Journal of Global Economy, Trade and International Business Vol. 1, No. 1, 2021, 25-40 © ARF India. All Right Reserved DOI:10.47509/JGETIB.1.1.2021.25-40



THAILAND'S MAJOR POLICY CHALLENGES AND TROPICAL FRUIT TRADE BETWEEN THAILAND AND SOUTH KOREA

Sitanon JESDAPIPAT*

Faculty of Economics, Rangsit University, 52/347 Phaholyothin Road, Lakhok, Pathumthani 12000, Thailand *Corresponding author E-mail: sitanon.j@rsu.ac.th

Received: 3-31-2020 / Revised: 6-25-2020 / Accepted: 9-20-2020 / Published: 1-1-2021

Abstract

While Thailand seeks to further open its economy through more open trade and investment, the new development context, dominated by such major drivers as climate change and disaster risks, and induced policy changes, set to become new factors shaping both its agricultural production, and trade policies. Acknowledging the importance of maintaining the balance between domestic food security and serving the world hunger, Thai governments have had great influence over the recent years on production and trade of agricultural products. Thailand's engagement in bilateral and multilateral free trade agreements testifies to this claim. Using desk-top research and secondary data, this paper argues that such external factors as climate change will pose new risks to shaping future trade. It then investigates the compatibility of a common trade rule under FTA, which enables Thailand and South Korea to increase their trade tie, and to possibly deepen other forms of technical cooperation that would be win-win, especially with the fast changing development context aforementioned. Specifically, it found that technical barriers remain intact, despite the fact that mutual benefits could be reaped from more open trade regimes. Technical cooperation is therefore of mutual interest, using an example from the case of mangosteen export from Thailand to South Korea.

Key words: tropical fruit; climate change; FTA; technical cooperation; agricultural policy F130; F140; F190

INTRODUCTION

With 67 million population now, Thailand has always maintained an open economy, especially since 1855, when the British Empire forced open the Kingdom with the famous Bowling Treaty. The degree of openness, though dropped from 147.31% of GDP in 2014 to 138% in 2019, indicates that this openness remains high. Its economy is shaped by this openness, towards services;

yet, despite its low value added, agriculture remains important as a source of employment—see Graph 1. Before the Covid-19 pandemic, the industrial sector contributed to less than a quarter of annual GDP, whereas services rose to 46% and agriculture dropped to 30.43%. It is thus obvious that trade has spurred growth, enabled capital formation, foreign exchange accumulation and diversification of development risks.

Today, in value terms, the share of good and service export in its Gross Domestic Product (GDP) climbs from 34% in 1990 to 69% in 2016, and 66.82% in 2018 (1). The share of merchandise trade in the annual GDP rose accordingly from 66% in 1990 to 101% in 2017. Growth of import in annual GDP, 8.59%, doubled that of export, 4.20%, in 2018.Import share also rose accordingly to propel exports of some sectors, such as canned tuna and electronics. This is an obvious connectivity of the Thai economy to the world.



Graph 1: Sectoral Employment

Source: The World Bank

The fact that openness is good, though also risky, has been however revealed. Before the financial crisis in 1997, Thailand was "... one of the fastest growing countries in the world, and the IMF had lauded it as a model to be emulated by other developing countries." (Leightner 2012, p. 270). Also, the "export-led growth enabled ...Thailand, not only to spur [its] development and reduce poverty in the first place but also to quickly recover from the financial crisis that hit [Thailand] in the period 1997-1998." (Mikic 2012, p.295 and Suwannarat (no date)) (2). This resilience is traded off with income inequality that continues to haunt Thailand today.

One explanation of the growing income gap is the rigid economic structure. That is, since 1997 the structure of its economy has not changed in a significant way, though GDP growth average between 2015-2019 was quite impressive, registered at 3.7% per year. The non-agricultural sector outpaced that of the agricultural sector, further widening the sectoral per capita income, while national per capita income rose from 191,723 Baht/ capita in 2015 to 225,356 Baht per person in 2018. (3) A technical transformation, based on technological propagation across the agricultural sector, possibly via regional cooperation such as BIMSTEC, (4) is mandatory to fit this crucial sector with the current Thai government Agriculture 4.0 policy. During the Covid-19 pandemic, however, the marginalized agriculture sector eases the crisis by ensuring ample supply of food to Thais, except for fruit exports which are also reduced 20-24% by the pandemic. Thailand Development Research Institute (TDRI) argues that a sector-wide technological application is the only way to triple per capita farm income. (5)

A review of literature on trade in goods and services traditionally linked prices and exchange rate regimes to change in trade flows. Early studies around late 1970s were at best inconclusive on the theoretical description of exchange rates and regimes on trade flows. (Miles 1979; Wilson and Takacs 1979). Although later Bahmani and Oskodee (1986) confirmed that trade are more responsive to these two variables in the long-run, the influence of real exchange rate on trade flows is solidly confirmed by work of Himarios in 1991. Research work on this linkage in 1990s, such as Asserery and Peel (1991) and Ghura; Grennes (1993); Reihart (1995); Chua and Sharma (1998) and Jiranyakul and Brahmasene (2002) seem to have put the issue to rest: prices and exchange rates influence trade flow. Hence, there is little doubt why trade wars often exploit through exchange rate manipulation of the accused—such as been the case of the US and China in recent times.

Literature on fruit exports, especially from Thailand to South Korea, is very limited, except for official information from the Ministry of Commerce. There is only one research paper, Win (2017) devoted to analyzing tropical fruit trade of Thailand. Thiraphat (2019) investigated Chinese investors' in managing the fruit supply chain. He found very strong proactive presence of these new group of merchants in the Eastern region, which has been Thailand's hub for tropical fruit production. Thiraphat recommended that competition and participation of local traders and farmers should be promoted to increase the trade between China and Thailand.

This paper focuses on the trade issues from a different angle: Emerging new policy environments identified in this paper seem to have great influence over domestic policies, and thus affecting trade. How robust is the role of Thailand's agricultural sector, amid dynamisms, using the case of tropical fruit export? Hence, the general objective of this paper is to identify main nontraditional drivers that have impacted upon policy changes in Thailand, and the current and prospective trends of tropical fruit trade between Thailand and South Korea, analyzed within the changing policy context.

OBJECTIVES

The specific objectives of this research are two-fold:

- 1. To study and describe major drivers that influence Thailand's agricultural trade in major commodities, especially tropical fruits, and
- 2. To analyze recent tropical fruit trade and recommend policy-relevant cooperation between Thailand and its major trading partners in tropical fruits, focusing on South Korea.

METHODS

This paper reports results of a desk-top research, using secondary data from government sources and those collected through interviews conducted with key informants in the government and private sectors using an in-depth interview technique, to verify the secondary data collected. A content analysis is applied to the data and information gathered.

FINDINGS

The agricultural sector will continue to be Thailand's economic backbone, especially providing income, livelihood and social safety net through food security. In terms of employment, and livelihood, agriculture remains a vital economic and social sector of Thailand; though agricultural export took only 2% of the total value, as high as 70% of labor force in 1980s relate, directly and indirectly, to agriculture. This employment share, though, is falling to less than 40% in the current decade as shown in Graph 1. The agricultural value added also fell from 32% in 1960s to a mere 9.7% in the current decade.(6) With

agriculture as its strong base for development, employment and nurturing of livelihood, Thailand also strikes to industrialize its economic structure, and moving quickly toward services—which has highest share in GDP (Graph 2). The agricultural sector, nevertheless, remains crucial to Thailand, shown by the social resilience it brought about during Covid-19 pandemic. Thailand has had no food shortage.



Graph 2: Sectoral Value Added

Most significantly, Thailand's backward agricultural structure, traditionally focused on rice, is shaped by trade opportunities and policies to a more diversified one. Among 'new' crops are fruits and vegetables that Thailand is able to penetrate some high-end markets, including Europe, and the US. South Korea is one of the targeted markets for Thai tropical fruits. One, however, has to view this potential within a dynamic long-term perspective. Specifically, external changes that influence Thailand's trade has had indiscriminate impacts on Thailand, while domestic policy change is faster, though sometimes socially and economically controversial. These are some examples, agreed by most of the eight informants interviewed:

(1) Unsound and inconsistent agricultural policy: A more recent example was the rice buy-out scheme by one government that caused

Source: The World Bank

about 22 billion dollars damage, and sent those concerned with the policy to get jail sentence, the ex-prime minister fled jail, and some lives of poor farmers from stress and suicide. Political development of recent times exploits populist policy to win votes, thus not setting on sound economic principles. This obviously backfired on Thailand, undermining its competitiveness and incurred public debt. But the popular policy strategy, sadly, is welcome by a large portion of Thais, being ignorant about the scale of corruption and misallocation of public resources. Reality dictates that it is the most dangerous and damaging game Thai politics has evolved itself into. Obviously, rationalization of the public policies is called for.

- (2) Climate change as new risk: The looming global climate change impacts require adaptation plans as a long-run strategy to diversify risks, and short-run coping strategies to reduce climate-related risks. Thailand is predicted and forecast to face intensified prolonged draught which may damage agricultural production and reduce productivity in most of the regions-shown in Figure 1. (ONEP 2015 and 2016) . For example, the Western region report (ONEP 2015) predicted that areas to be affected by draught would increase from the past record of 0.89% of the Eastern region to 89% in the next subsequent 20 years. This is proven alarming as the region produces Thailand's major fruit crops, including durians, mangoes, longans, pineapples, jackfruits, rose apples, and mangosteens. These crops are vulnerable and sensitive to draught, and local response remains very much autonomous adaptation, being insufficient to adapt to climate change-which requires planned adaptation (7). This region is also the heart of Thailand's largest industrial complex.
- (3) Regional free trade agreements: External factors such as regimes of the World Trade Organization (WTO) have had much less influence on Thailand's trade, compared to bilateral agreements which are more "progressive". The ASEAN- Korea trade agreement, for instance, sets a new trade framework to enhance trade flows between South Korea and members of ASEAN. Over 90% of products traded between the two parties enjoy no tariff on products exported to South Korea. Obviously, this regime enhances intra-ASEAN competition and Internal agricultural policy changes, which are products of political systems of recent times, as aforementioned, will need to adapt to this new trade regime as well—hence being very positive.



Figure 1: Predicted change in daily maximum temperature, present and future scenarios

Source: ONEP 2015

(4) Active role of private sector: In retrospect, participation in Thailand's FTA negotiation has not been open to small producers or traders; only large ones have had "more equal" opportunity to engage in the process. Also, the low rate of an FTA utilization indicates that small players have not been able to fully enjoy the benefit of freer trade. Modest use of trade development supports this claim. Improvement on these matters means more than developing the capacity or financial support, but the governments should pay more attention to enhance the access to information and strengthening the technical capacity of smaller ones. Of note is to encourage more market research and the provision of new information to exporters so that they could penetrate new markets more easily.

In short, the structural change of the agricultural sector would come mainly from four drivers: government-induced policy; external drivers mentioned above, private-sector driven force and 'systematic transformation' due to aging population of the farm sector. Climate and technological changes have not had clearly revealed impacts on existing structures of agriculture over the recent decade, though studies repeatedly alarm the possibility of large-scale impacts of prolonged draught, flash flood, landslide and seasonal variation, including intense and shifting rainfall patterns. These factors have had threatened seasonal supplies of tropical fruits, and their exports to the world market.

Korea-thailand Agricultural Trade

Thailand has mostly confined its trade to "traditional markets"; until more recently, Thailand refocused more on intra-ASEAN and rising new market

such as China—see Graph 3 below. As a result, export as percentage of GDP doubled over 1990-2017 (8). Table 1 below compares the different structures of trade South Korea and Thailand have with their major trading partners between 1995-2007 and 2019. Significant differences shown in Table 1 are obvious that South Korea engages much less with ASEAN, the US, EU and India than Thailand had. China has been major trading countries of both in the past and in 2019. This signals more opportunities for South Korea to expand its trade and investment ties with these partners—and to use Thailand as a gateway for trade with others, especially its strategic position in the region.

Table 1: Export Dependence of Thailand and South Korea, 1995-2007,and 2019 by Major Trading Partners (%)

Country	Japan (2019)	EU	US (2019)	China (2019)	India (2019)	ASEAN (2019)
South Korea*	-0.7 (5.2)	1.6	-0.1 (13.6)	8.0 (25.1)	0.4 (2.8)	0.16 (15.8)#
Thailand^	1.7 (10)	3.1	1.8 (12.8)	5.1 (11.8)	0.9 (3.0)	6.16 (22.1)@

Source: Modified from Mikic 2012, p. 306

* calculate from *http://www.worldstopexports.com/south-koreas-top-import-partners/* accessed on 2 August 2020.

only ASEAN 5 (the Philippines, Singapore, Vietnam, Thailand and Malaysia).

^calculate from http://www.worldstopexports.com/thailands-top-import-partners/ accessed on 2 August 2020.

@ only ASEAN 6 (the Philippines, Singapore, Cambodia, Malaysia, Vietnam and Indonesia).

Between them, however, there has been a chronic trade deficit for Thailand. These figures are -116,116 million Baht; -130,093 million Baht and -125,601 million Baht in 2017, 2019 and 2019, respectively (9). South Korea, nevertheless, is one of Thailand's strategic economic partners, but the fact that the high variability in value of food production (Graph 4), per capita production (Graph 5) and supply (Graph 6) gives high potential for food exports from Thailand. Thailand, as a food-exporting nation, stands a good chance of deepening the trade link with South Korea. But such opportunities require Thailand to reposition and rationalize its policy and enhance technical cooperation with trading partners, amid dynamism of internal and external drivers, all of which have had increasing impacts on production and trade.



Graph 3: Historical export of Thailand

Graph 4: Average value of food production in South Korea



Source: The Customs Department, Thailand

Source: EAOSTAT, http://www.fao.org/ faostat/en/#country/117









Source: FAOSTAT http://www.fao.org/faostat/en/#country/117



Thailand is ranked sixth top exporter to South Korea; the U.S. and China led the pack (10). By sector, Thailand also export the followings to South Korea: various tropical fruits, coffee, rice, poultry, corn, vegetables, sauces, flour, and animal feed, for instance—although Graph 7 shows Thailand is not in the Top 10 of agricultural exporters.

Thailand is perhaps Asia's largest supplier and exporter of various fresh fruits, especially tropical fruits, due to its long experience of famers, geography and suitable climate—not to mention the market familiarization of importing countries with high-quality Thai tropical fruits. In Indonesia, for instance, Durian "Bangkok" means top quality durian from Thailand that fetches highest price in the market. Tropical fruits such as durians, guavas, mangoes, mangosteens,



Graph 7: Top 10 Agricultural Exporters to South Korea

Source: UN Comtrade, HS 2017 (AG&FI&FO products, fertilizers & machinery)

bananas, oranges, rambutans, coconuts, and lychees from Thailand are known for variety, quality and "fair" prices. This is seen in Graph 8 below.

While Thailand exports tropical fruits to many countries, particularly to China and nearby Asian ones, it imports cooler climate fresh fruits from countries such as China, New Zealand, the United States, Australia, Japan, South Korea, Chile, Taiwan, and South Africa. China took 53% of total USD 3,954 million Thai export, valued at 2,096 million in 2019. South Korea shares only one percentage of that export. Thailand's open economy, as mentioned above, allows trading partners to reap mutual benefits of trade. It is perhaps worth mentioning that the Royal Projects in upland areas of Thailand have also produced some premium temperate fruits such as persimmon, peaches and strawberry, for local markets, though diversity is rather limited. Some of these varieties have been successfully bred to suit local conditions. As one could see from Table 2 imports continue to rise, from USD 623 million in 2015 to USD 750 million in 2017and is forecast to increase to USD 750 million in 2018. China, New Zealand and the US are top three exports of largely apples, grapes, cherries, strawberries, oranges, citrus and stone fruits to the Thai market. Thai consumption remains high, particularly with the trend in healthier diets.

Thailand leads tropical fruit supply in the international markets. Win (2017) reported that during 2012-2016 Thailand exported 11 major fruit exports to

	2015	2016	2017	2018 (Estimated)
Total Market Size	2,845,239	2,769,920	2,820,000	2,950,000
Local Production	3,175,000	3,200,000	3,300,000	3,500,000
Exports	953,223	1,113,432	1,200,000	1,300,000
Imports	623,462	683,352	720,000	750,000
Imports from the U.S.	37,690	33,166	34,000	36,000
Exchange Rate: 1 USD	34.25	35.30	34.80	35.00
*Total market size = (total loc	al production +	imports)-exp	orts	

Table 2: Thailand Fresh Fruit Market Size* USD 1,000

Source: https://www.export.gov/article?id=Thailand-fresh-fruit, accessed on November 11, 2017.

the international market, among them are: pineapples, durians, managosteens, mangoes, oranges, tamarinds, rambutans, lychees and grapes. They also fetched highest values. Thailand tops pineapple of all forms exports, valued at USD 615.10 million. Thailand also exports relatively similar value of longans export, mainly to China, USD 625.65 million. Durian and rambutan exports in the same year fetched USD 905.25 million. Exports of fresh and frozen mangosteens exports have relatively similar value, around USD 140 million per year. Fresh ones are destined mainly to China, which imports around 70-90% of all annual exports; frozen one goes to the US, Japan and Taiwan. Exports of mangoes are only around USD 37 million, mainly to Vietnam, Japan and South Korea. Thailand captures half of the global market for canned pineapple. Tropical fruit exports to South Korea continues to surge (Graph 8) with longans top the export profile (Graph 9).

Thailand plans to deepen its trade with India and South Korea, especially through ASEAN-Korea FTA and for Thailand, in moving its development within the new framework of Thailand 4.0—enabling enhanced competitiveness through Smart Farmers and accelerating high-value added for agricultural products. Thailand 4.0 aims to enhance competitiveness and connectivity for Thailand. Thailand 4.0 positions the country to be regional trade and service hub. This, together with its 20-year Strategic Plan, would require deepening of information technology (IT) in restructured Thailand. Thus, there will be structural changes in both imports and exports of the Thai economy in the long-run.

What has Thailand learnt from its tropical fruit trade with major trading partners, including ones that are covered by an FTA?



Source: Information and Communication Technology Center with cooperation of the Customs Department, Thailand





Source: The Customs Department, Thailand

- Under ASEAN- Korea FTA, Thailand maintains a non-zero rate for South Korea and a few other ASEAN members do the same for all pineapple products. South Korea's zero tariff rate would in effect level the playing field for imports into South Korea from all ASEAN members. Competition would be healthy for these members, including technological development for processing, for example, as countries would focus to compete to export quality products. In such an endeavor, the technical cooperation, within the economic cooperation framework, would be an important component that is win-win to both parties.
- 2. China traders made a very quick move to 'manage' the supply chain, by setting marketing networks in Thailand, also allowed under Thai laws. In effect, they could selectively ensure quantity and quality of exports, not to mention benefiting the marketing margin. At times, though there were stories of collusion and bleach of contracts, this approach has proven to be mutually beneficial. Given the rising trend of demand for tropical fruit in South Korea, and development of 1 and 2 points above, it is preferable that a closer economic and technical cooperation between Thailand and South Korea could be enhanced, taking advantage of the trade agreements.
- 3. The same thing could be suggested for climate change adaptation. South Korea is so far ahead of Thailand in climate change adaptation. It therefore could assist Thailand in this aspect. For instance, some adaptation technology such Eco-Top of South Korea could be modified and transfer to Thai farmers; or Korean investors could be

encouraged to establish a production base in Thailand in order to reduce costs.

- 4. Small shares of tropical fruits in Korean market (Rhee 2015) are opportunities for both Thailand and South Korea. One of the best strategies to enhance trade is conduct research and development of consumer preference and market development. Exporting firms should be involved in this process.
- 5. Last, but not least, trade is a specific dimension of larger context of international cooperation. Therefore, there is good prospect for Thailand and South Korea to cooperate and reap more mutual benefits which arise from trade cooperation. For instance, technical cooperation between South Korean and Thailand could focus on the agricultural development that South Korea is hailed sustainable (11).

CONCLUSIONS

Since the 1997 economic crisis, Thailand's economic structure has changed slightly on its "natural path", then being restructured, as could have been triggered by the crisis. But its economy remains strong and resilient, and its openness may have contributed to that as trade has remained its engine of growth, including trade in services such as tourism.

Thailand and South Korea have managed the Covid-19 crisis quite well. One could, therefore, expect the agricultural trade between the two trading partners to 'go back to normal' soon. But will that normalcy be new normal? The structural change in agricultural trade will take time and massive amount of private and public investment. Hence, over the next 2-3 years, at the least, Thailand will continue to be a major fruit exporting country, and South Korea would continue to import from Thailand, given the already mature trade links. Covid-19, however, may demand more stringent sanitary and phyto-sanitary (SPS) measures in the agricultural trade.

Meanwhile, running away global warming may only give the world meager short-term handicap, due to dampened economic activities world-wide. But the post-Covid-19 would restart the growth engine in such a way that emissions would increase again. At some point, the forecast prolong draught and abnormal weather patterns in Thailand will certainly haunt us all again. Hence these two major drivers will continue to modify public policies, if at all, so that the new economy will be weather-prone and managing trade becomes more complex and demanding. A revisit of the trade deals, bilateral or multilateral, is imperative to ensure that international trade serves its traditional purposes.

Covid-19 is a new reality that will force trade policies to change, for certain. With the current Covid-19 pandemic, global trade engine is halted. Disrupted trade in goods and services, as the primary engine of growth, has been in the lowest position since the Great Depression, surpassing that of Asian Flu and the Hamburger Crisis. This pandemic severs income and farmers are plunged deeper into poverty; the World Bank estimate was 35 million new poor, 25 million in China alone. The pandemic shall one day pass, but the tipping point that bears new poor was the fact that trade was no longer fueling economic growth: poor nations which already have significant numbers of rural and urban poor have no purchasing power. While there are several speculations on the future shape of recovery, propelling agricultural trade would certainly ease the recovery.

Notes

- http://databank.worldbank.org/data/Views/Reports/ReportWidgetCustom.aspx?Report_ Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=THA, accessed on 11 November 2017 and 7 July 2020.
- https://www.bot.or.th/Thai/Segmentation/Student/setthatat/Doclib_Settha_BE_2554/ B_Doc_Solace2_2554.pdf
- 3. https://www.bot.or.th/App/BTWS_STAT/statistics/BOTWEBSTAT. aspx?reportID=409&language=ENG retrieved on 20 August, 2020.
- 4. http://southasiajournal.net/bimstec-and-the-fourth-industrial-revolution-the-role-of-technologyin-regional-development-orf/ accessed on 8 August 2020.
- 5. https://tdri.or.th/en/2017/06/agriculture-4-0-obstacles-break-2/accessed on 4 September 2020.
- http://databank.worldbank.org/data/Views/Reports/Report/ReportWidgetCustom.aspx?Report_ Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=THA, accessed 10 November 2017.
- See also: https://www.bloomberg.com/news/articles/2020-02-13/thai-agriculture-reels-fromdrought-in-blow-to-ailing-economy accessed on 5 September 2020.
- http://databank.worldbank.org/data/Views/Reports/Report/ReportWidgetCustom.aspx?Report_ Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=THA, accessed on 10 November 2017.
- 9. http://tradereport.moc.go.th/Report/Default.aspx?Report=TradeThSummary, accessed on 28 August 2020.

- http://www.atoseoul.com/pdf/4thQuarterImportTrendsPresentation.pdf accessed on 3 August 2018.
- 11. https://www.eco-business.com/news/south-koreas-farming-culture-points-to-the-future-forsustainable-agriculture/ accessed on 3 September 2020.

References

- Asserery, A. and Peel, D.A. (1991). "The Effects of Exchange Rate Volatility on Exports: Some New Estimates", *Economics Letters*, 37 (1), 173-177.
- Bahmani-Oskooee, M. (1986). "Determinants of International Trade Flows: the Case of Developing Countries", *Journal of Development Economics*. 20 (1), 107-123.
- Chua, S. Y. and Sharma, S. C. (1998). "An Investigation of the Effects of Prices and Exchange Rates on Trade Flows in East Asia", *Asian Economic Journal*. 2 (3), 253-271.
- Ghura, D. and Grennes, T. J. (1993). "The Real Exchange Rate and Macroeconomic Performance in Sub-Saharan Africa", *Journal of Development Economics*. 42 (1), 155-174.
- Himarios, D. (1989). "Do Devaluations Improve the Trade Balance? The Evidence Revisited", *Economic Inquiry.* 27 (1), 143-168.
- Jiranyakul, K. and Brahmasene, T. (2002). "An Analysis of the Determinants of Thailand's Export and Imports with Major Trading Partners", Southwestern Economic Review. 29 (1&2), 111-121.
- Leightner, J. (2012). "Chinese Overtrading", in Rosefielde, S.; Kuboniwa, M. and Mizobata, S. (eds.) Two Asias: The Emerging Posterisis Divide. Singapore: World Scientific Publishing Co., 267-294.
- Mikic, Mia. (2012). "Counter-Crisis Trade Expansion", in in Rosefielde, Steven; Kuboniwa, Masaaki and Mizobata, Satoshi. (eds.) Two Asias: The Emerging Posterisis Divide. Singapore: World Scientific Publishing Co, 295-325.
- Miles, M. A. (1979). "The effects of Devaluation on the Trade Balance and the Balance of Payment: Some New Results", *Journal of Political Economy*. 87 (3), 600-620.
- Office of Natural Resources and Environmental Policy and Planning (ONEP), Ministry of Natural Resources and Environment. (2015). *Strategic Eastern Region Plan for Climate Change Adaptation*. Bangkok: ONEP. (*Thai*).
- Office of Natural Resources and Environmental Policy and Planning (ONEP), Ministry of Natural Resources and Environment. 2016. *Strategic Western Region Plan for Climate Change Adaptation*. Bangkok: ONEP. (*That*).
- Rhee, J. (2015). Consumer and Import Trends of Potential of Tropical Superfruits in Korea. A Powerpoint Presentation.

- Reinhart, C. M. (1995). "Devaluation, Relative Prices and International Trade: Evidence from Developing Countries", in *IMF Staff Paper*, 42, (2), 290-312.
- Thraphat, S. (2019). An Impact of Chinese Direct Investment on Fruit Supply Chain in Eastern Region. A research report submitted to Thailand Research Fund. (Thai).
- Wilson, J.F. and Takacs, W.E. (1979). "Differential Response to Price and Exchange Rate Influences in the Foreign Trade of Selected Industrial Countries", *Review of Economics and Statistics*. 61 (2), 267-279.
- Win, H. E. Analysis of Tropical Fruits in Thailand (2017). Retrieved August 25, 2020, from *https://ap.fftc.org.tw/article/1239*