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Local Currency Contribution to the CMIM

Chapter 2. Regional Integration and Use of Local Currencies in the Region

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January 2019

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Chapter 2. Regional Integration and Use of Local Currencies in the Region

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Abstract

Despite the high level of intra-regional trade in the ASEAN+3 region, the dominance in usage of the U.S. dollar is still significant in Asia due to network externalities in using international currencies. From BIS, SWIFT, and IMF data, the U.S. dollar's dominance as a key currency is confirmed in the FX market, trade settlement and composition of foreign exchange reserves. From five Asian countries' data disclosure on currency share of trade in the region, however, we confirmed that in addition to the Chinese yuan, a few other Asian currencies such as the Thai baht are utilized to a certain extent for trade settlement with neighboring countries. From the latest firm-level survey questionnaire in Japan, we confirm that it is becoming more common for Japanese manufacturing firms to use Asian currencies for their transactions within the region. The surveys of Korean and Chinese firms also suggest that the choice of invoicing currencies is becoming more diversified and direct transaction markets help to increase RMB usage in transactions with neighboring countries. Investigating local currency usage in investment, IMF data indicate that the U.S. dollar is still the main currency used in international investment, while the JPY and the RMB will play an important role as investment currencies in the region. Further data disclosure for cross-border transactions by currency is needed in order to correctly grasp what currencies are used in the region.

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Keywords: Key Currency, Local Currency, Trade Settlement, International Investment, cross-border transactions

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Executive Summary

Despite the high level of intra-regional trade in the ASEAN+3 region, the dominance in usage of the U.S. dollar is still significant in Asia due to network externalities in using international currencies. From BIS, SWIFT, and IMF data, the U.S. dollar's dominance as a key currency is confirmed in the FX market, trade settlement and composition of foreign exchange reserves.

From five Asian countries' data disclosure on currency share of trade in the region, however, we confirmed that in addition to the Chinese yuan, a few other Asian currencies such as the Thai baht are utilized to a certain extent for trade settlement with neighboring countries.

From the latest firm-level survey questionnaire survey in Japan, we confirm that it is becoming more common for Japanese manufacturing firms to use Asian currencies for their transactions within the region. In addition to the RMB, the share of the Thai baht and Korean won have also increased in Japanese exports to Asian countries. Such an increase in local currency usage means that Asian local currencies' utility in foreign exchange markets has improved.

The surveys of Korean and Chinese firms also suggest that the choice of invoicing currencies is becoming more diversified due to a series of financing infrastructures to facilitate local currency settlements between Korea and China. In particular, direct transaction markets help to increase RMB usage in transactions with neighboring countries.

As with local currency usage in trade transactions, investigating local currency usage in investment is also important, but not so many Asian countries disclose data on international investment by currency. IMF data indicate that the U.S. dollar is still the main currency used in international investment, while the JPY and the RMB will play an important role as investment currencies in the region. Further data disclosure for international investment by currency is needed in order to correctly grasp what currencies are used for investment in the region.

Beside BIS or IMF data, statistics published by each Asian central bank and firm-level interview research and surveys can give us more details on current local currency usage in cross-border transactions. In this sense, further promoting data disclosure and conducting regular surveys on local currency usage both in trade settlements as well as investments are indispensable in the near future.

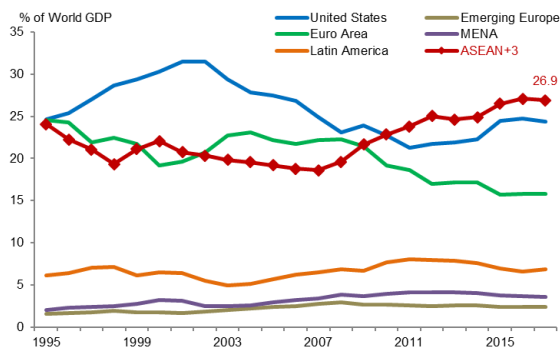
2. Regional Integration and Use of Local Currencies in the Region

2.1. Regional Economic and Financial Integration

Where Does the ASEAN+3 Region Stand?

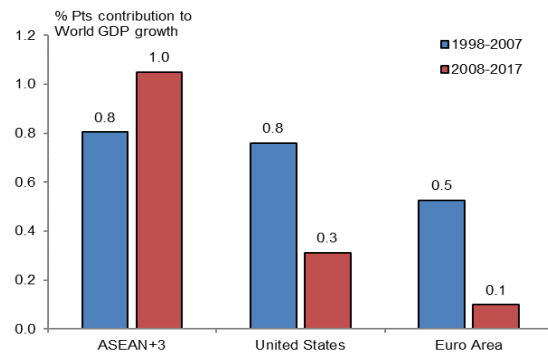
1. **In the two decades since the Asian Financial Crisis (AFC), the ASEAN+3 region has become the largest economic bloc in the world.** The ASEAN+3 region as a whole now accounts for more than a quarter (27 percent) of world GDP (at market exchange rates), overtaking the U.S. (25 percent) and the Eurozone (16 percent) (Figure 2.1.1). It has been the fastest growing area in the world since the early 2000s. Even after the Global Financial Crisis (GFC), the region continued to grow at an annual rate of about 4.6 percent from 2011-2017, outperforming the U.S. (about 2.8 percent) and the Eurozone (about 1.2 percent). Although it was affected by the global slowdown, the ASEAN+3 region has remained resilient and sound since the GFC. The post-GFC period has seen the region’s extraordinary contribution to world GDP growth (1 ppt on annual average in 2008-2017), compared with the U.S. (0.3 pts) and the Eurozone (0.1 pts) (Figure 2.1.2).

Figure 2.1.1. World GDP Share by Region



Note: GDP at current prices, converted into USD using market FX rates.
Source: IMF WEO; AMRO staff calculations

Figure 2.1.2. The Contribution to World GDP Growth by Region



Note: Based on the averages of annual figures during the period.
Source: World Bank; CEIC; AMRO staff calculations

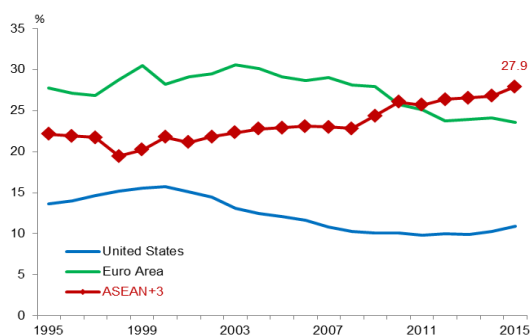
2. **Over the past two decades, capital inflows to ASEAN+3 have steadily recovered from devastating capital flight during the AFC and increased to the level largely comparable to the U.S. and the E.U., when the GDP is size adjusted.** In particular, the relatively sound economic landscape in the region has continued to attract FDI even after the GFC, in sharp contrast to the U.S. and the Eurozone. The ASEAN+3 region, except Myanmar, has, as a whole, has accumulated foreign exchange reserves of up to around USD6 trillion by 2017, a six-fold surge compared to the time of the AFC.

Role of Trade as a Growth Engine in ASEAN+3

3. **Such robust growth in ASEAN+3 is highly associated with an export-led growth strategy**, which has made the region one of the major players in world trade. **ASEAN+3 now accounts for around 30 percent of global trade**, having almost doubled its share since the AFC. Today, the region accounts for a larger share of global trade than the Eurozone (24 percent), and the U.S. (11 percent) (Figure 2.1.3). The region’s openness to trade – the ratio of merchandise trade to GDP – amounted to nearly 50 percent in 2015, having increased from 37 percent in 1998, but falls short of the Eurozone (69 percent).

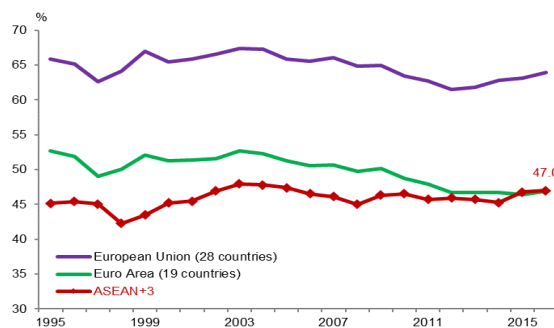
4. **The ASEAN+3 region as a whole is becoming more integrated in terms of trade.** Intra-regional trade among the ASEAN+3 region has steadily increased since the AFC, accounting for nearly half (47 percent) of its total trade in 2016. This is comparable to the 47 percent in the Eurozone (64 percent for the European Union) (Figure 2.1.4).

Figure 2.1.3. World Trade Share by Region



Source: IMF Direction of Trade Statistics (DOTS); AMRO staff calculations

Figure 2.1.4. Intra-regional Trade Share



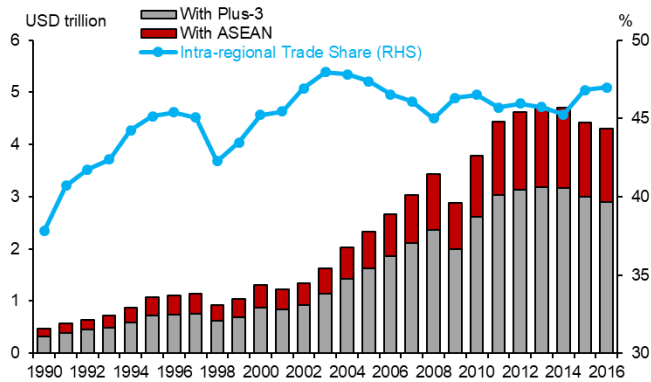
Note: The percentage of intra-regional trade to the region’s total trade. Source: IMF DOTS; AMRO staff calculations

5. **The diversity among ASEAN+3 economies has also fostered the development and growth of regional supply chain networks.** ASEAN+3 has been positioning itself well as “factory Asia” by utilizing global value chains (GVC) more actively compared to other competitors. The region’s GVC participation ratio (54 percent) exceeded the Eurozone’s (52.3 percent). Within the region, Singapore, the Philippines, Malaysia, Korea and Hong Kong China are more the more active participants in the GVC network.

Intra-regional Trade Flows in the ASEAN+3

6. **The size of intra-regional trade has expanded to over USD4 trillion over the past three decades.** The share of intra-regional trade among the ASEAN+3 region increased to 48 percent in 2003 from 37.8 percent in 1990, and has stayed in the mid-40 percent range since then (Figure 2.1.5). By sub-region, the Plus-3 economies, accounting for about two-thirds of intra-regional trade, remained dominant while the share of ASEAN showed an uptrend over the last decade to 32.4 percent in 2016 from 29.6 percent in 2004.

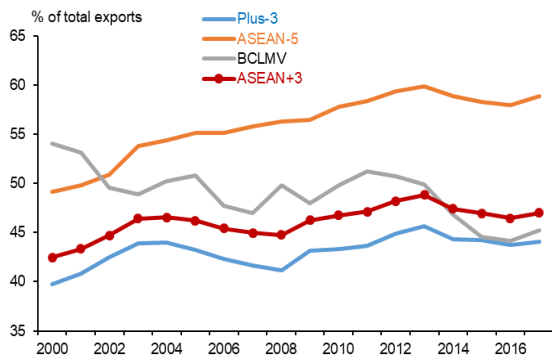
Figure 2.1.5. Intra-regional Trade Flows



Source: IMF DOTS; ADB ARIC (Asia Regional Integration Center) Database

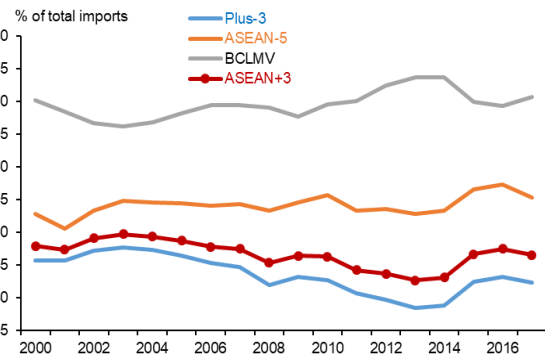
7. **Decomposing exports and imports by sub-group indicates some diversity in intra-regional trade among the ASEAN+3 economies.** Looking into exports, the ASEAN-5 economies² continued to heavily rely on the regional market, while showing a gradual upward trend in intra-regional exports (Figure 2.1.6). In contrast, the BCLMV country group became less dependent on exporting to the ASEAN+3 region, especially compared to the early 2000s. This could be owing with the fact that those countries have started participating in GVCs and increased their exports of labor-intensive goods to Europe and the U.S., thanks in part to preferential trade arrangements. On the other hand, the Plus-3 country group has continued to maintain its export share to the region in the mid-40 percent range. In terms of imports, the BCLMV and ASEAN-5 country groups largely maintained their import shares from the ASEAN+3 region at around 70 percent and 55 percent respectively (Figure 2.1.7). The intra-regional import share for the Plus-3 steadily dropped to about 40 percent by 2013 from 45.7 percent in 2000, but recovered to 42.3 percent in 2017.

Figure 2.1.6. Intra-regional Export Share



Source: IMF DOTS; AMRO staff calculations

Figure 2.1.7. Intra-regional Import Share



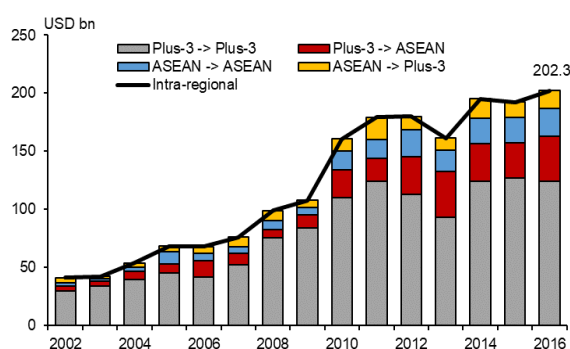
Source: IMF DOTS; AMRO staff calculations

Intra-regional Direct Investment in the ASEAN+3

² In the country groupings, “Plus-3” consists of China, Japan and Korea; “ASEAN-5” refers to Indonesia, Malaysia, the Philippines, Singapore and Thailand; and “BCLMV” includes Brunei Darussalam, Cambodia, Lao PDR, Myanmar and Vietnam.

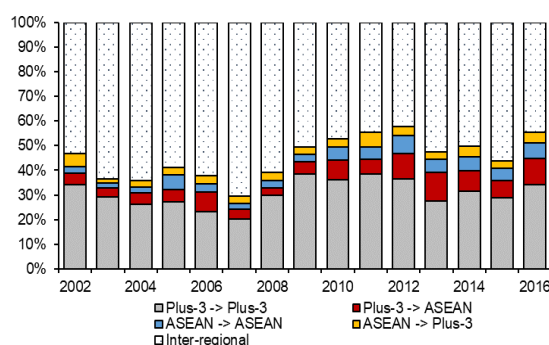
8. **The size of intra-regional FDI flows has continued to surge, reaching about USD200 billion in 2016, and accounting for more than half of total FDI inflows.** According to the BOP data, total intra-regional FDI flows in the ASEAN+3 region was about USD41.2 billion in 2002 and increased significantly to USD202.3 billion in 2016 (Figure 2.1.8). The share of intra-regional FDI inflows from the ASEAN+3 region also gradually increased from 46.8 percent in 2002 to 55.4 percent in 2016. By sub-region, FDI flows among the Plus-3 economies has remained solid, accounting from about two-thirds of intra-regional FDI (Figure 2.1.9). Over the past 15 years, FDI inflows toward ASEAN increased significantly from both the Plus-3 and the ASEAN (10 countries) groups, which led to ASEAN’s greater dependence on intra-regional FDI flows.

Figure 2.1.8. Intra-regional FDI Flows (BOP Data)



Source: ADB ARIC Database; AMRO staff calculations

Figure 2.1.9. Intra-regional FDI Share



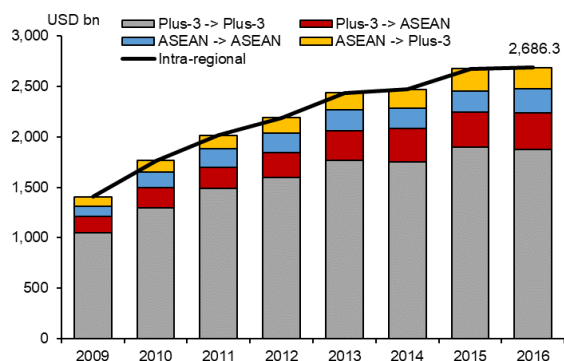
Source: ADB ARIC Database; AMRO staff calculations

9. **In terms of FDI stock, the inward direct investment position from ASEAN+3 amounted to USD2.7 trillion in 2016, almost doubling from 2009 (Figure 2.1.10).** The share of inward FDI stock in ASEAN+3 held by regional investors remained stable at around 45 percent of total inward FDI since 2009 when the data began to be compiled.³ By sub-group, intra-regional FDI among the Plus-3 group accounted for about 31 percent of total inward FDI with the investment to ASEAN from the Plus-3 at about 6 percent as of end-2016 (Figure 2.1.11). Intra-regional FDI within ASEAN fell short of 4 percent of total FDI to the ASEAN+3 region.

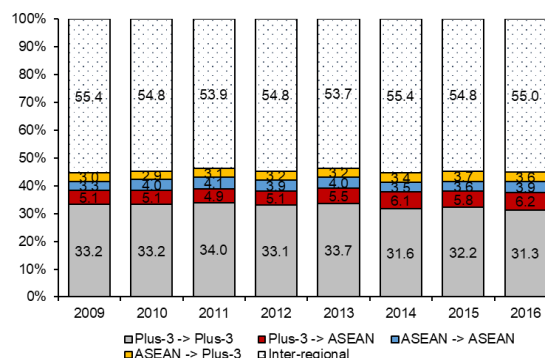
Figure 2.1.10. Inward Direct Investment Position

Figure 2.1.11. Inward Direct Investment Position Share

³ Since 2009, the IMF has been conducting the Coordinated Direct Investment Survey (CDIS) on an annual basis to compile bilateral foreign direct investment stocks (positions) data, and release the results of the CDIS, which covers about 100 economies.



Source: IMF Coordinated Direct Investment Survey (CDIS); AMRO staff calculations



Source: IMF Coordinated Direct Investment Survey (CDIS); AMRO staff calculations

Intra-regional Portfolio Investment in the ASEAN+3

10. **The growing trend in cross-border holdings of assets and liabilities shows that financial integration progressed notably among the ASEAN+3 economies in the past two decades.** As pointed out in Kim and Lee (2012)⁴, cross-border holding data of total international portfolio assets and liabilities can be exploited as quantitative measures to gauge the degree of financial integration in the ASEAN+3 region. To this end, the IMF's Coordinated Portfolio Investment Survey (CPIS) data is employed with a caveat that China started to report its data from 2015 while the data spans from 2001 through 2016. The total cross-border holdings of assets held by ASEAN+3 amounted to about USD982 billion at the end of 2016, having expanded more than ten-folds since 2001. This upward trend suggests that financial integration has improved significantly in the ASEAN+3 region over the sample period.

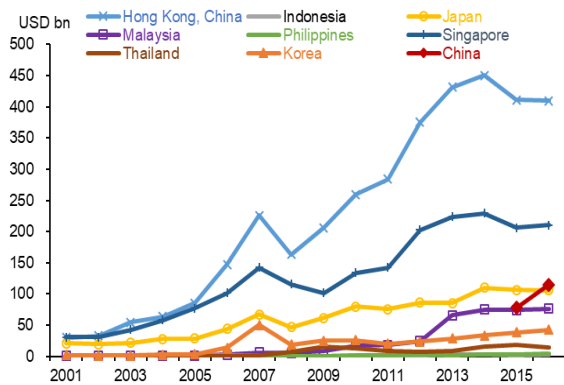
11. **By source, Hong Kong and Singapore maintained their dominant roles as financial hubs (Figure 2.1.12).** Among the Plus-3 group, Japan and Korea steadily increased intra-regional portfolio investments whereas China's portfolio asset holdings exceeded that of Japan in 2016. While these five economies play pivotal roles in intra-regional portfolio investment, it is notable that Malaysia has shown a significant jump since 2013.

12. **The share of intra-regional portfolio investment has been largely on the rise since early 2000s, partly reflecting strengthening financial integration.** Intra-regional portfolio investment assets accounted for 15.5 percent of total asset holdings in 2014 followed by a moderation to 13.7 percent in 2016 (Figure 2.1.13 and 2.1.14). By sub-group pairs, intra-regional cross-holdings among the Plus-3 region remained dominant while the Plus-3 group's asset holdings in ASEAN continued to support intra-regional portfolio investment.

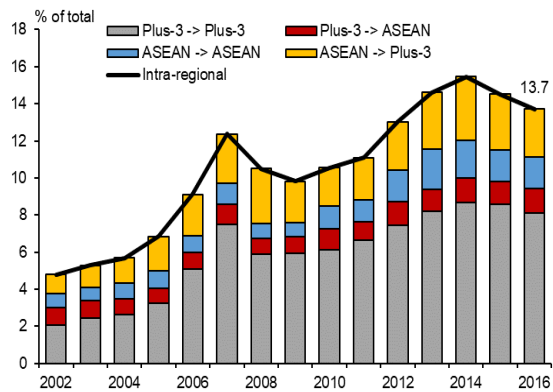
Figure 2.1.12. Total Portfolio Investment Asset Position in ASEAN+3 by Source

Figure 2.1.13. Intra-regional Shares of Total Portfolio Investment Asset Position in ASEAN+3

⁴ Soyoung Kim and Jong-Wha Lee (2012), "Real and Financial Integration in East Asia," *Review of International Economics* 20(2), 332-349.



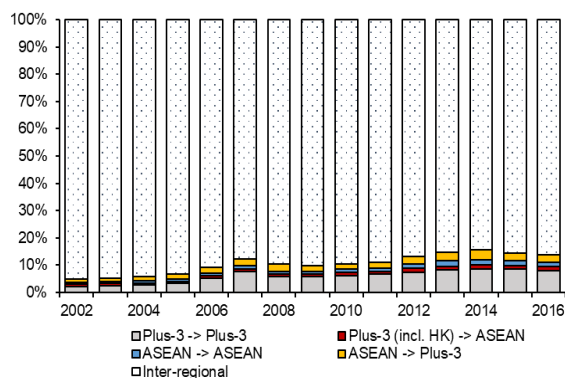
Note: China's investment data is available since 2015.
Source: IMF Coordinated Portfolio Investment Survey (CPIS)



Note: China's investment data is available since 2015.
Source: IMF Coordinated Portfolio Investment Survey (CPIS); AMRO staff calculations

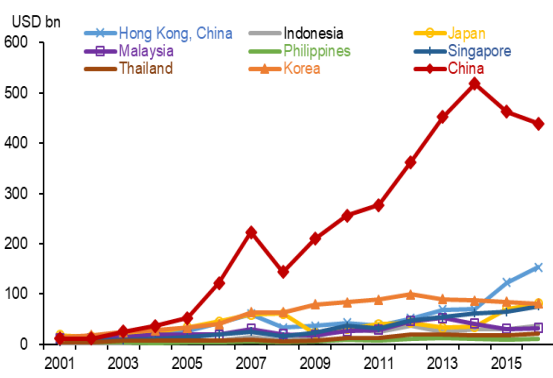
13. In terms of total liabilities, China has been at the forefront in attracting portfolio investment from the ASEAN+3 region. As the IMF CPIS excludes liabilities from its “core” reporting items such as assets, the liabilities data are currently available only for five countries in the region – Indonesia, Japan, Malaysia, Singapore and Thailand. Alternatively, the IMF also provides derived liabilities based on more granular bilateral asset data. It shows that China has attracted about USD440 billion in portfolio investment as of the end of 2016, accounting for a half of the portfolio investment from the ASEAN+3 region, after showing a significant upward trend in intra-regional portfolio liabilities (Figure 2.1.15). The two financial centers – Hong Kong and Singapore – continued to attract intra-regional portfolio investment. Portfolio investment toward Korea, meanwhile, continues to flow, although it has edged down from its 2012 peak.

Figure 2.1.14. Composition of Total Portfolio Investment Asset Position from ASEAN+3



Note: China's investment data is available since 2015.
Source: IMF Coordinated Portfolio Investment Survey (CPIS), AMRO staff calculations

Figure 2.1.15. Total Portfolio Investment Liability Position (Derived) in ASEAN+3



Note: Based on derived total portfolio liabilities amounts, which are calculated from the counterparts' portfolio asset reporting to the IMF.
Source: IMF Coordinated Portfolio Investment Survey (CPIS)

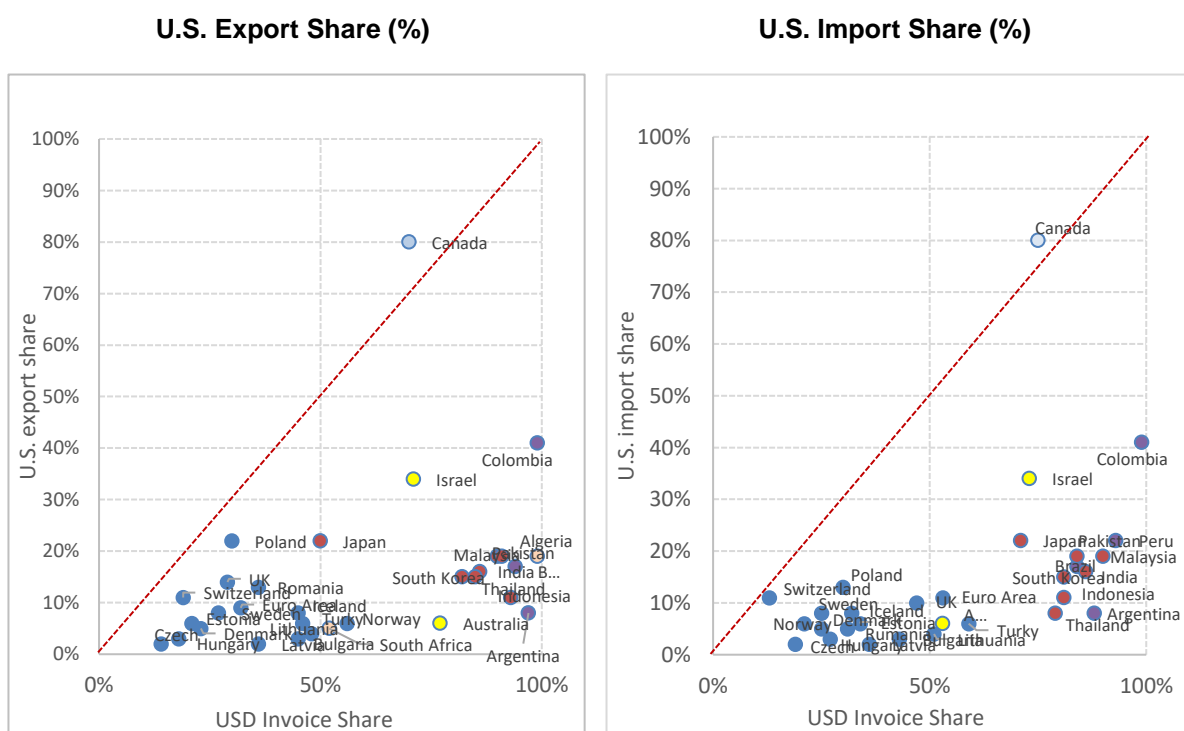
2.2. Overall Trend in USD versus Local Currency Usage in the Region

2.2.1. The U.S. Dollar as a Key Currency in Asia

14. Compared with countries in the EU, whose intra-regional trade share is also high, Gopinath (2015) and Casas et al. (2017) indicate that the U.S. dollar's dominance as an

invoice currency is more significant in Asia and Mercosur. Figure 2.2.1, which is made from their data, shows the relationship between each country's U.S. trade (export and import) share and the U.S. dollar's invoice share. It indicates that each country's U.S. dollar invoice share is greater than its U.S. trade share, except for Canada. According to Casas et al. (2017), the U.S. dollar's share as an invoicing currency is estimated to be around 4.7 times its share in (the sample of) world imports, while the U.S. dollar's share as an invoicing currency is estimated to be around 3.1 times its share in world exports. Comparing the magnitude of how many times by region, the points of Asian and Mercosur countries are located to the right of that of Europe, which means that their dependence on the U.S. dollar invoicing is larger than in the euro area. This is because there is no regional currency like the euro in Asia and Mercosur.

Figure 2.2.1. U.S. Export and Import Share and USD Invoice Share (%)



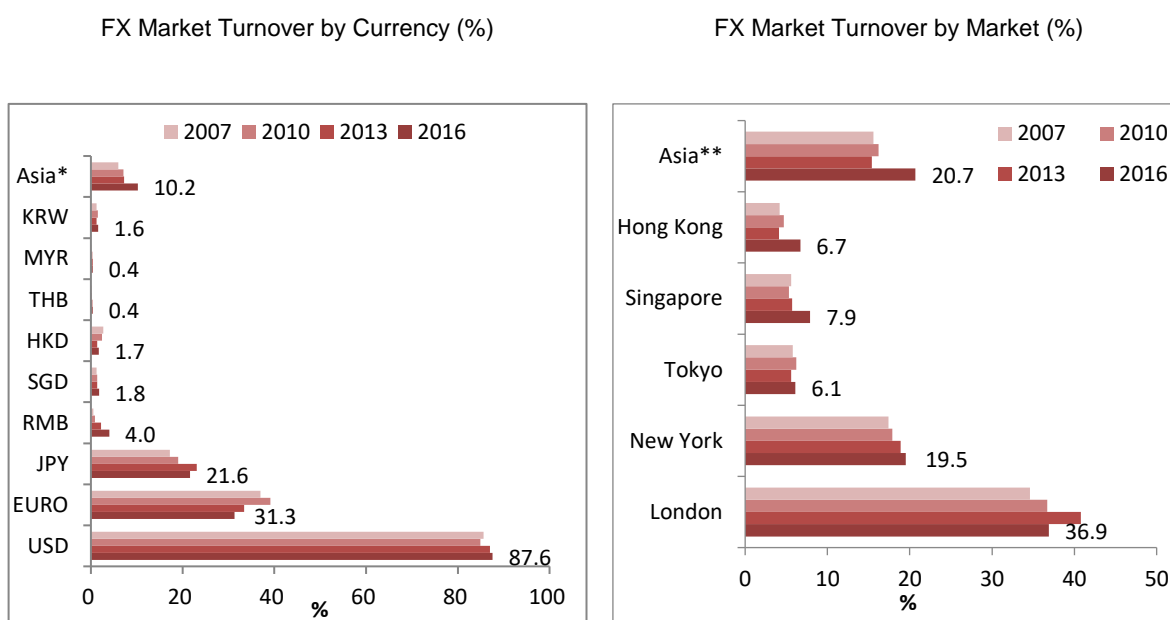
Source: Gopinath (2015); Casas, Diez, Gopinath and Gourinchas (2017)

15. The most comprehensive measure for foreign exchange transactions is a Triennial Survey conducted by the Bank for International Settlements (BIS). According to the BIS' survey on foreign exchange turnover by currency in April 2016 (Figure 2, LHS), the U.S. dollar has continued to be the dominant vehicle currency in the world. Each foreign exchange transaction involves two currencies, and the total share of all currencies is 200 percent. The U.S. dollar had an 87.6 percent share in 2016, which means that 87.6 percent of all currency-pair transactions involved the U.S. dollar on one side. The euro was the second-most traded currency with a 31.3 percent share. The Japanese yen, the third-most traded currency, had a 21.6 percent share, while the Chinese yuan was ranked 8th with a share of 4 percent, which was twice that of an earlier such survey in 2013. The Hong Kong dollar, the Korean won and the Singapore dollar also saw their shares increasing to 1.7 percent, 1.6 percent and 1.8

percent in 2016 respectively from 2013 figures of 1.4 percent, 1.2 percent and 1.4 percent. Although the individual share of Asian currencies was still small, all Asian currencies' share (except for the Japanese yen) of foreign exchange market turnover in 2016 stood at a significant 10.2 percent in total.

16. Comparing the size of FX market turnover by market (Figure 2.2.2, RHS), London is the largest with a share of 36.9 percent, followed by New York with a 19.5 percent in 2016. Asian financial centers, which include Singapore, Hong Kong and Tokyo, witnessed an increase in their combined share of global FX trading to 21 percent in 2016 from 15.0 percent in 2013. This was larger than New York's market share of 19 percent. These results indicate that although the U.S. dollar has continued to be the dominant vehicle currency, the role of Asian financial centers and the share of emerging Asian currencies in global FX trade has been on the rise.

Figure 2.2.2. Foreign Exchange Market Turnover by Currency and Market (%)



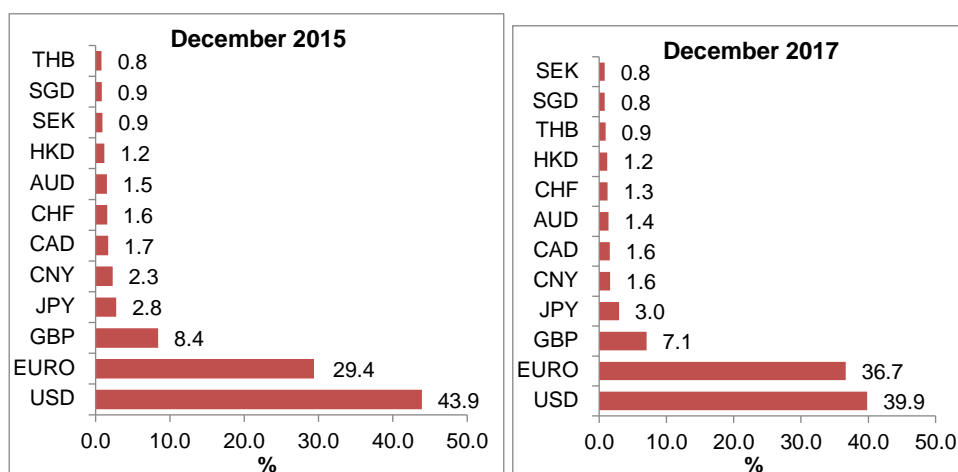
Note: Asia* in LHS chart includes Asian currencies except for the Japanese yen. Asia** in RHS chart includes Hong Kong, Singapore and Tokyo markets.

Source: BIS Triennial Central Bank Survey, Net-net basis, daily average in April.

17. What about local currency usage in settlement then? SWIFT has publicly released data on the internationalization of the Chinese yuan since 2010. *RMB Tracker*, based on the global interbank payment system, reports monthly trends in currency market shares. The ranking shows the actual usage through the SWIFT settlement system. Figure 2.2.3 shows the currency ranking according to SWIFT settlements in December 2015 and 2017. SWIFT data also confirms that the U.S. dollar continues to play a key role in international trade and finance. The share of the U.S. dollar was the highest at 43.89 percent in 2015. This was followed by a slight decline to 39.59 percent in 2017, while the euro's share increased from 29.39 percent in 2015 to 35.66 percent in 2017. Asian currencies' shares, including that of the Japanese yen, are relatively low compared to other major currencies despite their higher trade volumes.

The Japanese yen's share stayed slightly below 3 percent and the share of the Chinese yuan declined from 2.31 percent in 2015 to 1.61 percent in 2017.

Figure 2.2.3. Currency's Shares in International Cross-border Payments (SWIFT, %)



Source: SWIFT RMB Tracker

18. The U.S. dollar's dominance is measured from the standpoint of a store of value. The currency composition of foreign reserves reveals how a country regards the importance of currencies. The official sectors hold assets in foreign currencies for various reasons. One of them is foreign reserves that are used in foreign exchange interventions. Because of the experiences of the Asian currency crisis in 1997, almost all Asian countries have built up and hold foreign reserves (international reserves) as an asset. Data on the currency composition of foreign reserves are not publicly available, but U.S. BOP data shows a large amount of official Asian purchases of U.S. securities.

19. From the quarterly data on the currency composition of official foreign exchange reserves (COFER) of IMF, Table 2.2.1 shows the recent currency composition of foreign reserves.⁵ In the first quarter in 2018, the total reserves of all countries amounted to the equivalent of USD11.6 trillion. Currency decompositions were reported for "reporting countries," where reserves were valued at USD10.4 billion. Comparing the shares of major currencies between the first quarter in 2017 and 2018, the share of USD declined from 64.5 percent to 62.5 percent, while the share of the euro increased from 19.3 percent to 20.4 percent. The share of the Japanese yen, meanwhile, increased from 4.6 percent to 4.8 percent, and the share of RMB went from 1 percent to 1.4 percent. Although the RMB share rose 40 percent within a year, it is still very low compared to its SDR basket weight (10.9 percent). The U.S. dollar is the only SDR composition currency whose currency composition share of foreign exchange reserves is larger than its SDR basket weight.

Table 2.2.1. Currency Composition of Foreign Exchange Reserves (USD1 billion,%)

⁵ Unfortunately, not all countries report the currency composition of their foreign reserves. Reserves are "unallocated" for currencies, although they report the total amount of foreign reserves.

	Q1 2017		Q1 2018		SDR Basket Weights
	Value	Share	Value	Share	
Total Foreign Exchange Reserves	10899.4	100.0%	11593.6	100.0%	
Allocated Reserves	8849.0	81.2%	10402.5	89.7%	
Claims in U.S. dollars	5709.5	64.5%	6499.2	62.5%	41.7%
Claims in euros	1706.4	19.3%	2121.4	20.4%	30.9%
Claims in Chinese renminbi	88.5	1.0%	145.0	1.4%	10.9%
Claims in Japanese yen	403.0	4.6%	500.8	4.8%	8.3%
Claims in pounds sterling	378.7	4.3%	486.9	4.7%	8.1%
Claims in Australian dollars	162.4	1.8%	177.2	1.7%	
Claims in Canadian dollars	171.1	1.9%	193.8	1.9%	
Claims in Swiss francs	14.5	0.2%	18.1	0.2%	
Claims in other currencies	214.7	2.4%	260.2	2.5%	
Unallocated Reserves	2050.4	18.8%	1191.1	10.3%	

Note: SDR Basket Weights is based on 2015 Review of SDR Valuation.
Source: COFER, IMF

2.2.2. Individual Country Data for Trade Settlement

20. Among Asian countries, some monetary authorities disclose their own data on currency share of trade settlement. From this data, we are able to confirm that in addition to the RMB, a few other Asian currencies such as the Thai baht, are being utilized to a certain extent for trade settlement with neighboring countries. Table 2.2.2 summarizes the available data on currency share of trade invoicing in Asian countries. Based on this data, we briefly evaluate each country's currency share for trade invoicing and settlement.

Table 2.2.2. Data Disclosure of Currency Share for Trade Invoice/ Settlement

	Organization	Data	Frequency	Language	Website
Thailand	Bank of Thailand	By Region, Share	Annually (from 1994)	English	https://www.bot.or.th/English/Statistics/EconomicAndFinancial/Pages/StatInternationalTrade.aspx
		Export & Import by Region & by Country, Share	Quarterly (from 2015)		
Korea	Bank of Korea	Export & Import by Region & by Country, Value and Share	Annually (from 1992) Quarterly (from 1992) Monthly (from 1992)	English	http://ecos.bok.or.kr/flex/EasySearch_e.jsp
Japan	Japan Customs	Export & Import by Region, Share	Half yearly (from 2000)	English, Japanese	http://www.customs.go.jp/toukei/shinbun/trade-st/tuukahappyou.htm
China	PBOC (CEIC)	RMB Settlement on Total Goods (Export & Import), Service and Other Current Account (Export & Import), ODI & FDI, Value	Quarterly (from 2010) Monthly (from 2012)	Chinese	http://www.pbc.gov.cn/huobizhengceersi/214481/214511/214695/3398597/index.html
	RMB Internationalization Report (PBOC, IMI, Renmin Univ.)		Annually (RMB Int'l Report, from 2015)	Chinese English	http://www.imi.org.cn/en/wp-content/uploads/2017/07/%E3%80%90IMI-Research-Report-No.-1702-EN%E3%80%91RMB-Internationalization-Report-2017-Press-Release.pdf
Indonesia	Bank Indonesia	Total Export & Import (Non-oil & Gas and Oil & Gas), Value	Monthly (from 2010)	English	http://www.bi.go.id/en/statistik/seki/terkini/eksternal/Contents/Default.aspx

Notes: As of April 2018. PBOC's data is available at CEIC.

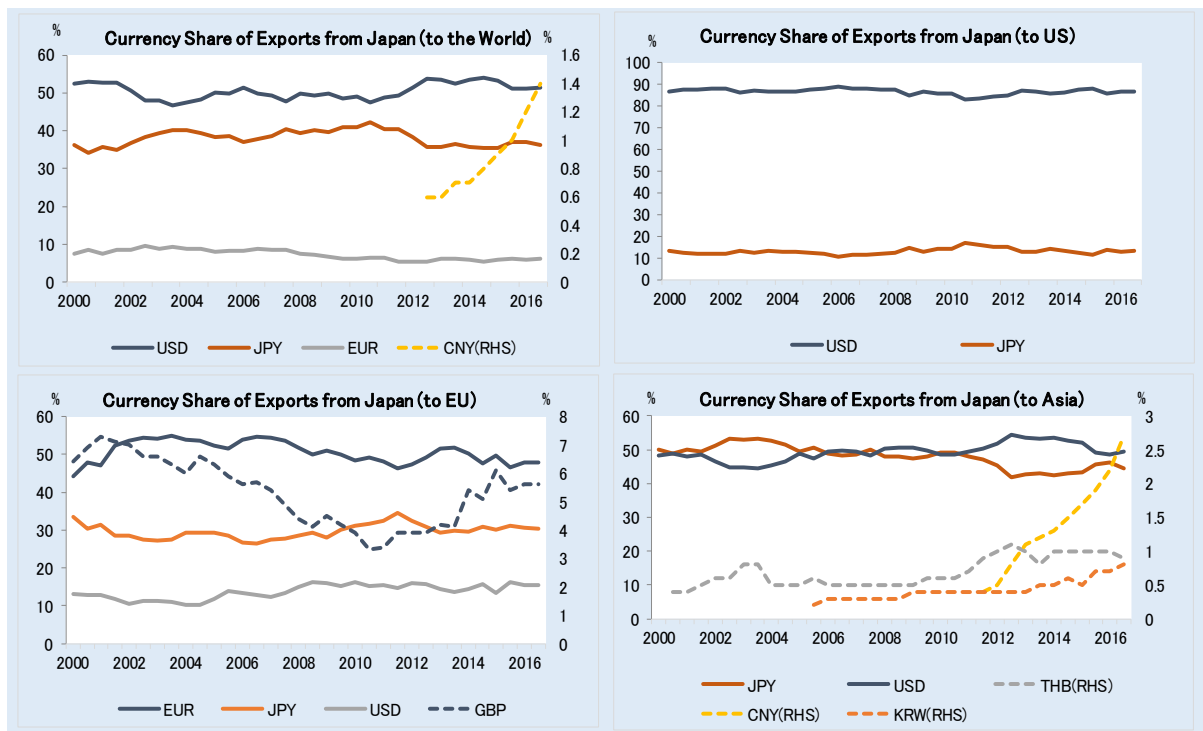
A. Japan

21. The Ministry of Finance of Japan releases a semi-annual report on the shares of different invoice currencies in Japanese exports and imports. Figure 2.2.4 shows the choice of invoice currency for Japanese exports from 2000 to 2017. There are three distinct characteristics of invoice currency choice for Japanese exports. First, in terms of global exports, the share of the U.S. dollar was the largest at about 50 percent between 2000 and 2015. The share of the Japanese yen was second with an estimated 40 percent share although it fell slightly to 35 percent in 2017. The third was the euro, at lower than 10 percent. The pattern has not changed despite volatile exchange rate movements, the GFC and change in Japanese production networks in the world. The RMB's share has begun appearing in this data since 2012, and has increased from 0.6 percent in 2012 to 1.4 percent in 2017.

22. Second, Japanese invoicing currency patterns differ across destination countries (regions). The share of yen invoicing is very low in exports to the U.S., which may reflect the U.S. dollar's special position as an international currency. As of 2017, 88.3 percent of Japanese exports to the U.S. were invoiced in the U.S. dollar. In exports to the euro area, the share of yen invoicing was about 30 percent during the sample period, while the share of euro invoicing was 50 percent in this period. This observation suggests that Japanese firms tend to invoice in local currency when exporting to advanced countries, which is consistent with the pricing to market (PTM) behavior of Japanese exporting firms.

23. Third, the share of yen invoicing has not increased for Japanese exports to Asia. Specifically, the yen's share was above the U.S. dollar's share in the early 2000s. However, it declined from 49.2 percent in 2010 to 43.2 percent in 2015, while the U.S. dollar's share increased from 48.7 percent in 2010 to 52.2 percent in 2015. At present, the share of U.S. dollar invoicing continues to exceed that of yen invoicing. The data indicates that Japanese firms mainly use the U.S. dollar as their invoicing currency for Asian exports and the share of Asian currency usage is still very low even for exports within Asia. However, if we look at the past four years, we see that the RMB's share in Japanese exports has increased by more than four times—from 0.5 percent in the second half of 2012 to 2.2 percent in the second half of 2016. Similarly, the shares of the Thai baht and Korean won also doubled – from 0.4 percent in the second half of 2012 to 0.8 percent in the second half of 2016.

Figure 2.2.4. Currency Share for Japanese Exports (%)



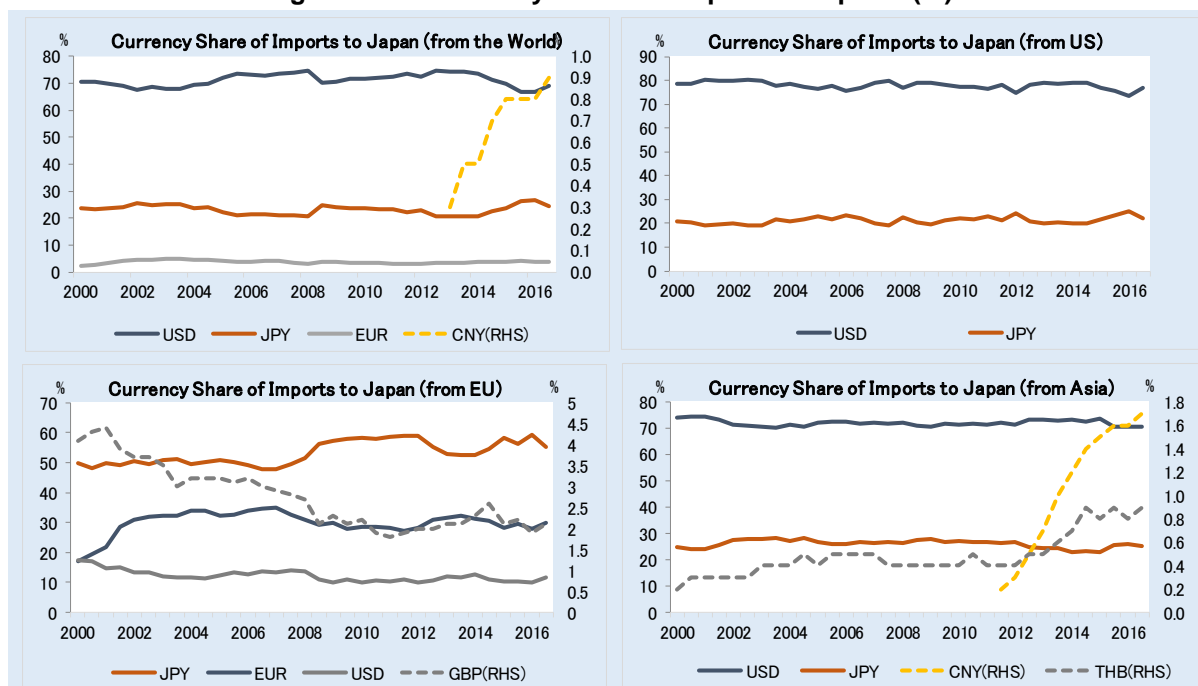
Source: Japan Customs

24. Figure 2.2.5 shows the shares of the yen and U.S. dollar in Japanese imports from 2000 to 2017. The U.S. dollar has continued to be the most commonly used currency in Japanese imports from the world, with a share of around 70 percent, which is larger than for its exports. It is well known that crude oil and raw materials trade tends to be invoiced in U.S. dollars and Japan has long depended on imported oil and raw materials. Conversely, only in imports from the E.U. is the share of the yen invoicing higher when other regions are considered. In this regard, the share of yen invoicing has increased slightly since the GFC from 50 percent to close to 60 percent in 2012. This is partially related to the decline in credibility of the euro, and partially caused by the PTM behavior of European exporting firms. More than 70.0 percent of imports from Asia are invoiced in U.S. dollars and the share of yen invoicing has never exceeded 30.0 percent. The RMB's share in Japanese imports, on the other hand, increased more than eight times from 0.2 percent in the second half of 2012 to 1.7 percent in the second half of 2016. Similarly, the shares of the Thai baht and Korean won also doubled – from 0.5 percent in the second half of 2012 to 1 percent in the second half of 2016.

25. These results show that Japanese firms have mainly used the U.S. dollar as their invoicing currency for both exports and imports in the 2000s. There seems to be no strong incentive for them to change these patterns in the near future. In the recent past, the usage of Asian currencies has gradually increased, but the total share of Asian currency invoicing is still very low compared to other major currencies. One exception is intra-firm trade in China, which Sato and Shimizu (2016) confirmed the increase in RMB settlement between Japanese

head offices and subsidiaries in China. In the case of intra-regional trade, whether Japanese firms can change the invoice currency in intra-regional trade transactions or not will be the key factor in deciding the share Asian currencies in trade in the future.

Figure 2.2.5. Currency Share for Japanese Imports (%)



Source: Japan Customs

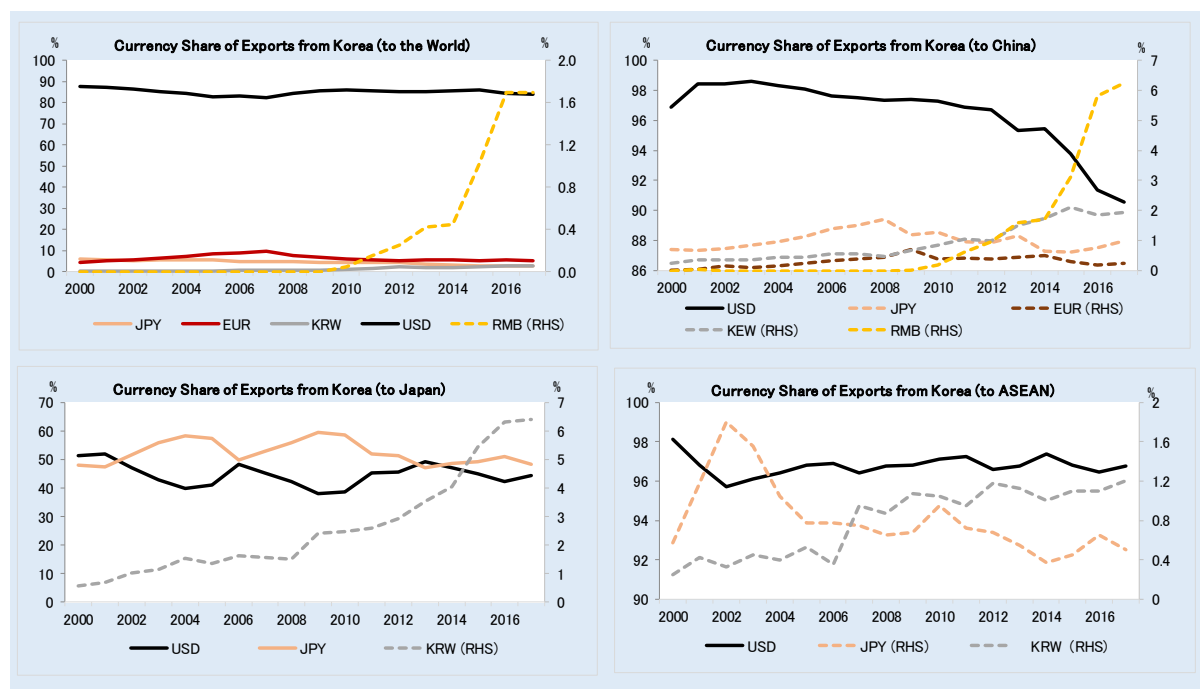
B. Korea

26. The Bank of Korea has disclosed data on value and share by currency in exports and imports on a quarterly basis since 2000. In this paper, data relating to the choice of invoice currency for trade with the world, ASEAN, China and Japan is summarized.

27. Figure 2.2.6 shows the choice of invoice currency for Korean exports from 2000 to 2017. When it comes to Korean exports globally, the share of the U.S. dollar was largest, at over 80 percent. The share of the euro stayed below 10 percent throughout the whole period. It did reach close to 10 percent in 2007, at around the same time when the share of the U.S. dollar declined from 88 percent to 82 percent. However, these movements have reversed since 2008 due to a decline in the credibility of the euro. Earlier, in 2000, the Japanese yen's share stood second at 6 percent, but by 2017, it gradually declined to below 3 percent. In its exports to Japan, the share of the U.S. dollar and Japanese yen were competing at round 50 percent each, while the share of the Korean won gradually increased to 7 percent in 2017. In its exports to China, the share of the U.S. dollar was above 90 percent through this period, although it declined from 97 percent in 2012 to 90.3 percent in 2017, while the share of the RMB increased rapidly to from near zero in 2008 to 6.2 percent in 2017. The Korean won's share also increased from 0.1 percent in 2000 to 2 percent in 2017. For Korean exports to ASEAN, the U.S. dollar's share remains dominant and has been maintained in a narrow range

between 95 percent and 97 percent. Other Asian currencies are used too, but their shares are relatively small.

Figure 2.2.6. Currency Share for Korean Exports (%)



Source: Bank of Korea, Settlement Currency of Exports and Imports

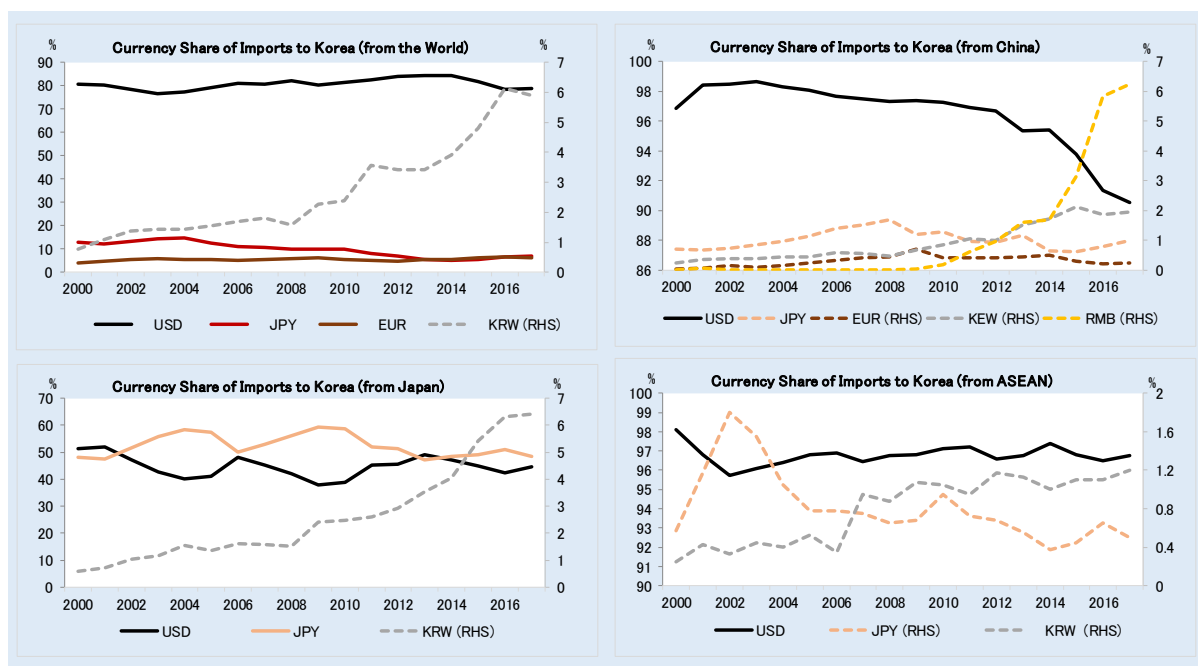
28. Figure 2.2.7 shows the choice of invoice currency for Korean imports from 2000 to 2017. In the case of imports, the share of the U.S. dollar was the largest at around 80 percent through this period. The Japanese yen's share was second (over 14 percent) in 2003 and 2004. However, it gradually declined to 6 percent in 2017. Meanwhile, the share of the euro gradually increased from 4 percent in 2000 to 6 percent in 2017, and the share of the Korean won increased from 0.8 percent in 2000 to 6 percent in 2017.

29. In its exports to Japan, the share of the U.S. dollar and Japanese yen were competing at round 50 percent each, while the share of the Korean won gradually increased to 7 percent in 2017. In the case of imports from China, the U.S. dollar has enjoyed a dominant share of more than 90 percent through this period, but its share declined from 97 percent in 2012 to 90.3 percent in 2017. Meanwhile, the share of RMB marked a rapid rise from 0 percent in 2009 to 5.5 percent in 2017, while the share of the Korean increased from 0.1 percent to 2.0 percent in the same period. In its imports to ASEAN, the share of the U.S. dollar is still dominant but declined somewhat from 97.5 percent in 2000 to 90.2 percent in 2017. The share of the Korean won, meanwhile, increased from 0.6 percent in 2000 to 3 percent in 2017.

30. These results show that Korean trade has been largely invoiced in the U.S. dollar. Interestingly, the share of the RMB has increased rapidly in Chinese trade from 2014. This could be the effect of the bilateral currency swap with China which was agreed upon in

December 2008 and renewed in October 2014. The Japanese yen's share is around 50 percent for both exports and imports with Japan.

Figure 2.2.7. Currency Share for Korean Imports (%)



Source: Bank of Korea, Settlement Currency of Exports and Imports

C. Thailand

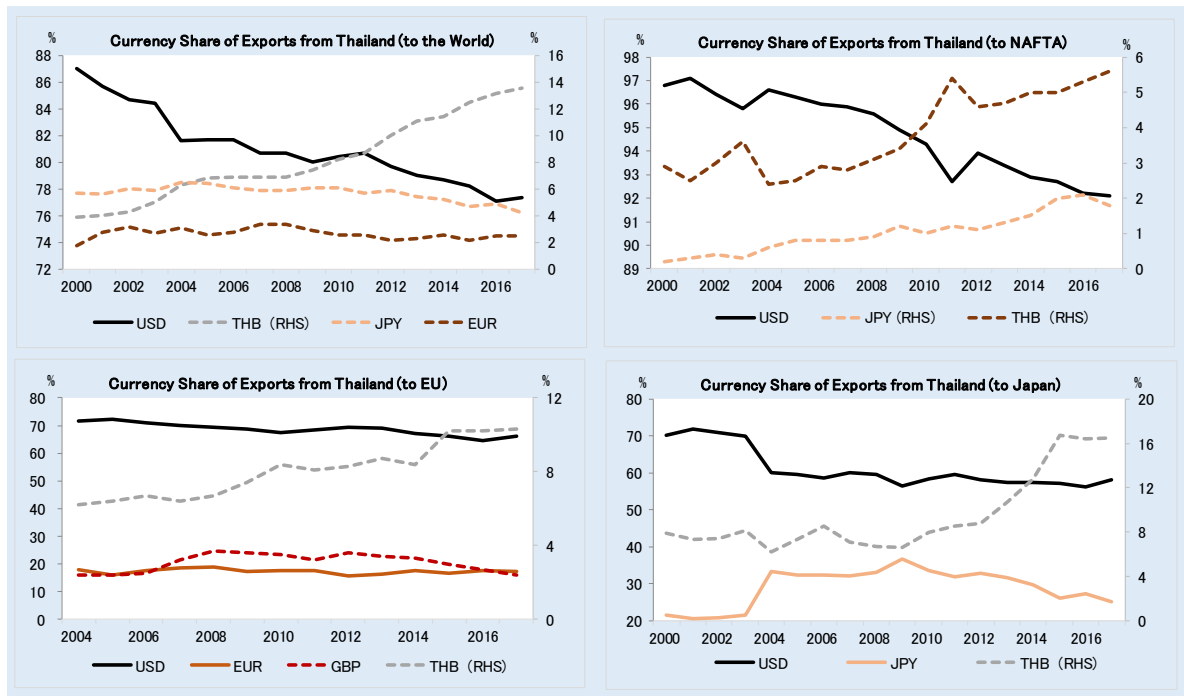
31. The Bank of Thailand has disclosed currency share data in exports and imports, by region and country, on an annual basis since 1994 and on a quarterly basis from 2015.

32. Figure 2.2.8 shows the choice of invoice currency for Thai exports from 2000 to 2017. In exports to the world, the share of the U.S. dollar was largest. However, it has gradually decreased from 87 percent in 2000 to 76 percent in 2017. Conversely, the share of the Thai baht has steadily increased from 4 percent in 2000 to 13.8 percent in 2017. The shares of the Japanese yen and the euro have remained unchanged at around 5 percent and 2 percent through this period respectively. The share of the U.S. dollar has stayed the largest in exports to all advanced countries, although the share of the Thai baht has steadily increased in exports to NAFTA (from 3 percent to 5.5 percent), the E.U. (from 6 percent to 10 percent) and to Japan (from 9 percent to 16 percent) over the past 17 years.

33. Figure 2.2.9 shows the choice of invoice currency for Thai imports from 2000 to 2017. For global imports, the share of the U.S. dollar was largest and stayed in a narrow range between 75 percent and 81 percent during the sample period. The Japanese yen ranked second with a 12 percent share in 2000. However, its share has gradually decreased to reach 6 percent in 2017. Separately, the share of the Thai baht increased steadily from 2 percent in

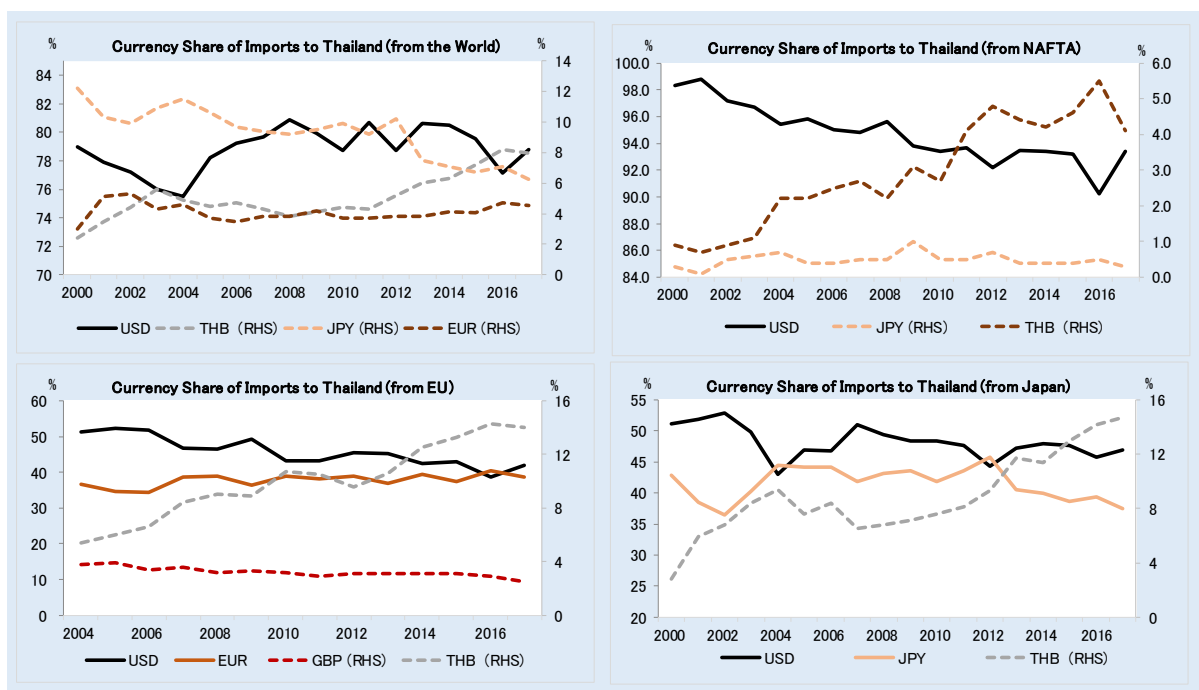
2000 to 8 percent in 2017, giving it the second largest share, while the share of the euro was unchanged at around 4 percent. As with exports, the share of the U.S. dollar stayed the largest in imports from all advanced countries, while the share of the Thai baht has steadily increased in imports from NAFTA (from 1 percent to 5 percent), the E.U. (from 6 percent to 12 percent), and from Japan (from 2 percent to 14 percent) over the past 17 years.

Figure 2.2.8. Currency Share for Thailand's Exports (%)



Source: Bank of Thailand

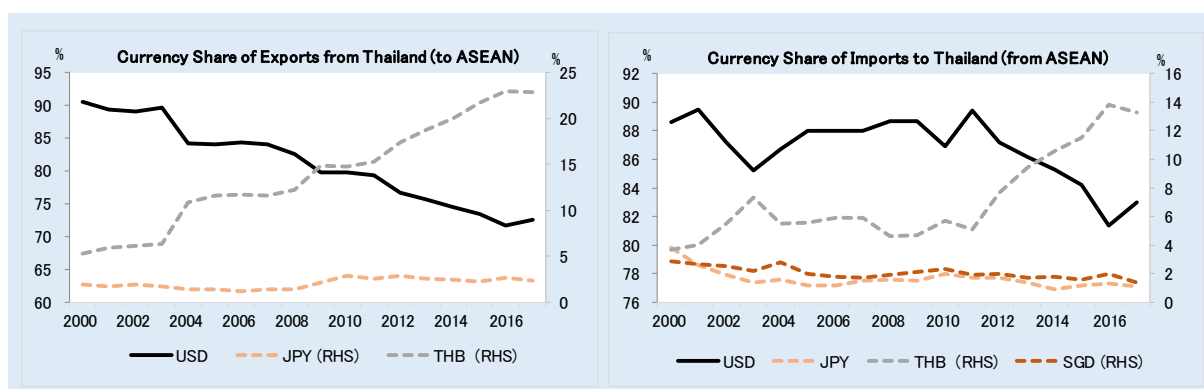
Figure 2.2.9. Currency Share for Thailand's Imports (%)



Source: Bank of Thailand

34. Figure 2.2.10 shows the choice of invoice currency for Thai trade with ASEAN countries from 2000 to 2017. In Thai trade with ASEAN countries, the increase in the Thai baht's share is remarkable in both exports and imports. For exports to ASEAN, the share of the U.S. dollar declined from 90 percent in 2000 to 72 percent in 2017, while the Thai baht's share increased from 5 percent in 2000 to 23 percent in 2017. Similarly, the Thai baht's share in imports from ASEAN increased from 4 percent in 2000 to 13 percent in 2017.

Figure 2.2.10. Currency Share for Thailand's Trade with ASEAN countries (%)



Source: Bank of Thailand

35. Table 2.2.3a and 2.2.3b summarize the Thai baht's share in trade with other ASEAN countries. The share in exports to neighboring countries, such as Lao, Cambodia and Myanmar, is particularly high. In the case of Lao in particular, the Thai baht is very prominently used for transactions. The most commonly traded goods are consumer products, for which baht settlements have been the norm traditionally. Such a high share of Thai baht usage seems to be supported by high baht liquidity in the border areas.⁶

Table 2.2.3a. The Baht's Share in Thailand's Exports to ASEAN Countries (%)

Baht share of Thailand Exports with ASEAN Countries (%)								
Country	2010	2011	2012	2013	2014	2015	2016	2017
Brunei	11.7	9.7	7.8	7.6	10	11.3	15.4	9.3
Indonesia	10.7	9.7	11.5	12.7	12.8	13.6	11.7	14.8
Malaysia	9.6	8.6	9.5	10.5	10.9	13.7	12.6	14
Philippines	5.5	6.7	10.6	12.3	12.6	13	22.2	18.5
Singapore	3.4	4.7	4.2	4.4	4.8	6.4	4.9	5.9
Cambodia	43	46.7	43	45.5	47.7	42.5	50.3	42
Laos	56.7	60.4	60.3	59.3	60.4	61.5	60	65.8
Myanmar	64.9	61.8	61	54.8	53.6	52.3	50.5	47.5
Vietnam	9.3	9.5	10.4	13.7	14.5	15.2	16.7	20.2

Source: Bank of Thailand

⁶ Please see Kubo (2007) for CLMV countries' transactions.

Table 2.2.3b. The Baht's Share in Thailand's Imports from ASEAN Countries (%)

Baht share of Thailand Imports with ASEAN Countries (%)								
Country	2010	2011	2012	2013	2014	2015	2016	2017
Brunei	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Indonesia	5.9	4.9	5.6	6.1	6.0	7.3	8.8	6.8
Malaysia	5.5	5.1	7.4	8.2	9.0	9.7	10.0	7.4
Philippines	9.5	9.8	12.9	15.8	19.3	20.0	19.8	14.7
Singapore	2.4	2.8	4.4	4.4	4.7	4.4	4.9	4.2
Cambodia	52.0	80.5	70.7	46.1	59.2	68.6	64.3	54.3
Laos	19.2	7.6	7.3	7.0	14.5	18.8	35.7	32.4
Myanmar	3.8	2.8	2.3	2.4	3.3	2.1	6.3	14.7
Vietnam	4.9	4.3	21.7	37.9	31.1	27.4	38.0	36.8

Source: Bank of Thailand

36. These data confirm that the high share of baht in invoicing with neighboring countries is not a recent phenomenon. According to the interviews we did in Thailand, baht-invoiced trades have continued for a long time as a traditional way in which small- and medium- enterprises (SMEs) trade with their neighboring countries. Currently, each baht-invoiced transaction conducted by SMEs is relatively small compared to the trade transactions by multinational firms operating in Thailand. However, with considerable supply chain expansion in Thailand and its neighboring countries, the usage of the baht may increase not only in trade with SMEs, but also in intra-firm trade with international production networks.

D. Indonesia

37. Bank Indonesia provides data on the total value of exports and imports by currency on a monthly basis from 2010. Table 2.2.4a and 2.2.4b summarizes each currency's trade share calculated by using each currency's trade volume on an annual basis. In the export segment, the U.S. dollar has been the dominant invoice currency and its share has been at around 95 percent throughout the entire sample period. The share of the Indonesian rupiah has increased from 0.8 percent in 2010 to 1.5 percent in 2017 but still remains very small. In imports, the share of the U.S. dollar has gradually increased from 78.5 percent in 2010 to 84.7 percent in 2017. The share of the Indonesian rupiah has also gradually increased from 1.5 percent in 2010 to 3.2 percent in 2017. Although the share of the Japanese yen was the second largest at 5.2 percent in 2010, it declined slightly to the lowest share of 2.9 percent in 2014 and then recovered at 3.8 percent in 2017. On the other hand, the share of the euro has increased gradually from 3.1 percent in 2010 to 4.5 percent in 2017. Other Asian currencies are rarely used in imports to Indonesia except for the Singapore dollar (1.4 percent share) in 2017. This data indicate that the U.S. dollar continues to play a dominant role in trade invoicing and settlements in Indonesia. However, usage of the Indonesian rupiah is gradually increasing.

Table 2.2.4a. Currency Share for Exports from Indonesia (%)

Currency Share of Exports from Indonesia (%)								
Currency	2010	2011	2012	2013	2014	2015	2016	2017
USD	95.8%	95.6%	94.2%	95.2%	95.1%	94.9%	94.4%	95.1%
Euro	1.1%	1.0%	1.1%	1.0%	1.2%	1.2%	1.2%	1.1%
JPY	1.1%	1.4%	1.9%	0.9%	0.8%	0.7%	0.9%	0.8%
IDR	0.8%	0.8%	0.7%	0.7%	0.8%	1.1%	1.5%	1.5%
CNY	0.0%	0.3%	0.4%	0.6%	0.6%	0.8%	0.7%	0.4%
HKD	0.4%	0.2%	0.2%	0.2%	0.1%	0.0%	0.0%	0.0%
THB	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%
MYR	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
SGD	0.4%	0.3%	1.2%	1.1%	1.2%	1.1%	1.0%	0.9%
Others	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%

Source: Bank Indonesia. The currency share is calculated from the value of exports and imports by currency. For 2017, total data from January to November is used.

Table 2.2.4b. Currency Share for Imports to Indonesia (%)

Currency Share of Imports to Indonesia (%)								
Currency	2010	2011	2012	2013	2014	2015	2016	2017
USD	78.5%	79.1%	76.9%	77.0%	76.2%	77.6%	84.4%	84.7%
Euro	3.1%	2.8%	3.3%	3.5%	3.6%	4.4%	4.3%	4.5%
JPY	5.2%	3.8%	3.7%	3.1%	2.9%	2.9%	3.6%	3.8%
IDR	1.5%	1.4%	1.7%	2.3%	2.6%	3.0%	3.8%	3.2%
CNY	0.0%	0.0%	0.1%	0.1%	0.1%	0.2%	0.6%	0.6%
HKD	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.2%
THB	0.1%	0.1%	0.1%	0.2%	0.2%	0.3%	0.4%	0.3%
MYR	0.3%	0.3%	0.2%	0.3%	0.2%	0.2%	0.3%	0.3%
SGD	1.2%	1.0%	2.5%	2.0%	1.8%	1.8%	1.6%	1.4%
Others	10.0%	11.4%	11.2%	11.5%	12.3%	9.6%	0.9%	0.9%

Source: Bank Indonesia. The currency share is calculated from the value of exports and imports by currency. For 2017, total data from January to November is used.

E. China

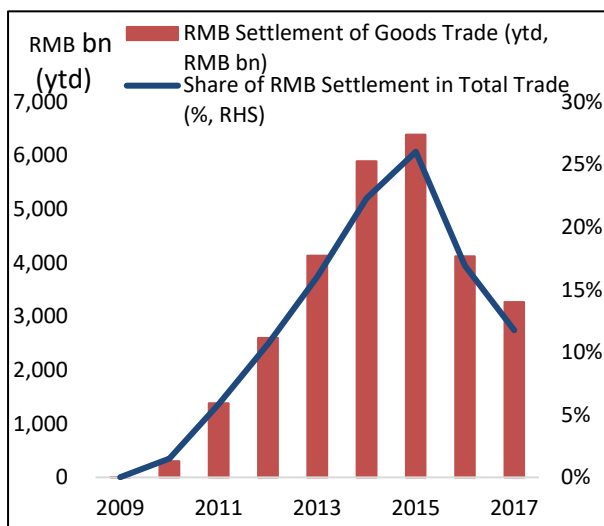
38. The People's Bank of China (PBOC) provides trade value data settled in RMB on a monthly basis from 2010. In addition, "The RMB Internationalisation Report" has been published annually from 2015 and highlights information on RMB settlements both in trade (goods and services) and FDI/ ODI.

39. Figure 2.2.11 shows the movement of RMB's share in trade settlement from 2009 to 2017. In 2010, the RMB's trade settlement share was only 1 percent of total Chinese foreign trade. Due to the aggressive internationalization policies around the RMB, trade settlement in RMB ballooned and reached a historical high of 26 percent of China's total trade in 2015.⁷ However, the latest data shows a decline to 13.7 percent in 2017.

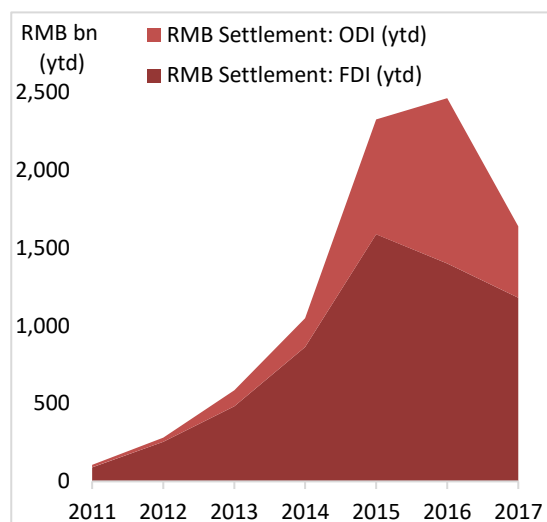
Figure 2.2.11. RMB Settlement of Goods Trade

Figure 2.2.12. RMB Settlement in FDI & ODI

⁷ According to Eichengreen and Kawai (2014), more than 80 percent of this trade settlement have been with Hong Kong.



Source: RMB Internationalisation Report, PBOC

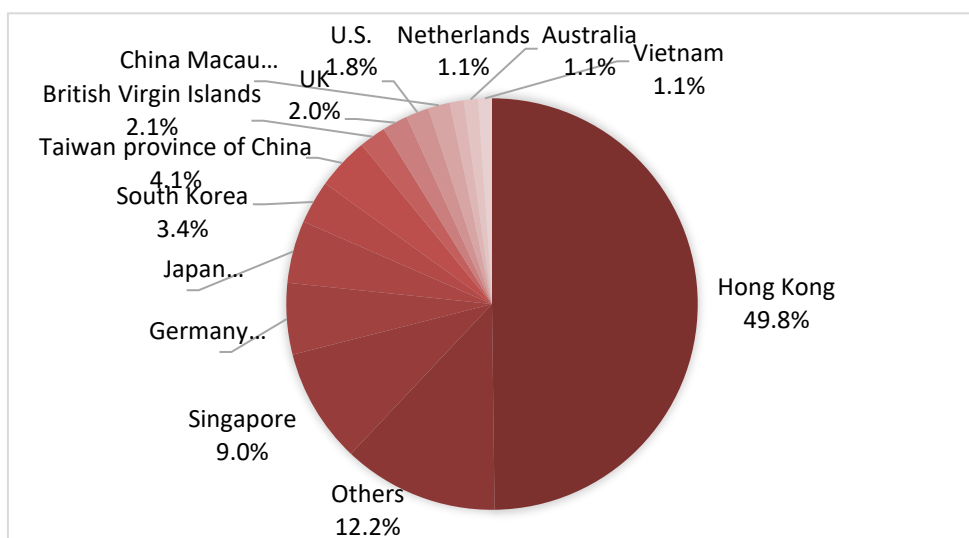


Source: RMB Internationalisation Report, PBOC

40. Figure 2.2.12 shows the movement of cross-border RMB settlement in FDI and ODI in China 2011 to 2017. FDI settled in RMB increased spectacularly from RMB91 billion in 2011 to RMB1,587 billion in 2015. ODI settled in RMB meanwhile, increased from RMB16 billion in 2011 to RMB1,062 billion in 2016. From PBOC’s data, it is understood that total RMB settlement volume has declined in the past two years.

41. The latest RMB Internationalisation Report 2018 shows the overseas regional distribution of the RMB settlement (Figure 2.2.13). Due to this report, the scale of countries and regions that conducted cross-border RMB settlements with China further expanded. By the end of March 2018, 242 countries and regions were conducting cross-border RMB settlements with China, including more than 349,000 companies and 368 banks. In 2017, the amount of cross-border RMB settlements in Hong Kong SAR accounted for 49.7 percent of all RMB settlements in terms of volume, followed by Singapore with a share of 9 percent, Germany (5.6 percent) and Japan (nearly 5 percent).

Figure 2.2.13. Geographical Distribution of Cross-border RMB Receipts and Payments (2017)



42. As indicated above, the U.S. dollar has continued to be an important currency for trade transactions in the region; however, Asian local currency usage, while small, has been increasing gradually increasing owing to market forces and government efforts.

43. What more should be done to promote the greater use of local currencies in Asia? First, the availability and reliability of data related to invoice/ settlement currencies in the region need to be improved. This will help strengthen understanding about factors impeding and promoting local currency usage. For example, data disclosure on currency share in trade by countries is good information, particularly for SMEs that are starting to trade and wish to know other firms' choice of settlement currency. As indicated above, besides BIS or SWIFT data, detailed statistics of currency share in trade transactions published by each central bank can provide more details on current currency usage in their trade transactions. Although the share of local currency use is still small, it is important to know the progress by looking at detailed data.

2.3. Country Case Study for Trade Settlement (Japan, Korea and China)

2.3.1. Country Case Study for Trade Settlement Using Firm-level Data: Based on Japanese Firms' Behavior in Asia

44. For Japanese firms' choice of invoicing currency, Ito et al. (2012, 2016) investigated the determinants of invoicing currency by conducting the RIETI Questionnaire Survey⁸ and they confirmed that the exports from Japanese companies' Asian subsidiaries tend to be invoiced in USD as long as the final destination market is the U.S. Although Japanese firms have shifted their production bases to Asian countries, exports from these Asian bases tend to be invoiced in USD as long as the final destination market is the U.S. By invoicing exports to Asian subsidiaries in dollars, Japanese firms can shift currency risk from Asian subsidiaries to headquarters for efficient currency-risk management. Accordingly, Japanese parent firms have a strong tendency to take exchange rate risk by invoicing in the importer's currency or the U.S. dollar if the importer's currency is not fully convertible, which is consistent with the pricing-to-market behavior discussed in the literature. It also makes economic sense to concentrate currency risk at the headquarters, since it is better equipped with risk management expertise and with scale economies⁹.

45. Comparing the latest RIETI survey results (2017) with previous ones (2009 and 2013), we confirmed the following two trends. First, the share of yen-invoiced exports has declined and become much smaller than the corresponding share of the U.S. dollar in Japanese exports to the world, while the share of U.S. dollar-invoiced exports account for about 60 percent of Japanese exports if taking into account firms' export amounts. Second, the use of Asian

⁸ RIETI is the Research Institute of Economy Trade and Industry, Japan. Ito, Sato, Koibuchi and Shimizu conducted the survey on choice of invoice currency and exchange rate risk management with Japanese listed manufacturing firms in 2009, 2013 and 2017.

⁹ Please refer to Ito et al. (2018) for a detailed investigation on the choice of invoice currency and exchange rate risk management for Japanese firms.

currencies has increased steadily. More than 40 percent of the sample firms use the RMB for their transactions, and the larger the company size, the stronger is the tendency to transact in RMB. According to Table 2.3.1, which summarizes the invoice currency share of Japanese firms' exports to China, Korea and Thailand, we confirmed that in addition to the RMB, the shares of the Thai baht and Korean won also increased in 2017. In addition, we confirmed that not only large sized firms, but also SMEs have started to use Asian local currencies for their trade invoicing.

Table 2.3.1. Japanese Firms' Invoice Currency Share (% , Exports to Asia, RIETI Survey Results)

Export to China	JPY Invoicing Share (%)			USD Invoicing Share (%)			Importer's Currency Invoicing Share (%)		
	2009	2013	2017	2009	2013	2017	2009	2013	2017
Total responded firms	55.4	44.6	47.6	43.7	47.1	39.2	1.3	8.2	12.3
Large (upper 1/3)	45.3	29.1	35.0	52.4	64.3	48.9	3.2	6.5	14.9
Middle (middle 1/3)	60.5	46.3	49.5	40.9	41.0	37.8	0.0	12.4	12.4
Small (lower 1/3)	63.4	61.1	58.1	34.2	33.0	30.9	0.0	5.8	9.5
Export to Korea	JPY Invoicing Share (%)			USD Invoicing Share (%)			Importer's Currency Invoicing Share (%)		
	2009	2013	2017	2009	2013	2017	2009	2013	2017
Total responded firms	69.0	58.4	65.1	25.5	36.1	25.8	4.5	5.4	8.6
Large (upper 1/3)	62.5	38.8	52.4	32.8	51.4	37.1	4.2	9.8	9.3
Middle (middle 1/3)	68.9	61.4	68.0	25.8	35.7	21.4	4.2	2.8	10.3
Small (lower 1/3)	78.9	77.7	74.2	13.8	19.5	20.0	5.4	2.9	5.8
Export to Thailand	JPY Invoicing Share (%)			USD Invoicing Share (%)			Importer's Currency Invoicing Share (%)		
	2009	2013	2017	2009	2013	2017	2009	2013	2017
Total responded firms	60.1	54.6	52.3	30.4	36.3	33.7	9.4	7.8	14.1
Large (upper 1/3)	54.7	41.4	32.9	35.4	49.6	48.2	9.5	8.1	18.9
Middle (middle 1/3)	57.3	41.6	58.0	32.5	30.3	30.7	10.1	9.0	11.4
Small (lower 1/3)	75.5	68.6	71.0	16.7	21.9	17.5	7.8	5.8	11.6

Source: Ito et al. (2018). All figures are calculated by RIETI Questionnaire Survey on Choice of Invoice Currency to Japanese Firms conducted in 2009, 2013 and 2017. We divide the respondent firms into three size categories – large, medium and small by using their consolidated sales.

46. The results above suggest that it is becoming more common for Japanese manufacturing firms to use Asian currencies for transactions within the region than the previous survey in 2013. Most of them answered that they choose local currency invoicing in order to release from foreign exchange risk of their overseas subsidiaries. They used to utilize the U.S. dollar instead of Asian local currencies due to their less convertible and less liquid nature. In this context, an increase in local currency usage implies that Asian local currencies' utility in foreign exchange markets has improved. In addition, we confirmed that the USD invoice share is decreasing slightly in Japanese firms' trade with Asian countries instead of such an expanding of Asian currencies' usage.

47. Because of the increase of overseas production ratio, natural hedging by financing in Asian local currencies is important for Japanese firms. According to the survey, 60 percent of firms borrow in Asian local currencies in local financial markets for their natural hedging. This result suggests that the development of local financial markets is also essential for Japanese firms' production networks in the region.

2.3.2. Country Case Study for Trade Settlement: Based on Korean firms' Behavior in Asia

48. The latest interview survey conducted in Seoul in September 2018 suggests that Korean firms mainly use the USD as their invoice currency because the USD is a “key currency”. Recently, however, they are trying to diversify the currencies used in settlement in order to reduce their overseas subsidiaries’ exchange rate risks. Beside the USD, they also use the EUR and the JPY in trade with E.U. and Japan, respectively. The recently stable exchange rate of the KRW has also supported the diversification endeavors of companies. KRW share in settlement is still small but is gradually increasing not only in trade with Asian countries, but also in trade with E.U. countries. For foreign exchange risk management, Korean firms prefer a natural hedge of exports and imports and lagging of payments to manage USD exposure. Basically, most transactions are dealt on a spot basis, while large multinational firms utilize forward transactions for their hedging. Foreign firms that use the KRW for their trade transactions have to use non-deliverable-forward (NDF) transactions for their hedging.

49. In addition to the Bilateral Swap Agreement (BSA) between Korea and China that came into effect in December 2008, the Bank of Korea has launched a series of financing infrastructures (such as those listed below) to facilitate local currency settlements between Korea and China, which have contributed to the increase in RMB usage by Korean firms recently. Because both KRW and RMB are not fully internationalized currencies, the KRW-RMB direct transaction market, which allows RMB remittances for Korean firms, has worked effectively.

- BSA with China, which was agreed upon in December 2008, renewed in October 2014 and then in October in 2017
- KRW-RMB Settlement Infrastructure was introduced in December 2012
- KRW-RMB Direct Transaction Market was started since December 2014
- RMB-denominated government bonds issued in November 2014

2.3.3. Country Case Study for Trade Settlement: Based on a Market Survey on the Usage of RMB by the Bank of China and China Construction Bank

50. The RMB Internationalisation Report 2018 shows the results of a market survey on RMB usage in 2017.¹⁰ According to a the market survey conducted by Bank of China in 2017, 61 percent of foreign institutions surveyed had already used RMB and were expected to scale up RMB usage, while those who did not use RMB showed interest in using RMB in the future. The most frequently used RMB related product for 53 percent foreign entities was cross-border RMB payment, while other products, sorted by frequency of use, were RMB deposits, RMB trading, RMB banknotes and RMB financing products. The survey revealed that the RMB has been recognized as a currency of settlement by a majority of foreign entities, yet its functions

¹⁰ Bank of China made a survey over 3,134 enterprises and 118 financial institutions around the world on the usage of RMB, and China Construction Bank also conducted a survey targeting the usage of RMB by domestic and foreign enterprises.

as financing currency and investment currency had not been fully realized and offered great potentials for the future.

51. The Asian Banker and China Construction Bank also launched the global Renminbi (RMB) Internationalisation Report 2018.¹¹ This global survey revealed a growing level of activity in RMB cross-border settlement; where about half of the respondents, comprised of 56 percent of Chinese companies, 50 percent of overseas companies and 42 percent of financial institutions, indicated an increase in engagement in 2017. Notably, 76 percent of the Chinese companies and 36 percent of overseas companies described themselves as “proactive” towards RMB usage in cross-border settlement. The Belt and Road Initiative emerged as the most significant driver of RMB internationalization as cited by 72 percent of the respondents. This is followed by the "inclusion of RMB in the IMF SDR", which was mentioned by 60 percent of surveyed respondents.

52. For foreign exchange risk management, 31 percent of Chinese companies prefer a natural hedge of assets and liabilities/ leading and lagging of payments to manage RMB exposure. Meanwhile, the offshore RMB spot market is the most preferred route for 24 percent overseas companies and 23 percent of Chinese companies to hedge their RMB exposure.

2.4. Country Case Study for Investment Transaction

53. Like local currency usage in trade transactions (invoice and settlement), investigating local currency usage in investments is also important, but not many Asian countries disclose data of international investment by currency. Table 2.4.1 shows each Asian country’s data disclosure of currency breakdown for investment transactions. The IMF also conducts two surveys – the Coordinated Direct Investment Survey (CDIS) and Coordinated Portfolio Investment Survey (CPIS). The CPIS discloses country data by currency, and we are able to get currency breakdown data for Indonesia, Japan, Korea, Malaysia, the Philippines and Thailand through CPIS. The Bank of Korea discloses International Investment Position (IIP) data for both FDI and Portfolio Investment by currency. The Bank of Japan, meanwhile, discloses data only for portfolio investment by currency while the PBOC discloses the RMB usage on capital account in its RMB Internationalisation Report.

Table 2.4.1. Data Disclosure of Currency Share for Investment

¹¹ This report is based on a survey of 346 companies (230 in China and 116 overseas) and 52 financial institutions to evaluate the progress in RMB usage and development of cross-border RMB denominated products and businesses. Please refer the following website for the details.
(<http://forums.theasianbanker.com/uploads/TAB-PR-RMB-Internationalisation-report-2018.pdf>)

Country	Organization	Data	Frequency	Language	Website
Korea	Bank of Korea	International Investment Position (Foreign Direct Investment, Portfolio Investment) by currency	Annual (from 2002)	English, Korean	http://ecos.bok.or.kr/flex/EasySearch_e.jsp
Japan	Bank of Japan	Portfolio Investment Position (Asset & Liability) by currency	Annual (Asset side from 2005, Liability side from 2014)	English, Japanese	http://www.stat-search.boj.or.jp/ssi/cgi-bin/famecgi2?cgi=\$nme_a000_en&lstSelecton=BP01
China	PBOC, RMB Internationalization Report	RMB Settlement on Capital account	Annual	Chinese English	http://www.pbc.gov.cn/huobizhengceersi/214481/214511/214695/3635170/index.html
Indonesia, Japan, Korea, Malaysia, Philippines, Thailand	IMF (CPIS)	Portfolio Investment Asset by currency	Annual (from 2001), Semi-annual (from 2013)	English	http://data.imf.org/regular.aspx?key=32983

As of August 2018.

54. Table 2.4.2 shows the currency breakdown of portfolio investment assets by five Asian countries. The share of the U.S. dollar is the highest in all countries, however, the shares are different. In the Philippines, more than 95 percent of portfolio investment assets is in the U.S. dollar. On the other hand, the share of the U.S. dollar, while the highest, is around 60 percent in Thailand, followed by the Japanese yen (10.17 percent) and the euro (8.99 percent). The data on the RMB has recently included in the currency of denomination in this survey, but not so all countries answered the data regarding the RMB, and so the usage of the RMB might be counted in other currency. Among the five countries, the share of the RMB is the highest in Korea (2.01 percent), and the second highest in Indonesia (1.27 percent), followed by in Malaysia (0.65 percent).

Table 2.4.2. Currency Breakdown of Portfolio Investment Assets in Five Asian countries (in USD millions, June 2017)

Currency of denomination	Indonesia		Korea		Malaysia		Philippines		Thailand	
	Value	Share	Value	Share	Value	Share	Value	Share	Value	Share
U.S. dollars	11,594	79.49%	254,042	69.69%	53,718	69.13%	11,498	95.46%	28,431	60.54%
Euros	17	0.12%	30,250	8.30%	1,196	1.54%	307	2.55%	4,220	8.99%
Chinese renminbi	186	1.27%	7,316	2.01%	504	0.65%	8	0.07%	0	0.00%
Japanese yen	0	0.00%	14,441	3.96%	573	0.74%	126	1.05%	4,775	10.17%
British pounds	2	0.01%	10,666	2.93%	1,315	1.69%	10	0.08%	551	1.17%
Australian dollar	31	0.21%	5,251	1.44%	3,275	4.22%	29	0.24%	0	0.00%
Canadian dollar	-	-	4,555	1.25%	7	0.01%	12	0.10%	0	0.00%
Swiss francs	-	-	3,499	0.96%	114	0.15%	2	0.02%	15	0.03%
Other	2,755	18.89%	34,523	9.47%	17,002	21.88%	53	0.44%	8,966	19.09%
Total Value	14,585	100.00%	364,543	100.00%	77,705	100.00%	12,046	100.00%	46,959	100.00%

Source: Coordinated Portfolio Investment Survey (CPIS, IMF).

55. Based on BOJ's data (Table 2.4.3), we confirm that the share of the U.S. dollar in portfolio investment assets in Japan is lower than the above five Asian countries. The share of the U.S. dollar in asset is the highest (50.91 percent) in 2017, and the next highest share is the Japanese yen (21.56 percent), followed by euro (13.14 percent). It means that Japanese

investors hold their international investments in various currencies, and around 20 percent of total value is yen-denominated investment funds set up overseas. On the liability side, 94.68 percent of portfolio investment liability is denominated in Japanese yen. This means that portfolio investment liabilities are mainly due to an increase in overseas investors' holdings of yen-denominated equities.

Table 2.4.3. Currency Breakdown of Portfolio Investment in Japan (USD, millions)

Currency of denomination	2017				2016			
	Asset		Liability		Asset		Liability	
	Value	Share	Value	Share	Value	Share	Value	Share
U.S. dollars	2,247,374	50.91%	153,479	4.72%	2,259,257	48.75%	201,229	5.33%
Euros	580,225	13.14%	15,064	0.46%	625,506	13.50%	24,233	0.64%
Chinese renminbi	121,996	2.76%	2,291	0.07%	123,816	2.67%	2,395	0.06%
Japanese yen	217,490	4.93%	627	0.02%	240,198	5.18%	1,151	0.03%
British pounds	49,951	1.13%	382	0.01%	52,860	1.14%	401	0.01%
Australian dollar	23,378	0.53%	325	0.01%	25,220	0.54%	-	-
Canadian dollar	2,402	0.05%	160	0.00%	5,241	0.11%	618	0.02%
Swiss francs	31,721	0.72%	1,490	0.05%	43,764	0.94%	1,555	0.04%
Other	951,798	21.56%	3,077,891	94.64%	1,038,218	22.40%	3,544,870	93.86%
Total Value	187,877	4.26%	425	0.01%	220,093	4.75%	419	0.01%
Total Value	4,414,213	100.00%	3,252,135	100.00%	4,634,171	100.00%	3,776,870	100.00%

Source: Bank of Japan. The date refers to the end of the period.

56. According to the PBOC's RMB Internationalisation Report 2018, cross-border RMB settlement under the capital account totaled RMB4.83 trillion, with a YOY increase of 4.7 percent, of which receipts stood at RMB2.68 trillion and payments stood at RMB2.15 trillion, with a net inflow of RMB521.98 billion in 2017. Cross-border RMB settlements of securities investment amounted to RMB1.9 trillion with a yoy increase of 219 percent, which contributed the most to the growth of RMB settlement under the capital account. Cross-border RMB settlement of direct investment amounted to RMB1.64 trillion, marking a yoy decrease of 34 percent. Cross-border RMB settlements of other investment, meanwhile, amounted to RMB1.3 trillion, marking a yoy decrease of 16 percent. The share of cross-border RMB settlements under the capital account in the total cross-border settlement witnessed a significant upward trend. In 2017 – cross-border RMB settlements under the capital account accounted for 66 percent of total cross-border settlement during the same period, 9 ppts higher compared with 2016. The proportion of RMB settlement in direct investment rose steadily, reaching a peak of 56 percent in November 2017 with an average of 39 percent on a yearly base.

57. The above results suggest that the U.S. dollar is still mainly used in international investment, while the Japanese yen and the RMB will play an important role as investment currencies in the region. In addition, we should promote further data disclosure around international investment by currency in order to correctly grasp what currencies are being used for investment.

2.5. Summary

58. Despite the high level of intra-regional trade in ASEAN+3 countries, the dominance of the U.S. dollar is still significant in Asia due to network externalities in using other international currencies. From BIS, SWIFT and IMF data, the U.S. dollar's dominance as a key currency is confirmed in the FX market, in trade settlement and in the composition of foreign exchange reserves. From five Asian countries' data disclosure on currencies' share of trade in the region, however, we confirm that in addition to the RMB, some other Asian currencies such as the Thai baht, are being used to a certain extent for trade settlement with neighboring countries. Beside BIS or IMF data, the statistics published by each Asian central bank can provide us with more details on current local currency usage on their trade transactions. Although the share of local currency use is still small, it is important to know how much progress is being made through the disclosure of data, the further promotion of which is needed in the near future.

59. Based on the latest firm level survey questionnaire in Japan, we confirm that it is becoming more common for Japanese manufacturing firms to use Asian currencies for transactions within the region. This indicates that in addition to the RMB, the shares of the Thai baht and Korean won also increased in Japanese exports to Asian countries. Such an increase of local currency usage by Japanese firms is a result of both the improvement of Asian local currencies' utility in foreign exchange markets as well as the increase in the importance of Asian local markets as a final destination for exported goods and services.

60. Our interviews with Korean firms confirmed that they are trying to diversify their settlement currencies to reduce their overseas subsidiaries' exchange rate risks. The recently stable KRW exchange rate has lent support to companies as they have looked to diversify their settlement currencies. In addition to the BSA between Korea and China that has been in place since December 2008, the Bank of Korea has also launched a series of financing infrastructures to facilitate local currency settlements between Korea and China which has resulting in increased RMB usage by Korean firms recently.

61. Based on a special market survey conducted by the Bank of China in 2017, we confirmed that the RMB has been recognized as the currency of settlement by a majority of foreign entities. The Asian Banker and China Construction Bank also launched the global Renminbi (RMB) Internationalisation Report 2018, which suggests a notable increase in RMB engagement amongst respondents in 2017, with a greater push towards the use of RMB in cross-border settlement by Chinese companies.

62. Similar to local currency usage in trade transactions, investigating the local currency usage in investment is also important, however not so many Asian country disclose the data of international investment by currency. The PBOC's RMB Internationalisation Report 2018 also confirmed that the cross-border RMB settlement under the capital account has steadily increased.

63. IMF data indicate that the U.S. dollar is still the main currency used in international investment, while the JPY and the RMB are increasingly playing an important role as investment currencies in the region. Further data disclosure for international investment by currency is needed in order to correctly grasp what currencies are used for investment in the region.

64. Beside BIS or IMF data, statistics published by each Asian central bank and firm level interview researches and surveys can give us more detail on current local currency usage in their cross-border transactions. In this sense, further promoting data disclosure and conducting surveys on a regular basis on local currency usage, both in trade settlements as well as investments, remains very important.

<Box 1> Cross-regional Evidence on Usage of Local Currency: Euro Area and South America

1. To promote local currency usage in the region, it is worthwhile for us to refer to the experiences of the euro area and the challenges faced in South America.

Experience of European countries

2. In the 1980s, a significant increase in intra-regional cross-border capital flows and trade together with stable intra-regional exchange rates owing to the European Monetary System (EMS) contributed to a substantial reduction in transaction costs among European currencies. According to the BOE's Quarterly Bulletin 32 (1992), the Deutsche mark's invoicing share within the region was not very high even when foreign exchange cross transactions between the Deutsche mark and other European currencies were growing in 1990s. After the Plaza Accord of 1985, the Deutsche mark started to be used as an intervention currency to support EMS, and then European central banks started to hold it as their reserve currency. Although the size of the Frankfurt market was small, euro-mark transactions were expanding in the London capital market, which resulted in an increase in Deutsche mark liquidity.

3. Since the introduction of the euro in 1999, it has steadily increased its share in settlement and invoicing of trade, especially in the euro zone but also in non-euro E.U. countries. This implies that regional monetary and financial cooperation could be indispensable in promoting the use of a regional currency. Faudot (2015) reveals that the euro is a high and stable invoicing currency regionally, but has failed to reach the status of vehicle currency. While the euro very quickly became more widely used by both euro area and non-euro area E.U. countries, its role is still predominantly within the region.

4. Table B1 shows the currency share of extra-E.U. exports and imports in 2016. In extra-E.U. trades, the share of the U.S. dollar is 32.9 percent in exports and 55.4 percent in imports. In imports, the U.S. dollar invoicing shares are larger than euro shares in E.U. countries except for Germany. The share of the euro in extra-E.U. exports is 49.3 percent in total E.U. trade, however each country's share is different. The highest euro share is in Italy (70.8 percent), followed by Spain (66.4 percent). The share of the euro in extra-E.U. imports is 34.4 percent in total E.U. trade, smaller than in the case of exports. The highest euro share is in Germany (48.4 percent), followed by Italy (44.9 percent)¹². Thus, the euro is the predominant invoicing currency in extra-E.U. exports, while the U.S. dollar is still the most used currency in imports into the E.U. On the other hand, according to Eurostat, intra-E.U. trade was valued – in terms of exports – at EUR3,347 billion in 2017, 78 percent higher than the EUR1,879 billion worth of exports leaving the EU-28 to non-member countries (extra-E.U. trade). If we consider intra-

¹² According to Eurostat data, the type of products traded influences clearly the choice of invoicing currency. For instance, while over 85 percent of petroleum products imported into the E.U. in 2016 were traded in U.S. dollars, around half of the primary goods (54 percent) and manufactured goods (50 percent) that the E.U. exported to non-E.U. countries were invoiced in euros. This also partly explains why some member states have higher invoicing shares in certain currencies than others. (<https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20170627-1?inheritRedirect=true>)

and extra-E.U. trades together, the share of euro invoicing becomes much higher, because of the high share of intra E.U. trade.

Table B1. Extra-E.U. Trade by Invoicing Currency (2016)

Extra-E.U. exports by Member state (%)						Extra-E.U. imports by Member state (%)					
	Other currencies	U.S. dollar	National currency of E.U. excl. euro	Euro	Total (all currencies)		Other currencies	U.S. dollar	National currency of E.U. excl. euro	Euro	Total (all currencies)
E.U.	9.8	32.9	8	49.3	100	E.U.	5.2	55.4	4.9	34.4	100
Euro area	9.8	32.3	0.4	57.5	100	Euro area	4.3	52.9	0.6	42.2	100
Germany	13.1	27.7	0.1	59.1	100	Germany	7.1	44.2	0.3	48.4	100
Ireland	19.6	71.5	0.3	8.5	100	Ireland	3.5	65.8	0.7	30.1	100
Spain	5.8	27.5	0.3	66.4	100	Spain	1.8	59.6	0.2	38.4	100
France	8.4	39.4	0.2	52.1	100	France	3.9	52.4	0.4	43.2	100
Italy	4.9	24.1	0.2	70.8	100	Italy	3.1	51.9	0.1	44.9	100
Portugal	4.5	32.6	0.4	62.5	100	Portugal	1.1	66.4	0	32.4	100
Finland	11.1	40.6	0	48.3	100	Finland	5.3	64.7	0.1	29.9	100
Sweden	24.2	37.9	21.1	16.8	100	Sweden	21.3	48.8	15.7	14.2	100
U.K.	3.8	35.6	57.4	3.2	100	U.K.	7.2	67.5	20.6	4.6	100

Source: Eurostat

Brazil-Argentina Local Currency Payments System (SML) in 2008

5. The Brazil-Argentina Local Currency Payment System (SML) has launched in late 2008. Its objectives are as follows: increase the trade business access of small and medium-sized agents, allow foreign trade in local currency, strengthen the real/ Argentinean peso market, and reduce the cost of transactions. Under SML, exchange contracts and foreign trade documents are not required. SML trades are available only with authorized financial institutions (local banks and overseas banks such as Citibank, BNP, Deutsche, HSBC and the like). The integration of the Brazilian payment system (SPB) with the Argentinean payment system (MEP) also has been promoted. For the exchange rate, two SML rates, a real/ peso rate set by the Central Bank of Brazil (BCB) and a peso/ real rate set by Argentine Central Bank (BCRA) are available daily.

6. According to Gersten (2015), BRL-invoiced exports have increased with three Brazil Mercosur partners (Argentina, Paraguay, and Uruguay) by SML. Three neighboring countries represented over 85 percent of BRL-invoiced exports between 2007-2010 and over 53 percent in 2011, which seems to be the effect of SML. Although the share of the U.S. dollar is dominant in exports (94.5 percent, 2011) and imports (83.8 percent, 2011), the share of BRL invoicing in exports increased from 0.13 percent in 2007 to 1.25 percent in 2011, while the share of BRL invoicing in imports increased from 0.48 percent to 1.95 percent in the same period, according to the Ministry of Development, Industry and Foreign trade. The top exported products (electrical energy, tobacco, and sugar) represent a significant portion of BRL invoicing in exports (high share products). BRL-invoiced imports also have increased with international trade and the main import products in BRL are pharmaceuticals from the U.S., Germany and Switzerland, and electrical equipment from China, Korea and India (intra-firm trade).

7. The SML's bilateral agreements with other Mercosur countries have been expanded as follows: Brazil and Uruguay in 2014, Argentina and Uruguay 2015, and Paraguay and Uruguay in 2015.

Experiences from E.U. and Mercosur

8. The experiences from E.U. and Mercosur indicate that the local currency usage could be changed from regional transactions. In E.U., although US\$ invoice is used for extra-E.U. trade, euro is widely used by both euro area & non-euro area E.U. countries. In Brazil, BRL invoice share has been gradually increasing mainly in the trades with three Mercosur countries since Brazil-Argentina SML launched in 2008.¹³ In the case of Brazil, there are three factors that promote BRL invoicing, and they are as follows: neighboring countries' trades due to the Brazil-Argentina SML, import transactions between local subsidiaries and multinational corporations (intra-firm trade), and export resources with high market share, such as tobacco and sugar.

9. These experiences tell us that there are three main factors to consider in expanding local currency usage, such as bilateral trades in neighboring countries with strong political support, intra-firm trade with local subsidiaries importing manufacturing goods from their head office, and export resources with high market share.

¹³ More information is available at website of Banco Central do Brazil (<https://www.bcb.gov.br/rex/sml/ingl/introduction.asp>).

<BOX 2> Use of Local Currencies in Trade and Investment in Mainland South East Asia – Cambodia, Lao PDR and Myanmar

1. **With the opening up of their markets in the 1990s, trade and investment have continued to expand in the transition economies in mainland South East Asia, namely Cambodia, Lao PDR and Myanmar.** After opening up, authorities have stepped up their efforts to liberalize trade and investment in order to boost economic growth and to make the switch from planned to market economies. Reform measures, including privatization and deregulation, were initiated in order to ensure free and fair market entry and to improve the business environment for trade and investment.

2. **These transition economies have long been characterized by high level of dollarization (to varying degrees), and they have followed different trajectories in terms of dollarization in the course of transition to market economy.** Dollarization in Lao PDR has been on a declining trend in the past 10 years, though it still remains high compared to Myanmar and Vietnam, with 53.7 percent of deposits and 50.2 percent of credit in foreign currency, of which approximately half are in U.S. dollars and the other half in Thai baht. The Bank of Lao PDR's thin foreign reserves limit its ability to serve as a buffer in case of exchange rate pressure or a foreign currency liquidity crunch. While no official information is available on the extent of dollarization in Myanmar, we know that it was very high in Myanmar prior to reforms, accounting for 66.5 percent of total deposits in 2011 (Kubo, 2014). Since then, dollarization in Myanmar has reduced substantially with the opening of more domestic private banks, which mainly take deposits and provide loans in the local currency. In the most highly dollarized economy of the three, Cambodia, the degree of dollarization as measured by foreign currency deposits over broad money (M2) was recorded 84 percent in 2018, having increased from 36 percent in 1993. However, it has been stable since 2012 given the measures taken by the authorities.

3. **Expanding trade and investment among the regional economies has increased the usage of local currencies in trade and investment, particularly in the border areas of the economies.** In the case of Lao PDR, with domestic currency in circulation at a relatively low 7.1 percent of GDP, the use of the U.S. dollar and Thai baht as means of payment is considered prevalent. Trade is also mostly settled in U.S. dollars and Thai baht, particularly for imports from Thailand, which account for 59.7 percent of total imports. In terms of FDI, China has recently stepped up, with its investment almost doubling to USD1.3 billion, mostly in RMB, and driven by the construction of the Lao-China railway project. In Myanmar, trade with China and Thailand accounted for 50 percent of total trade, half of which is estimated to be border trade. With no official data available, significant chunks of border trades are estimated to be settled in RMB or baht on either side of the border. In Cambodia, the combined imports from Thailand and Vietnam comprise more than 30 percent of the country's total import. Trade with these two major neighboring trading partners after China, has been carried out in either baht or dong around the border areas.

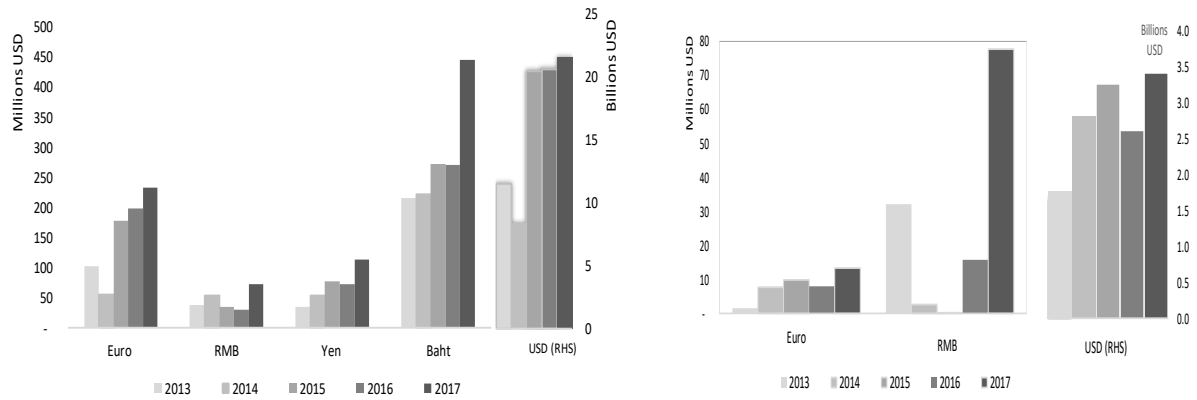
4. **Apart from anecdotal evidence of increasing usage of local currencies in trade and investment in the transition economies, the development of formal foreign exchange rules on trade settlement has been inconsistent in them.** Lao PDR has agreements with Thailand, China and Vietnam that enable payment related to goods and services with countries to be paid for in the local currencies of the trading partners. On the other hand, Myanmar does not have any official agreements on trade settlement with its key neighboring trading partners, except for gas exports to China, which is in RMB. In Cambodia, trade settlement has been conducted in several foreign currencies in the absence of foreign exchange regulations. Only recently, bilateral local currency trading between the riel (Cambodia's fiat money) and the RMB launched in the interbank market in the autonomous Guangxi region of southern China to facilitate trade and investment. The official RMB-riel exchange rate decreases the use of U.S. dollar as an intermediary currency.

5. **While the lack of available data limits a complete understanding and analysis of local currency usage in these economies, it is clear that local currencies – particularly the RMB and the baht – have increasingly been used in them.** Driven by increasing trade and investment among the regional economies, local currency usage has been on the rise lately. This can be seen from data available for Cambodia, although the U.S. dollar remains the dominant currency there. The baht, RMB and the yen are the top three local currencies used for cross-border trade and investment in Cambodia. As per the bank transfers recorded through the International Transactions Reporting System (ITRS),¹⁴ the use of the baht in cross-border trade settlement with Cambodia increased more than two-fold in five years to more than USD400 million in 2017 (2 percent of total trade settlement), while that of the Japanese yen and the RMB also increased remarkably. On the investment front, meanwhile, use of the RMB increased sharply to USD77.8 million in 2017 (2.2 percent of total captured investment funds transfers), given China is the leading investor in Cambodia. It is notable that while other local currencies are increasingly being used in trade and investment, the U.S. dollar still remains dominant with around 92 percent share in trade and 94 percent share in investment in 2017.

Figure 1: Selected Major Currencies Used for Trade Settlement with Cambodia

Figure 2: Major Currencies Used in Investment

¹⁴ Figures extracted from the system do not necessarily indicate the amount of local currency used, since most of the transfers by banks were converted into U.S. dollar equivalents, given their respective banks' systems do not support multi-currency records, which lead to under-recorded.



6. **Going forward, the further use of local currencies in these economies will depend on several factors, including the further integration of regional markets through trade and investment and through the development of rules on local currency usage in cross-border settlement by authorities.** Strengthening data availability and adequacy in currency usage should enable the authorities to better monitor the foreign exchange market and consider further improving rules on settlement of trade and investment, which will contribute to enhancing the deeper integration of regional economies.

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