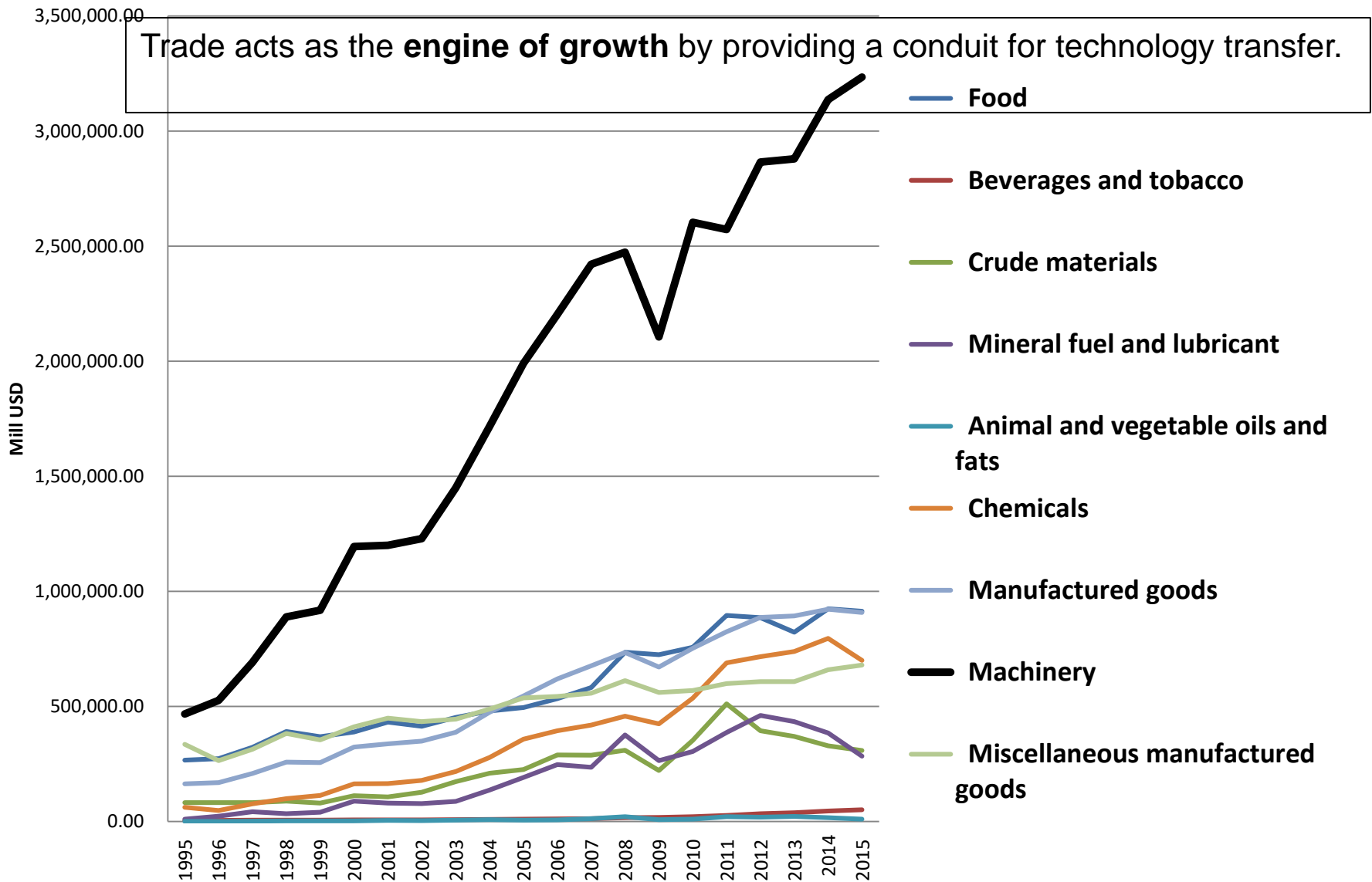


Thailand's Imports and Exports Nonspurious Relationship (1990-2014)

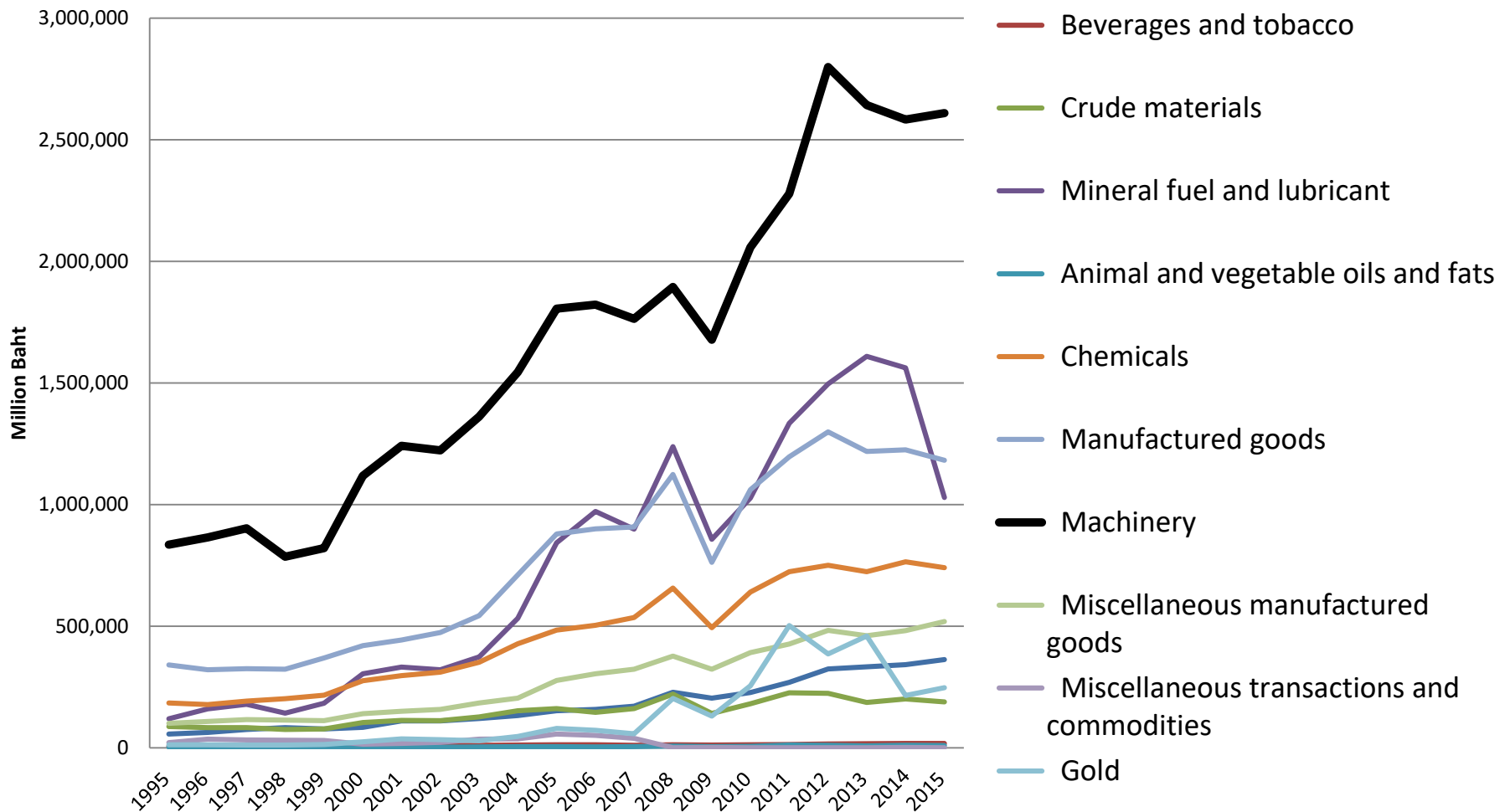
Exports and Imports Growth



Thailand's changing pattern of exports 1995-2015

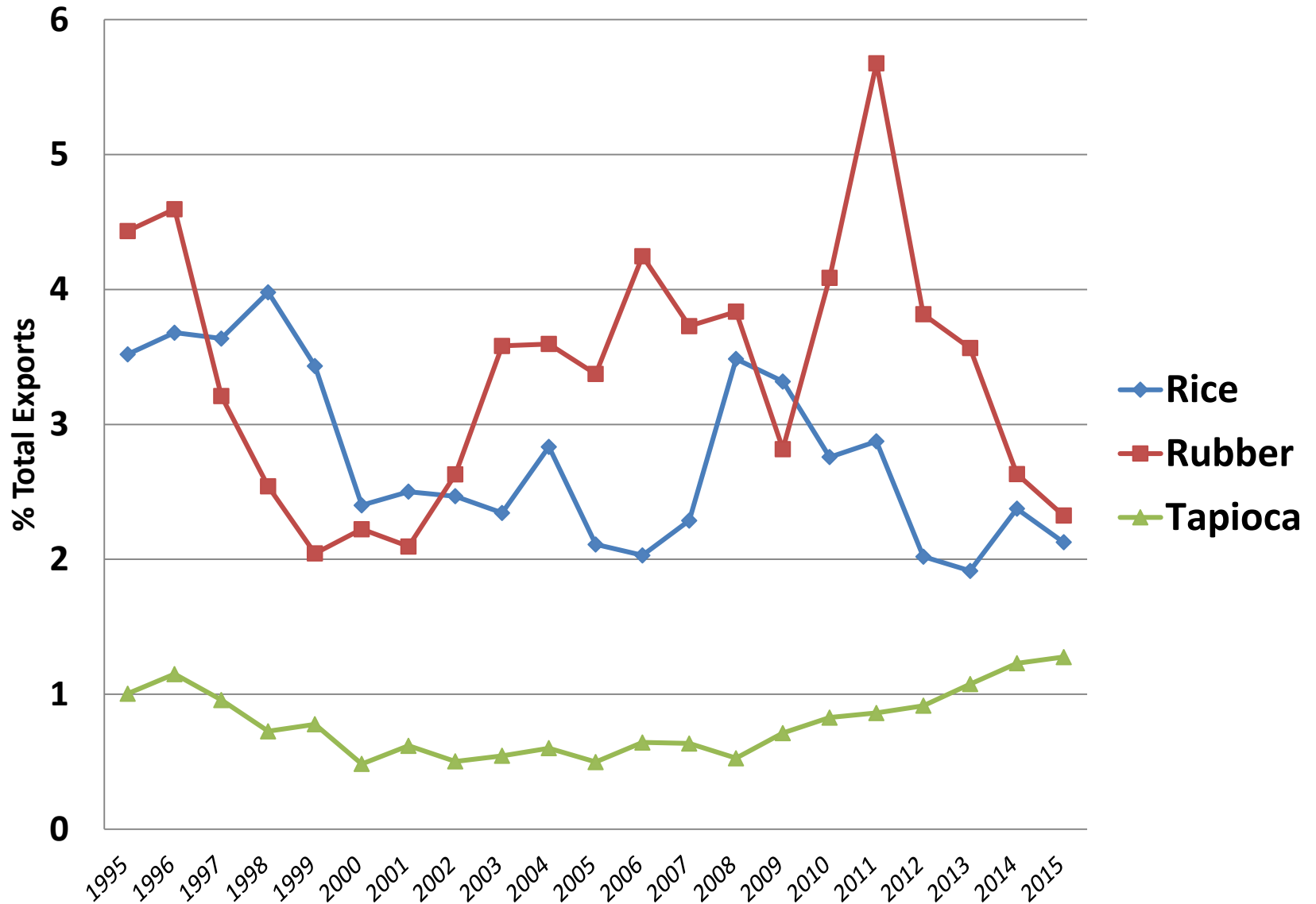


Thailand's Changing Pattern of Imports 1995-2015



Trade acts as the **'handmaiden'** of growth by improving the quality of investment.

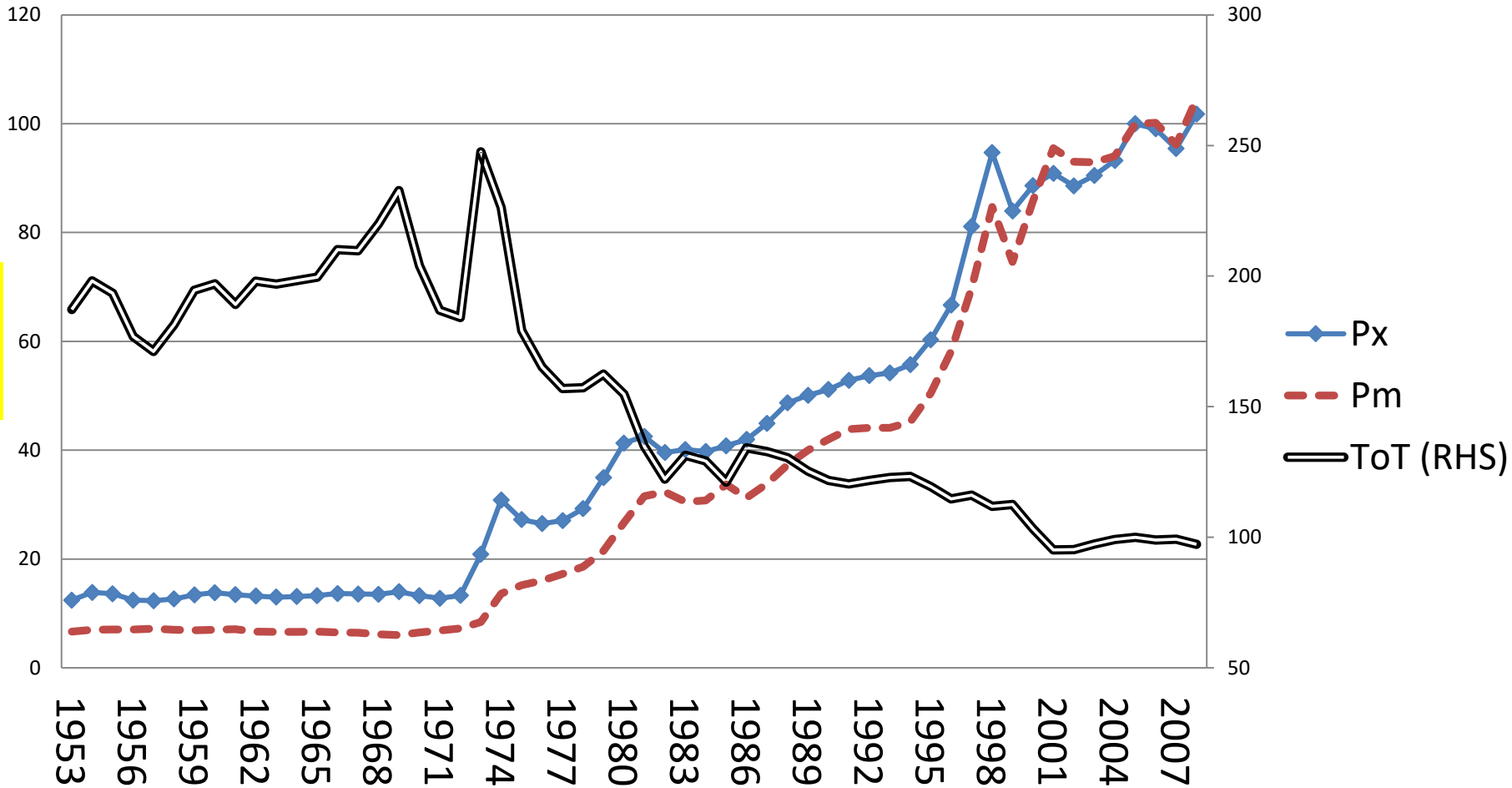
Share of Thailand's primary exports: 1995-2015



Declining terms of trade

1953-2008

2005=100

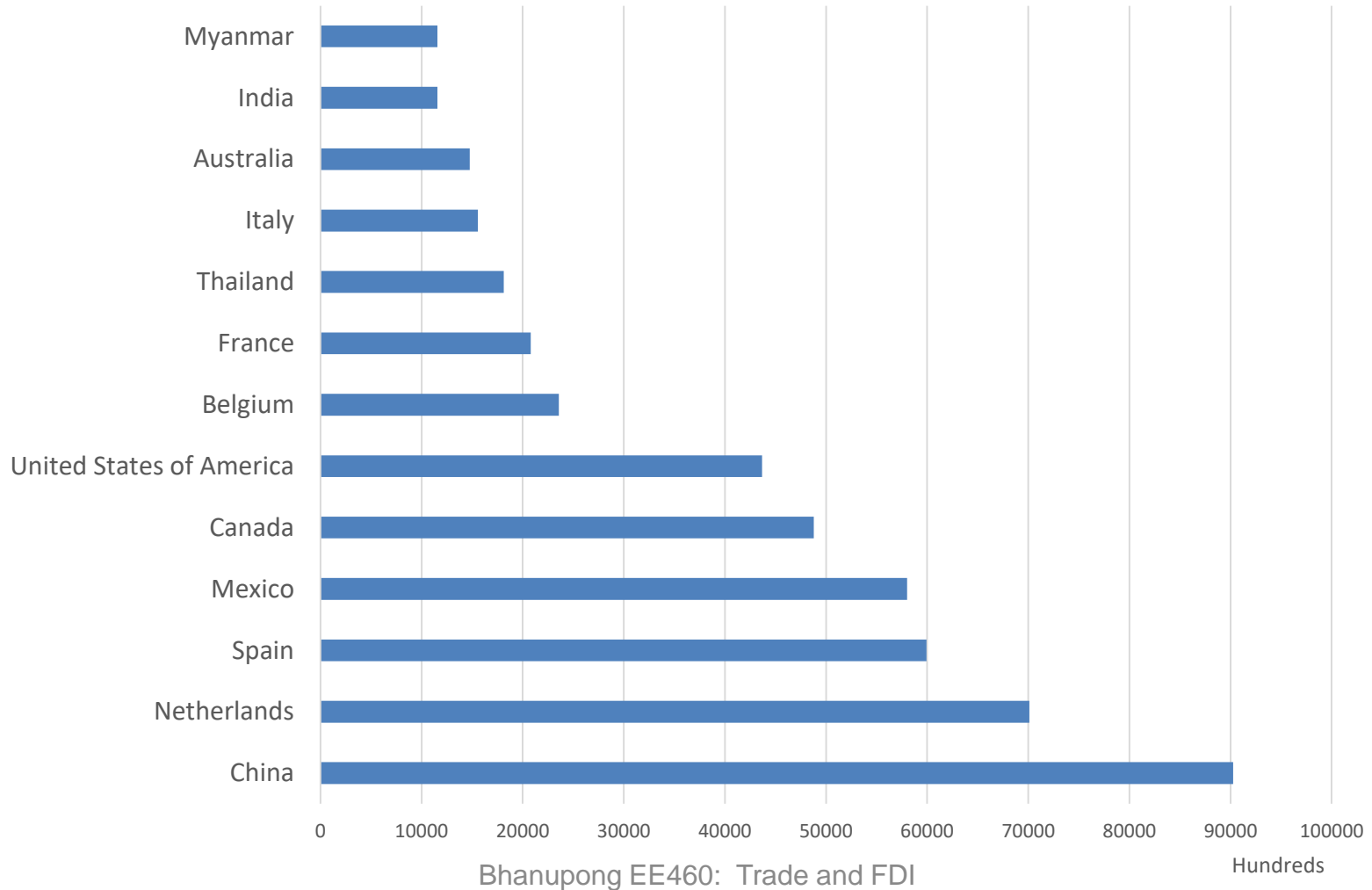


Trade in primary products

- Primary goods are non-differentiated commodities whose prices are mainly set in commodity exchanges.
- ***Factor endowments*** are the main determinant of trade in mineral and agricultural commodities.
- With dissimilar production functions, ***technology gaps in agriculture***, along **with factor endowments**, are determinants of trade in agricultural goods such as rubber, rice, and vegetables.

Trade in Primary Products

Edible Vegetables: Product 07
Value exported in 2015 (USD thousand)



Food security and one-billion hungry people in the world

- The number of people who go to bed hungry every night somewhere in our world has reached 1 billion – one in six of the Earth's population, according to a new report by the United Nations' Food and Agriculture Organization.
- Should Thailand focus more on agricultural exports to exploit the rising trend of commodity prices?
- All countries are concerned with food security; FTAs usually exclude food items.

Malthus vs. Sen

- Demand is outpacing supply.
(Thomas Malthus)
- Enough supply but access to food is denied for hungry people. (A.K. Sen)

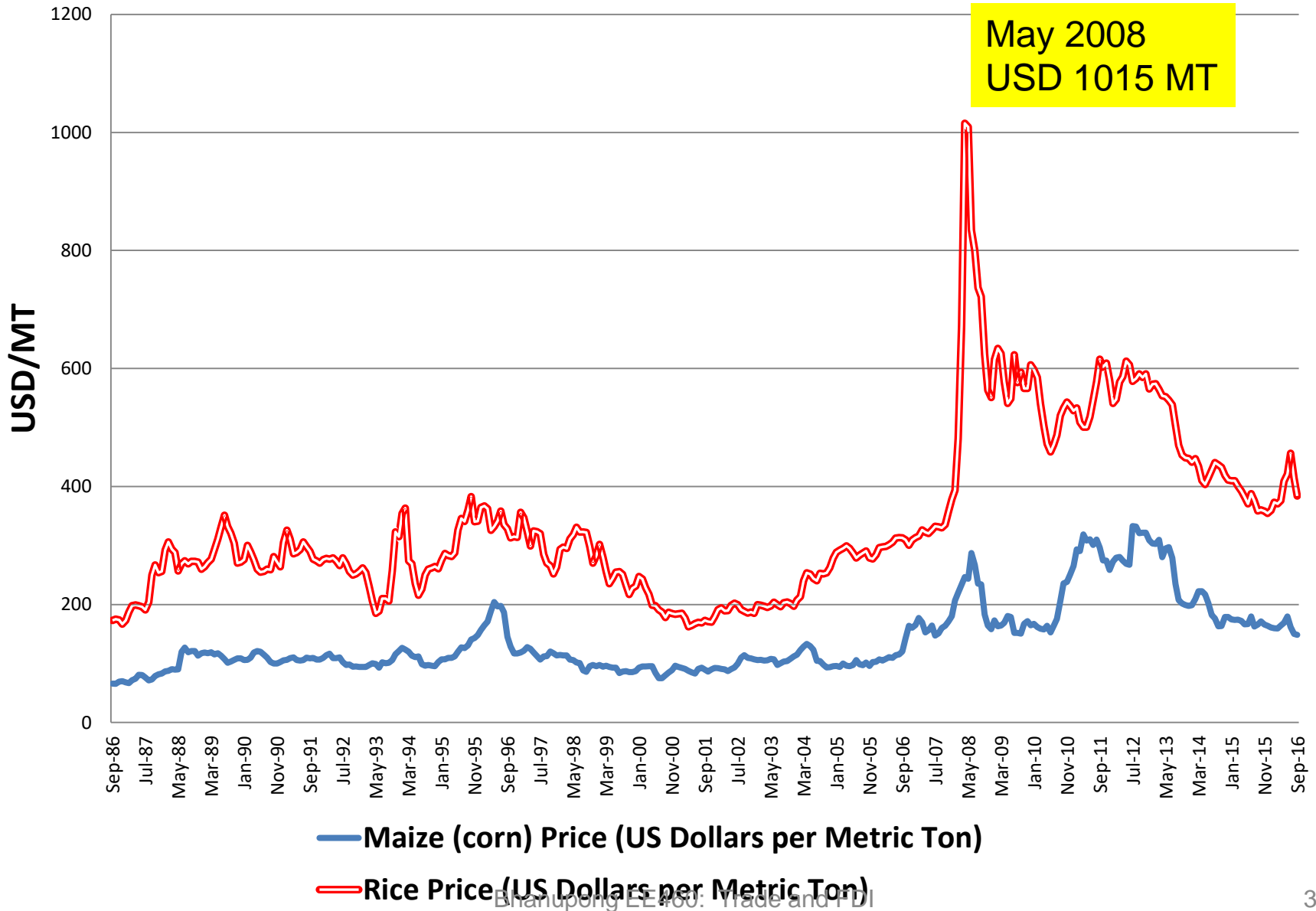
Why did food prices soar?

- High prices were triggered by the 2007 drought in Australia, the worst for a century, which halved its wheat harvest. But there were more fundamental background factors.
- As countries like China, India, Brazil and Russia have got richer they have begun eating more.
- Rich people don't just eat more than poor people, they eat *differently*.
- ***The demand for meat in developing countries has doubled since 1980;*** In India it is up 40 per cent, China 50 per cent.
- ***And because cattle and chickens are fed on corn – it takes 8kg of grain to produce 1kg of beef – the price of all cereals has been forced up.***

Biofuels

- Added to that was George W. Bush's love affair with American biofuels.
- (And what about the Thais' love of the gasohol?)
- Instead of buying plant ethanol from sunshine states like Brazil, the Americans have been trying to grow their own – with oil-based fertilizers and by subsidizing US farmers.
- A third of its maize crop goes to fuel cars, in a bid to lessen its dependency on oil from dodgy dictators in the Middle East.
- ***The price of cereals had rocketed as a result.***

Export Prices of Rice and Maize Sep 1986-Sep 2016



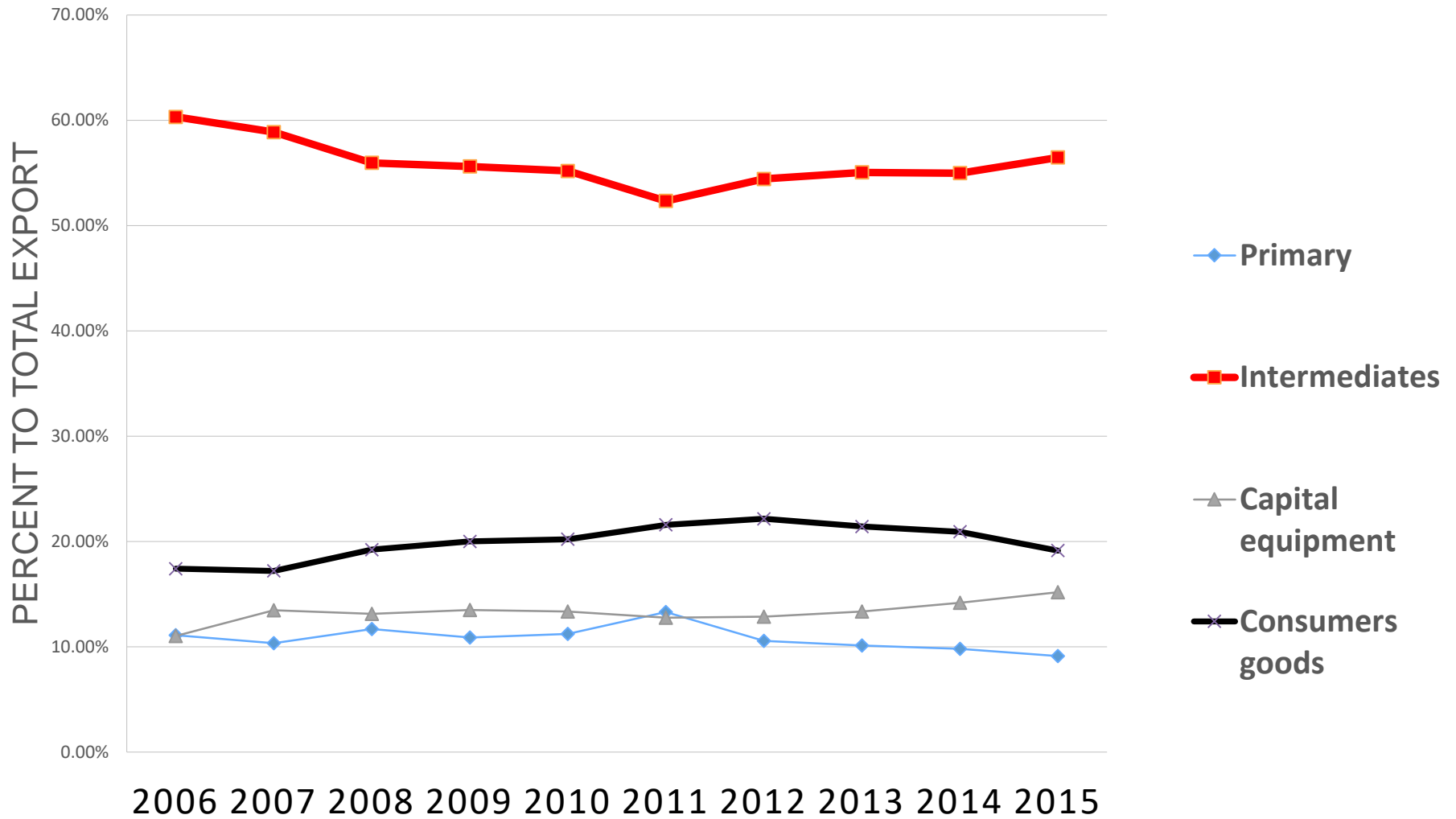
Adverse impact of globalization

- Exposure to external shocks
- Export dependency
- Increase business synchronization
- Destroy traditional (uncompetitive) sectors
- Tariff reduction and trade liberalization

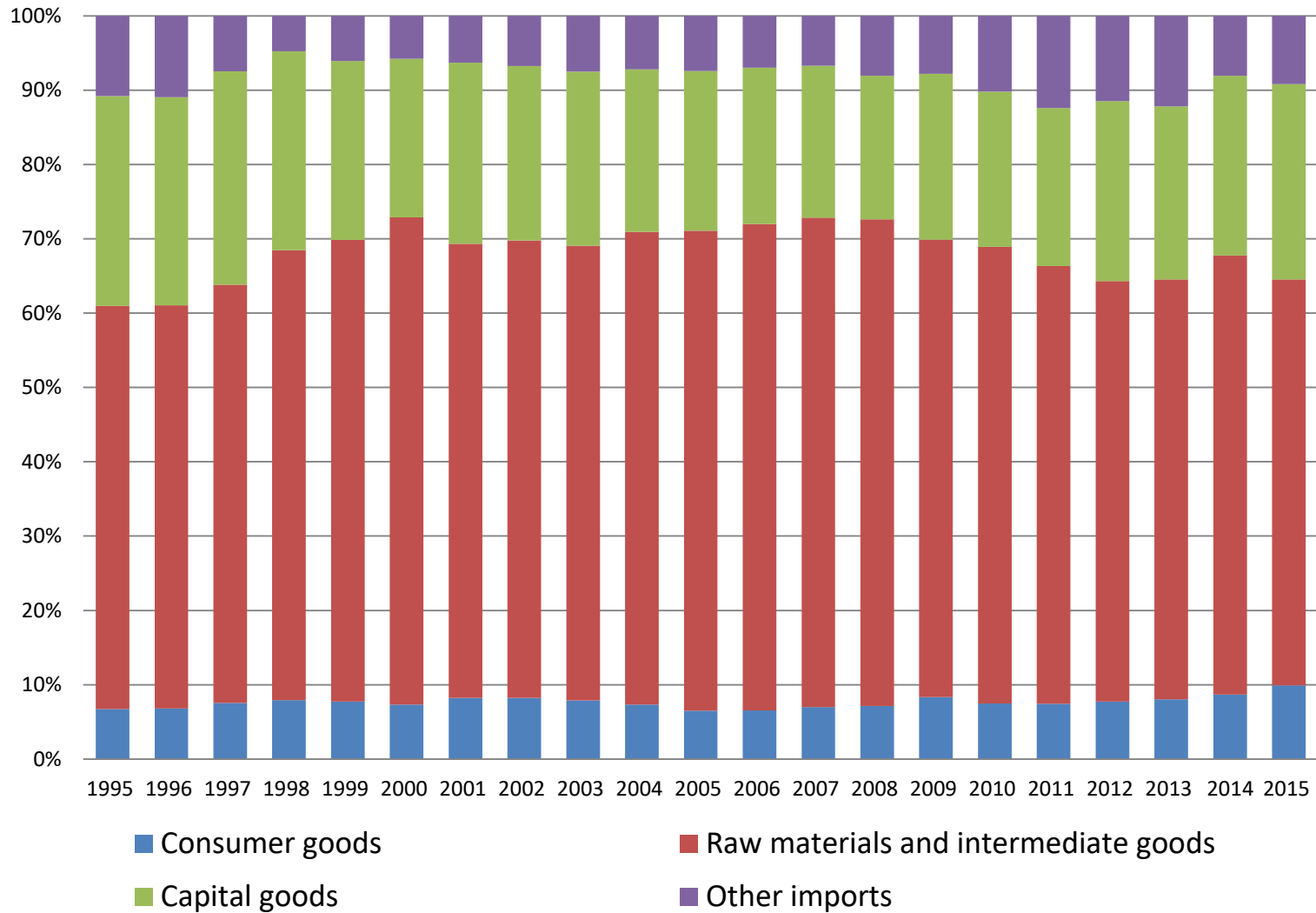
What globalization can do

- High exports can sustain output growth
- Imported capital goods raise productivity
- World competition exposure leads to efficiency improvement.
- Exploitation of economies of scale
- Outward oriented development strategy
- Improve resource allocation as production is dictated by comparative advantage.
- Encourage inflows and outflows of foreign direct investment

PERCENTAGE OF EXPORT VALUES BY STAGE OF PROCESSING



Thailand's Import Structure



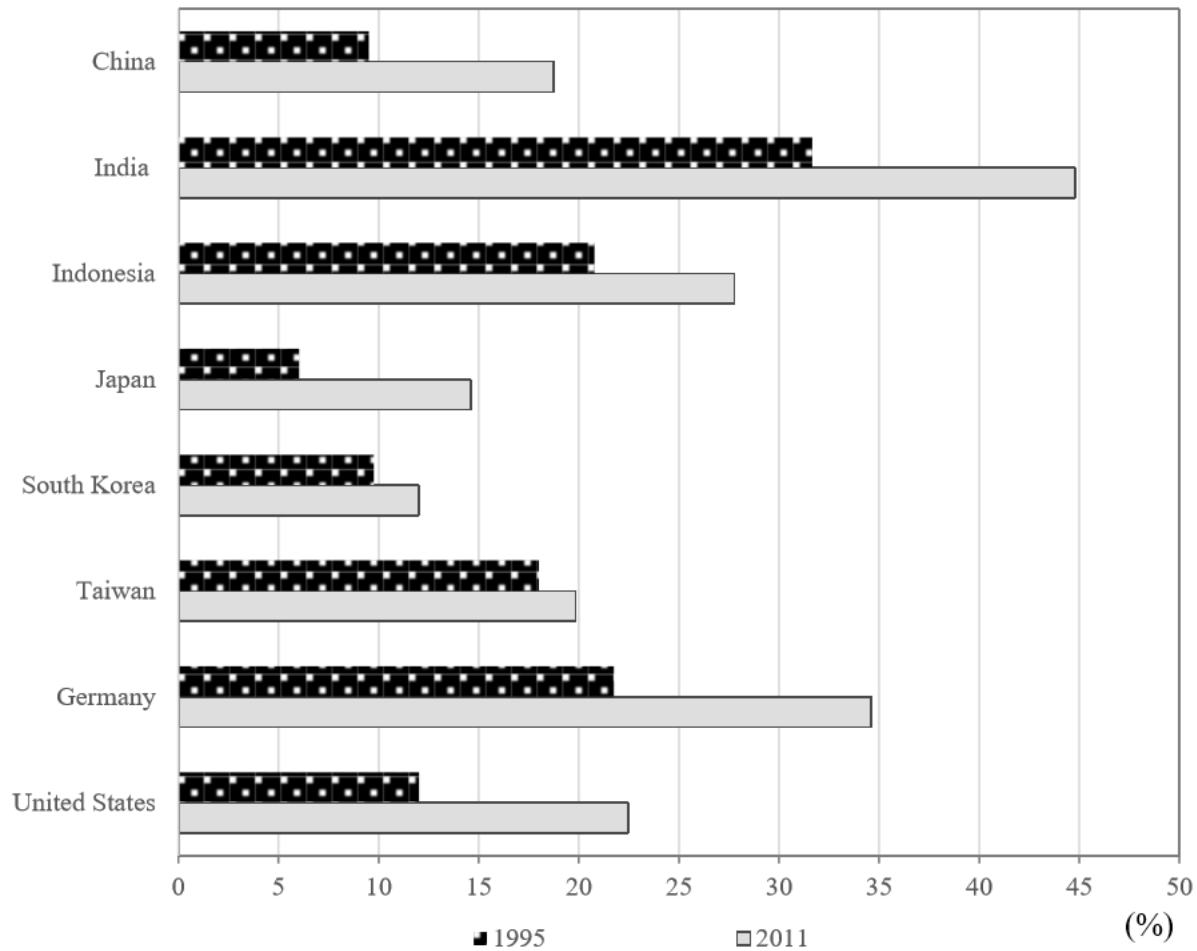
Growing *network trade*

- Network trade is expanding much faster compared to conventional product-based trade (24 % of total manufactured exports in 1993, 45.5% in 2007).
- There is a shift away from mature industrial economies towards developing countries .
- Developing countries' share in network exports rose from 25 % in 1993 to 41% in 2007.

Growing *network trade*

- The degree and intensity of participation *of East Asian Economies in network trade* is much greater compared to countries in other parts of the world.
- China has become an integral part of global production networks—a premier center of final assembly.
- Clear evidence of **trade complementarity** rather than crowding out (substitution) effect.

Figure 3. International Fragmentation of Production

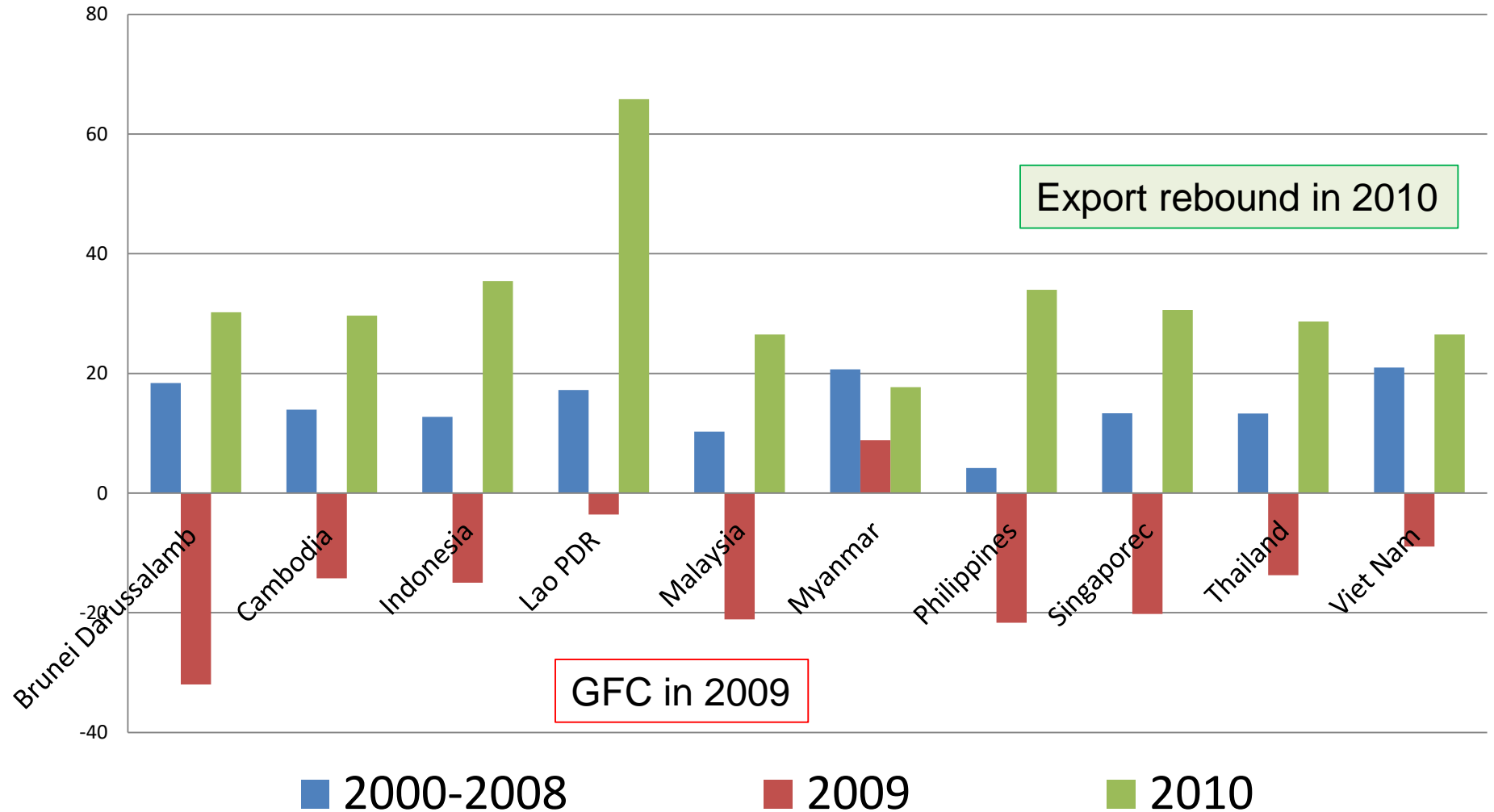


Note: The figure shows the shares of imported intermediate inputs in total intermediate inputs in manufacturing industries in 1995 and in 2011.

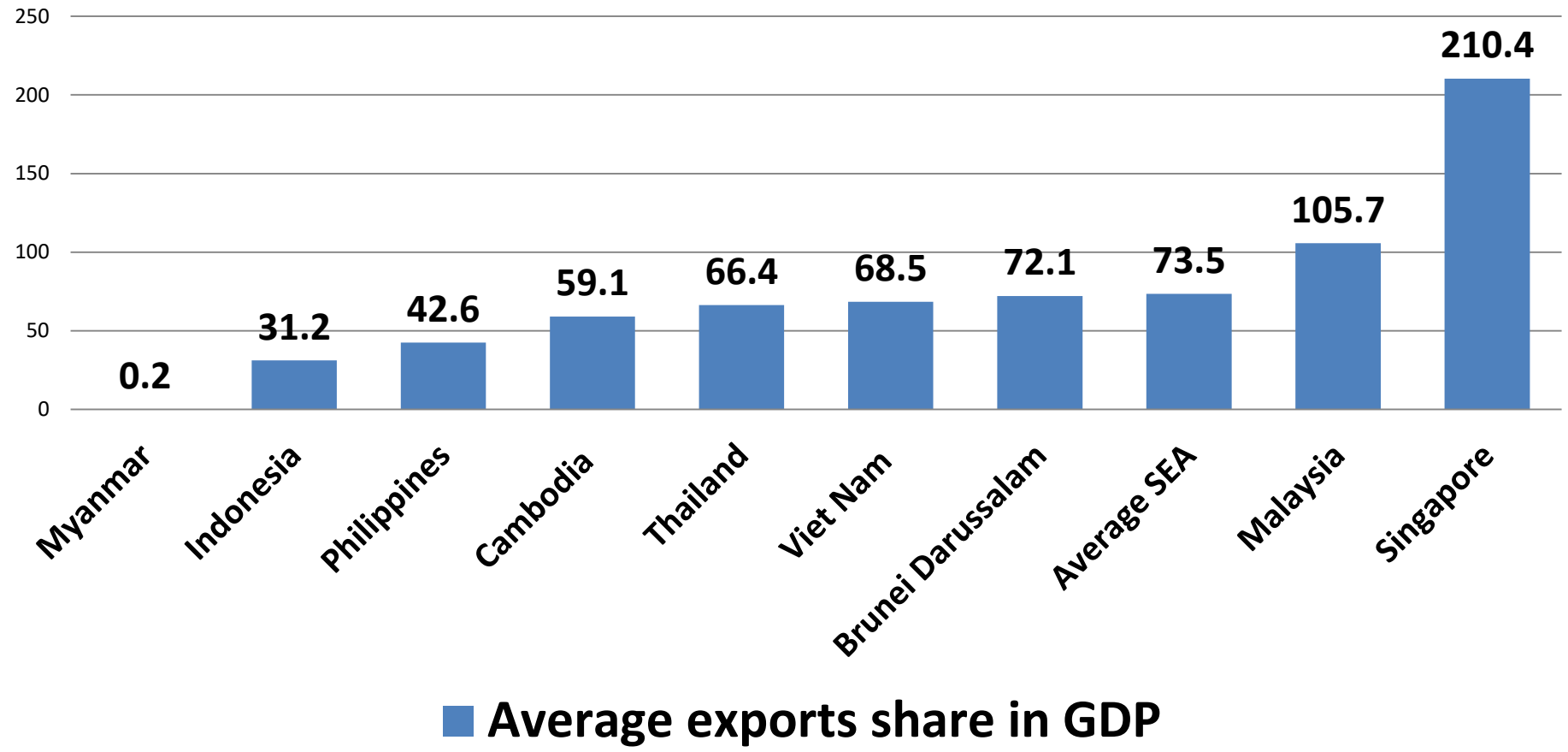
Impact of global slowdown: The Great Deceleration

- A sharp contraction in world trade following the onset of the global financial crisis at a faster rate than in the Great Depression
- ***Trade contraction experienced by the East Asian countries has been even faster.***
- Contraction of trade credit (due to global financial crisis)
- Greater share of ***consumer durables*** in world trade volume slowdown
- Parts and components trade have been more susceptible to the global economic slowdown compared to trade in **final assembly** and total trade.

Impact of GFC on Exports Growth Rate (% growth)

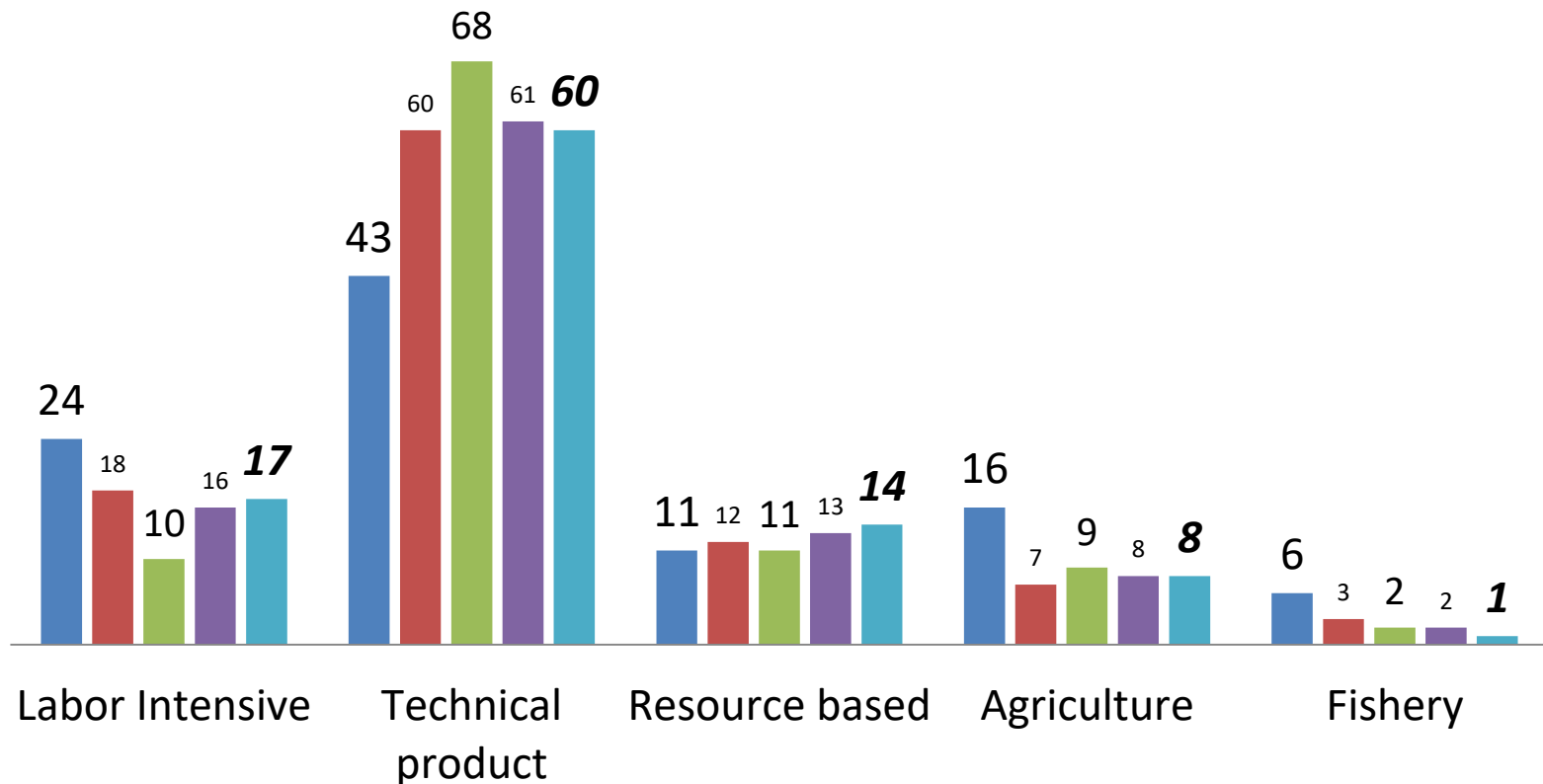


Outward vs. inward oriented Southeast Asian economies: 2000-2011



Thailand's export classified by product group (% of total exports)

■ 1995 ■ 2000 ■ 2005 ■ 2009 ■ 2012



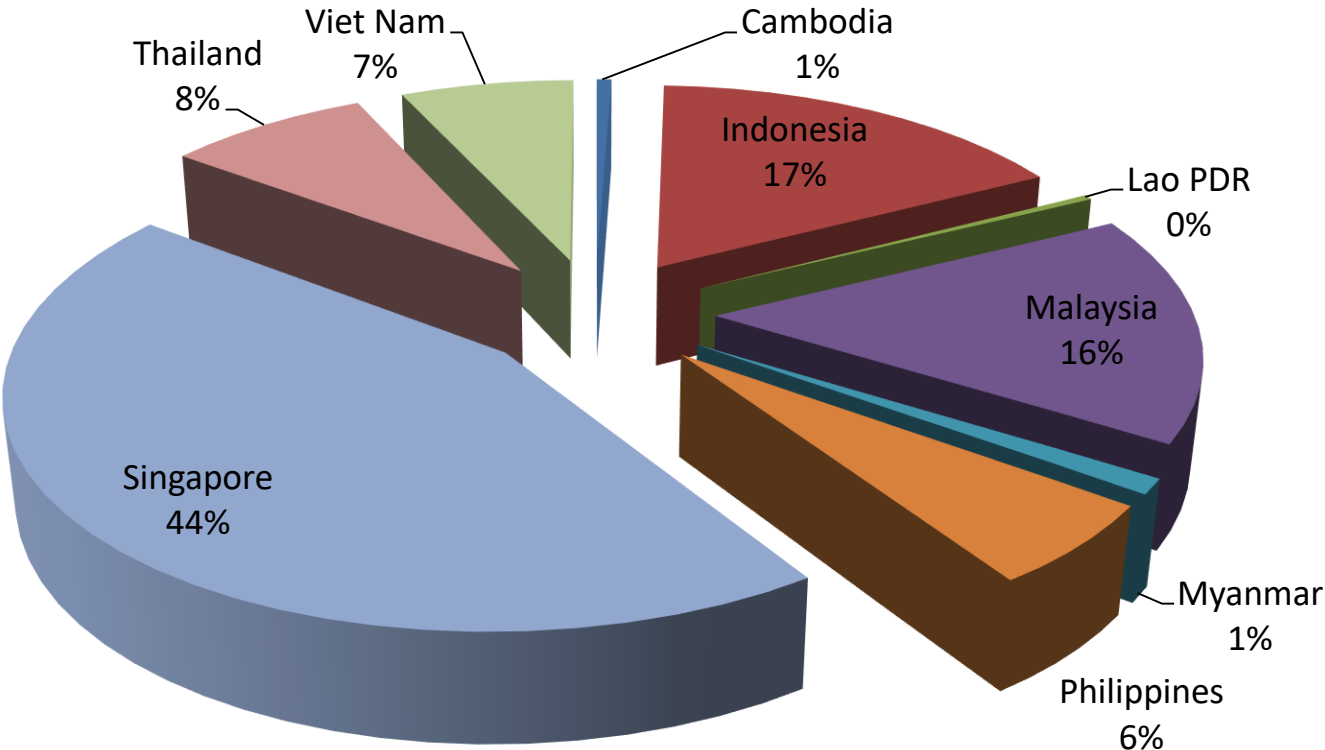
Source of comparative advantage in manufactured goods: Their life cycles

- In the early phase, when the product is new, comparative advantage derives from **technology gaps**.
- In the middle phase, when imitators exist, **product differentiation**, accompanied by economies of scale, become principal explanation of comparative advantage.
- In the late phase, the product loses differentiation, **factor endowments and economies of scale** emerge as the dominant influences of comparative advantage.
- MNCs need to innovate and come up with unique products (Ipod, Ipad, Iphone)

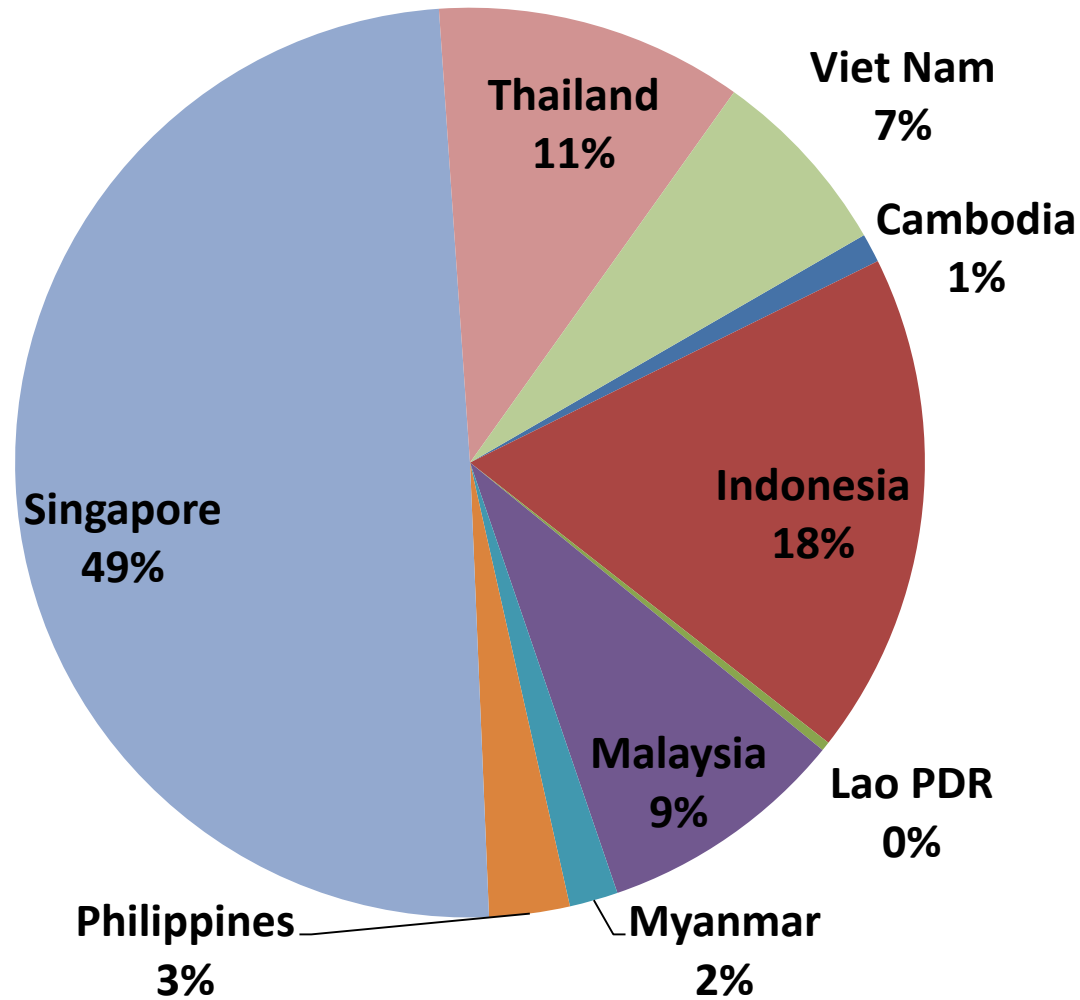
Keep an eye on MNCs behaviors

- Technology gaps, economies of scale, and product differentiation give to individual firms some degree of market power.
- Trade in newly differentiated manufactured products reflects the marketing, production, and investment behaviors of Multi National Corporations (MNCs).

Share of FDI net inflows to ASEAN in 1995



Inflows of Net FDI in ASEAN: 2013
% share of ASEAN inflows



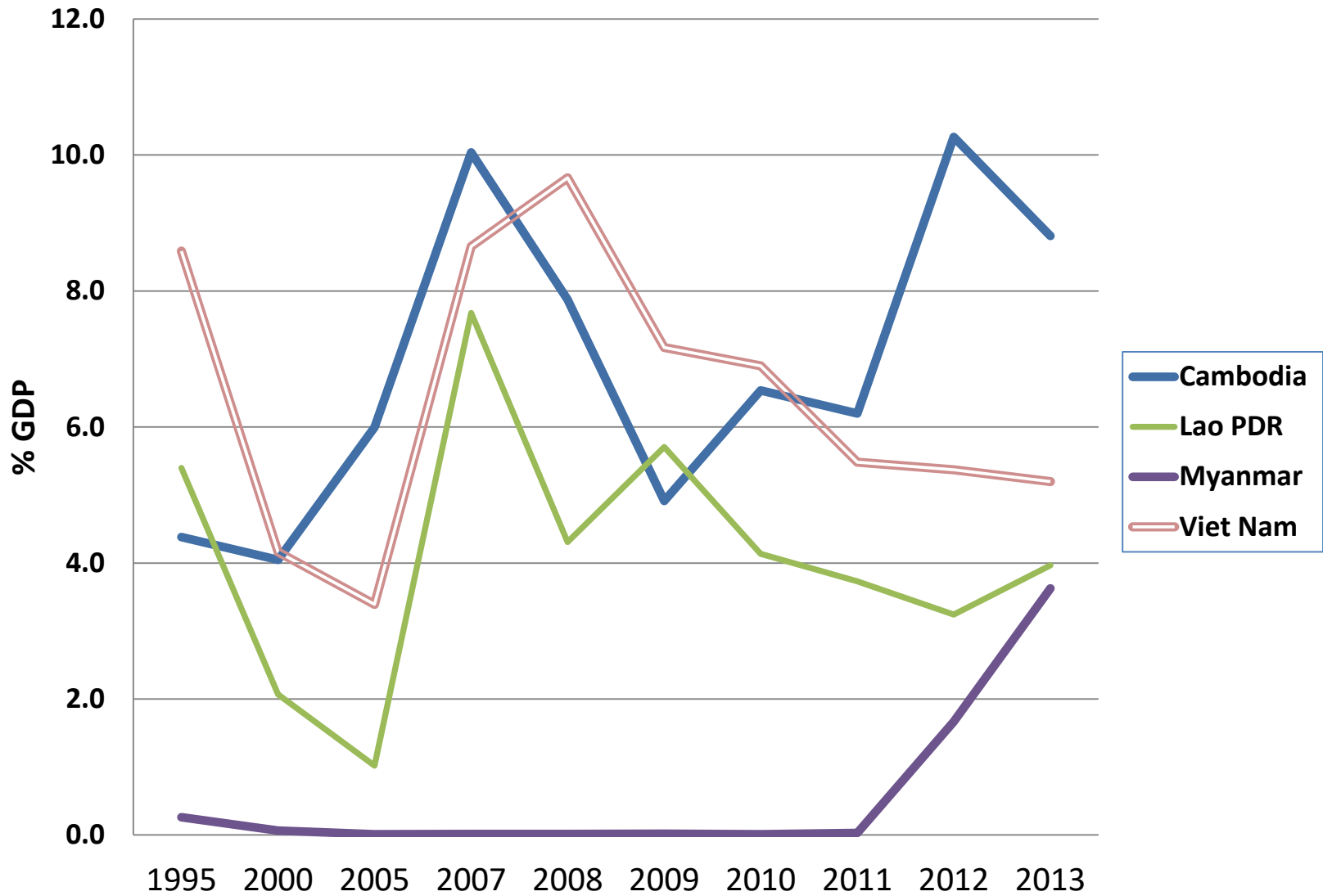
Benefits from FDI Inflows

- Infrastructure and technology transfer
- Increased productive efficiency due to competition from multinational subsidiaries.
- Improvement in quality of the factors of production
- Inflow in investment funds (benefits to the balance of payments, in particular to countries experience chronic current account deficit).

More FDI benefits

- Faster growth of output and employment
- Consumer benefits
- Increase in exports
- Increase in savings
- Increase investment (crowding- in effect vs. crowding-out effect on local investment)
- Reduce vulnerability to currency crisis (FDI is a long –term capital flows)

FDI (net inflows) CLMV

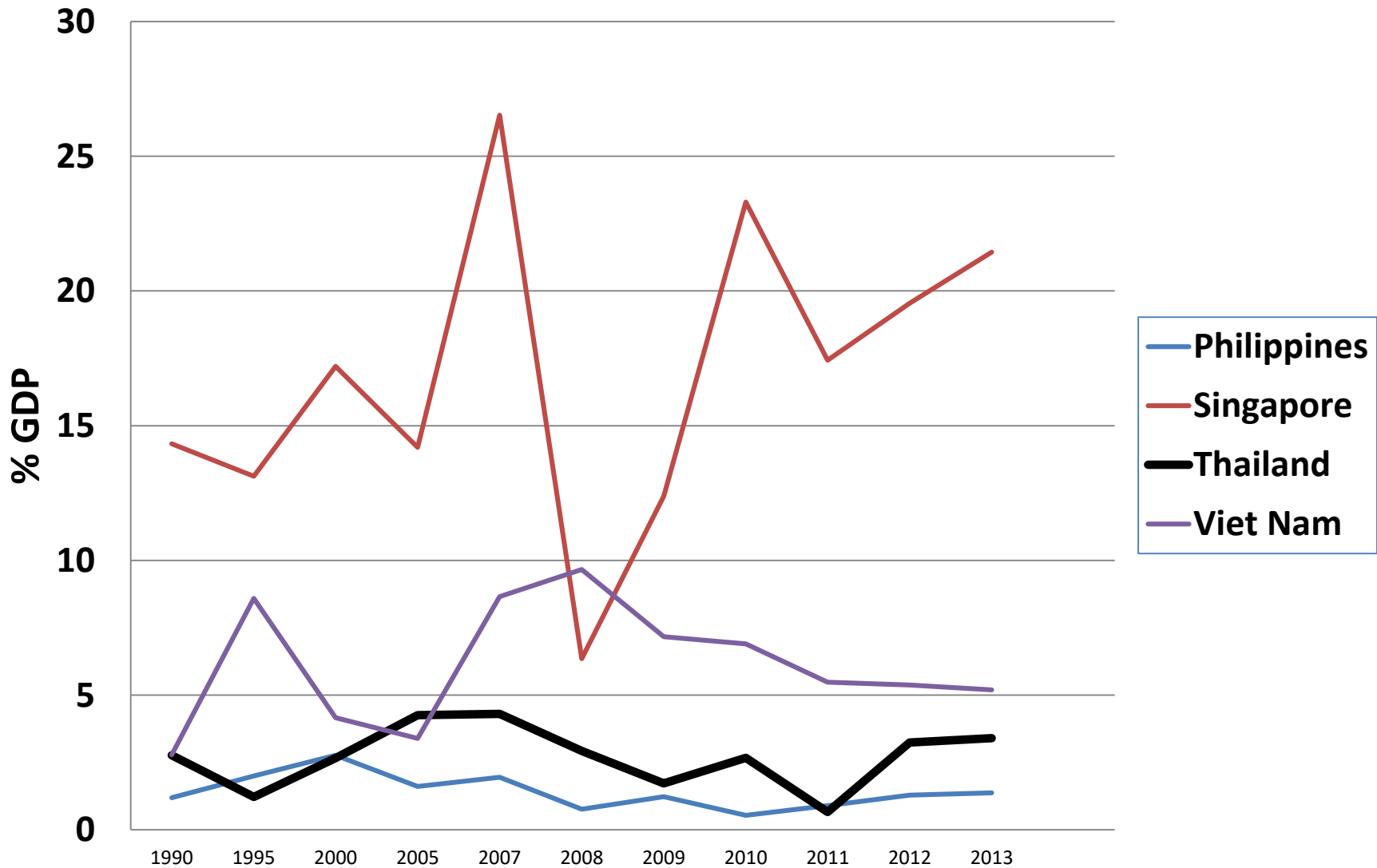


Newly Industrializing Countries (NICs) with biggest FDI inflows (USD billion)

	1992-97 average	2004	%GDP stocks, end of 2004
China	32.8	60.6	14.0
HK	7.8	34.0	277.6
Brazil	6.6	18.2	25.2
Mexico	9.6	16.6	27.0
Singapore	8.3	16.1	150.2
S. Korea	1.3	7.7	10.7

FDI Net Inflows (1990-2013)

The bigger, the better



John Dunning (1981) *International production and the Multinational Enterprises*

- FDI implies that **location-specific** advantages favor a foreign host country (abundant resources).
- **Ownership-specific** advantages favor the investing firm (knowledge assets) (McDonald and 7Eleven)
- International production is attributable not only to firms' monopolistic advantage and its ability to internalize that advantage but also to the **presence of foreign country** in which production brings unique benefit to the firms . (Apple in Ireland, Samsung in Vietnam)

Eclectic Theory of FDI

- The eclectic theory (Dunning, 1981) draws on the theories of comparative advantage and location and also on the theories of *monopolistic advantage* and *internalization*.
- MNC would invest only when it is most profitable for an MNC to internalize its monopolistic advantage in a foreign country
- Otherwise it exploits the country market through export or licensing.

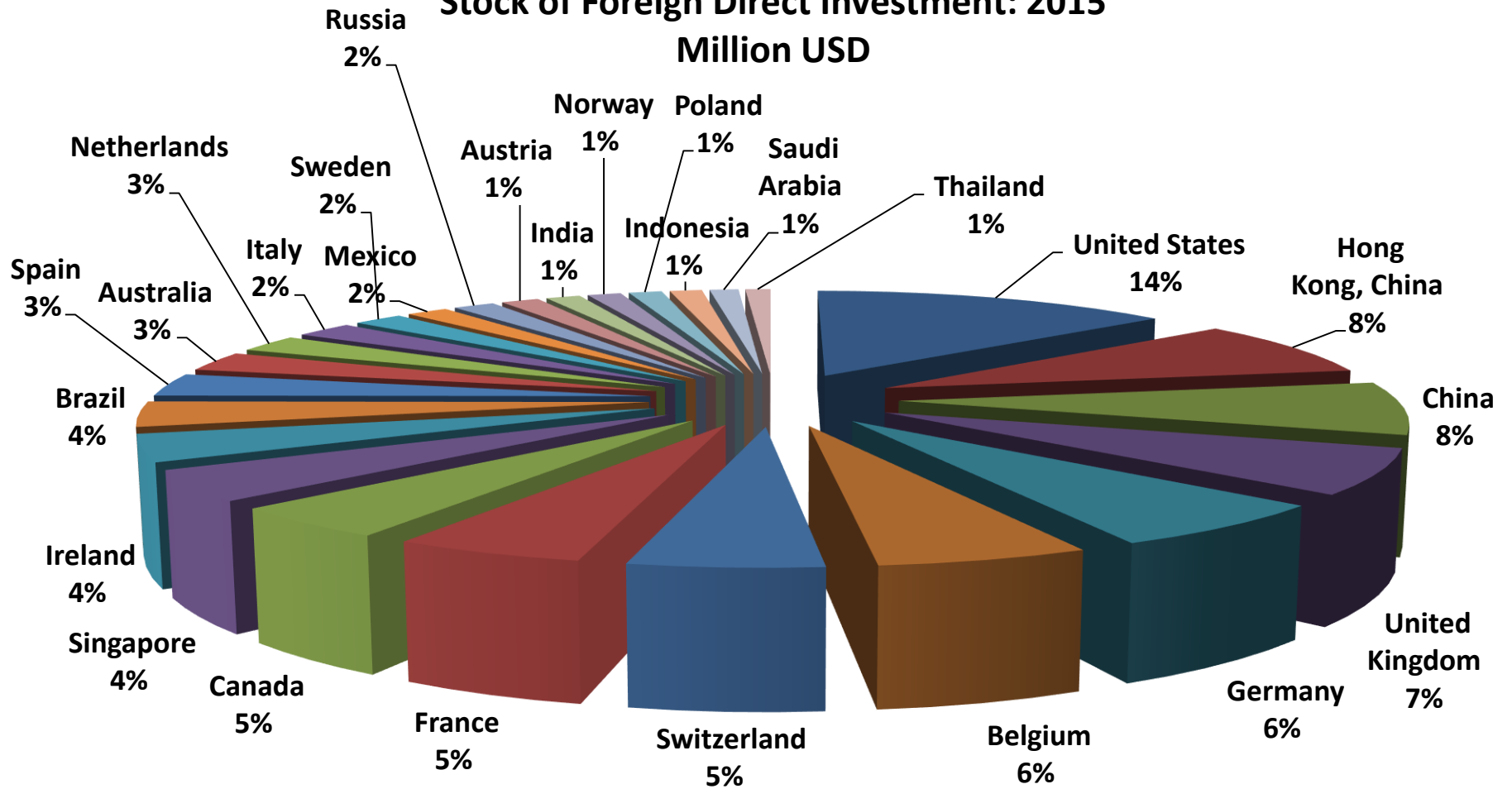
Monopolistic and Oligopolistic Markets

- MNCs have some unique **production knowledge** or managerial skill that could easily and profitably be utilized abroad and over which the corporation wants to remain control.
- **Horizontal integration:** production of differentiated products that are also produced at home
- **Vertical intergration:** to obtain control of needed raw-materials by ensuring uninterrupted supply at the lowest cost

Determinants of FDI

- Ownership advantages arise from economies of scale with respect to **intangible assets** such as skilled management and know-how by investing abroad.
- Locational advantages in host countries
- Product cycle (new technology produced and used in home country)
- Standardized technology permits shifting high cost plants abroad
- Low tax, low labor cost, and government policy

Stock of Foreign Direct Investment: 2015 Million USD



Source: CIA World Factbook

Factors affecting FDI

- Repatriation of profits
- Economy and market size
- *Risks and uncertainties*
- *Political stability*
- *Policy consistency*
- External debt discourages FDI
- Market potential and accessibility
- Product fragmentation
- *The ease of doing business*

Possible costs from FDI

- Negative effects on the balance of payments (imported goods from home countries, repatriation of profit).
- Discourage development of technical know-how (no product engineering process)
- Detriment to growth of domestic producers (too weak and too efficient to compete with MNCs)
- ***Transfer pricing*** can lead to loss of host government's revenue.

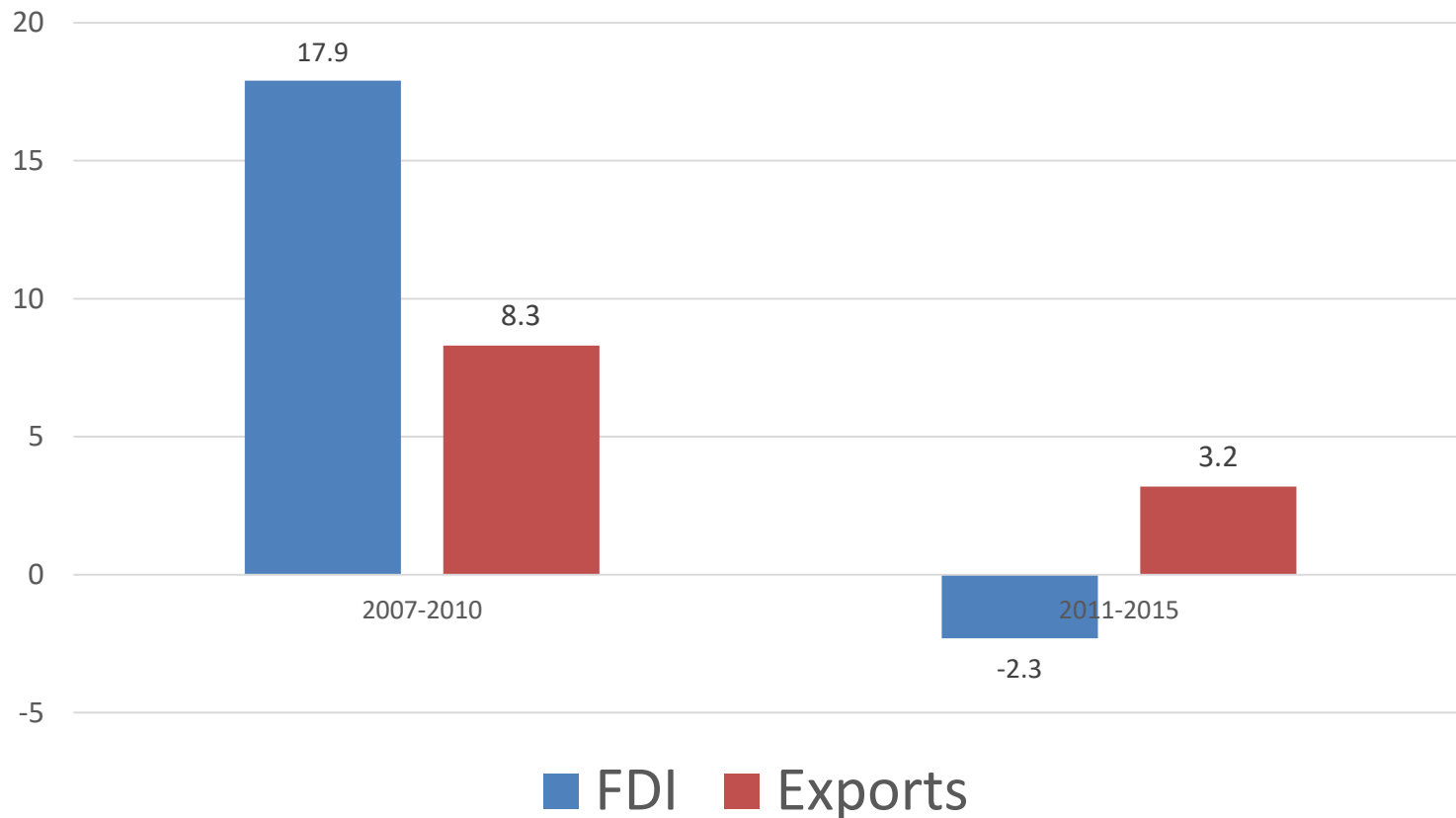
Social costs to host countries

- Environment and natural resource costs
- Damages to local culture and traditional exports
- Politico-Strategic Interests
- Facilitate hegemony by dominant Japanese and Western cultures.
- Country sovereignty is at stake.
- But some CLMV countries do not care much.

Sectoral FDI inflows and Exports

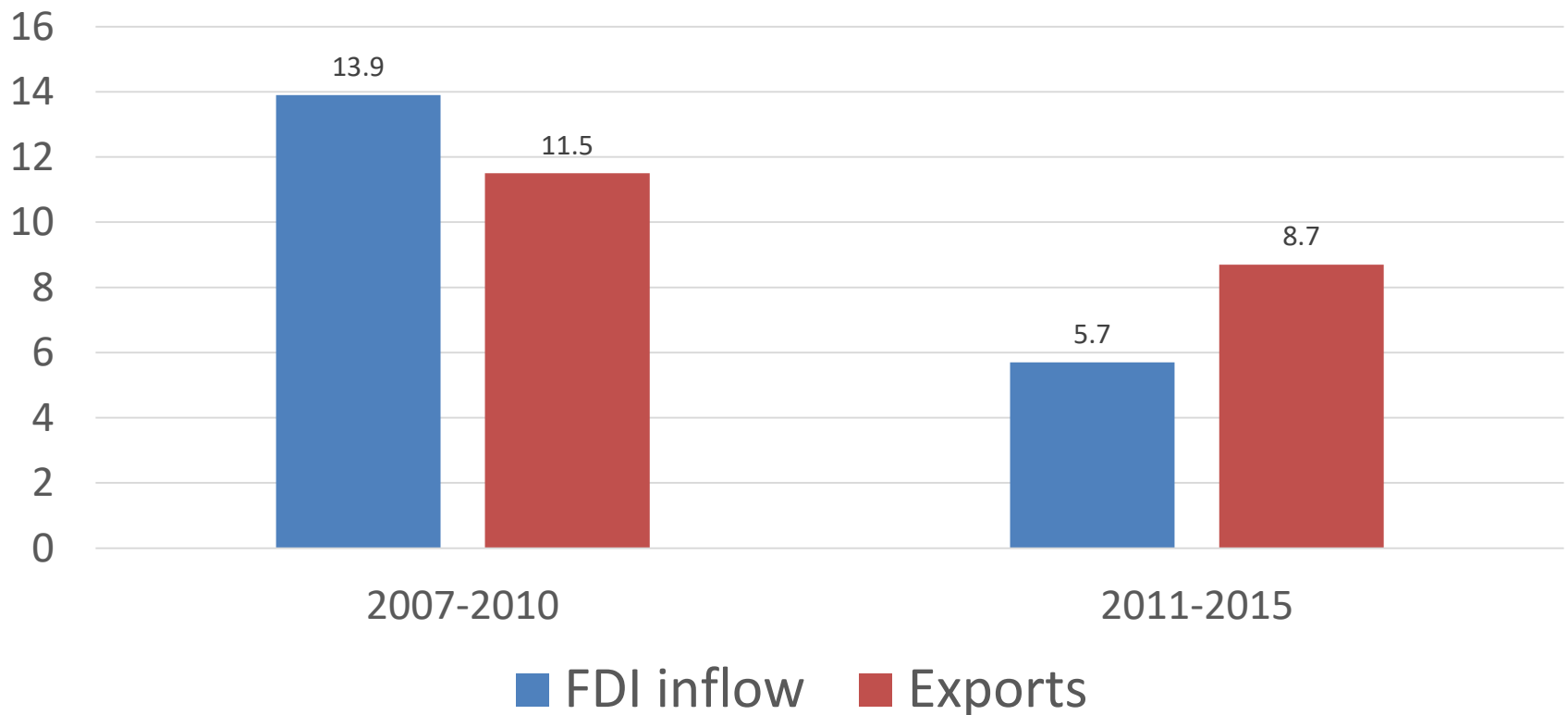
Percentage Change

Chemicals



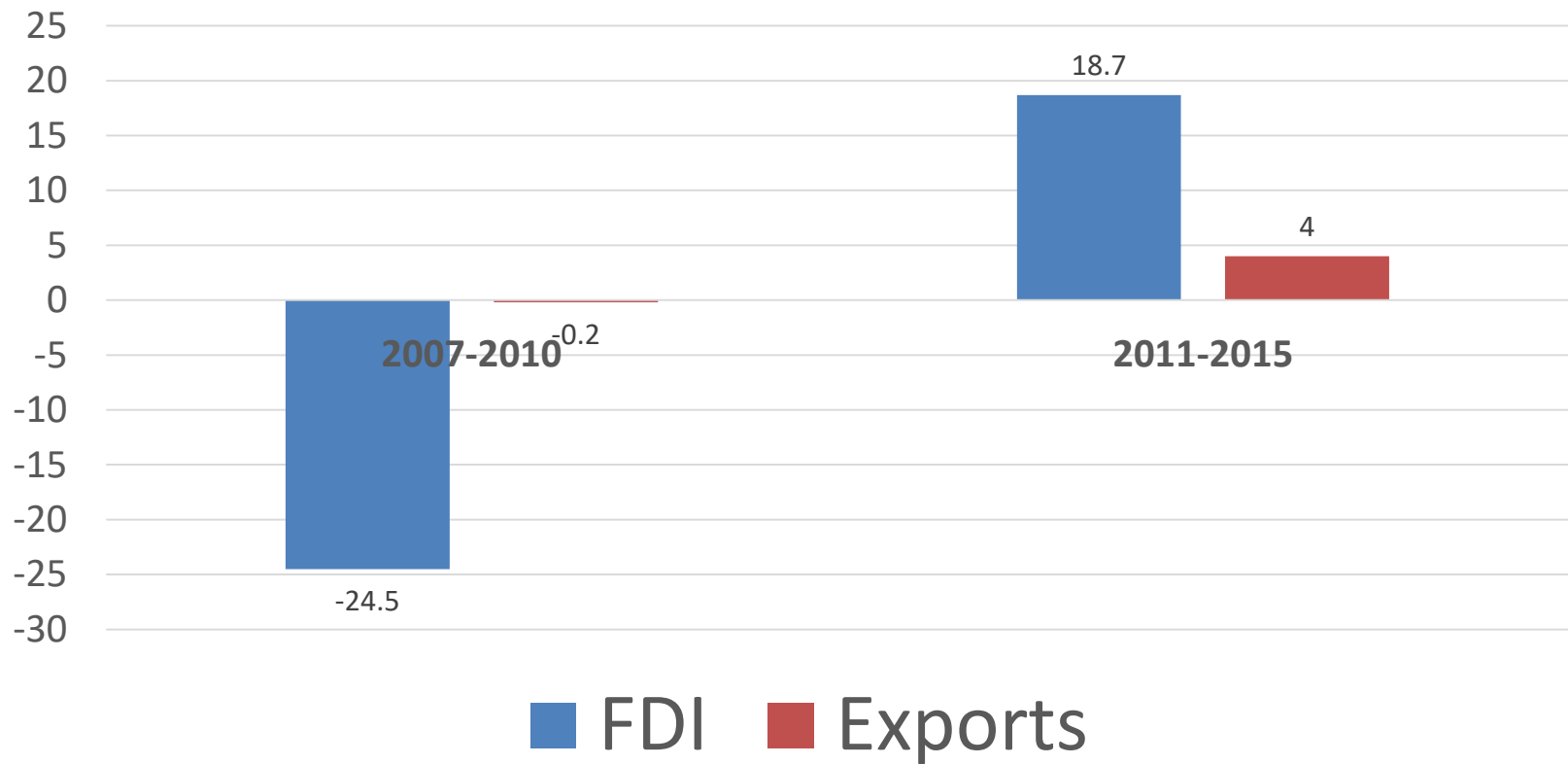
FDI Inflows and Export Growth (percentage Change)

Vehicles



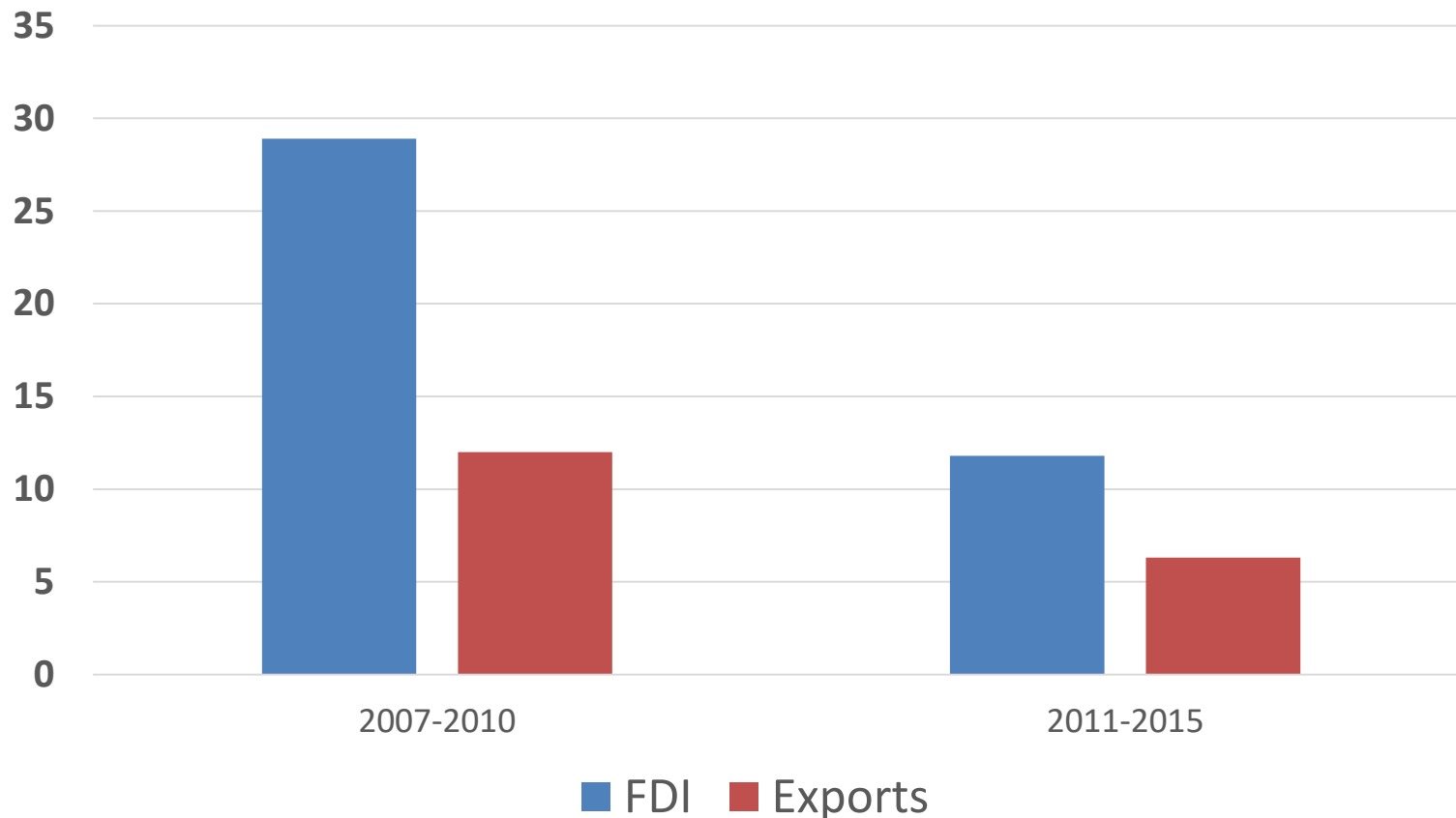
FDI Inflows and Export Growth (percentage change)

Electrical Appliances



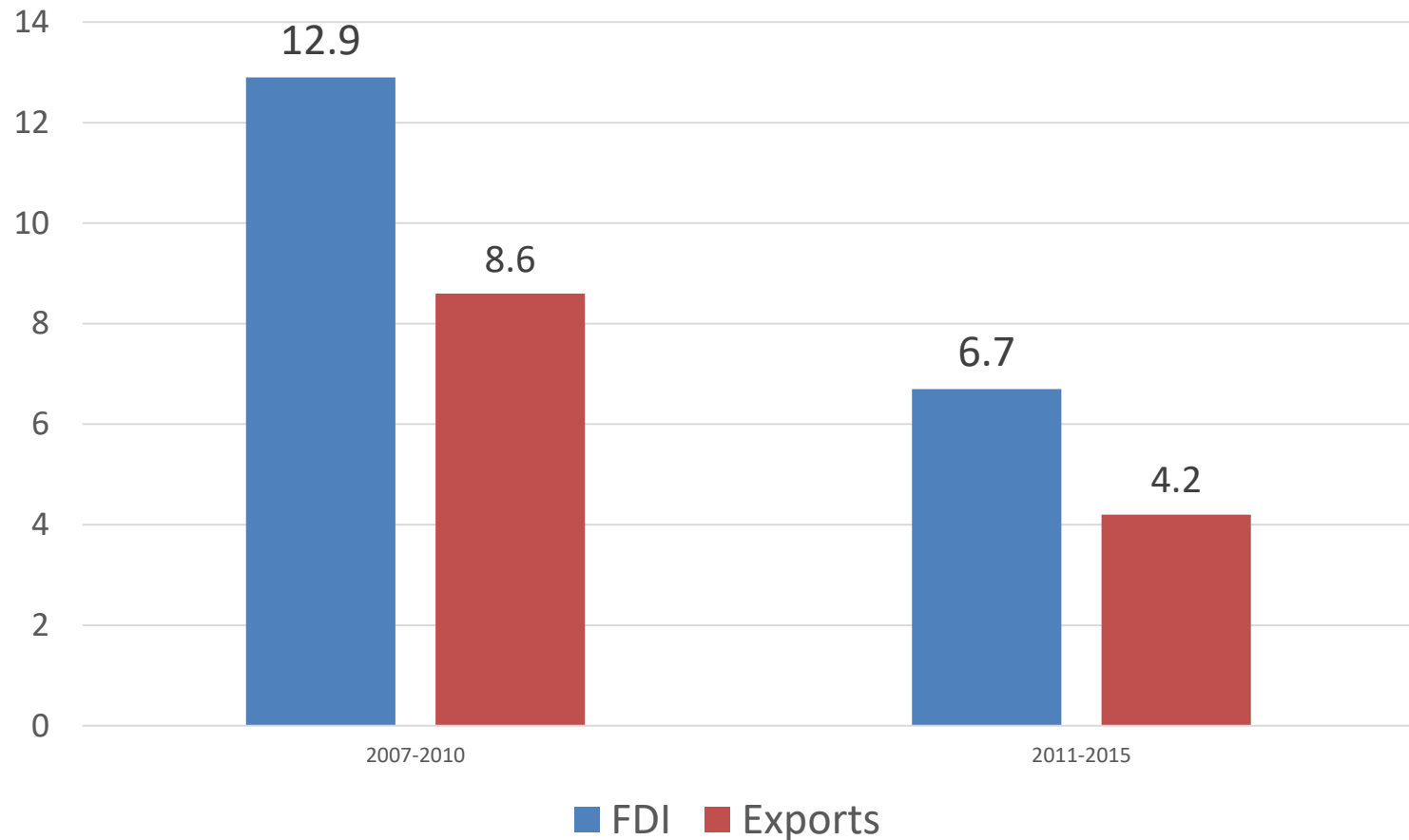
FDI inflows and export growth percentage change

Machinery Industry

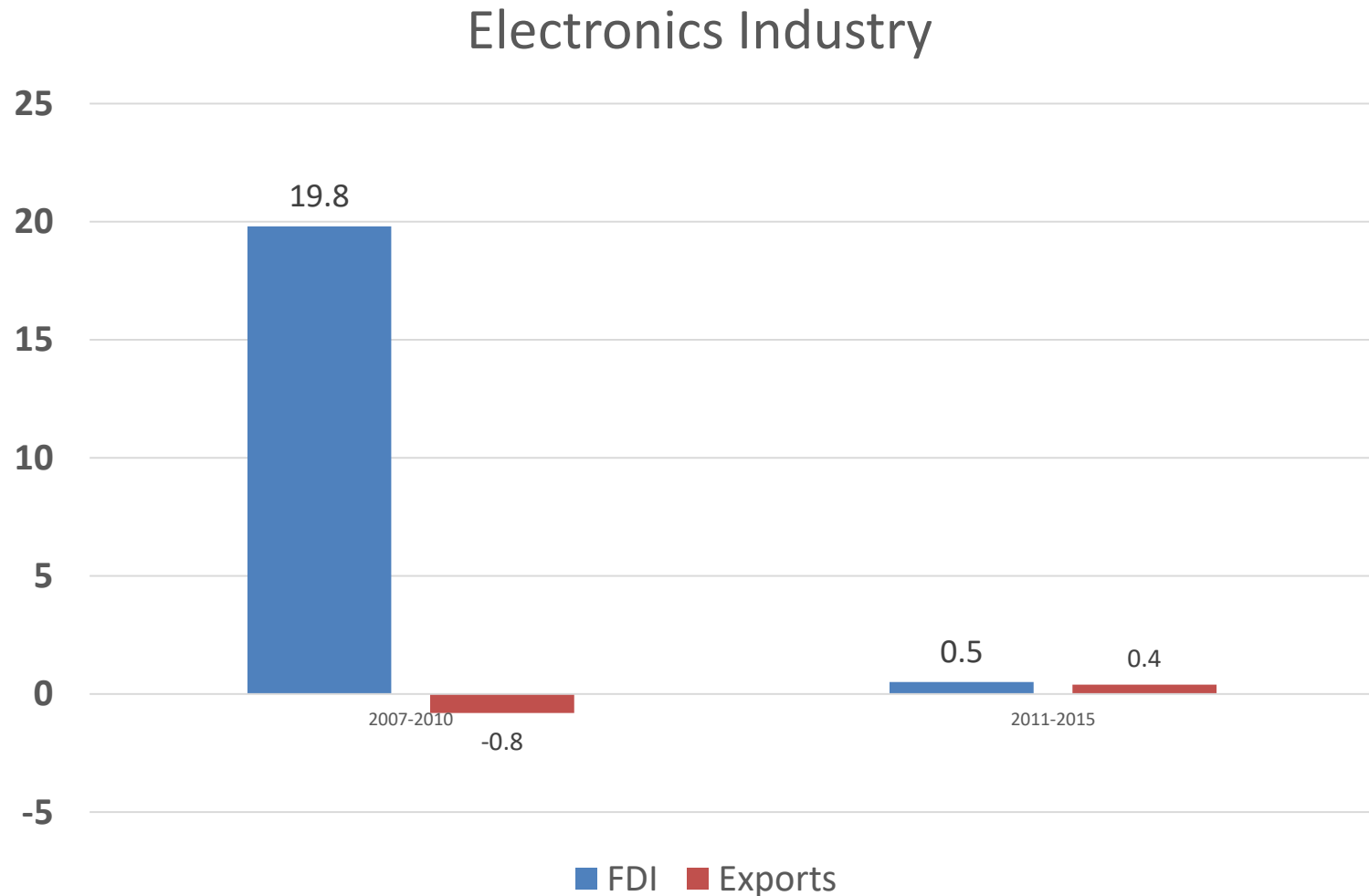


High FDI, High Exports

Processed Food Industry



Is this the beginning of the end?



Conclusions

- Since the first oil shock, Thailand's terms of trade has been declining.
- Primary commodities have become less important over time.
- Comparative advantage is changing, reflected by changing capital intensity.
- Demand for biofuels, if increasing, will keep cereal prices high – making staples beyond the reach of the poorest .

Conclusions

- Agriculture protection is on the rise for the sake of food security. Most advanced countries provide subsidies to farmers.
- FDI and trade are related through production fragmentation.
- The lack of FDI implies low rate of technological adoption and hence lower standard of living.
- The rise of production sharing is a major structural shift in the world trade from final product to network trade.

Conclusions

- Thailand benefitted from participation in network trade and the rapid recovery of exports in Japan and China in 2010 after the export collapse due to GFC in 2009..
- The severity of the impact of GFC on Southeast Asian economies depend on each country's export dependency, and trade intensity among them.

Further questions

- What would be the impacts of the war on corporate income tax cut?
- What will be the impact on Thailand's growth due to the Great Deceleration in 2016?
- Explain why network trade can lead to business cycle synchronization in Asia?

Further questions

- What would be the impacts of the war on corporate income tax cut?
- What will be the impact on Thailand's growth due to the Great Deceleration in 2017?
- Explain why network trade can lead to business cycle synchronization in Asia?