

Lee, Il Hounq; Park, Yung Chul

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**Use of National Currencies for
Trade Settlement in East Asia:
A Proposal**

**Il Houg Lee and
Yung Chul Park**

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Il Hounng Lee is President of the Korea Institute for International Economic Policy and G20 Sherpa of the Republic of Korea. Yung Chul Park is Distinguished Professor at the Division of International Studies, Korea University.

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Please contact the authors for information about this paper.

Email: yungcp@korea.ac.kr, ilhounng@kiep.go.kr

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Asian Development Bank Institute
Kasumigaseki Building 8F
3-2-5 Kasumigaseki, Chiyoda-ku
Tokyo 100-6008, Japan

Tel: +81-3-3593-5500

Fax: +81-3-3593-5571

URL: www.adbi.org

E-mail: info@adbi.org

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Abstract

This paper develops a multilateral currency system where national currencies are used for trade settlement in East Asia, comprising the Association of Southeast Asian Nations (ASEAN) member countries, the People's Republic of China, Japan, and the Republic of Korea (ASEAN+3). The currency scheme is expected to mitigate the risks associated with independent attempts at internationalization in non-convertible currency countries. It could also reduce dependence on the US dollar, safeguard against financial spillovers from outside, and deepen trade and financial integration in the region. The patterns and structure of trade and financial openness suggest that East Asia has already established an economic base upon which it could launch such a system. The experience with renminbi internationalization will help the Republic of Korea and ASEAN-5 to emulate this strategy.

JEL Classification: F15, F36, F42

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1. INTRODUCTION

To date, achieving deep financial and monetary integration in East Asia has been an elusive goal. In the aftermath of the 1997 Asian financial crisis, the Association of Southeast Asian Nations (ASEAN), the People's Republic of China (PRC), Japan, and the Republic of Korea—a group of countries known as ASEAN+3—came to realize the urgency of constructing regional cooperative arrangements for regional economic integration, and for expanding the scope of policy coordination to prevent future crises and help safeguard the region from financial spillovers from outside the region. This realization culminated in the creation of a regional liquidity support system in 2000, the Chiang Mai Initiative (CMI), which has since been restructured and renamed the Chiang Mai Initiative Multilateralization (CMIM).

In subsequent years, other regional initiatives followed to expand and complement the role of the CMIM.¹ However, with the fading memory of the 1997 financial crisis and the return of financial stability, ASEAN+3 had lost much of its earlier momentum for regional cooperation before emerging economies of East Asia fell victim to the contagion of the 2008 global financial crisis. Having negotiated for years to reorganize and increase its pooled reserves, it was expected that ASEAN+3 was ready to activate the CMIM to insulate the region from the vagaries of the recent global financial crisis.

Yet, while some of the member countries suffered severe shortages of US dollar liquidity, which drove them to the edge of another financial meltdown, none would consider drawing down liquidity from the CMIM. Not surprisingly, ever since then the global as well as regional financial markets have ignored the existence of such a system.² This ineffectiveness of the CMIM, together with the travails of the eurozone in recent years as a monetary union have dampened interest among the member states of ASEAN+3 in consolidating regional monetary and financial cooperation.

While regional efforts at financial cooperation and integration have languished, the member states of ASEAN+3 have been relatively more successful—or at least more active—in promoting freer trade in East Asia by concluding and initiating new negotiations for a number of bilateral and plurilateral free trade agreements (FTAs) with countries within and without the region. Thus, proliferation of FTAs has been a new driver for regional economic integration.

In this new milieu of free trade fervor, by virtue of its large size and a commanding share in intra-regional trade, the People's Republic of China (PRC) has become the hub of trade integration in East Asia.

While negotiating FTAs with regional partners, the PRC has also been vigorous in elevating the status of its currency, the renminbi (RMB), to a global as well as a regional unit of accounting and exchange. Over the relatively short period since initiating a pilot program for renminbi internationalization in 2009, the PRC has made

¹ The Economic Review and Policy Dialogue (ERPD) is a non-binding surveillance process structured as a peer review, which is currently supported by the Asian Macroeconomic Research Office (AMRO) in Singapore, created by ASEAN+3 in 2011. The ERPD is expected to oversee the operation of the CMIM. The Asian Bond Market Development Initiative (ABMI) allowed for creating regional bond markets and integrating financial markets of the ASEAN+3 member countries.

² Because of the limitations of the CMIM as a regional liquidity support system and an aversion to approaching the International Monetary Fund (IMF) for its short run lending facilities, many ASEAN+3 members have chosen to accumulate more foreign exchange reserves than before, and sought to secure liquidity through bilateral currency swap arrangements with countries within and without the region.

great strides in expanding the use of its currency in trade settlements throughout East Asia.

Both theory and past experience suggest that countries wishing to internationalize their currencies first need to satisfy a set of pre-conditions, including financial reform comprising liberalization of financial markets, deregulation of capital account transactions, and making their currencies convertible. The PRC was far from meeting these conditions at the time of embarking on RMB internationalization. Realizing that it was not prepared to undertake sweeping financial reforms, the PRC chose first to promote the use of the RMB for settling trade with its neighboring economies.³

Soon after the start of the pilot program, however, the PRC began broadening the scope of the initial program to gear up internationalization of the RMB by removing some of the restrictions on capital account transactions and foreign investments in domestic financial assets.

The anticipation was that if the PRC strategy is viable and promising, then other members of ASEAN+3, not yet ready to open their financial markets and relinquish control over their capital accounts, may find that the path the PRC has taken presents a new and perhaps more tenable approach to using their currencies for trade settlement.

The purpose of this paper is to develop such a multilateral currency scheme for some of the member states of ASEAN+3. Although any member with a relatively open trade and financial regime is a potential participant, at the initial stage of development the PRC, Japan, the Republic of Korea, and possibly some ASEAN-5 members appear to be the most appropriate candidates to join the scheme as they have an institutional base broad enough to accommodate such a regional cooperative arrangement.

Section 2 of this paper examines the patterns and structure of trade in East Asia to gauge the scope of cooperation and potential benefits from the use of a national currency for trade settlement among the ASEAN+3 members.⁴

Section 3 reviews the evolution and factors driving the rapid rise of the RMB as a regional currency. Since the PRC is the largest trading partner of all other members of ASEAN+3 and the central country in East Asia's trade network, as well as being at the forefront of currency internationalization, the PRC approach is likely to be emulated by other emerging economies in East Asia.

Section 4 discusses the objectives and potential size of the currency scheme in East Asia.

Section 5 outlines the structure of the proposed regional currency scheme. Some of the potential members, including the PRC are likely to run deficits in trade with other members of ASEAN+3 as a whole. This means that in the new regional currency system outflows of the RMB and other currencies of deficit countries will increase. During the initial phase of development, it would be critical to contain the volatility of capital flow among the participating countries to get the currency scheme established.

Section 6 examines the benefits and costs of the currency scheme. Concluding remarks are presented in the final section.

³ Internationalization here is defined as the use of a currency outside the issuer's borders for the purchase of goods and services, and including the financial assets of transactions by nonresidents. It is essentially an organic, evolutionary, and market-driven process. See Kenen (2011).

⁴ In this paper the geographical coverage of East Asia includes the 13 countries of ASEAN+3.

2. TRADE PATTERNS AND FINANCIAL OPENNESS: PRE-CONDITIONS OF ASEAN+3 AND THE PEOPLE'S REPUBLIC OF CHINA, JAPAN, AND THE REPUBLIC OF KOREA

The PRC, Japan, and the Republic of Korea (CJK), and some of the ASEAN-5 countries will have an incentive to form a new currency scheme if they believe they could benefit from using their currencies for trade invoicing and settlement among the participating countries. The size of the benefit will depend largely on the pattern and structure of trade and financial openness in the region. More specifically, the viability of the new system would, among other things, depend on:

- (i) openness of trade and the prospect of trade liberalization;
- (ii) the share of intra-regional trade and the structure of intra-industry trade; and
- (iii) the degree of financial openness and the future prospect for financial market opening and capital account liberalization.

2.1 Trade Openness

The benefits accruing to the participating countries would, other things being equal, be positively related to the degree of openness of their trade regimes. Historically, the degree of openness has been high throughout East Asia. From the early 1990s to 2007, all of the ASEAN+3 member states except Indonesia saw a sharp increase in total trade relative to gross domestic product (GDP). Economic slowdown in the aftermath of the 2008 global financial crisis and the subsequent eurozone debt crisis has caused a large contraction of trade in both the PRC and ASEAN-5.

During the 2008–2012 period, the ratios of total trade to GDP plummeted by more than 11% and 21% in the PRC and ASEAN-5, respectively (Table 1). Notwithstanding the setback, all countries in the group except Japan still rely heavily on exports for growth and hence have a relatively larger trade sector compared to emerging economies in other regions.

Table 1: Openness of the Trade Regime: Ratio of Total Trade to Gross Domestic Product (%)

	2003–2007	2008–2012
PRC	60.2	49.1
Japan	24.2	26.6
Republic of Korea	64.9	90.6
ASEAN-10	125.2	104.3

ASEAN = Association of Southeast Asian Nations, PRC = People's Republic of China.

Source: United Nations Comtrade data.

2.2 Proliferation of Free Trade Agreements

There has been a large increase in the number of FTAs in East Asia. At the end of 2012 there were 71 FTAs, with more still under negotiation, in Asia comprising

ASEAN+3; the PRC; Hong Kong, China; India; and Taipei, China. The member states of ASEAN+3 have concluded a number of FTAs with partners from within and outside the region. Among the larger plurilateral ones are the ASEAN FTA and the three ASEAN+1 FTAs with the PRC, Japan, and the Republic of Korea. Negotiations have also been initiated for other bilateral and multilateral FTAs. The PRC and the Republic of Korea are expected to conclude a bilateral FTA before the end of 2024. All of the ASEAN+3 members are participants in the negotiation of a 16-country FTA that includes Australia, India, and New Zealand through the mechanism of the Regional Comprehensive Economic Partnership (RCEP) to be concluded by the end of 2015.

Although it is beyond the scope of this paper to probe the causal relationships between the increase in the number of FTAs and the use of national currencies for trade settlement in East Asia, recent studies by Kawai and Wignaraja (2013) and Wignaraja (2013) suggest that this proliferation could exert positive effects on the construction of the currency scheme.

In their examination of the results of a number of independent country surveys, as well as the Asian Development Bank (ADB) and Asian Development Bank Institute (ADBI) firm level survey for 2007–2008, the authors show that the increase in the number of FTAs in Asia contributed to the expansion of trade among firms, and prevented collapse of intra- and inter-regional trade during the 2008 global financial crisis.

More relevant to our study is the finding from these surveys that FTA use by enterprises in East Asia has been higher than expected, and is forecast to increase as more firms opt to use them. If this is the response at the firm level, one may then argue that the widespread use of FTAs could induce firms in East Asia, both large and small, to take advantage of the regional currency scheme for trade settlement to the extent that they are fully informed of the benefits.

The increase in the number of FTAs will further strengthen the case for use of national currencies for trade settlement if the existing bilateral and plurilateral FTAs are integrated into a large region-wide FTA. With the increase in the number of participants, the currency scheme could facilitate negotiations for forming such a region-wide FTA, and could also resuscitate negotiations for the CJK FTA that has languished since 2003 when the 3 countries first agreed to a feasibility study.

2.3 Intra-Regional Trade

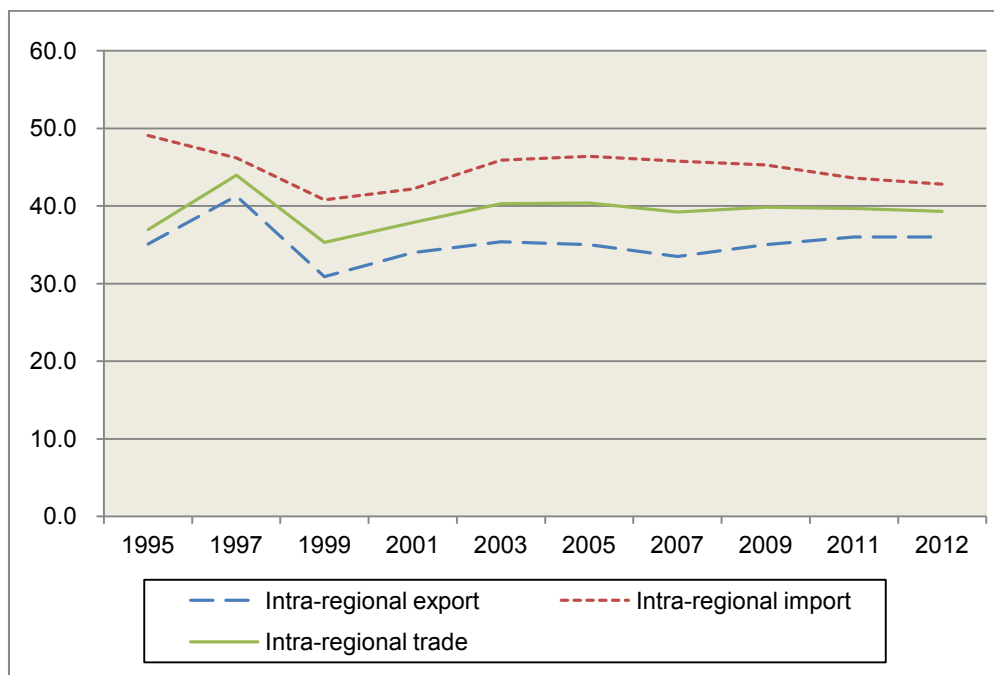
2.3.1 Association of Southeast Asian Nations+3

The potential gains from developing the currency scheme will be greater, the larger the share of intra-regional trade is in the total trade of ASEAN+3. Intra-regional trade in East Asia suffered a severe setback during the 1997 Asian financial crisis (Figure 1). The share returned to the pre-crisis level around 2003 and since then has remained at the 40% level.

Among the individual countries, the PRC trades relatively more with countries outside compared with those inside East Asia. The PRC regional trade share was smaller, about 30%, compared to ASEAN (52%), the Republic of Korea (42%), and Japan (40%) during the 2008–2012 period (see Figure 3). However, the PRC provides the largest market for exports, and the second largest for imports for all other economies in East Asia.

Compared to the European Monetary Unit (EMU) in 1989—10 years before the creation of the euro—the proportion of intra-regional trade is much lower in East Asia, suggesting the potential for further expansion.⁵

Figure 1: Intra-regional Trade in ASEAN+3 (%)



ASEAN = Association of Southeast Asian Nations.

Source: United Nations Comtrade data.

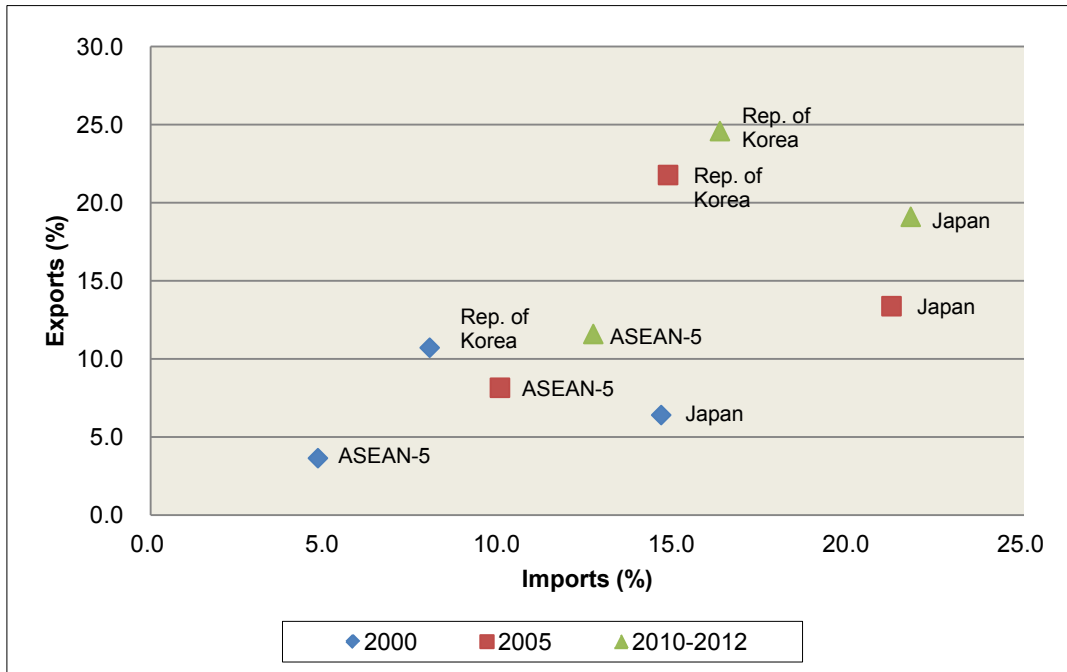
2.3.2 Trade with the People's Republic of China

With the rise of the PRC as a global trader and the major assembler of parts, components, and other intermediate inputs, two-way trade of other East Asian countries with the PRC has been growing and is expected to rise. Among the members of ASEAN+3, the increase in the dependence of ASEAN-5 on the PRC for their exports has been remarkable (Figure 2). In 2000, they shipped less than 4% of their exports to the PRC; 12 years later this increased to more than 12%, mostly at the expense of their exports to the United States. Japan and the Republic of Korea also depend heavily on the PRC market, sending on average of more than 22% of their exports there.

As shown in Figure 3, the PRC trades relatively more with non-ASEAN+3 countries. Nevertheless, its share in intra-regional trade among the PRC, Japan, and the Republic of Korea surged 50% in 2012 from about 30% in 1995, mostly at the expense of Japan (Figure 4).

⁵ In 1989, the average ratio of intra-regional trade in the eurozone was 69% for exports and 66% for imports.

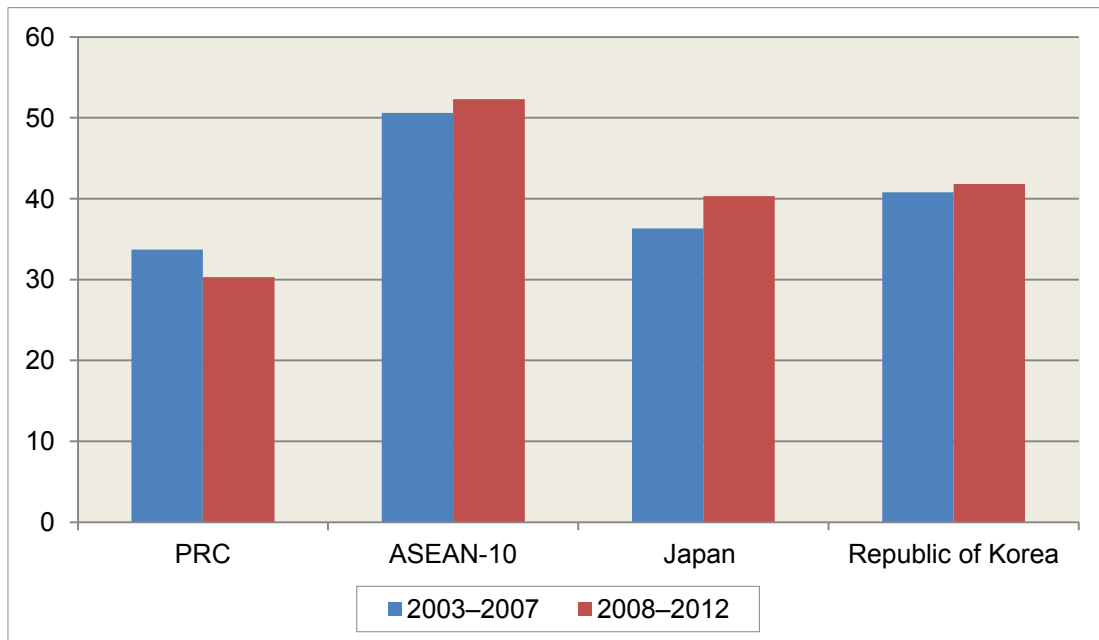
Figure 2: Trade with the People’s Republic of China by Country



ASEAN = Association of Southeast Asian Nations, Rep. of Korea = Republic of Korea.

Source: United Nations Comtrade data.

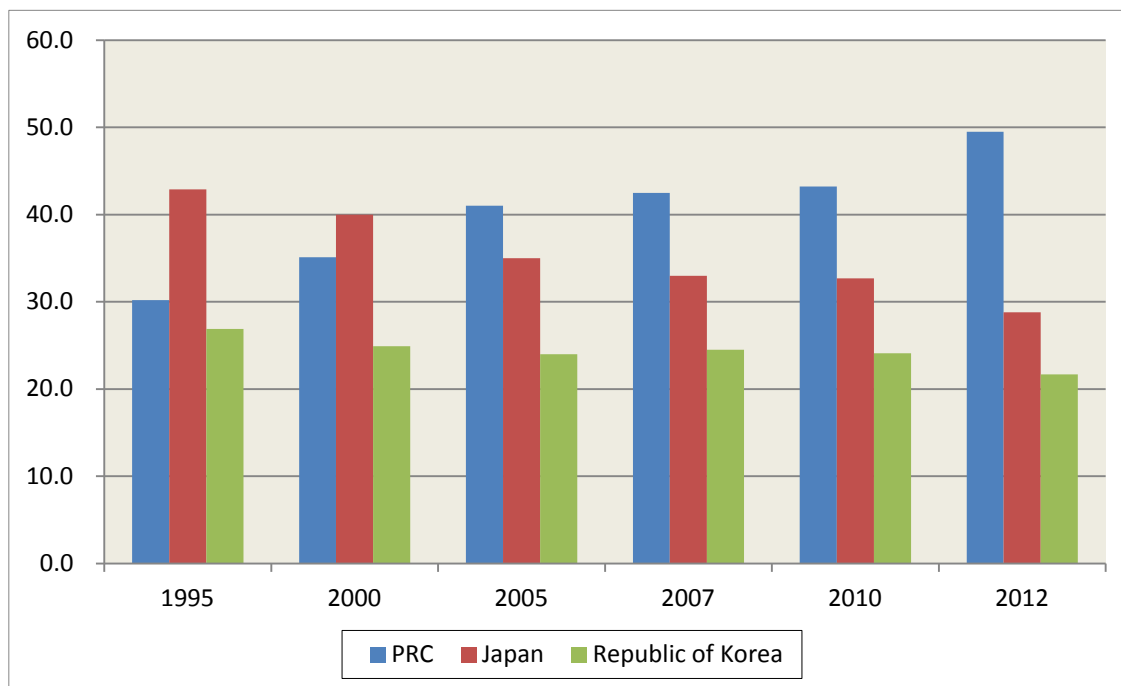
Figure 3: Share of Trade with ASEAN+3 by Country/Group (%)



ASEAN = Association of Southeast Asian Nations, PRC = People’s Republic of China.

Source: United Nations Comtrade data.

Figure 4: Share of Intra-regional Trade Among the People's Republic of China, Japan, and the Republic of Korea (%)



PRC = People's Republic of China.

Source: United Nations Comtrade data.

2.4 Intra-Industry Trade

2.4.1 Association of Southeast Asian Nations

The trade network centering on the PRC has long been a defining feature of the intra-regional trade structure of East Asia. Available data confirm that there has been little change in this structure.⁶ Table 2 presents the 5-year averages of the Grubel and Lloyd (1975) index for the three categories of intra-industry trade parts and components (P&C), consumer, and capital goods of ASEAN-5 vis-à-vis the PRC as the central country for the periods 2000–2004, 2005–2009, and 2010–2012.

For all ASEAN-5 members—except Indonesia—parts and components display the highest indices, which have not changed to any noticeable degree throughout the 2000s, followed by capital goods. The indices for consumer goods are very low, though have risen in recent years.

⁶ This is also true for ASEAN+3 (see Appendix, Table A.1).

Table 2: Intra-Industry Trade of ASEAN-5 with the People's Republic of China

		2000–2004 Average	2005–2009 Average	2010–2012 Average
Thailand	P&C	0.91	0.75	0.61
	Capital	0.47	0.91	0.71
	Consumer	0.80	0.74	0.80
Indonesia	P&C	0.58	0.27	0.13
	Capital	0.31	0.27	0.07
	Consumer	0.38	0.40	0.46
Philippines	P&C	0.64	0.67	0.90
	Capital	0.63	0.68	0.65
	Consumer	0.46	0.24	0.23
Malaysia	P&C	0.88	0.76	0.86
	Capital	0.58	0.62	0.70
	Consumer	0.27	0.36	0.33
Singapore	P&C	0.95	0.83	0.78
	Capital	0.71	0.51	0.45
	Consumer	0.42	0.71	0.81

ASEAN = Association of Southeast Asian Nations, P&C = parts and components.

Source: United Nations Comtrade data.

2.4.2 The People's Republic of China, Japan, and the Republic of Korea

The indices for P&C and capital goods are also very high for both Japan–PRC and Republic of Korea–PRC bilateral trade, and have remained relatively stable throughout the 2000s. The index for consumer goods between Japan and the PRC is low, though it has almost tripled during 2000–2014. In contrast, the index for trade in consumer goods between the Republic of Korea and Japan is higher than the index for P&C.

It should be noted that at the level of integration the data in Tables 2 and 3 do not necessarily indicate whether there has been any increase in the degree of horizontal rather than vertical integration of trade in P&C and capital goods.

Large shares of trade in different P&C are distinguished by technological and skill contents and used at various stages of the value chain between countries at different stages of development. These features suggest that more disaggregated data on the Grubel and Lloyd index may show that there has been little increase in horizontal integration in intra-industry trade among the member states of ASEAN+3.

This feature of the intra-industry trade would not favor creation of the currency scheme. However, there is a growing trend among intra-industry trade in consumption goods, which is likely to expand, among some of the ASEAN+3 member states. Furthermore, much of the trade in P&C and capital goods takes the form of intra-firm trade between parent firms and their affiliates, and between the affiliates (Lanz and Miroudot 2011).

Table 3: Intra-Industry Trade Among the People's Republic of China, Japan, and the Republic of Korea: Grubel and Lloyd Index

		2000–2004 Average	2005–2009 Average	2010–2012 Average
Japan–PRC	P&C	0.75	0.76	0.73
	Capital	0.98	0.88	0.90
	Consumer	0.10	0.19	0.28
Rep. of Korea– PRC	P&C	0.64	0.60	0.64
	Capital	0.85	0.85	0.72
	Consumer	0.47	0.45	0.57
Rep. of Korea– Japan	P&C	0.62	0.65	0.65
	Capital	0.46	0.60	0.58
	Consumer	0.62	0.92	0.86

PRC = People's Republic of China, Rep. of Korea = Republic of Korea, P&C = parts and components.

Source: United Nations Comtrade data.

Although reliable data are not available, anecdotal evidence suggests that the growth of foreign direct investment (FDI) by Japan and the Republic of Korea in intra-firm trade between parent firms of the 2 countries—most of which are multinational enterprises—and their affiliates in the PRC is likely to account for an increasing share of intra-industry trade within the PRC on the one hand, and between Japan and the Republic of Korea on the other.⁷ More than any others, those heavily engaged in intra-firm trade will gain from settling trade with their national currencies. Therefore, the growing share of intra-firm trade and intra-industry trade in consumption goods will help garner public support for the construction of the currency scheme in the region as a whole, and among CJK in particular.

2.5 Financial Openness

Government control of financial markets and the capital account together with currency inconvertibility has been, and will continue to be, an obstacle to currency internationalization in the PRC, the Republic of Korea and ASEAN-5. As shown in the subsequent sections of this paper, following the PRC strategy, the new currency system proposed here explores the possibility of internationalization in a heavily regulated financial system before transiting to a more liberalized regime over time.

Since the early 2000s, the Republic of Korea has made a great deal of progress in developing a deregulated and open financial regime. The PRC has also come a long way from a repressive financial regime of the pre-2008 crisis period. Departing from its longstanding policy of gradual reform, the statement of the Third Plenary Session of the 18th Communist Party of China (CPC) Central Committee affirmed its plans to accelerate interest rate liberalization and capital account convertibility.

ASEAN has launched a long-term plan to liberalize and integrate financial markets and deregulate capital account transactions of the member countries, to be completed by around 2020, although some members may be ready to join the currency scheme before the target year.

⁷ However, the share of intra-firm trade in total manufactured exports was relatively small—only 10% in 2007 for Japan (Lanz and Miroudot 2011).

Changes in the trade pattern and structure of East Asia suggest that there is considerable room for deeper trade integration through an expansion of intra-regional trade in the region. Proliferation of FTAs and vertical structures of intra-industry trade are expected to help promote wider use of national currencies for trade invoicing and settlement, which could in turn speed up trade integration. At the same time, if the scheme creates and builds up market pressure for domestic financial reform among the participating countries, it will also serve as a catalyst for harnessing regional cooperation for financial market integration.

3. PROGRESS IN INTERNATIONALIZATION OF THE RENMINBI

The financial markets of the PRC are largely closed to foreign lenders and borrowers and its currency is not convertible. Yet, given the sheer size of its economy and its growing share in global trade, there is little doubt that the RMB will emerge as the dominant currency of East Asia and eventually attain global reserve currency status. Although as the second largest economy in the world it may have a greater stake in global rather than regional integration at the level of ASEAN+3, its interests lie in forging deeper economic relations with ASEAN, Japan, and the Republic of Korea.⁸

RMB internationalization—understandably a long-term process—could reduce the reliance of East Asia on the US dollar. Further progress in RMB internationalization, however, requires the PRC to allow access to its RMB assets to nonresidents, which implies capital account liberalization. Given the elevated global financial uncertainties following the 2008 crisis, and excess liquidity in the global economy, the PRC policy authorities appear to have concluded that rapid progress in capital account liberalization is unlikely to be desirable and could even be destabilizing since the domestic financial institutions of the PRC are not yet efficient and stable enough to compete in the global environment.

The PRC response was to shift the focus to trade settlement in RMB, instead of RMB internationalization. This then allowed nonresidents to access RMB assets as required to keep the demand for RMB alive. Realizing the limitations of its initial strategy, the PRC has progressed to deregulating capital account transactions as this has become necessary to facilitate the second stage of RMB internationalization.

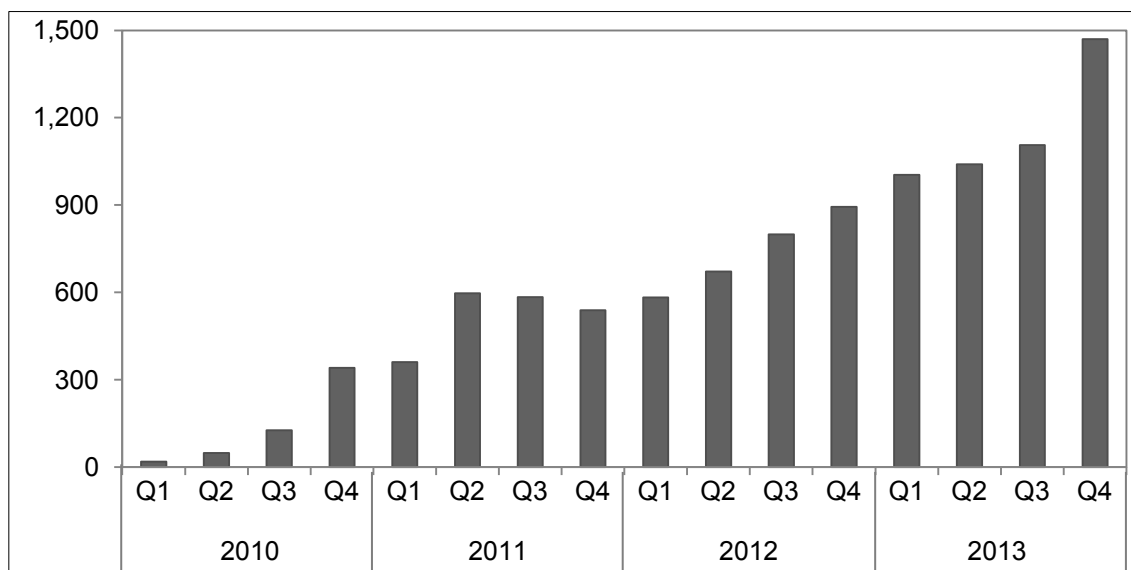
3.1 Renminbi as a Currency of Settlement

In April 2009, the PRC launched a pilot program for the RMB settlement of cross-border trade in a limited number of cities and regions with the intention of promoting economic and trade ties with its neighboring countries. By August 2011 the geographical coverage expanded to the entire nation. The eligible transactions have also been enlarged to include not only trade in goods but also in services and other items of current account transactions. Over a span of 4 years since the inception of the pilot program, all restrictions on trade settlement in RMB have been lifted. The

⁸ Covering the period before the 2008 global financial crisis, Park (2010), and Park and Song (2011) show that there was a reasonable prospect that internationalization of the RMB could transform it into a regional medium of exchange, and even an anchor currency for a group of East Asian economies: ASEAN-10; Hong Kong, China; the Republic of Korea; and Taipei, China. Since the global financial crisis in 2008, changes in trade relations and financial markets in the region appear to have improved the position of the RMB as an international currency.

accumulated volume of PRC cross-border trade settlement in RMB under current accounts reached CNY10.2 trillion (\$1.7 trillion) by the end of 2013 (Figure 5). The share of renminbi trade settlement in PRC total international trade saw an increase from 3.2% in 2010 to 18% in 2013.⁹

Figure 5: Renminbi Settlement for Cross-Border Trade (CNY billion)



Source: CEIC Data. Available at <http://ceicdata.com>.

3.2 Renminbi Settlement Services

From the beginning of RMB internationalization, Hong Kong, China has served as the premier offshore RMB business center, offering RMB clearing and settlement services through the Bank of China (Hong Kong, China). By the end of 2013, the volume of RMB trade settlement in Hong Kong, China rose to CNY470 billion, accounting for 81.2% of total RMB trade settlement. In addition to Hong Kong, China, the Macao, China and Taipei, China branches of the Bank of China and the Singapore Branch of the Industrial and Commercial Bank of China (ICBC) have been authorized to offer RMB clearing services.¹⁰ The PRC began RMB settlement of overseas direct investment in January 2011, and in October of the same year allowed domestic banks to operate overseas RMB loan services.¹¹

3.3 Interbank Market for the Renminbi

The PRC has also expanded the direct trading of the RMB with non-major reserve currencies. In August 2010, the PRC Foreign Exchange Trade System (CFETS) created an interbank market for the Malaysian ringgit, which was the first emerging market currency traded in the PRC interbank market. It was followed in November 2010 by the Russian Federation's ruble and, a month later, by the creation of an

⁹ On a value basis.

¹⁰ Hong Kong, China hosts the largest pool of RMB liquidity outside the PRC. Banks and other financial institutions in Hong Kong, China now offer a full range of RMB-denominated financial products, including certificates of deposits, RMB stocks, RMB insurance policies, RMB futures, and 'dual currencies, dual stocks' that are denominated in both RMB and Hong Kong dollars.

¹¹ See the People's Bank of China (PBC) (2011B0) on *Guidelines on RMB Loans for Overseas Projects by Domestic Banking Financial Institutions*.

offshore market in Moscow. Since then, the RMB has been traded against the Thai baht on the interbank market in Yunnan Province (December 2011), the Japanese yen (June 2012), and against the Australian dollar (April 2013) on their interbank markets. Currently, nine currencies are traded for RMB in their respective interbank foreign exchange markets.¹²

3.4 Renminbi as an Investment Currency

The PRC Ministry of Finance issued sovereign bonds denominated in RMB for the first time in September 2009 in Hong Kong, China as part of its effort to construct a yield curve for the offshore RMB bond market. The offshore RMB bond market has grown rapidly since July 2010 when the clearing agreement for RMB business was amended to facilitate development of RMB asset management and insurance business. In April 2012, RMB denominated bonds amounting to CNY2 billion were also issued in London by the Hong Kong and Shanghai Banking Corporation (HSBC).

The PRC has steadily opened onshore financial markets to foreign investors, allowing allowed investment and trade in the domestic securities market for the first time in 2002 by launching the Qualified Foreign Institutional Investor (QFII) program. Only licensed foreign investors have been allowed to buy and sell equities and bonds in PRC stock exchanges in Shanghai and Shenzhen. Since then, the PRC has increased the quota and, as of January 2014, a total of 235 foreign institutional investors and a quota of \$51.4 billion have been approved under the QFII program.¹³

The RMB Qualified Foreign Institutional Investors (RQFII) scheme launched in December 2011 permits RMB fund investments in PRC domestic financial assets, whereas the QFII scheme is reserved for US dollar denominated investments. The investment quota for RQFII was raised to CNY167.8 billion for 57 institutions in January 2014. Foreign central banks and RMB clearing banks outside the PRC have also been allowed to invest their RMB funds in the PRC interbank bond market since August 2010.¹⁴

Another key scheme, which links the offshore market in Hong Kong, China and the onshore market in mainland PRC, is the *Pilot Scheme for Three Kinds of Eligible Institutions Outside of the Mainland to Invest in PRC's Interbank Bond Market*, which was launched by the PBC in 2010. Under the scheme, foreign central banks and monetary authorities, the RMB clearing banks in Hong Kong, China and Macao, China, and banks outside mainland PRC participating in cross-border trade settlement transactions can invest their RMB funds in the interbank bond market in mainland PRC.¹⁵ By the end of July 2013, holdings of foreign banks amounted to only 1.7% of total RMB-denominated government bonds outstanding in the interbank bond market.

¹² The US dollar, euro, yen, Hong Kong dollar, pound sterling, ringgit, ruble, Australian dollar, and Canadian dollar can be traded. Thai baht can also be traded, but only in the province of Yunnan.

¹³ In October 2011, the PRC allowed RMB-denominated direct investment in the PRC for overseas investors and the PBC (2011) issued the *Administrative Rules on Settlement Business of Foreign Direct Investment Denominated in CNY*, stipulating that banks start to provide settlement services.

¹⁴ The interbank mark is the largest bond market in the PRC accounting for more than 95% of total trading volume.

¹⁵ Their RMB funds shall come from currency cooperation between central banks, cross-border trades, and investment in RMB business. In March 2013, the PBC (2013) published the *Notice on Issues Related to Investment in the Interbank Bond Market by Qualified Foreign Institutional Investors*, allowing QFIIs to apply to invest in the interbank bond market. Prior to that, QFIIs could only access the exchange bond market.

3.5 Renminbi as a Reserve Currency

To provide an adequate amount of short-term RMB liquidity and to promote bilateral trade by the end of 2013, the PRC signed bilateral RMB–local currency swap agreements with central banks or monetary authorities in 23 countries and regions, amounting to CNY2.6 trillion (Table 4).

Table 4: **Bilateral Currency Swap Agreements Negotiated by the People’s Republic of China (CNY billion)**

Number	Country	Amount	Date	Number	Country	Amount	Date
1	Belarus	20	11 March 2009	12	Turkey	10	21 February 2012
2	Argentina	70	2 April 2009	13	Mongolia	10 (5)	20 March 2012 (6 May 2011)
3	New Zealand	25	18 April 2011	14	Australia	200	22 March 2012
4	Uzbekistan	0.7	19 April 2011	15	Ukraine	15	26 June 2012
5	Kazakhstan	7	13 June 2011	16	Singapore	300 (150)	7 March 2013 (23 July 2010)
6	Republic of Korea	360 (180)	26 October 2011 (12 December 2008)	17	Brazil	190	26 March 2013
7	Hong Kong, China	400 (200)	22 November 2011 (20 January 2009)	18	United Kingdom	200	22 June 2013
8	Thailand	70	22 December 2011	19	Hungary	10	9 September 2013
9	Pakistan	10	23 December 2011	20	Iceland	3.5	11 September 2013 (9 June 2010)
10	UAE	35	17 January 2012	21	Albania	2	12 September 2013
11	Malaysia	180 (80)	8 February 2012 (8 February 2009)	22	Indonesia	100	1 October 2013 (23 March 2009)
				23	ECB	350	9 October 2013

ECB = European Central Bank, UAE = United Arab Emirates.

Note: The numbers in parentheses refer to initial swaps and the date.

Source: People’s Bank of China.

Since the relaxation of investments in the PRC interbank bond market in 2010, a growing number of foreign central banks have begun to invest in PRC government bonds to hold as part of their foreign reserves. In December 2011, the PBC announced that the Bank of Japan would invest in PRC government bonds. In April 2013, the Reserve Bank of Australia (RBA) announced its decision to invest up to 5% of its foreign reserves in RMB through the Australian Chamber of Commerce in Shanghai. It was reported that Chile, Malaysia, and Nigeria also hold RMB bonds as part of their foreign reserves.¹⁶

3.6 The Shanghai Pilot Free Trade Zone

The PRC established the Shanghai Pilot Free Trade Zone (FTZ) in September 2013. In its effort to support the development of the FTZ, the PBC affirmed its plan for announcing the general principles to support the FTZ. One of them is continuing reform and innovation, and leading the way in promoting the cross-border use of RMB to move

¹⁶ Financial Times (25 April 2013).

toward capital account convertibility, market-based interest rate reform, and foreign exchange administration reform.

The PBC allowed the banking institutions located in Shanghai to directly process cross-border RMB settlement for current account transactions and FDI (PBC 2014). Also, financial institutions and non-financial companies located in Shanghai can borrow RMB funds from overseas.¹⁷ Further measures are expected to be adopted in the FTZ to speed up internationalization of the RMB.

4. OBJECTIVES AND THE POTENTIAL SIZE OF THE CURRENCY SCHEME IN EAST ASIA

4.1 Objectives

Measured in terms of GDP, the economy of East Asia, comprising ASEAN-10 along with the PRC, Japan, and the Republic of Korea (ASEAN+3), is already as large as that of the US. East Asia is home to a number of international financial centers. It has a large number of growing domestic financial markets that are linked with one another more closely than before. In 2010, ASEAN+3 accounted for more than 25% of global trade, yet the shares of the two major currencies in the region—the yen and the RMB—in total global trade payments were about 2.5% and 0.24%, respectively, whereas their shares in total global trade were 5% and 11.4% (Auboin 2012).

Heavy reliance on the US dollar as the dominant reserve currency no longer serves the interests of either the US or East Asia. The euro, once a promising reserve currency second only to the US dollar in importance, remains uncertain to survive the ongoing eurozone crisis for which no end is in sight.

If East Asian countries are serious about addressing the mismatch between trade and payment, constructing a scheme for using some of the regional currencies including non-convertible ones for trade settlement could be an effective strategy for reducing dependence on the US dollar, and safeguarding economies against financial spillovers emanating from more advanced economies.

In addition, such a regional currency arrangement would also help internationalize some of the inconvertible currencies, thereby concomitantly speeding up trade and financial integration in the region. The scheme is also expected to provide fresh impetus to various regional free trade negotiations currently underway, and revive cooperation toward financial integration within the framework of ASEAN+3 that has been stalled by global financial instability and stagnation.

Among the currencies of East Asian countries, the yen is a fully-fledged reserve currency. As described in the preceding section, the PRC has put into effect a number of measures for deregulating capital account transactions and allowing limited opening of domestic financial markets for foreign investments. Although these are hardly adequate for complete currency internationalization, as the PRC has put so much effort into this already, its commitment to the pilot program is likely to escalate as the PRC continues to move forward with financial reform. The Republic of Korea has made several attempts to internationalize its currency, but each time has failed due to a lack of will or political support for the requisite institutional and policy reforms.¹⁸

¹⁷ However, the borrowed money must not be used for investment in securities or derivatives.

¹⁸ See Kim and Suh (2011) on the Republic of Korea's internationalization of the won.

At the 12th ASEAN summit in January 2007, the member countries affirmed their commitment to create the ASEAN Economic Community (AEC) by 2015 and “to transform ASEAN into a region with free movement of goods, services, investment, and skilled labor, and freer flow of capital” (ASEAN 2008). To achieve this ambitious goal in the financial sector, the ASEAN Central Bank governors accepted the results of an ADB study that draws up “plans for capital account liberalization (CAL) and financial services liberalization (FSL) in the ASEAN banking sector, together with institutional and policy reforms and an ASEAN framework for policy coordination and mutual assistance over 2011–2020” (ADB 2013: 1).¹⁹

The probability of success for the proposed multilateral currency settlement scheme would likely be higher if it began with the currencies of the PRC, Japan, and the Republic of Korea. This is because they are the major trade partners for each other. Furthermore, we assume that some of the ASEAN-5 member states would join the system from the beginning on a voluntary basis.

Over time, the currency arrangement could increase the number of participating countries, as well as the scope of settlement coverage, to include other items of current account and, eventually, capital account transactions. However, the use of national currencies would need to be a gradual process, with stability concerns fully addressed at each stage.

In constructing the scheme, this study envisions a multilateral arrangement in which the participating countries agree to use not only their own currencies but also other currencies, as vehicle currencies in bilateral trade settlements with a partner. For instance, traders from the PRC could make payments for their imports from the Republic of Korea with any one of the participating currencies.

More than 40% of bilateral trade between the Republic of Korea and Japan, and between the PRC and Japan was settled using yen in recent years (Table 5). In comparison, the trade share for the RMB was a paltry 1.4% with the Republic of Korea and 0.4% with Japan. Neither the yen, the RMB, nor the won were used in trade with a third country as the vehicle currency. However, since opening the RMB–yen interbank market in both Shanghai and Tokyo in June 2012, the volume of RMB–yen transactions has soared to \$20 billion per month in Shanghai and about \$3 billion in Tokyo on average during the March–April 2013 period from a negligible amount before that.

Table 5: Use of National Currencies in Trade Settlement (%)

	Republic of Korea/PRC ^a	Republic of Korea/Japan ^a	PRC/Japan ^b
US dollar	97.3	58.9	52.4
Yuan	1.4	0.0	0.4
Euro	0.8	0.3	0.4
Yen	0.5	40.2	43.9
Won	0.1	0.6	-
Hong Kong dollar	0.002	0.0001	1.6

PRC = People's Republic of China.

Note: Trade settlement is the sum of exports and imports.

^a Average (January–May 2013)

^b May 2012

Source: Bank of Korea.

¹⁹ The plans propose financial integration targets and the sequencing for the implementation of both CAL and FSL over the 2011–2020 period.

At the country level, the new currency system brings several benefits to the participating countries (except Japan) similar to those enjoyed by countries with an internationalized currency, such as lower transaction costs and reduced exchange rate risk, and the ability to issue international debt in their own currencies. However, the participating countries will have to bear substantial costs too, as they are exposed to a number of risks in addition to those difficulties that countries with an internationalized currency often encounter. These include complications of monetary management and straining of the domestic financial system's ability to absorb capital flow due to the potential for increased volatility and large shifts in portfolio activity.²⁰

One potential risk is that since traders are free to choose the currency they prefer, they may discriminate against non-convertible currencies in favor a currency like the yen in their trade settlements. The onus will therefore be on the non-convertible currency members to make their currencies more attractive to traders as a vehicle for financial investment as well as for trade settlement.

Another risk is the problem of clearing imbalances in currency outflows and inflows stemming from trade deficits or surpluses of the participating countries. If one member runs a persistent deficit on its trade account, then the system may come under strain in the absence of an adjustment mechanism to control the flow. This problem could be manageable if the capping of the use of national currencies for settling import bills were to be imposed.

A third risk is the down side risk associated with changes in the imbalances in currency flow, which could create opportunities for currency speculation, increasing the volatility of capital flow and hence the bilateral exchange rates of the member countries. We argue in the following section that these problems could be mitigated if the scheme instituted a currency swap arrangement through which short-term liquidity could be made available to members suffering from short-term capital outflow.

4.2 Potential Size

Based on the 2012 data, and assuming that all trade settlements take place in the respective national currency—i.e., export receipts are received in the importing country's currency—a multilateral agreement that covers only trade settlement in national currencies would result in a net outflow of currencies equivalent to \$234 billion for the 9 economies taken as a whole (Table 6).

About half of this amount would be in Hong Kong dollars, equivalent to \$124 billion, followed by RMB, equivalent to \$44 billion. Japan, the Republic of Korea, and Singapore, each having a current account surplus against the countries listed in Table 6, would accumulate other Asian currencies equivalent to \$70 billion, \$77 billion, and \$86 billion, respectively. In reality, the actual amounts of the net outflow are likely to be much smaller than the maximum figures shown in Table 6, suggesting that the total amount of the imbalances between the 3 countries would be of a volume manageable for clearance.

²⁰ For a comprehensive discussion on benefits and cost, see Ahmed et al. (2011).

Table 6: National Currency Outflows from the Multilateral Trade Settlement Scheme in Local Currencies, 2012 (\$ million)

	Export to									
	Hong Kong, China	PRC	Japan	Republic of Korea	Indonesia	Malaysia	Philippines	Thailand	Singapore	Net
Hong Kong, China		123,811	18,576	7,606	2,674	3,712	2,901	5,384	7,222	171,885
PRC	177,630		126,788	73,313	34,291	28,756	12,888	24,820	36,937	515,422
Japan	24,662	160,591		61,515	20,273	17,701	11,855	43,696	23,290	363,583
Republic of Korea	28,265	138,664	38,796		13,955	7,723	8,211	8,221	22,888	266,723
Indonesia	291	24,002	30,135	15,050		11,280	3,708	2,634	17,135	104,235
Malaysia	6,957	31,551	26,879	8,202	8,954		3,398	12,231	30,944	129,116
Philippines	4,776	6,159	9,881	2,862	840	1,018		2,446	4,861	32,843
Thailand	13,041	26,702	23,320	4,752	11,142	12,351	4,830		10,763	106,901
Singapore	40,454	48,391	18,826	16,580	43,332	50,432	6,337	15,622		239,973
Net	296,076	559,872	293,201	189,880	135,461	132,973	54,127	115,053	154,039	1,930,681

	Net based on exports									
	Hong Kong, China	PRC	Japan	Republic of Korea	Indonesia	Malaysia	Philippines	Thailand	Singapore	Net
Hong Kong, China		-53,819	-6,086	-20,659	2,383	-3,245	-1,875	-7,657	-33,233	-124,191
PRC			-33,803	-65,351	10,289	-2,795	6,729	-1,883	-11,454	-98,269
Japan				22,719	-9,862	-9,177	1,973	20,376	4,464	30,493
Republic of Korea					-1,095	-479	5,349	3,470	6,308	13,553
Indonesia						2,326	2,868	-8,508	-26,197	-29,511
Malaysia							2,379	-120	-19,487	-17,228
Philippines								-2,384	-1,477	-3,861
Thailand									-4,859	-4,859
Singapore										0
Net	0	-53,819	-39,890	-63,291	1,715	-13,370	17,424	3,293	-85,934	-233,873

PRC = People's Republic of China.

Note: Adjusted for re-exports through Hong Kong, China. Negative amounts represent inflows into the export recipient country.

Source: Authors' estimation.

5. STRUCTURE OF THE SYSTEM

The proposed system is built on a set of multilateral agreements among the participating countries, and on an institutional and operational framework that includes:

- (i) convertibility of national currencies of the participating countries received as export payments;
- (ii) a clearing mechanism: designation of clearing banks;
- (iii) creation of interbank foreign exchange markets for direct trading among some of the members;
- (iv) investment vehicles for exporters with non-national currencies received from the trading partners; and
- (v) an adjustment mechanism for imbalances in currency flow between trade surplus and deficit countries.

These five requirements are critical to the success of the system as they are designed to alleviate some of the constraints on the use of non-convertible currencies.

5.1 Construction of Market Infrastructure

5.1.1 Convertibility

In this currency arrangement, exporters and importers decide on the choice of currency for their transactions. National governments should not intervene in favor of particular currencies, so as to ensure some measure of competition among the participating currencies. Importers will favor using their national currencies, but it is a different matter for exporters. In choosing a settlement currency, considerations would include, among other things, changes in the expected exchange rates of the currencies of their trading partners, transactions, and hedging costs and, most of all, convertibility into their own currency or other reserve currencies such as the US dollar.

Exporters are likely to prefer payments of their receipts in yen rather than other non-convertible currencies including the RMB unless their full convertibility is guaranteed. They would be more so if they imported inputs for their exports from non-member countries that demanded payments in reserve currencies. Exporters may have even fewer incentives to accept non-convertible currencies if they are not allowed to invest their export proceeds in domestic financial assets denominated in their trading partners' currencies.

Some of the factors key to successful launching and expansion of the currency scheme will, therefore, include sustaining the stability of exchange rates and ensuring access of traders to the domestic financial markets of the non-convertible currencies.

5.1.2 Clearing and Settlement

A well-organized multicurrency clearing and settlement system offering services in all participating currencies would be crucial for the efficient operation of the currency scheme. The building of such a system will be the most difficult hurdle in the face of unevenly developed national clearing and settlement arrangements, and different business practices across the member countries. These inconsistencies could also be a major source of systemic risk and inefficiency.²¹

The clearing and settlement system is built on a network of clearing banks established throughout the participating countries. These clearing banks provide local banks with diversified clearing services, including settlement accounts, deposit and withdrawal of banknotes, remittance, foreign exchange, and bonds settlement in all participating currencies. In the process of providing clearing services, they manage counter party risk and guarantee contractual performance by playing the role of central counterparty, and serve as settlement agents for, and intermediaries between, local clearing banks and their respective central banks.

5.1.3 Interbank Foreign Exchange Markets

The convertibility guarantee and an efficient clearing and settlement system are critical to establishing credibility of the scheme at the early stage of development. However, equally important would be the need to complement the scheme by creating the

²¹ Even in the early 2000s, when the European Union (EU) had already developed into a highly integrated region, a 2001 study, *Cross-Border Clearing and Settlement Arrangements in the European Union*, by the Giovannini Group for the EU Commission found that cross-border transactions within Europe are far more complex, are hindered by a number of significant barriers, and are much more costly than domestic transactions. Inefficiencies in clearing and settlement represent the most primitive and thus most important barrier to integrated financial markets in Europe.

interbank foreign exchange markets for the participating currencies to facilitate their direct trading.

At the initial stage, state-owned banks or other designated non-bank financial institutions could serve as market makers to provide liquidity and to set and control transaction costs to facilitate creation of markets both onshore and offshore.²² Since interbank markets for the RMB and the yen are already in operation in both Shanghai and Tokyo, other members will need to make preparations for the creation of onshore and offshore markets for their currencies.

5.1.4 Investment Vehicles

Each member country may create an investment vehicle reserved exclusively for exporters of other member countries to invest their holdings of the country's currency. The demand for the instruments issued by the vehicles could be controlled by adjusting the return on these assets.

5.2 Adjustments of Imbalances of Holdings of National Currencies

Trade account developments would differ from country to country and the participating countries may run deficits or surpluses in their bilateral trade with other members. The new scheme faces the problem of managing imbalances in national currency outflows. For example, the PRC has been running deficits in its bilateral trade with both Japan and the Republic of Korea (Table 6). The PRC will then experience a continuing outflow of RMB, which will be absorbed by the surplus countries. Unless these imbalances are managed in a manner that prevents an excessive accumulation of a particular currency outside of its issuer to sustain stability of the foreign exchange markets, the scheme will come under strain.

It is difficult to conjecture the effects of the national currency scheme on trade account balances of the participating countries. The scheme may, other things being equal, stimulate imports to the extent that importers can use their national currencies, but the actual increase will also depend on exporters' choice of currency for settlement. This feature of the system could interfere with adjustments of trade imbalances among the members through changes in the exchange rates, thus exacerbating speculation in the foreign exchange markets, and complicating the conduct of monetary policy. Therefore, a protracted one-sided trade deficit or surplus would need to be addressed through an adjustment mechanism agreeable to the members.

Although importers are not, and should not be, subject to any restrictions in using national currency, a limit could be set initially on the use of each currency for trade settlement at the country level to contain excessive accumulation of the deficit country's currency.

For example, if the Republic of Korea runs a larger bilateral deficit in its trade with Japan, Japanese exporters may end up holding more won than they desire. The monetary authorities of Japan and the Republic of Korea could then agree to a bilateral adjustment mechanism to clear the excessive accumulation of won in Japan. If the volume of the actual settlement exceeds the limit, then the excess could be settled using yen or another reserve currency such as the US dollar or the euro.

²² In 1996 the Republic of Korea opened a won–yen market, but closed it less than a year later because of the lack of liquidity and high costs of transactions compared with the won–US dollar and yen–US dollar markets.

Supposing, to be more specific, Japan and the Republic of Korea agreed to 50% of the Republic of Korea's imports from Japan being settled in won. If the actual amount of the won settlement exceeds the limit, the difference is adjusted *ex post* in yen or US dollars as a "rebalancing" currency, through a clearing mechanism set up by the 2 countries' central banks.

The participating countries could also adopt a more gradual approach for adjustment. For instance, if Japan accumulates W100 million at the end of the year due to an increase in trade imbalance, a limit can be set at W100 million, and then one more at 2 times W100 million. During the second year, Japan should be expected to exchange any amount, including zero, in excess of W100 million for US dollars. For any amount in excess of 3 times W100 million, Japan is required to exchange for US dollars with the Republic of Korea such that the total amount does not exceed 3 times the base year's trade imbalance.²³

In this arrangement, monetary authorities of the member countries may have to absorb, directly or indirectly, most of the national currencies of other members in excess of the predetermined limits and, beyond that limit, agree to exchange their own currencies with any of the other currencies.

Another arrangement for resolving currency imbalances would be to utilize the bilateral currency swap as a *de facto* borrowing arrangement. In this case, members in deficit draw down currencies of other participating countries running surpluses from the swap, within the limit and at a predetermined interest rate, to settle additional holdings of their currencies beyond those limits. For example, if Japan accumulates won above the set limit as a result of its bilateral surplus vis-à-vis the Republic of Korea, and demands that the excess amount be settled in yen or other reserve currencies, the Republic of Korea may draw down yen from the bilateral swap for the conversion.

To supplement these measures, monetary authorities could agree to exchange their own currencies with any of the other currencies beyond those from trade settlement, as a buffer. With the current currency swaps that are in place using national currencies, the PRC has *de facto* already achieved this aim. In addition, central banks in these countries could agree *ex ante* to hold each other's sovereign bills and bonds in national currencies to create liquidity, which can then be moved to balance out net differences in trade settlements.

6. BENEFITS AND RISKS

6.1 Benefits

Although fully convertible, the yen has not been as widely used as other full-fledged reserve currencies. Most yen exports are still invoiced in US dollars. As the yen share of total trade among ASEAN+3 continues to grow as shown in Figure 3, Japan will benefit more than other countries from joining the currency scheme. This is because the yen has a competitive edge—exporters are likely to favor it over other currencies

²³ This arrangement could be extended to cover all ASEAN+3 countries and allow any country to exchange bilateral excesses with anyone among the selected currencies that has space and is willing. In other words, extending the above example, country A can exchange 100 million units of country B's currency with country C for country D's currency if the latter's holding of country B's currency is within the 2 to 3 times limit originally set. The logic behind this approach is that it allows countries to adjust holding other country's currencies gradually. It will still lead to greater use of the selected currencies within ASEAN+3, and thus reduce overall reliance on the US dollar and euro.

for trade settlement. More importantly, if most ASEAN-5 countries sign on to the scheme, it will be in Japan's interest to follow suit.

Using its vast market for regional exporters and importers as leverage, the PRC could take the lead in promoting the new currency scheme. The benefits to the PRC would be sizeable, as the scheme will help broaden its regional base as a launch pad for RMB globalization. The new currency scheme will also provide impetus to the PRC to accelerate RMB internationalization by breaking the impasse on capital account liberalization.

The Republic of Korea has taken some steps toward internationalizing its currency. It has established bilateral currency swaps with the PRC, Japan, Malaysia, Indonesia, and the UAE in recent years and plans to negotiate similar arrangements with other countries. As a highly open economy extensively integrated with the global economy, the Republic of Korea realizes that it needs to open its financial industries and make the won convertible. Participation in the currency scheme may help the Republic of Korea policy authorities to overcome domestic opposition to, and speed up, capital account liberalization and currency convertibility.

For other countries, the benefits would be equally substantial. It would boost confidence in their currencies and allow them to hold relatively smaller reserves in convertible currencies than before. The total amount of foreign exchange reserves held by these countries could be smaller because the use of other currencies for current account settlement would require a smaller buffer, and the interchangeability of these currencies implies a *de facto* pooling of foreign exchange reserves in convertible currencies.

Finally, the new currency arrangement will strengthen regional capacity to absorb external shocks. As acceptance of these currencies grows within the member countries, one would expect less volatility among bilateral exchange rates of the East Asian currencies, and perhaps greater flexibility of the weighted average East Asian currencies against the euro and the US dollar.

6.2 Relative Advantages

If the experience with forming the CMIM is any guide, constructing a multinational arrangement involving a number of currencies would require an enormous amount of time for negotiations on the details of the scheme among the participating countries. Furthermore, *a priori* benefits cannot easily be gauged, while at the same time the risks could be magnified. For this reason, detractors could argue against the benefits of such a scheme.

They could argue that if any country wishes to internationalize its currency, all it has to do is open its financial markets, remove restrictions on capital account transactions, and make its currency convertible. In particular, they would question the rationale for participation of the PRC, and more so of Japan, for which the yen is a fully-fledged reserve currency.

While these objections deserve merit, they overlook one critical advantage that individual initiatives cannot deliver. In internationalizing their currencies, emerging economies will find it more expedient, but much less risky and less costly, if they work with other countries in a multilateral framework where the participating members agree to use—and to construct requisite infrastructures and frameworks for policy cooperation—their national currencies for trade settlement than pursuing this goal individually.

Given that internationalization is essentially a market-driven process, it is uncertain how successful individual attempts will be, even if they are preceded by reforms satisfying most of the pre-conditions. In a cooperative framework it is at least assured, and the market expects, that currencies will be acceptable for settlement of trade at least among the participating countries, thereby overcoming some of the teething problems while reaping the gains from network externality.

It is possible that even after joining the scheme some of the participating countries may find that their non-convertible currencies are not used for trade settlement, and they will have to continue to settle their trade with US dollars or other reserve currencies as they did before. However, even in this unlikely scenario they will not bear any additional cost. Perhaps one of the most attractive features of the currency scheme is that it does not impose any cost on the participating countries.

In addition, by joining the multilateral currency scheme, emerging economies of ASEAN+3 could mitigate some of the difficulties currency internationalization entails such as complicating monetary management and increasing the volatility of capital flow. This benefit could be realized by instituting a mutual liquidity support system and setting up a common capital control regime. Finally, participation in the currency scheme may provide justification and provide peer pressure for an extensive financial reform of emerging economies that would be difficult to implement independently.

Unlike other members, Japan's participation will be crucial to the success of the scheme. As holder of the only reserve currency, it will enhance not only the credibility and stability of the scheme, but also the confidence of other participating members in the arrangement. It may also help the participating countries to avoid the strategic misjudgments Japan made in internationalizing the yen.

Although it is the third largest economy, Japan has failed to expand the role of the yen in the global trading and monetary system commensurately with its share of the world economy. According to Takagi (2011), "by 2003, however, it was clear that any further attempt to internationalize the yen would be futile without a fundamental change in the economic might of Japan or major cooperation efforts among Asian countries to promote the role of the yen in the region". Japan has a large stake in the vast and growing export market of East Asia. Joining the scheme will help expand the scope of the yen as a regional settlement currency and thereby regain its export market share, which has been declining, and strengthen its role in deepening regional trade and financial market integration in the region. Most important of all, as a reserve currency country, Japan could enjoy the privilege of dictating terms for settling its bilateral trade with other participating countries with non-convertible currencies.

As for the PRC, having so far managed rather successfully its internationalization program, it might be argued that it has no incentive to deviate from an independent strategy. However, over time the increase in RMB circulation outside the country is likely to slow down unless the PRC is prepared to overhaul its financial system to allow foreign holders of RMB easy access to its domestic financial markets and make the RMB fully convertible. Furthermore, if the PRC plans to consolidate the regional base of its currency, both Japan and the Republic of Korea will have to use the RMB more extensively for their trade settlement than they have in the past. The currency scheme could be one way of achieving this objective.

Although the PRC authorities claim that they are deeply committed to financial liberalization and openness, they are faced with formidable domestic opposition to the internationalization scheme, which is viewed as a cover for extensive financial market and capital account liberalization that the PRC may not benefit from and is certainly not ready for yet (Yu 2012). The PRC cannot internationalize its currency while retaining a

repressive financial regime. If globalization of the RMB is part of the vision of the PRC as a global power, RMB internationalization could serve as a banner under which parties of conflicting interests are brought together to create a deregulated financial system where the vision is realized.

6.3 Risk Management

The participating countries will have to tolerate the same costs that countries with an international currency have to bear. The use of a currency outside its country's borders could become a source of complacency in the conduct of monetary policy. For example, printing money could finance a growing domestic imbalance, as the usual market reaction may be absent.

In addition, there is exposure to other risks. To the extent that the use of national currencies is limited to settlement of current account transactions, the incidence of speculative attack is relatively small and could be controlled. Even so, currency speculation could increase since currency traders can expect, with some degree of certainty, the accumulation of one particular currency against another due to trade imbalances. As noted before, however, this pressure can be alleviated by introducing a mechanism for adjustment, such as conversion into a fully convertible currency, and fortifying it with currency swaps as short-term borrowing arrangements.

7. CONCLUDING REMARKS

The instability of the US dollar funding market that followed the 2008 global financial crisis has prompted the PRC to consider some means of reducing its reliance on the US dollar through RMB internationalization. The Republic of Korea and Singapore secured access to a foreign exchange swap facility with the US Federal Reserve to ensure uninterrupted funding in US dollars and to assure investors of their capacity to meet foreign exchange obligations.

While these swap lines were critical to restoring currency stability in East Asian economies during the 2008 global financial crisis, they have also increased the reliance of East Asia on the US dollar as a reserve currency.

Over the long run, this situation is not tenable as economic activities in East Asian economies could be disrupted by developments in the US dollar market beyond the trade and capital flow channels. Furthermore, heavy reliance on the US dollar subjects these countries to US monetary policy that may not be optimal for their own economic objectives.

Each time uncertainty in the global financial market leads to heightened risk aversion, East Asian economies will be subject to changes in US dollar funding market conditions, possibly forcing them to seek swap lines with the Federal Reserve.

When the pilot program was announced, the PRC policy authorities concluded that the PRC was not ready to meet the level of liberalization of its financial system—in particular the capital account—required to support RMB internationalization for fear that such a reform could destabilize domestic financial markets. The PRC response was to shift the focus to trade settlement in RMB from RMB internationalization. It then allowed non-residents to access RMB assets as necessary to keep the demand for RMB alive.

Internationalization of East Asia's non-convertible currencies is understandably a long-term process. This paper argues that economic conditions are ripe for some of the

ASEAN+3 members, in particular the Republic of Korea and some of the ASEAN-5 member states, to join forces together with Japan and the PRC to create an efficient multinational currency arrangement where the currencies of these countries are used for trade settlement. If created, such a system could speed up the currency internationalization process in the region.

Some of the emerging economies of East Asia, which are planning to internationalize their currencies but are not prepared to relinquish their control over capital account transactions, may consider emulating the path of RMB internationalization that the PRC has chosen.

However, if those economies maintain control over capital account transactions and inconvertibility of their currencies, the new currency system would not be a viable arrangement for currency internationalization in the long run; such a system could only be transitional. This paper proposes some of the market-supporting institutions that could mitigate the constraints of the closed financial system on the new currency scheme. Even if these institutions do not work, they will at least increase the pressure for capital account liberalization.

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APPENDIX

Table A.1: Intensity of Intra-Industry Trade with Association of Southeast Asian Nations+3

		1995	2000	2005	2007	2012
PRC	P&C	0.66	0.54	0.54	0.60	0.63
	Capital	0.58	0.75	0.67	0.71	0.86
	Consumption	0.26	0.21	0.37	0.47	0.51
Japan	P&C	0.63	0.78	0.81	0.81	0.84
	Capital	0.41	0.77	0.89	0.87	0.95
	Consumption	0.32	0.21	0.29	0.34	0.35
Republic of Korea	P&C	0.99	0.95	0.89	0.95	0.81
	Capital	0.60	0.74	0.92	0.95	0.78
	Consumption	0.54	0.82	0.79	0.61	0.75
ASEAN-10	P&C	0.85	0.96	0.98	0.99	0.99
	Capital	0.75	0.85	0.88	0.84	0.76
	Consumption	0.80	0.87	0.93	0.92	0.93

ASEAN = Association of Southeast Asian Nations, PRC = People's Republic of China, P&C = parts and components.

Source: United Nations Comtrade data.