China Business Cycle and Impact of the U.S.-China Trade War

Bhanupong

Lecture 21

Required Readings:

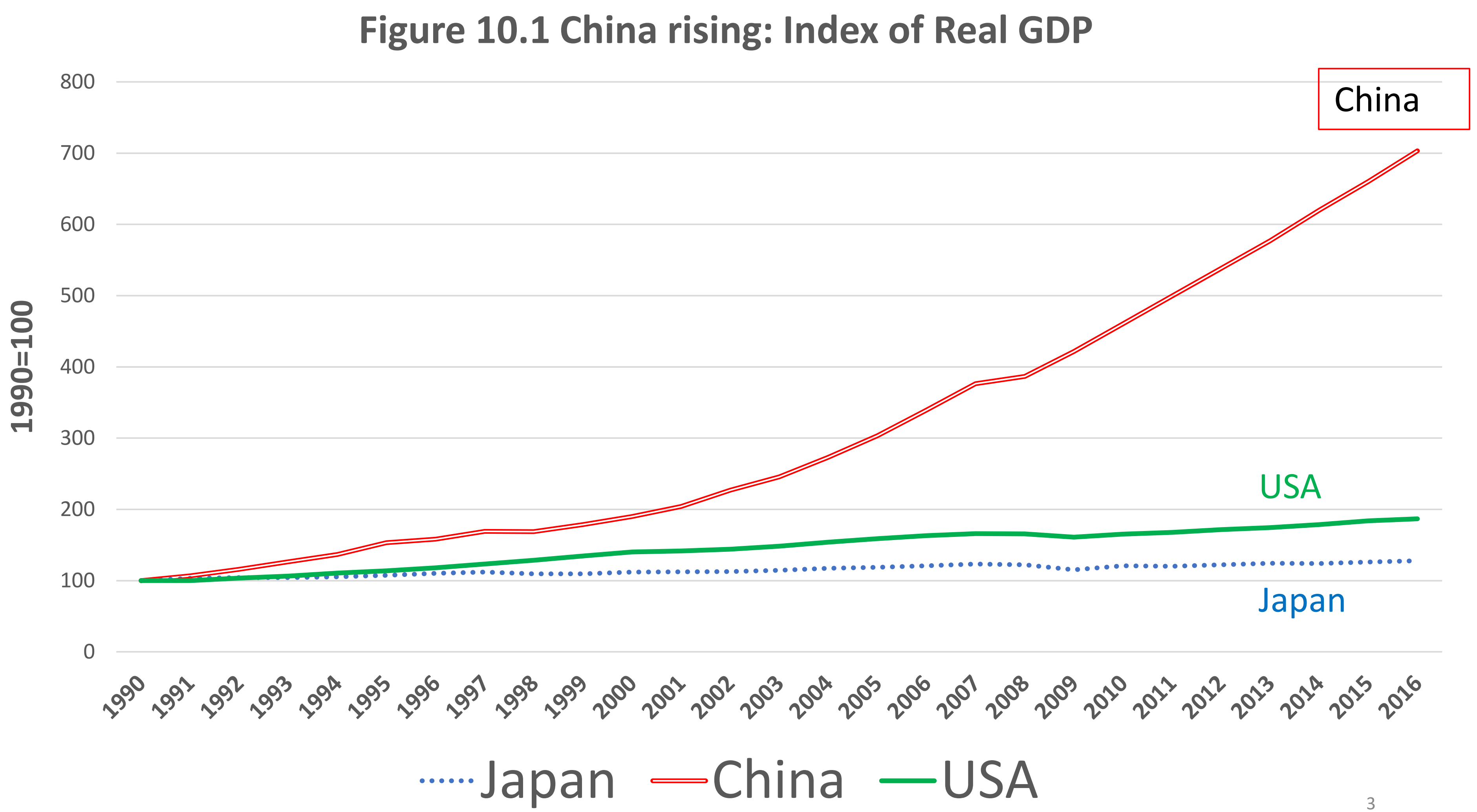
(1) Macroeconomic policy for emerging markets: Chapter 10

(2) "Impact of the U.S.-China trade war on Thailand" Asian Economic Papers *18(3)*, 2019

Main themes

1. China rising
2. ASEAN Business Cycle Synchronization
3. Global rebalancing
4. The U.S.-China Trade War
5. The impact on Thailand
6. Hydropower on the Mekong

1. China Rising



Imports from the three largest economies

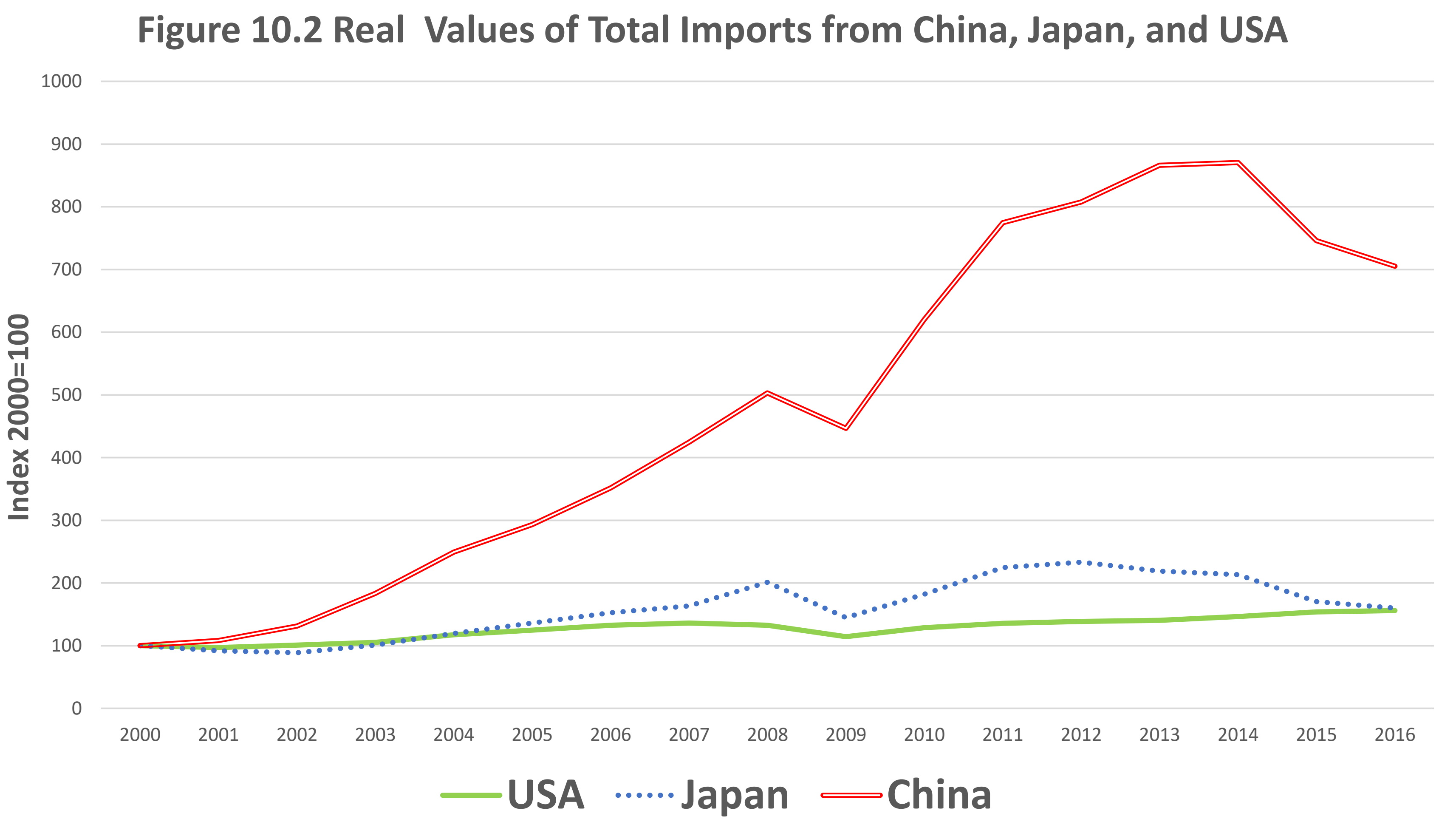
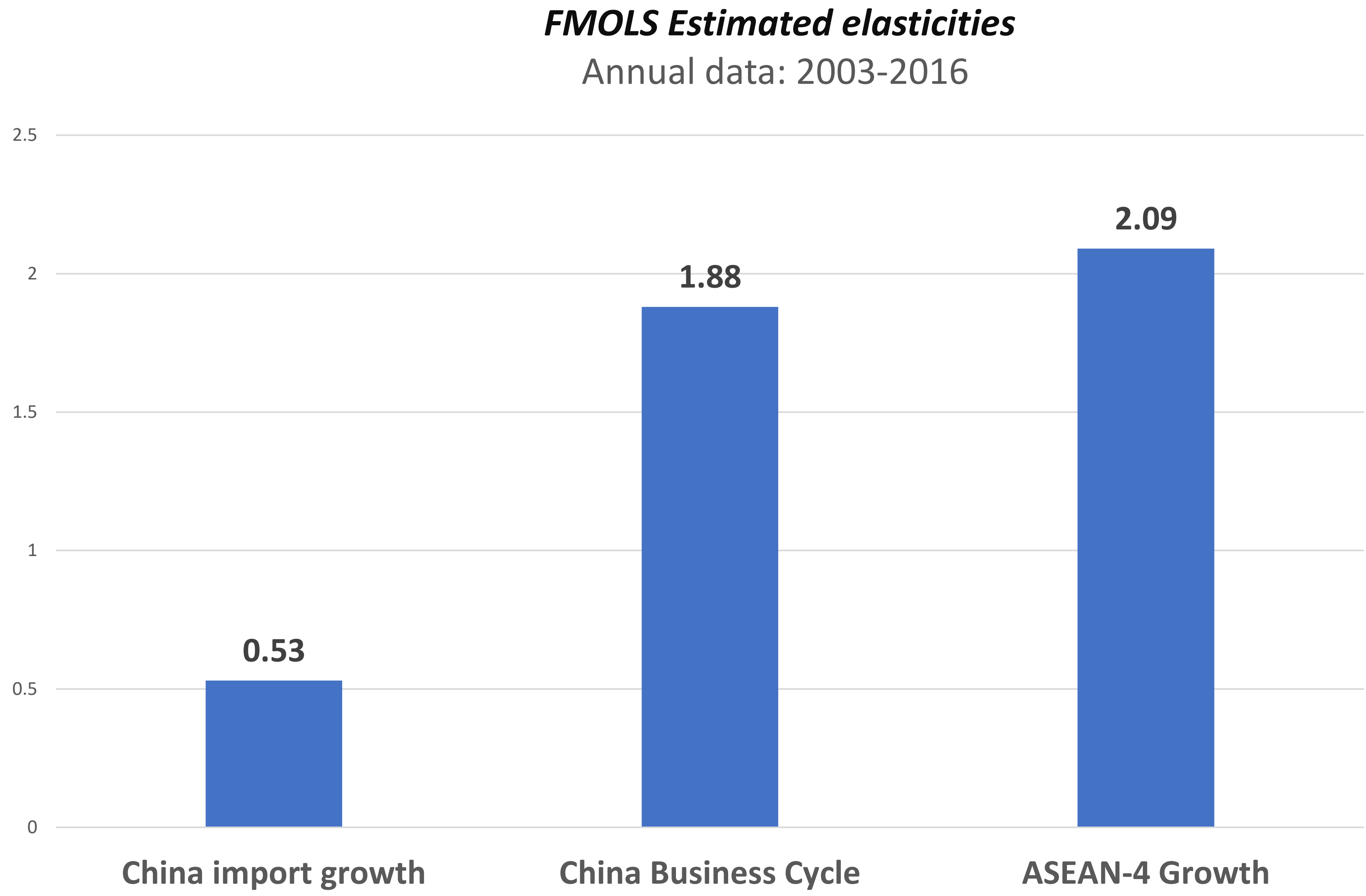


Figure 10.3 China's influence on Thailand's exports

Figure 10.4 Impacts on Thailand's export growth

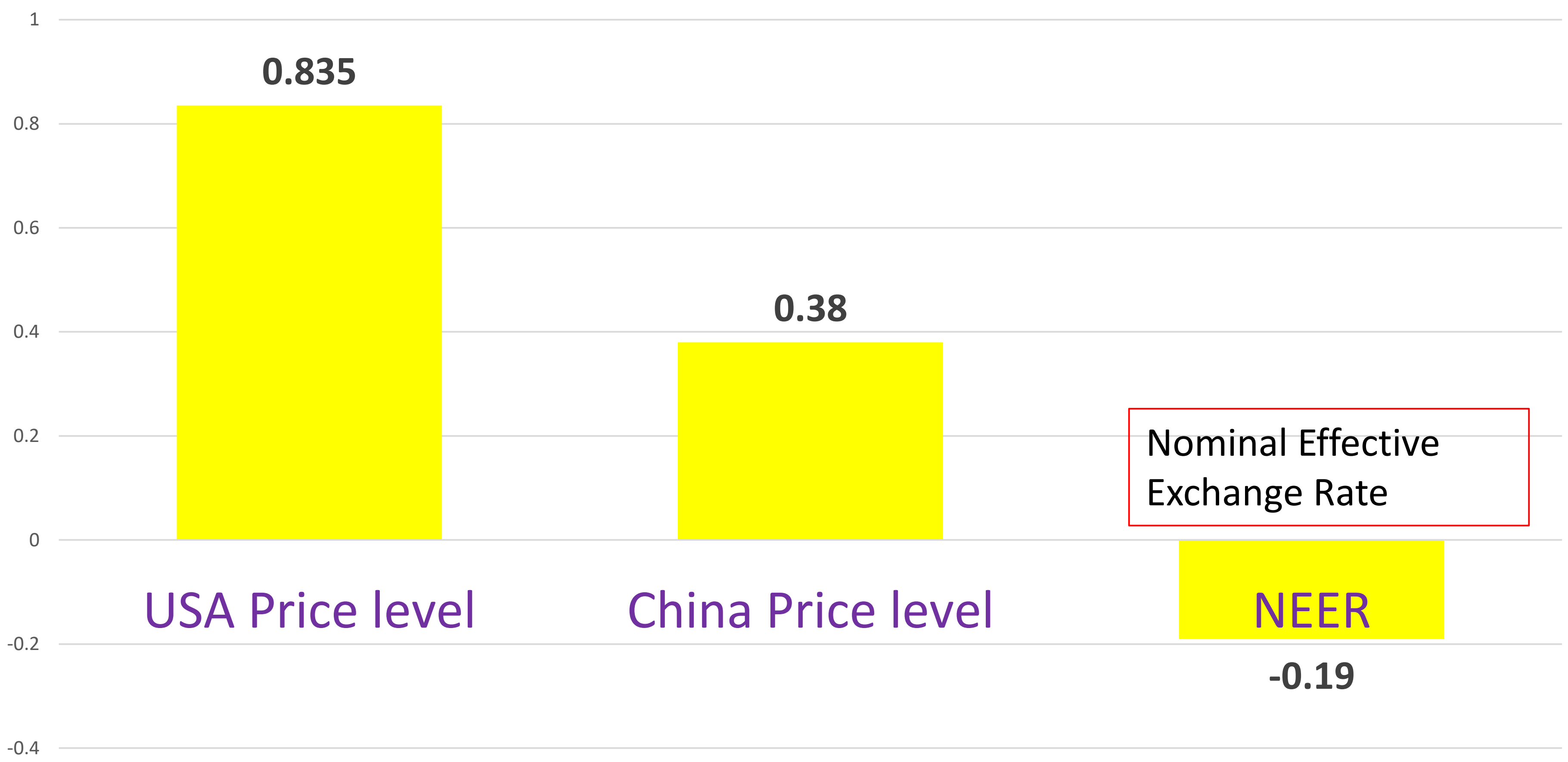


Implication from the estimated elasticities

- China's import growth significantly impacts Thailand's exports, which is highly sensitive to China business cycle.
- ***Deviation from China's stable growth path*** results in a more massive swing on demand for Thailand's exports.
- Growing reliance on interregional trade within ASEAN economies intensifies the interconnectedness of ASEAN economies through the trade channel.

Figure 10.8 Thailand's Consumer Price Elasticities

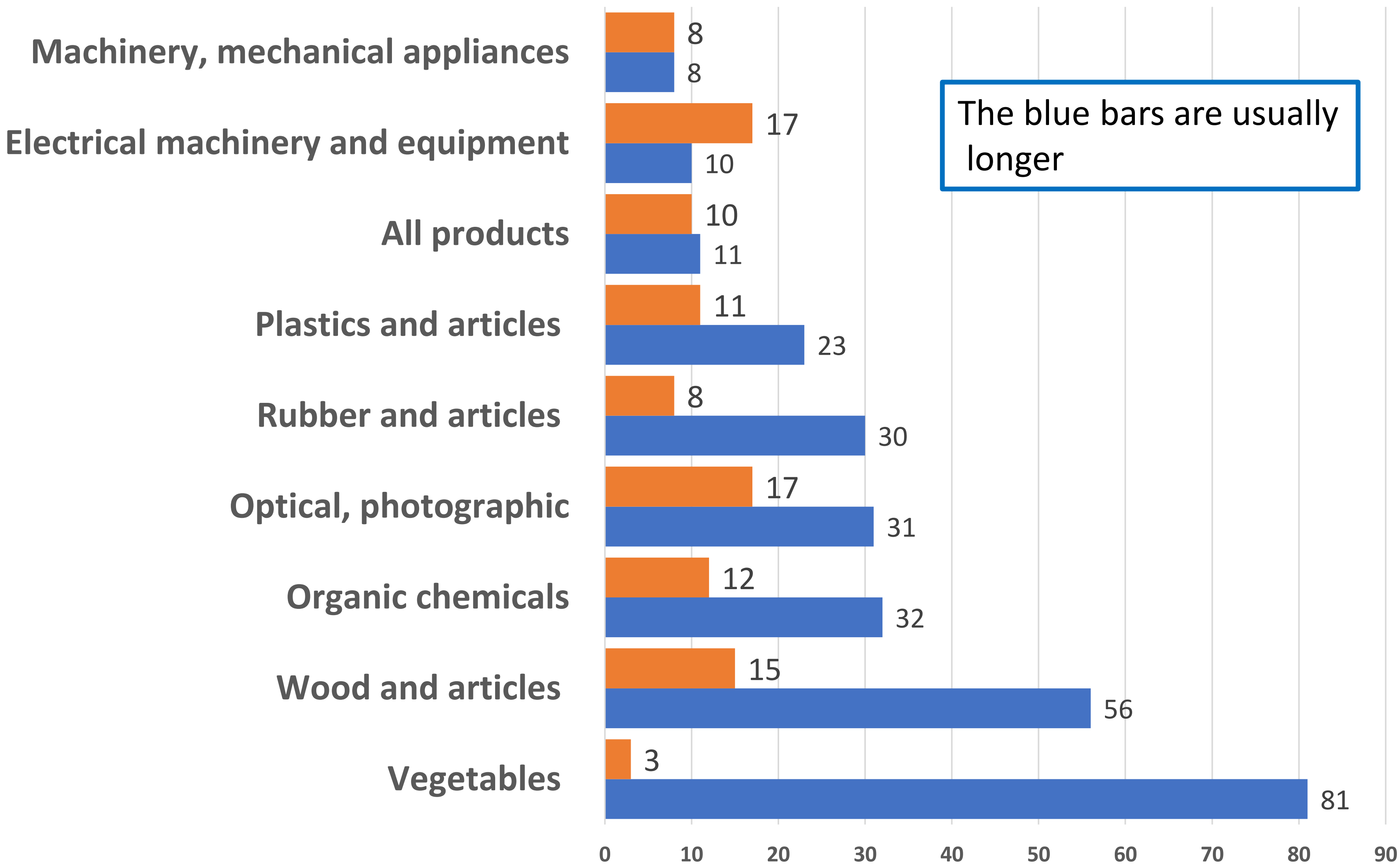
Source: Estimated coefficients (Jan 1994 -May 2017)

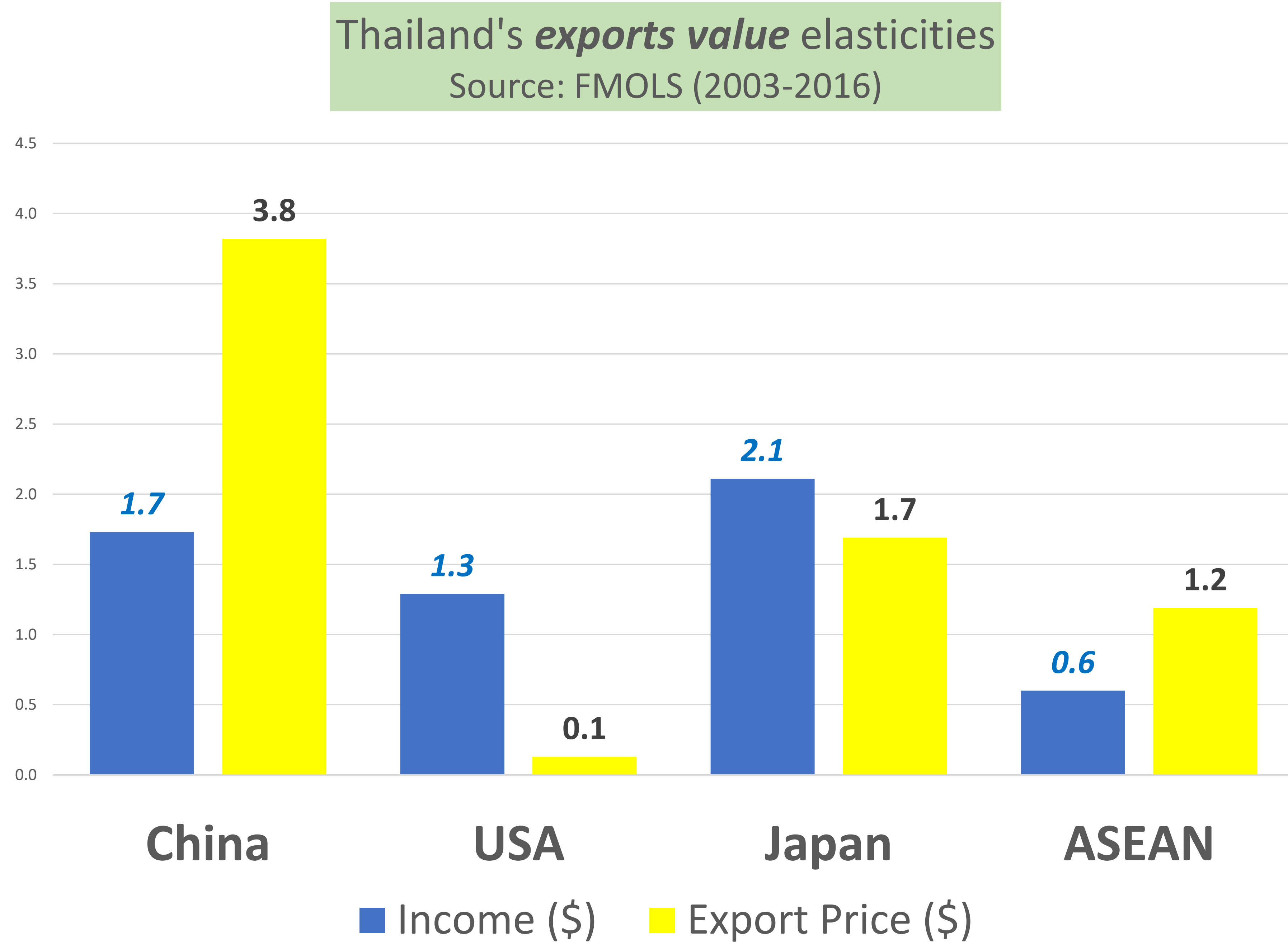


China's influence on Thailand's exports: 2016

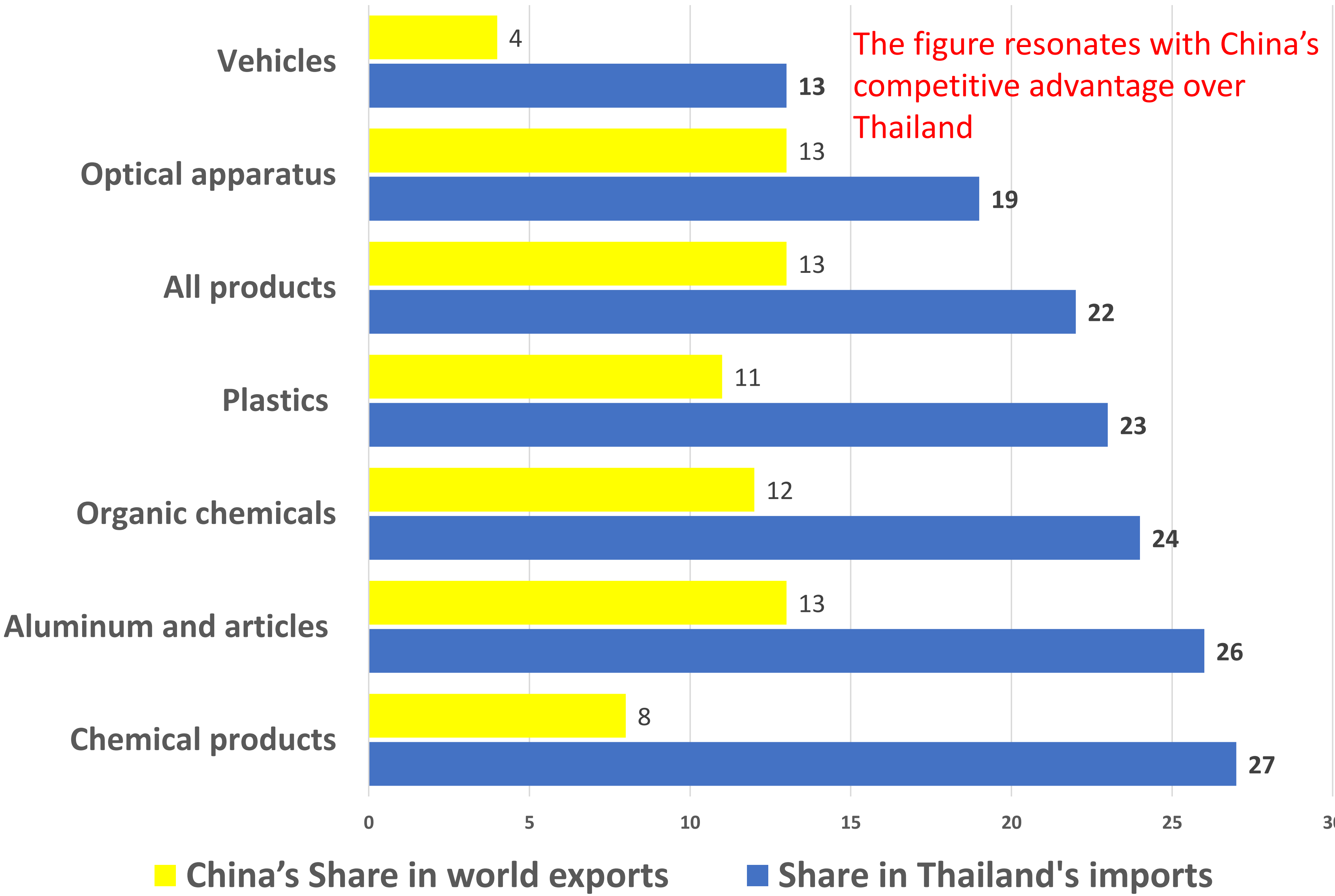
Share of Thailand's exports in China's total Imports

Share in Thailand's exports to China




Thailand's ***exports value*** elasticities
Source: FMOLS (2003-2016)
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.7
3.8
1.3
0.1
2.1
1.7
0.6
1.2
China
USA
Japan
ASEAN
Income ($)
Export Price ($)

China's influence on Thailand's imports: 2016



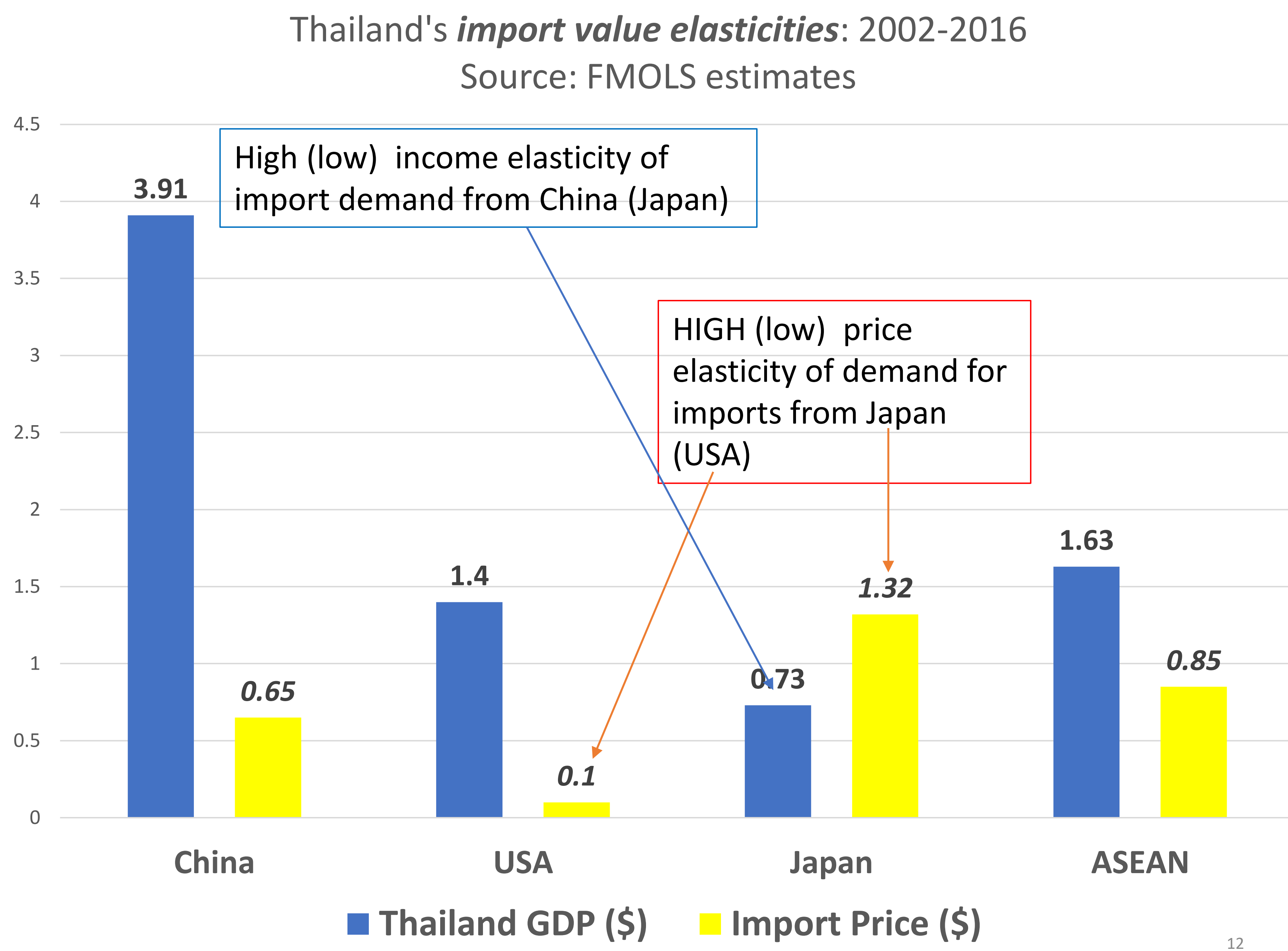
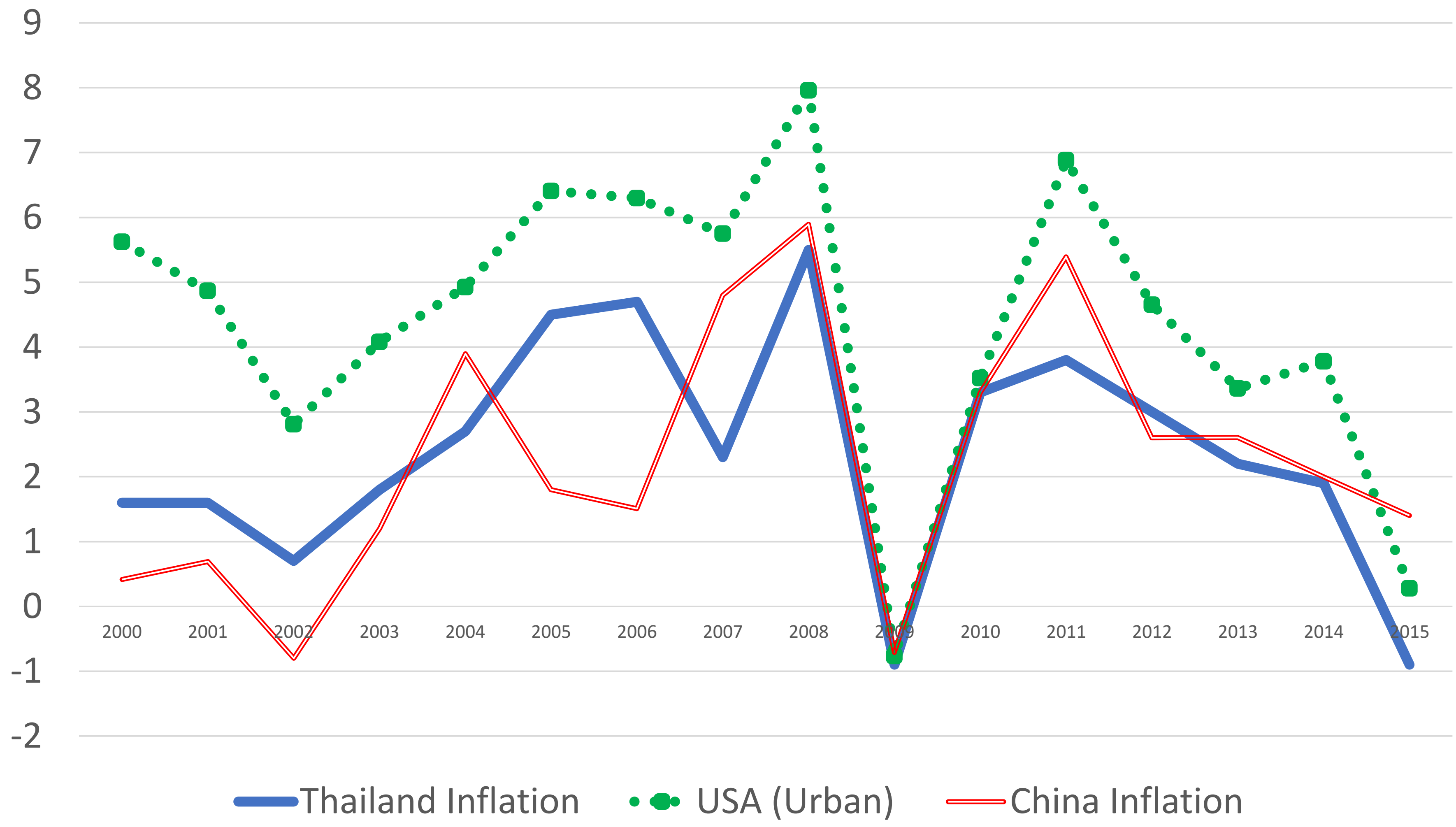
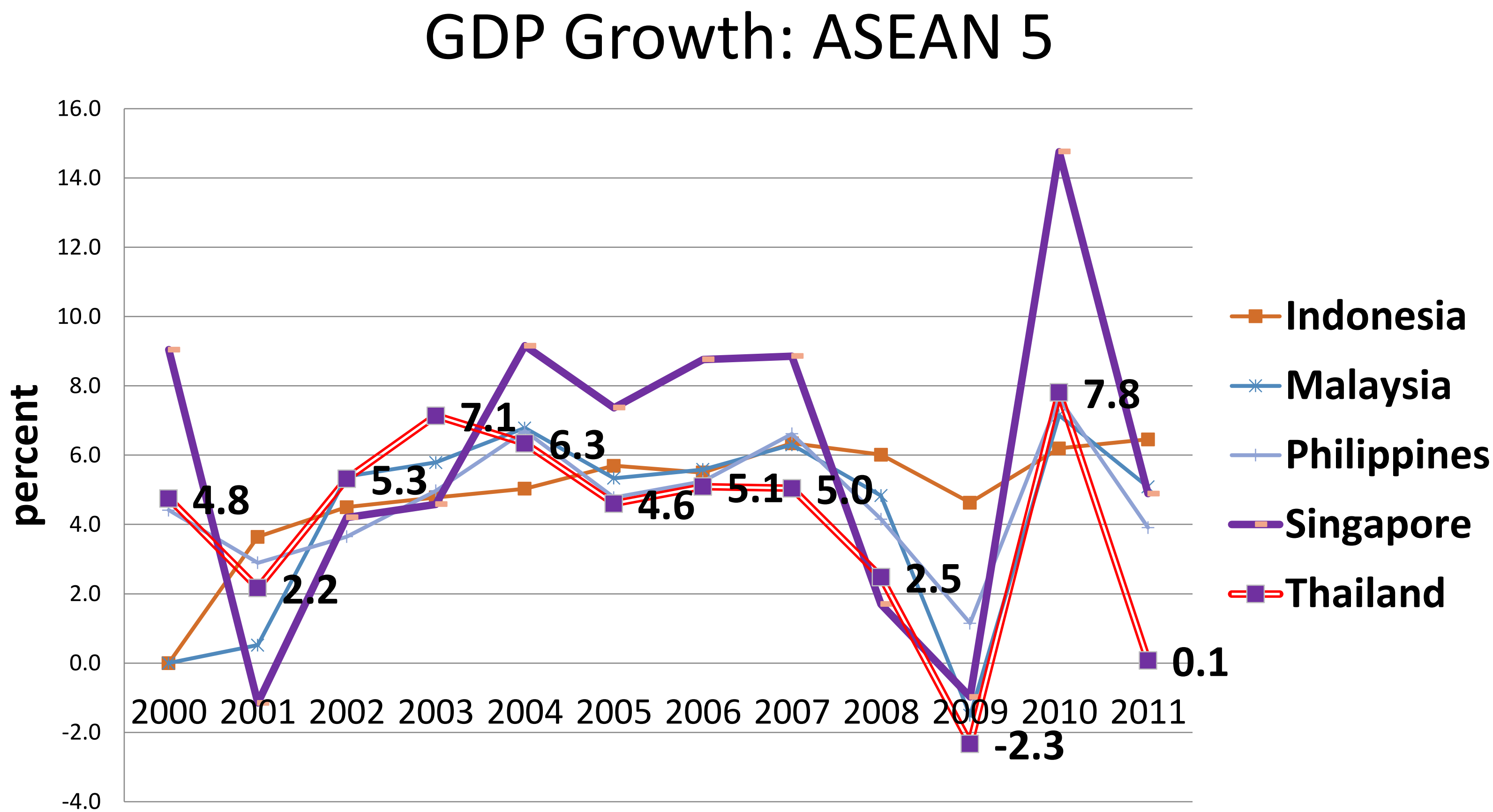

Thailand's *import value elasticities*: 2002-2016
Source: FMOLS estimates
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
3.91
0.65
1.4
0.1
0.73
1.32
1.63
0.85
High (low) income elasticity of import demand from China (Japan)
HIGH (low) price elasticity of demand for imports from Japan (USA)
China
USA
Japan
ASEAN
Thailand GDP ($)
Import Price ($)

Figure 10.7 External influences on Thailand's inflation
Source: Federal Reserve Bank



2. ASEAN Business Synchronization

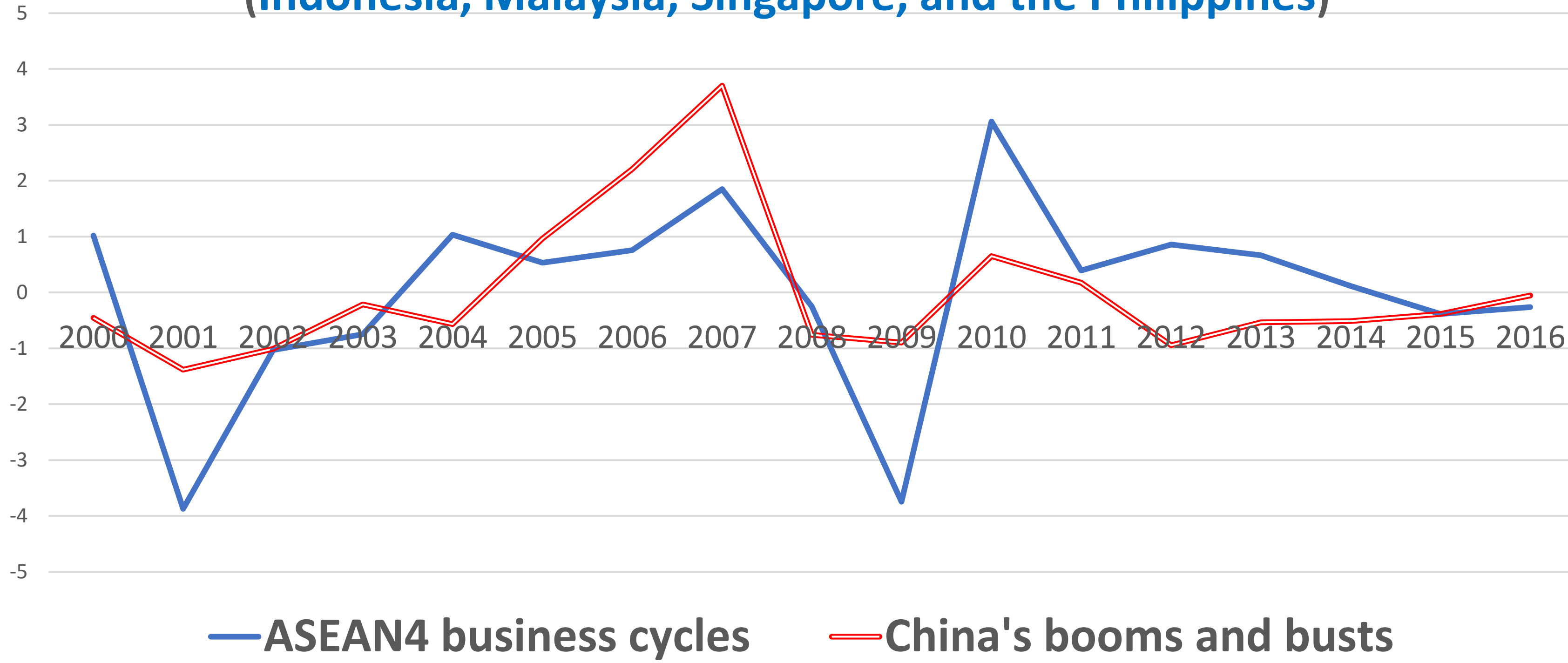


China and ASEAN-4 Business Cycle

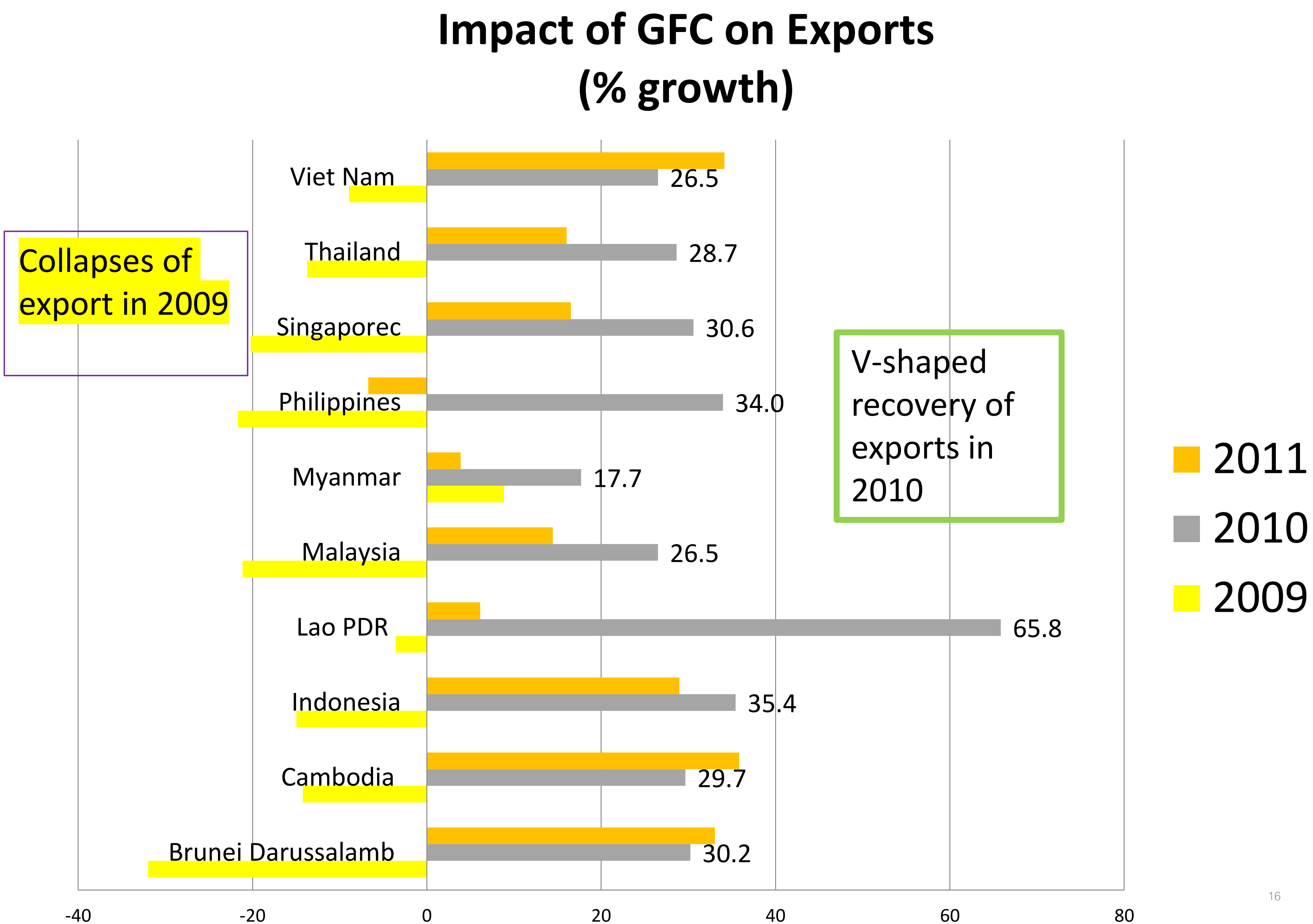
Figure 10. 9 Business Cycles in China and ASEAN-4*

(Deviation from trend growth path)

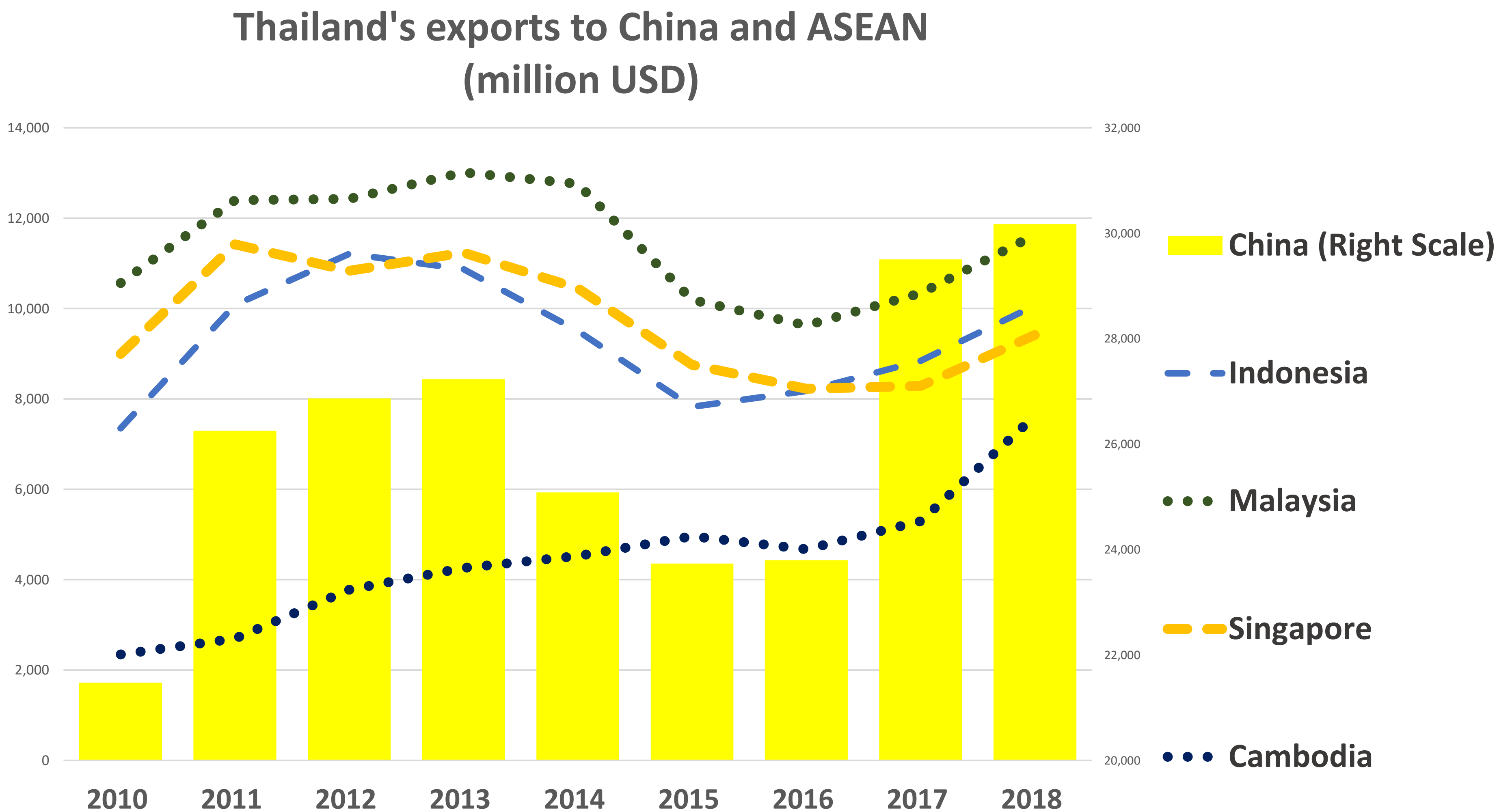
(Indonesia, Malaysia, Singapore, and the Philippines)



What did ASEAN Exports have in common after the GFC?

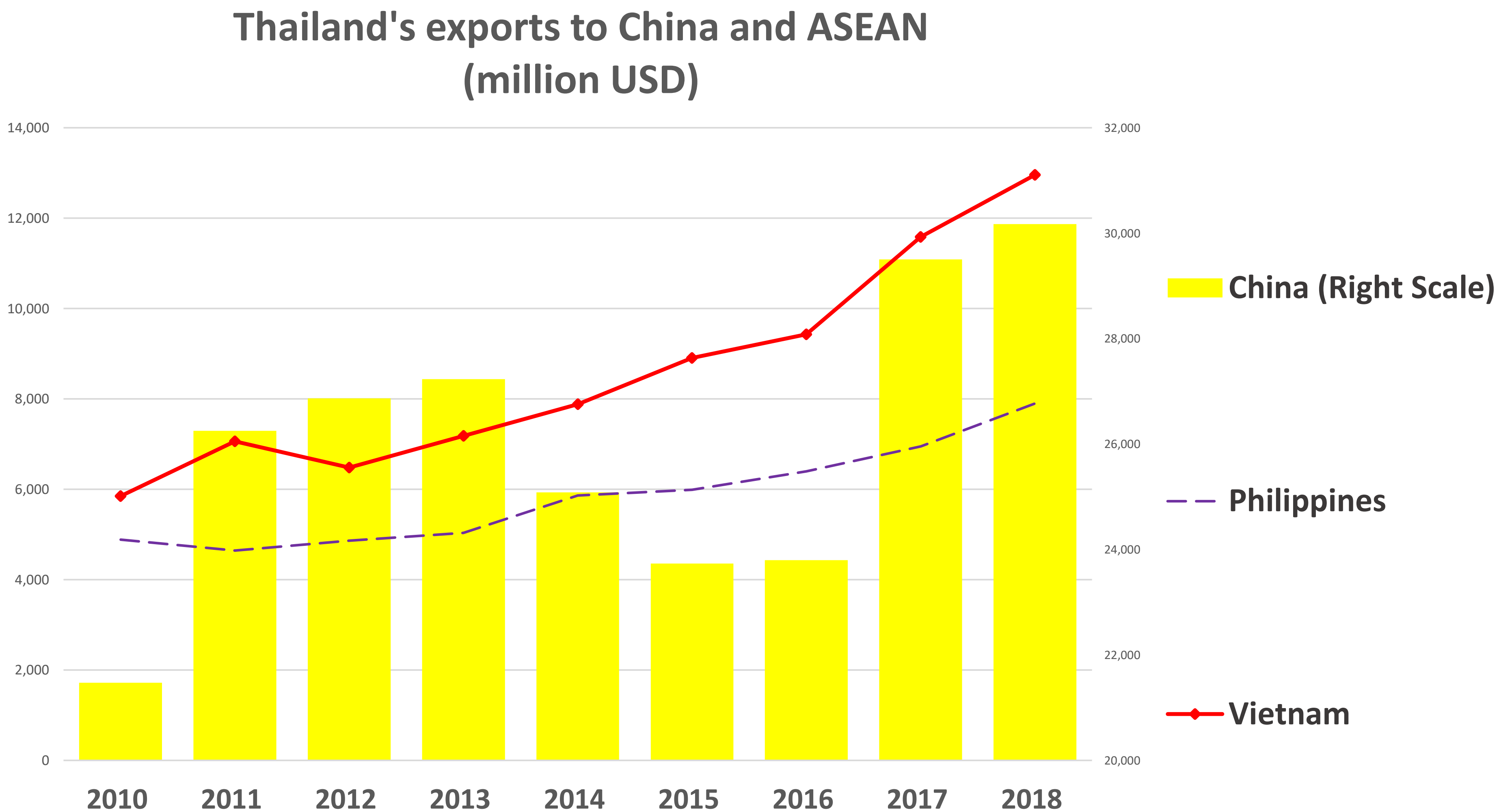


Thailand's ASEAN exports synchronize with China's business Cycle (Thailand's exports to China)



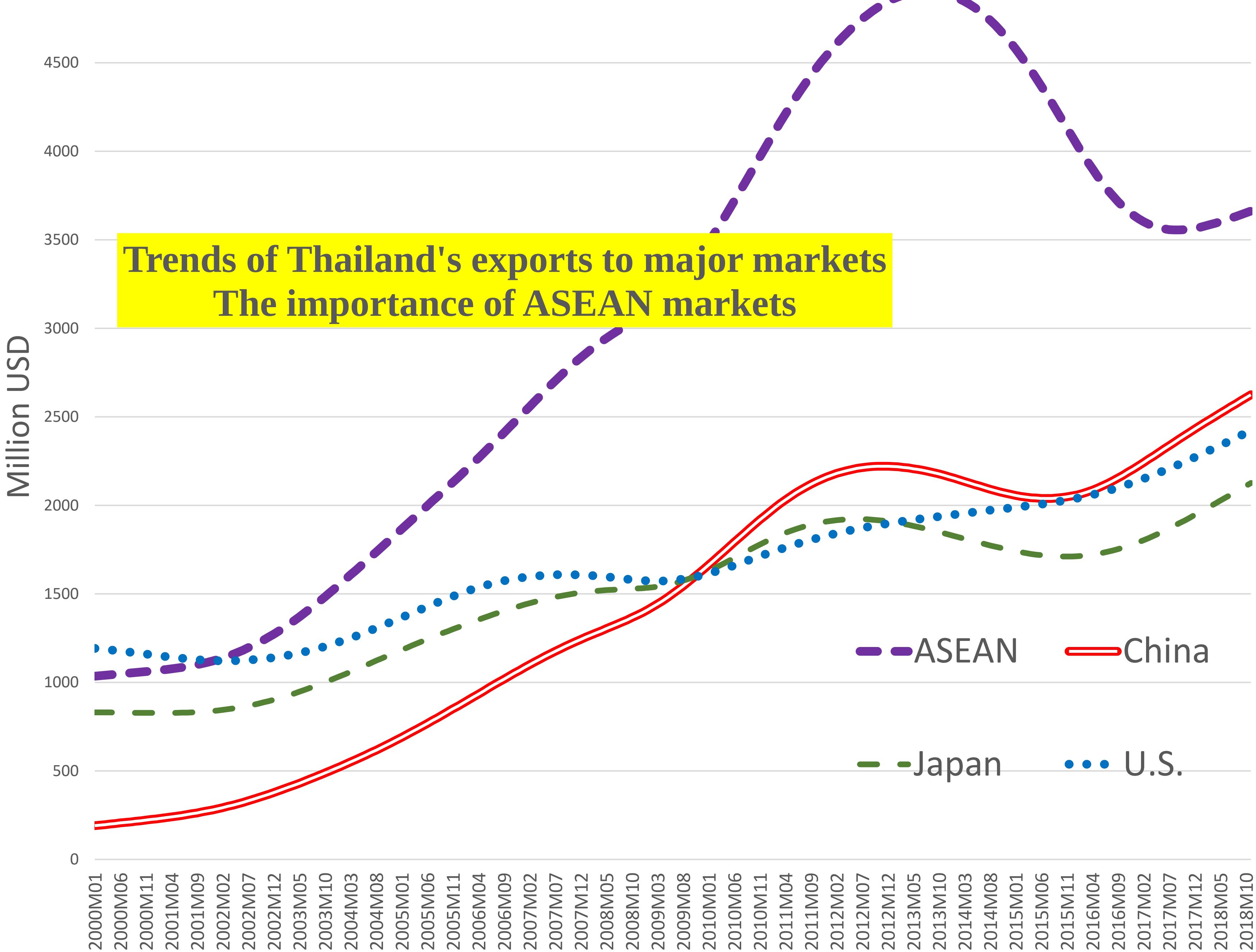
Source: Bank of Thailand

Thailand's exports to Vietnam and the Philippines did not synchronize with China's business Cycle



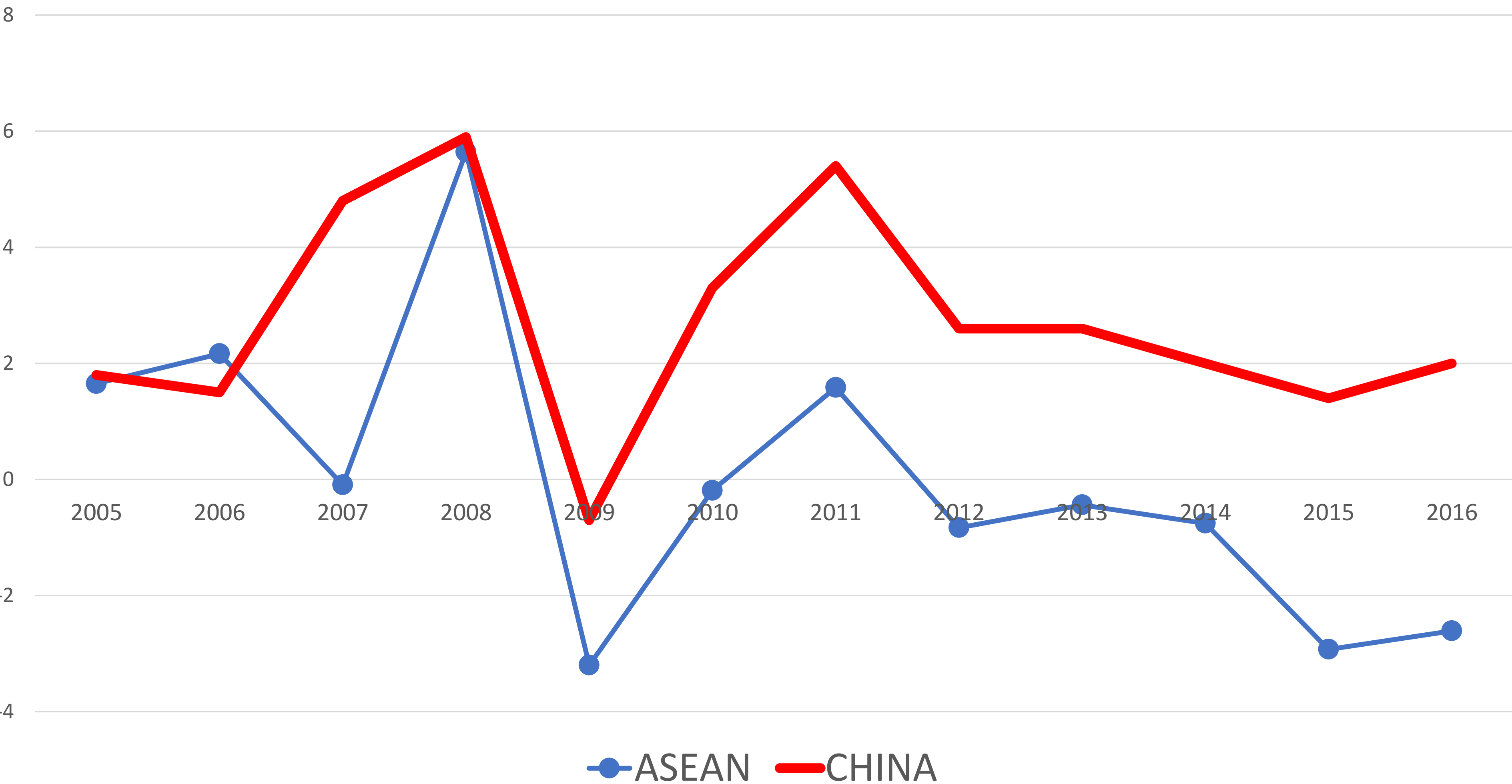
Source: Bank of Thailand

What caused exports to Vietnam the Philippines different from other markets?



ource: Bank of Thailand

Figure 10.10 China and ASEAN *Inflation Synchronization*
(Principal Component of inflation)
Source: ADB Key Indicators



The ASEAN business cycle and China's slowdown

Bhanupong Nidhiprabha

The economies in the Association of Southeast Asian Nations (ASEAN) have been integrated through increasing trade relations intensified by tariff reductions and increasing openness to foreign direct investment. Rising volume of networks trade has deepened interconnectedness between ASEAN and China, a recent growth locomotive in the world. ASEAN business cycle is shaped by volatile China's trade volume. As China's expansion slows down, adverse consequences on ASEAN economies have become more pronounced. The extent of the damage depends on each member of ASEAN's trade exposure and China dependency. This paper identifies the most vulnerable ASEAN economies to China's business cycle. The slowing down of the Chinese economy would undoubtedly result in a decline in long-term growth of some ASEAN economies, unless appropriate policy responses can be implemented.

The impact depends on trade exposure and China dependency

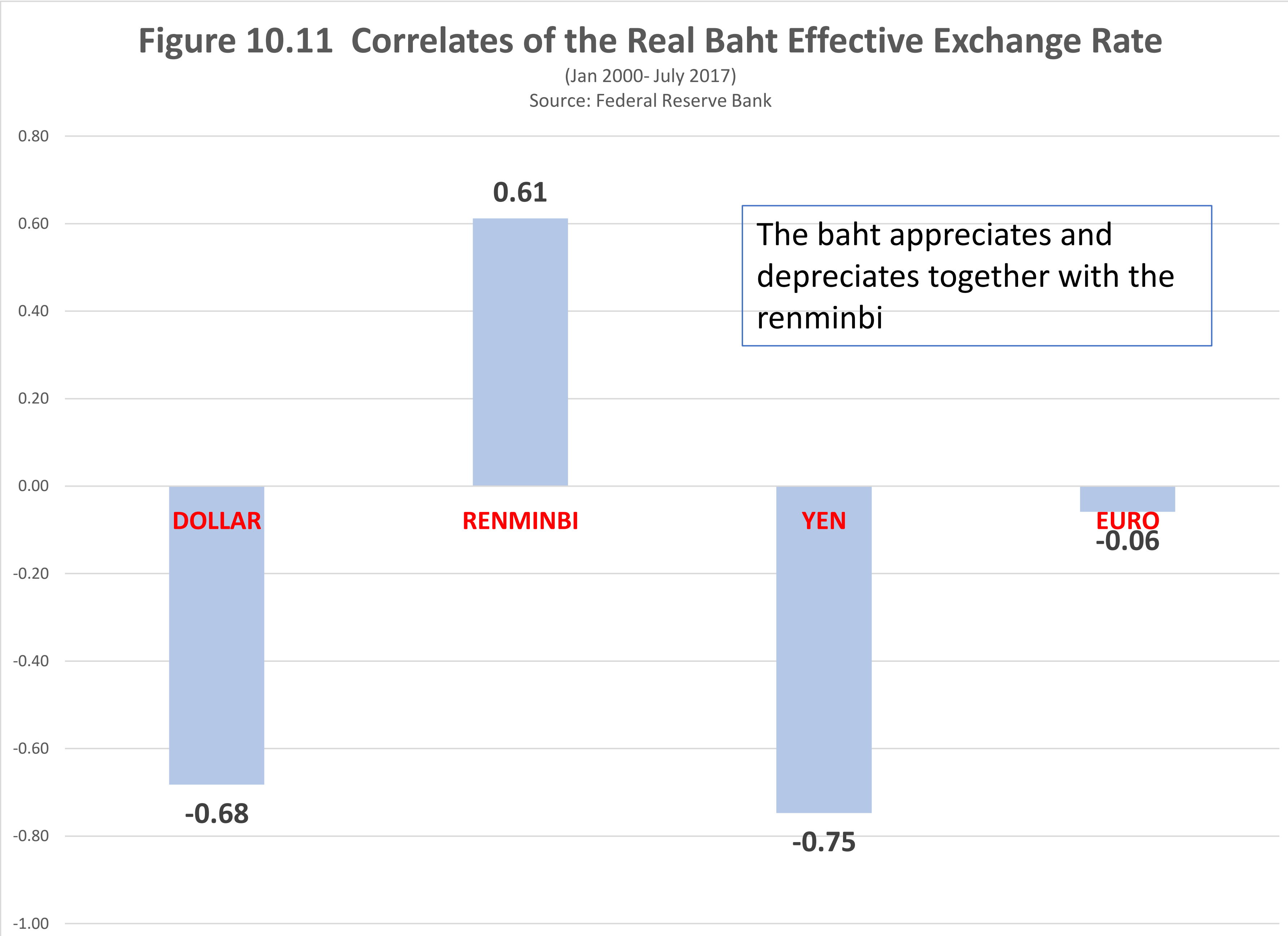
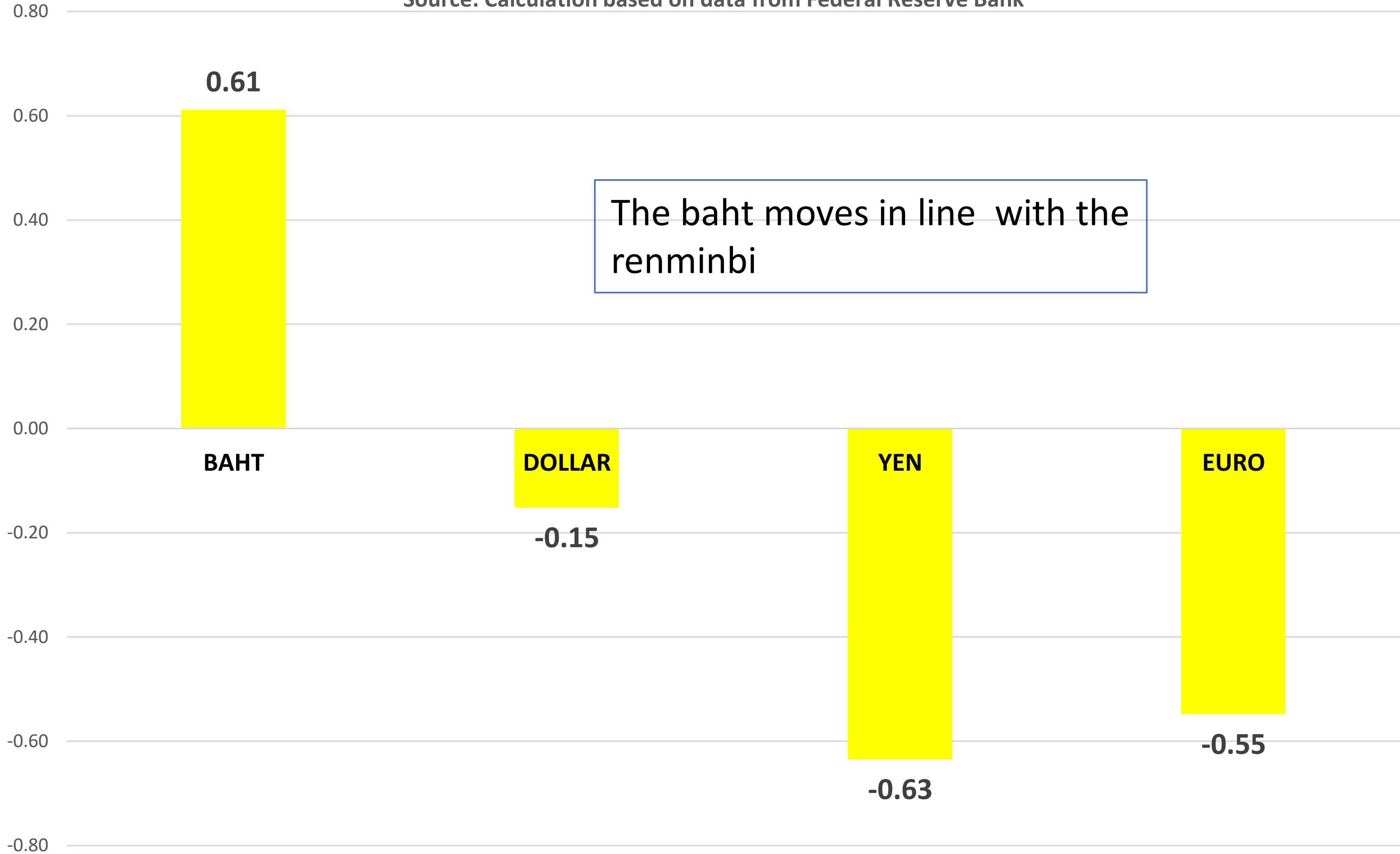


Figure 10.11 Correlates of the Real Baht Effective Exchange Rate
(Jan 2000- July 2017)
Source: Federal Reserve Bank
0.80
0.60
0.40
0.20
0.00
-0.20
-0.40
-0.60
-0.80
-1.00
0.61
The baht appreciates and depreciates together with the renminbi
DOLLAR
RENMINBI
YEN
EURO
-0.06
-0.68
-0.75

Figure 10.12. Correlates of the nominal renminbi

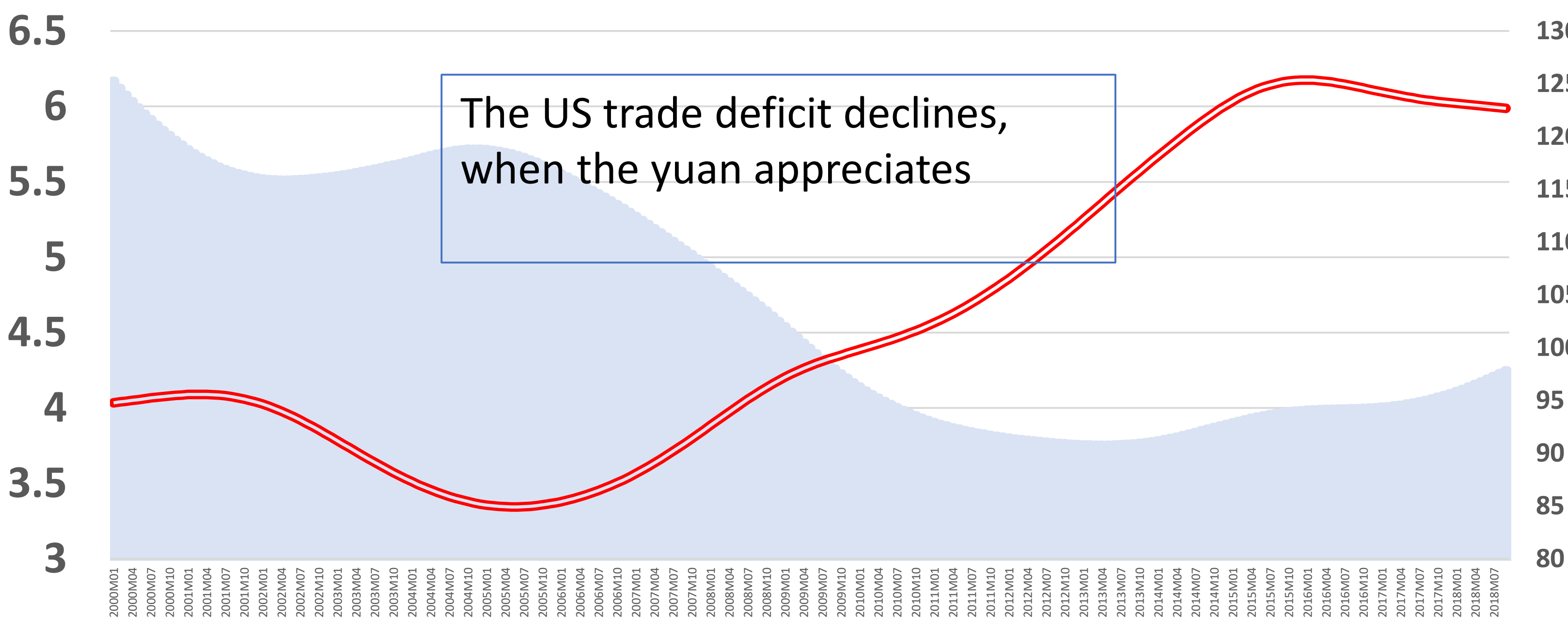
(Jan 2000-July 2017)

Source: Calculation based on data from Federal Reserve Bank



3. Global rebalancing

Trends of the U.S. trade deficit and Renminbi REER



Source: Federal Reserve Bank

China and the U.S trade disputes

- When the issue of global rebalancing first emerged, it was focused squarely on the trade imbalance between **China and the Unites States**.
- However, the global economic turbulence of 2009-2010, and the subsequent economic fragility and uncertainty enveloping much of **the global economy** today, has begun to underscore how broad this issue really is.

To correct the huge trade deficit between the US and China

- China has taken steps to contribute to possible rebalancing.
- China's currency has ***appreciated*** by over 30 percent against the US Dollar since 2005.
- And it has experienced some decline in its trade surplus in recent years.
- Nevertheless, the consumption share of GDP in China is still low (and even declined according to recent statistics).

Global rebalancing

- Further, the US still has a current account deficit amounting to about 3.1 percent of GDP.
- In 2011, the US maintained a trade deficit with at least 91 countries, most of which are in the developing world.
- Thailand is one of those countries on the watch list of the US government.

To rebalance the trade disequilibrium between the two countries

$$(M - X) = (I\text{-}S) + (G\text{-}T)$$

For the U.S. to cutdown trade deficit with China, American private and public saving must rise: Reduce domestic consumption and investment, the US government must raise tax and spend less (Lower absorption)

For China to cut down trade surplus with the U.S., China's private and public saving must fall:
China must raise domestic consumption and investment (Higher absorption)

Chinese government's actions to trade surplus

- The government has started to tackle several ingrained problems.
- After a long period of overproduction of steel and coal, a campaign to close unused capacity restrained output and pushed up prices.
- To reduce the property overhang, local governments bought millions of unsold homes from developers and gave them to poorer citizens.

Maturing Chinese Economy

- Growth is bound to slow over time as China gets richer, but structural changes are also making growth more stable.
- Thanks in part to a falling working-age population, which peaked in 2011.
- This is rebalancing the economy.
- Excessive reliance on investment is giving way to consumption.
- And heavy industry is giving way to services, which now account for more than half of GDP, up from a third two decades ago.

The Trade Conflict and China's strategy

- The conflict with Washington has prompted Chinese leaders to step up a marathon effort to encourage ***self-sustaining growth driven by domestic consumption and reduce reliance on exports and investment***.
- Beijing has cut tariffs, promised to lift curbs on foreign ownership of auto producers and taken other steps to rev up growth.
- But leaders have refused to scrap plans such as "**Made in China 2025**," which calls for state-led creation of Chinese champions in robotics and other technologies.

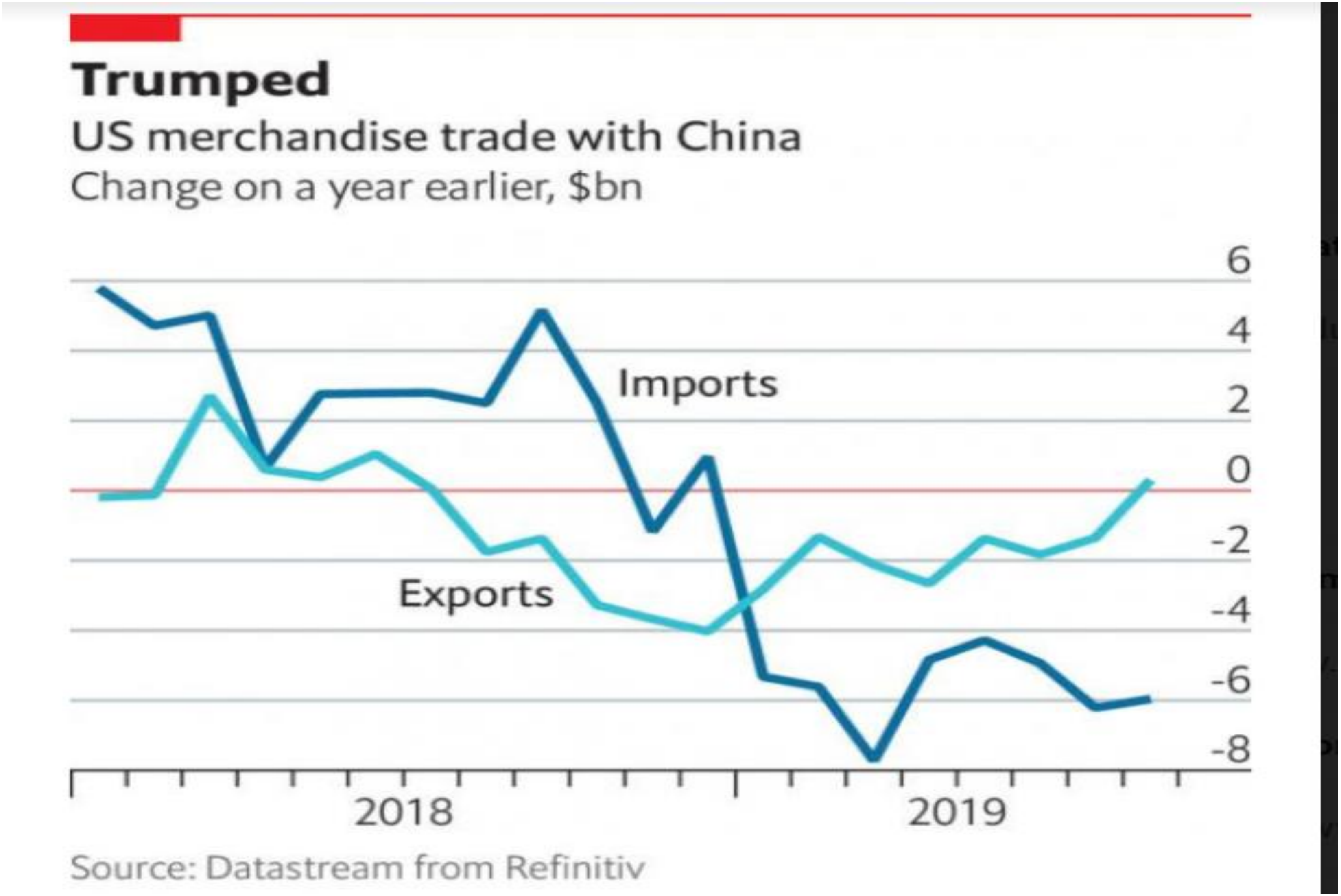
4. The US-China Trade War

- **Round 1:** The US-China trade war started on 6 July 2018, when the US imposed a 25 per cent tariff on US$34 billion of Chinese imports of “industrially significant technology”, the first in a series of tariffs imposed during 2018 and 2019.
- China imposes 25% tariff on $34 billion of U.S. Imports of agricultural goods, autos and parts, and aquatic products
- **Round 2:** August 23, 2018
- U.S. imposes 25% tariff on $16 billion in Chinese exports benefiting from China’s industrial policies including “Made in China 2025”
- China imposes 25% tariffs on $16 billion of U.S. Imports of chemical and energy products, medical equipment.

The US-China Trade War

- **Round 3**: September 24, 2018
- U.S. imposes 10% tariff on $200 billion in various Chinese imports including tobacco, small manufactures, and chemicals
- China imposes 5-10% tariff on $60 billion of U.S. Imports of agricultural, food, chemical, textile, metal, and *electrical equipment products*

At the beginning of the trade war

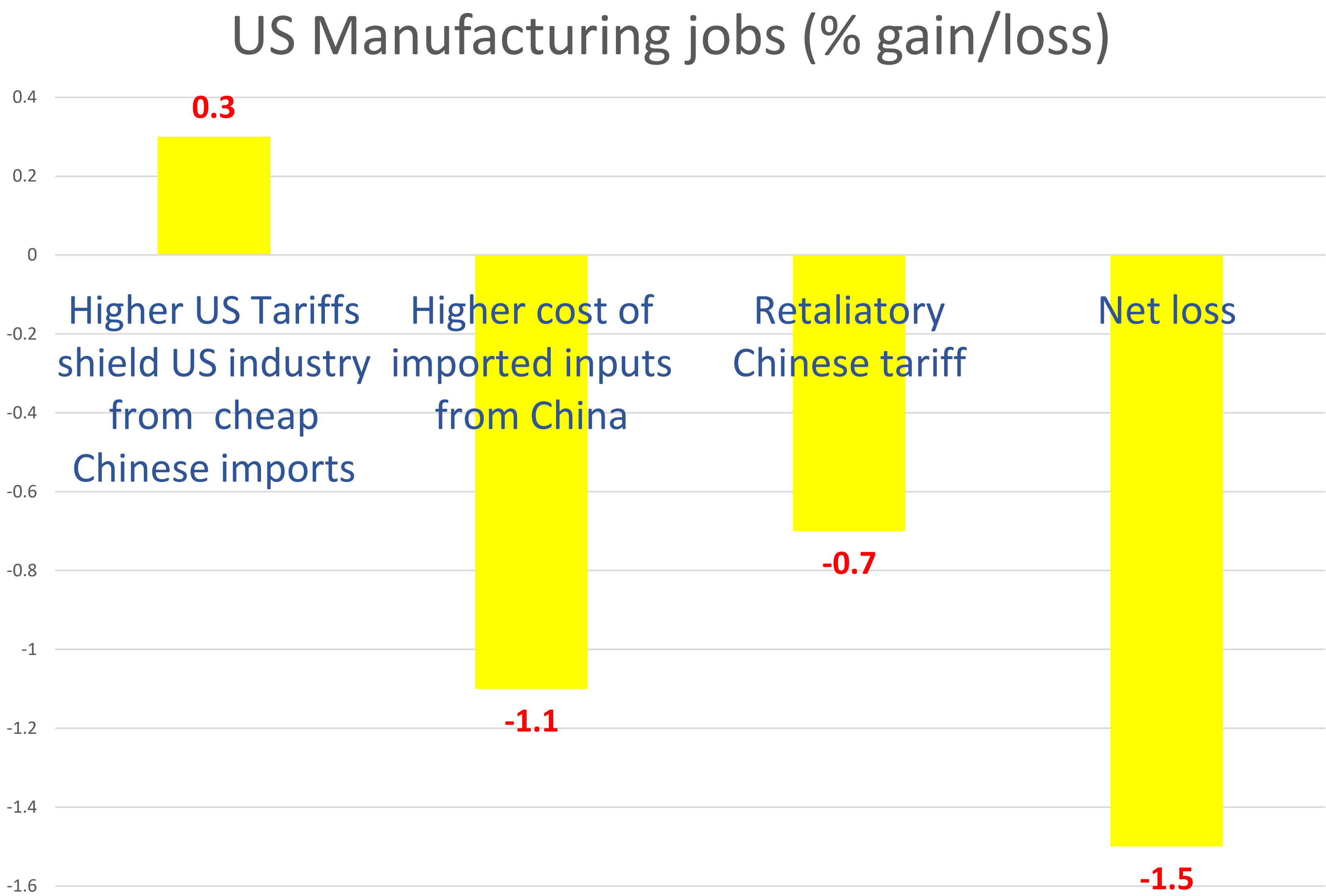


The US Did Not Benefit From Trade War With China

- President Donald Trump’s trade war with China did not achieve the objective of boosting manufacturing in the U.S
- The trade deficit with China reduced in 2019.
- Still, the *overall trade balance has soared to a record $84* billion in August 2020.
- Because U.S. importers shifted to imports from Vietnam, Mexico, and other countries.
- Since the pandemic, China's trade deficit is back to where it was at the start of the Trump administration.

The US has lost the Trade War

- Tariffs helped boost employment by 0.3% by protecting domestic industries exposed to cheaper Chinese imports.
- Those gains were more than offset by higher costs of Chinese imports due to tariffs, cutting manufacturing employment by 1.1% in the U.S.
- The retaliatory tariffs by China on the U.S. exports reduced domestic factory jobs by 0.7%.



US Manufacturing jobs (% gain/loss)
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
0.3
Higher US Tariffs shield US industry from cheap Chinese imports
Higher cost of imported inputs from China
-1.1
Retaliatory Chinese tariff
-0.7
Net loss
-1.5

What actually has changed

- As progress on the US-China trade relationship languishes, tensions between the two countries have escalated in other areas as they blame each other for starting and mishandling the coronavirus pandemic and clash over Hong Kong and alleged human right abuses in Xinjiang.
- Washington has targeted TikTok owner ByteDance and has forced Huawei into a fight for survival.
- What Trump has succeeded in doing is changing the way Washington talks about China,
- The idea that a *more aggressive approach* is needed

5. Impacts of the trade war on Thailand

Impacts of the U.S.–China Trade War on ASEAN: Case of Thailand

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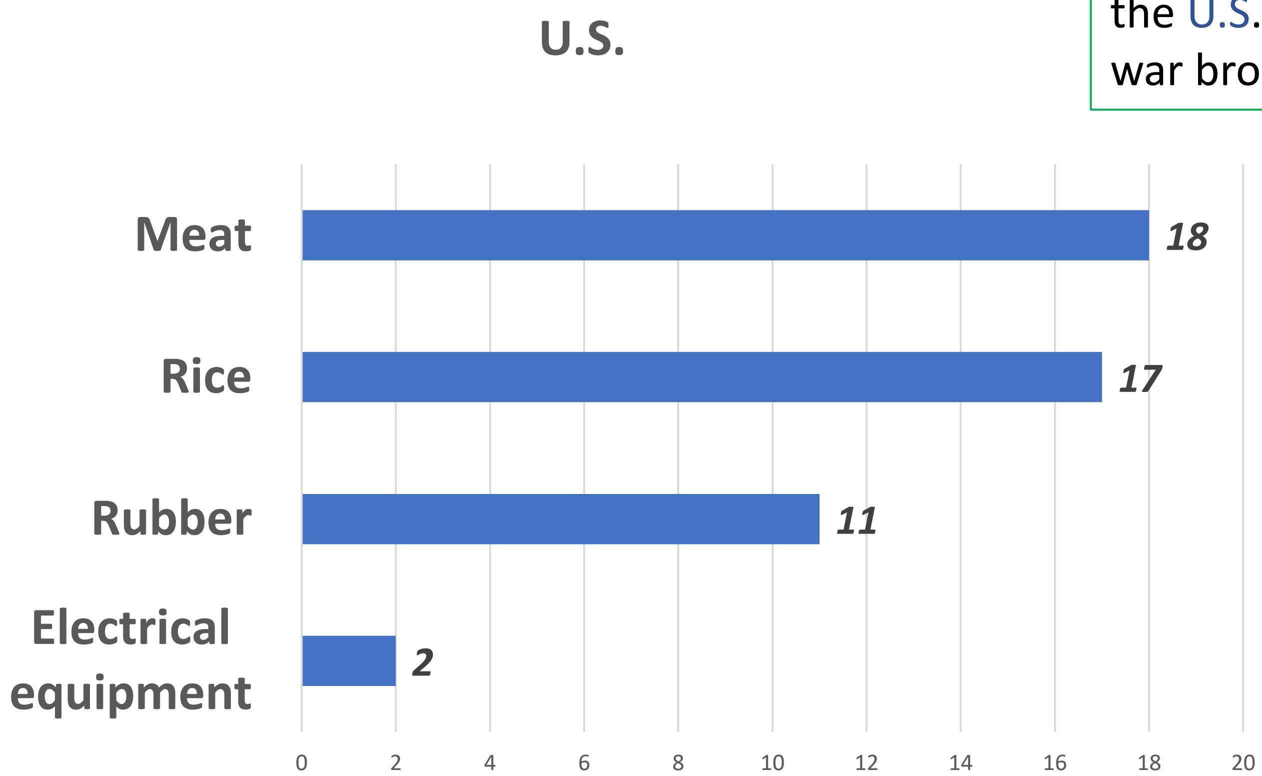
Abstract
With nearly a year of trade dispute between the United States and China, it has become apparent that the global economy will slow down, and this will have direct impact on the world trade. We adopt a vector autoregressive model to examine the impact of the U.S.–China trade war on the Thai economy. The results indicate that Thailand's output and exports to key markets are adversely affected by the escalating trade dispute. The slowdown in the Chinese economy will also put further downward pressure on world commodity prices, which in turn will reduce Thailand's exports.

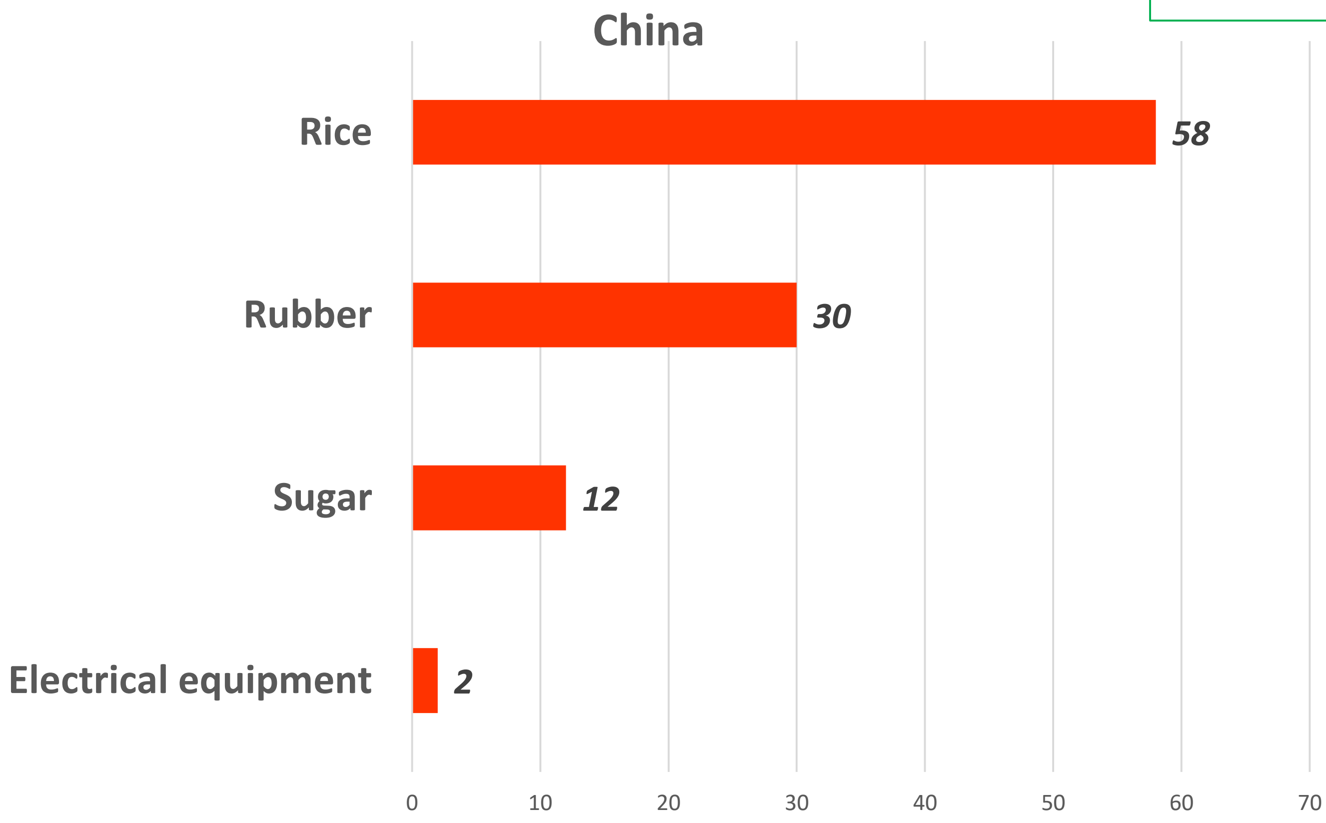
Thailand's export penetration in the US market in 2018 (% US total imports)

Which commodities can Thailand export more to the U.S. after the trade war broke out?

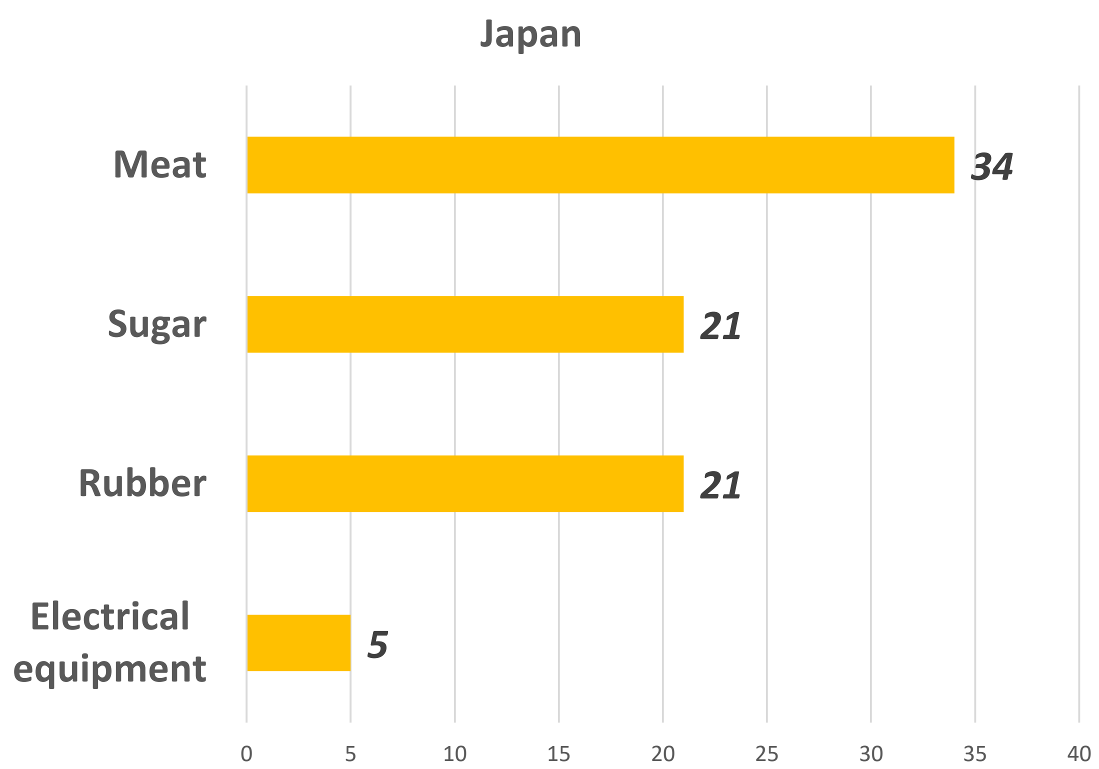


Thailand's export penetration in China 2018 (% total China imports)

Which commodities can Thailand export more to China after the trade war broke out?



Thailand's export penetration in 2018 (% total imports)

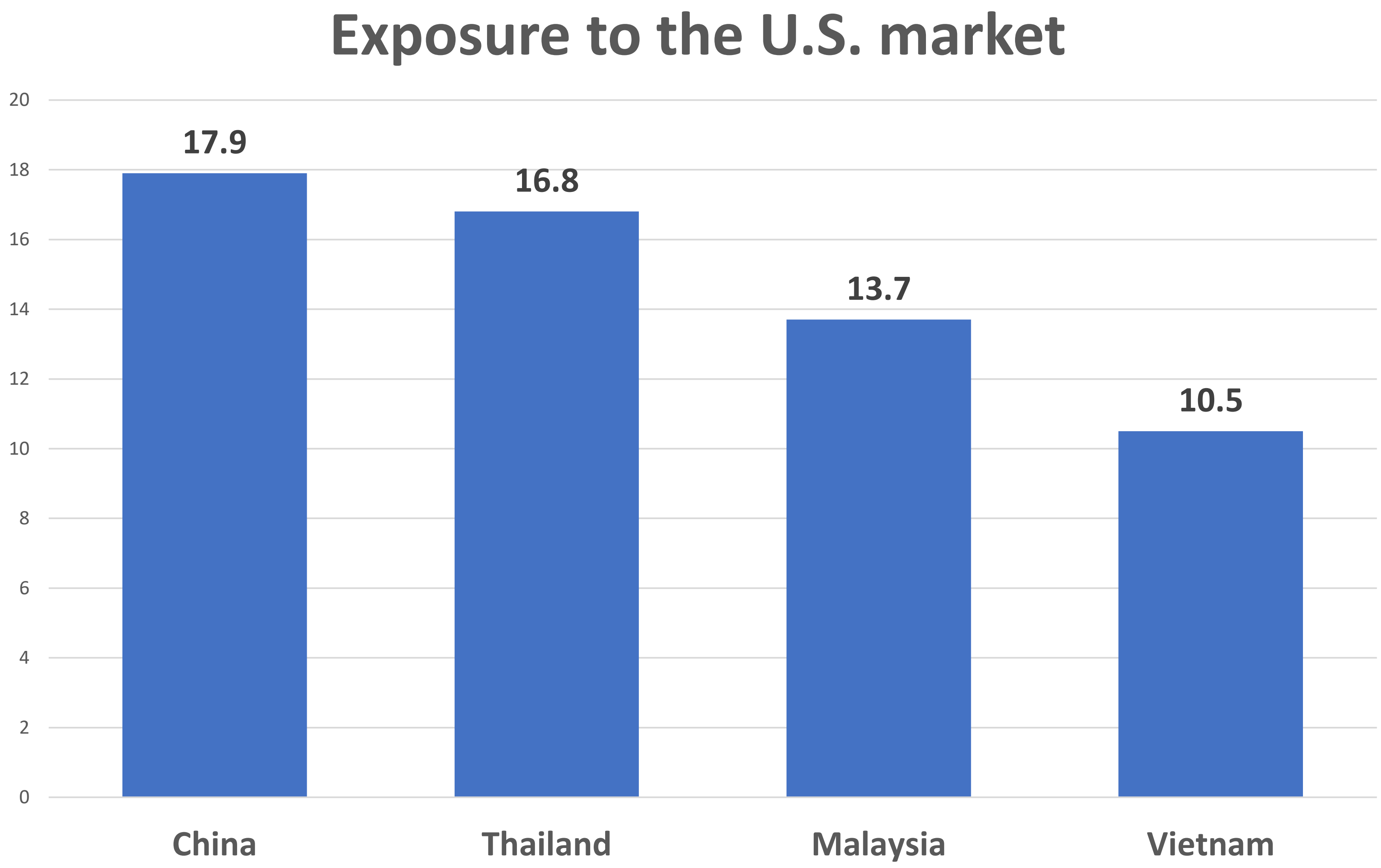


Which commodities can Thailand export more to Japan and China after the trade war broke out?

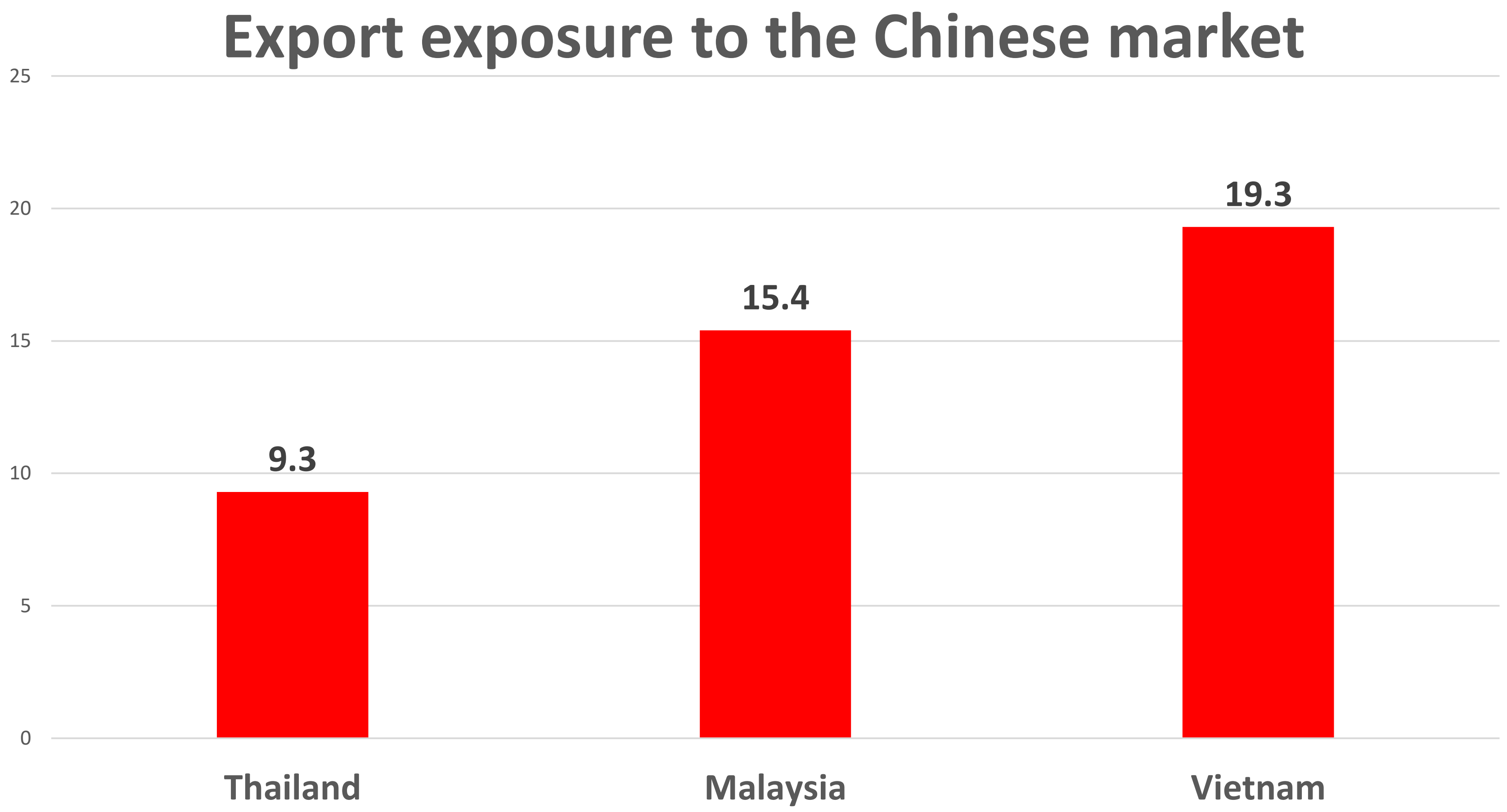
Long-lasting consequences

- A full-blown trade war between the U.S. and China would immediately generate a negative impact on Thailand's output growth.
- The adverse effect will be long-lasting. The reduction in the U.S. imports from China causes greater output losses for Thailand than when China retaliates the U.S. by imposing import restrictions.
- The quantitative simulation results from the model indicate that the country which imposes trade barriers to other trading partners would be less well-off due to reducing output growth effect.

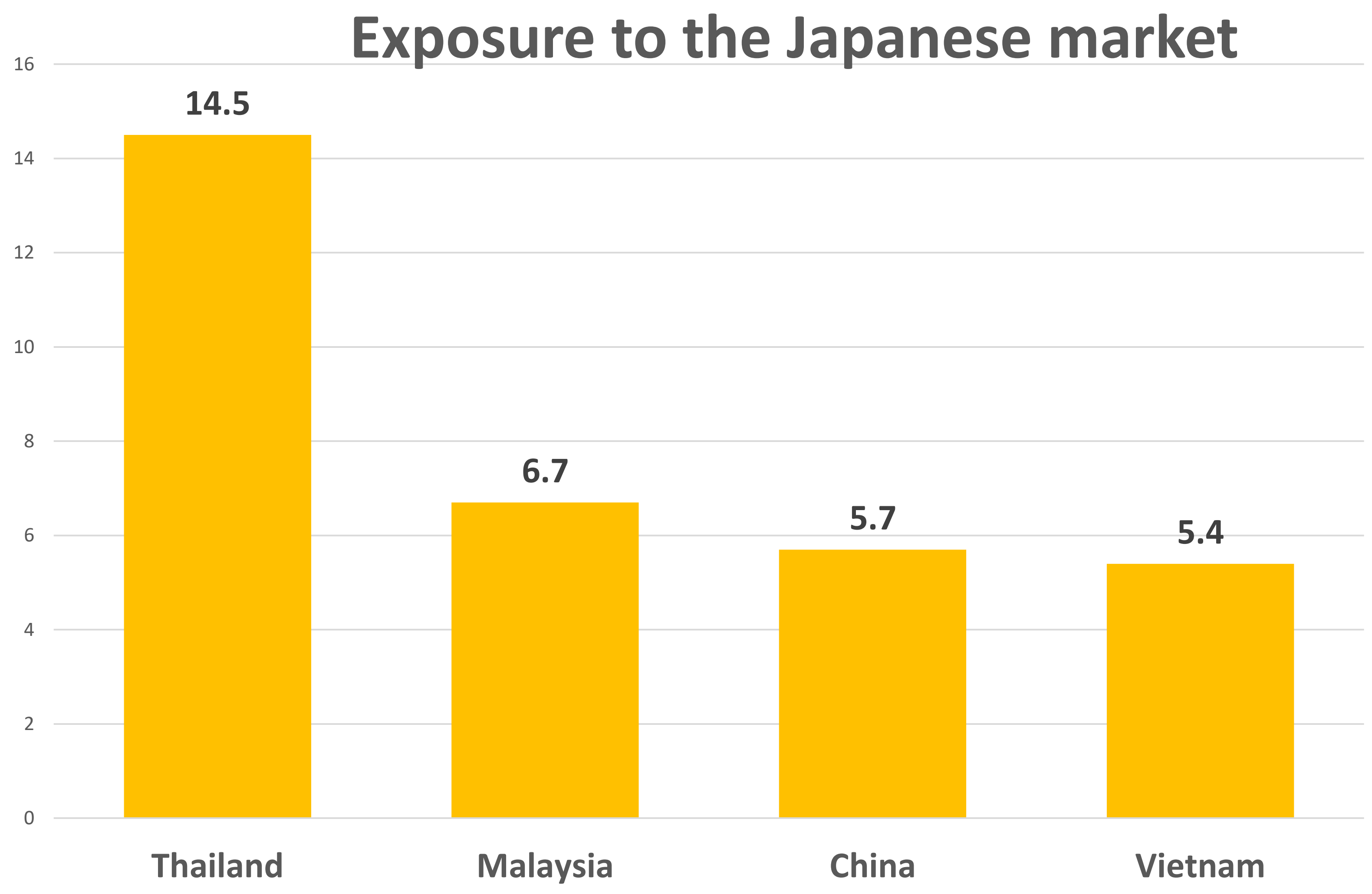
Market exposures to shocks in exports of electrical machinery and equipment (% total exports in each country)



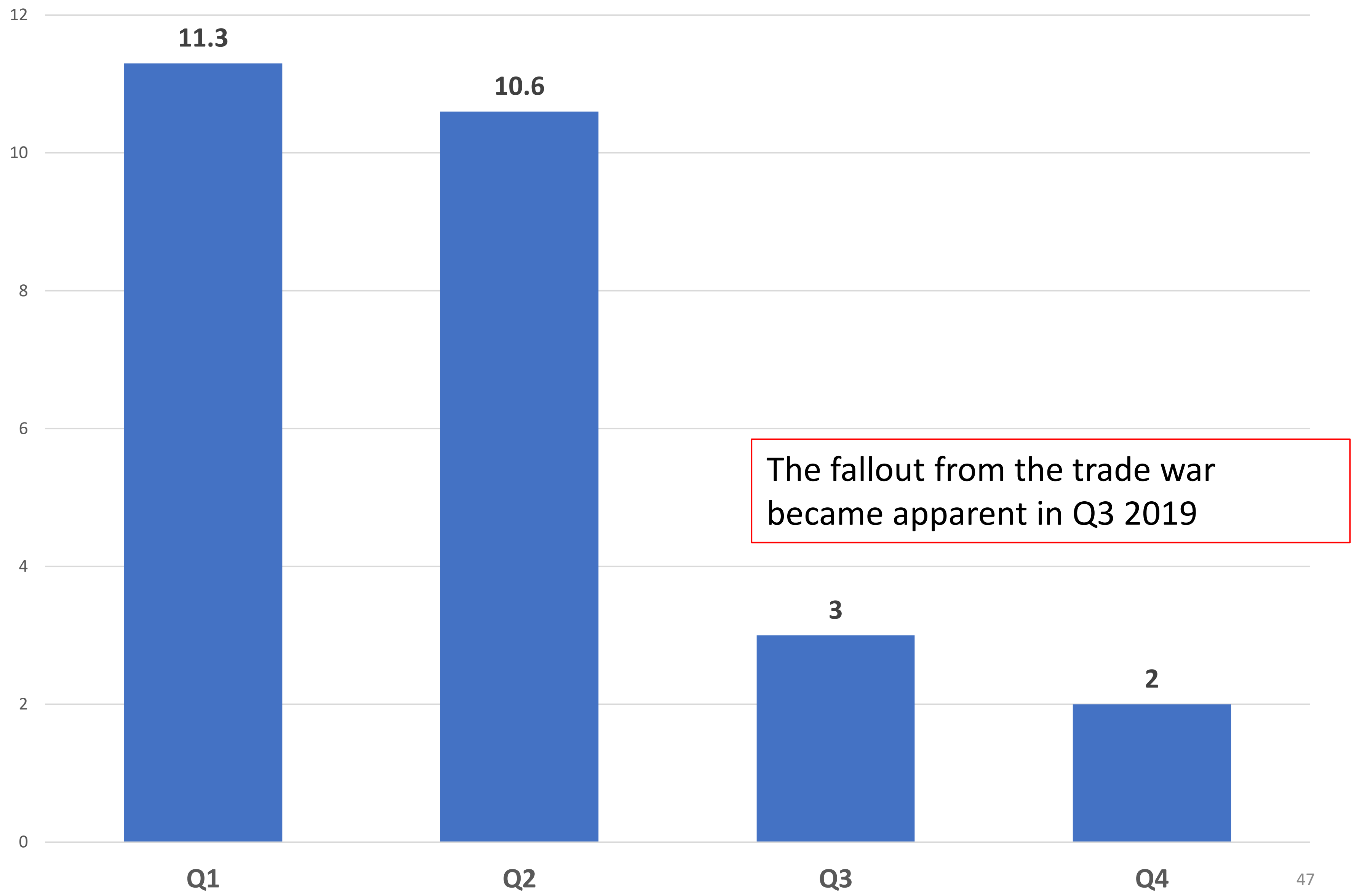
Market exposures to shocks in exports of electrical machinery and equipment (% total exports in each country)



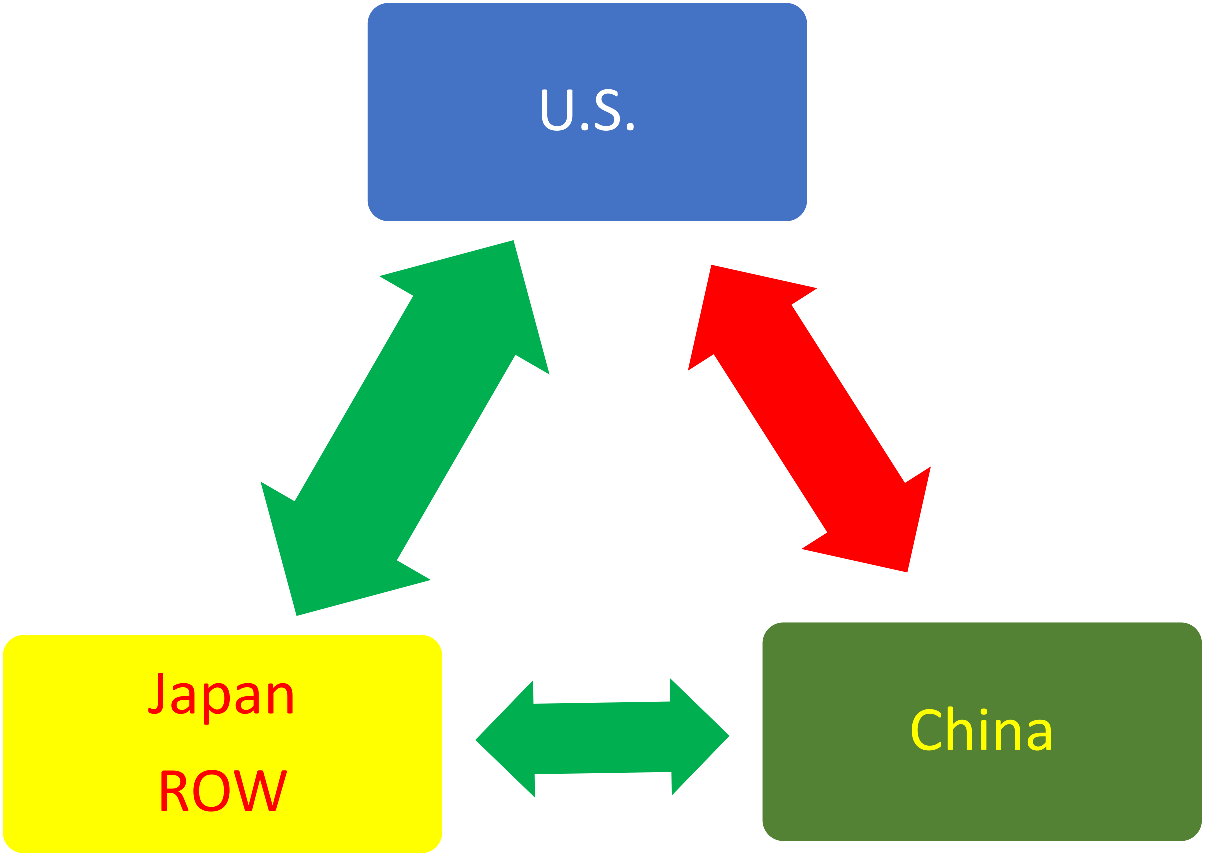
Market exposures to shocks in exports of electrical machinery and equipment (% total exports in each country)



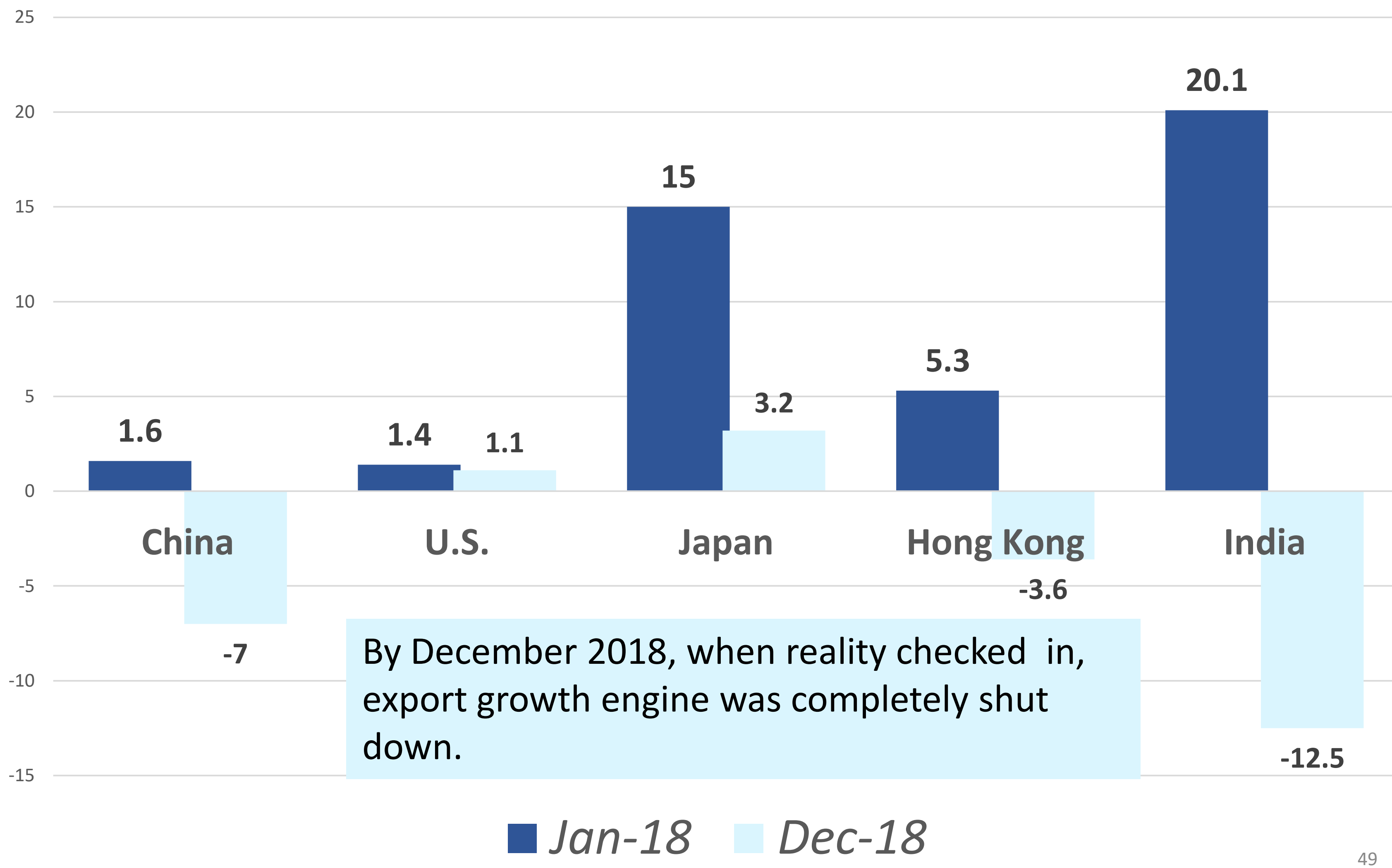
Thailand's export growth in 2018 was 6.7 %
(Quarter-on-quarter growth started declining)



Replacement effect depends on the substitutability and competitive advantage of Thailand's products in the American and Chinese markets



Thailand's export growth in major markets (2018)
January vs December (y-o-y)



By December 2018, when reality checked in, export growth engine was completely shut down.

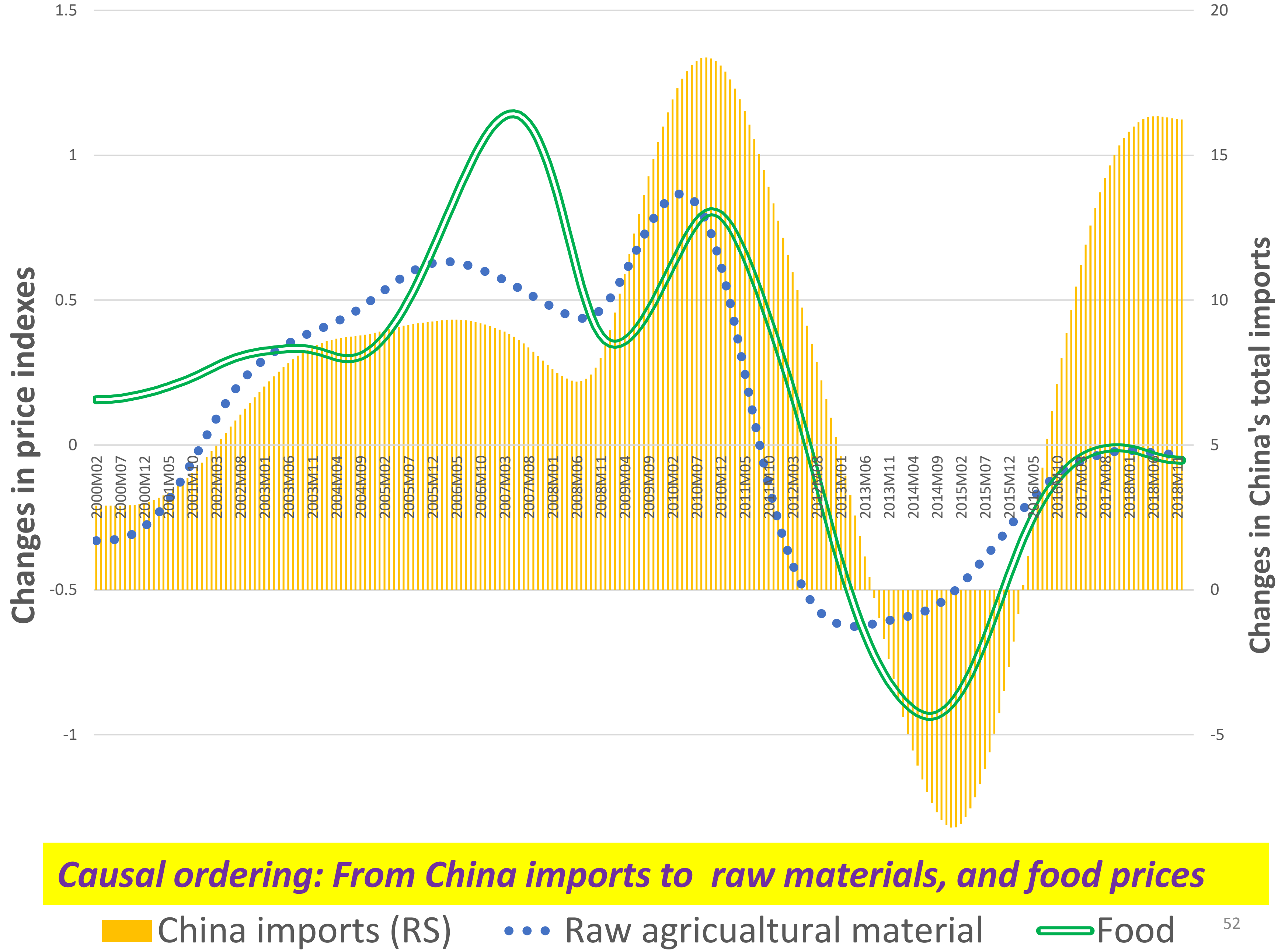
The Trump tariffs and wider impacts

- Some of the Trump tariffs could remain even after the conclusion of the trade deal between the U.S. and China (Ratchet effect)
- The chicken tax of 25% on light trucks imposed in 1964 still remains until today and it has shielded the U.S. car manufacturers from imports of one-ton pickup trucks from Thailand.
- The slowdown in the U.S. economy delays the Fed’s interest normalization policy, causing capital inflows and appreciation of the baht and regional currencies

Indirect impact of the trade war

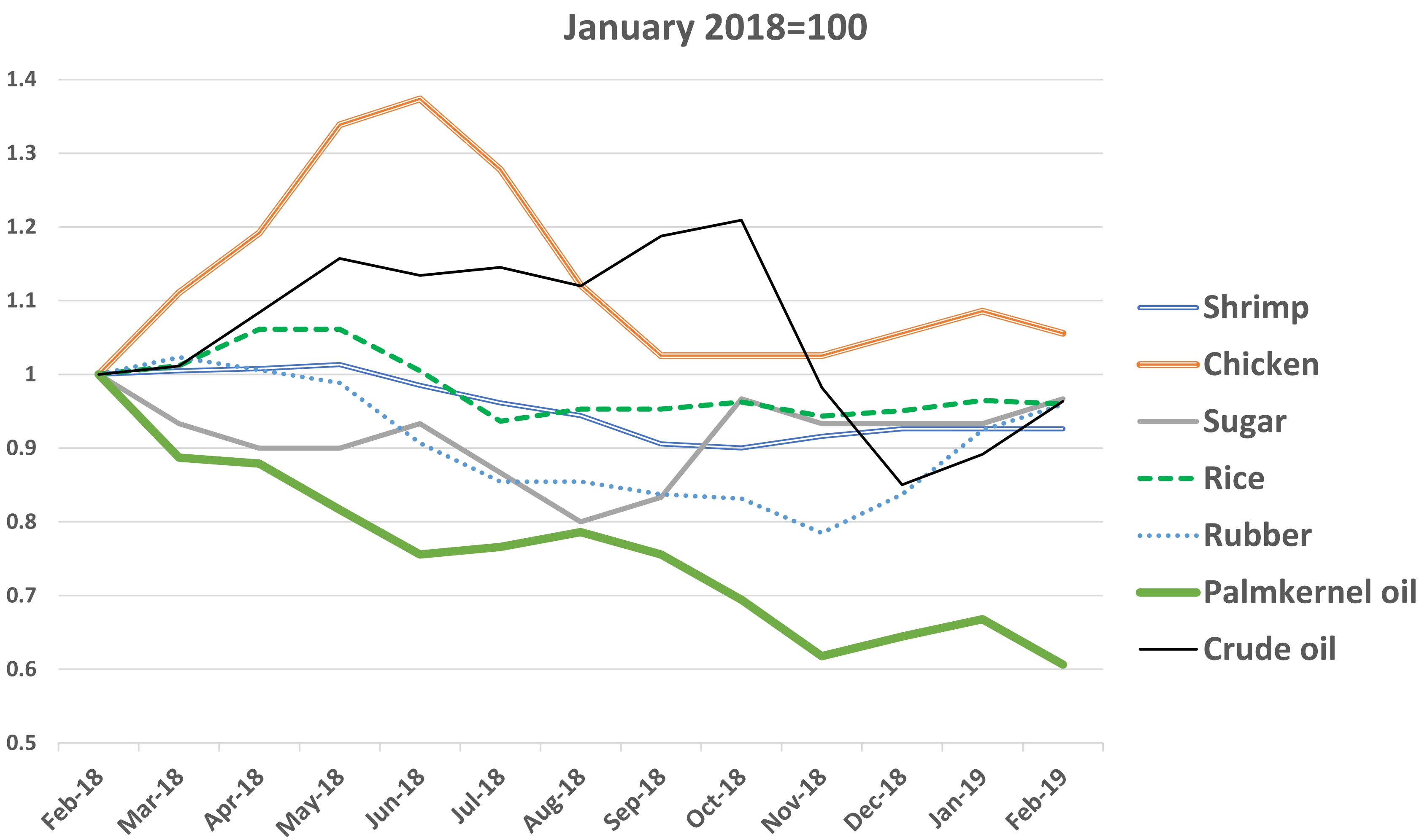
- The trade war dampens consumer confidence and depress investor sentiment, exacerbating the slowdown of the global growth.
- If stock markets falls because of the bad news from trade disputes, the wealth effect would further reduce private spending.
- Due to a significant slowdown in China growth, *commodity prices fall*, decelerates the speed of poverty reduction and complicates income distribution issues.

Changes in trends of commodity price indexes and China's total imports



Causal ordering: From China imports to raw materials, and food prices

Declining world commodity prices



Source: Mudi Index

Palm kernel is a close substitute to soybeans

Negative output effect is stronger than Thailand's ability to replace the fallout from American and Chinese exports products

- According to the estimated income and the real effective exchange rate elasticities, the negative impacts of the trade war on shrinking world trade volume outweigh the positive substitution effects on Thailand's exports.
- The latter effect depends on ***Thailand's ability to compete successfully*** in the United States and Chinese markets.
- When considering the output and substitution effects among different export markets, *the trade war hurts countries that raise trade barriers more than hurting their trading partners.*

- The third parties (e.g., Thailand) caught in the middle of the trade war are affected by decelerating global growth and experience an economic downturn.
- There is also a negative terms of trade effect on commodity prices, which are influenced by China’s declining demand for commodities.
- A full-blown trade war between the United States and China would immediately generate a negative impact on Thailand’s output growth.
- The adverse effect will be long-lasting.

Negative indirect impacts

- The indirect impact of Trump’s tariffs is on the global slowdown, particularly in Thailand’s major trading partners.
- The negative effect on output is stronger than the positive diversion effect that might occur from substitution effects.
- Thailand’s GDP contracts, because of a slowdown in economic activities in the United States, China, and Japan.

Profound negative indirect impacts

- The negative impact on Thailand's GDP will be even higher if we incorporate the negative effect of slackening global demand, which crimps on consumer and investor confidence.
- China's economic slowdown translates into lower demand for commodities.
- The result in declining commodity prices further complicates poverty eradication and might retard long-term growth of the economy because capital spending is curtailed for the sake of agricultural subsidies.

Potential benefits from relocation of FDI

- There is also a long-term impact on output and exports in Southeast Asian emerging economies that might benefit from the relocation of production networks from China by the United States and Chinese companies.
- The effect will be permanent as it will change the structure of value chains of manufacturing productions.
- Because ASEAN economies have a different degree of vulnerability to trade shocks, **the relative recessionary impact of the trade war would hinge on the individual country's international trade exposure as well as domestic policy responses.**

Concluding remarks

- The baht real effective exchange rate moves in line with the renminbi and other ASEAN real effective exchange rates.
- The policy implication is that stimulus policy packages of China can ameliorate the contractionary effect of the trade war.
- The People's Bank of China and the U.S. Federal Reserve have already implemented monetary policy stimulus. China's fiscal policy became more expansionary in 2019.
- Unless China maintains high growth and currency appreciation, the U.S.–China trade disputes will remain for many years to come.

Conclusions

- The indirect impact of the Trump tariffs is on the global slowdown, particularly in Thailand's major trading partners.
- The *negative effect on output is stronger* than the diversion effect that might occur from substitution and diversion effects.
- Thailand's GDP responds positively to output expansion in the US, China, and Japan.
- The negative impact on GDP will be higher if we incorporate the negative impact of global growth deceleration on consumer confidence and investor sentiment on aggregate spending.

Concluding remarks

- The policy implication is that stimulus policy packages of these large economies can ameliorate the contractionary effect of the trade war.
- Unless these economies sustain high growth, other countries in the region will also experience growth slowdown.
- Since ASEAN economies have a different degree of vulnerability to trade shocks, the relative contractional impact of the trade war would hinge on the individual country's international *trade exposure as well as domestic policy responses*.