

Internationalization of the yen – where has it gone? –

Hitotsubashi University and IMF joint seminar
on

The Future of International Monetary System for Asia
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Motivation

- Over the last three decades, Japan has attempted to **internationalize the Yen**, with limited success.
- Recently, China has actively promoted **the RMB internationalization**, possibly positioning itself as an alternative to the USD as the predominant international currency for Asia.
 - China has also been making bilateral efforts to increase the use of RMB through swap agreements, with RMB offshore markets & clearing banks in key financial centers.
 - The importance of RMB in international transactions has been increasing, and has led to the recent inclusion of the RMB in the SDR basket.
- This presentation will discuss about the future desirable currency system for Asia.
 - Particularly, we focus on the issue of access to international currency and the possible expansion of the role of regional currencies.

Contents

1. Quick Review of the Yen's Internationalization
 - Why the yen failed to be internationalized?
2. Choice of Invoice currency
 - Findings from the questionnaire survey of Japanese overseas subsidiaries in Asia
3. GFC & Change of Trade Structure in Asia
4. Conclusion

1. Quick Review of the Yen's Internationalization

Differences in Internationalization between RMB and Yen

- Since 2009, Bilateral Currency Swap Agreements with various countries
- Pilot Scheme for use of the RMB in trade settlement(2009)
- Offshore Market RMB (CNH)
- Direct RMB trading with non-US dollar currencies
- Official RMB Clearing Banks

- 1960: Free Yen Accounts for nonresidents
- 1980: Amendment of Foreign Exchange and Foreign Trade Control Act
- 1984: Abolition of the real demand
- 1998:Amendment of Foreign Exchange and Foreign Trade Act

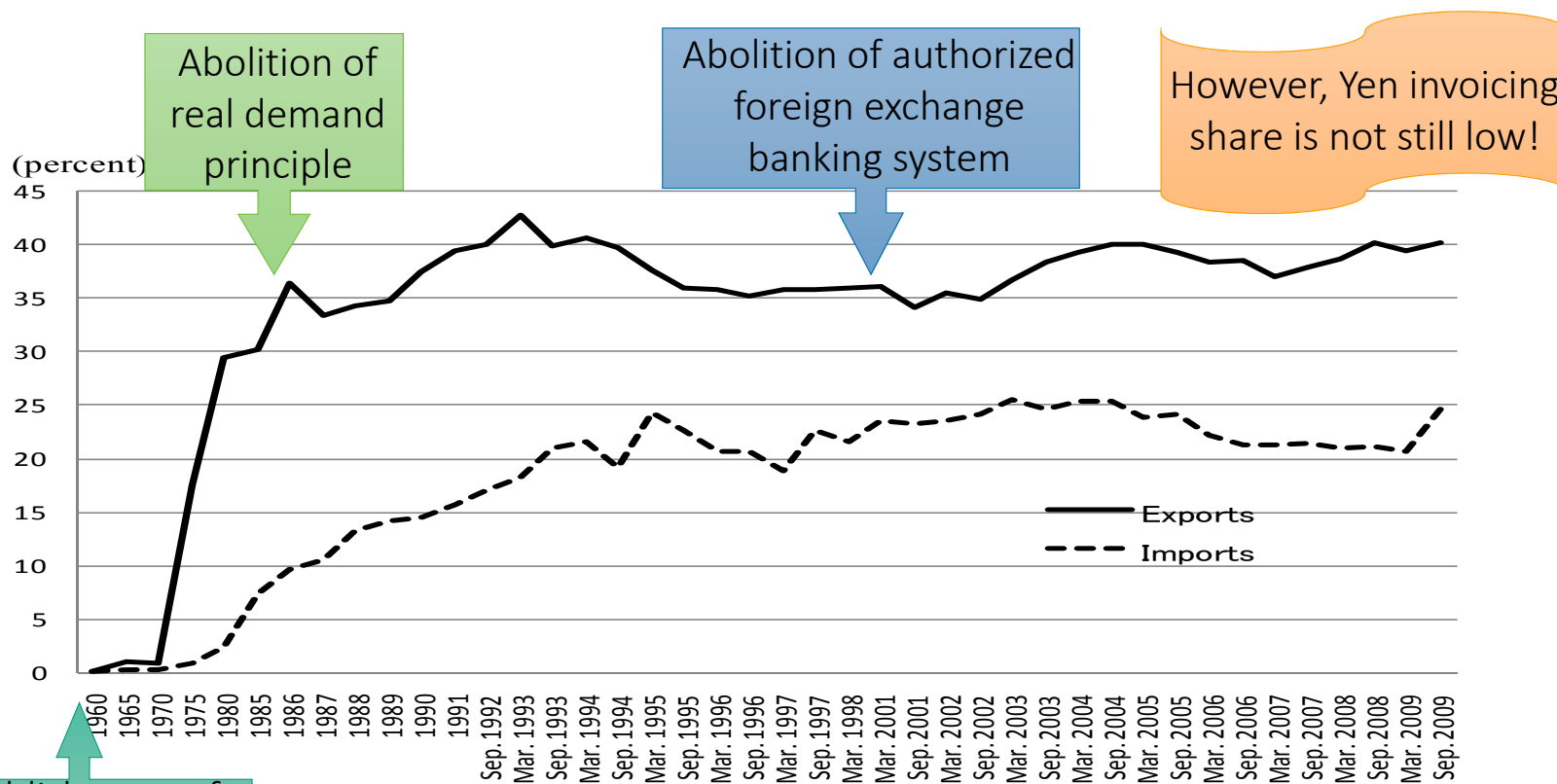
- ✓ Rapid and aggressive promotion
- ✓ Cross-border trade settlement
- ✓ Strong expectation of RMB appreciation

- ✓ Gradual and sequential internationalization
- ✓ Convertibility and capital openness
- ✓ Prolonged stagnation of Japanese economy

Road to the full convertibility of the Yen

- Establishment of free yen account for non-residents in 1960
 - It permitted short-term cross-border capital flows
- Amendment of Foreign Exchange and Foreign Trade Control Act of 1980
 - From “prohibition in principle” to “permission in principle”
 - The difference between domestic interest rates and Euro-yen interest rates disappeared.
- US Japan Yen Dollar Committee of 1984
 - The abolition of real demand principle
 - Further liberalization of capital transactions such as Euro-yen transactions
- Amendment of Foreign Exchange and Foreign Trade Act of 1998
 - Abolition of authorized foreign exchange banking system through which foreign exchange transactions were to be carried out

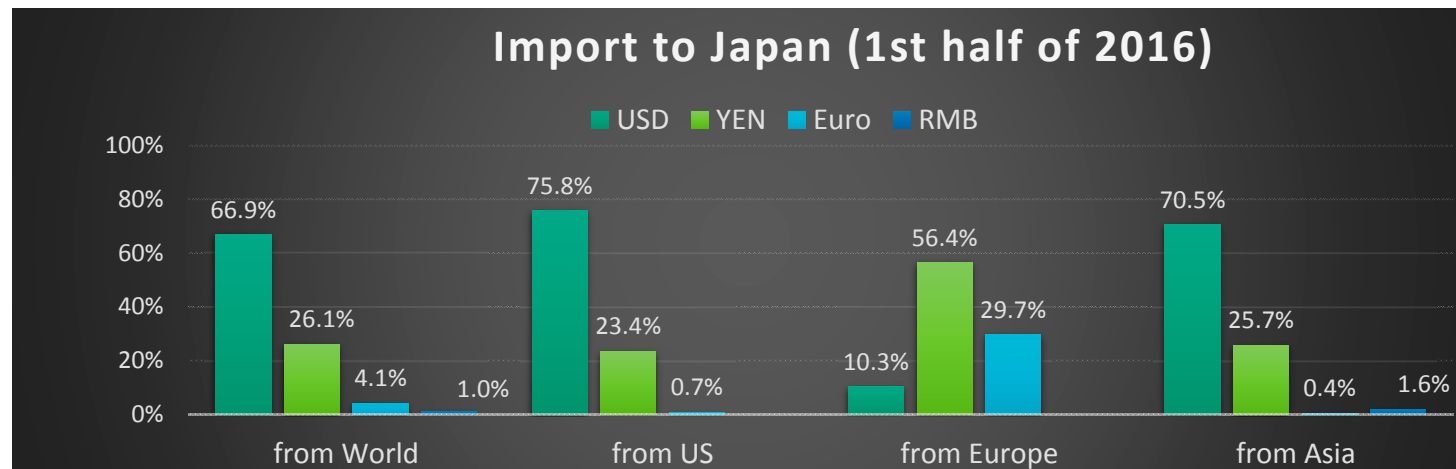
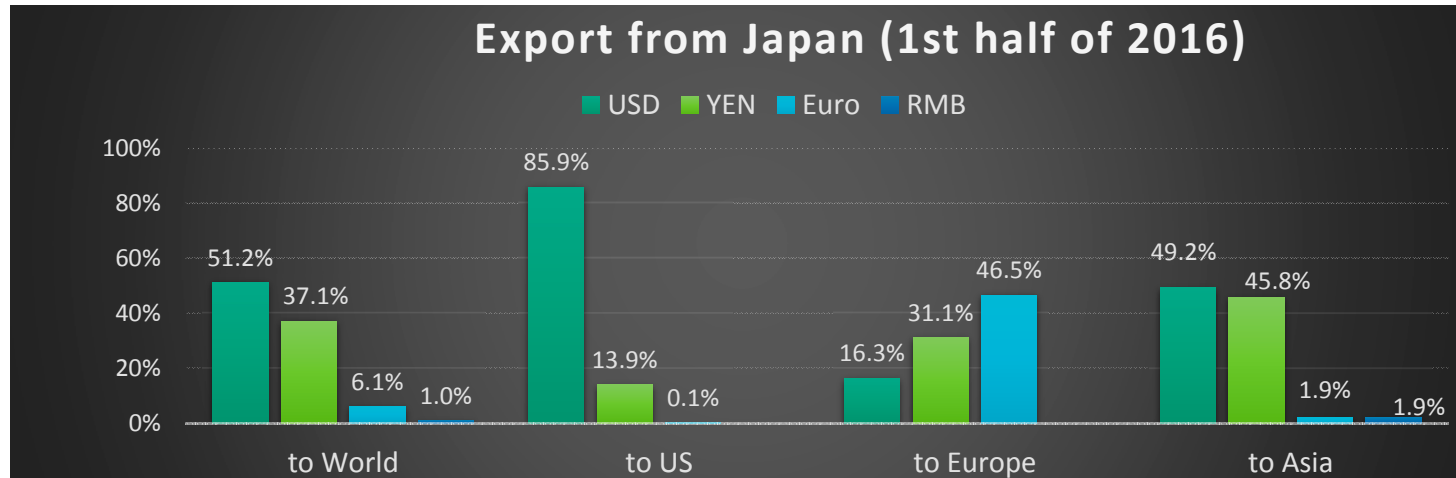
Yen invoicing share of Japan's trade & Road to full convertibility of the Yen



Establishment of free yen account for non-residents

Source: Ministry of Finance; Trade Statistics of Japan and other sources

Invoice currency share of Japan's trade, 2016



(Source: Ministry of Finance)

Why the Yen failed to be internationalized ?

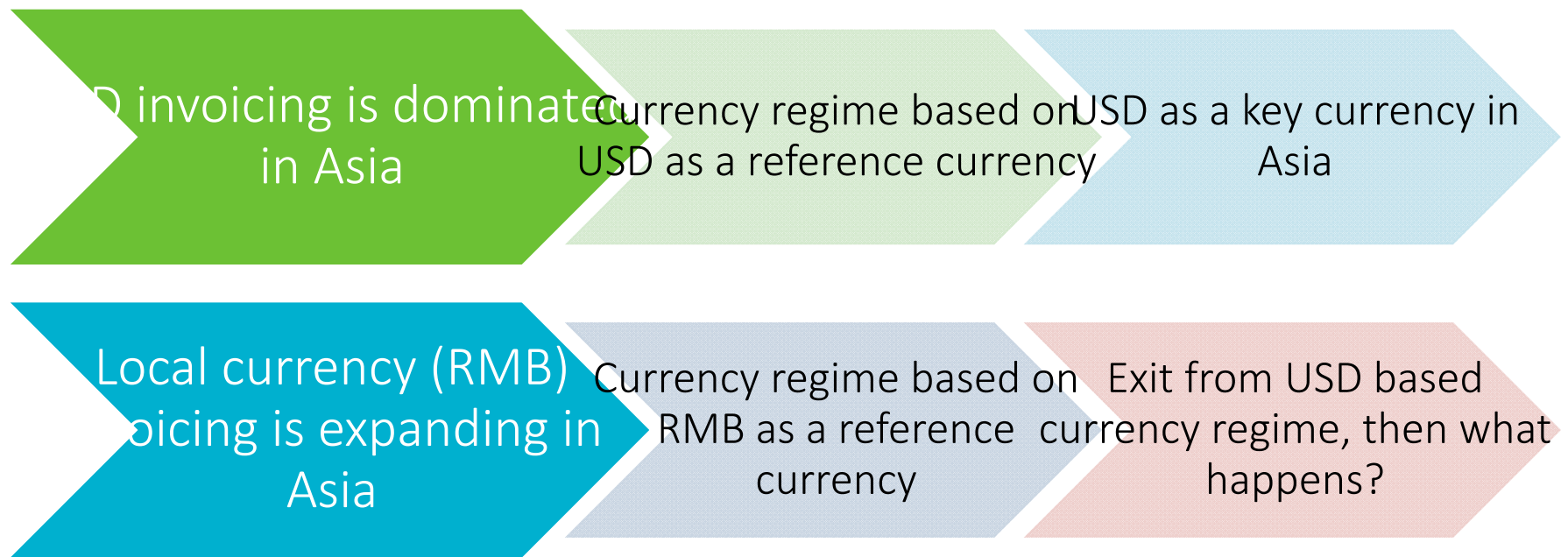
- Liberalization of foreign exchange and capital controls contributed to the expansion of international transactions, foreign exchange markets and financial institutions, and economic growth of Japan.
 - The liberalization has provided sufficient risk management opportunities both with operational and financial hedging to Japanese firms.
 - As a result, large-sized Japanese exporting firms would rather choose the USD as their trade invoicing currency.
- Ito et al. (2010) investigated the determinants of invoicing currency:
 - Exports from their Asian subsidiaries tend to be invoiced in USD as long as the final destination market is in the US.
 - By using USD in intra-firm trade, they can shift currency risk from Asian subsidiaries to headquarters (efficient currency-risk management).
- Prolonged stagnation of Japanese economy dampened the usage of the Yen in 1990s.

Study Group for the Promotion of the Internationalization of the Yen (June 30, 2000)

- The use of an international currency as a medium of exchange is subject to inertial forces.
 - High volatility of the Yen impeded the Yen as for trade transactions in Asia.
 - Asian countries have no choice but to focus on their currencies' stability against the USD, given the high ratio of their USD-denominated trade & capital transactions, and the high level of their outstanding dollar-denominated claims and liabilities.
- Underdevelopment of Direct Foreign Exchange Markets for the Yen and Asian Currencies
 - It would be difficult to establish direct-exchange markets between the yen and Asian currencies unless yen-denominated trade and capital transactions rises and increases the real demand for the yen.

- 2. Choice of Invoice currency
- Findings from the questionnaire survey of Japanese overseas subsidiaries -

Why is a choice of invoice currency so important ?



Questionnaire surveys of Japanese Overseas Subsidiaries in 2010 and 2014 (Sato & Shimizu, 2016)

RIETI Questionnaire survey 2010:

Sent to 16,020 ⇒ 1,479 (9.2%)
Asia, Oceania, North America,
Europe

RIETI Questionnaire survey 2014:

Sent to 18,932 ⇒ 1,640 (8.7%)
Asia, Oceania, North/South America,
Europe

- Subsidiaries are chosen from the Toyo Keizai's Overseas Japanese companies database
- Questionnaire items focus on:
 - (i) **Exchange rate risk management** of overseas subsidiaries.
 - (ii) **Choice of invoice currency** by source and destination, by trading partner (intra-firm or arm's length).

“Problems of invoice currency used for int’l trade” in 2010 and 2014

Problems of invoice currency used for international trade (# of firms to answer "yes")

Answers in 2010

Currency	Currency the firm uses in trade transactions	Currency that the firm suffers problems	US Dollar	Euro	Japanese yen	Chinese Yuan	Hong Kong Dollar	Taiwan Dollar	Korean Won	Singapore Dollar	Malaysian Ringgit	Indonesia Rupiah	Thai Baht	Philippines Peso	India Rupee
Foreign currency	1,224	714	31	40	84	608	39								
	(86.0)	(58.3)	(4.3)	(5.6)	(11.8)	(85.2)	(5.5)								
US Dollar	484	236													
	(34.0)	(48.8)													
Euro	920	654													
	(64.6)	(71.1)													
Japanese yen	149	76													
	(10.5)	(51.0)													
Chinese Yuan	83	18													
	(5.8)	(21.7)													
Hong Kong Dollar	44	14													
	(3.1)	(31.8)													
Taiwan Dollar	22	10	0	0	1	9	0								
	(1.5)	(45.2)													
Korean Won	143	45													
	(10.0)	(48.8)													
Singapore Dollar	55	24													
	(3.9)	(33.3)													
Malaysian Ringgit	41	26													
	(2.9)	(33.3)													
Indonesia Rupiah	137	49													
	(9.6)	(33.3)													
Thai Baht	23	10													
	(1.6)	(33.3)													
Philippines Peso	13	6													
	(0.9)	(46.2)													
India Rupee															

RIETI Questionnaire Survey 2010 "Questionnaire Survey on the Choice of Invoice Currency by Japanese Overseas Subsidiaries"

Problems of invoice currency used for international trade (# of firms to answer "yes")

Answers in 2014

Currency	Currency that the firm suffers problems	Problems (multiple answers)						Others
		Foreign exchange control regulations hinder non-residents' transactions of the currency	Capital controls and restrictions hinder the operational hedging, marry and netting	Raising and investment of funds in that currency	High transaction costs involved with currency hedging	High foreign exchange volatility		
US Dollar	311	22	18	18	53	247	13	
	(83.9)	(46.6)	(7.1)	(6.2)	(18.3)	(60.7)	(4.5)	
Euro	87	5	3	4			3	
	(21.6)	(1.5)	(0.8)	(1.0)			(0.8)	
Japanese yen	920	907	907	907	907	907	907	
	(64.6)	(90.7)	(90.7)	(90.7)	(90.7)	(90.7)	(90.7)	
Chinese Yuan	149	94	94	94	94	94	94	
	(10.5)	(63.4)	(63.4)	(63.4)	(63.4)	(63.4)	(63.4)	
Hong Kong Dollar	83	3	0	0	1	3	0	
	(5.8)	(3.6)	(0.0)	(0.0)	(3.3)	(100.0)	(0.0)	
Taiwan Dollar	44	9	0	1	2	7	1	
	(3.1)	(20.5)	(0.0)	(2.3)	(5.0)	(15.9)	(2.7)	
Korean Won	22	9	0	1	2	8	1	
	(1.5)	(40.9)	(0.0)	(4.5)	(9.1)	(36.4)	(4.5)	
Singapore Dollar	143	54	5	0	5	31	0	
	(10.0)	(37.8)	(3.5)	(0.0)	(3.5)	(21.7)	(0.0)	
Malaysian Ringgit	55	23	0	1	3	18	1	
	(3.9)	(41.8)	(0.0)	(1.8)	(5.5)	(32.7)	(1.8)	
Indonesia Rupiah	41	23	0	2	3	18	1	
	(2.9)	(56.1)	(0.0)	(2.4)	(7.3)	(43.9)	(1.8)	
Thai Baht	137	5	0	0	0	4	0	
	(9.6)	(3.6)	(0.0)	(0.0)	(0.0)	(2.9)	(0.0)	
Philippines Peso	23	10	0	1	2	6	1	
	(1.6)	(43.5)	(0.0)	(4.3)	(8.7)	(26.3)	(7.7)	
India Rupee	13	6	0	1	2	6	1	
	(0.9)	(46.2)	(0.0)	(10.0)	(10.0)	(60.0)	(10.0)	

RIETI Questionnaire Survey 2014 "Questionnaire Survey on the Choice of Invoice Currency by Japanese Overseas Subsidiaries"

Currency that the firm suffer problems
 CNY: 51.0%(2010)⇒27.9%(2014)
 Ringgit:43.6%(2010)⇒21.4%(2014)
 Baht: 35.8%(2010)⇒18.1%(2014)

Foreign exchange control & regulation hinder non-residents transaction of the currency
 CNY: 42.1%(2010)⇒29.3%(2014)

Capital controls and restrictions hinder the operational hedging, marry and netting.
 CNY: 34.1%(2014)
 Ringgit: 16.7%(2014)
 Baht: 8.7%(2014)

High foreign exchange volatility
 YEN: 90.7%(2010)⇒94.7%(2014)
 CNY: 26.3%(2010)⇒63.4%(2014)

Summary of Findings

- Findings:

- Although RMB is extensively used for local sales and procurement in China, Japanese firms in China mainly use the U.S. dollar in trade with other countries. Yen is used mainly for trade with Japan.
- No evidence is obtained on the growing use of RMB in Japanese firms' international trade along the production chain in Asia. **Possible exception is intra-firm trade between China and Japan.**

- Implications:

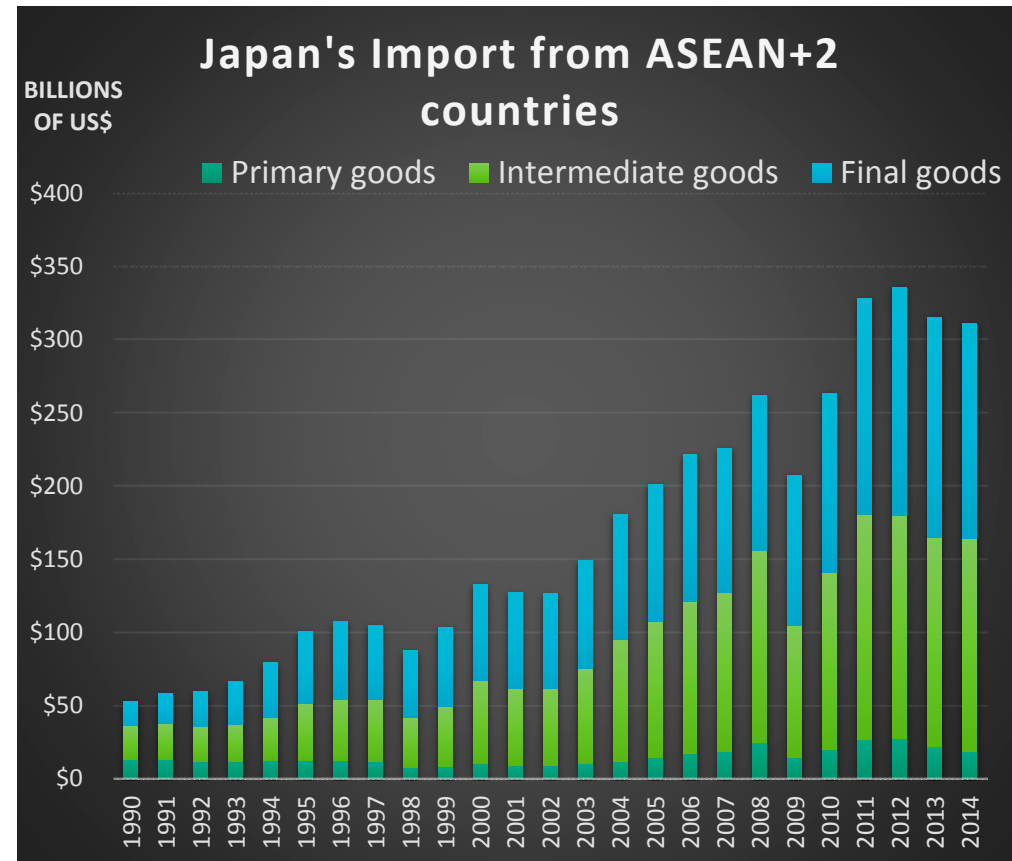
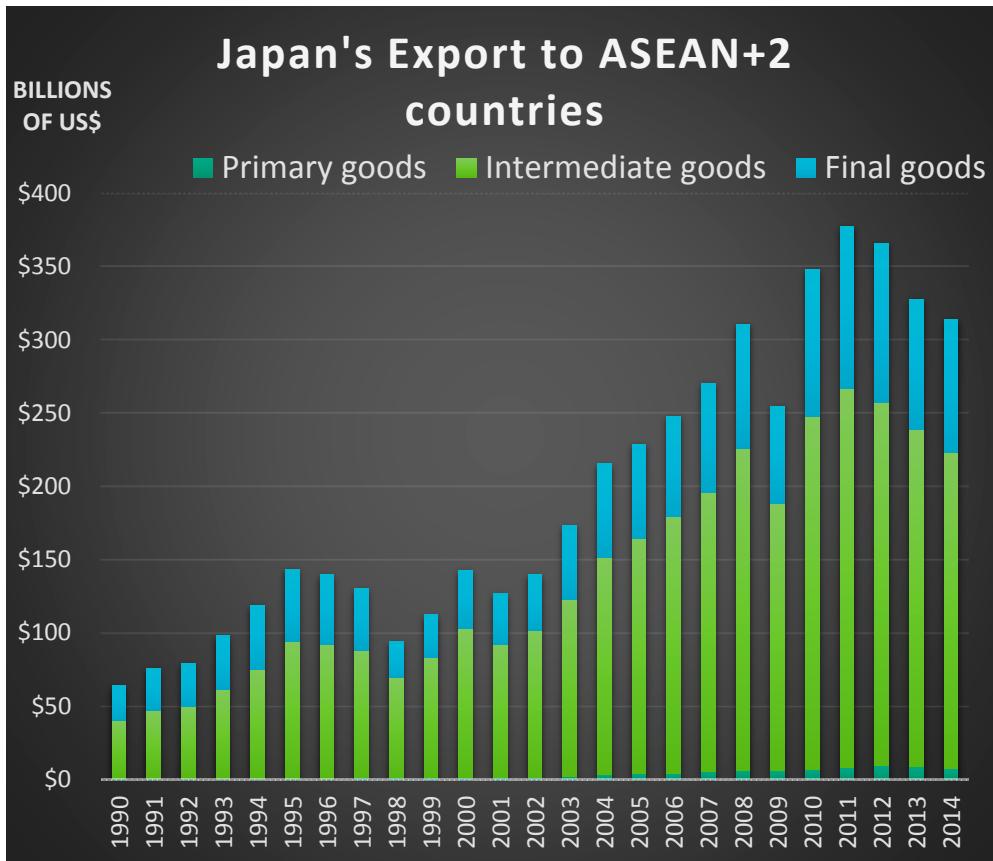
- RMB transactions will be growing further if it becomes easier for Japanese firms to use RMB in intra-firm trade by conducting operational exchange rate risk management.
- In order to promote JPY and RMB as an invoice currency, exchange rate risk managements in overseas subsidiaries are needed.
- Japanese trading company also play an important role.

3. GFC & Internationalization of Asian Currencies

Change of Trade Structure in Asia

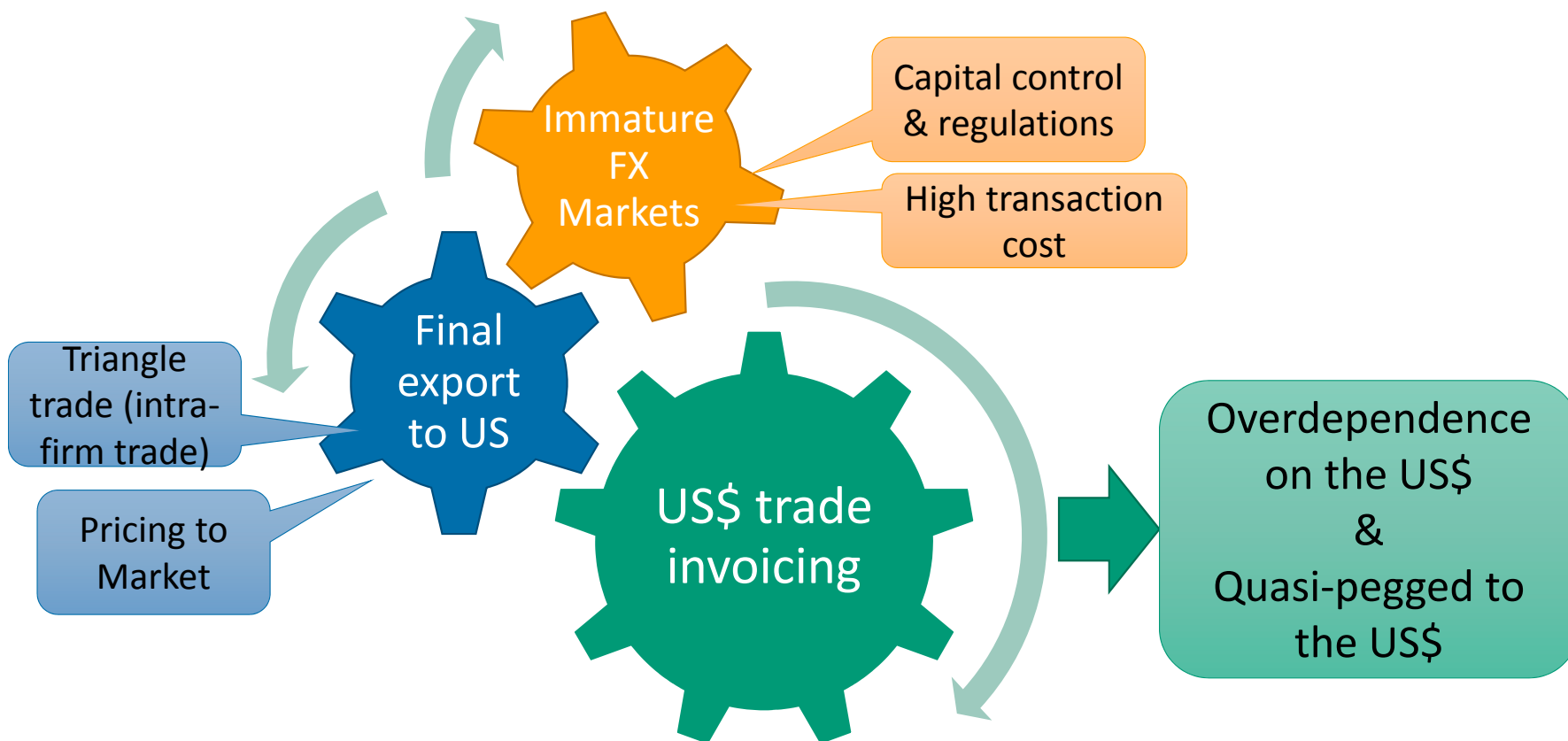
- Changes in the global and East Asia trading structures over the past decade are confirmed:
 - East Asia production network has been expanding its supply and demand of intermediate goods in the region.
 - China's increasing presence as an assembly and export base, and ASEAN has started to play a role expanding the supply of intermediate goods to China.
- The share of Asian domestic markets as a final demand are gradually increasing after the GFC.
 - Experiences of USD liquidity shortage during the GFC period also warn to avoid overdependence on the USD.
- Japan's intra-firm imports from Asian countries are expanding in both intermediate and final goods.
 - Strong Yen after GFC promoted Japanese manufacturing firms' offshoring in Asia.

Japan's trade with ASEAN+2 countries

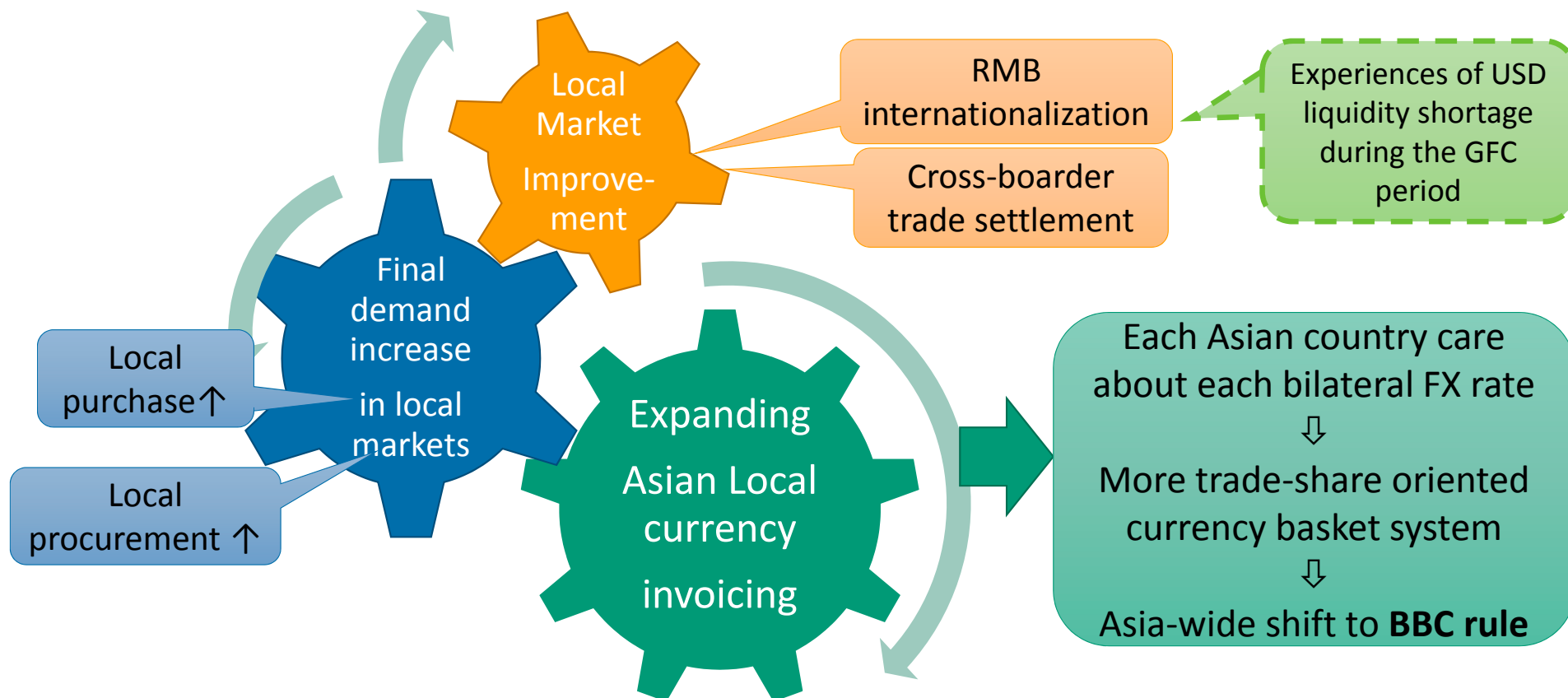


Source: RIETI-TID2014 (RIETI Trade Industry Database 2014)

Asian exchange rate regimes before GFC



Asian exchange rate regimes after GFC



Changes after the GFC in ASEAN Countries

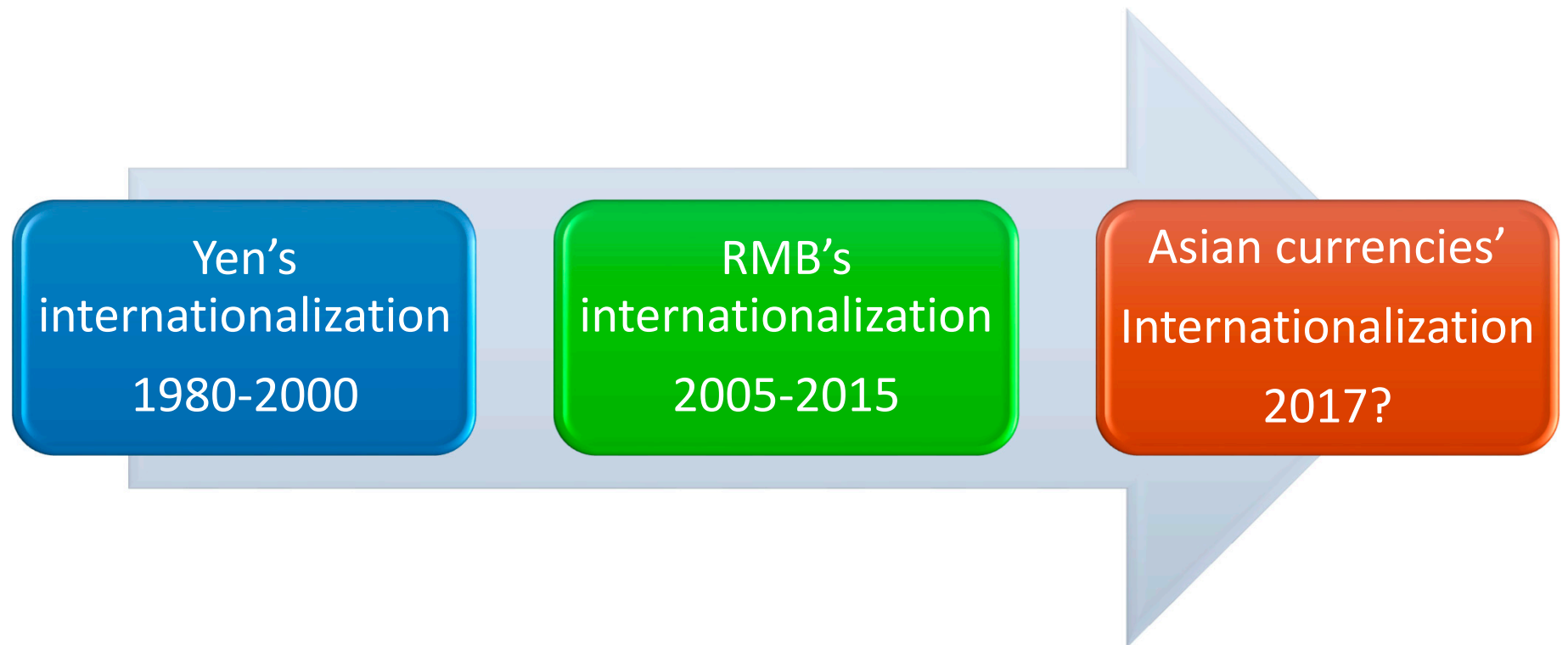
- Following the RMB internationalization, other Asian countries have recently started to use their local currencies in their domestic transactions.
 - Bank Indonesia issued regulation on the Mandatory Use of Rupiah in Indonesia which applies to almost all domestic transactions in 2015.
 - With the AEC starting in 2015, the Bank of Thailand signed with Bank Negara Malaysia on direct local currency settlements between the baht and ringgit. In December 2016, Bank of Indonesia also announced to join this cooperation.

Thailand Structure of Export & Import in selected ASEAN Countries (2014, %)

	ASEAN		Cambodia		Laos		Myanmar		Vietnam	
	Export	Import	Export	Import	Export	Import	Export	Import	Export	Import
US\$	74.4	85.3	52.1	40.4	39.1	85.3	39.6	96.6	83.0	66.2
Baht	20.0	10.6	47.7	59.2	60.4	14.5	59.6	3.3	14.5	31.1

Source: Bank of Thailand

Internationalization of the Asian currencies



Conclusion

- Recent cooperation among Asian countries to use local currencies for trade settlements might bring structural change of invoicing currency choice in Asia, which will support Asian-wide currency basket system in future.
 - We need to construct the data of invoice currency usage in each Asian country in order to investigate the factors which impede the local currency invoicing.
- At the moment, RMB moves asymmetrically to Yen in risk-on/risk-off, and other Asian countries are keener to co-move with RMB, but Yen.
 - Such a movement could stabilize an Asian currency basket as a whole if we include both of them in a currency basket.
 - We need to discuss what kind of common currency basket, for example G3 currencies, Asian currencies with/without JPY, is suitable as a surveillance indicator.
- Japanese financial institutions will play a significant role in constructing financial infrastructure in Asia, providing high-quality financial markets and services in local currency basis.
 - Such an improvement will make Asian currencies' transaction cost lower, which will support and promote local currency invoicing in Asian countries.