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

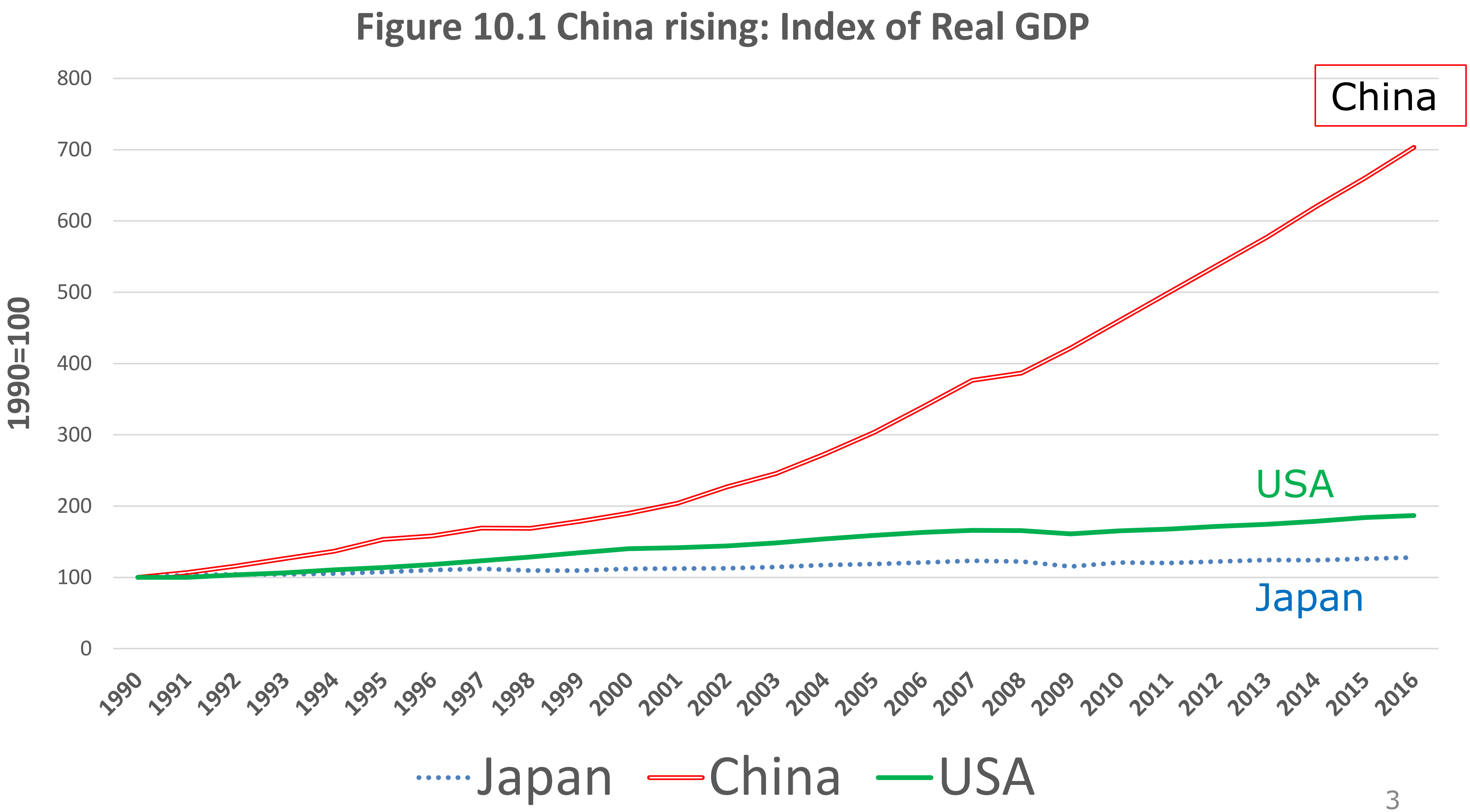
Bhanupong: Lecture 21

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

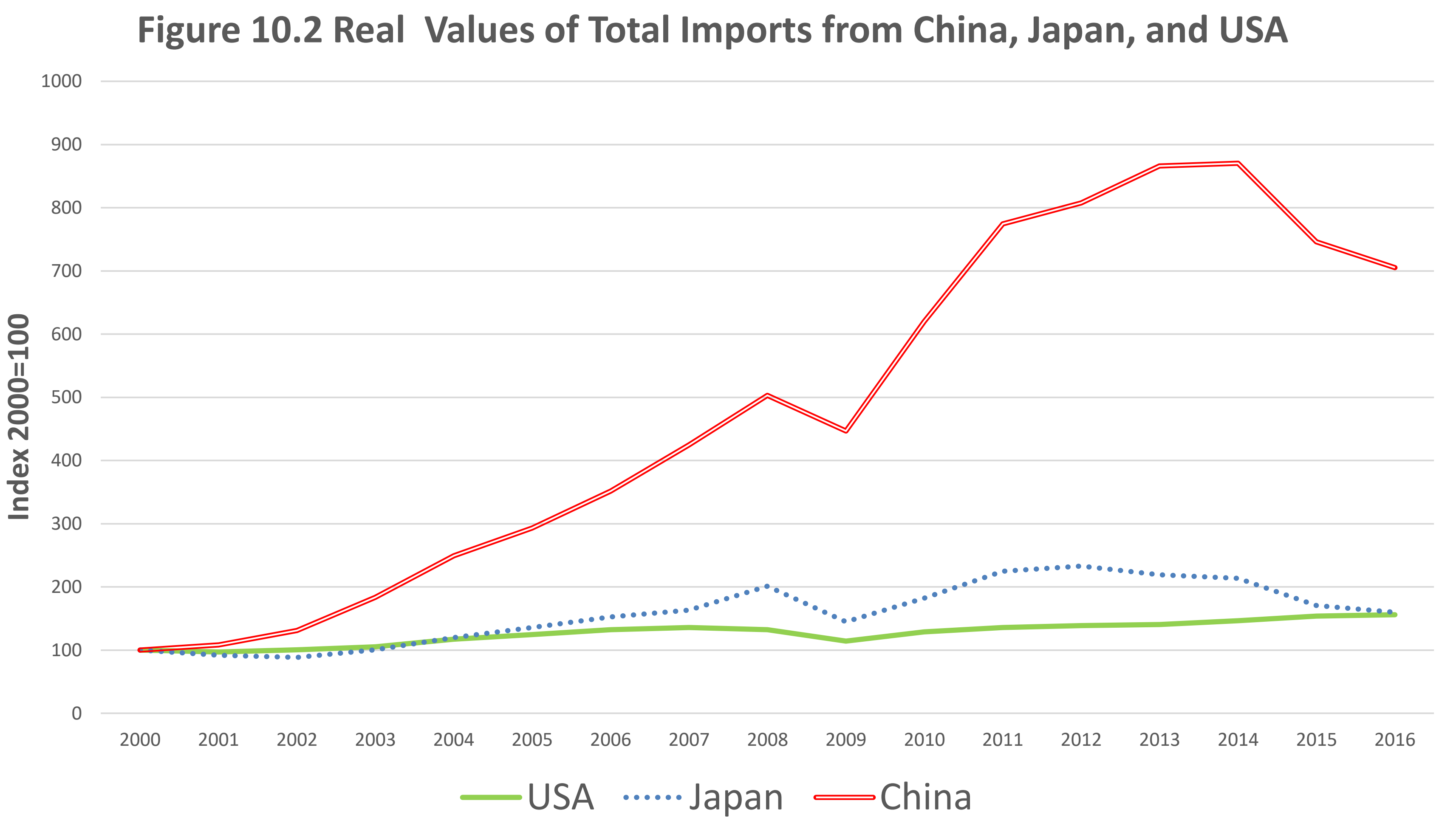


Figure 10.3 China's influence on Thailand's exports

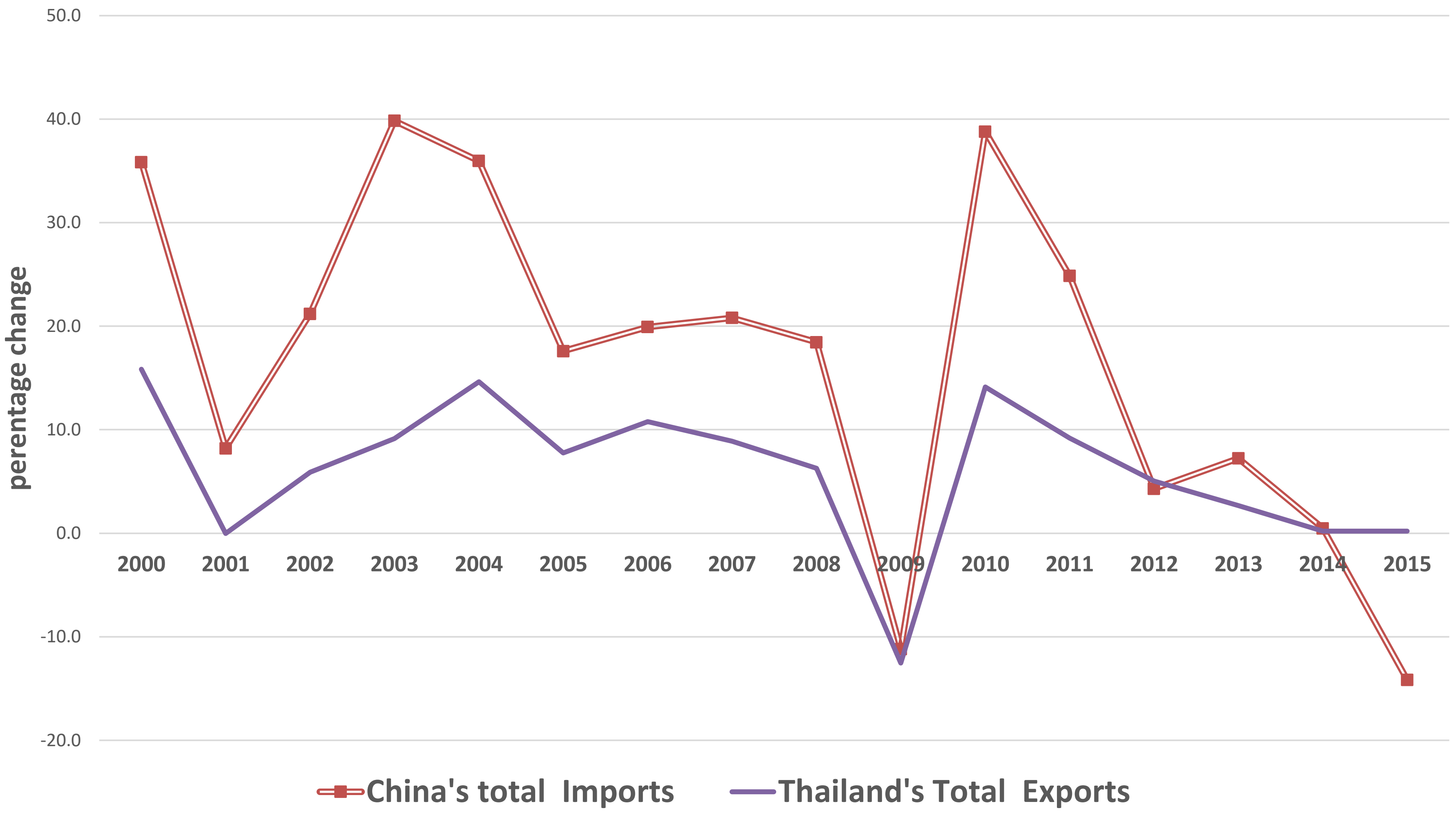
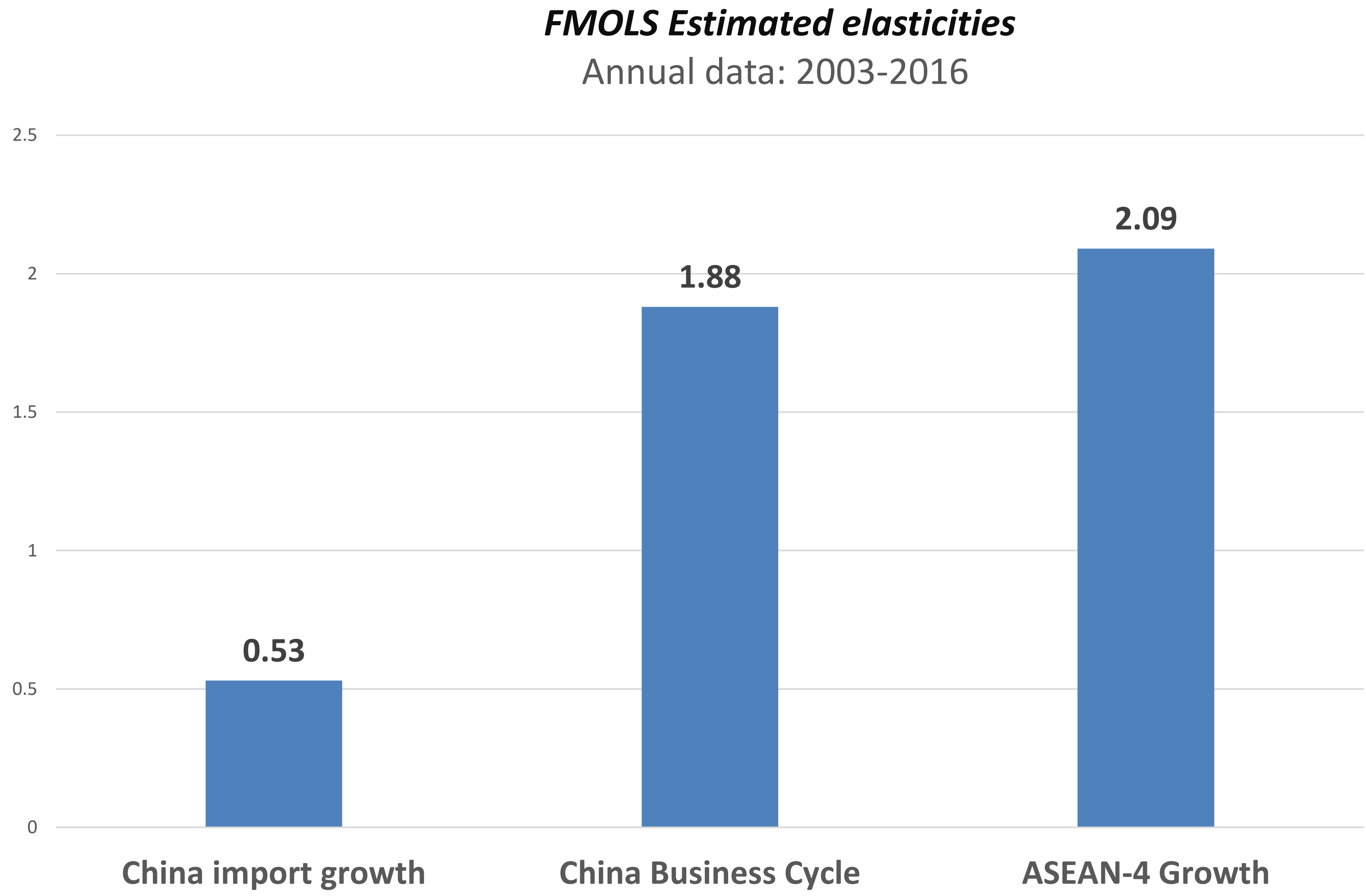


Figure 10.4 Impacts on Thailand's export growth

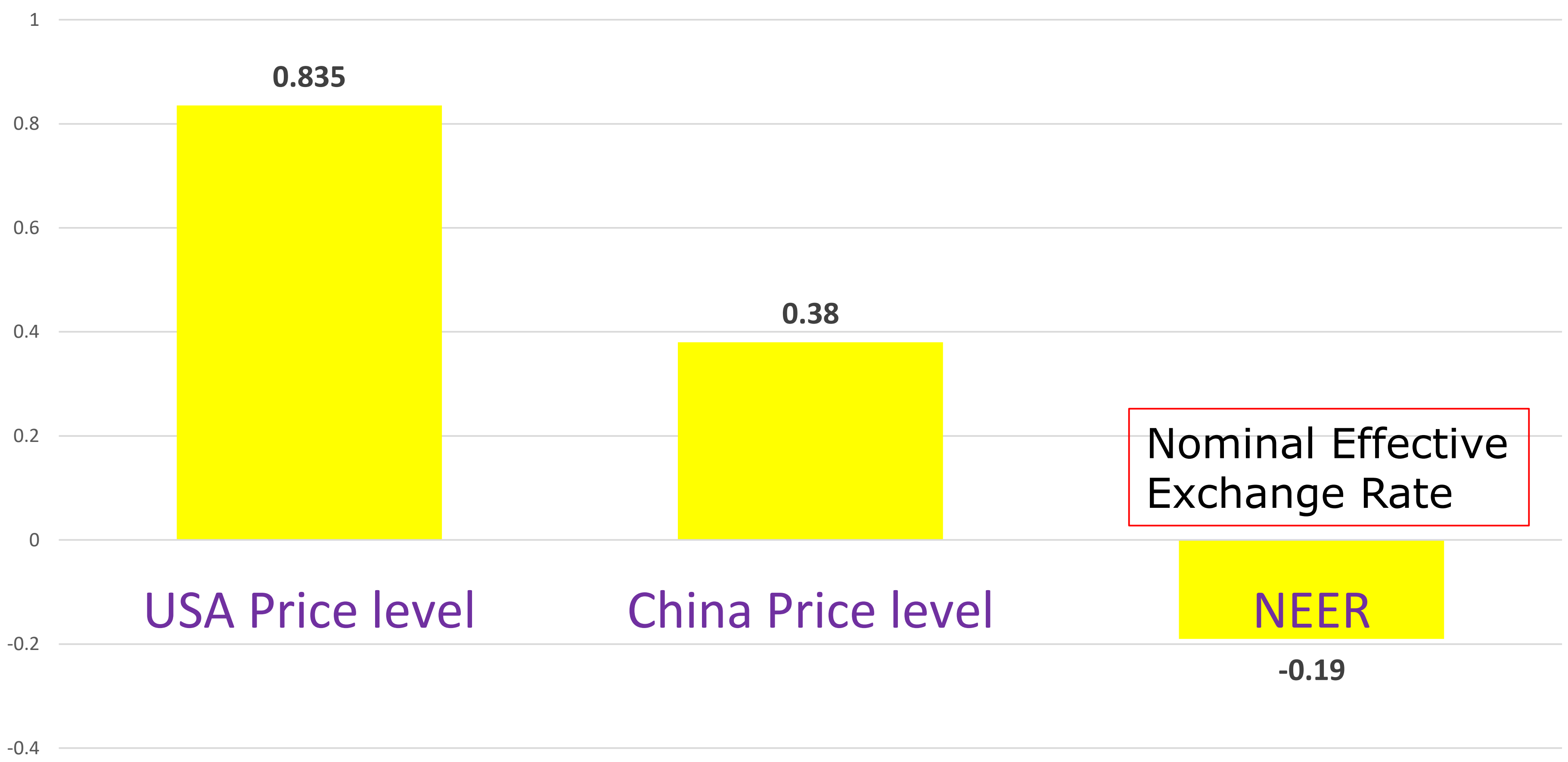


Implication from the estimated elasticities

- 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

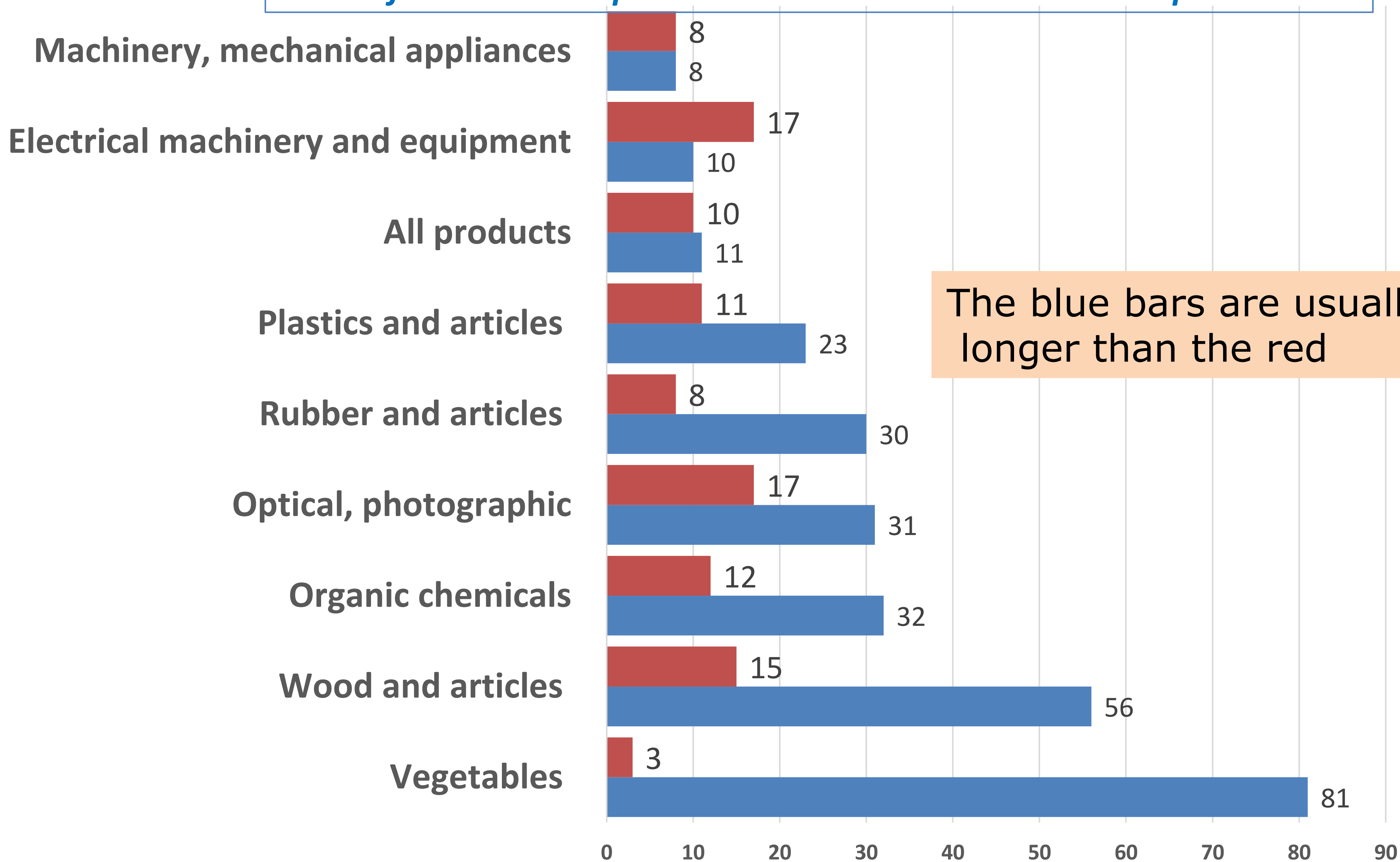
Source: Estimated coefficients
(Jan 1994 -May 2017)



China's influence on Thailand's exports: 2016

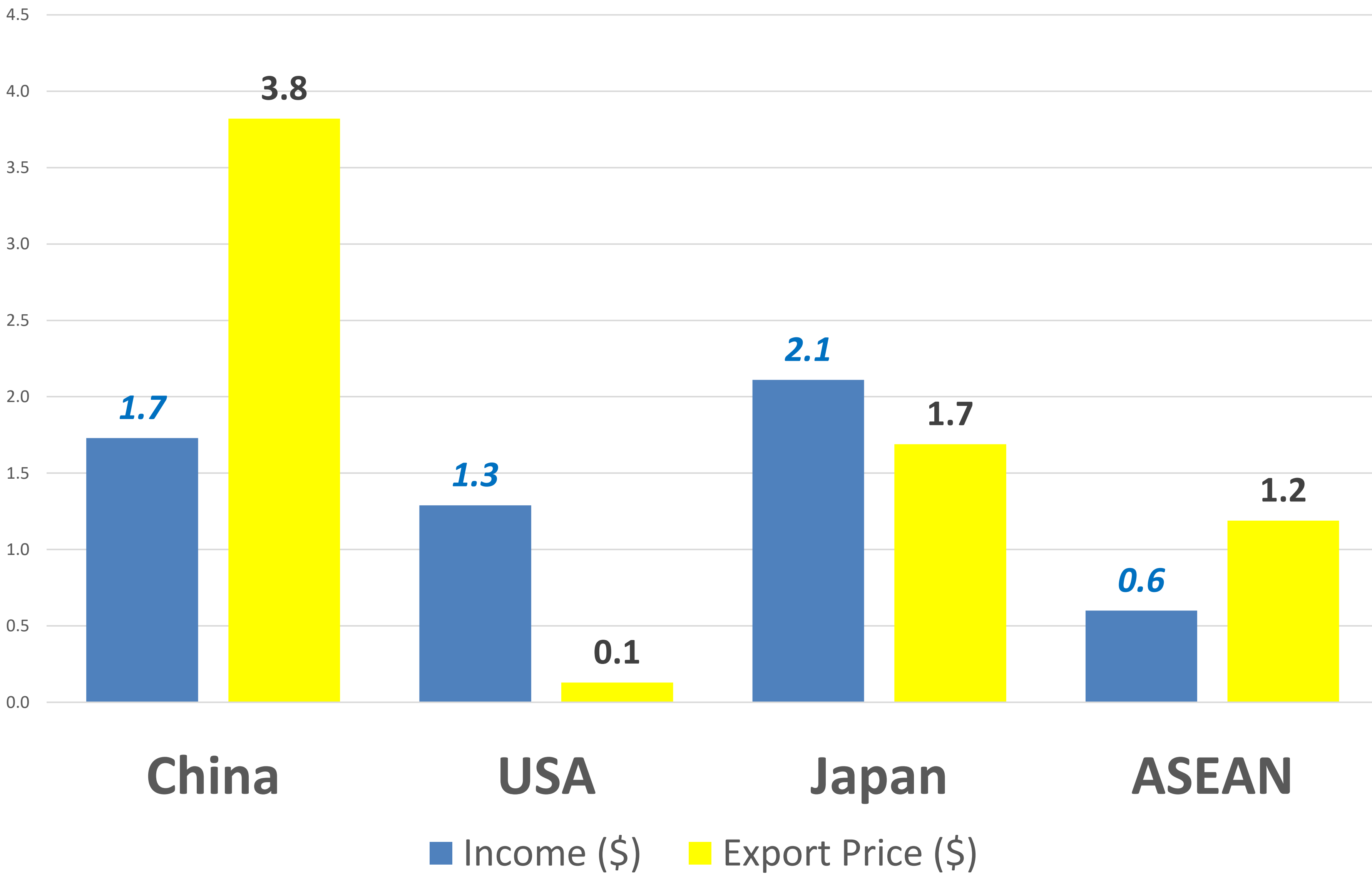
Share of Thailand's exports in China's total Imports

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

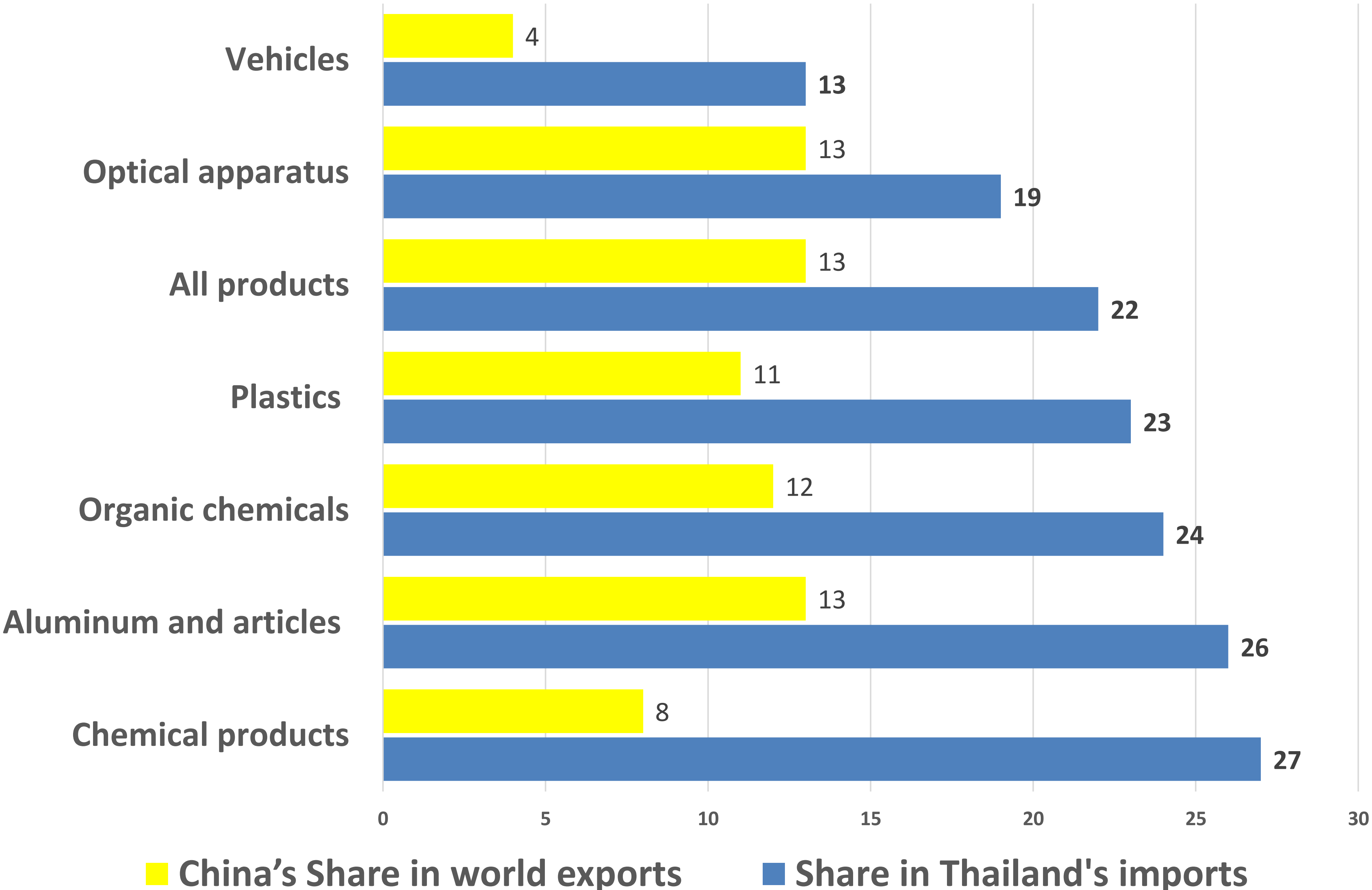


The blue bars are usually longer than the red

Thailand's ***exports value*** elasticities
Source: FMOLS (2003-2016)



China's influence on Thailand's imports: 2016



Thailand's ***import value elasticities***: 2002-2016
Source: FMOLS estimates

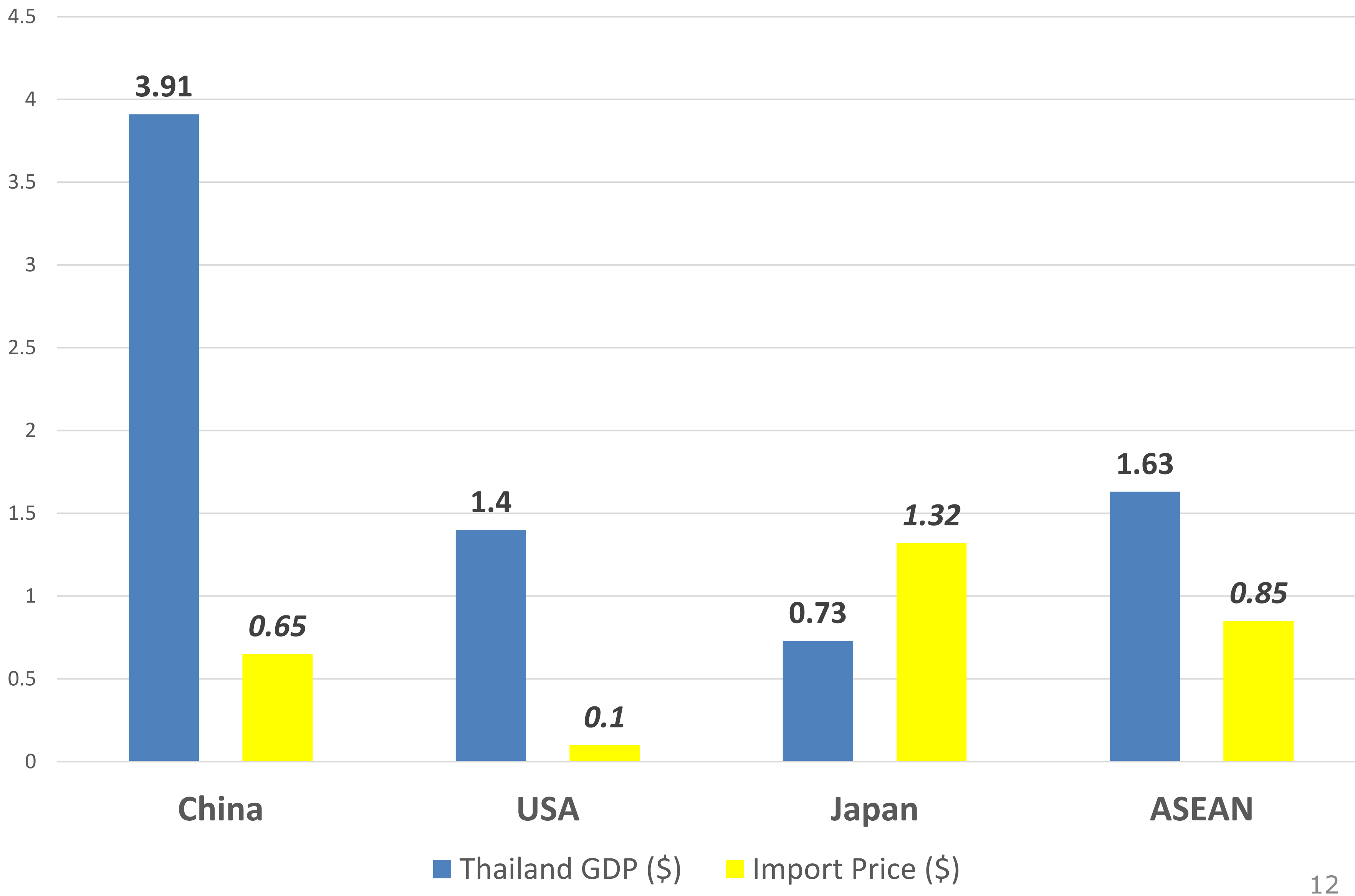
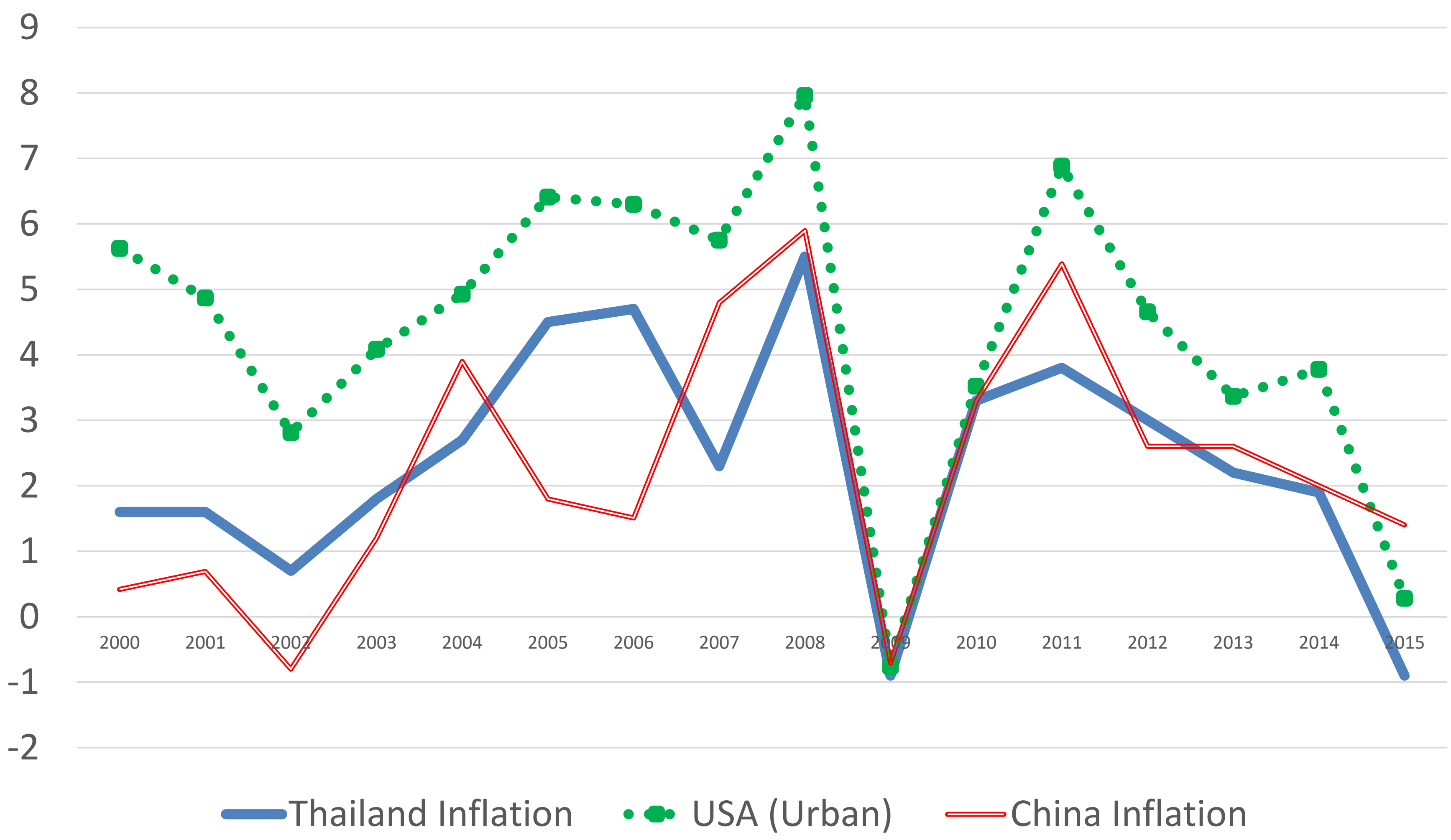
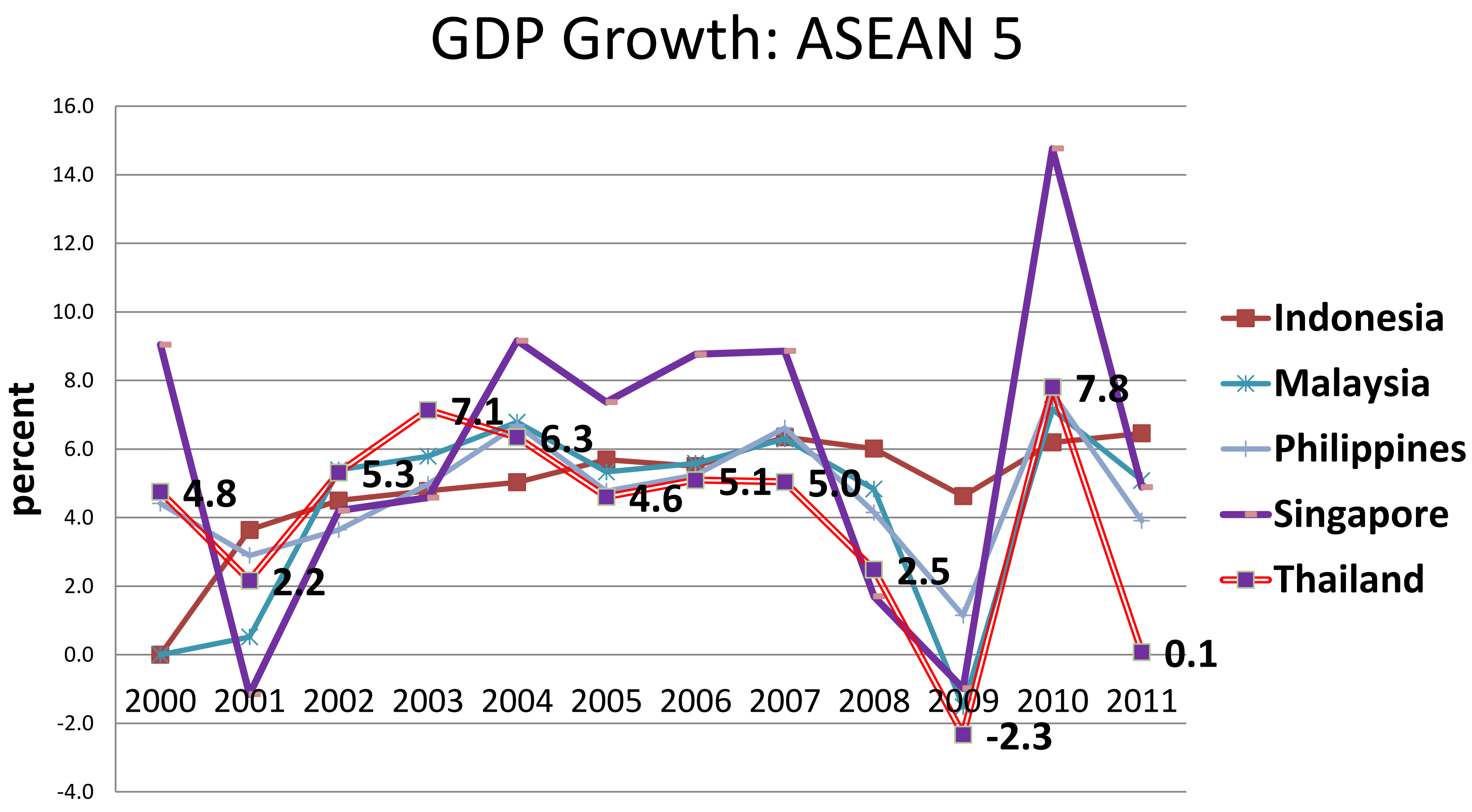


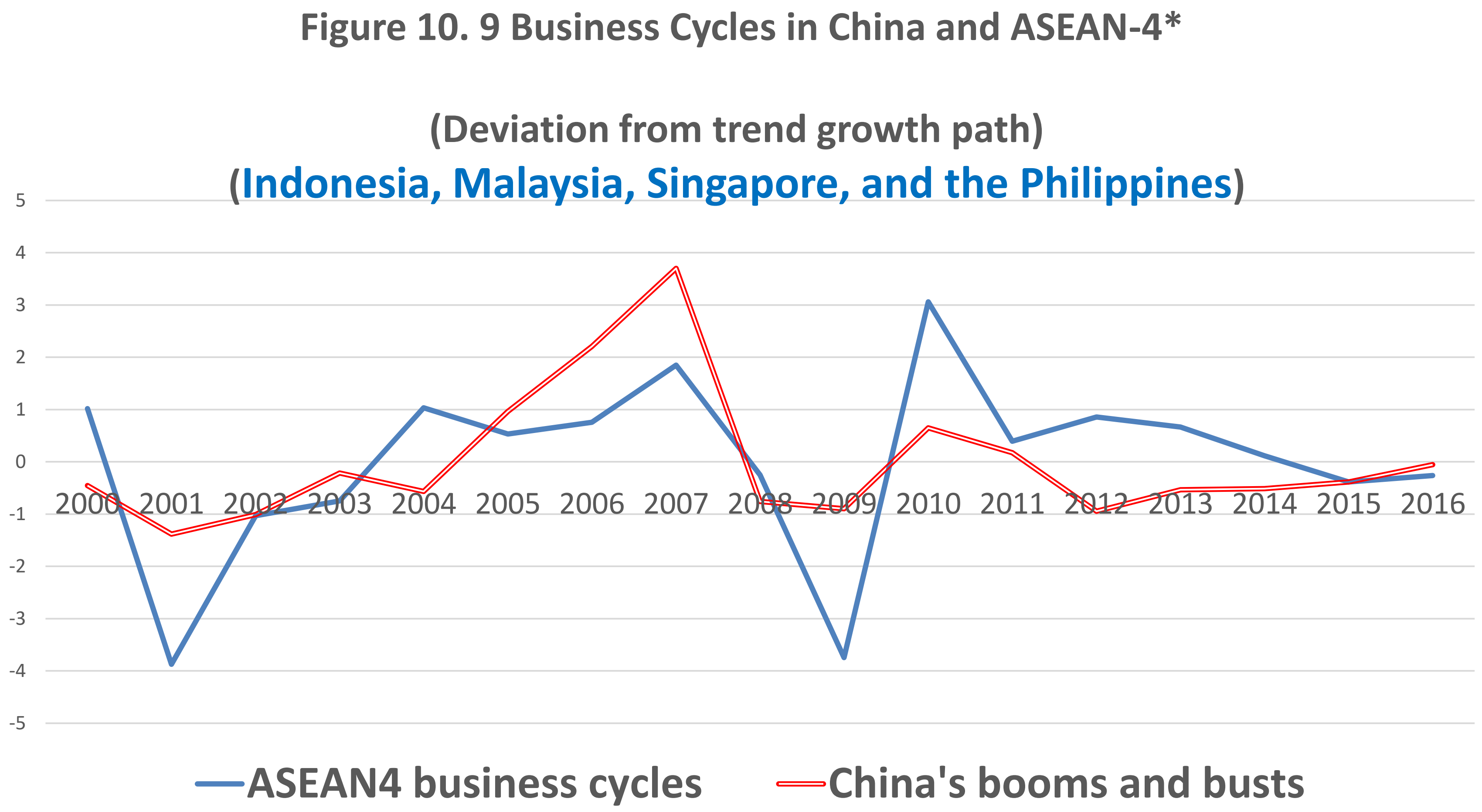
Figure 10.7 External influences on Thailand's inflation
Source: Federal Reserve Bank



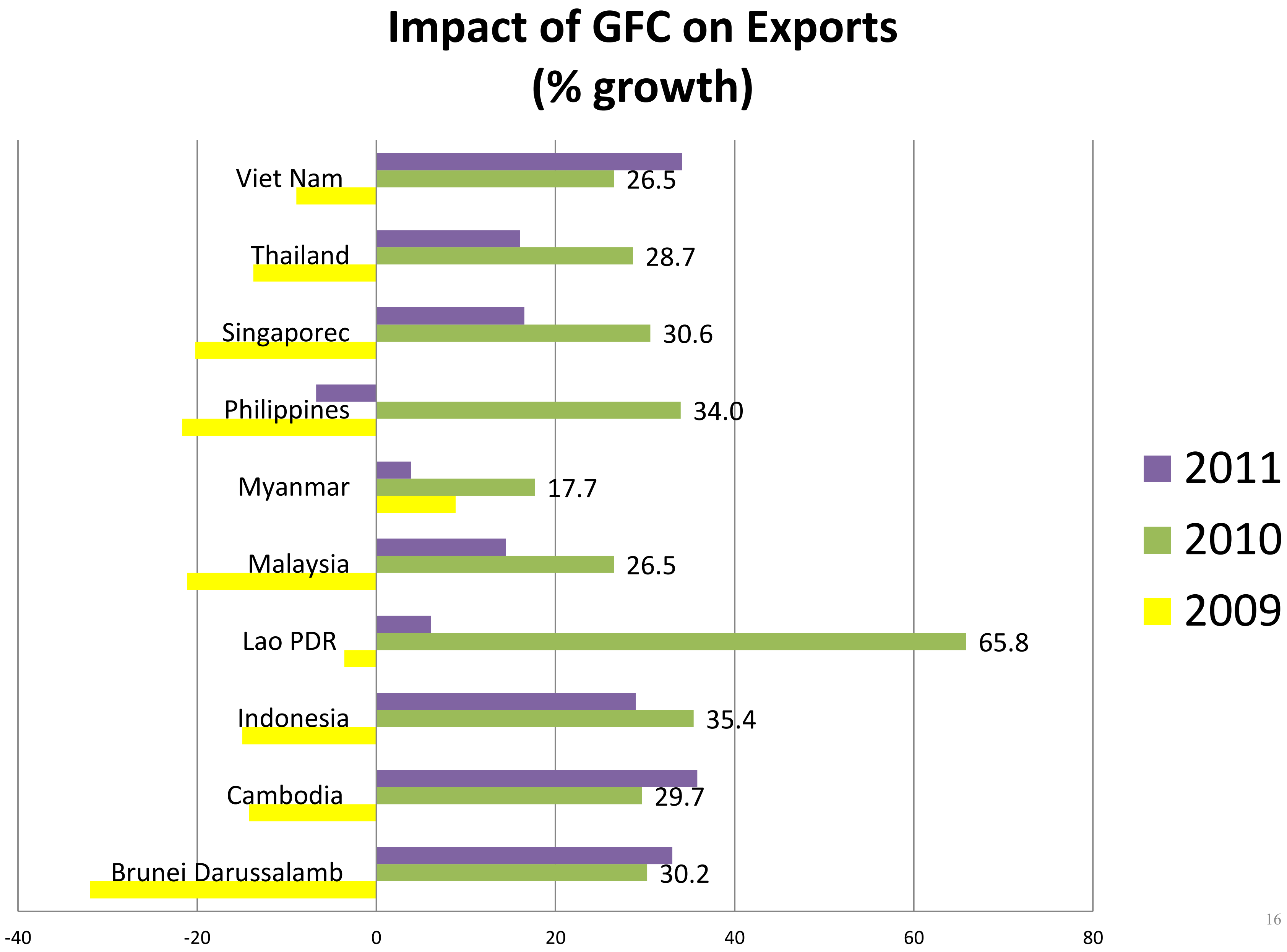
2. ASEAN Business Synchronization



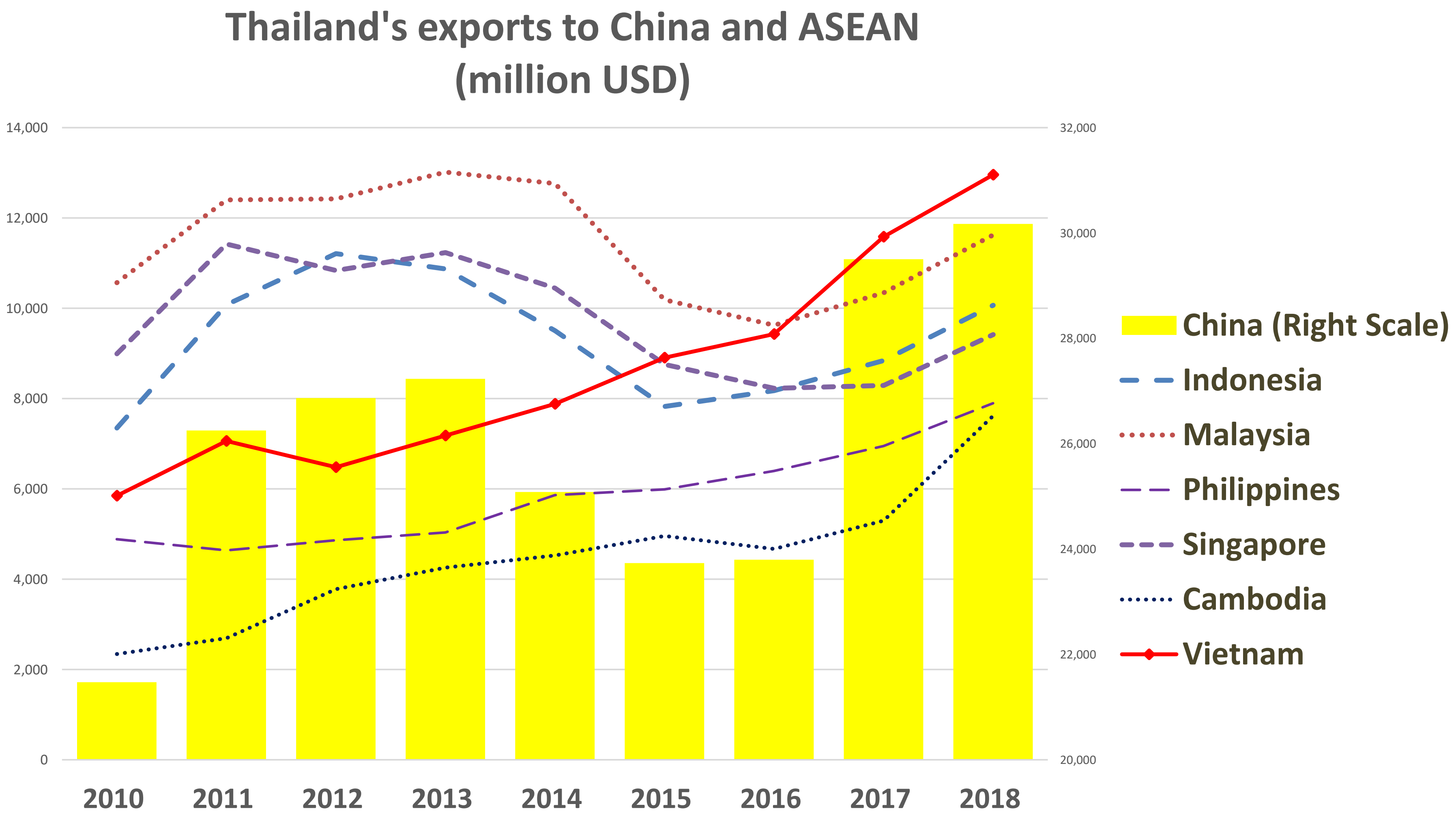
China and ASEAN-4 Business Cycle



What did ASEAN Exports have in common after the GFC?

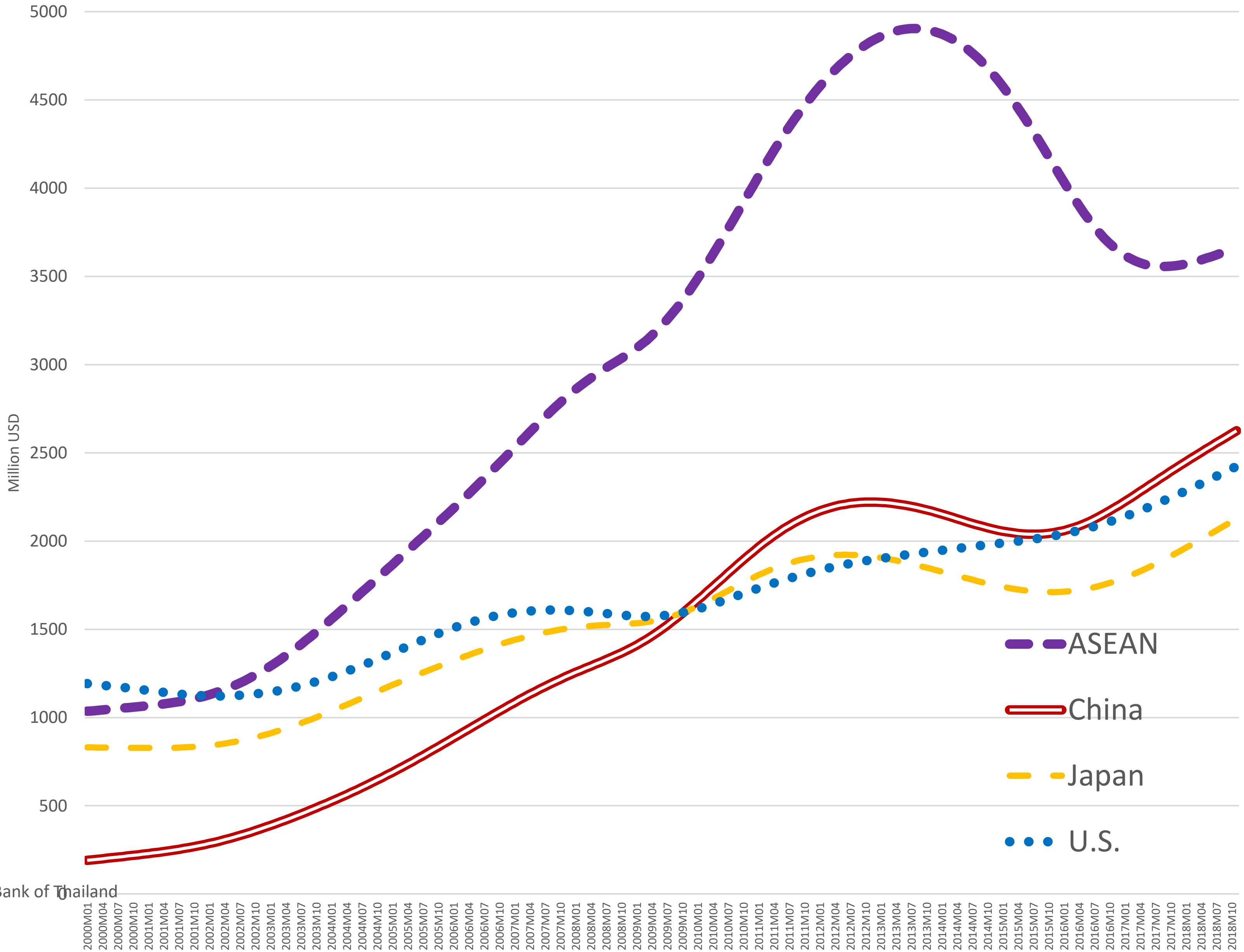


Thailand's exports synchronize with China's business Cycle



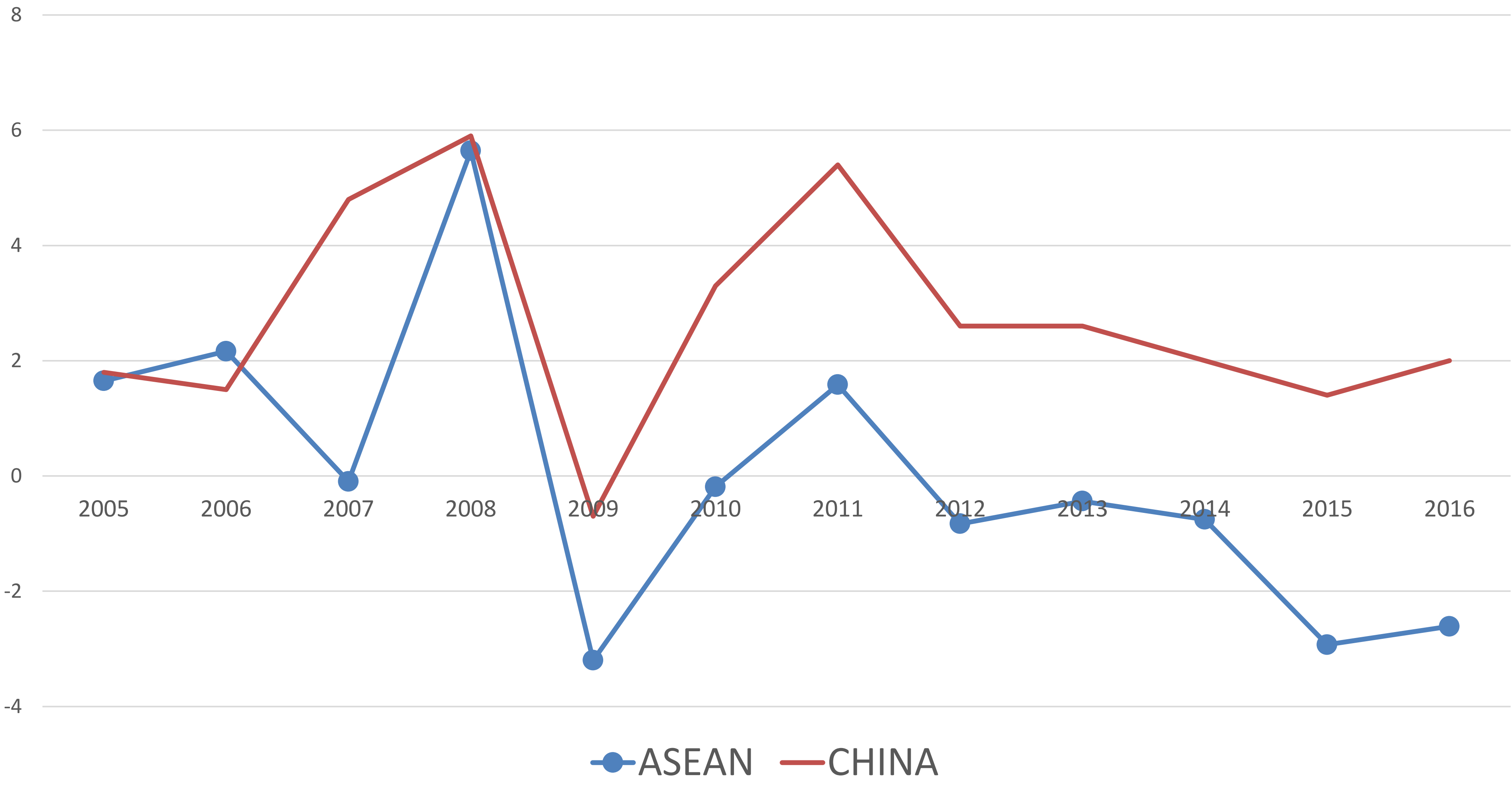
Source: Bank of Thailand

Trends of Thailand's exports to major markets
The importance of ASEAN markets



Source: 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.

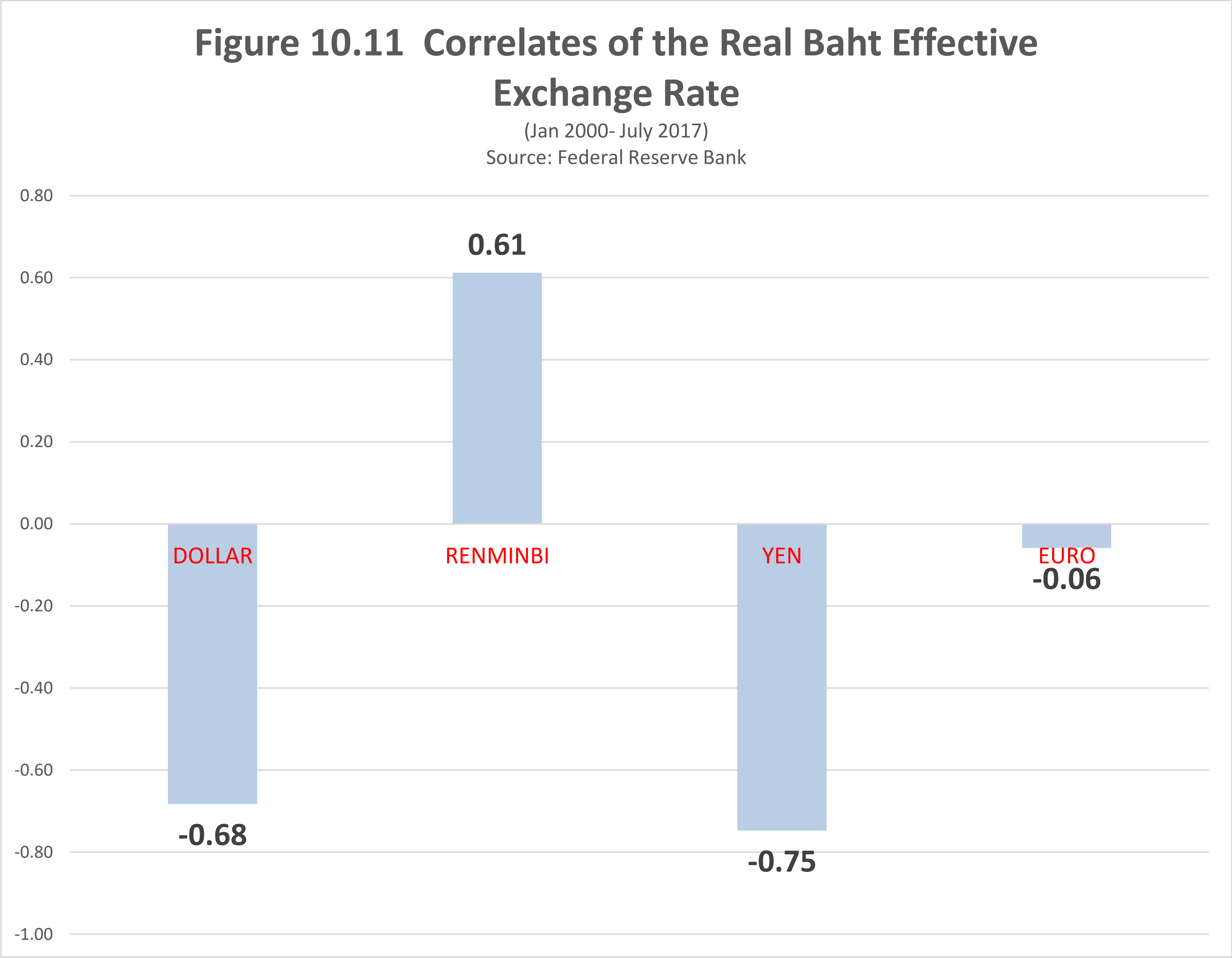
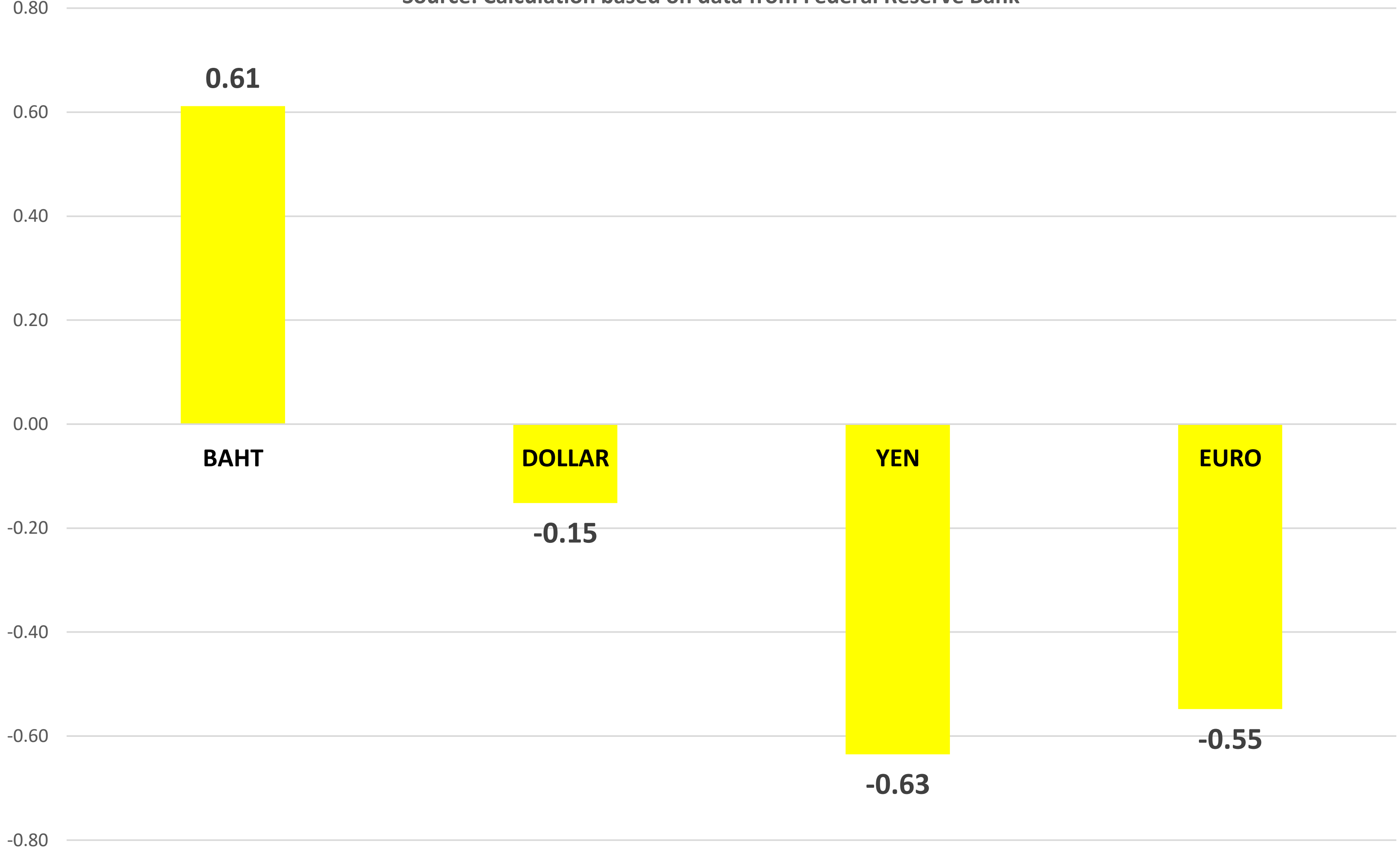


Figure 10.11 Correlates of the Real Baht Effective Exchange Rate
(Jan 2000- July 2017)
Source: Federal Reserve Bank
0.80
0.60
0.40
0.20
0.00
-0.20
-0.40
-0.60
-0.80
-1.00
0.61
DOLLAR
RENMINBI
YEN
EURO
-0.06
-0.68
-0.75

Figure 10.12. Correlates of the nominal renminbi

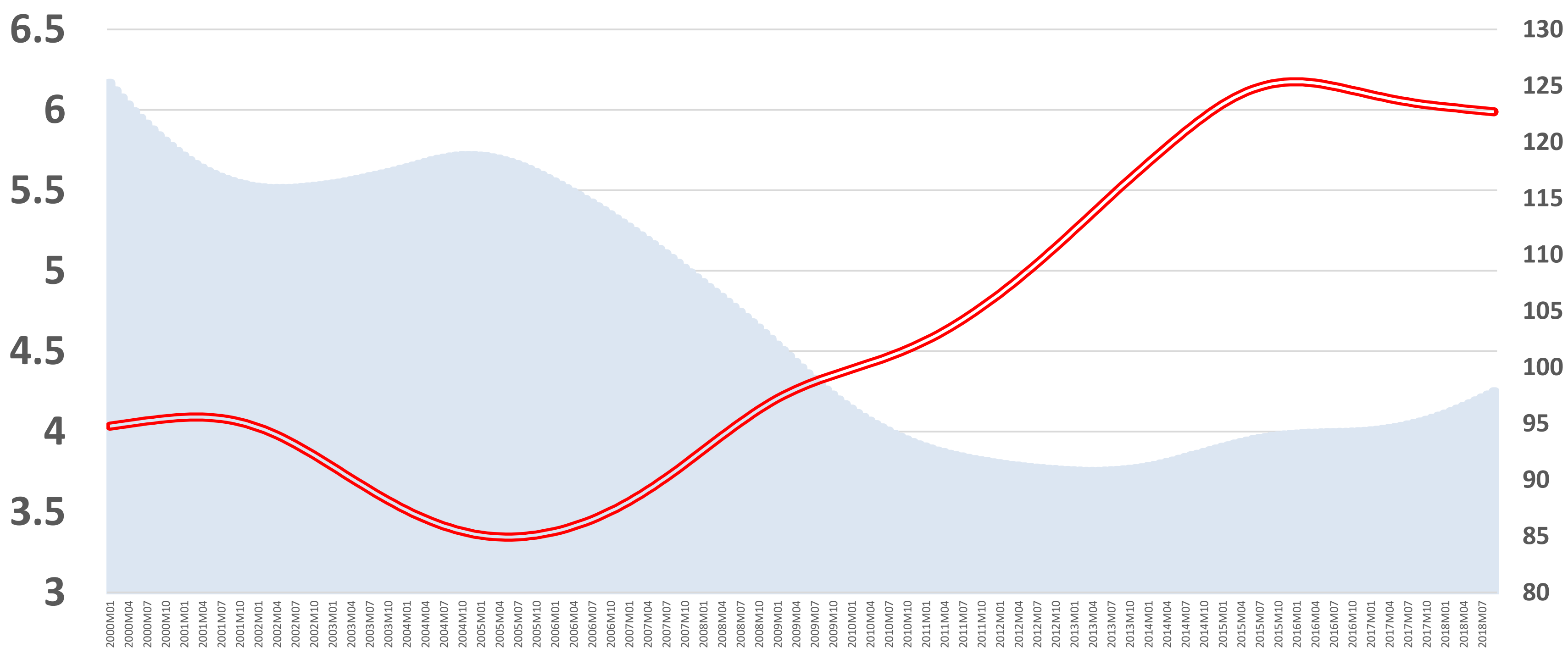
(Jan 2000-July 2017)

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

$$(M - X) = (I-S) + (G-T)$$

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

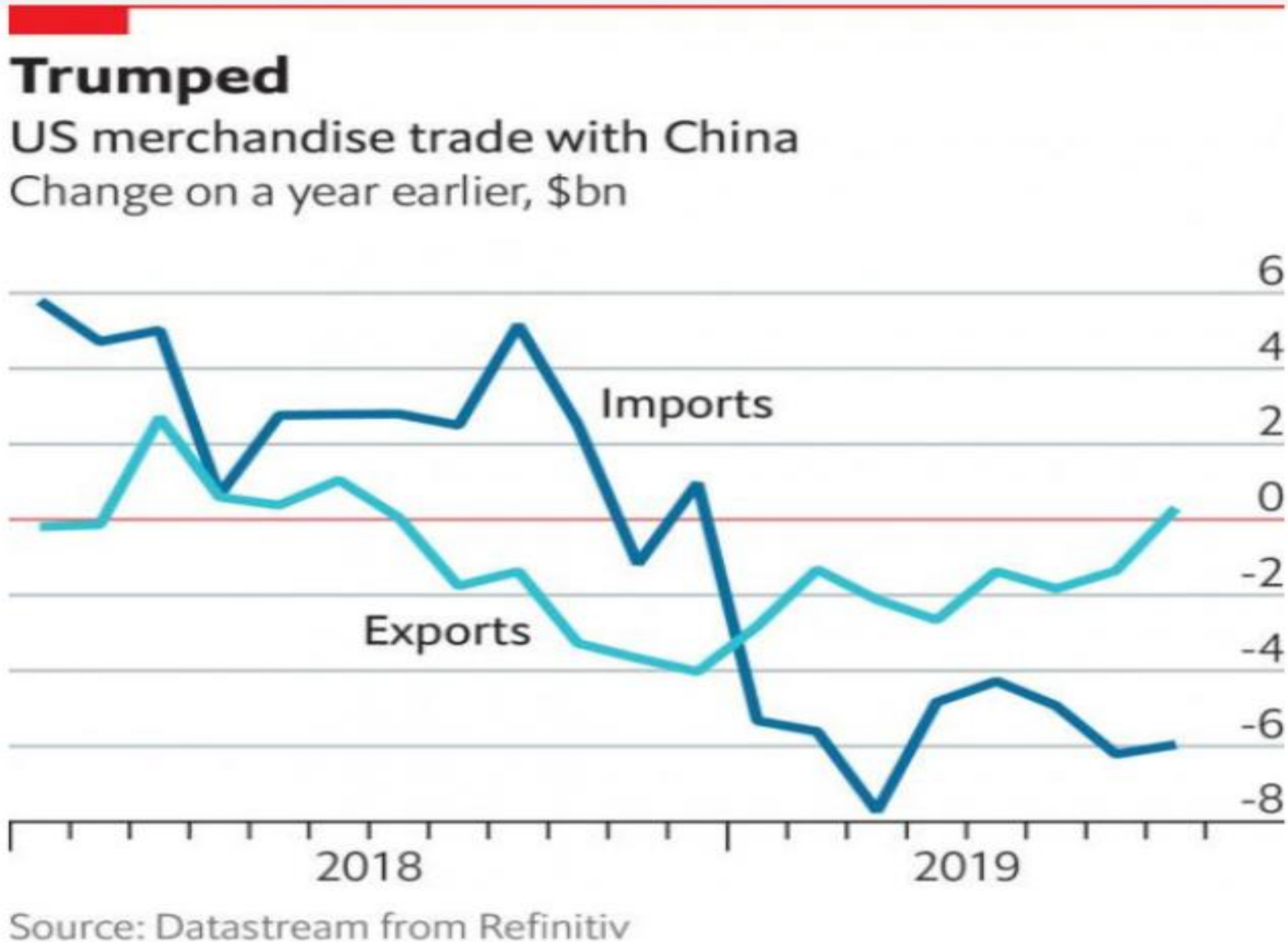
For China to cut down trade surplus with the U.S., private and public saving must fall: higher domestic consumption (Higher absorption)

Chinese government's actions

- 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, in turn, 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.


Trumped
US merchandise trade with China
Change on a year earlier, $bn
6
4
2
0
-2
-4
-6
-8
Imports
Exports
2018
2019
Source: Datastream from Refinitiv

Is China a currency manipulator?
The weakening yuan will not help rebalancing

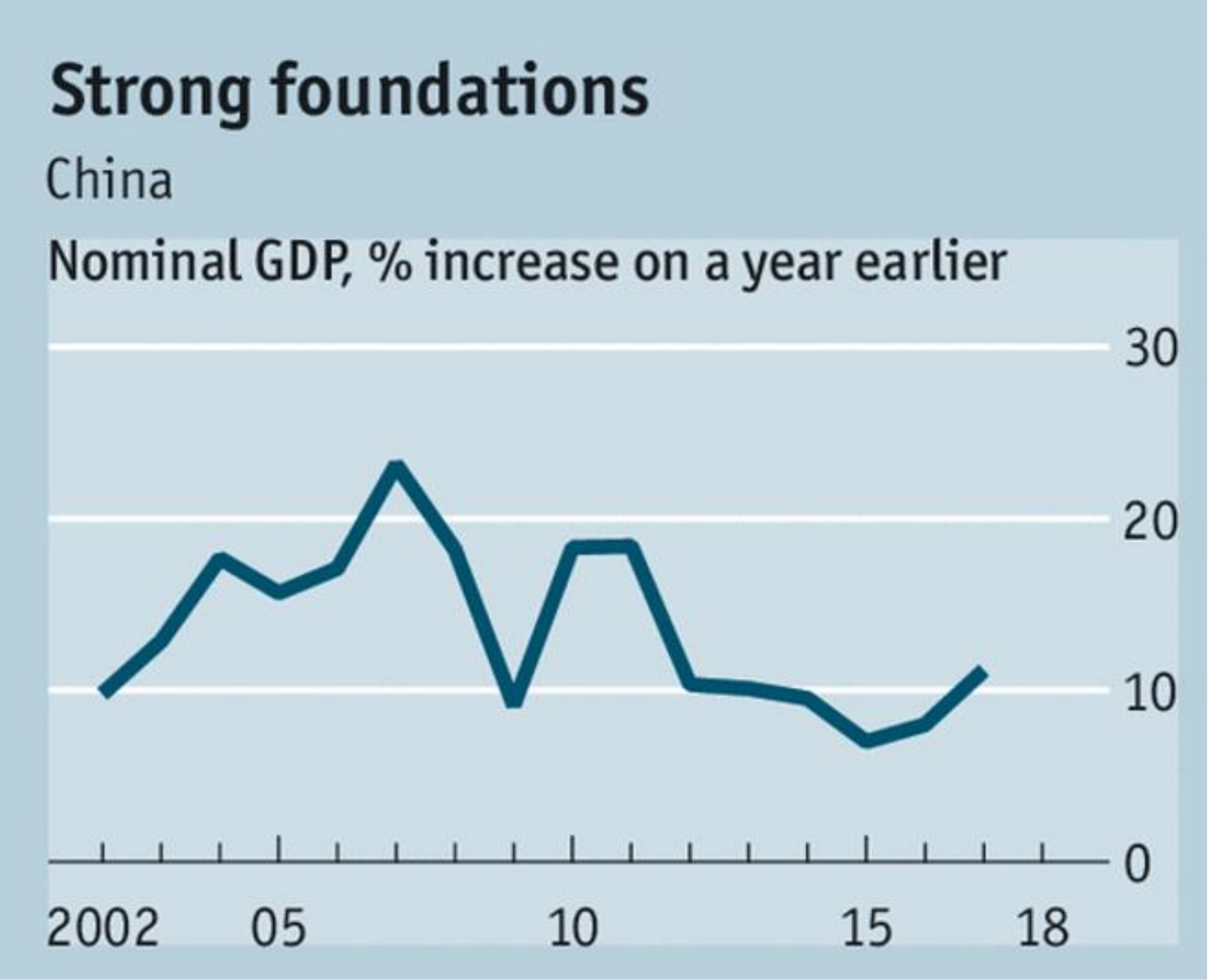
4. U.S.-China Trade War Tariffs, 2018

Table I: Key Dates in U.S.-China 2018 Tariff Implementation under Section 301 Case

EFFECTIVE DATE	ACTION	TARIFF DETAILS
ROUND 1: JULY 6, 2018	U.S. imposes 25% tariff on $34 billion in Chinese imports	Includes products identified as containing "industrially significant technology"
	China imposes 25% tariff on $34 billion in U.S. imports	Includes agricultural goods, autos and auto parts, and aquatic products
ROUND 2: AUGUST 23, 2018	U.S. imposes 25% tariff on $16 billion in Chinese imports	Includes products identified as benefiting from Chinese industrial policies including 'Made in China 2025'
	China imposes 25% tariff on $16 billion in U.S. imports	Includes chemical products, medical equipment, and energy products
ROUND 3: SEPTEMBER 24, 2018	U.S. imposes 10% tariff on $200 billion in Chinese imports	Wide range of goods including tobacco, chemicals, small manufactures
	China imposes 5-10% tariffs on $60 billion in U.S. imports	Includes agricultural, food, chemical, textile, metal, and electrical equipment products
ROUND 4: TO BE DETERMINED	U.S. threatened to raise the 10% tariff on $200 billion in Chinese imports to 25% if no agreement reached	Includes same product list at Round 3.

Source: U.S. Trade Representative's Office, Ministry of Commerce.

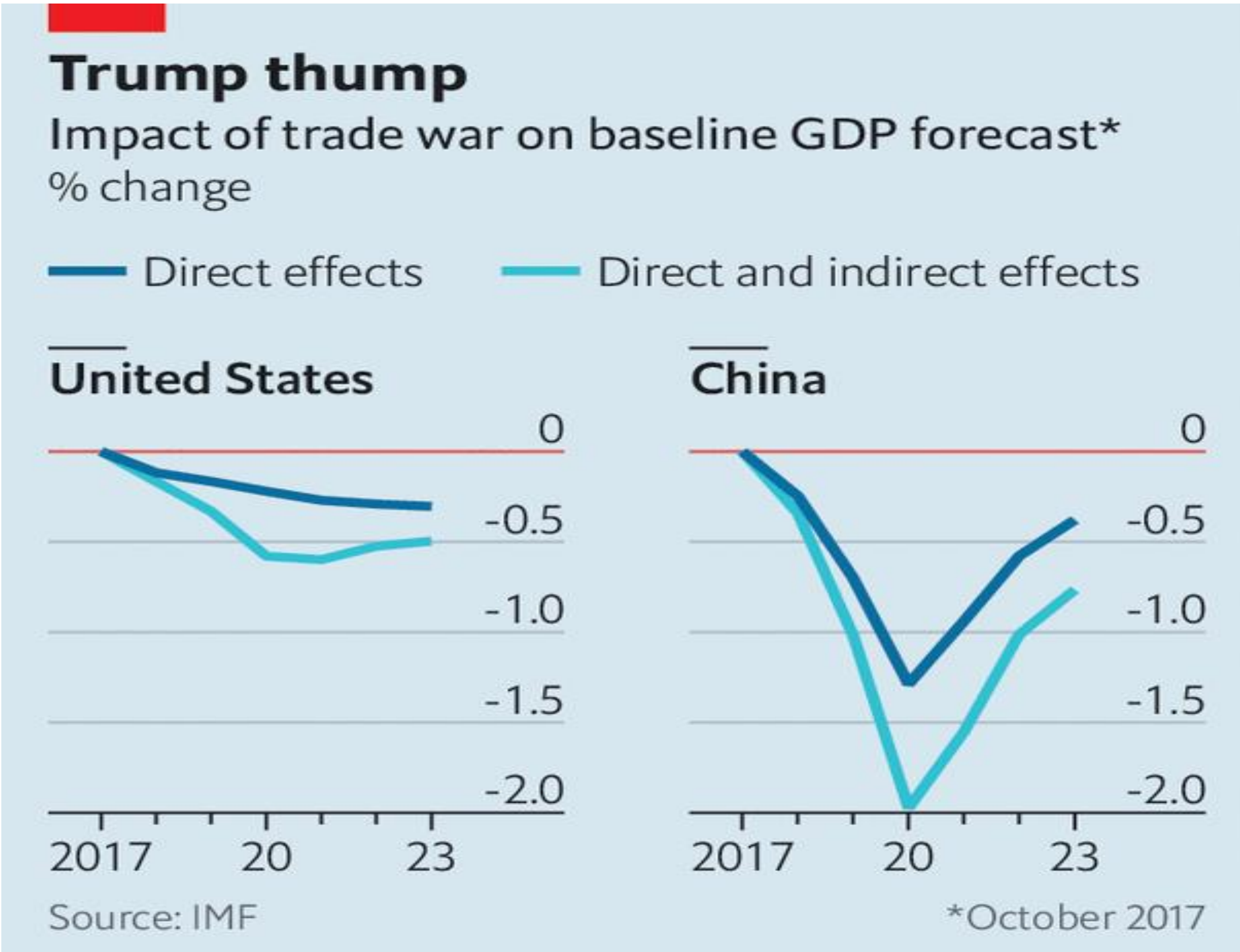
In normal time, China's growth was above 10%



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.

The damage to almost 0.6% of America’s GDP in 2020.
The damage to China would be almost 2% of its GDP.



The Economist

Foggy outlook

How the twists and turns of the trade war are hurting growth

The IMF: Unpredictability is a problem

- Not just higher tariffs but "prolonged trade-policy uncertainty" are damaging the world economy
- Manufacturing firms have become more cautious about long-range spending and have held back on equipment and machinery purchases
- The fog of trade war is depressing investment spending. And because machinery, equipment and other capital goods are often imported, weak investment spending is further hurting trade.
- The IMF now expects the world economy to expand by just 3% this year, compared with 3.6% last year.
- That would be the slowest rate in the decade since the global financial crisis.

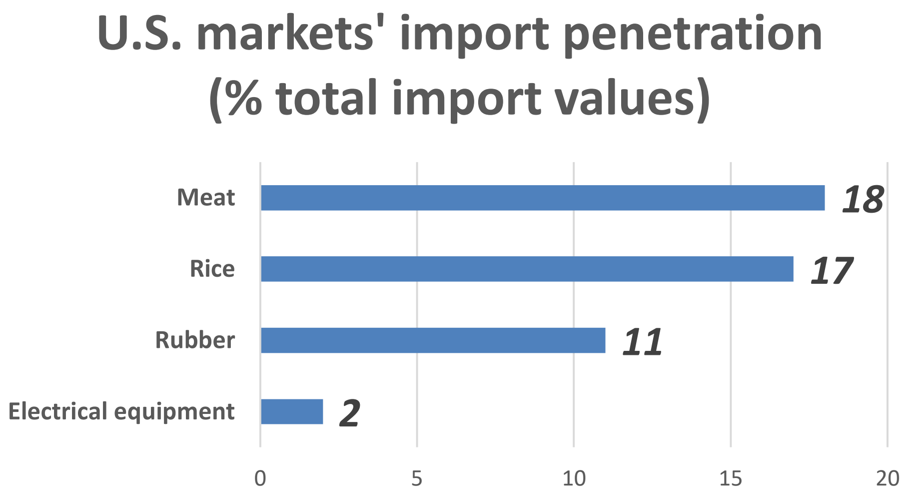
5. Impacts of the trade war on Thailand

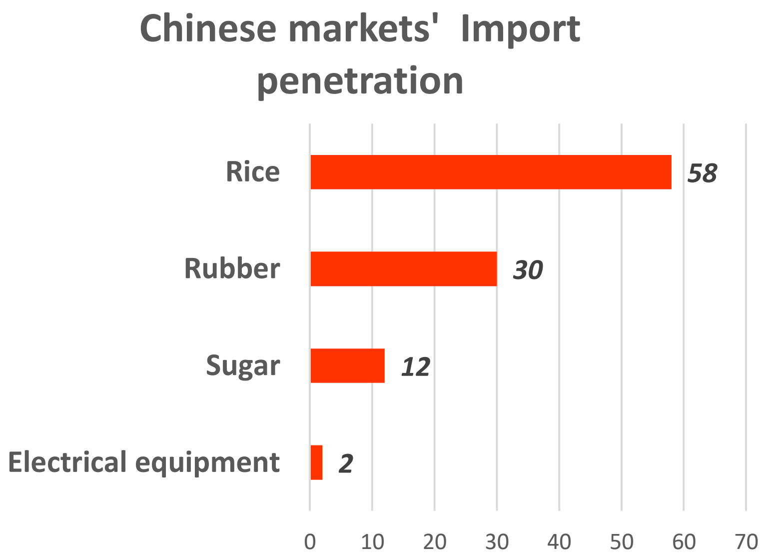
Impacts of the U.S.–China Trade War on ASEAN: Case of Thailand

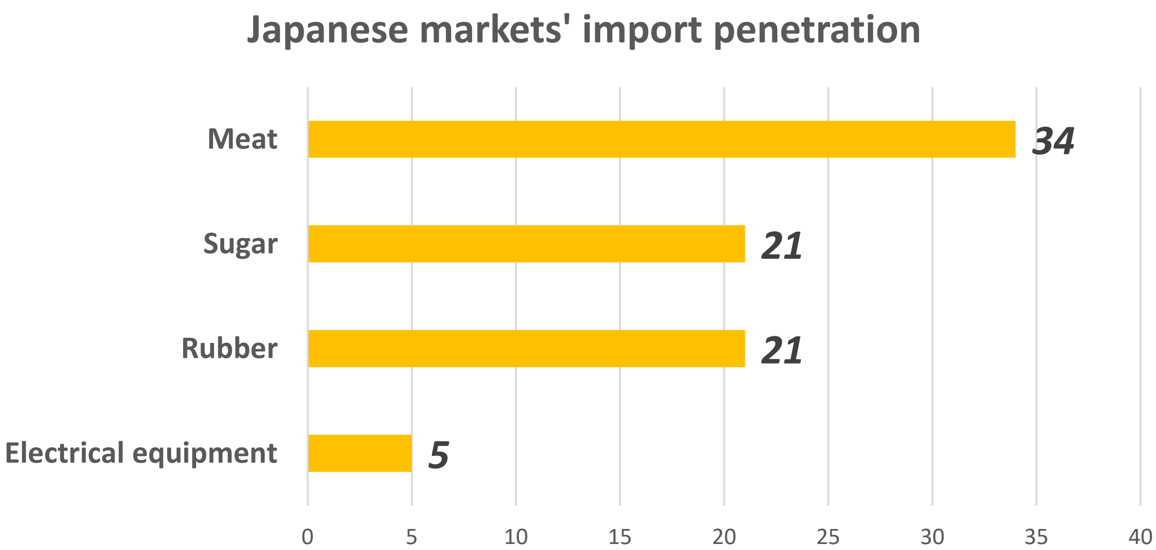
Bhanupong Nidhiprabha
Faculty of Economics
Thammasat University
2 Prachan Road, Bangkok 10200
Thailand
bhanupong@econ.tu.ac.th

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 access to the three largest economies





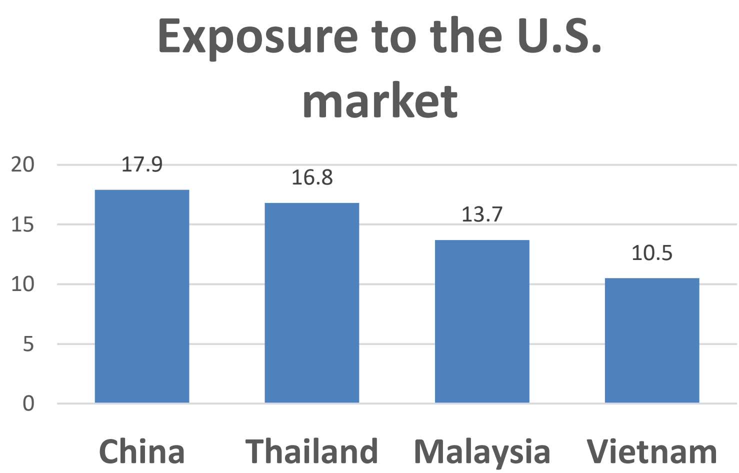


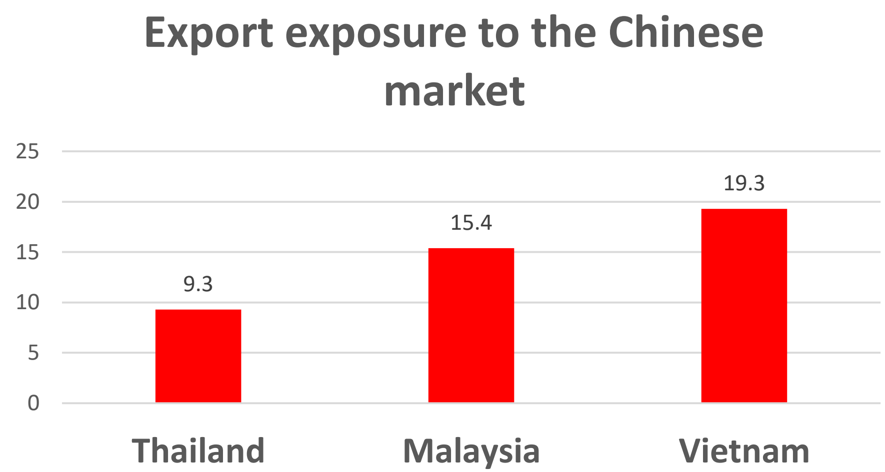
The importance of being Unimportant:
inelastic import demand

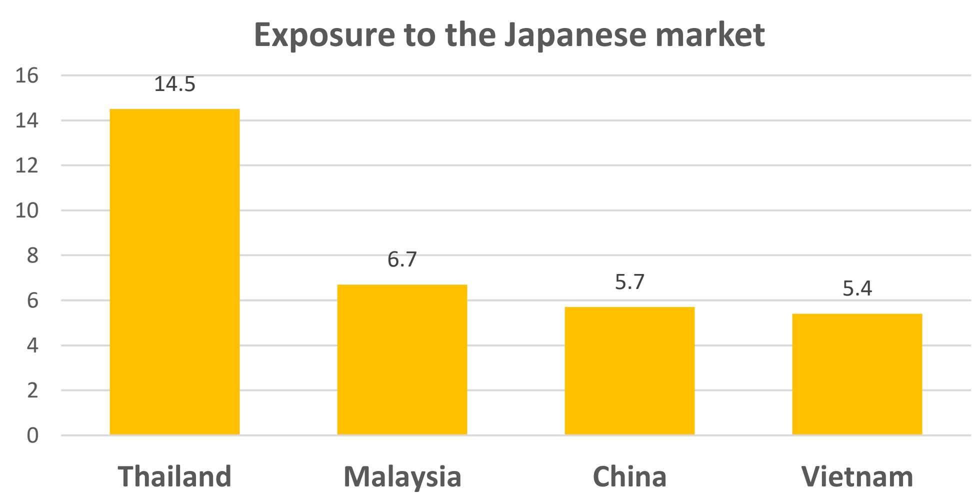
Long-lasting consequences

- 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.

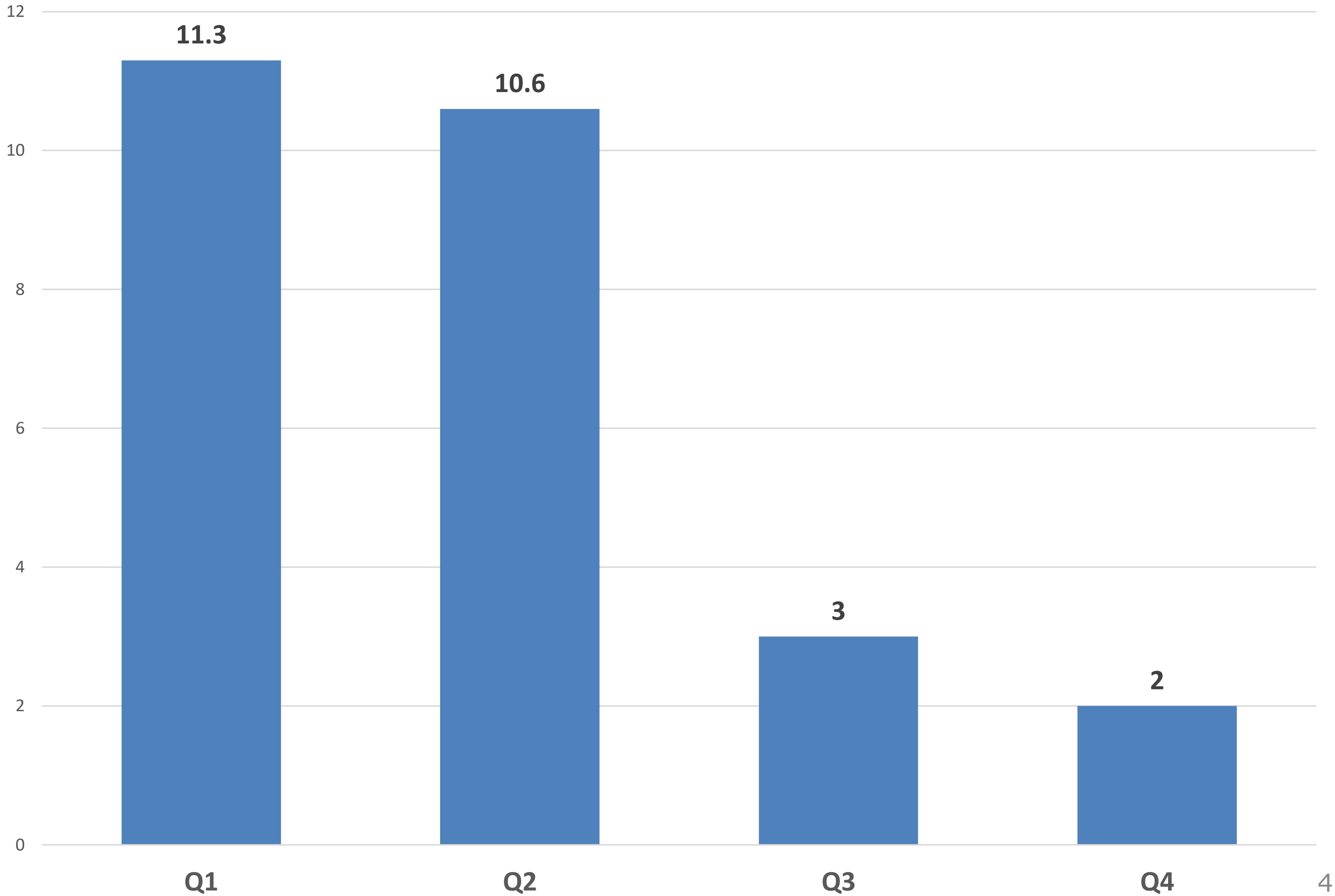
Market exposures to shocks in exports of electrical machinery and equipment (% total exports in each country)



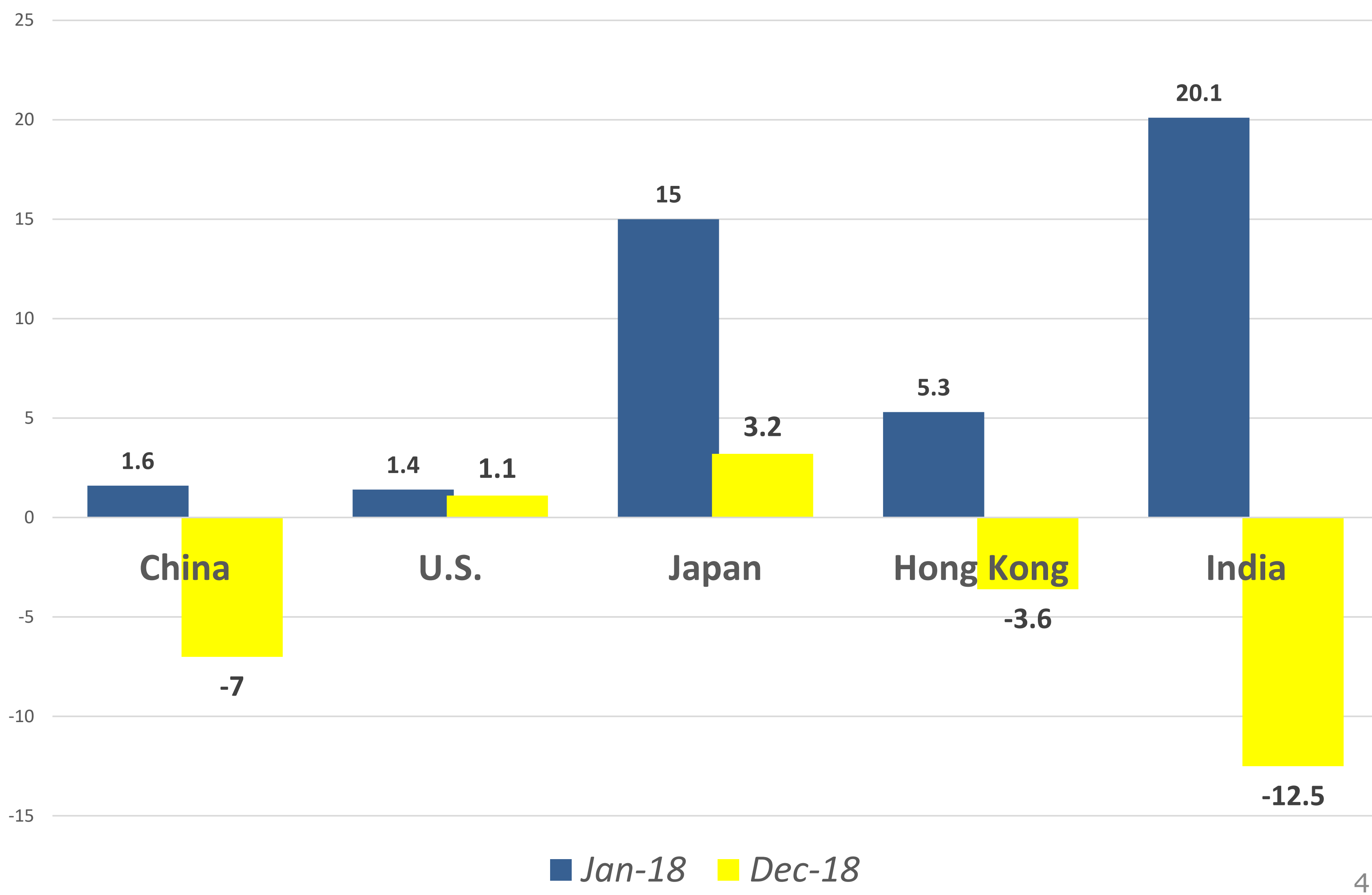




Thailand's export growth in 2018 was 6.7 %
(Quarter-on-quarter growth started declining)



Thailand's export growth in major markets (2018) Beginning and year-end growth rates (year-on-year)

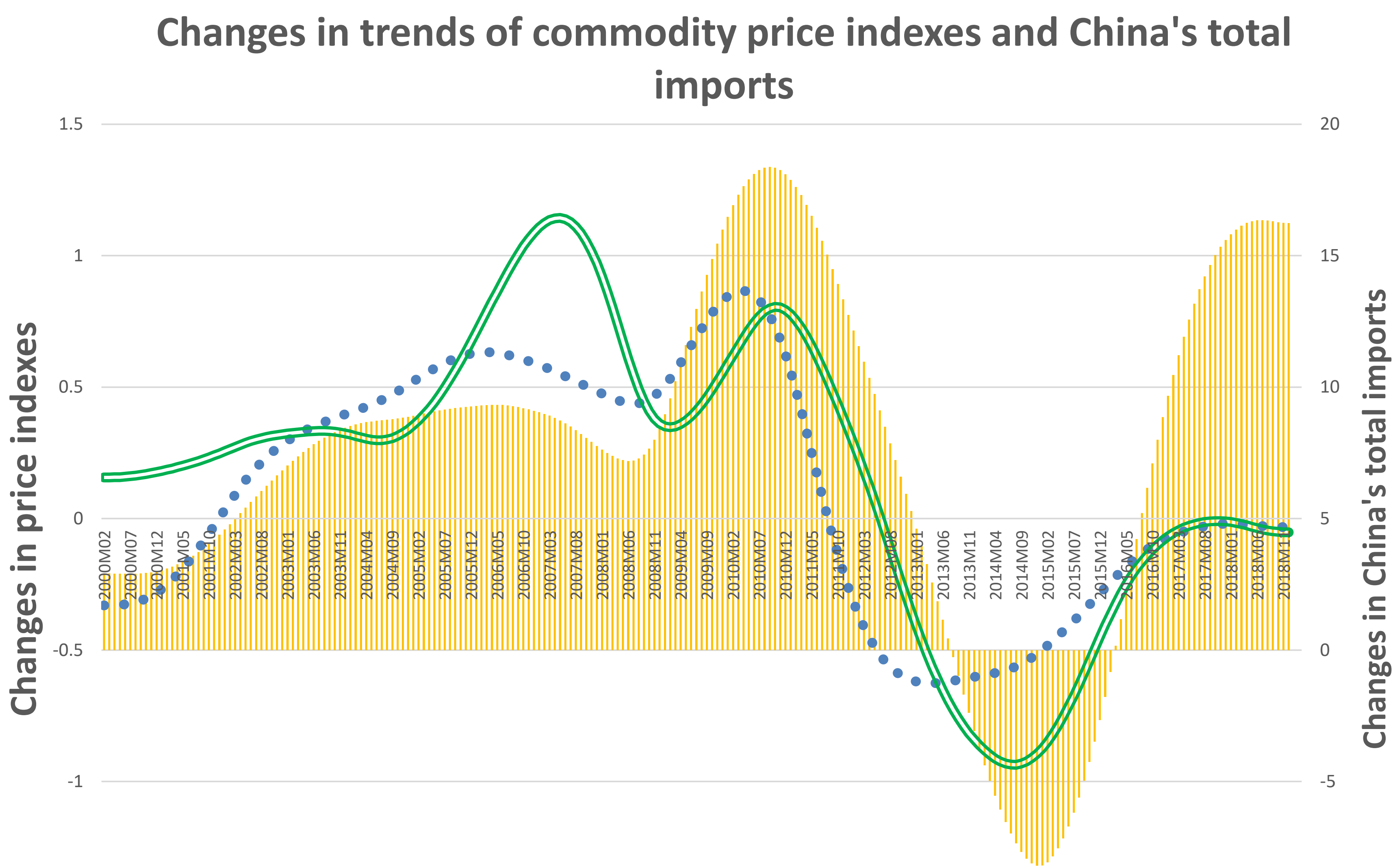


The Trump tariffs

- 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 regional currencies

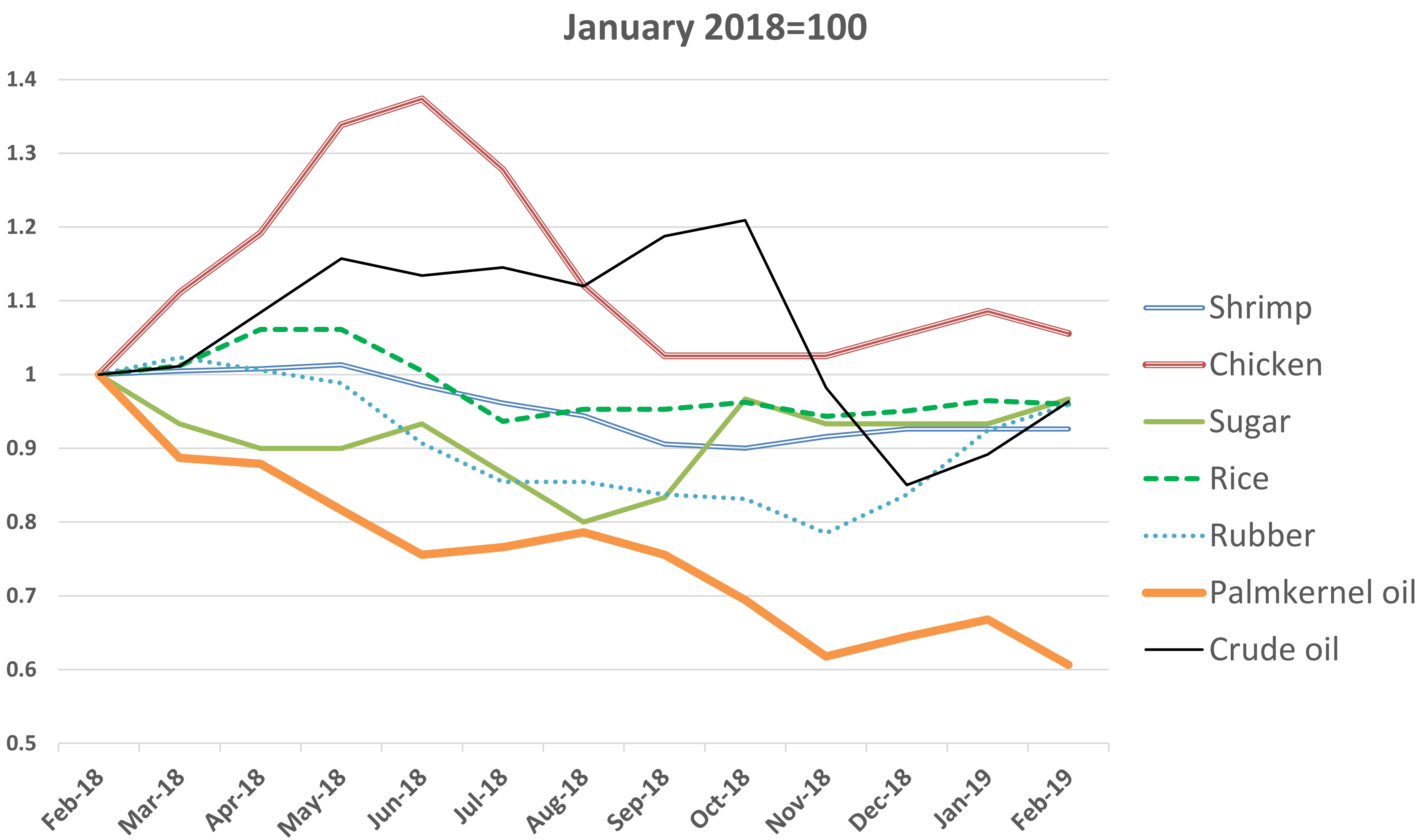
Indirect impact of the trade war

- 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.



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

Declining world commodity prices



Source: Mudi Index

Palm oil is a close substitute to soybeans

- 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 simulation from the trade war hurts countries that raise trade barriers more than hurting their trading partners.

- The third parties caught in the middle of the trade war are affected by decelerating global growth and experience an economic downturn.
- There is also a negative term 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.

Conclusion

- Incidentally, 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 contractional 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 considered implementing monetary policy stimulus. China's fiscal policy has become 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.

The 130-billion-baht Xayaburi Hydroelectric Power Plant in Laos

6. Hydropower on the Mekong

- Power generation is set to start this week at the Xayaburi dam in northern Laos.
- Since construction began in 2010, some 5million cubic meters of concrete have been poured into raising a 38-metre wall and structures on the greatest of all South-East Asian waterways.
- The Mekong is the world’s largest inland fishery, and the most biodiverse river after the Amazon.
- Critics warn of devastating consequences for the flow of fish, sediments and nutrients of a river that feeds tens of millions of people.

Negative transboundary impacts

- Unlike Chinese dams, any projects proposed on the lower Mekong must be tabled for discussion among the governments of the four countries -- Thailand, Laos, Cambodia and Vietnam -- that signed the Mekong Agreement in 1995 and formed the Mekong River Commission (MRC).
- They cannot veto the projects but only raise concerns about negative transboundary impacts.
- The hydroelectric power plant has a capacity of 1,285 megawatts.

Xayaburi is only the first of a planned 11 dams on the Lower Mekong (nine are in Laos; two in Cambodia).

Under construction

operational

10 Planned dams

Sold down the river: hydropower on the Mekong

- The World Bank and the Asian Development Bank refused to back the project.
- Thailand, whose banks financed it, will buy 95% of the energy.
- The power and the profits will remain in Thailand and Laos;
- The environmental and social consequences will largely be borne by the lower riparian countries, Cambodia and Vietnam.

Tractor on the river basin: Dried up Mekong River Leoi province: October 2019

Fiery crossing to Lao from Mookdaharn: October 2019