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.***

Course Syllabus
Lecture 18

How important is the export sector as an engine of growth? What are the factors contributing to the high degree of trade exposure?

The globalization process in Thailand has been ongoing for the last three decades.

The relationship between trade and economic growth is well established.

FDI and its impact on network trade are examined.

Trade structure is shaped by the role of FDI in various industrial sectors.

The impact of the GFC on Thailand's exports.

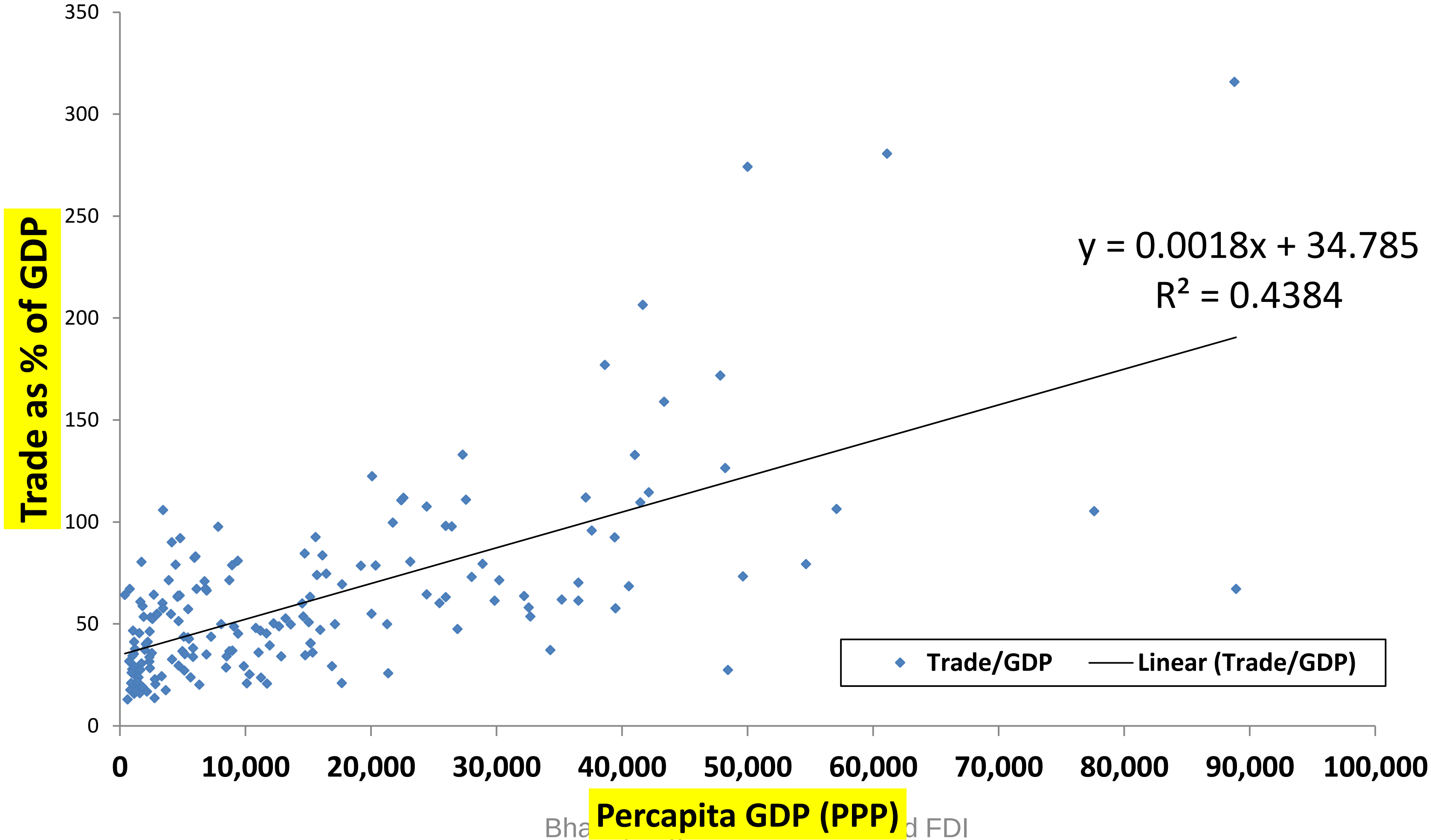
The impact of the US-China trade war in 2018/2019

Main Themes

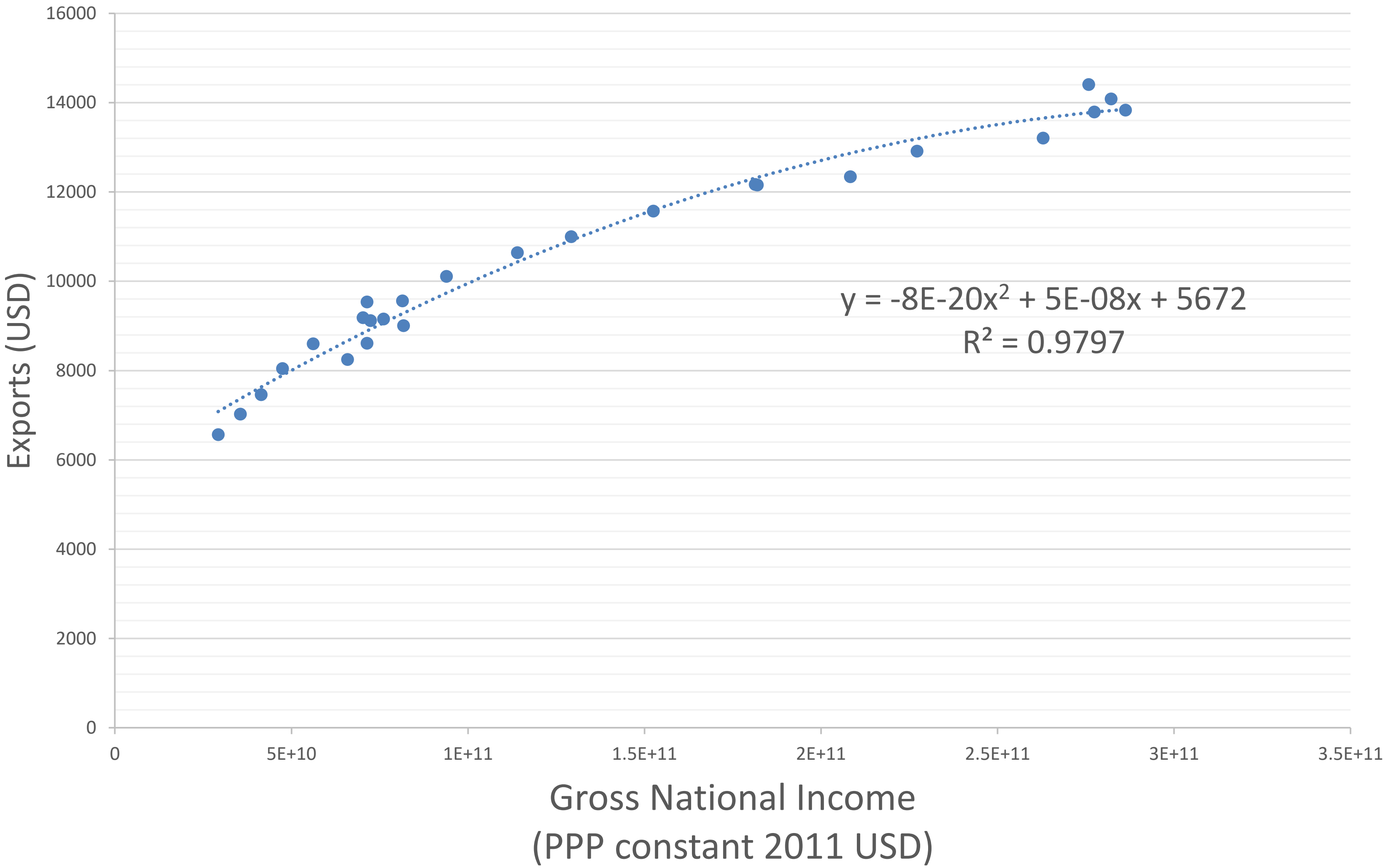
1. Trade and economic development
2. Trade in primary products
3. Growing volume of network trade
4. GFC and China’s slowdown
5. FDI and manufactured exports
6. Dwindling FDI and export capability
7. The US and China Trade disputes

1. Trade and Economic Development

Trade and Economic Development: Cross-Section Data

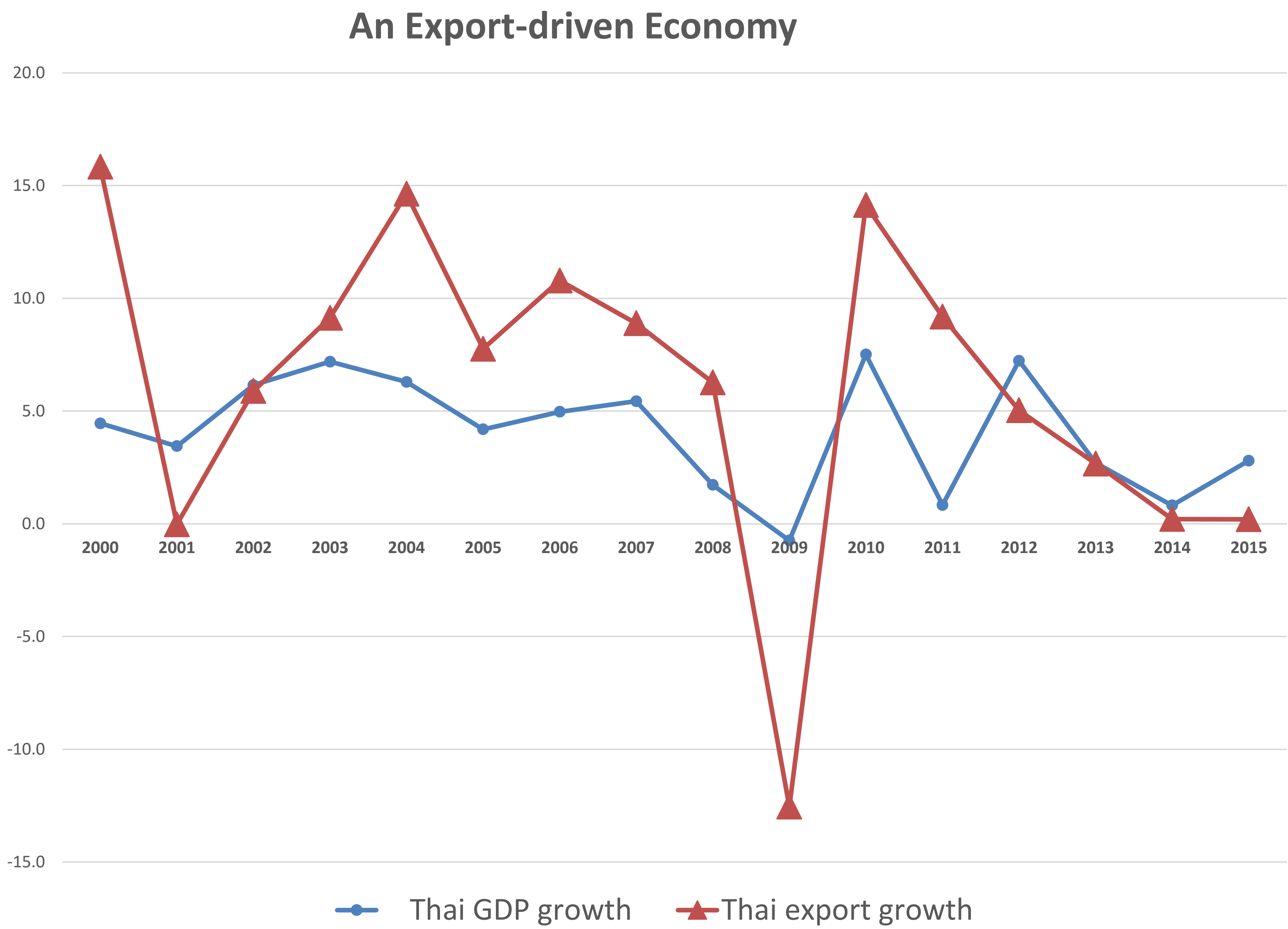


Thailand's Exports: Handmaiden of Growth (1990-2015)



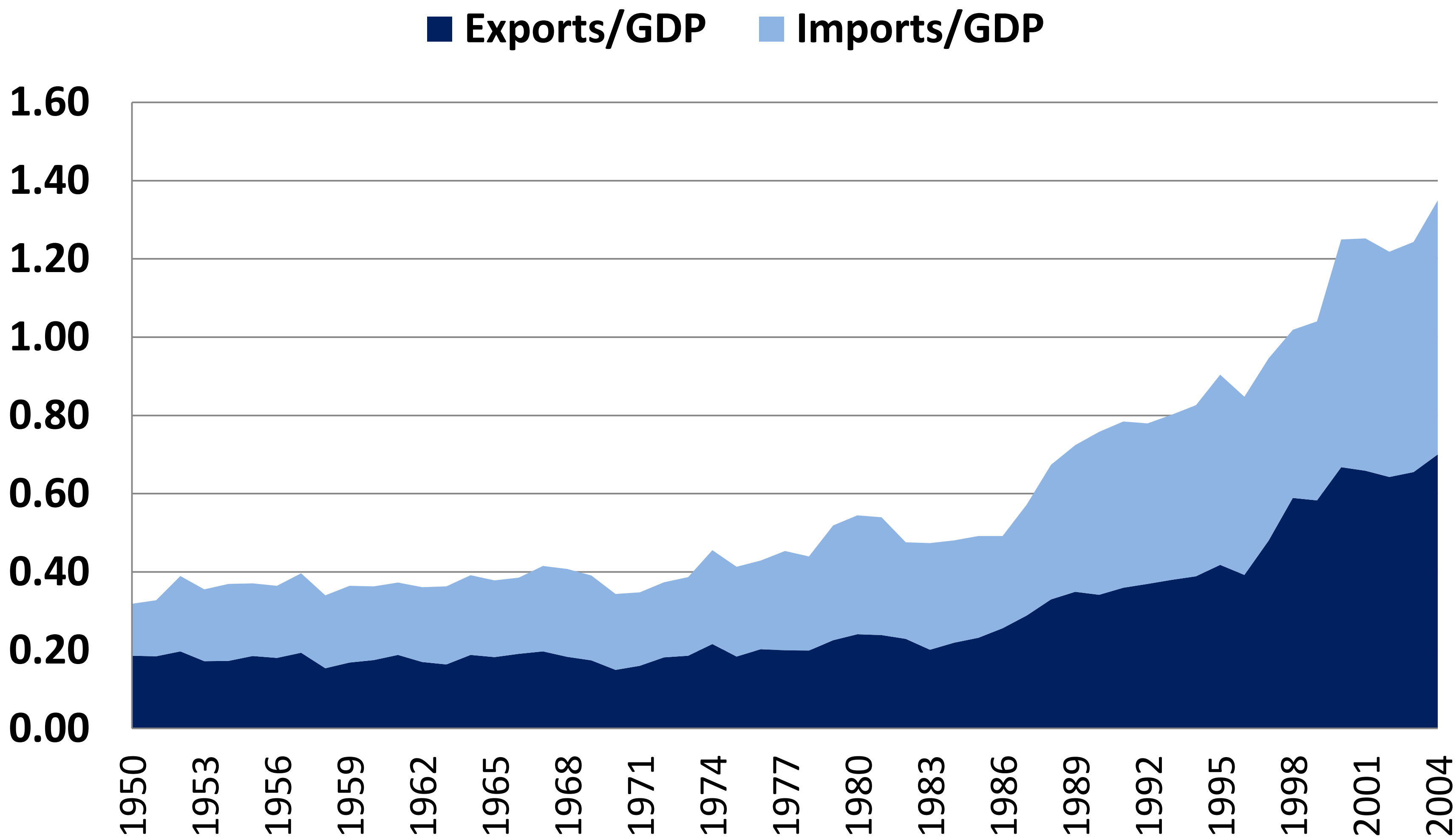
Three views on international trade and economic growth

- 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***.

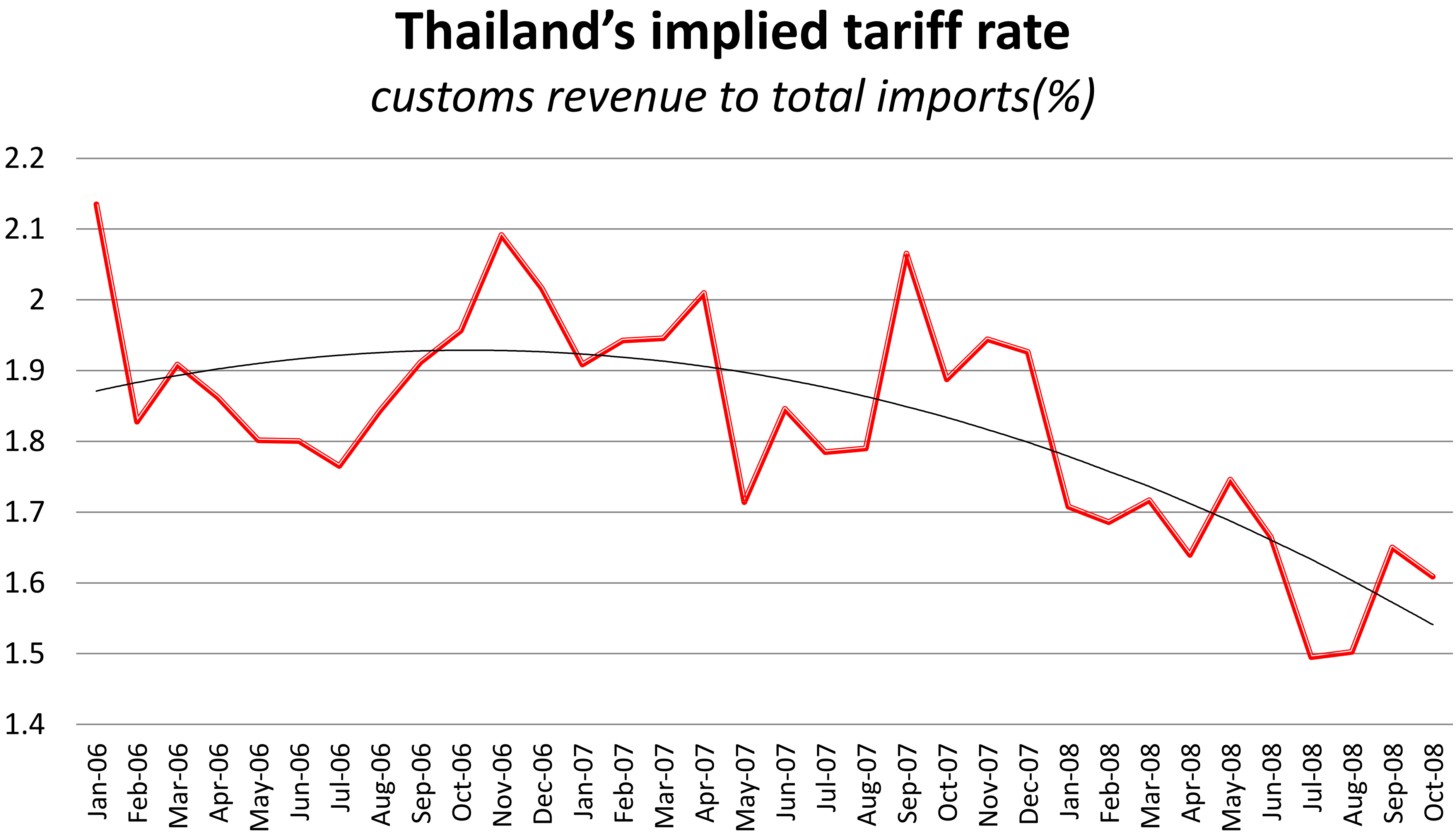


An Export-driven Economy
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
Thai GDP growth
Thai export growth

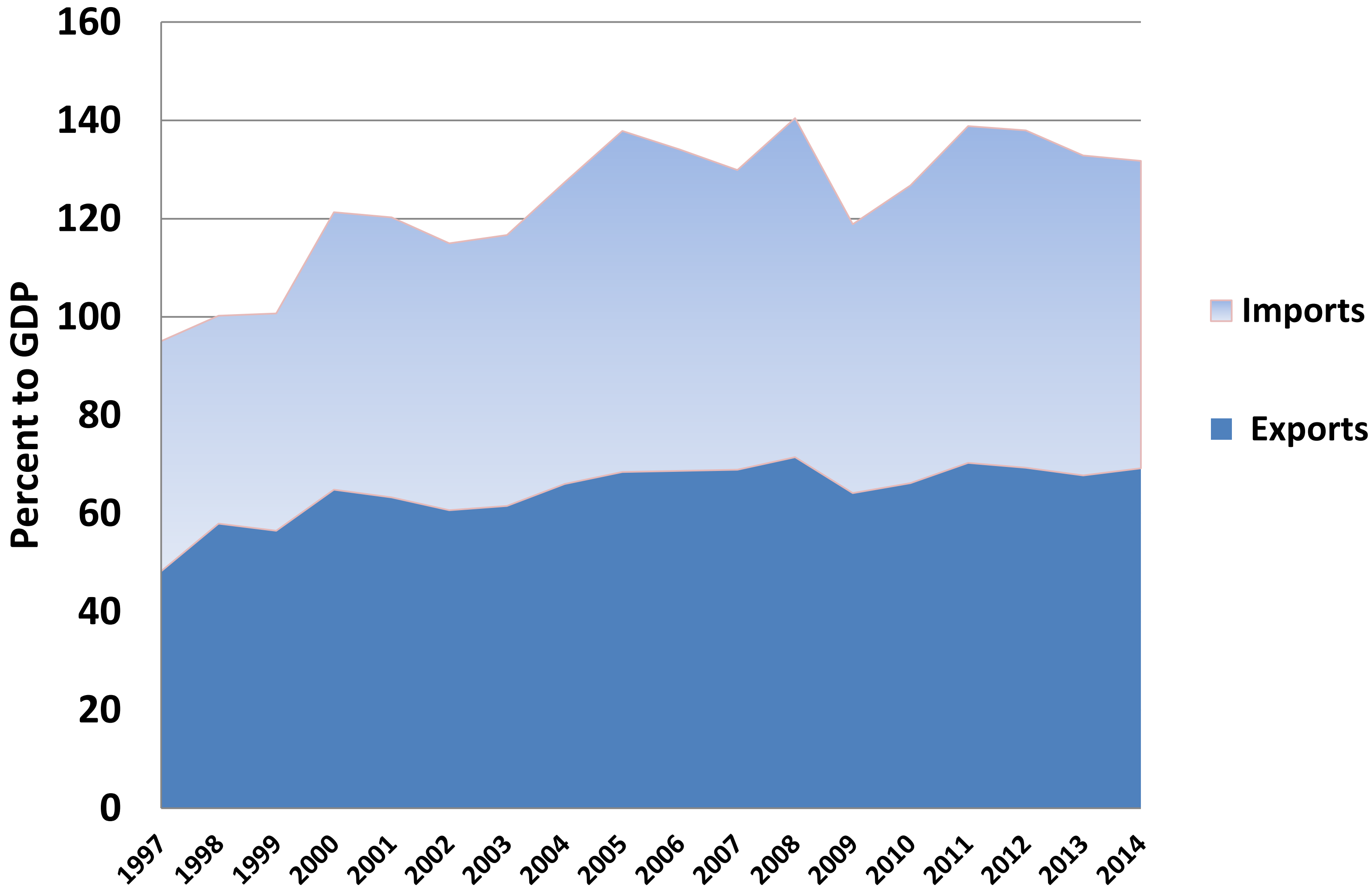
Trade Liberalization: 1950-2004

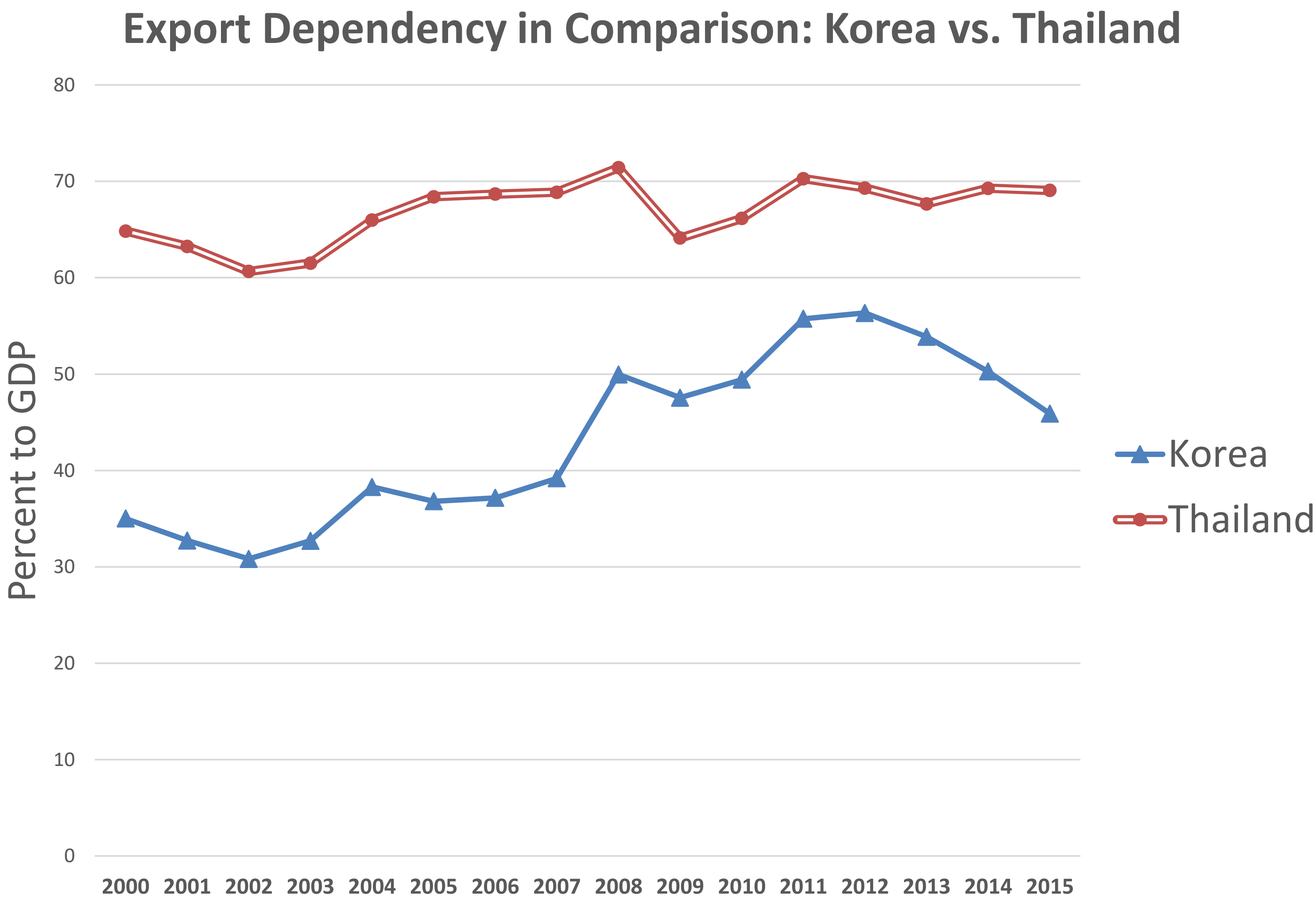


Trade Reform: Reducing tariff rates

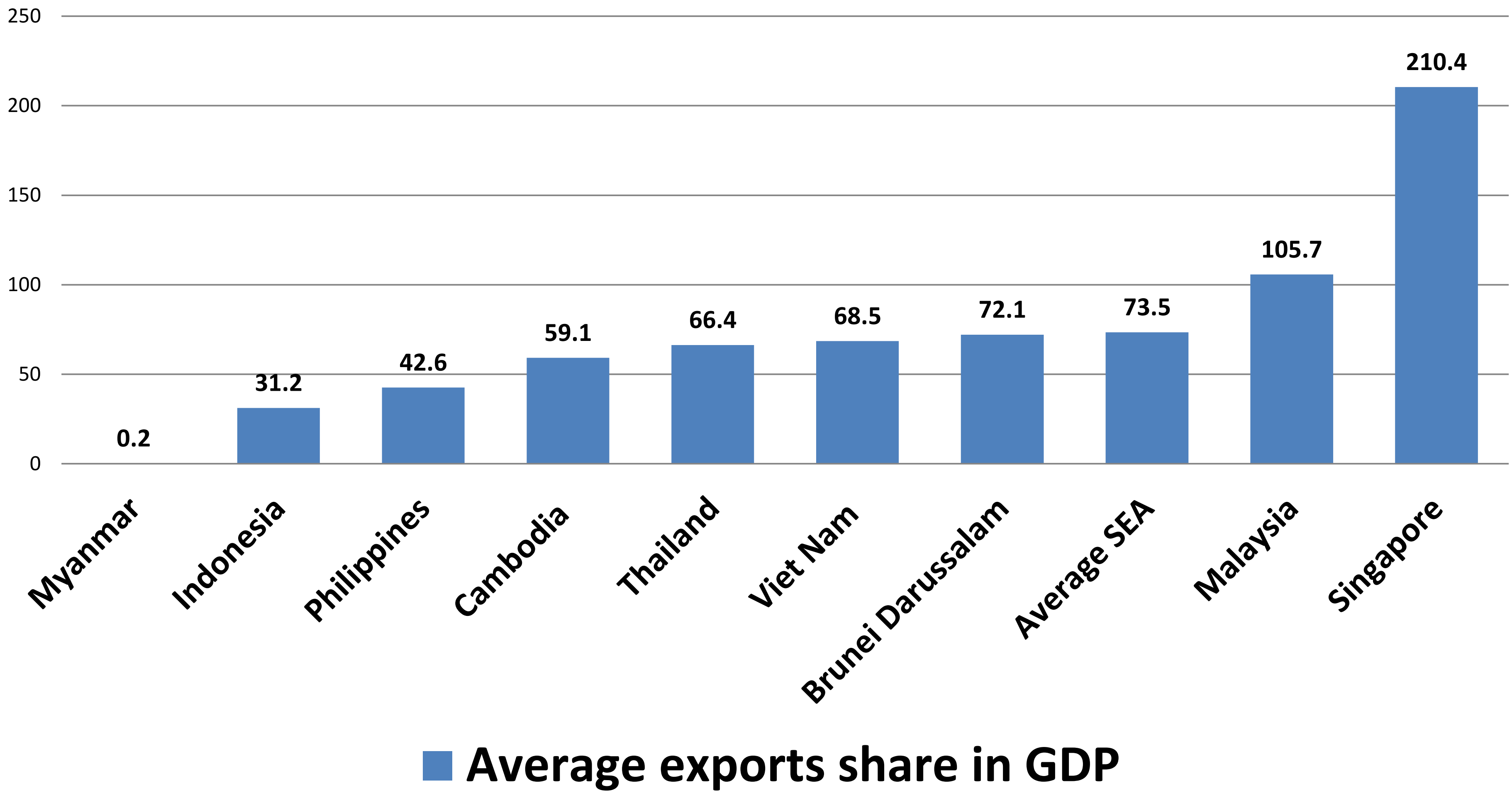


Thailand's Trade Exposure After AFC 1997-2014

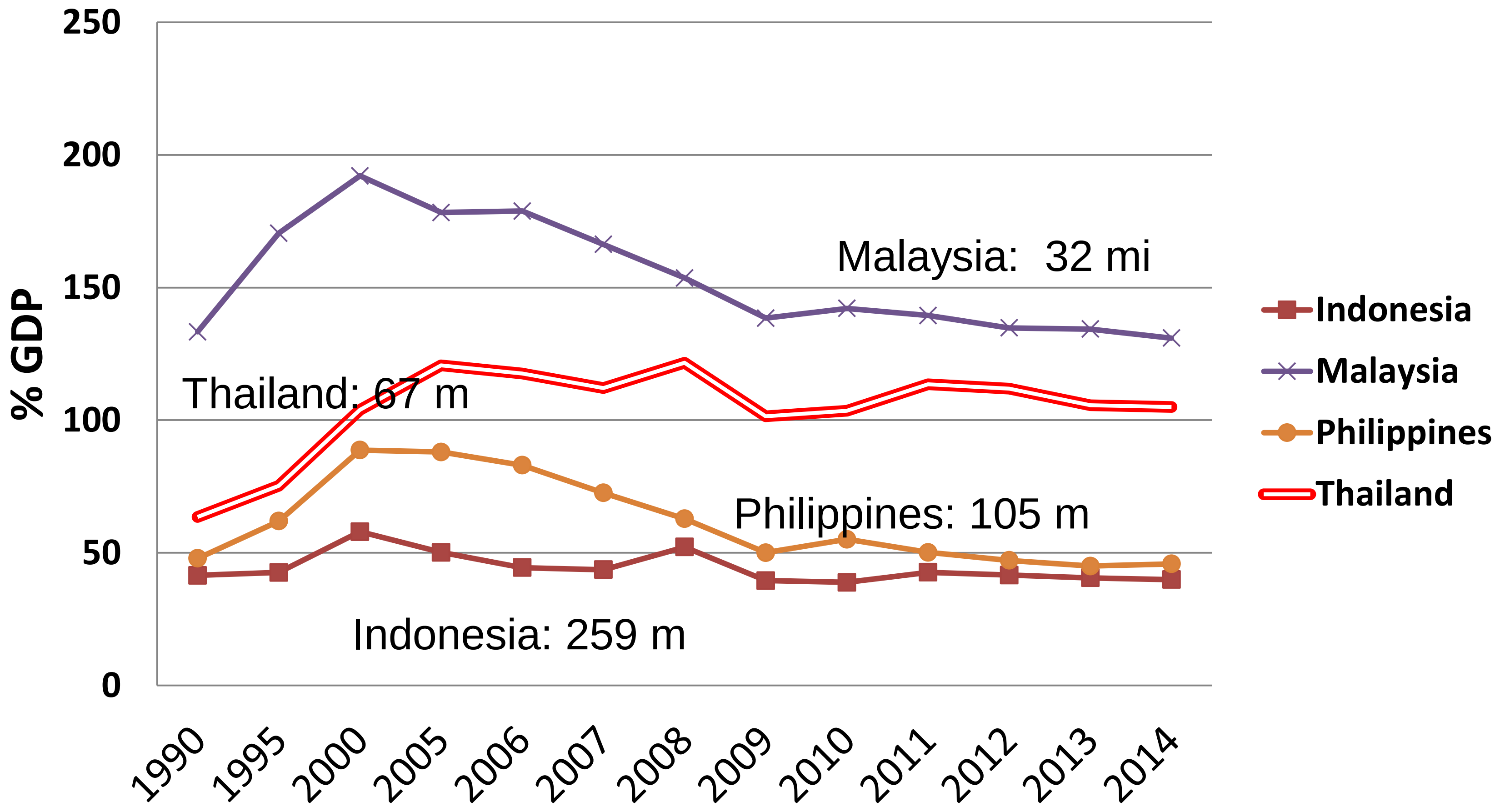



Export Dependency in Comparison: Korea vs. Thailand
Percent to GDP
0
10
20
30
40
50
60
70
80
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
Korea
Thailand

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

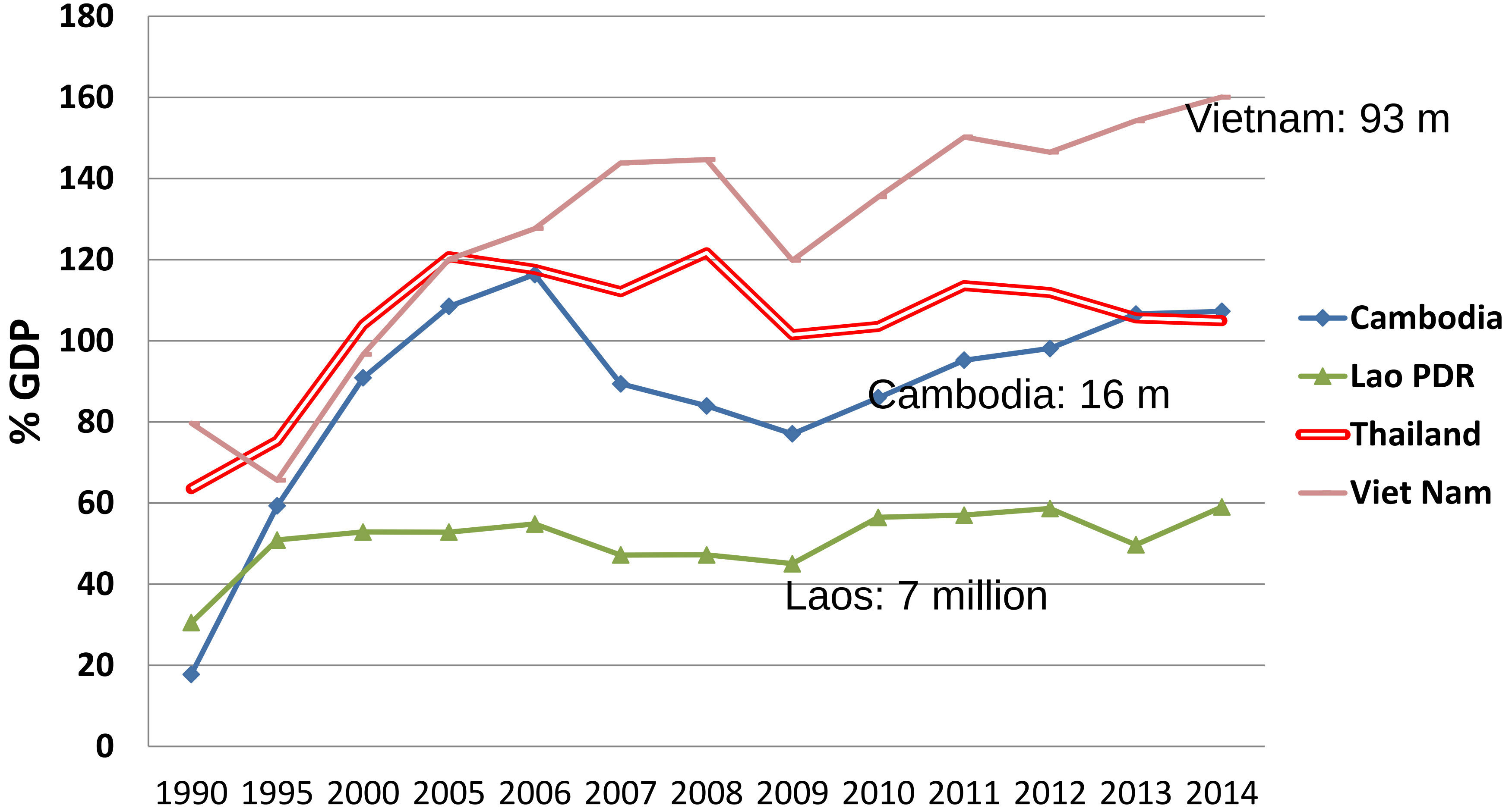


Trade Exposure: Sum of merchandise exports and imports (% GDP) ASEAN



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

CLV vs Thailand



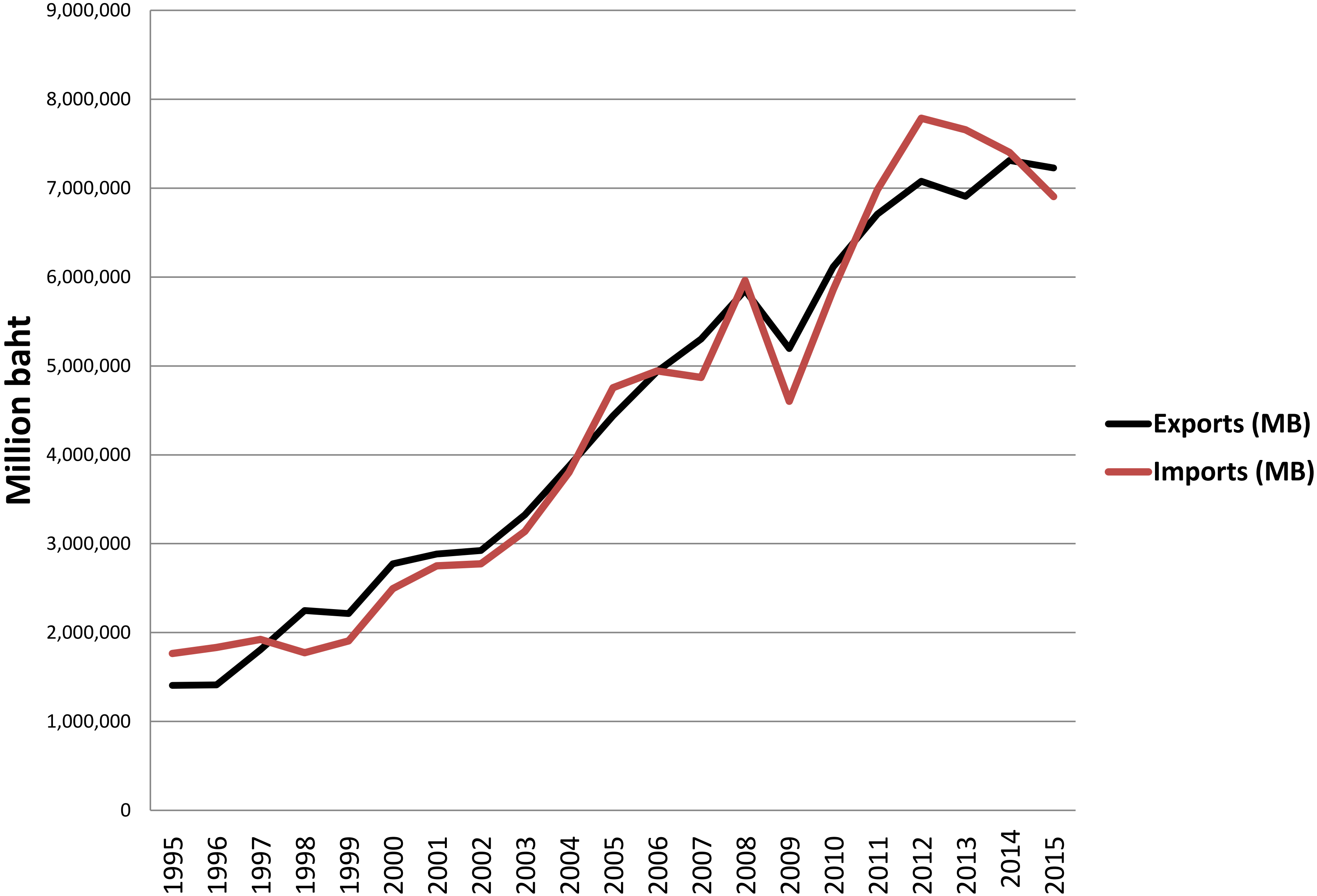
Adverse impact of globalization

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

What globalization can do

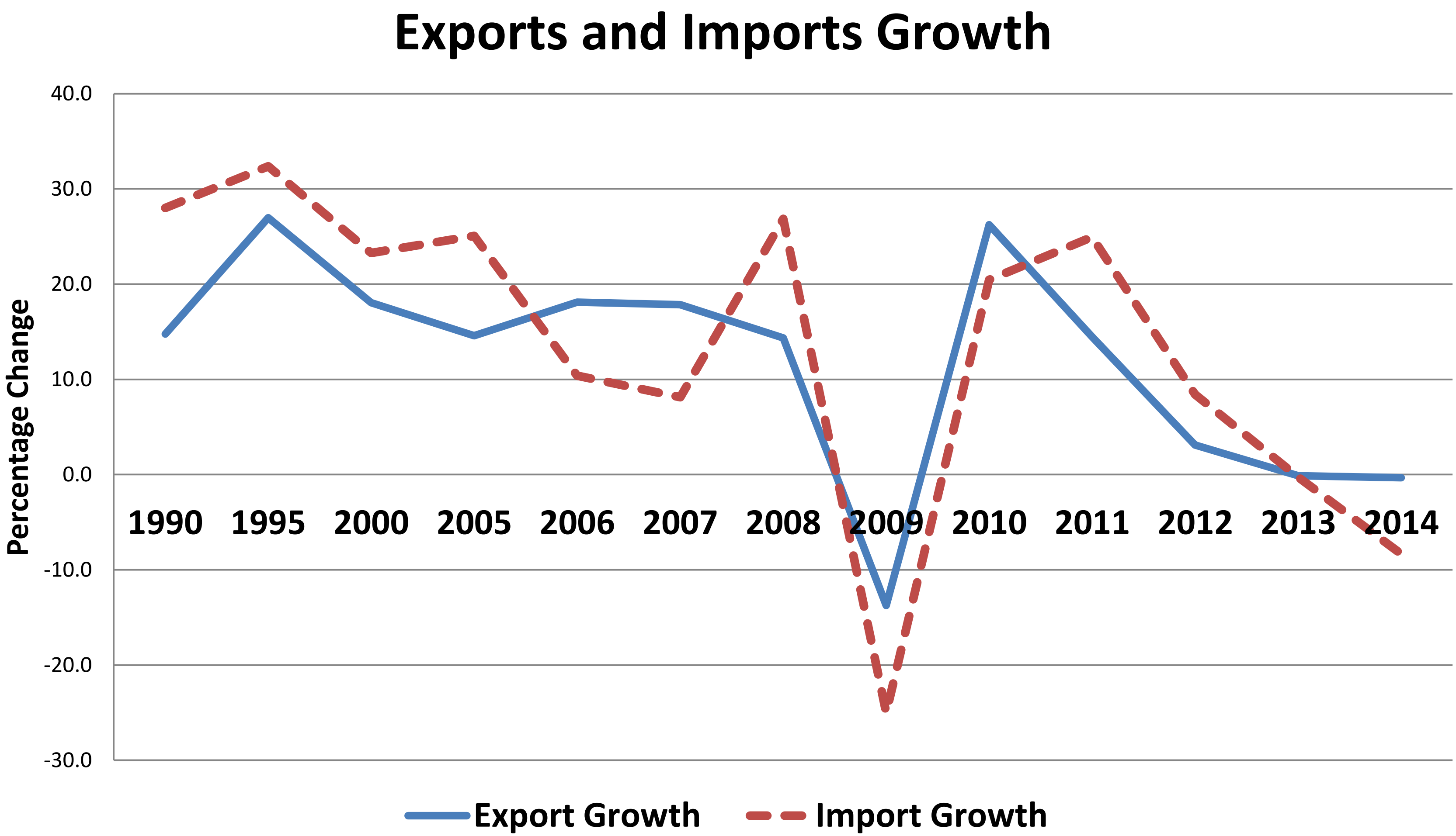
- High exports can sustain output growth
- Imported capital goods raise productivity
- World competition exposure leads to efficiency improvement.
- Exploitation of the economies of scale
- Outward-oriented development strategy
- Improve resource allocation as production is dictated by comparative advantage.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

Co-movements of exports and imports levels: Causal relationship?

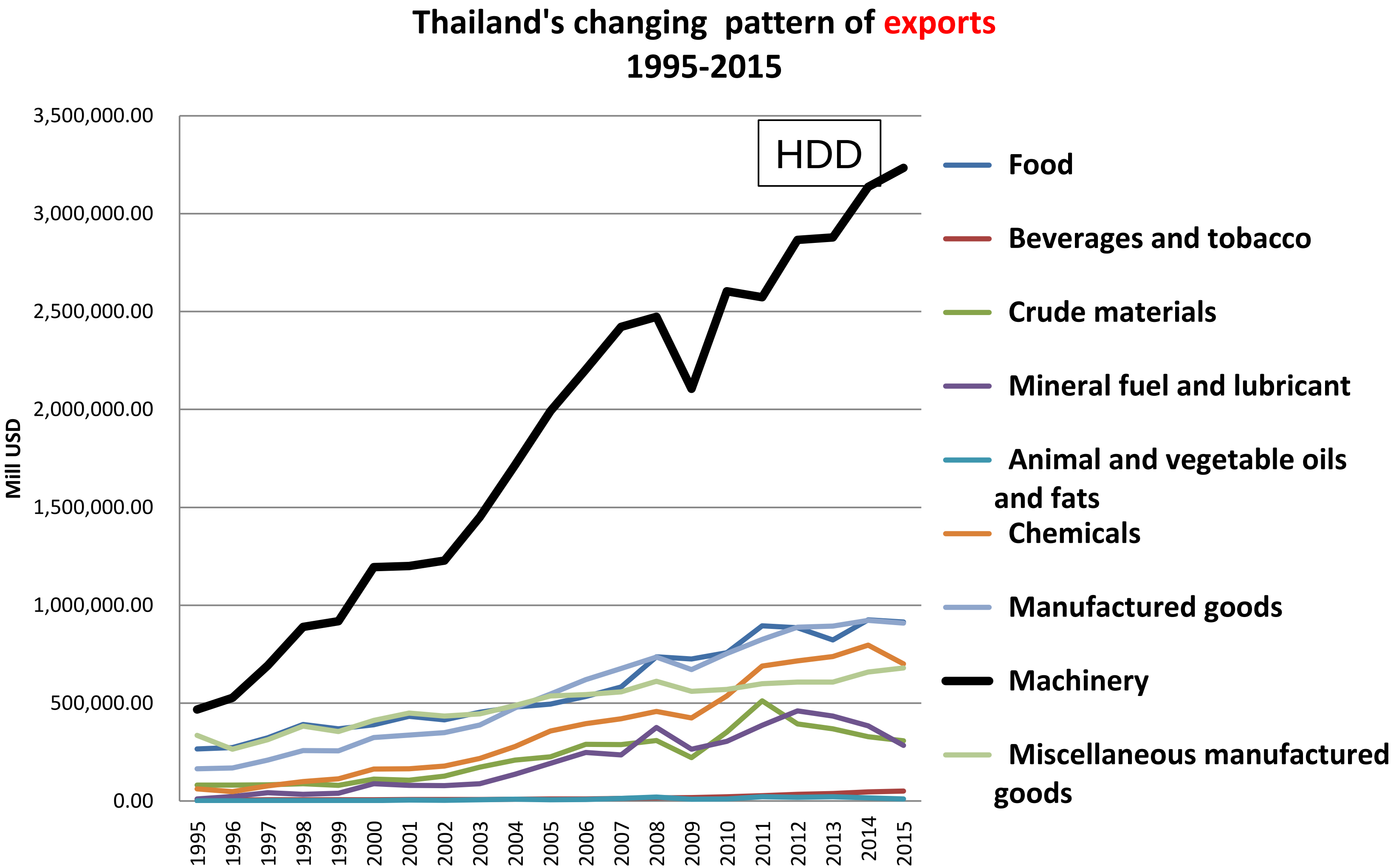


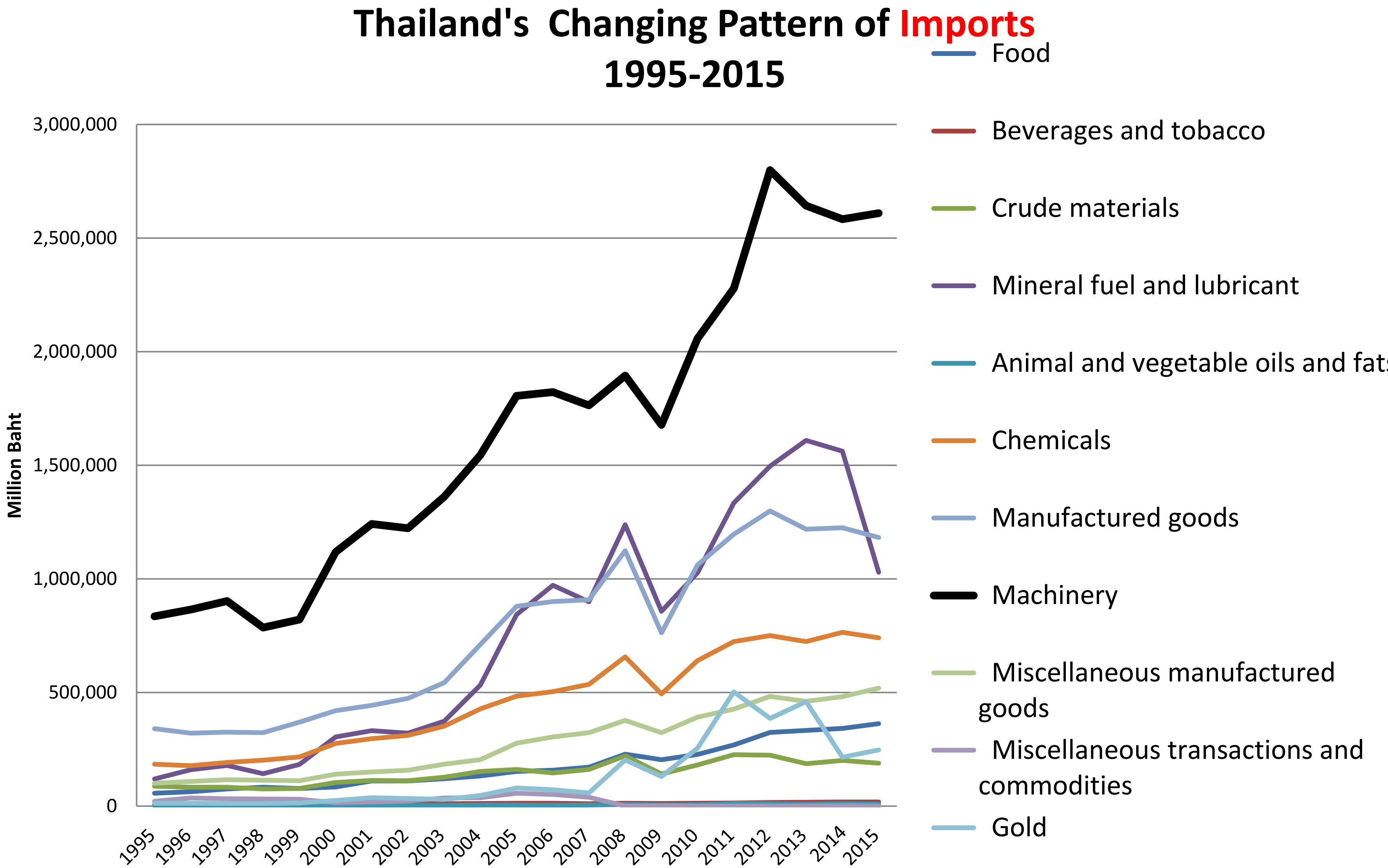
Thailand's Imports and Exports Nonspurious Relationship

(1990-2014)



Trade acts as the **engine of growth** by providing a conduit for technology transfer



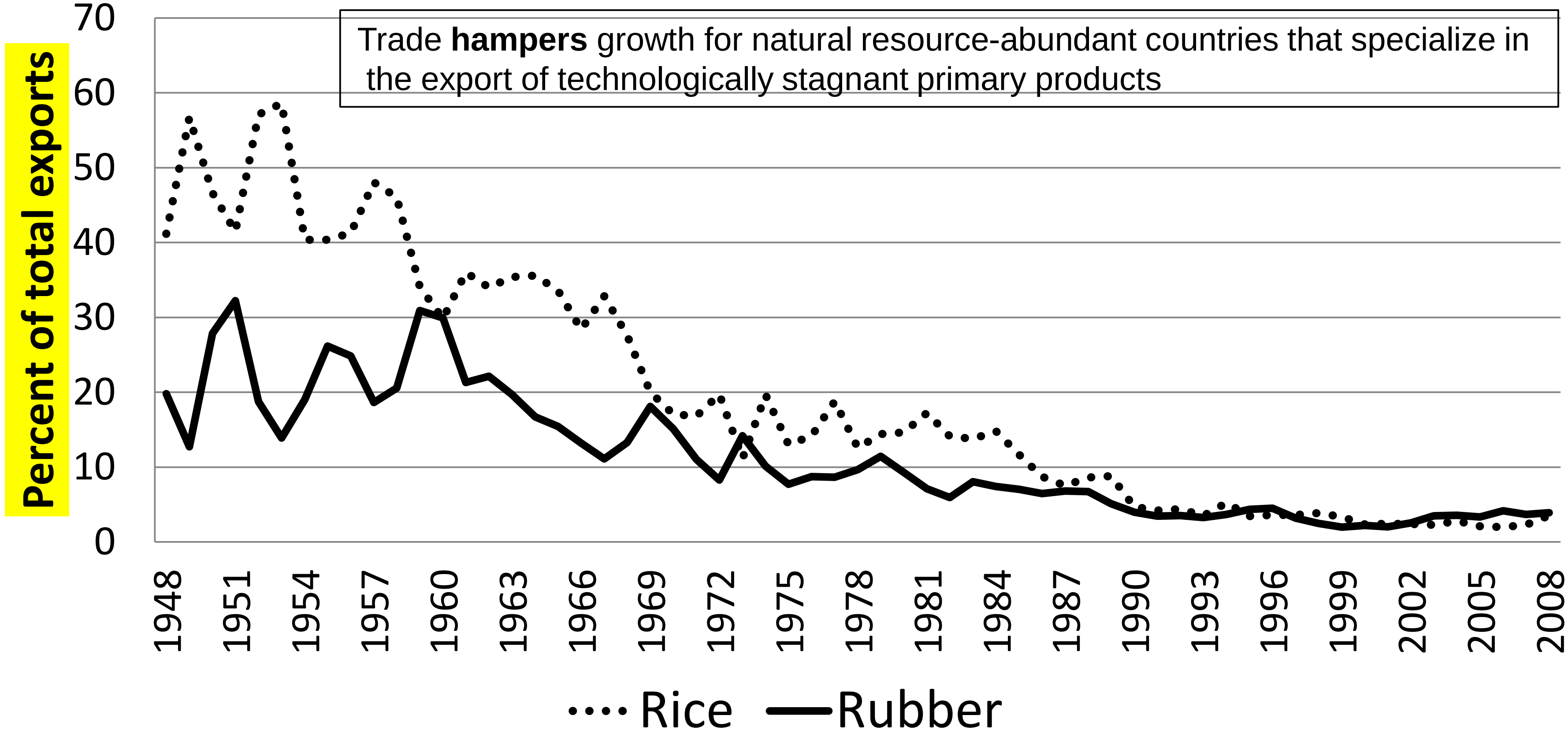


Trade acts as the ‘**handmaiden**’ of growth by improving the quality of investment

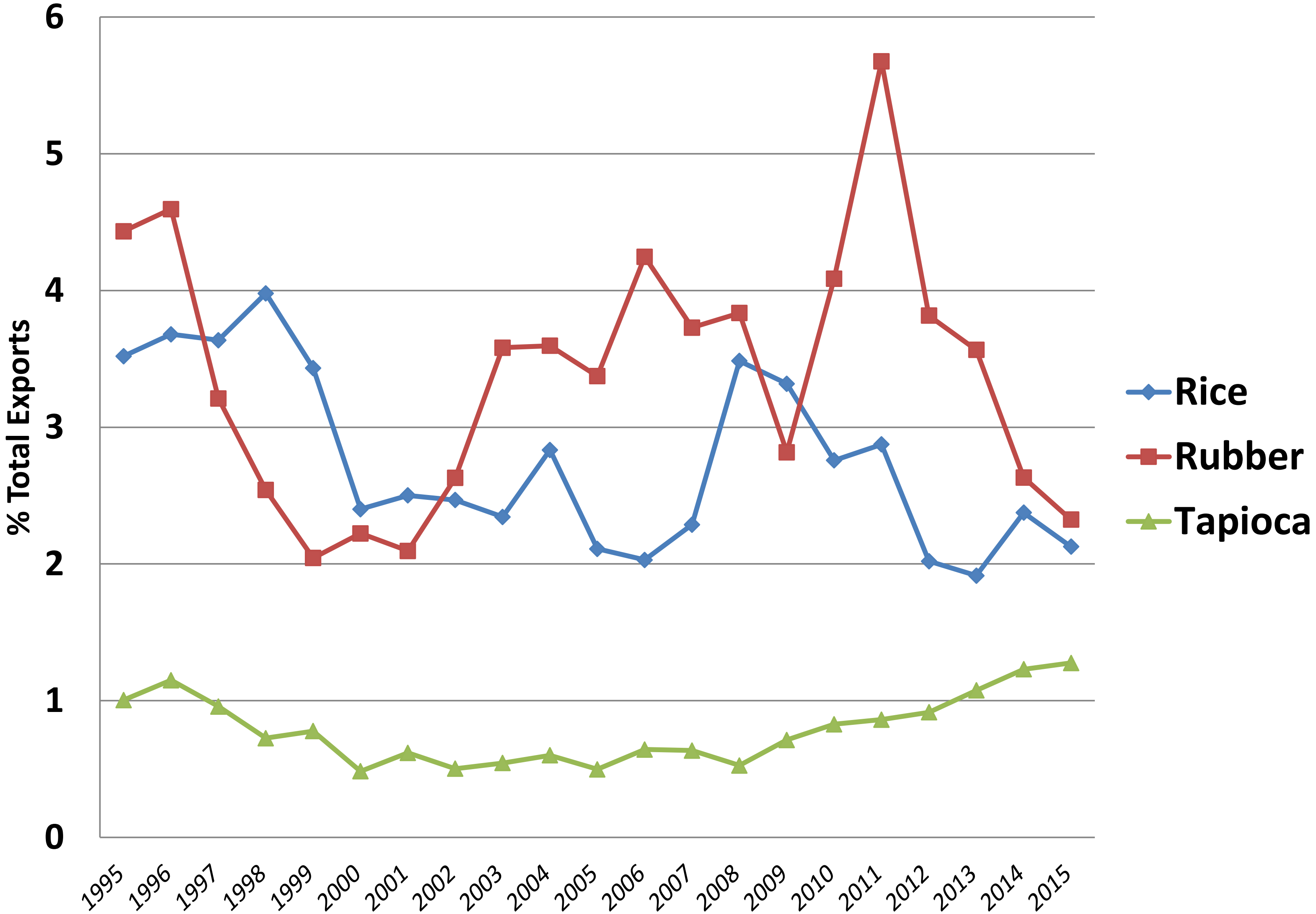
2. Trade in Primary Products

Shares of traditional primary exports: Rice and Rubber (1948-2008)

Trade **hampers** growth for natural resource-abundant countries that specialize in the export of technologically stagnant primary products



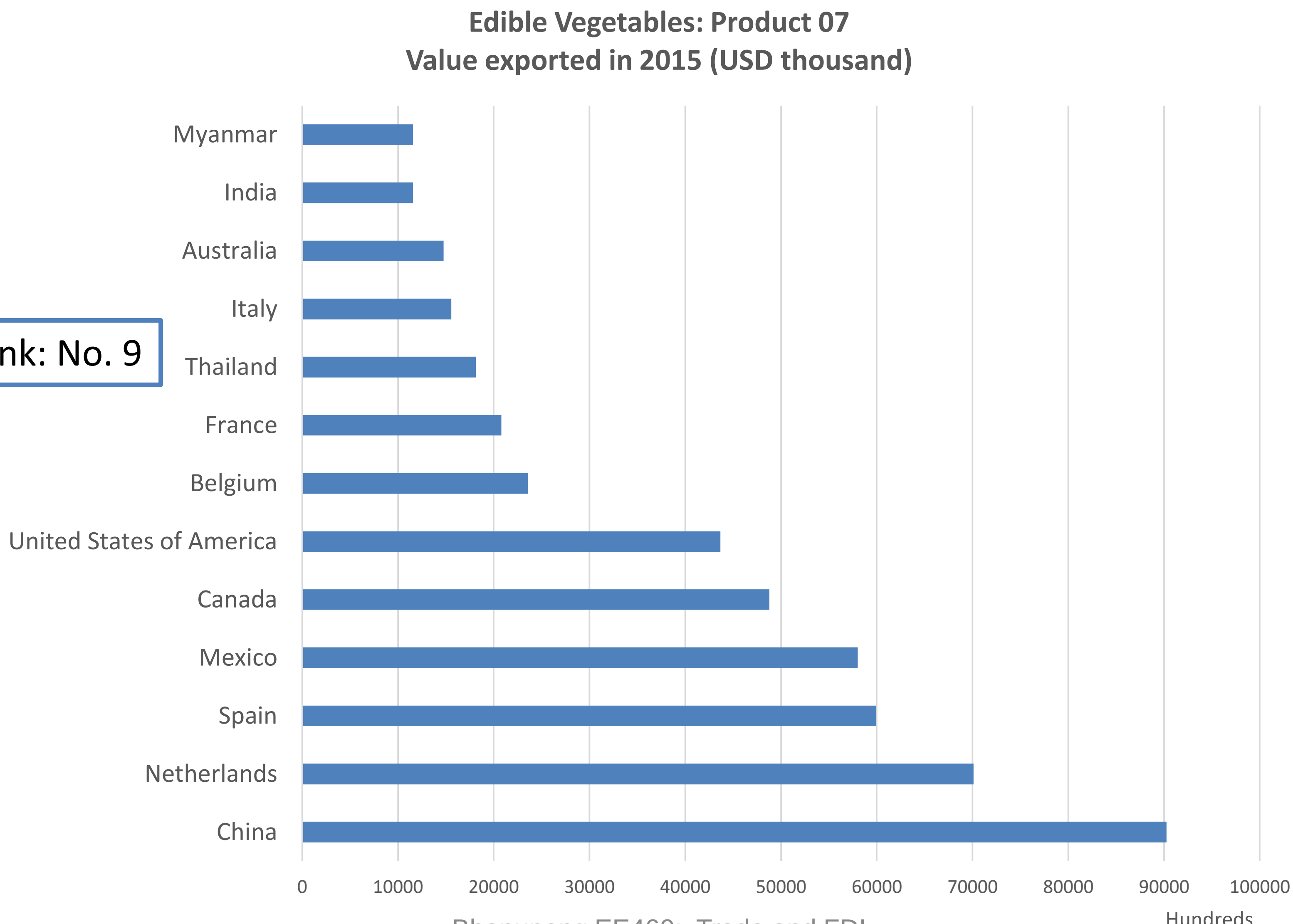
Share of Thailand's primary exports: 1995-2015



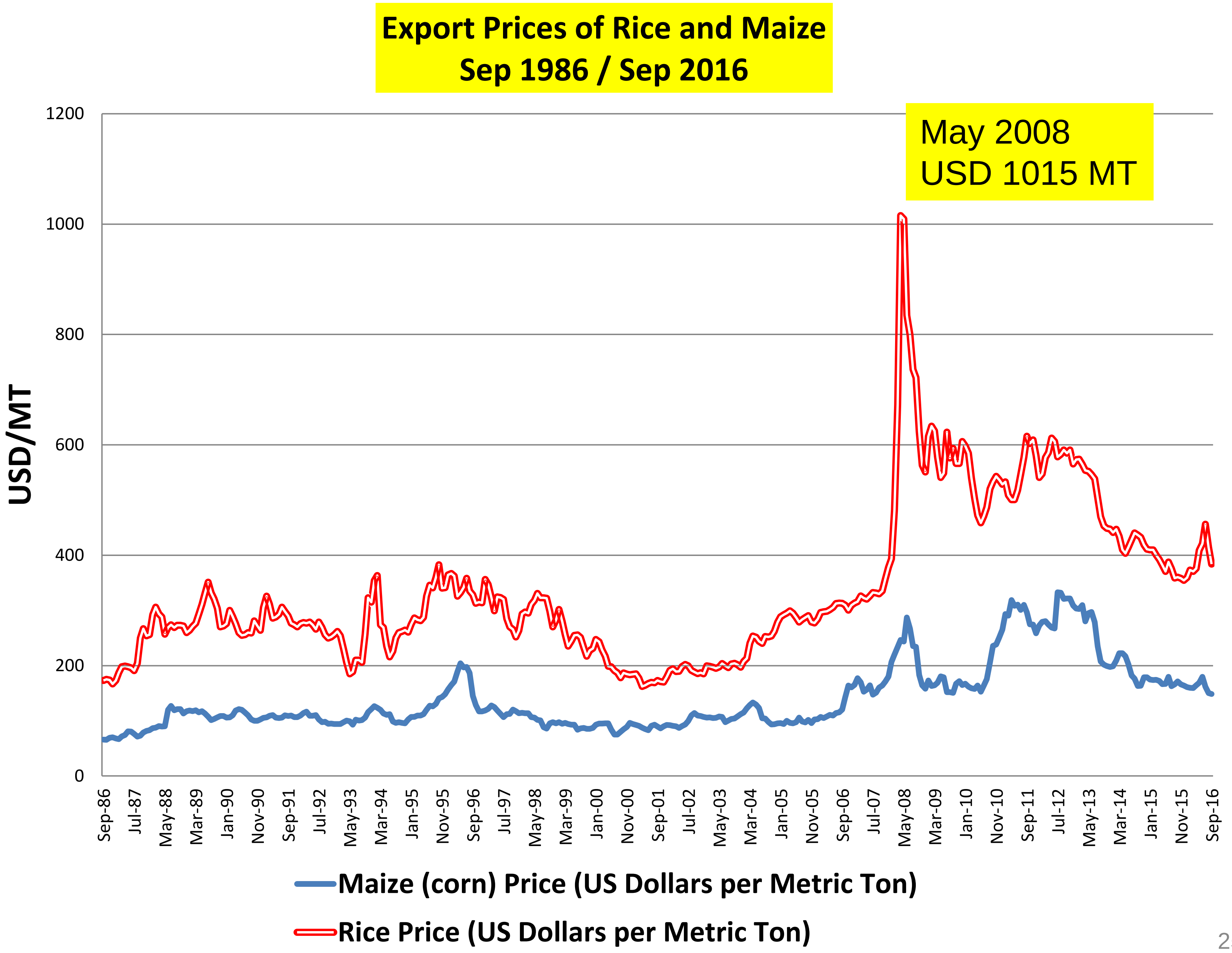
Trade in primary products

- 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: Vegetables



Rank: No. 9



Export Prices of Rice and Maize
Sep 1986 / Sep 2016
May 2008
USD 1015 MT
USD/MT
1200
1000
800
600
400
200
0
Sep-86
Jul-87
May-88
Mar-89
Jan-90
Nov-90
Sep-91
Jul-92
May-93
Mar-94
Jan-95
Nov-95
Sep-96
Jul-97
May-98
Mar-99
Jan-00
Nov-00
Sep-01
Jul-02
May-03
Mar-04
Jan-05
Nov-05
Sep-06
Jul-07
May-08
Mar-09
Jan-10
Nov-10
Sep-11
Jul-12
May-13
Mar-14
Jan-15
Nov-15
Sep-16
Maize (corn) Price (US Dollars per Metric Ton)
Rice Price (US Dollars per Metric Ton)

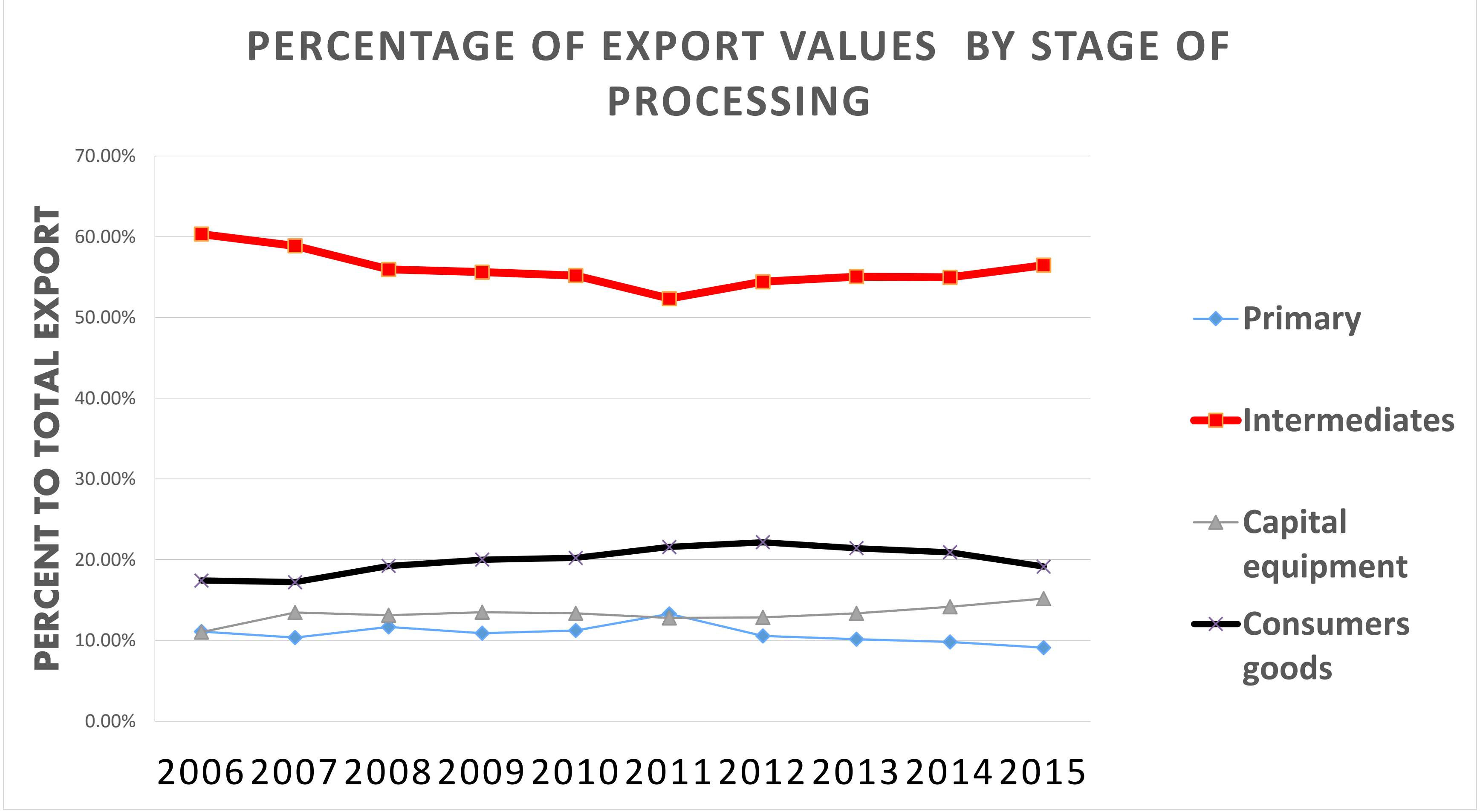
Why did food prices soar in 2008?

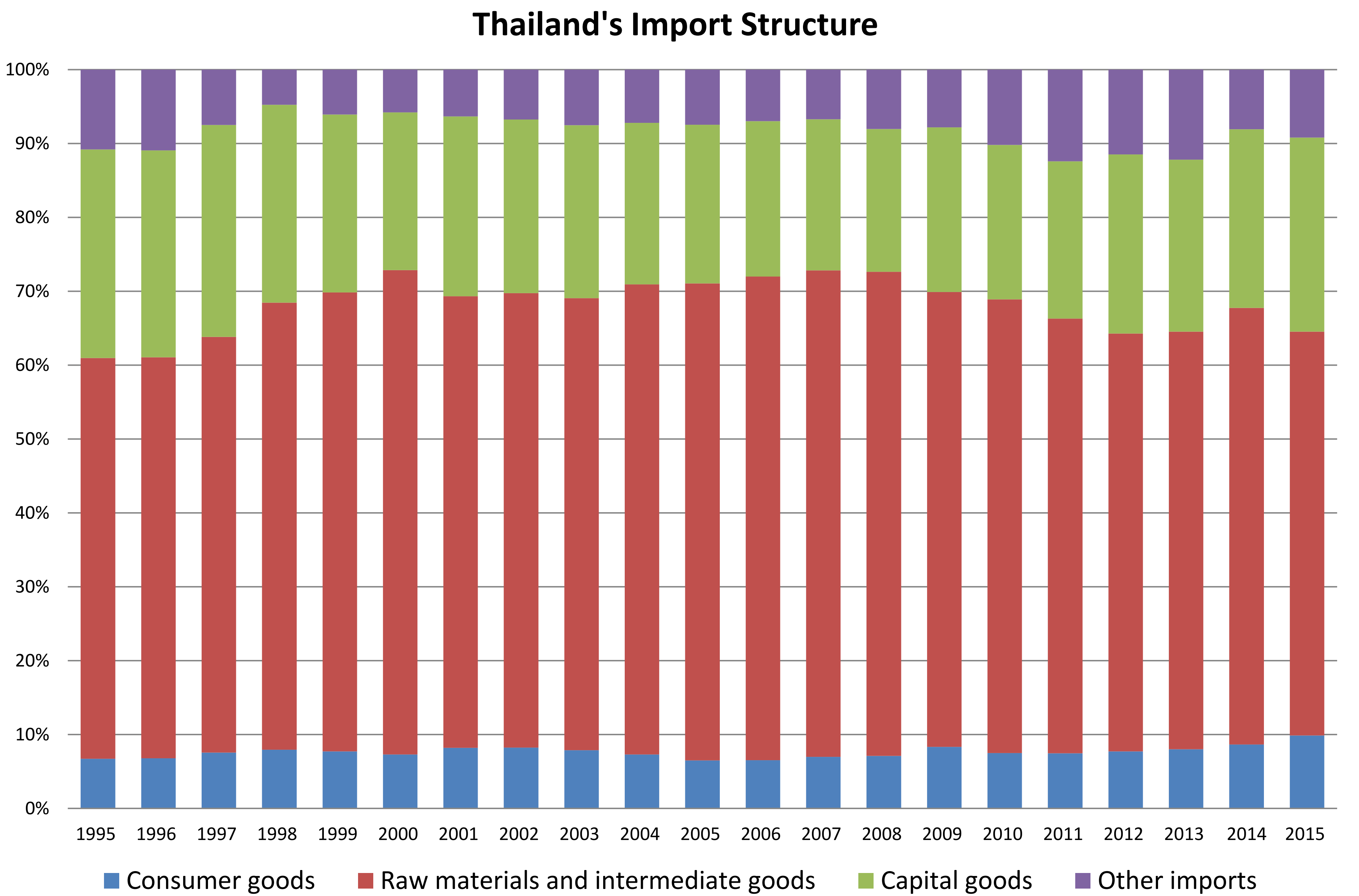
- High prices were triggered by the 2007 drought in Australia, the worst for a century, which halved its wheat harvest. But there were more fundamental background factors.
- As countries like China, India, Brazil, and Russia have become more affluent, they have begun eating more.
- Rich people don't 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 8 kg of grain to produce 1 kg of beef – the price of all cereals has been forced up.

Biofuels

- Added to that was a love affair with biofuels.
- 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.
- ***In 2008, the price of cereals had rocketed as a result***.

3. Growing volume of Network Trade




Thailand's Import Structure
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
Consumer goods
Raw materials and intermediate goods
Capital goods
Other imports

Rising network trade

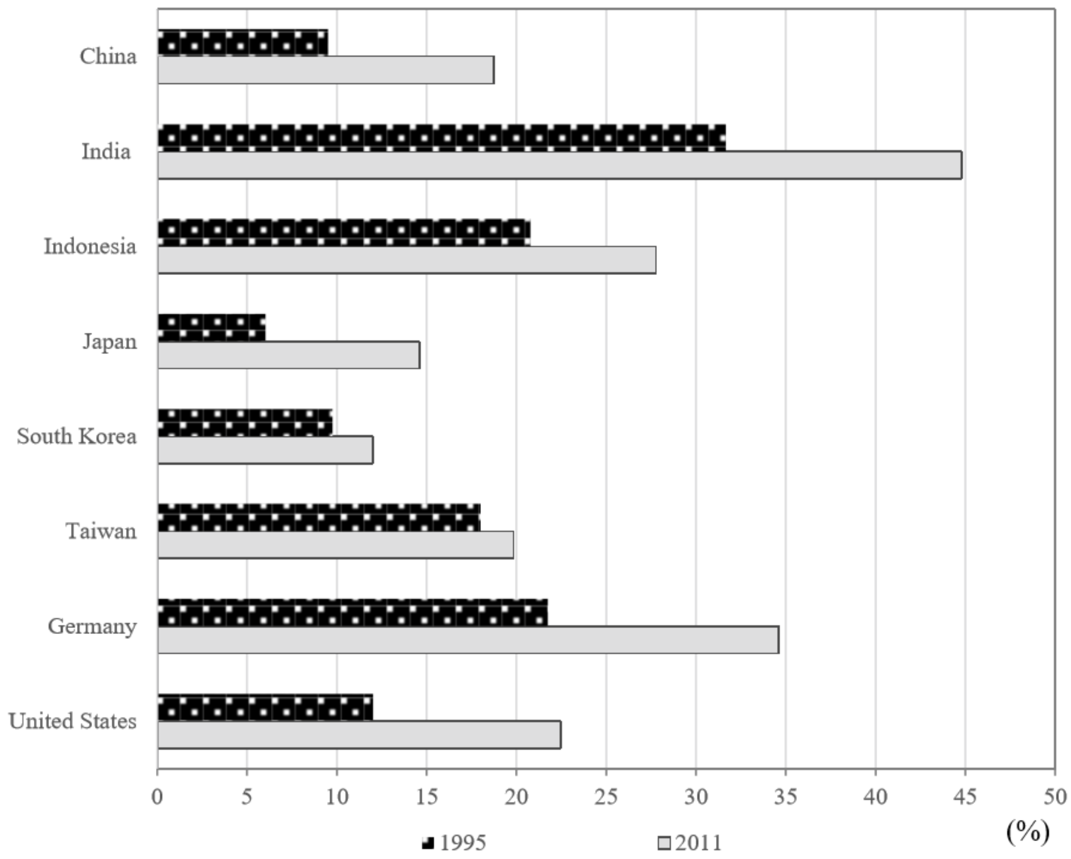
- Network trade is expanding much faster compared to conventional product-based trade (24 % of total manufactured exports in 1993, 45.5% in 2007).
- There is a shift away from mature industrial economies towards developing countries .
- Developing countries' share in network exports rose from 25 % in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

Network trade in East Asia

- 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.

Share of imported intermediate inputs in total intermediate inputs in manufacturing industries

Figure 3. International Fragmentation of Production



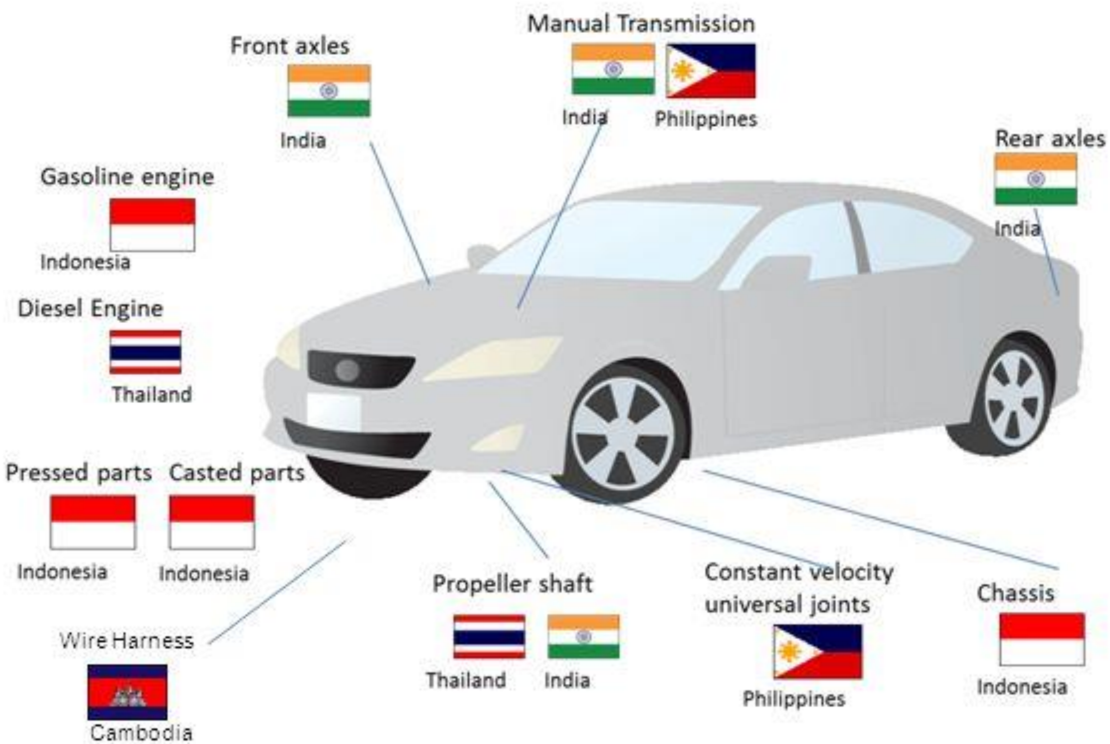
Note: The figure shows the shares of imported intermediate inputs in total intermediate inputs in manufacturing industries in 1995 and in 2011.

Global Value Chains

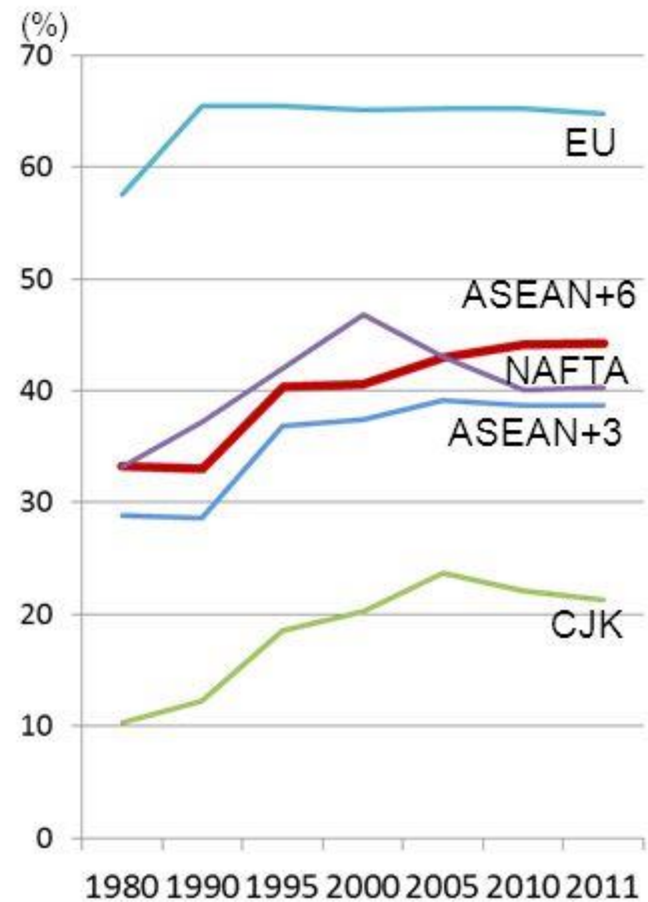
- *Global Value Chains (GVCs) are transforming global trade by breaking production into steps that can be carried out in different countries;*
- *GVCs have helped advance developing countries, but some have benefited more than others;*
- *Cutting trade costs is crucial to building more inclusive GVCs that deliver greater benefits to developing countries and smaller companies.*

Developing Value Chain Network in East Asia (2)

Example of production network for auto parts



Intra-regional trade in ASEAN+6 now exceeds NAFTA

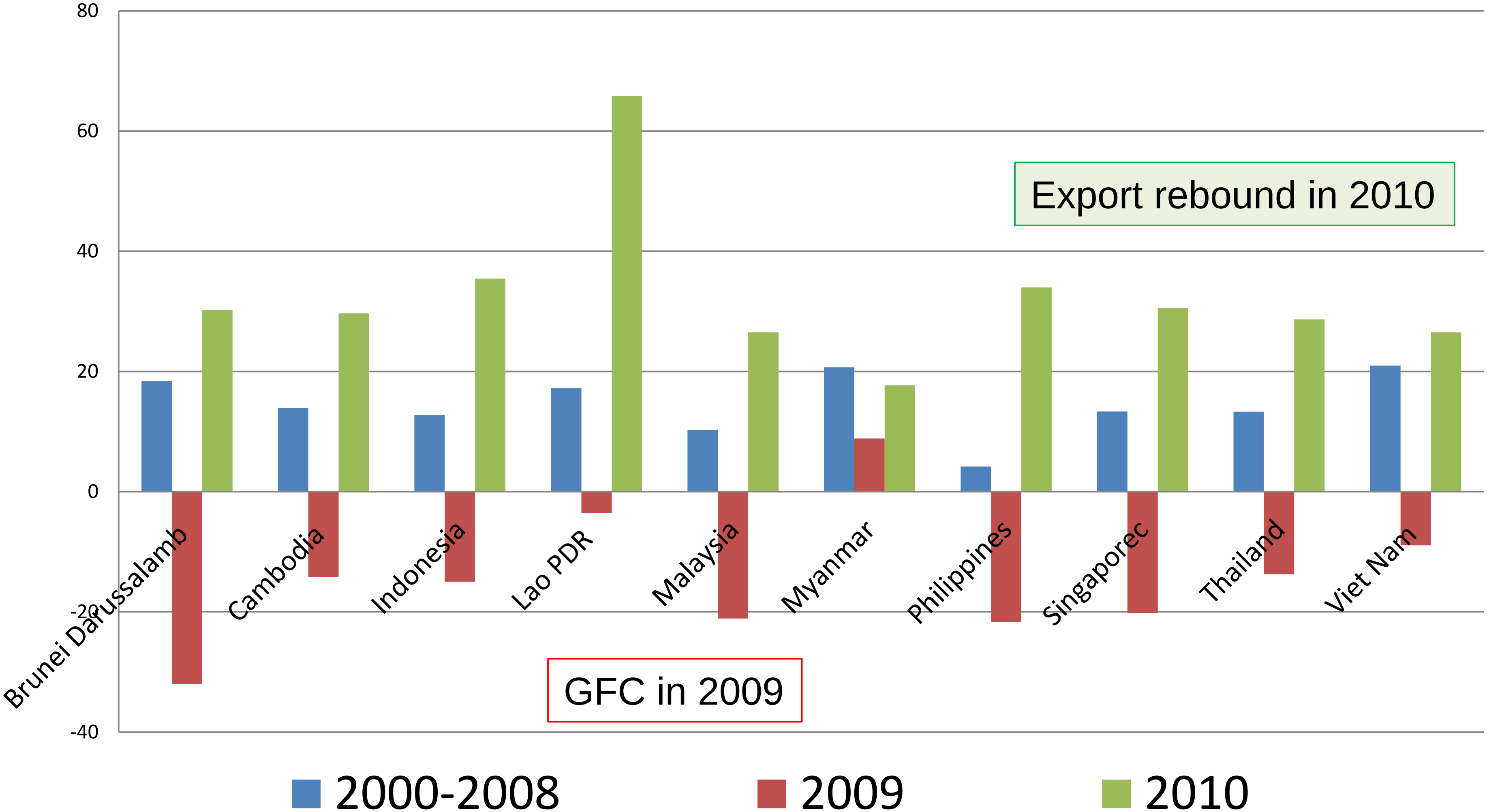


Source: JETRO 2012

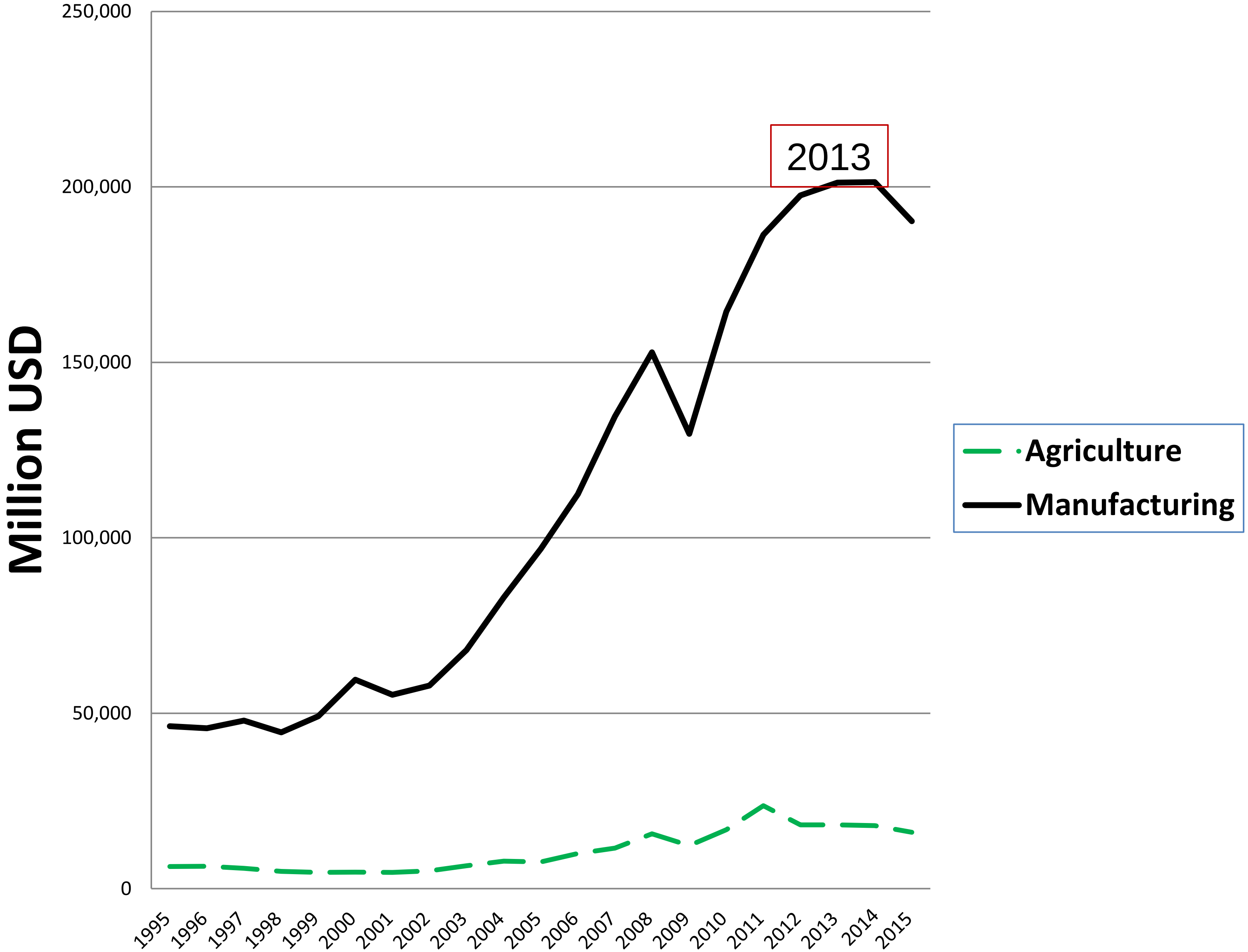
4. GFC and impact of China's slowdown

- A sharp contraction in the world trade following the onset of the Global Financial Crisis (GFC) at a faster rate than 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 the world trade volume slowed down.
- ***Parts and components*** trade have been more susceptible to the global economic slowdown compared to trade in **final assembly** and total trade.

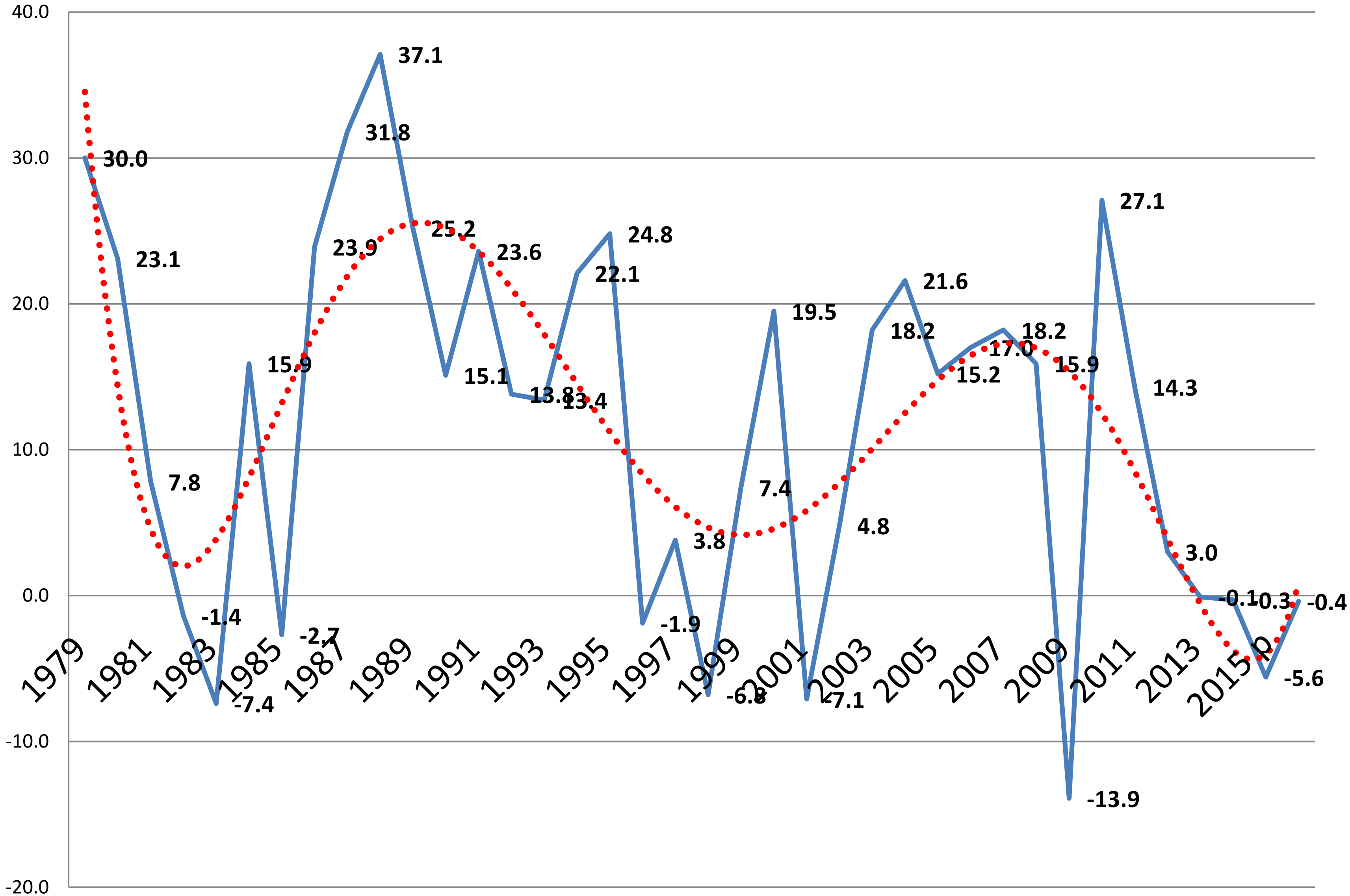
Impact of GFC on Exports Growth Rate: 2009 (% growth)



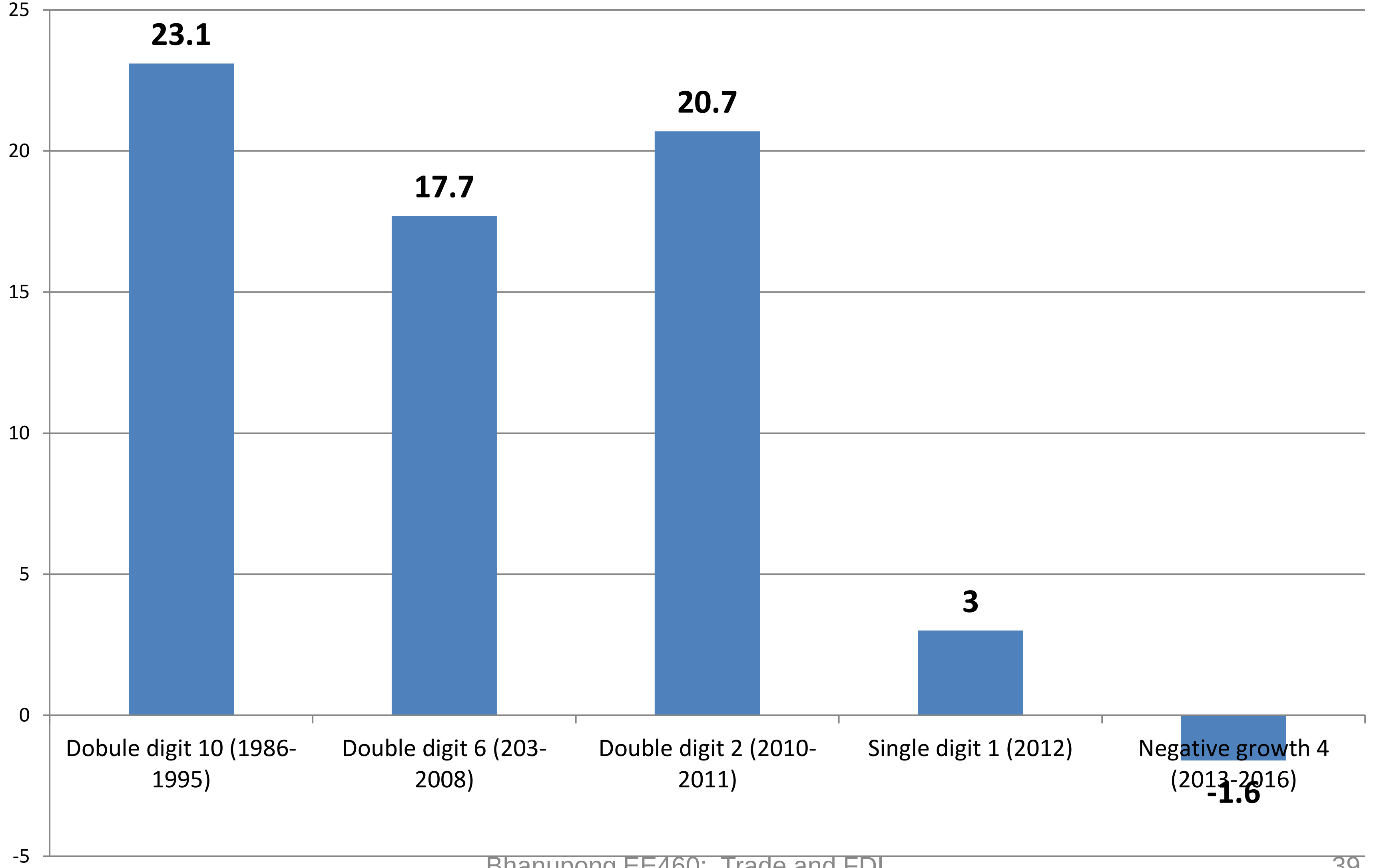
Thailand's export growth engine:
A complete shutdown since 2013?



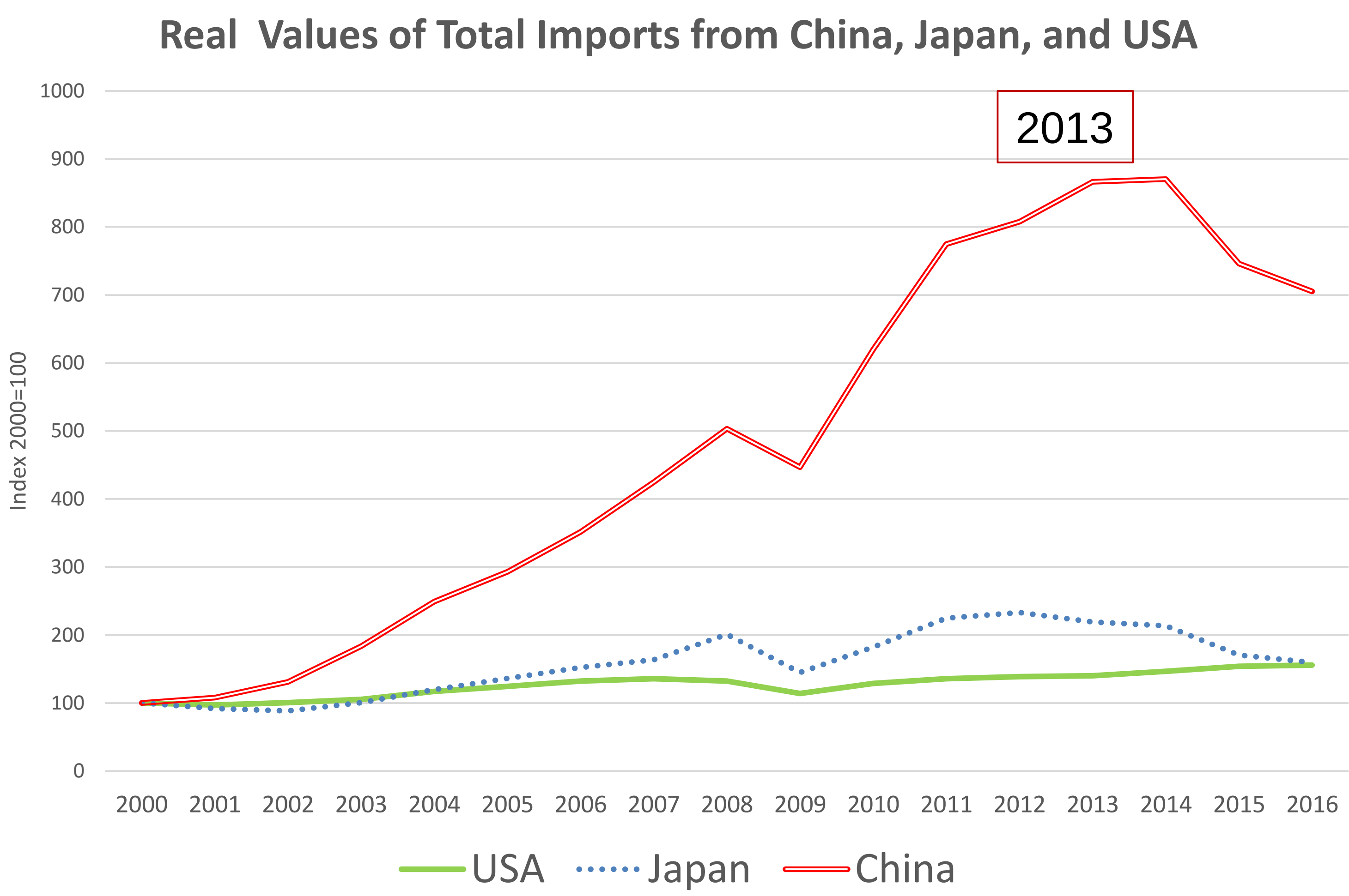
Thailand's Exports Cycles: the trough in 2016 (% change)



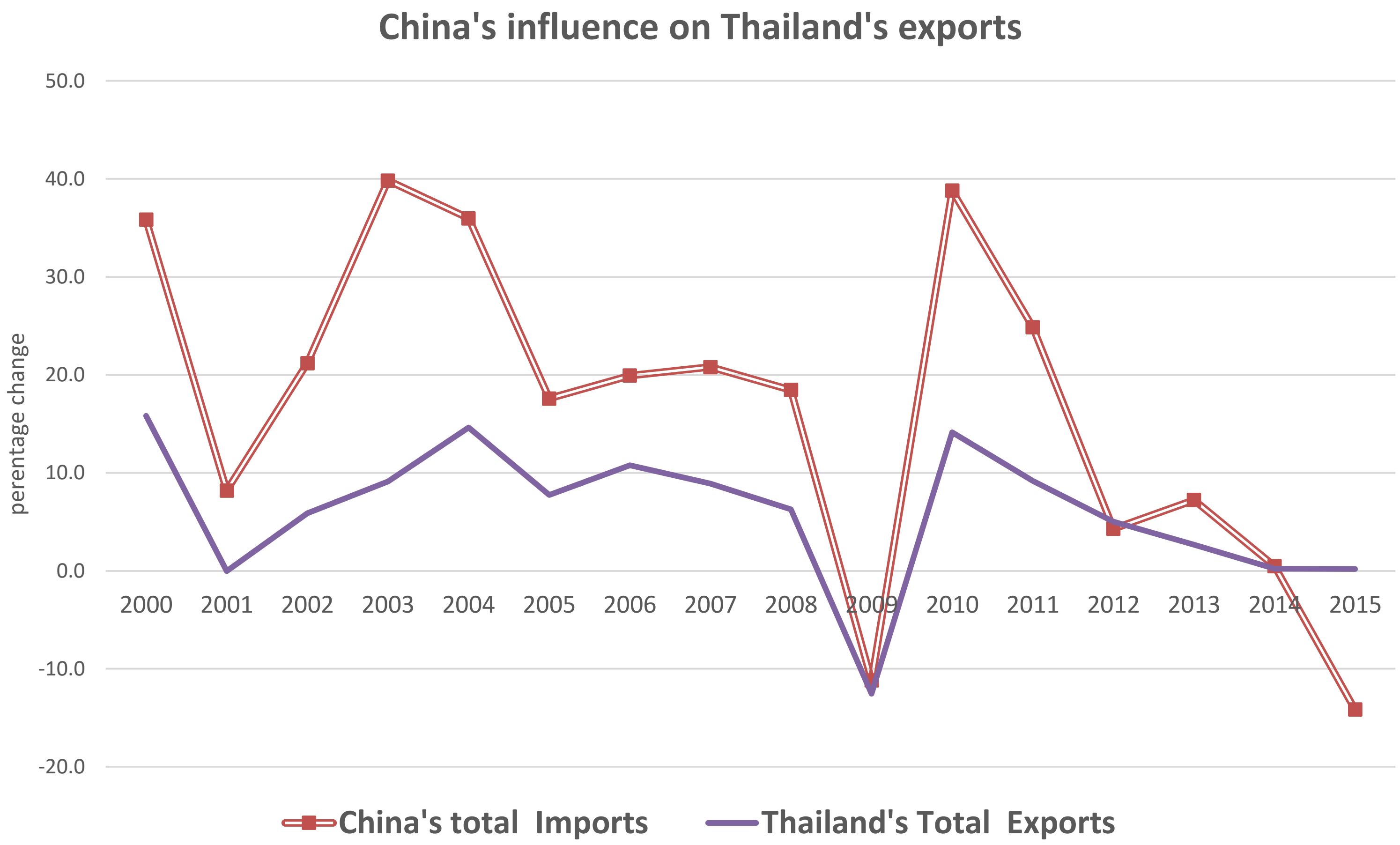
Thailand's Export Growth (period average) and Number of years in each period From double digit to negative growth rates

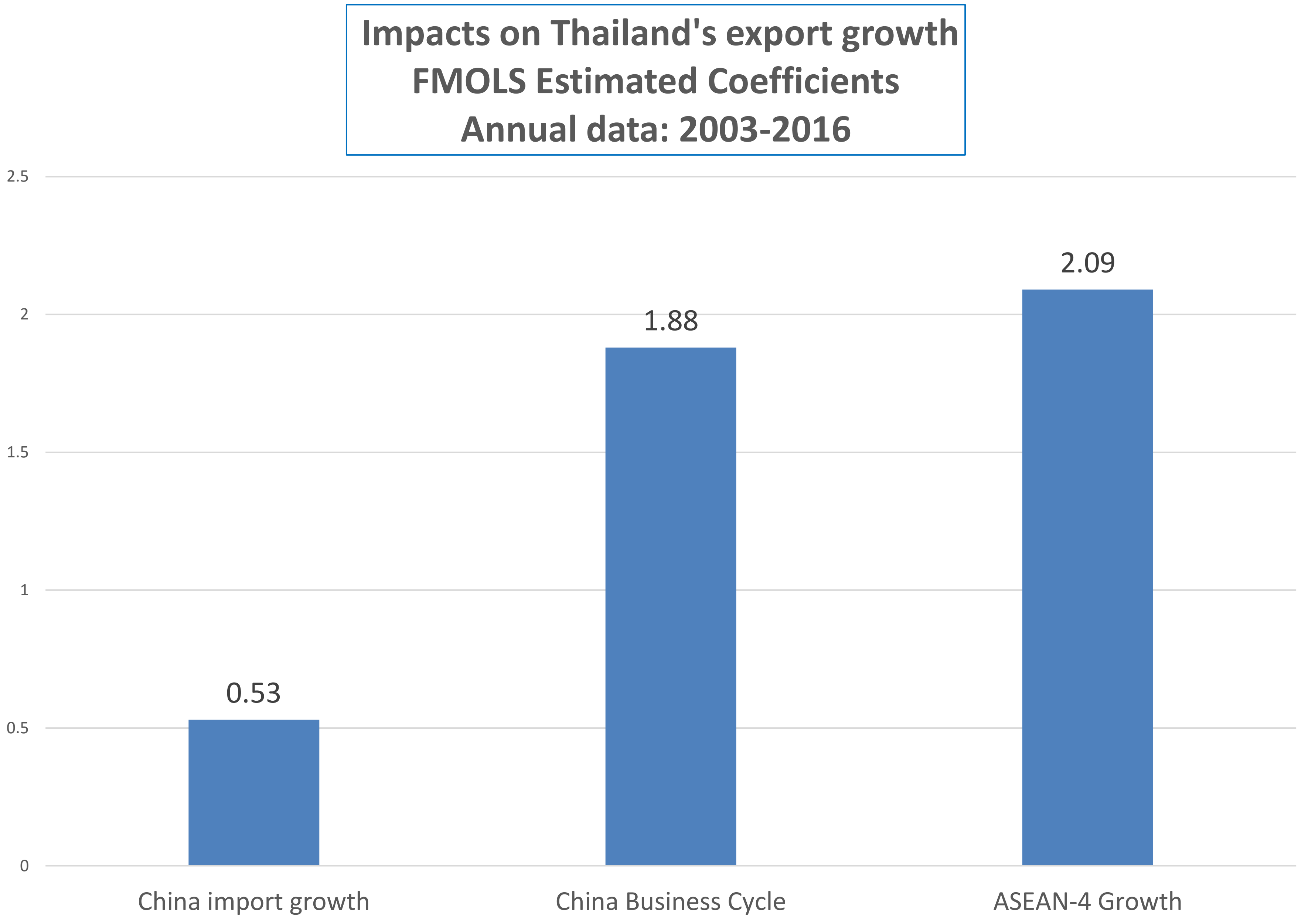


China's Business Cycle



China Factor




Impacts on Thailand's export growth
FMOLS Estimated Coefficients
Annual data: 2003-2016
2.5
2
1.5
1
0.5
0
0.53
1.88
2.09
China import growth
China Business Cycle
ASEAN-4 Growth

5. FDI and Manufactured Exports

5.1 Life cycle of manufactured goods

5.2 FDI in ASEAN countries

5.3 Costs and Benefits of FDI

5.4 Theories of FDI

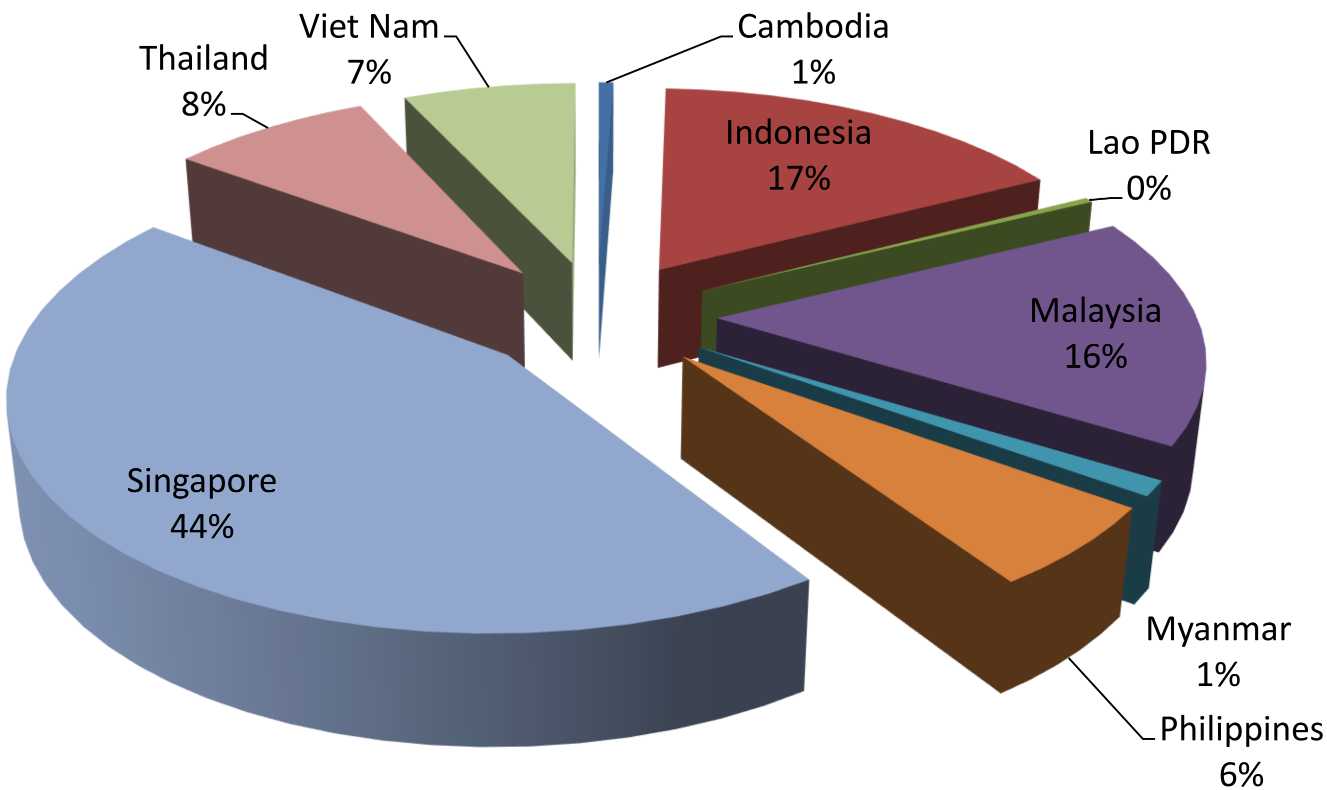
5.1 The life cycle of manufactured goods

- 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 determinants 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, etc.)

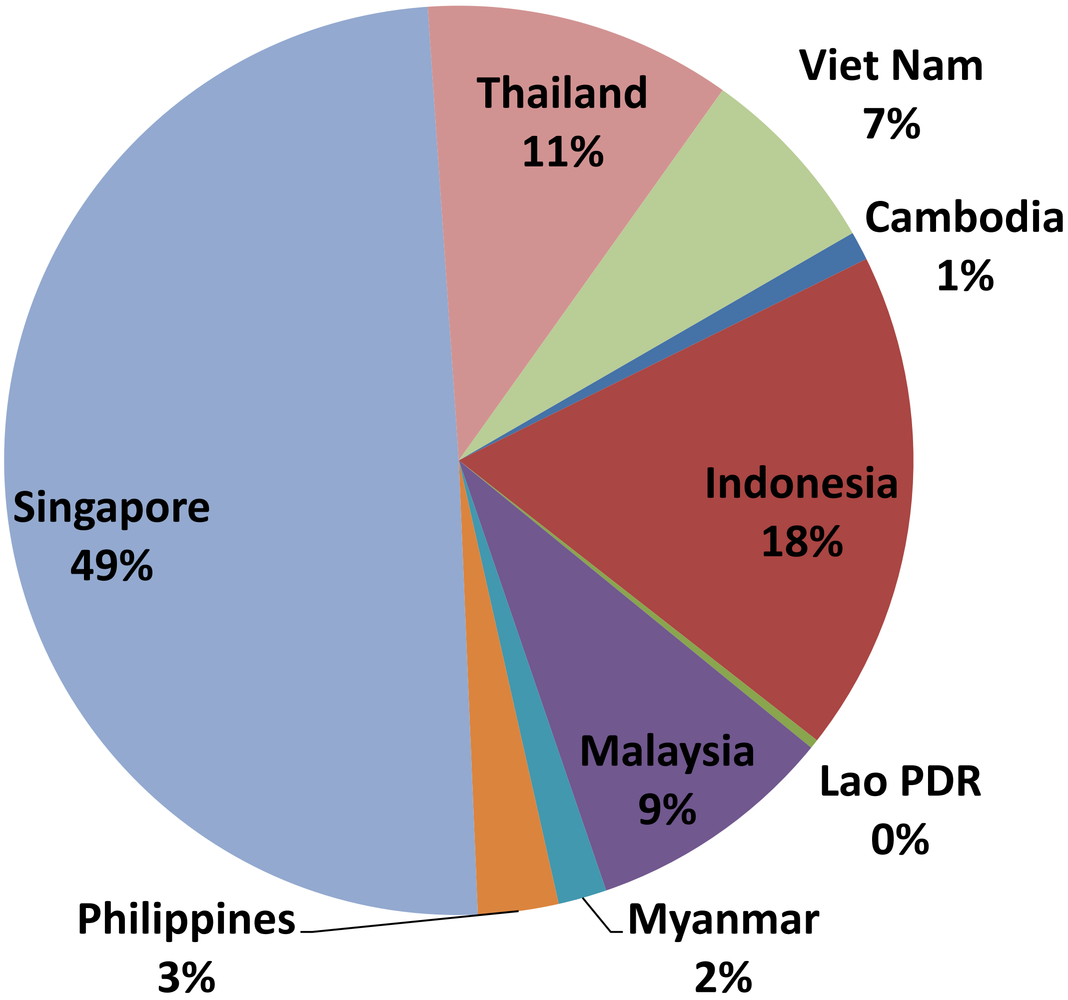
MNCs and market power

- Technology gaps, economies of scale, and product differentiation provide 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).

5.2 Shares of FDI net inflows to ASEAN in 1995



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



5.3 Benefits and costs of FDI Inflows

- Infrastructure and technology trasfers
- Increased productive efficiency due to competition from multinational subsidiaries.
- Improvement in ***quality*** of the factors of production
- Investment inflow ***benefits*** the balance of payments, in particular to countries experiening 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)

Possible costs from FDI

- Negative effects on the balance of payments (imported goods from home countries, repatriation of profits).
- ***Discourage*** development of technical know-how (no product engineering process)
- ***Detriment*** to growth of domestic producers (too weak and too efficient ot compete with MNCs).
- *Transfer pricing and taxation*

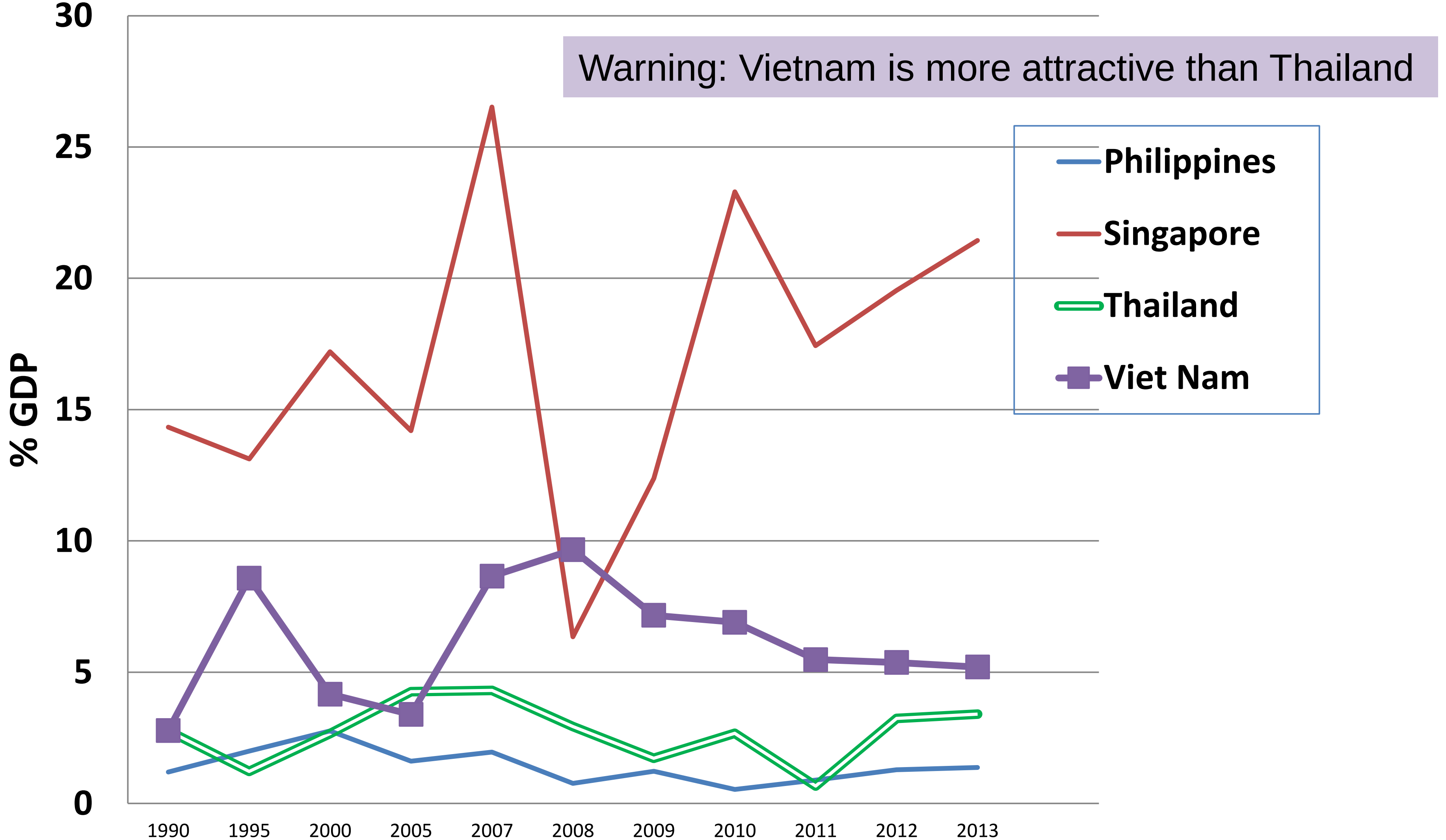
Social costs to host countries

- Enviroment and natural resource costs
- *Pollution heaven hypothesis*
- Damages to local culture and traditional exports
- Politico-Strategic Interests
- Facilitate hegemony by dominant Janpanese and Western cultures.
- Country sovereignty is at stake (invasion by the Chinese).
- But some CLMV countries do not care much.

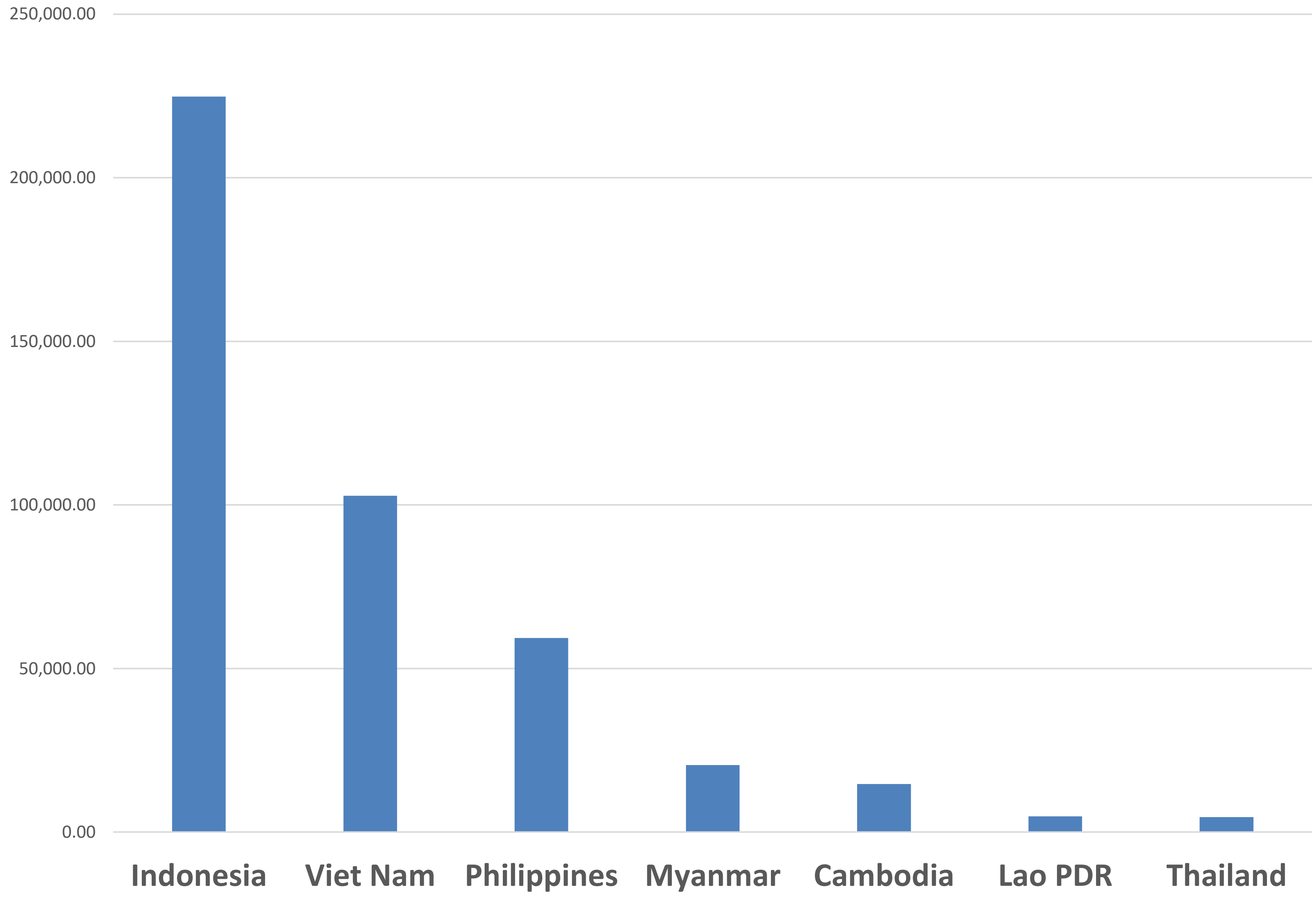
Newly Industrializing Countries (NICs) with biggest FDI inflows (USD billion)

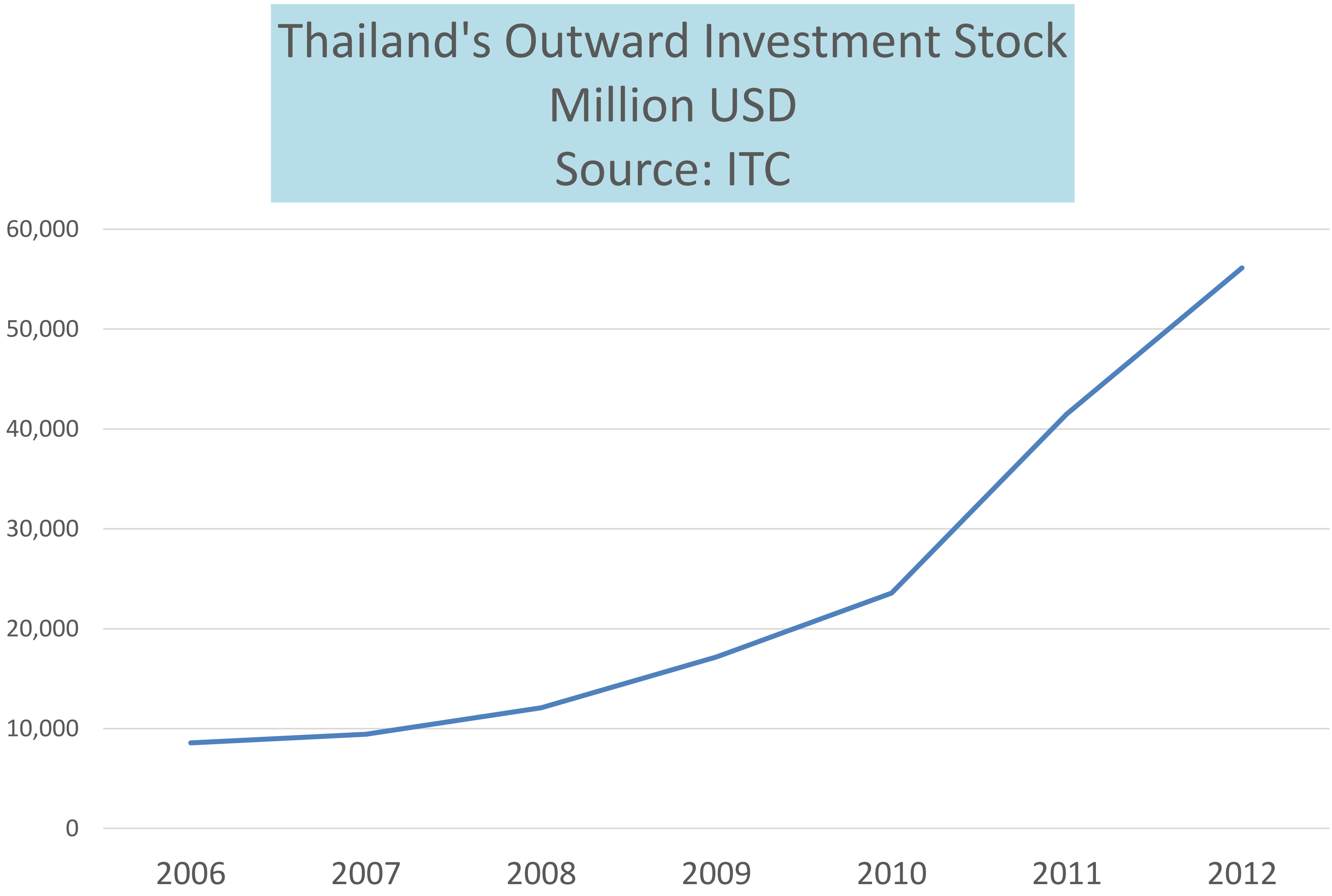
	1992-97 average	**2004**	**%GDP stocks, end of 2004**
China	32.8	60.6	14.0
HK	7.8	34.0	**277.6**
Brazil	6.6	18.2	25.2
Mexico	9.6	16.6	27.0
Singapore	8.3	16.1	**150.2**
S. Korea	1.3	7.7	10.7

FDI Net Inflows relative to GDP (1990-2013)
The larger, the better

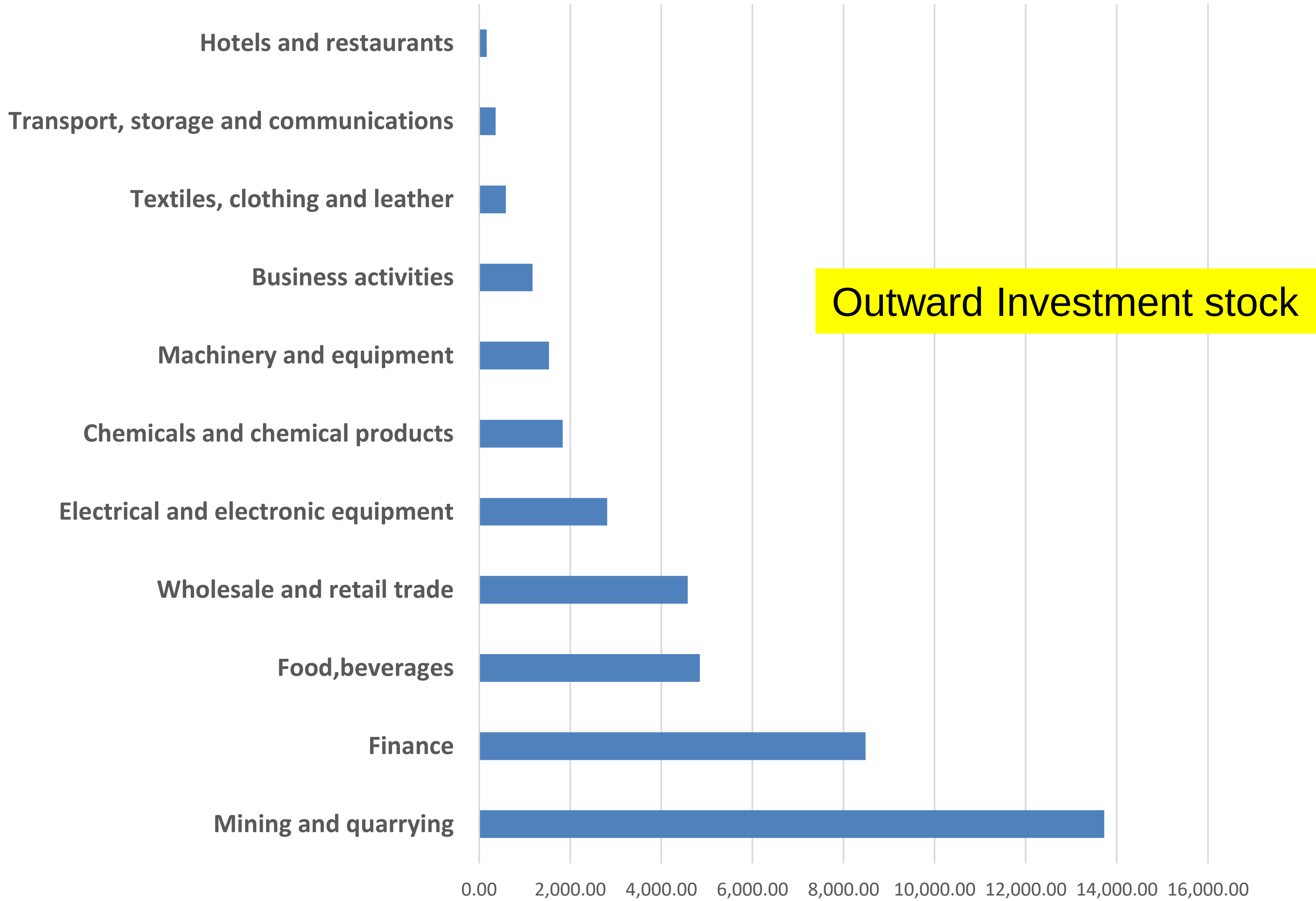


Inward stock of FDI in secondary sector: 2015



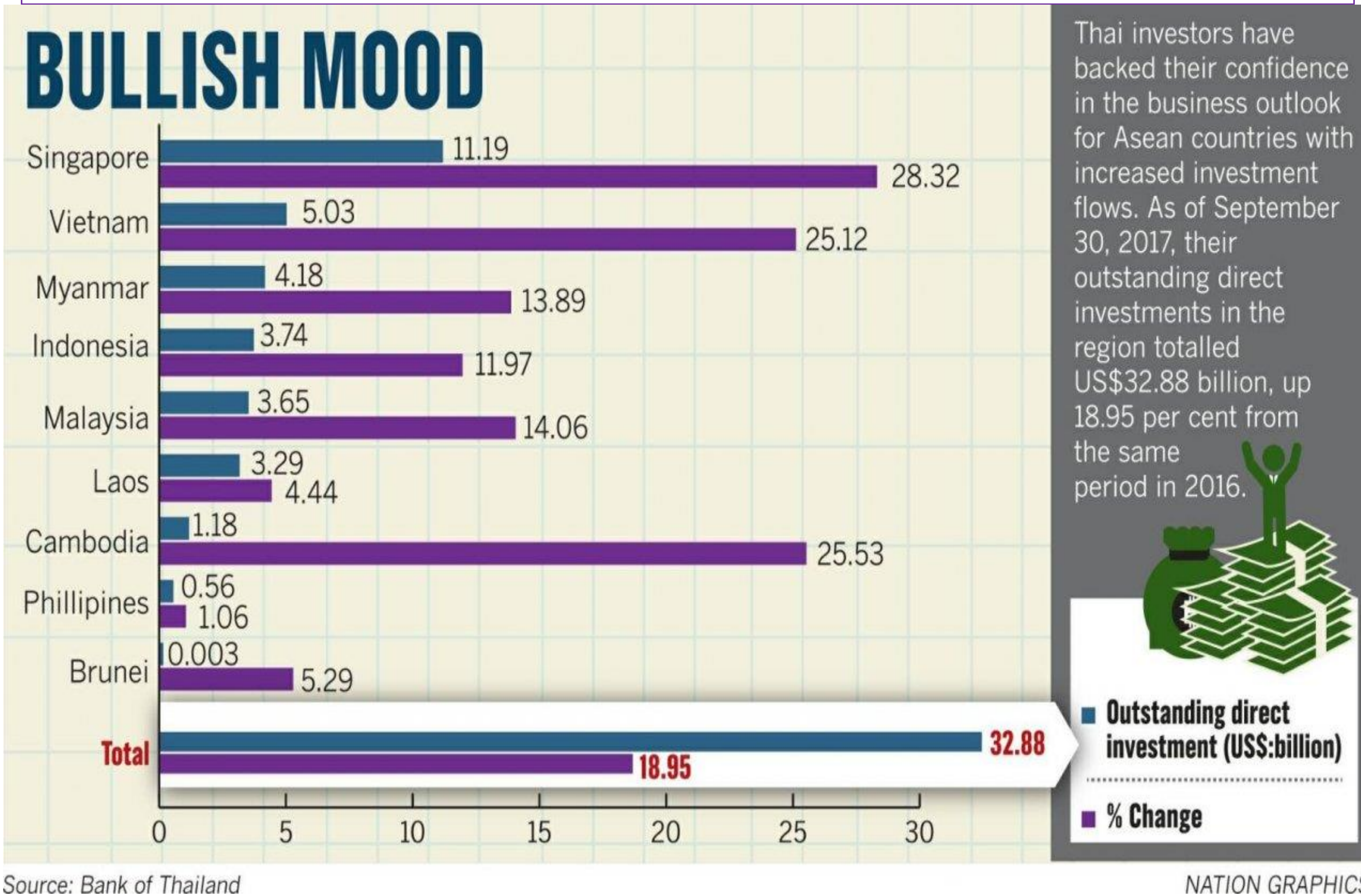

Thailand's Outward Investment Stock
Million USD
Source: ITC
60,000
50,000
40,000
30,000
20,000
10,000
0
2006
2007
2008
2009
2010
2011
2012

Thailand's outward Investment Stock in 2012 (m$)



Name the Thai companies which have invested abroad

Thailand’s FDI outflows to ASEAN in 2017
$billion and % change



5.4 Eclectic Theory of FDI
John Dunning (1981)

- 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)

Dunning: Eclectic theory of FDI

- The eclectic theory 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 lisensing.

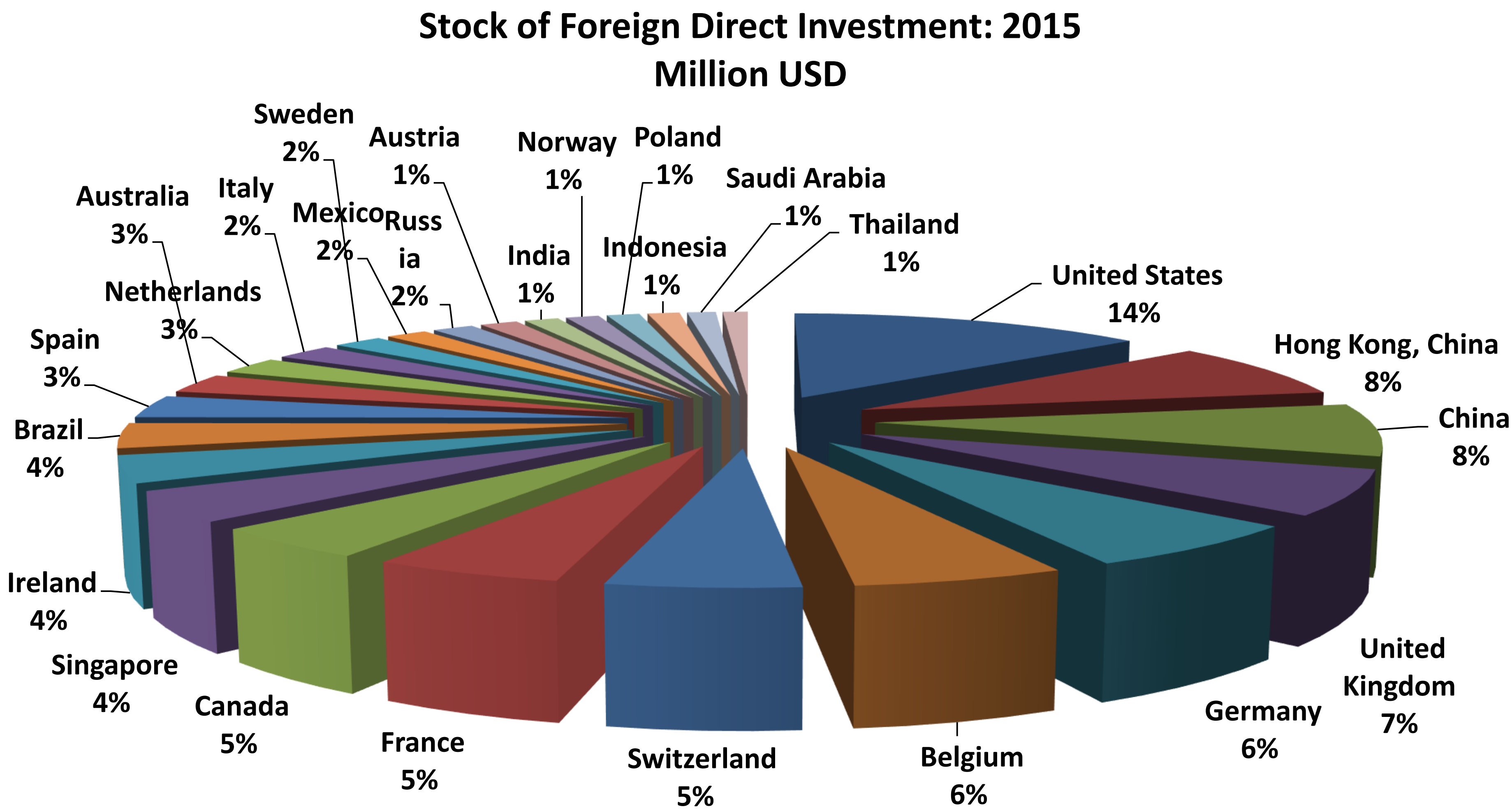
Monopolistic and Oligopolistic Markets

- 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*. (Hotel Chains..Sheraton, Dusit Thani etc.)
- DHL and Kerry delivery

- **Horizontal integration**: production of *diffrentiated products* that are also produced at home (Honda's Fit in Japan, or Jazz in Thailand)
- **Vertical intergration**: to obtain control of needed raw-materials by ensuring uninterrupted supply at the *lowest cost.*

Why invest in certain countries?

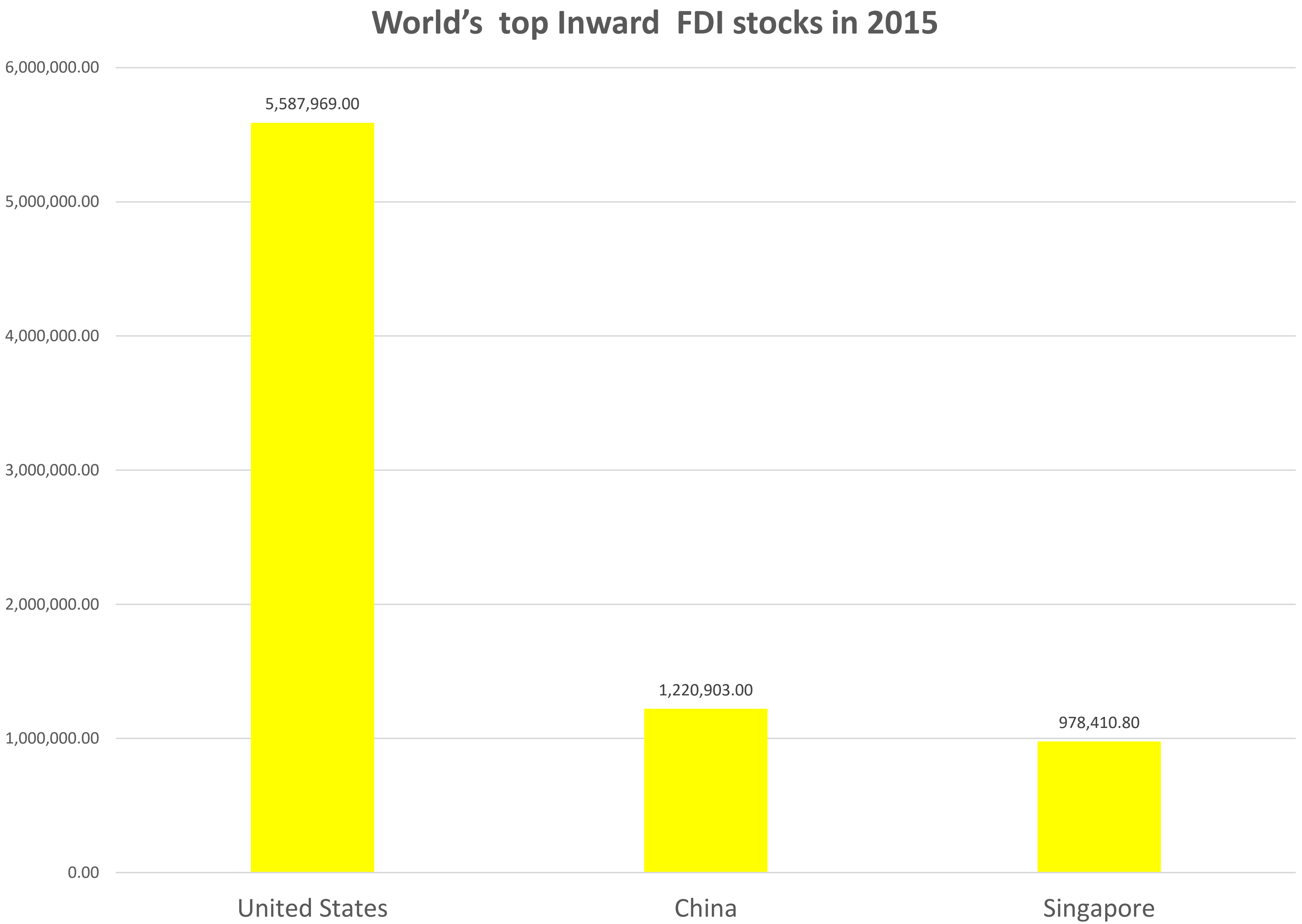
- Ownership advantages arise from economies of scale concerning intangible assets such as skilled management and know-how by investing abroad. (Greyhounds restaurant in London and Nara restaurant in Manila)
- Locational advantages in host countries (Transportation hub in Singapore)
- Product cycle (new technology produced and used in the home country)
- Standardized technology permits shifting high cost plants abroad (production fragmentation, global value chain)
- Low tax (Apple in Ireland), low labor cost, and government policy (Uniqlo plants in Vietnam)



Source: CIA World Fact book

Factors affecting FDI

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


World's top Inward FDI stocks in 2015
6,000,000.00
5,000,000.00
4,000,000.00
3,000,000.00
2,000,000.00
1,000,000.00
0.00
5,587,969.00
1,220,903.00
978,410.80
United States
China
Singapore

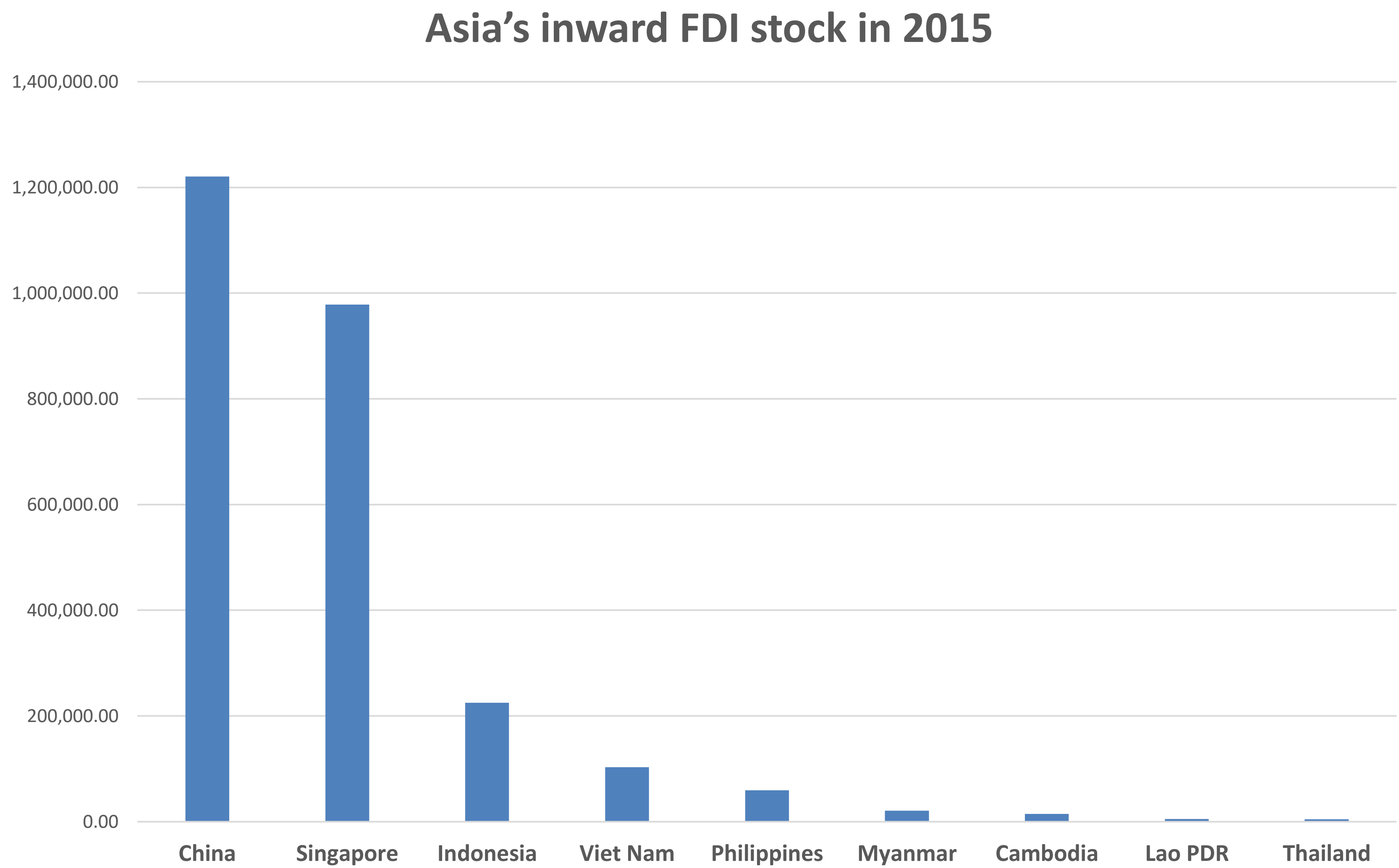
Vietnam to remove 49% foreign ownership cap on listed companies

- Hanoi has desire to see Vietnamese shares become part of the **MSCI Emerging Markets Index**, which would bring an **influx** of capital into local exchanges.
- Banking and aviation foreign ownership limits also expected to be raised, ***but not*** above 50%
- The move is expected to open business opportunities in the world's 14th-most-populated country with over 92 million people and a median age of 30.

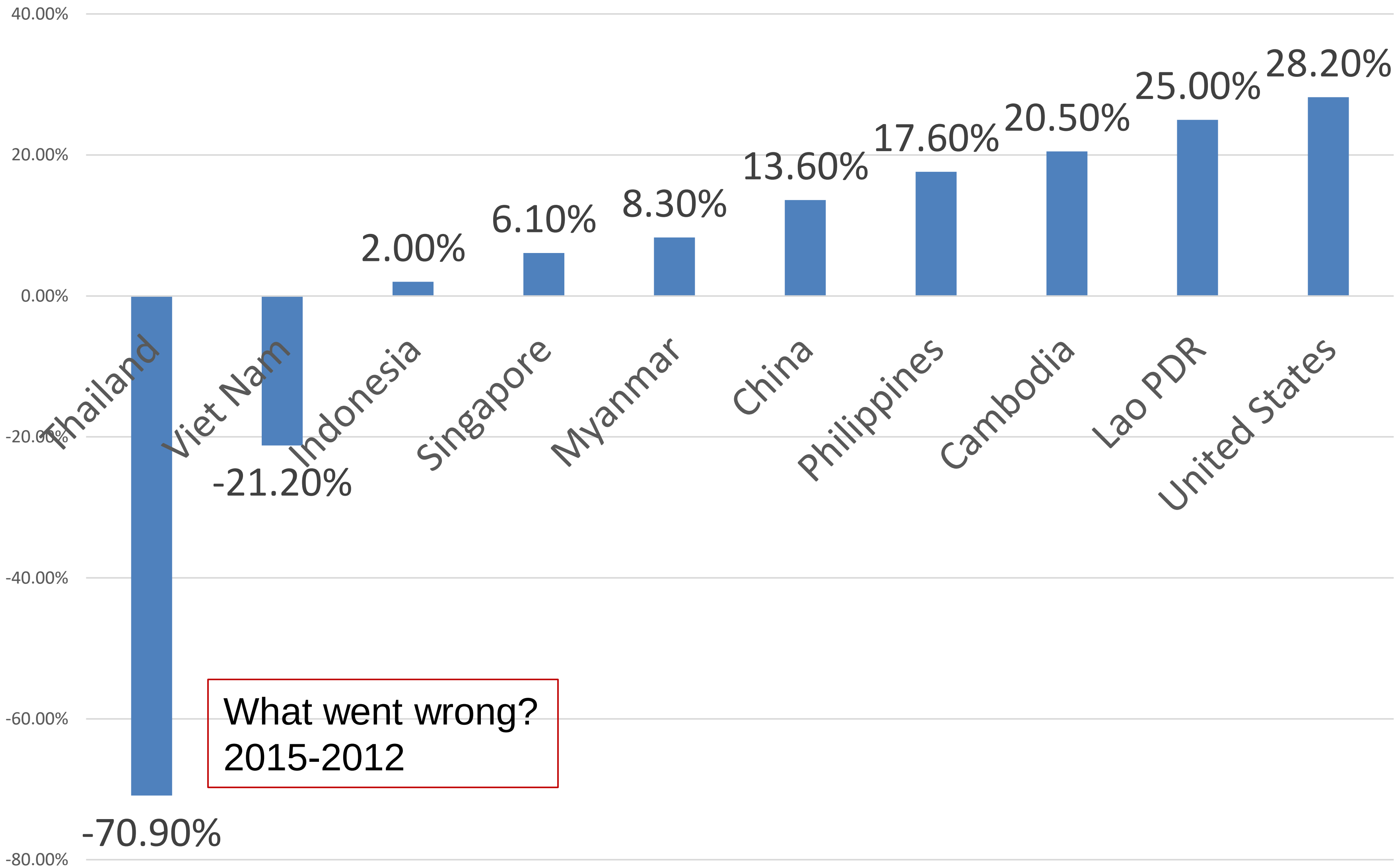
A race to attract FDI

- PricewaterhouseCoopers forecasts Vietnam to be among the world's 20 biggest economies based on purchasing power parity by 2050.
- "Vietnam is in a competition with rivals such as the Philippines and Myanmar to be the next destination of investment in Asia, following China and Thailand," Sumitomo Corporation Global Research, a Japanese think tank.
- "Opening up to foreign investment will give them access to advanced technology, which they believe will help them in that race."

6. FDI and Thailand's Export Capability

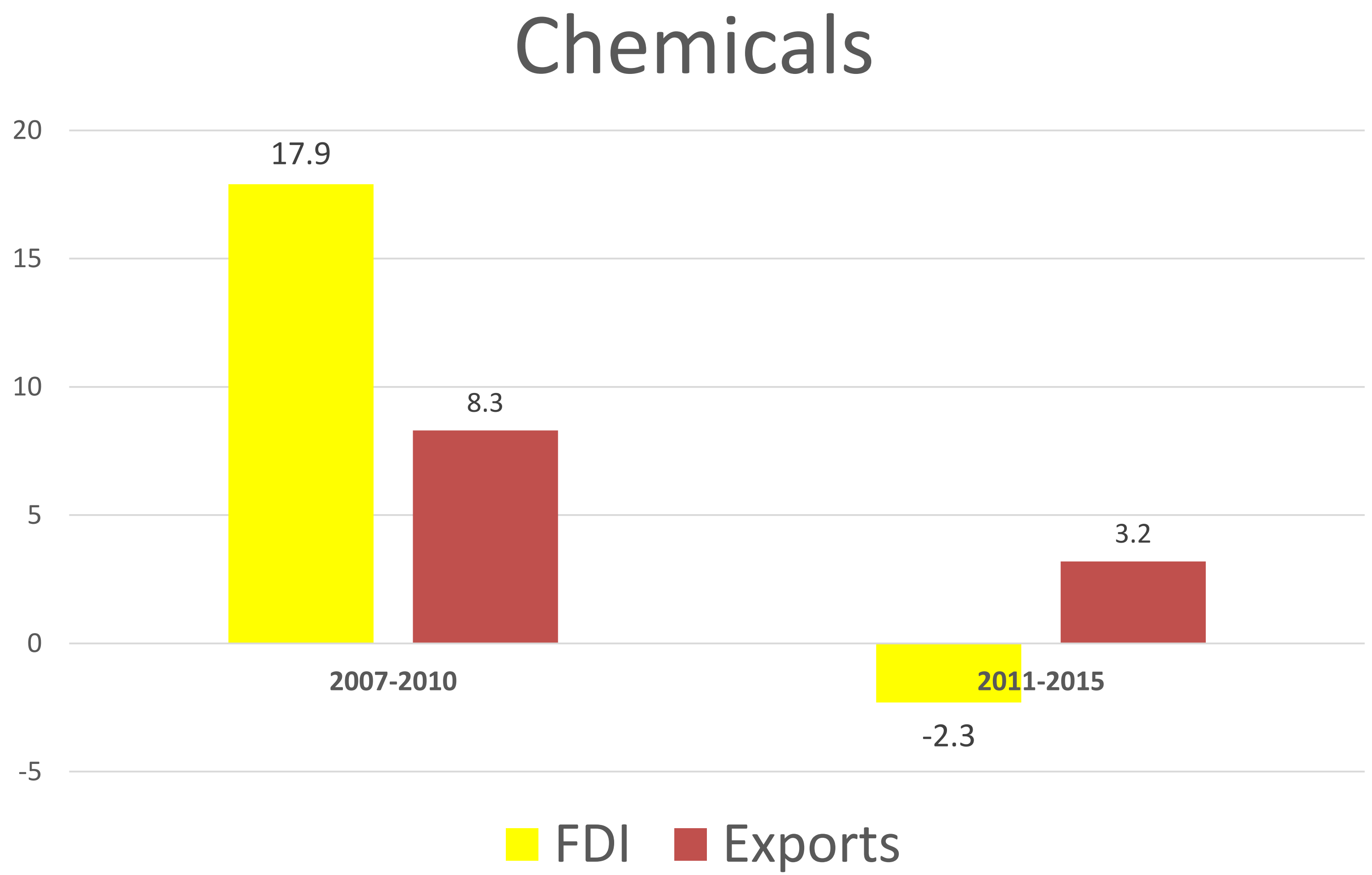


Inward FDI stock: 2015
Percentage change per annum since 2012

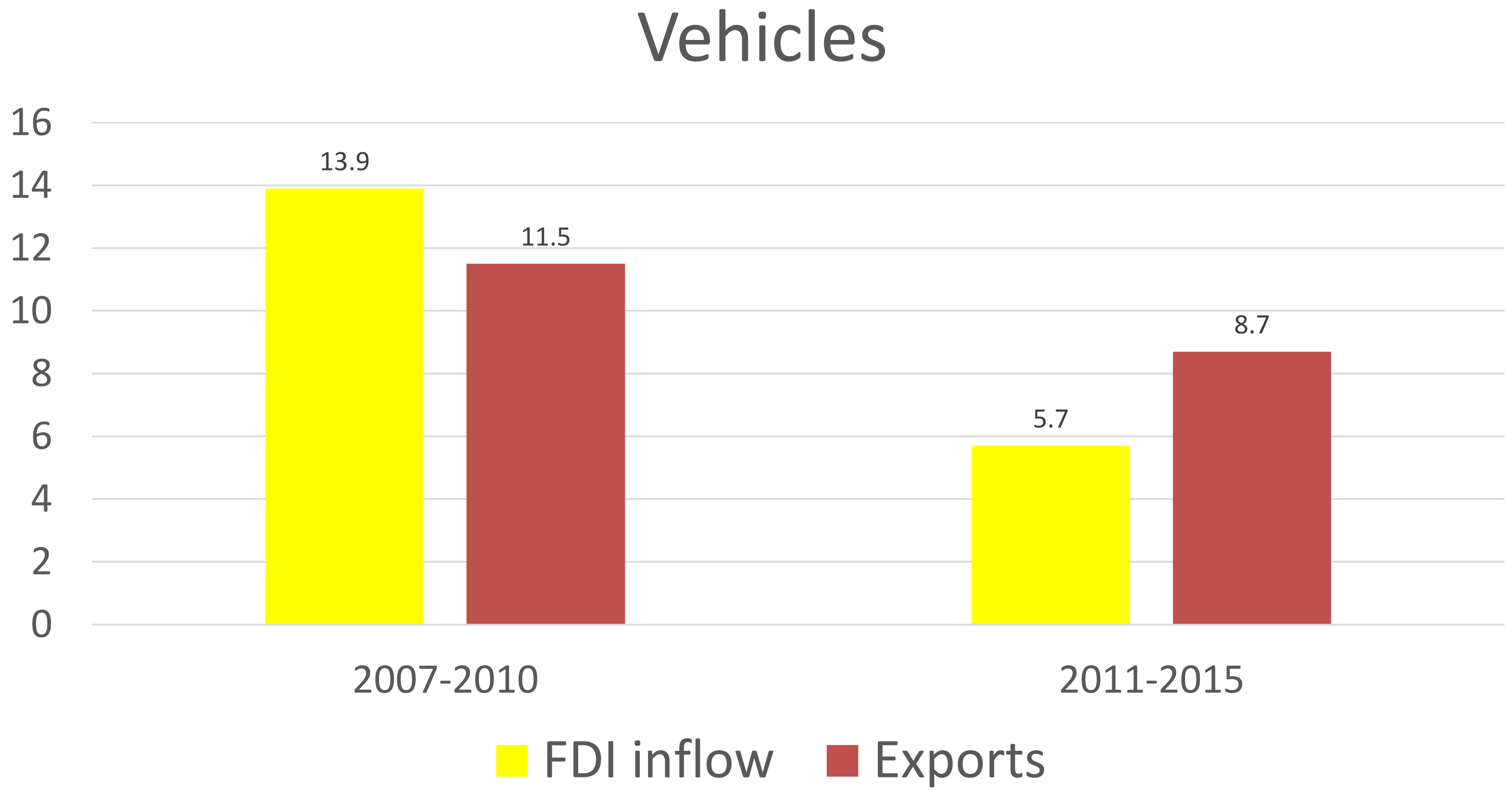


Sectoral FDI inflows and Exports

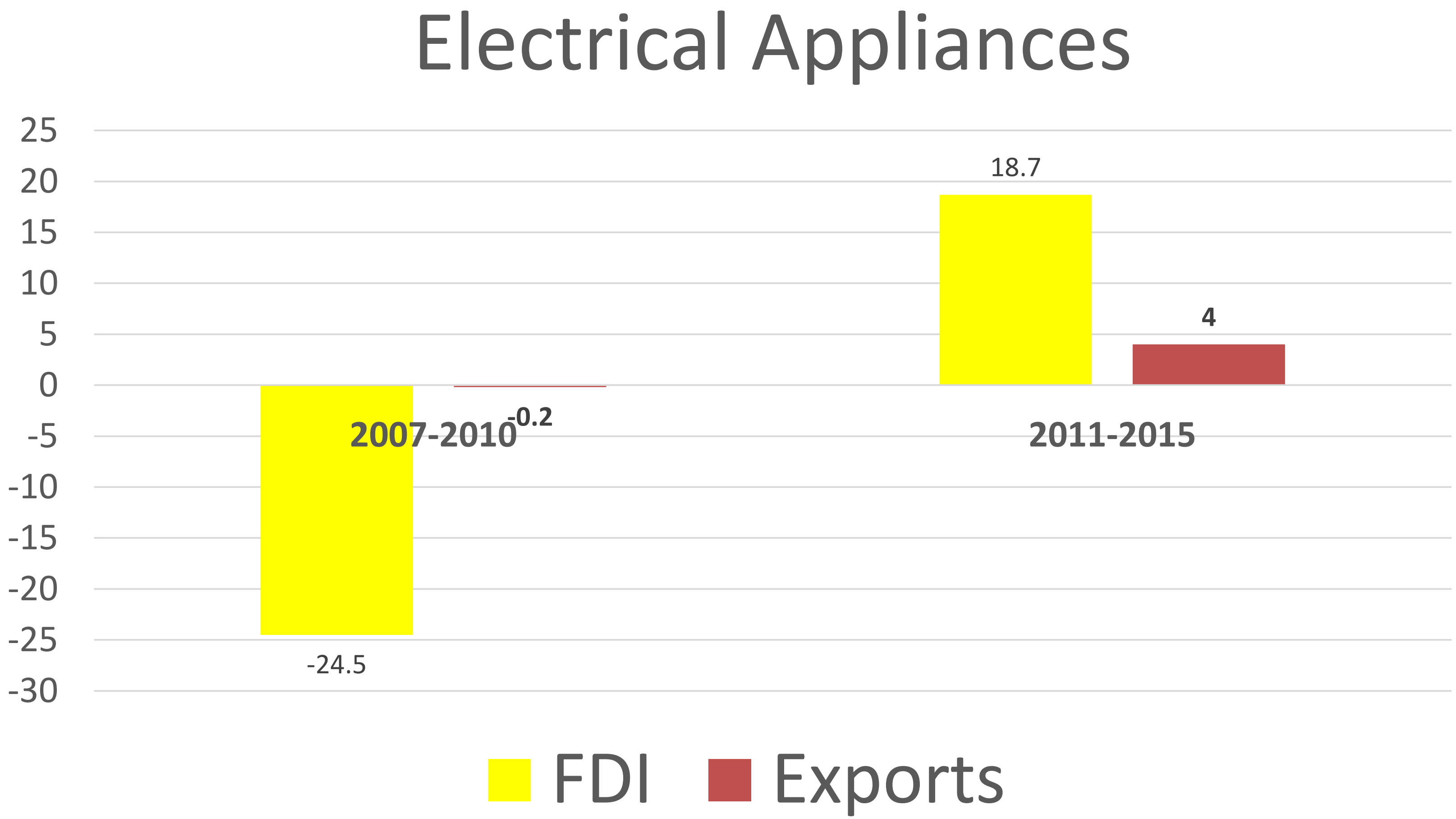
Percentage Change



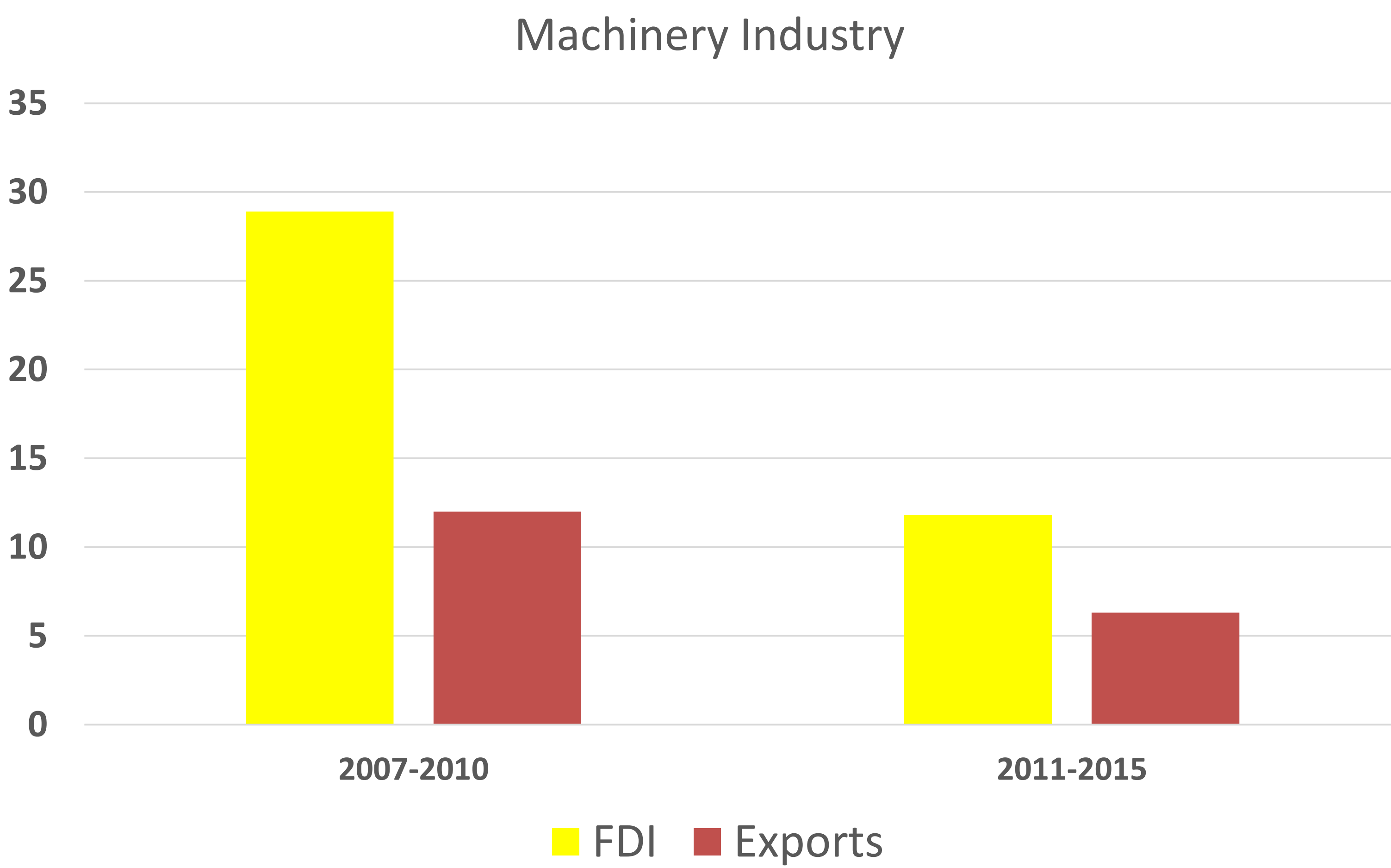
FDI Inflows and Export Growth
(percentage Change)



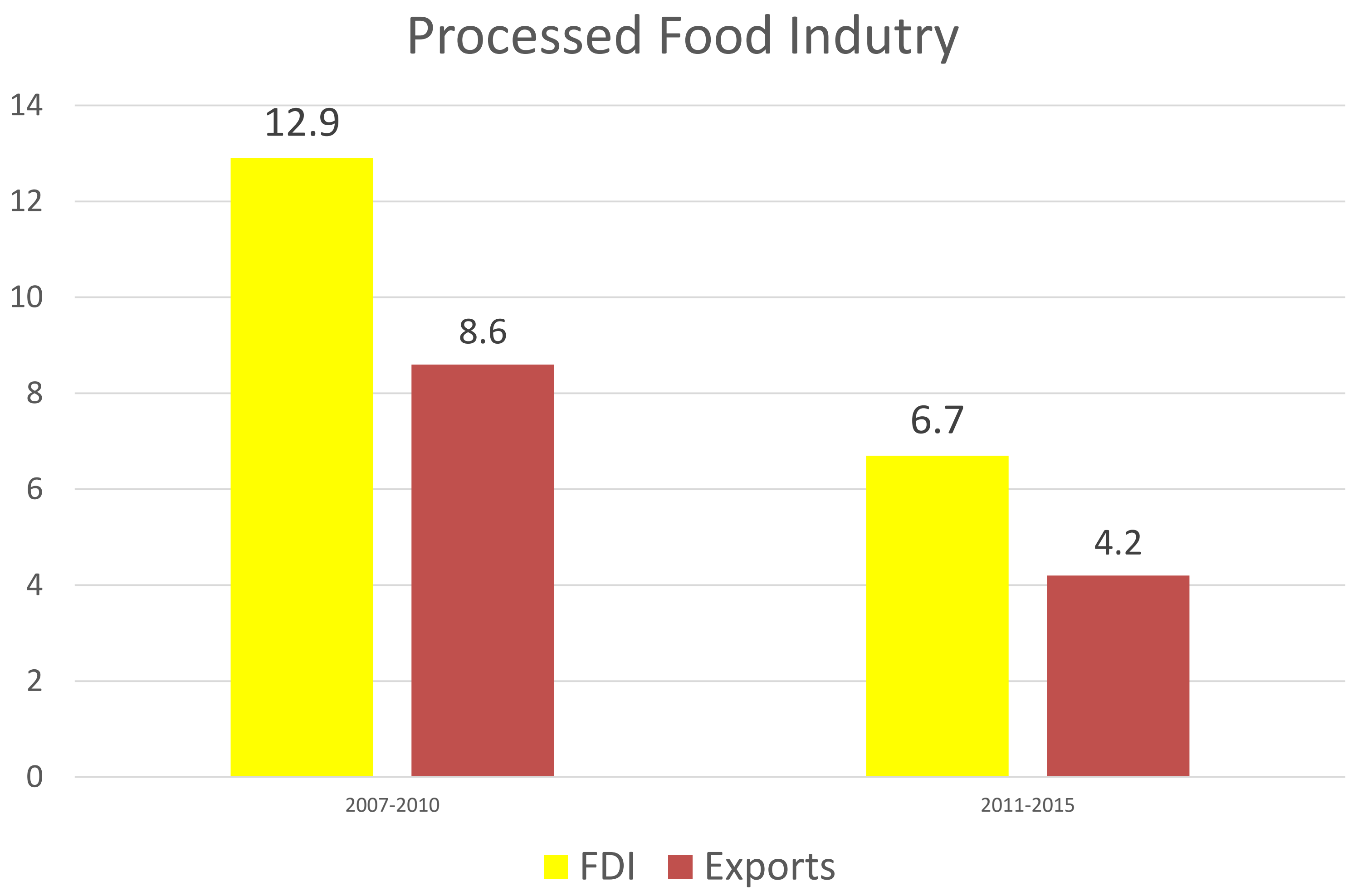
FDI Inflows and Export Growth
(percentage change)



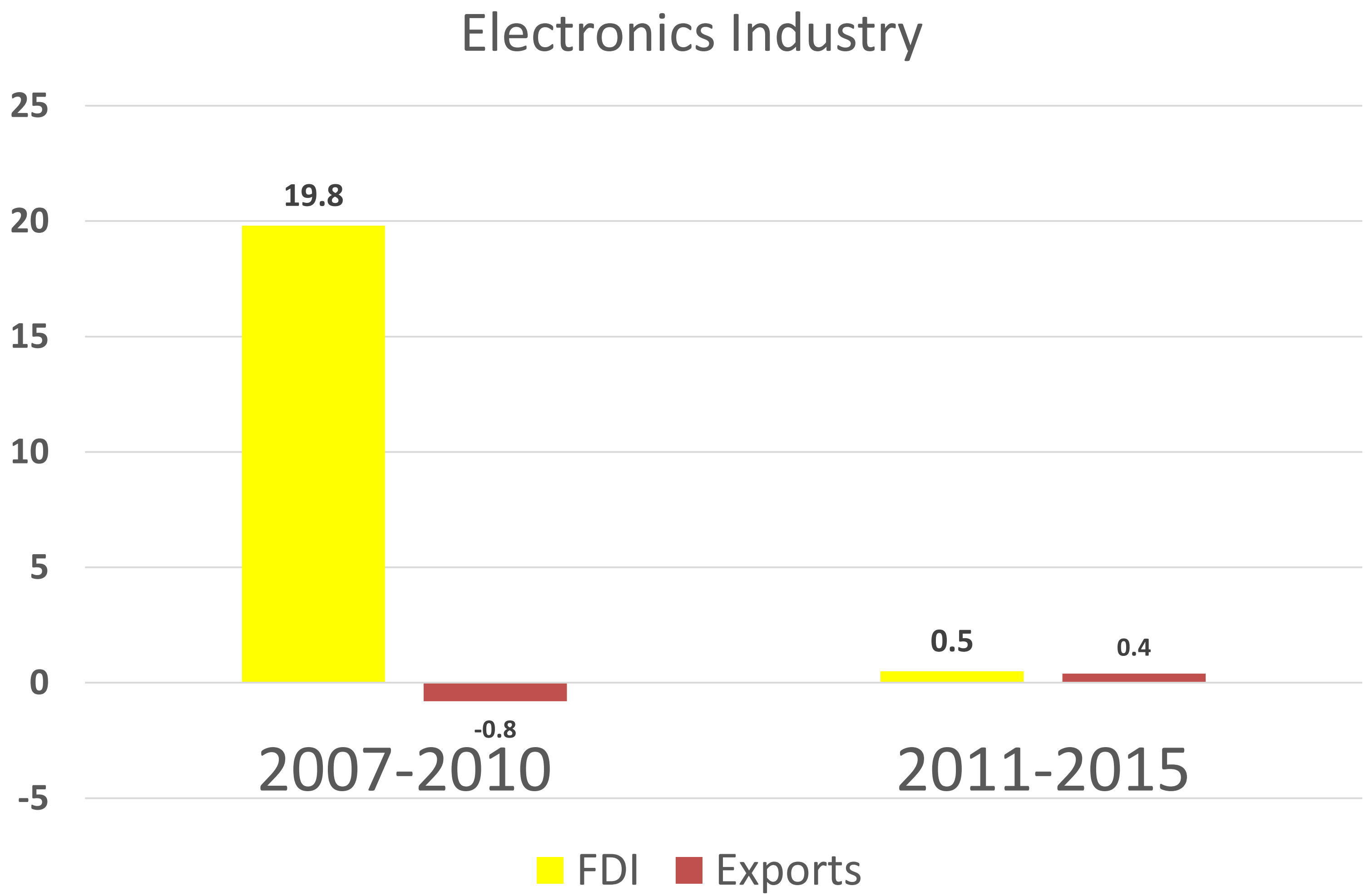
FDI inflows and export growth percentage change



High FDI, High Exports

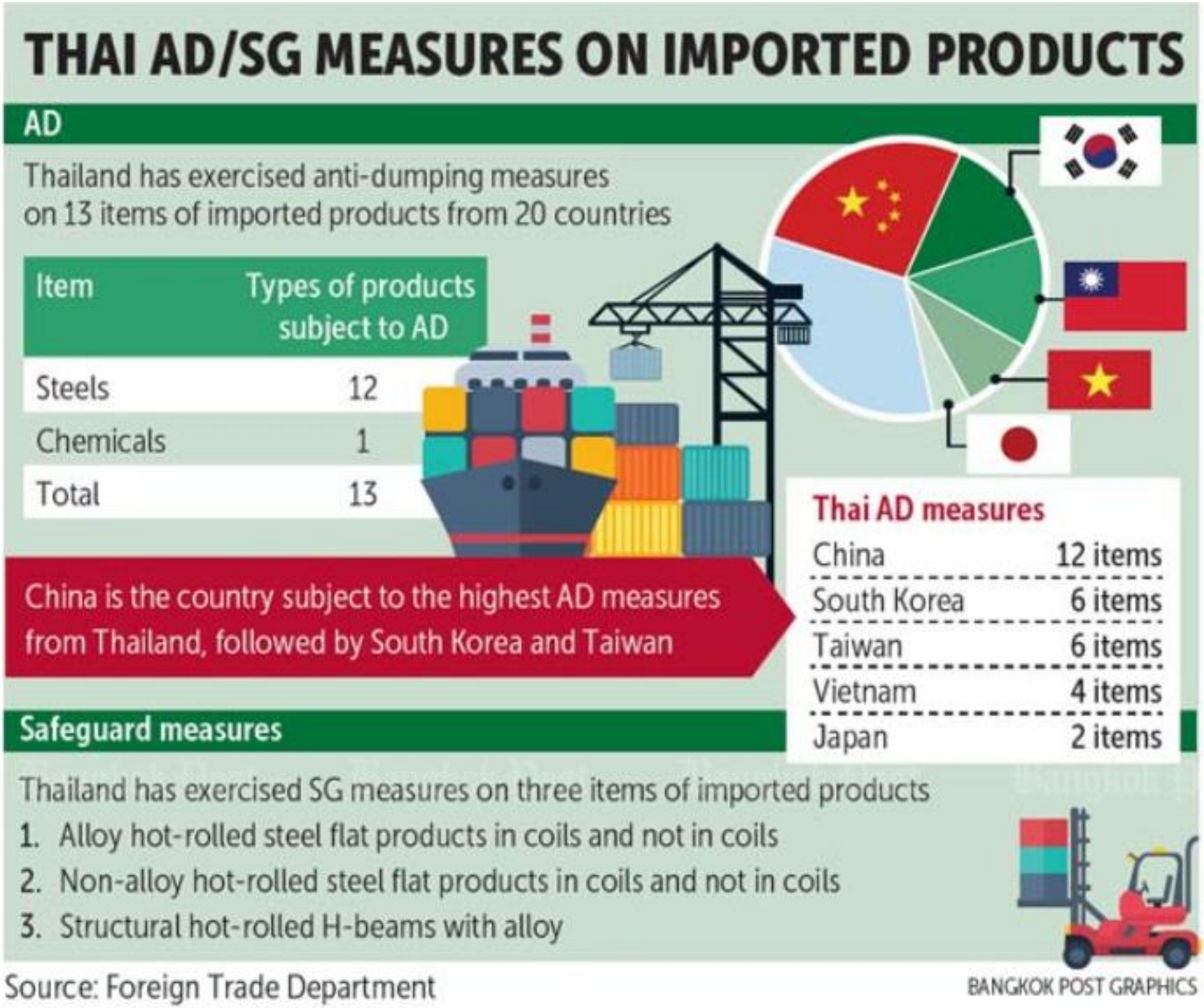


Is this the beginning of the end?



7. Trade retaliation measures in 2018

- **Anti-dumping (AD), countervailing duty (CVD) and safeguards (SG)** for three categories of products: steel and aluminum; chemical products; and frozen seafood.
- The US has imposed AD tariffs on certain frozen fish fillets from Vietnam at a rate of 63.9% of CIF (cost, insurance and freight), with an exemption for Thai products.
- The US also imposed AD measures on certain frozen warm-water shrimp from China, India, Brazil and Vietnam at rates of 112.8%, 110.9%, 67.8% and 25.8% of CIF.
- Thai shrimp products are also subject to the AD, but at a lower rate of 5.3% of CIF.


THAI AD/SG MEASURES ON IMPORTED PRODUCTS
AD
Thailand has exercised anti-dumping measures on 13 items of imported products from 20 countries
Item
Types of products subject to AD
Steels 12
Chemicals 1
Total 13
China is the country subject to the highest AD measures from Thailand, followed by South Korea and Taiwan
Thai AD measures
China 12 items
South Korea 6 items
Taiwan 6 items
Vietnam 4 items
Japan 2 items
Safeguard measures
Thailand has exercised SG measures on three items of imported products
1. Alloy hot-rolled steel flat products in coils and not in coils
2. Non-alloy hot-rolled steel flat products in coils and not in coils
3. Structural hot-rolled H-beams with alloy
Source: Foreign Trade Department
BANGKOK POST GRAPHICS

The Trump tariff

- The US's Section 232 of the Trade Expansion Act of 1962 was invoked by President Donald Trump on March 8 to impose a **25% tariff on steel and 10% tariff on aluminum imports**.
- The tariff has halted the export of steel and aluminum products from China to the US, leading to these products ***flooding*** the Asean region, including Thailand.

US-China trade war threatens Asia with 0.9% loss of GDP
IMF suggests policymakers liberalize economies to escape external headwinds

Asian real GDP growth estimates *(in percent)*

	2015	'16	'17	'18*	'19*
Asia	5.6	5.4	5.7	5.6	5.4
Japan	1.4	1.0	1.7	1.1	0.9
South Korea	2.8	2.9	3.1	2.8	2.6
Singapore	2.2	2.4	3.6	2.9	2.5
China	6.9	6.7	6.9	6.6	6.2
India	8.2	7.1	6.7	7.3	7.4
Indonesia	4.9	5.0	5.1	5.1	5.1
Malaysia	5.1	4.2	5.9	4.7	4.6
Philippines	6.1	6.9	6.7	6.5	6.6
Thailand	3.0	3.3	3.9	4.6	3.9
Vietnam	6.7	6.2	6.8	6.6	6.5

*India's data is reported on a fiscal year basis, starting April 1 *Estimate* *Source: IMF*

IMF forecast

- In its world economic outlook released, the IMF lowered its global growth forecast for this year by 0.2%, to 3.7%.
- But as U.S.-China trade tensions take more of a toll, Asia, which accounts for more than 60% of global economic growth, will begin to suffer like the rest of the world. Because of this, the IMF cut its 2019 growth forecast for Asia by 0.2% from its April outlook, to 5.4%.
- The IMF also cut its global growth forecast for 2019 by 0.2%, to 3.7%.

Repercussions from the U.S.-China trade war

- The IMF said other Asian economies will be caught up in the U.S.-China skirmish since many send supplies to China and are heavily involved in the automotive trade. It added that although aggregate short-term job losses would likely be limited, sectors targeted by specific tariffs could see "sizable impacts."
- As repercussions from the U.S.-China trade war spread and external demand declines, Asian policymakers could react by liberalizing their own trade and investment regimes, the IMF said, adding that these steps could lead to **tighter economic integration** and foster a new driver of regional growth.

Plurilateral Liberalization

- "**Multilateral** liberalization would be ideal," the IMF report says, "but plurilateral liberalization within Asia can be a useful second-best solution.
- Trade flows within Asia should increasingly cater to final demand within the region, consistent with the rebalancing agenda, with the region thus *relying less* on manufacturing exports to the rest of the world."

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 befitted 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.

Review 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 global growth slowdown in 2019?
- Explain why network trade can lead to business cycle synchronization in Asia?