



**ADB Working Paper Series**

**Asian Monetary Integration:  
A Japanese Perspective**

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No. 475  
April 2014

**Asian Development Bank Institute**

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This is a substantially revised version of the paper presented to the Asia–Europe Economic Forum on “Impact of the Eurozone Debt Crisis on East Asia,” hosted by ADBI, Bruegel, CEPII, the European Commission, the Korea Institute of Finance, and Korea University, in Seoul on 9–10 December 2011. The author is grateful to Charles Wyplosz and an anonymous referee for their comments throughout the production of the paper.

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Suggested citation:

Kawai, M. 2014. Asian Monetary Integration: A Japanese Perspective. ADBI Working Paper 475. Tokyo: Asian Development Bank Institute. Available: <http://www.adbi.org/working-paper/2014/04/18/6233.asian.monetary.integration.japan/>

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**Abstract**

This paper discusses Japan's strategy for Asian monetary integration. It argues that Japan faces three major policy challenges when promoting intraregional exchange rate stability. First, there must be some convergence of exchange rate regimes in East Asia, and the most realistic option is for the region's emerging economies to adopt similar managed floating regimes—rather than a peg to an external currency. This requires major emerging economies—particularly the People's Republic of China (PRC)—to move to a more flexible regime vis-à-vis the US dollar. Second, given the limited degree of the yen's internationalization and the lack of the renminbi's (or the prospect of its rapid) full convertibility, it is in the interest of East Asia to create a regional monetary anchor through a combination of some form of national inflation targeting and a currency basket system. Emerging economies in the region need to find a suitable currency basket for their exchange rate target, such as a special drawing rights-plus (SDR+) currency basket—i.e., a basket of the SDR and emerging East Asian currencies. Third, if the creation of a stable regional monetary zone is desirable, the region must have a country or countries assuming a leadership role in this endeavor. There is no question that Japan and the PRC are such potential leaders, and the two countries need to collaborate closely with each other.

To assume a leadership role, together with the PRC, in creating a stable monetary zone in Asia, Japan needs to make significant efforts at the national and regional levels and further strengthen financial cooperation. Practical steps that Japan could take include (i) restoring sustained economic growth through Abenomics; (ii) transforming Tokyo into a globally competitive international financial center; (iii) further strengthening regional economic and financial surveillance (Economic Review and Policy Dialogue and ASEAN+3 Macroeconomic Research Office) and regional financial safety nets (Chiang Mai Initiative Multilateralization) and creation of an Asian currency unit index; and (iv) launching serious policy discussions focusing on exchange rate issues to achieve intraregional exchange rate stability.

**JEL Classification:** F31, F32, F33, F42

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## 1. INTRODUCTION

In recent years, East Asia has seen rapid advances in market-driven economic integration through cross-border trade, investment, and finance. Following Japan, the Asian newly industrialized economies (NIEs: Hong Kong, China; the Republic of Korea; Singapore; and Taipei, China), and middle-income Association of Southeast Asian Nations (ASEAN) member states, the People's Republic of China (PRC) is the most recent participant in this integration process. This growing trade and foreign direct investment (FDI) integration has led to the formation of a regional production network, with supply chains spanning throughout East Asia.<sup>1</sup> Japanese multinational corporations (MNCs), with significant presence in the region thanks to their advanced technological capabilities, have played a key role in creating and supporting these production supply chains. Financial integration has also progressed, albeit to a more limited extent than trade and FDI integration, due to limited financial market development and opening in many developing economies in the region.

Reflecting such rising economic integration through trade, FDI, and finance, macroeconomic interdependence has deepened in East Asia. The high and rising degree of economic interdependence in East Asia suggests that it is increasingly important for the region's economies, including Japan, to avoid disruptive exchange rate volatility and to achieve intraregional exchange rate stability.<sup>2</sup> The reason is that intraregional currency stability is conducive to more active trade and FDI and thus the more efficient workings of the supply chains.

In reality, however, the region remains characterized by diverse, uncoordinated exchange rate arrangements. Japan and the PRC, the two dominant countries in East Asia, have respectively adopted an exchange rate regime akin to a pure float and a tightly managed US dollar-based regime. Most other economies—except for the small open economies of Brunei Darussalam and Hong Kong, China, both of which have adopted currency board systems—employ intermediate regimes of managed floating with the US dollar as the most important anchor currency. As it is becoming difficult to maintain intraregional rate stability through the traditional policy of dollar pegs, it would be desirable to develop a regional framework for exchange rate policy coordination in East Asia. The PRC aggressively pursues renminbi (RMB) internationalization and may wish to create a RMB-based monetary system in the region. From a Japanese perspective, the yen could hopefully be an organizing currency for the region's monetary policy coordination as it is the region's only international—particularly reserve—currency.

A group of international experts (Angeloni et al. 2011; Eichengreen 2011; Subramanian 2011) hold the view that the RMB will play the role of a dominant international currency in Asia. Indeed, building on an impressive economic performance, the PRC authorities have adopted a strategy to internationalize the RMB using a two-track approach: the first is to promote the international use of the RMB through its use in trade and investment settlements, the establishment of offshore markets for bank deposits and bonds in Hong Kong, China, and bilateral currency swap arrangements; and the second is to achieve capital account convertibility through gradual liberalization of

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<sup>1</sup> In this paper, East Asia includes the so-called ASEAN+3 countries (the 10 ASEAN member states plus the PRC, Japan, and the Republic of Korea); Hong Kong, China; Taipei, China; and India.

<sup>2</sup> Some key policy makers in East Asia are even more vocal about the need to create a monetary union in the region (e.g., Chino 2004; Kuroda 2004). The recent eurozone financial crisis revealed clearly that forging a regional monetary union is a much more challenging task than previously thought.

international capital and financial flows. According to this view, East Asia will be a RMB zone where substantial amounts of trade and investment transactions may be conducted in RMB. On the other hand, another group of economists is much less optimistic about the prospect of RMB internationalization. The PRC faces enormous economic, social, and political challenges domestically, and it is by no means certain that the RMB will become the most prominent international currency in East Asia. According to this second view, over the next decade or two at least, it is highly unlikely that the RMB can establish itself as a credible international currency with full capital account convertibility. Even if RMB internationalization is successful, it may take much longer than optimists expect. Under this scenario, there is a case for developing a basket of East Asian currencies—such as an Asian currency unit (ACU)—as the region's common reference currency. If the second view is more valid than the first, creating an ACU would be desirable not only for the PRC and Japan but also for East Asia as a whole.

This paper focuses on Japan's strategy for Asian monetary integration and asks the following questions:

- What has been the problem with Japan's initiative to internationalize the yen?
- What should Japan do to promote intraregional exchange rate stability?
- What are the steps for strengthening foundations for regional exchange rate policy coordination? What types of institutional support are needed for this purpose?
- What are the most serious impediments to such steps?

Essentially, Japan faces three major policy challenges when promoting intraregional exchange rate stability. First, there must be some convergence of exchange rate regimes in East Asia, and the most realistic option is for the region's emerging economies to adopt similar managed floating regimes—rather than a peg to an external currency. This requires major emerging economies—particularly the PRC—to move to a more flexible regime vis-à-vis the US dollar. The PRC needs to be convinced that a more flexible exchange rate is in its interest as well as of the region as a whole. Second, given the limited degree of internationalization of the yen and the lack of that of the RMB (or the prospect of its rapid) full convertibility, it is in the interest of East Asia to create a regional monetary anchor through a combination of some form of national inflation targeting and a currency basket system. Emerging East Asian economies need to find a suitable currency basket for their exchange rate target, such as a special drawing rights-plus (SDR+) currency basket (i.e., a basket of the SDR and emerging East Asian currencies). Third, if the creation of a stable regional monetary zone is desirable, the region must have a country or countries assuming a leadership role in this endeavor. There is no question that Japan and the PRC are such potential leaders, and the two countries need to collaborate closely with each other. Japan also needs to transform Tokyo into a world-class international financial center and further internationalize the yen in order to play a joint leadership role with the PRC.

The paper is organized as follows. Section 2 reviews the recent developments of Japan's exchange rate, its current account balance, and real economic activity. Section 3 discusses Japan's policy challenges in the areas of exchange rates, yen internationalization, and relationships with other East Asian economies. Section 4 explores Japan's strategy for East Asian monetary integration from the perspectives of transforming Tokyo into an international financial center, creating an ACU as Asia's regional currency basket, and supporting regional financial and currency stability. It

also identifies policy steps for exchange rate policy coordination that could lead to stable intraregional exchange rates. Section 5 provides concluding remarks.

## 2. THE JAPANESE YEN AND THE CURRENT ACCOUNT

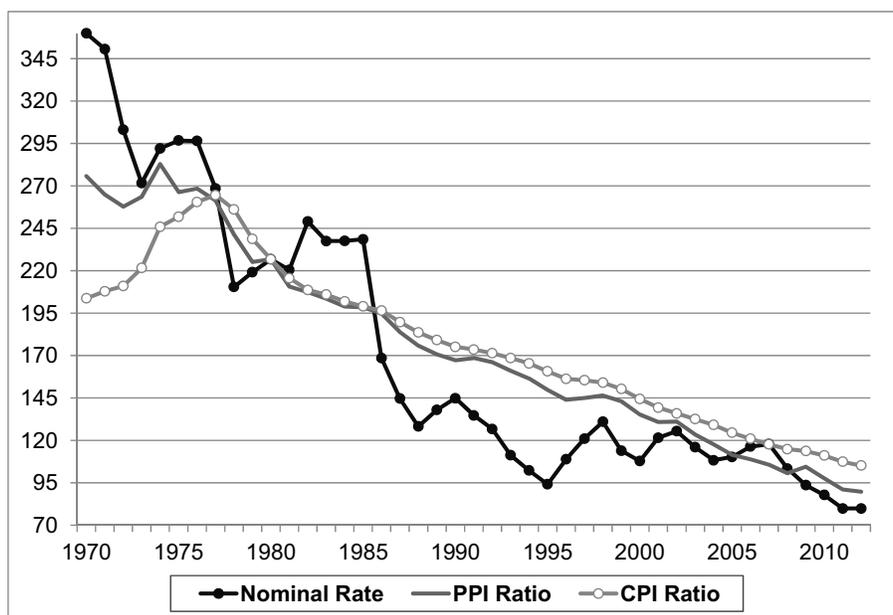
### 2.1 Yen Appreciation

The Japanese yen has been appreciating in terms of both nominal and real (effective) exchange rates as a trend over the last 40 years. This chronic appreciation trend has been a defining feature even during the periods of the “lost decade” of the 1990s, the global financial crisis of 2007–2009, and the post-triple disaster in 2011. In addition, despite the pressures from an aging population and rapidly rising public debt, the yen remained strong rather than collapsed. The launch of Abenomics in 2013 has reversed this trend, but it remains to be seen whether this is long-lasting or short-lived. We first examine why the yen appreciation trend persisted until late 2012 and then discuss the recent yen depreciation under Abenomics.

#### 2.1.1 Factors behind Yen Appreciation

One important factor behind the nominal appreciation of the yen is Japan’s low inflation or deflation, which has reduced relative prices in Japan over time. Figure 1 plots the nominal yen/US dollar exchange rate and the relative producer price index (PPI) and consumer price index (CPI) between Japan and the United States (US). The downward trends of the relative prices match the appreciation trend of the yen on average. Japan’s relative price decline reflects the relative tightness of Japanese monetary policy vis-à-vis the US.

**Figure 1: Nominal Yen Appreciation Matched by Relative Price Deflation**



CPI = consumer price index, PPI = producer price index.

Source: International Monetary Fund, International Financial Statistics.

A factor behind the real yen appreciation trend is the persistent current account surplus (see next subsection). Waves of yen rate appreciation seem to be associated with

changes in the current account balance; with a rising current account surplus, the yen tended to appreciate and vice versa. This phenomenon is consistent with what McKinnon (2005) called “conflicted virtue;” that is, as Japan ran current account surpluses by saving more than investing domestically and thus accumulated net external assets, the real exchange rate tended to appreciate and reduce the yen value of net external assets, thereby inducing further savings, current account surpluses, and yen appreciation.

Noteworthy is the fact that, even during the global financial crisis of 2007–2009 and the post-triple disaster period of 2011, the yen appreciated.

Surprisingly, the global financial crisis initially caused the US dollar to appreciate against most currencies, except the yen. The reason for the US dollar appreciation was that cash-short US financial firms repatriated massive amounts of US dollar liquidity back to the US from the rest of the world, putting upward pressure on the dollar.<sup>3</sup> In Asia, for example, the Republic of Korea saw rapid liquidity outflows, sharp currency depreciation, and a large loss of foreign exchange reserves, experiencing a mini-won crisis. There was, however, no significant liquidity repatriation from Japan to the US; instead, there was an unwinding of yen carry trades—i.e., reversals of capital outflows from Japan to high-yield countries and repatriations of funds back to Japan—causing yen appreciation.<sup>4</sup>

There may have been a safe haven effect as well; the Japanese economy was not growing, but its growth prospect was deemed better than those of the crisis-affected US and Europe—given the latter’s problems, among others, deep banking sector problems and sharp economic contractions—and thus attracted fund flows to Japan. When the US Federal Reserve adopted an easy monetary policy, particularly quantitative monetary easing in March 2009, the US dollar began to depreciate and the yen continued to appreciate.<sup>5</sup>

Following the triple disaster of the Great East Japan Earthquake in March 2011, the yen once again appreciated with the expectation of Japanese insurance firms’ repatriation of their funds from their investment destinations abroad. Together with the further deepening of the eurozone financial crisis, the yen continued to appreciate, breaking the historical record reached in April 1995. The monthly average exchange rate reached 76.8 yen/US dollar (September 2011) while the previous peak was 83.7 yen/US dollar (April 1995).

### 2.1.2 Public Debt and the Yen

Despite the pressures from an aging population and the rising public debt, the yen remained strong. The general government public debt-to-gross domestic product (GDP) ratio likely reached 227% (for gross debt) and 144% (for net debt) at the end of

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<sup>3</sup> There were carry trades between the US dollar and most other currencies in the form of borrowing in low-cost US dollar instruments and investing in higher-yield currencies during 2002–2007. The global financial crisis caused a rapid unwinding of these carry trades, a massive repatriation of funds back to the US, and a consequent appreciation of the US dollar.

<sup>4</sup> The short-term yen interest rate was near zero and, as a result, there were no carry trades of borrowing in US dollar and investing in yen. There were, however, carry trades between the yen and several currencies in Asia and the Pacific—such as the won, the Australian dollar, and the New Zealand dollar—and the US dollar, in the form of borrowing in yen and investing in these currencies. The unwinding of the yen carry trades caused appreciation of the yen.

<sup>5</sup> Soon after this first round of quantitative easing (QE1) policy was introduced, US dollar liquidity started to flow out of the US to the rest of the world, particularly to emerging economies with strong growth prospects. This put upward pressure on the currencies of these economies as well as Japan.

2013 (OECD 2013) and continues to rise. The consensus view is that the fiscal position and public debt are clearly unsustainable, although the market has not shown any sign of concern. Indeed, the government's net debt interest payments were only 1.0% of GDP in 2013, while the Organisation for Economic Co-operation and Development (OECD) average was 2.0% of GDP.

There are several factors underlying this favorable market reaction. First, most sovereign debt, particularly long-term Japanese government bonds (JGBs), is held by Japanese investors, and foreign ownership is only about 10%. This prevents flight of investment, particularly by Japanese banks, away from sovereign debt to foreign financial assets. Second, the current account is still in surplus, implying that Japan does not have to rely on foreign borrowing to finance fiscal deficits. This provides market confidence that further debt issuance can still be financed domestically without much difficulty. Third, room exists for substantial fiscal consolidation through an increase in the consumption tax rate, which is currently only 5%.<sup>6</sup> Japan could raise the consumption tax rate to 20%, which is the norm in western European countries, thereby generating a total tax revenue of 55 trillion yen (roughly 11% of GDP) and contributing to fiscal consolidation.<sup>7</sup>

However, the issue is one of multiple equilibria. Once market participants lose confidence in the sustainability of public debt for some reason—for example, the current account turning into a deficit—they may start selling debt instruments for fear of capital loss, forcing the JGB price down and the interest rate up. In this sense, expectations can be self-fulfilling. Such market developments would further increase fiscal deficits by magnifying interest payments on JGBs, threaten the health of the banking system as many banks hold massive amounts of sovereign debts, and likely cause a financial and economic crisis.

### **2.1.3 The People's Republic of China's Industrialization and Japan's Trade Structure**

The rapid emergence of the PRC as a large, low-cost supplier in the world economy may have created a deflationary impact on the rest of the world, particularly Japan, and yen appreciation pressure. Hirakata, Iwasaki, and Kawai (2014) analyze empirically the impact of a supply shock in emerging economies on Japan's inflation rate, using the panel instrumental variable method developed by Auer and Fischer (2010). They find that the impact on Japan was deflationary and that it was larger in Japan than in the US and Europe.

Hirakata, Iwasaki, and Kawai (2014) also examine the impact of the PRC's supply shock on the yen rate by using a three-country dynamic stochastic general equilibrium (DSGE) model, which replicates the trade relationships among Japan, the PRC, and the US and the existing exchange rate arrangements.<sup>8</sup> Using simulation analysis, they

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<sup>6</sup> The government decided to raise the consumption tax rate to 8% in April 2014 and further to 10% in October 2015.

<sup>7</sup> In Japan, government total outlays as a share of GDP are not particularly high; they were 43% in 2013, roughly the same as the OECD average of 42%. In contrast, government revenues were low at 33% of GDP in 2013, while their OECD average is 37% of GDP. Thus, the first challenge for Japan in its efforts at fiscal consolidation would be to raise government revenues.

<sup>8</sup> The model assumes vertical specialization of trade between Japan and the PRC: Japan produces and exports highly sophisticated parts and components to the PRC; the PRC produces final manufacturing goods, by assembling parts and components, and then exports final goods to Japan and the US; and the US has no competitive advantage in the production of parts and components or final goods. The

find that a positive supply shock to the PRC's final goods sector stimulates its production of final goods and its imports of parts and components from Japan, generates trade surpluses in Japan and the PRC and a trade deficit in the US, and causes the yen to appreciate vis-à-vis the US dollar. The yen appreciates largely because Japan runs a trade surplus against the US, as the nominal value of the RMB cannot appreciate against the US dollar because of the fixed exchange rate assumption. In Japan and the US, price deflation takes place and Japan's deflation is more severe than US deflation.

The observation of a long-term yen appreciation trend is consistent with these simulation results, which showed that emerging economies' rise in the global economy, represented as persistent supply shocks, would create yen appreciation because Japan is a competitive producer of parts and components for the supply chain countries and adopts a free float for the yen, while the US dollar is an anchor currency for many emerging economies.

#### **2.1.4 Launch of Abenomics and Yen Depreciation**

The second Abe Cabinet, formed at the end of 2013, adopted "Abenomics" comprising "three arrows" to revitalize the Japanese economy: a combination of more aggressive monetary policy easing by the Bank of Japan (BOJ), flexible fiscal policy (a fiscal stimulus), and structural reforms to boost Japan's productivity. The new BOJ Governor, Haruhiko Kuroda, implemented aggressive monetary policy easing of a "different dimension" in April 2013—called quantitative and qualitative easing (QQE)—to achieve an inflation target of 2% within 2 years.

One important way of making monetary policy effective was to affect asset prices through the expectations channel, backed by its behavior. That is, even before the BOJ QQE policy was announced, Japanese stock prices had begun to rise and the yen rate had begun to depreciate in late 2012 when the victory of the Liberal Democratic Party in the general election was widely anticipated. Governor Kuroda then indicated that there was a fundamental regime change in monetary policy making to create a sustained rate of inflation of around 2% so that people should start behaving differently.

As a result, 2013 saw a reversal of yen movements toward depreciation and a rise in stock prices. Although these new trends were adversely affected on 23 May by Federal Reserve Board Chairman Ben Bernanke's indication of the tapering of quantitative easing, they recovered and returned in the new direction. It is interesting to observe that yen rate and stock price movements are closely related. There is a strong indication that the stock market surge in Tokyo and the yen depreciation trend were driven primarily by foreign investors, particularly foreign hedge funds. The new yen depreciation trend will likely be sustained over a long period.

## **2.2 Japan's Current Account**

### **2.2.1 Persistent Current Account Surpluses**

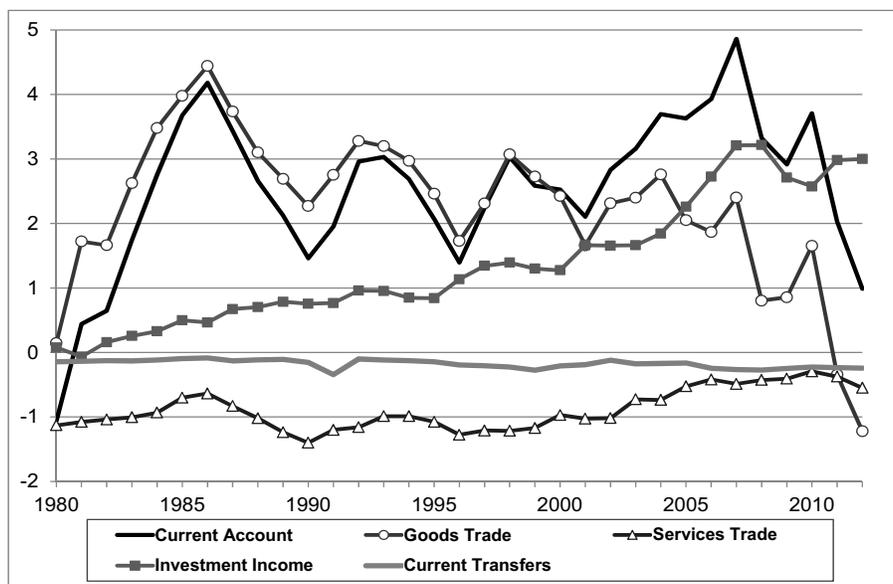
Japan has experienced sizable current account surpluses since the 1980s (Figure 2) although the size of the surplus has fluctuated over time in a cyclical way. The current account balance improved sharply from a small deficit (1.1% of GDP) recorded in 1980 to a large surplus (4.2% of GDP) reached in 1986. The balance then declined toward 1990 and exhibited cyclical fluctuations throughout the 1990s and 2000s. The balance

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model also assumes that the central banks of Japan and the US set the respective policy interest rates following the Taylor rule, while the central bank of the PRC pegs the currency to the US dollar.

began to widen substantially again from a moderate surplus (2.1%) in 2001 to a record large surplus (4.8%) in 2007, followed by a trend decline afterward.

**Figure 2: Japan’s Current Account and Its Composition (% of GDP)**



GDP = gross domestic product.

Sources: Bank of Japan, Balance of Payments Statistics; Cabinet Office.

There has been a shift in the composition of the current account surplus. In earlier years, a substantial part of the current account surplus was from the goods trade balance, while the services trade balance has long been in deficit at a relatively stable level of 1% of GDP. In more recent years, the source of the current account surplus has shifted to a surplus in net investment income, which has reached around 3% of GDP, far exceeding a surplus in the goods trade balance. The large investment income surplus is a result of the accumulation of net external assets, which have risen significantly from a mere 2.5 trillion yen (1% of GDP) in 1980 to 296 trillion yen (62% of GDP) in 2012. It is expected that Japan will continue to earn a high level of net investment income from abroad, while its size can rise or fall as a share of GDP depending on the yen’s exchange rates against the US dollar and other major currencies in which the assets are held.

The surplus in the goods trade balance has been on a declining trend since the eruption of the global financial crisis. In 2011, the goods trade balance registered a deficit for the first time since the last deficit in 1963 (0.2% of GDP), mainly due to the increased imports of liquefied natural gas (LNG), petroleum, and other sources of energy for electricity power generation, required by the stoppage of almost all nuclear power reactors following the failure of the Fukushima Daiichi Nuclear Power Plant in March 2011. The deficit was also partly due to the reduced exports of manufacturing products following the disruptions of supply chains hit by the tsunami in the Tohoku area and a rapid yen rate appreciation.

**2.2.2 Impact of Real Yen Appreciation on Net Exports**

Movements in the real exchange rate have played a significant role in promoting adjustment of the current account. To quantify the impact of real exchange rate changes on external rebalancing, Kawai and Takagi (2013) consider a vector

autoregressive (VAR) model of Japanese net exports as a percentage of GDP, Japan's real GDP growth less world GDP growth (RY), and Japan's real effective exchange rate (REER), and examine the impact of the REER shock on net exports.<sup>9</sup> The estimated VAR model reveals several points. First, the estimated coefficient of the lagged RY and REER variables have the expected (negative) signs, suggesting that faster growth in Japan or real yen appreciation causes net exports to decline, though only the estimated coefficient of one-period lagged REER is statistically significant. Second, the negative impact of a REER shock on net exports lasts for up to only 3 years, while about 20% of the variance of net exports can be explained by the variance of the REER during the current period, with the percentage increasing to 50% in 3 years before declining to 40%.

These findings indicate that changes in the REER have a statistically significant, predictable impact on Japan's net exports, though the impact is temporary and lasts only for about 3 years. They also suggest that Japan's external balance over the medium to long term depends largely on the fundamental determinants of domestic savings and investment, independently of cyclical or transitory factors.

### 2.2.3 Prospects for Japan's Current Account

In considering the future prospects for Japan's current account, three fundamental factors—net savings of the public, the corporate, and the household sector—need to be examined.

First, given the large gross public debt amounting to 227% of GDP, the public sector is expected to go through significant fiscal consolidation to maintain debt sustainability. Fiscal consolidation is expected to be achieved mainly through increases in tax revenues and partly through containment of public expenditures. This is the only way to avoid the kind of debt crisis observed in Greece in 2010–2011. This suggests that public sector net savings will likely increase in the future, contributing to an increase in national savings over investment.

Second, the corporate sector has seen positive net savings since the second half of the 1990s. It had accumulated large retained earnings to the tune of 300 trillion yen by March 2013. This is largely due to the need for the corporate sector to repay debt incurred during the period of asset price bubbles in the late 1980s, as well as and low corporate domestic investment because of stagnant domestic economic activity,<sup>10</sup> a shift of manufacturing production abroad, and the prospective population decline. Once the Japanese economy recovers from the two lost decades, corporate investment is expected to recover as well, thereby reducing corporate net savings.

Third, the household sector has experienced a trend decline in net savings since the 1990s. This declining trend can largely be explained by demographic changes, i.e., increases in the aged population and declines in the working-age population. Net savings have declined despite the presence of counterbalancing factors, such as greater future uncertainty associated with debt sustainability concerns and the declining trust in social safety nets due to the deterioration of public finances. As these concerns abate under the scenario of fiscal consolidation, the household sector net savings are expected to further decline.

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<sup>9</sup> A qualitatively similar result was obtained using the current account balance instead of net exports. However, the estimated model fits considerably better when net exports are used.

<sup>10</sup> Japan's corporate investment as a ratio of GDP has been declining as a trend since the early 1990s. Its net investment, i.e., gross investment net of capital depreciation, became negative in 2009.

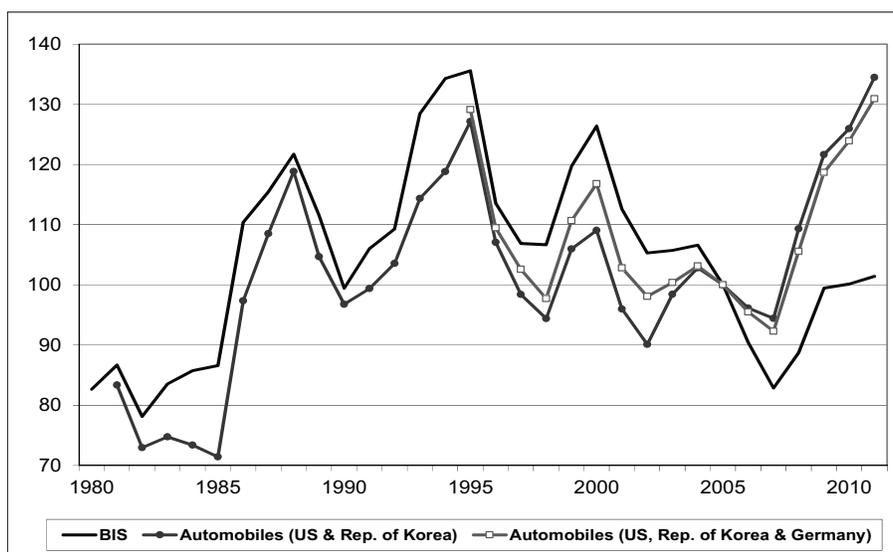
The increase in public net savings will be offset by a decline in corporate and household net savings, with an ambiguous impact on overall national net savings or the current account balance. Under the reasonable scenario that the demographic factors eventually dominate the fiscal consolidation factor, current account surpluses will likely vanish and even current account deficits may emerge. Given that the net investment income balance will remain positive, this implies that the goods trade balance is expected to further deteriorate to deficits in the future. Thus, the Japanese economy needs to depend increasingly on the nontradable goods sector for domestic production and employment, while focusing on higher value-added manufacturing activities.

## 2.3 Impact of Yen Appreciation on the Japanese Economy

### 2.3.1 Yen Appreciation and Japanese Manufacturing

Real effective yen appreciation has had a significant negative impact on the Japanese manufacturing sector and its overall economic activity, while yen depreciation has had a positive impact. The recent global financial crisis and the eurozone financial crisis have been associated with rapid yen appreciation, aggravating negative impacts on the Japanese economy. The business sector has been hit by the high yen in recent years. However, according to the yen's overall real effective exchange rate (BIS REER) index, based on relative CPIs, the yen was still about 35% lower in 2012 than the previous peak in 1995 and 25% lower than in around 2000 (Figure 3). This begs the question why the real effective yen rate facing the manufacturing sector was considered “high.”

**Figure 3: Real Effective Exchange Rates of the Yen, BIS Data, and for Automobiles**



BIS = Bank for International Settlements, US = United States.

Sources: BIS; national data for the Germany, the Republic of Korea, and the US.

Part of the answer is that the overall REER index may not fully capture the difficulties of some manufacturing firms. First, the manufacturing firms were accustomed to a low yen from the early 2000s until 2007, which may have caused difficulties for firms to adjust to the new, high yen rate environment. Second, the real REER constructed for the automobile sector suggests that the recent level of the yen was as high as in 1995. Many auto firms, including big and competitive ones like Toyota, lost money in domestic production for exports. Once the auto sector was severely hit, there were

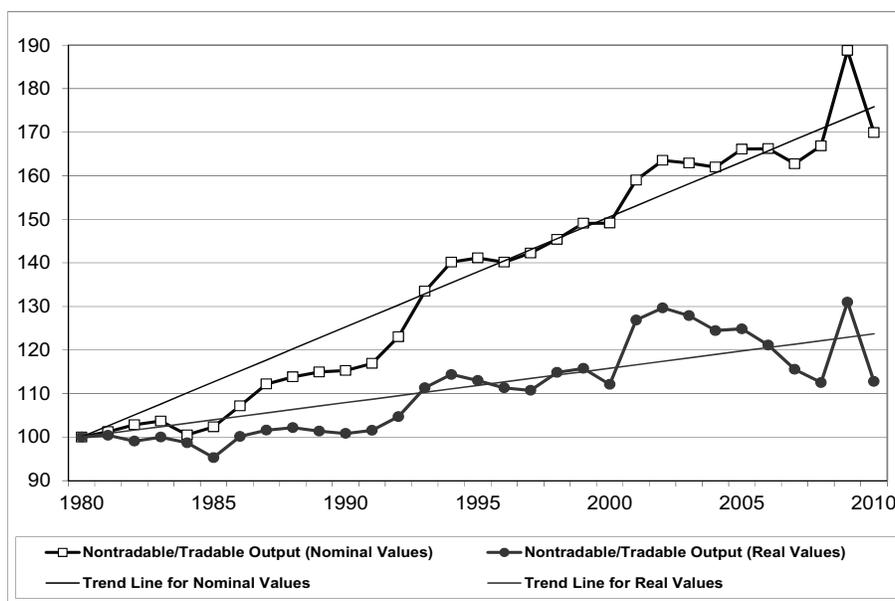
large negative spillover effects on the wider, auto-related sectors (steel, tires, glass, electronics, etc.), dampening overall manufacturing activities.

The business sector has long been concerned with the hollowing out of Japanese manufacturing—that is, a relocation of production bases abroad and a loss of domestic employment. Several sectors, such as electronics and electric appliances, which had already exited from Japan, were hardly affected by the high yen. However, competitive sectors that continue to stay home, such as automobiles and technology- and knowledge-intensive sectors, were severely affected.

### 2.3.2 Impact on the Nontradable and the Tradable Goods Sector

The ratio of nontradable to tradable goods production has been moving largely in a way consistent with the movements of the REER. Figure 4 depicts this ratio, using both nominal and real GDP data. The ratio exhibits an upward trend, implying a de-industrialization trend toward the nontradable (or services) sector. The fact that the nominal data indicate a steeper trend than the real data suggests that the relative price of nontradables to tradables has tended to rise over time.

**Figure 4: Production of Nontradable Goods Relative to Tradable Goods, Nominal and Real, 1980 = 100**



Note: The tradable goods sector includes agriculture, mining, and manufacturing industries, while the nontradable goods sector includes other sectors (construction, electricity, gas, water, wholesale and retail trade, banking and insurance, real estate, transportation, telecommunication, and services).

Source: Constructed from data published by the Cabinet Office, Government of Japan.

The movements of the nontradable-to-tradable goods production ratio around the upward trend line appear to have responded to the REER changes; real yen appreciation stimulated the production of nontradable goods relative to the production of tradable goods, while real yen depreciation had an opposite impact. For example, in 1985–1994 when the yen sharply appreciated as a trend, the ratio of nontradable to tradable goods production (expressed as an index) rose from 95 to 115. During the pre-global financial crisis episode of yen depreciation between 2002 and 2008, the ratio declined from 130 to 112.

The key to current account adjustment is a shift in resources between the tradable and nontradable goods sectors. Essentially, a higher real value of the yen raises the relative price of nontradable goods, thus encouraging their production and causing a shift of resources away from the production of tradable goods. As long as the economy is always in full employment, with a smooth shift of resources (in particular labor) between sectors, REER changes should not pose a significant problem for the economy. In reality, however, the economy’s adjustment to REER appreciation tends to be more difficult than to real depreciation.

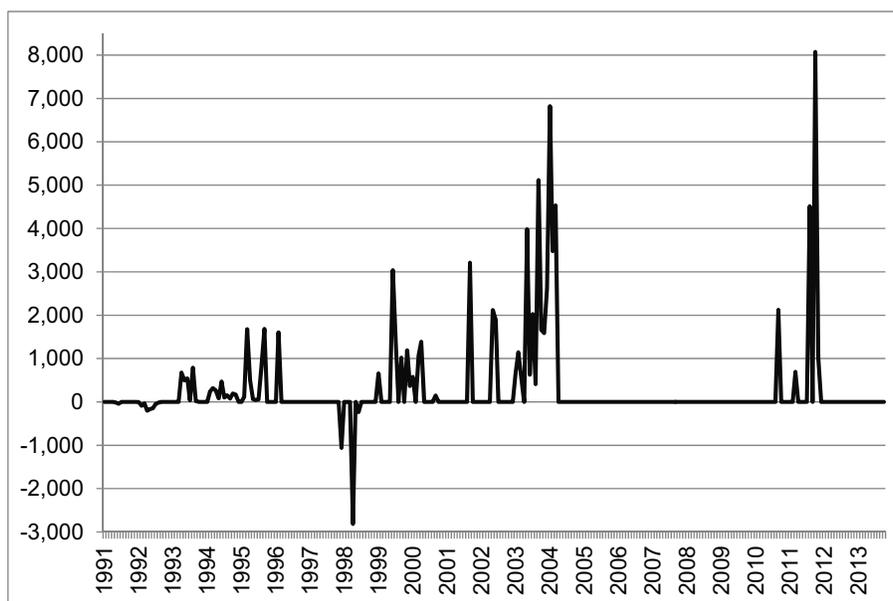
### 3. JAPAN’S YEN POLICY

#### 3.1 Foreign Exchange Market Intervention

##### 3.1.1 Preventing Rapid Yen Appreciation

To prevent rapid yen movements, the Japanese authorities intervened in the foreign exchange market from time to time. According to the data published by the Ministry of Finance, Japan has intervened mostly to purchase foreign currency—that is, to prevent rapid yen appreciation (Figure 5). The exception was 1998 when the authorities intervened to sell foreign currency to prevent rapid yen rate depreciation. During the period from January 2003 to March 2004, there were massive interventions totaling more than 35 trillion yen, to stem rapid yen appreciation and to contain price deflation through the provision of yen liquidity into money markets. Between April 2004 and August 2010, there was a 6-year absence of intervention until September 2010 when intervention resumed. The recent intervention in October 2011 was a record high, reaching more than 8 trillion yen as monthly intervention volume.

**Figure 5: Japanese Ministry of Finance Intervention in the Foreign Exchange Markets (billion yen)**



Note: Positive and negative numbers indicate purchases and sales, respectively, of foreign currency with the yen

Source: Official website of the Ministry of Finance, Government of Japan.

Intervention has often, but not always, been sterilized. Intervention has been mostly unilateral, without coordination with the US or other authorities. Table 1 provides information on coordinated intervention, which turns out to be relatively rare. As a result, effectiveness of intervention has been limited in exerting lasting impact or stopping rapid currency movements, but it has given signals to the market that the authorities are concerned about the pace and speed of yen movements. These signals have likely had a smoothing effect on the rate movements, lowering the speed of yen movements and avoiding a free fall of the target currency concerned.

**Table 1: Internationally Coordinated Intervention for the Yen**

Period	No. of Days	Episodes
February 1987	1	Yen appreciation (Louvre Agreement)
January–February 1992	3	Yen depreciation together with low performance in the stock market
April–June 1993	4	Yen appreciation due to Japan–US trade friction
May–June 1994	2	Yen appreciation due to Japan–US trade friction
November 1994	2	Yen appreciation due to Japan–US trade friction
March–May 1995	4	Yen appreciation due to the Mexican currency crisis and Japan–US trade friction
July–August 1995	3	Yen appreciation due to the Mexican currency crisis and Japan–US trade friction
November 1997	5	Rupiah depreciation due to spread of the Asian currency crisis
June 1998	1	Yen depreciation due to Japan’s nonperforming loan problem
September 2000	1	Euro depreciation
March 2011	1	Yen appreciation in the aftermath of the Great East Japan Earthquake

US = United States.

Source: Press releases by the Ministry of Finance, Government of Japan and other media sources.

In the face of rapid yen appreciation, more fundamental policies than currency market interventions are needed to prevent it. These include more proactive monetary policy to address Japan’s persistent price deflation—and thereby contain yen appreciation—and the creation of an environment in which more capital outflows take place so that the yen does not appreciate and even depreciates. The second arrow of Abenomics—introduced by the BOJ in April 2013 in the form of aggressive quantitative and qualitative easing of monetary policy—has been successful in generating CPI inflation and a weak yen. Capital outflows through household investment in emerging Asian financial assets and firms’ FDI abroad will likely prevent further appreciation of the yen, but these have yet to take place.

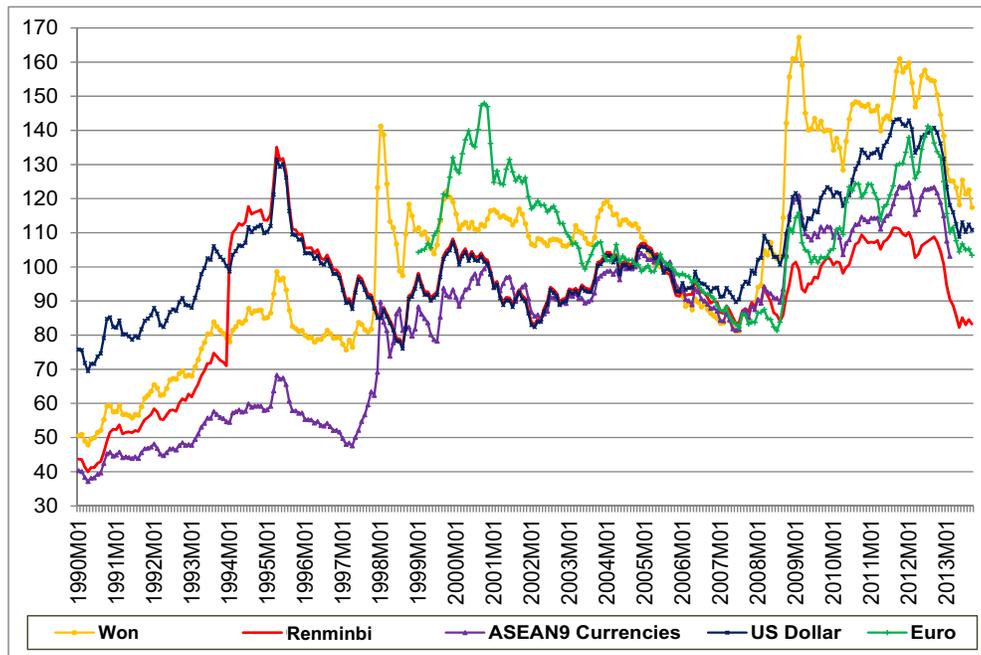
### 3.1.2 Addressing the Volatility of the Yen against Emerging Asian Currencies

Japan in principle adopts freely floating exchange rates with occasional currency market intervention, while many East Asian economies tend to manage exchange rate movements to varying degrees. Until the Asian financial crisis (AFC) of 1997–1998, many emerging economies in East Asia had maintained de jure or de facto US dollar peg regimes, but the post-AFC period exhibited a greater diversity in exchange rate regimes (Kawai 2008). The two giant economies in the region, Japan and the PRC, have adopted different exchange rate regimes: Japan a freely floating exchange rate regime and the PRC a heavily managed regime targeted at the US dollar. Other countries operate intermediate exchange rate regimes, mostly managing their rates to

avoid excessive volatility. In a sense, the region has seen some convergence toward greater exchange rate flexibility, except in the PRC. This has not reduced exchange rate volatility between the yen and emerging East Asian currencies.

When East Asian currencies become more flexible, there could be an even greater volatility of the yen rate against such currencies. An example is the case of the won. The yen rate against the won moved in a very volatile manner (Figure 6). The won was strong before the global financial crisis but, following the Lehman collapse, depreciated sharply from 907 won/US dollar (October 2007) to 1,483 won/US dollar (November 2008). As a result, the won/yen rate moved from 7.6 won/yen in mid-2007 to above 15.5 won/yen in late 2008 and in early 2009. The extent to which the yen appreciated against the won during the global financial crisis was massive in comparison to the yen's movements against other currencies. This large fluctuation is greater than the yen/won movements observed during the AFC of 1997–1998. Such a large exchange rate volatility is counterproductive to trade and investment given the high and rising economic interdependence between the two countries.

**Figure 6: Nominal Exchange Rates of the Yen against the Won and Other Currencies**



ASEAN = Association of Southeast Asian Nations.

Note: ASEAN9 currencies refer to a weighted average of the exchange rates of 9 ASEAN member states (Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam) against the yen. Gross domestic product shares are used as weights. An increase is Japanese yen appreciation.

Source: International Monetary Fund, International Financial Statistics, CD-ROM.

### 3.2 Yen Internationalization

Even though Japan liberalized its capital account in the mid-1980s, the country has not been successful in fully internationalizing the yen, even in East Asia. Reversing the initial policy stance of limiting the international use of the yen, Japan's Ministry of Finance began to promote yen internationalization in the 1990s. However, Japan's

large economic and financial size globally has not been matched with a commensurate increase in the use of the yen as an international currency.

### 3.2.1 International Use of the Yen

Table 2 summarizes the currency compositions of foreign exchange trading in the world's major markets from April 1989 to April 2013. The table indicates that the share of foreign exchange trading involving the U.S. dollar has declined somewhat over the 24-year period, though it is still the most dominant globally at 87% in 2013. The euro share has declined as a trend from 38% in 2001 to 33% in 2013, perhaps due to the eurozone debt and banking crisis in 2011–2012. The share of the yen also declined from 27% in 1989 to 23% in 2013, but is making a good recovery from the trough of 17% recorded in 2007. Its share is still higher than the share of the pound sterling, which was 12% in 2013. The share of the RMB in the global currency markets has risen substantially since the mid-2000s and achieved the number 9 position at 2.2% in 2013, exceeding the shares of all other Asian currencies such as the Hong Kong dollar, Singapore dollar, and the won.

**Table 2: Currency Distribution of Reported Foreign Exchange Market Turnover<sup>a</sup>**  
(% shares of average daily turnover in April)

	1989	1992	1995	1998	2001	2004	2007	2010	2013
US dollar	90.0	82.0	83.3	86.8	89.9	88.0	85.6	84.9	87.0
Euro	–	–	–	–	37.9	37.4	37.0	39.1	33.4
Japanese yen	27.0	23.4	24.1	21.7	23.5	20.8	17.2	19.0	23.0
Pound sterling	15.0	13.6	9.4	11.0	13.0	16.5	14.9	12.9	11.8
Deutsche mark	27.0	39.6	36.1	30.1	–	–	–	–	–
French franc	2.0	3.8	7.9	5.1	–	–	–	–	–
ECU & other EMS currencies	4.0	11.8	15.7	17.3	–	–	–	–	–
Australian dollar	2.0	2.5	2.7	3.0	4.3	6.0	6.6	7.6	8.6
Swiss franc	10.0	8.4	7.3	7.1	6.0	6.0	6.8	6.3	5.2
Canadian dollar	1.0	3.3	3.4	3.5	4.5	4.2	4.3	5.3	4.6
Mexican peso	–	–	–	0.5	0.8	1.1	1.3	1.3	2.5
PRC renminbi	–	–	–	0.0	0.0	0.1	0.5	0.9	2.2
New Zealand dollar	–	0.2	0.2	0.2	0.6	1.1	1.9	1.6	2.0
Emerging economy currencies <sup>b</sup>	–	8.8	8.5	13.4	15.1	15.4	20.2	19.7	20.3
All currencies	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0

ECU = European currency unit, EMS = European Monetary System, PRC = People's Republic of China.

Notes: <sup>a</sup> Because two currencies are involved in each transaction, the sum of the percentage shares of individual currencies totals 200% instead of 100%. Data are adjusted for local and cross-border double-counting.

<sup>b</sup> Defined as the sum of emerging economy currencies.

Source: Bank for International Settlements, Triennial Central Bank Survey: Foreign Exchange Turnover (Various issues).

The very high weight of the US dollar in foreign exchange market trading suggests that it plays the role of a vehicle currency, mediating exchanges of various currencies. For example, conversion of the yen into won is done typically through the US dollar, first converting the yen into US dollar and then the US dollar into won. This vehicle-currency role of the US dollar is usually explained by the low transaction costs due to economies of scale and network externalities of the US dollar; people prefer to use the

US dollar because almost everyone else uses it as well. There is no sign that the yen has been functioning as a vehicle currency in the world's foreign exchange markets.

Data for currency compositions of foreign exchange reserves held by all International Monetary Fund (IMF) reporting countries show that the share of the US dollar, which was about 50% in the early 1990s rose to 71% in 2000 and then declined to 61% in the third quarter (Q3) of 2013 (IMF Currency Composition of Official Foreign Exchange Reserves database). The share of the euro rose substantially from 18% in 1999 to 28% in 2008 before slightly declining to 24% in Q3 2013. The share of the yen declined from a peak of 8.5% in 1991 to a mere 4% in Q3 2013. The pound sterling and the yen are the close third and fourth largest reserve currencies in the world, respectively, following the US dollar and the euro. The share of the US dollar used to be high among developing countries, but has become higher among industrialized countries since 2003. Though not much information is available about the reserve currency role of the RMB, the total size of the People's Bank of China's bilateral currency swap arrangements suggests that the value of global RMB reserves would be in the range of US\$30 billion to US\$60 billion, accounting for at most 0.5% of global foreign exchange reserves. Thus the RMB is not yet one of the global reserve currencies.

Table 3 summarizes the relative size of currency areas.<sup>11</sup> It indicates that the area of the world economy covered by the US dollar has been stable at 54%, though it rose to 60% in 1995–1999 before declining to a historically low level. The share of the euro area has risen from 25% to 31% between the 1970s and most recently over 2005–2007. The yen area has declined slightly from 9% to 8% over the last 37 years. The pound sterling area has declined from 9% to 5%. The size of the US dollar area is much larger than the euro area, because many developing countries regard the US dollar as the most important global anchor. The yen area is only slightly larger than the weight of the Japanese economy in the world, reflecting a small number of countries assigning weight to the yen in their exchange rate policies. The yen area outside Japan is only 1% of the world economy and, thus, the yen cannot be said to be a full-fledged global or regional anchor currency.

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<sup>11</sup> The relative size of currency areas was computed in the following way. First, we identify what currency or currency basket each country in the world has chosen as a nominal anchor. To do this, we extended the work by Frankel and Wei (1994) and Kawai and Akiyama (1998) to determine whether each country's exchange rate is affected by the currencies of major industrialized countries, such as the US dollar, the euro, the pound sterling, the yen, and a few regional currencies, using monthly observations and the Swiss franc as a numéraire. Though it is possible that the RMB began to play an important role in the exchange rate policies of some Asian economies from the second half of the 2000s (Subramanian 2011; Subramanian and Kessler 2013), we do not consider this possibility in this exercise. Prior to the introduction of the euro in January 1999, the Deutsche mark and the French franc were used instead of the euro. The statistically significant coefficients were interpreted as the weights assigned by the authorities to the corresponding currencies in their exchange rate stabilization policies. Next, GDP measured at 2005 purchasing power parity was used to estimate the economic size of the currency areas for the US dollar, the euro, the pound sterling, and the yen. For example, for a country pegging its exchange rate to a particular international currency, its entire economy is classified as belonging to the currency area formed by this particular currency. If a country assigns some weights to a basket of major or regional currencies, its economy is divided according to these weights and distributed to the corresponding currency areas. Before 1999, we assumed that Germany and France formed a future eurozone. In the period, 2005-07, the role of the RMB as an anchor currency may have risen, but its potential impact is not considered in the table.

**Table 3: Estimated Shares of Currency Areas of Major Currencies, 1970–2007 (%)**

	US Dollar Area			Euro Area			Yen Area			Pound Sterling Area			UA
	US	Other	Total	EZ	Other	Total	JPN	Other	Total	UKG	Other	Total	
<b>1970–1974</b>	26.7	27.2	54.0	12.5	12.8	25.2	9.3	0.0	9.3	5.4	3.5	8.9	2.7
<b>1975–1979</b>	25.8	27.8	53.6	11.9	15.4	27.3	9.3	1.6	10.9	4.9	1.6	6.4	1.8
<b>1980–1984</b>	25.0	26.7	51.8	11.4	13.9	25.3	9.5	2.2	11.7	4.4	2.3	6.7	4.4
<b>1985–1989</b>	25.5	27.3	52.8	10.7	9.4	20.0	9.6	0.5	10.2	4.4	1.8	6.2	10.8
<b>1990–1994</b>	22.7	32.7	55.4	9.7	13.5	23.2	9.1	0.5	9.6	3.7	1.3	5.1	6.7
<b>1995–1999</b>	23.5	36.4	59.9	11.3	10.8	22.1	8.5	2.4	10.9	3.7	0.9	4.6	2.5
<b>2000–2004</b>	22.9	31.6	54.5	17.7	11.1	28.8	7.4	3.1	10.5	3.6	0.5	4.1	2.2
<b>2005–2007</b>	21.7	32.8	54.6	16.1	14.3	30.5	6.7	1.0	7.7	3.4	1.5	4.9	2.3

EZ = eurozone; UA = unallocated.

- Notes: 1. Computations are based on gross domestic product at 2005 purchasing power parity.  
2. The euro area prior to 1999 is defined by Germany and France and after 1999 consists of the eurozone member countries.  
3. The figure for 1995–1999 is the weighted average of the 1995–1998 and 1999 data.

Source: Author's computation.

### 3.2.2 Limiting Factors of the Yen's International Currency Role

The weight of the Japanese yen as an international currency has been limited both in comparison to the US dollar and the euro, and relative to the size of the Japanese economy. The yen has not been playing a major role as international money or as a nominal anchor to which other countries may peg or stabilize the value of their currencies. Several explanations can be given for the limited use of the yen as an international currency.

First, use of the yen in invoicing Japan's trade has been limited due to the country's specific trade structure. Japan has been dependent on the US as its major export market of manufacturing products and on imports of large quantities of resources (minerals, fuels, raw materials, and basic commodities) for its industrial production. Trade with the US and trade in resources tend to be dollar denominated, reducing the use of the yen. In addition, substantial trade has been carried out by Japanese trading companies and multinational manufacturing corporations with the capacity to marry US dollar-denominated exports and imports and minimize currency risks. From the perspectives of Japanese MNCs that conduct global business, yen invoicing is not particularly important for intra-firm trade or trade in parts and components (from Japan to emerging Asia) and finished manufacturing products (from emerging Asia to Japan). As a result, they have only limited interest in denominating trade in yen.

Second, the size of Japanese imports, particularly of manufactured products, has been relatively small. In recent years, manufactured imports have risen in value and have raised yen invoicing ratios in imports. However, the lack of horizontal trade—in similar but differential products to satisfy consumer preference for diversity—between Japan and emerging Asia may have prevented yen invoicing, because imports of manufacturing products are largely facilitated by Japanese MNCs and trading firms and tend to use the US dollar.

Third, Japanese money and capital markets, particularly for treasury bills and other private short-term instruments, have not been as liquid as markets in New York or London. The lack of market infrastructure with a global standard and the perceived overregulation in Tokyo money and capital markets have been pointed to as severe impediments to an expanded use of the yen. As a result of these impediments in the

Tokyo markets, foreign monetary authorities and private investors have been reluctant to use yen instruments to carry out international trade and investment transactions.

Fourth, Japan has been the only developed economy in Asia and most of Japan's neighbors have been developing and emerging economies that are basically US dollar-area economies. These economies have had little incentive to use the yen, as they tended to maintain stable exchange rates vis-à-vis the US dollar. In contrast, European countries were more or less at a similar stage of economic development in the 1960s and 1970s, and their economic interdependence—particularly through horizontal intra-industry trade and FDI—gave the incentive to invoice a high proportion of intra-European trade in their own national currencies. After the introduction of the euro, many European countries naturally selected the euro as an invoicing currency. This type of symmetric relationship has not been developed in Asia, and, as a result, most of Japan's trade with emerging Asian economies has been invoiced primarily in the US dollar.

Finally, a prolonged period of economic and financial stagnation in Japan during the 1990s prevented the yen from being used as an international currency. Damaged by the banking crisis, Japanese banks were paralyzed in advancing international businesses and the internationalization process of the yen stopped as a result. In addition, the size of the Japanese economy, measured in terms of the yen or the US dollar, hardly grew during this period, which also hurt the relative use of the Japanese yen as an international currency.

### **3.3 Importance of Intra-regional Exchange Rate Stability for Japan**

#### **3.3.1 Integration through Trade and Foreign Direct Investment**

The expansion of intraregional trade in East Asia over the last few decades has been remarkable. The share of East Asia's intraregional trade in its total trade has risen to more than 50% in recent years. This share is higher than for the North American Free Trade Agreement (NAFTA) area, though still lower than for the European Union member states.

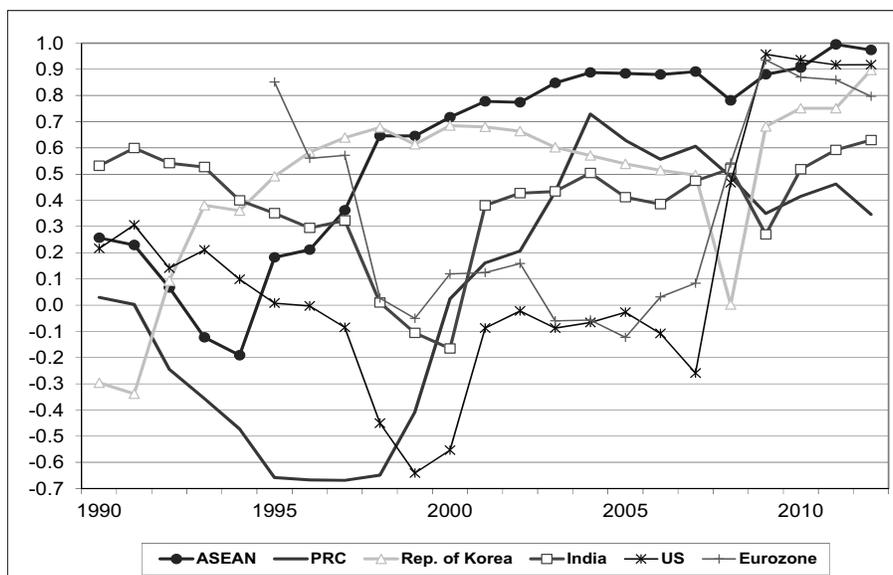
The main driver behind economic integration through trade is the intraregional business activity of multinational manufacturing corporations, initially those from Japan and then from Europe and the US. These MNCs have formed closely organized production networks and supply chains across East Asia, linked with the global market. These arrangements have emerged as a result of each MNC's business strategy of attempting to divide its whole production process into several subprocesses and locating these in different countries according to their comparative advantage—defined by factor proportions and technological capabilities. Such business arrangements have created vertical intra-industry trade within East Asia in capital equipment, parts and components, other intermediate inputs, semifinished goods, and finished manufactured products.

These trends accelerated in the wake of the Plaza Accord in 1985, when Japanese MNCs, compelled to cope with the high cost of domestic production due to the steep appreciation of the yen, began to relocate their production facilities to emerging East Asia—initially in the Asian NIEs, later in middle-income ASEAN member states (such as Indonesia, Malaysia, the Philippines, and Thailand), and more recently in the PRC. Facing rising domestic costs, NIE firms soon began also investing in middle-income ASEAN economies and later in the PRC. In recent years, not only global MNCs from developed economies (such as Japan, Europe, and the US), but also firms from the

NIEs (the Republic of Korea in particular) and advanced ASEAN member states (such as Malaysia and Thailand) have been providing FDI to other ASEAN members (including Cambodia, the Lao People’s Democratic Republic, and Viet Nam) and to the PRC, contributing to the formation of a web of regional supply chains.<sup>12</sup> Japanese firms are now expanding these supply chains to India.

An important consequence of this growing trade and FDI integration is the heightened macroeconomic interdependence and business cycle co-movements within East Asia. The rolling 10-year moving correlations of GDP growth rates between Japan and emerging Asian economies (Figure 7) exhibit a rising trend of correlations or co-movements. The correlations with ASEAN have been rising persistently and are particularly high, while the correlations with the PRC have been declining in recent years, after having risen significantly from the mid-1990s to the mid-2000s. Overall, Japan’s economic interdependence with emerging Asia has risen to a high level.

**Figure 7: Correlations of Gross Domestic Product Growth Rates between Japan and Major Economies**



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

- Notes:
1. Correlation coefficients are calculated using 10-year moving windows. For example, the data for 1990 are the correlation coefficients for the period 1981–1990.
  2. Data for 2011 and 2012 are estimates and projections, respectively, made by the International Monetary Fund.

Source: Constructed using data from International Monetary Fund, World Economic Outlook, April 2013.

### 3.3.2 Lack of Exchange Rate Policy Coordination

Given the heightened interdependence of the economies in the region, it may be argued that Japan and emerging Asian economies should aim to stabilize intraregional exchange rates through policy coordination. Japan and all supply chain countries would benefit from intraregional exchange rate stability.

Hayakawa and Kimura (2009) empirically investigated the relationship between exchange rate volatility and international trade, focusing on East Asia. They found that

<sup>12</sup> See Kawai and Urata (1998) and Fukao, Ishido, and Ito (2003) who found that FDI played a significant role in the rapid increase in vertical intra-industry trade in East Asia, using cross-country data from the electrical machinery industry.

intra-East Asian trade was discouraged by exchange rate volatility more seriously than trade in other regions. They also found that an important source of this discouragement was in intermediate goods trade within international production networks, which accounted for a significant fraction of East Asian trade and was more sensitive to exchange rate volatility than other types of trade. Essentially, trade in parts and components within supply chain countries, including Japan, would benefit from intraregional exchange rate stability.

In addition to intraregional exchange rate stability, Japan also regards emerging Asia's financial stability as vital. The reason is that Japanese MNCs have developed extensive business operations in emerging Asia—particularly in ASEAN economies—and a large-scale financial crisis can have significant, negative business impacts on these MNCs. From this perspective, Japan took initiatives to support crisis-affected countries during the AFC, beginning with Thailand, Indonesia, Malaysia, and the Republic of Korea. Japan took the lead in creating the ASEAN+3 processes to promote regional financial cooperation. During the more recent global financial crisis, Japan expanded bilateral currency swaps with the Republic of Korea to stabilize the currency markets and supported Indonesia for preparation of fiscal funding at a difficult time.

#### **4. JAPAN'S STRATEGY FOR ASIAN MONETARY INTEGRATION**

Japan's interest is to promote a stable monetary zone in Asia, with the yen as Asia's most important international currency. However, given that the PRC's economic growth will continue over the next decades, its trade, investment, and financial activities will expand rapidly, and the RMB has a strong potential to rise as the region's most prominent international currency in the long run. Thus, the yen may eventually be overshadowed by the RMB. To avoid such a situation, Japan must formulate a clear strategy to substantially improve the yen's international role and to lead Asian monetary integration. Even if the RMB does not become a dominant international currency in East Asia due to the PRC's domestic economic, social, and political problems, its rising economic size will certainly expand the RMB's international role. This suggests that Japan needs to pursue its own domestic reforms to further open its economy and intensify its collaboration with its East Asian neighbors—including the PRC—to create an Asian monetary zone, while promoting Japan's commercial and economic interests.

This paper argues that a single national currency is unlikely to be the most dominant international currency to replace the US dollar in East Asia, at least over the next decade or two. Without currency cooperation, the East Asian monetary system will likely be multipolar with the US dollar, the yen, the RMB, and (in the future) the Indian rupee. With currency cooperation, East Asia can come up with a better monetary system. Thus, there is a case for Japan, the PRC, and other ASEAN economies to cooperate to seek intraregional currency stability by developing a regional currency basket, composed of the yen, the RMB, the won, the baht, the ringgit, the rupiah, etc., as a currency unit for Asia. The Indian rupee may join the unit in the future.

## 4.1 Transforming Tokyo into a Competitive International Financial Center

### 4.1.1 The Decline of Tokyo as an International Financial Center

In the late 1980s, London, New York, and Tokyo were the top three global financial centers, and Tokyo was challenging the leading role of New York in global finance (Cassis 2005). Today, however, London and New York are the only two genuinely global financial centers despite the global financial crisis that revealed problems of financial industries and supervisory and regulatory failures in the US and the United Kingdom. Other centers—such as Hong Kong, China; Singapore; Tokyo; and Zurich—are national and/or regional centers and, according to Long Finance (2012), are not likely to challenge the dominance of London and New York. A view is even emerging that if a third global financial center is to develop, it is most likely to be Shanghai, which could surpass the regional financial centers of Tokyo, Singapore, and Hong Kong, China.

The weaknesses of Tokyo as an international financial center are often identified as the lack of a business-conducive regulatory environment and of available expertise and talent (see Z/Yen Limited 2005; IBA Japan 2007). Tokyo’s global ranking as an international financial center declined due to the bursting of the asset price bubble in the early 1990s, the subsequent banking sector difficulties, and the two decades of economic stagnation. According to the recent ranking of international financial centers reported in Table 4, however, Tokyo’s ranking has gradually risen from around 10th in 2007 to 5th in 2013.

**Table 4: Ranking of Global Financial Centers, March 2007–September 2013**

Financial Centers	Mar 2007	Sep 2007	Mar 2008	Sep 2008	Mar 2009	Sep 2009	Mar 2010	Sep 2010	Mar 2011	Sep 2011	Mar 2012	Sep 2012	Mar 2013	Sep 2013
London	1	1	1	1	1	1	1	1	1	1	1	1	1	1
New York	2	2	2	2	2	2	1	2	2	2	2	2	2	2
Hong Kong, China	3	3	3	4	4	3	3	3	3	3	3	3	3	3
Singapore	4	4	4	3	3	4	4	4	4	4	4	4	4	4
Tokyo	9	10	9	7	15	7	5	5	5	6	5	7	6	5
Zurich	5	5	5	5	5	6	7	8	8	8	6	5	5	6
Boston	14	12	11	11	9	18	14	13	12	12	11	11	8	7
Geneva	10	7	7	6	6	9	8	9	9	13	14	9	7	8
Frankfurt	6	6	6	9	8	12	13	11	14	16	13	13	10	9
Seoul	43	42	51	48	53	35	28	24	16	11	9	6	9	10
Toronto	12	13	15	12	11	13	12	12	10	10	10	10	12	11
San Francisco	13	14	12	17	17	17	15	14	13	9	12	12	13	12
Chicago	8	8	8	8	7	8	6	7	7	7	7	8	11	14
Sydney	7	9	10	10	16	11	9	10	10	15	16	15	19	15
Shanghai	24	30	31	34	35	10	11	6	5	5	8	24	19	16
Shenzhen	–	–	–	–	–	5	9	14	15	25	32	38	32	27
Dublin	22	15	13	13	10	23	31	29	33	43	46	49	49	56

Notes: 1. The table lists financial centers that have been ranked among top 10 globally during the sample period.

2. Shenzhen cannot be ranked in and before March 2009 due to insufficient information.

Source: City of London Corporation and Long Finance, The Global Financial Centre Index, various issues.

Although Tokyo ranked fifth in September 2013 as a global financial center, this ranking still does not quite match the size of Japan's economy, domestic financial assets, and net external assets, or its potential. Given that Japan has the world's third largest GDP, the largest pools of savings liquidity in Asia, a "world-class city" with a dynamic urban environment supported by the best public transport system and infrastructure, a high degree of public safety, and a highly educated, literate workforce (IBA Japan 2007), Tokyo has the potential to rank among the top three centers globally.

Japan has not been able to maximize its economic and financial potential to become a truly global financial center. As a result, Tokyo has been overtaken by Singapore and Hong Kong, China as Asia's international financial center, and Shanghai is rapidly catching up with Tokyo, with the 16th ranking globally in 2013.<sup>13</sup>

#### 4.1.2 Tokyo's Challenges and Opportunities

For Japan, where the population is rapidly aging, demand for better financial services is growing because of the need to maximize the rates of return on wealth and secure sufficient income for post-retirement. So far, Japan has invested mostly in bonds and equities in developed country markets, with limited investment in emerging Asia. Given the dynamic growth opportunities in emerging Asia, Tokyo should actively intermediate Japan's massive savings for emerging Asia's investment, particularly for infrastructure development. Tokyo must also provide attractive financial services related to emerging Asia's businesses, such as settlements of emerging Asian currencies (like the RMB and the won) and issuance of emerging Asia's local currency bonds. Attracting more listings in the Tokyo Stock Exchange from emerging Asia remains a challenge. Development of private banking and asset management, as in Zurich and Geneva, for Japanese wealth-holders is also key. This, however, requires a substantial change in public policy toward greater openness, business-friendly climates, and provision of supporting market infrastructure for financial services.<sup>14</sup> Private financial firms must accumulate regional financial information and knowledge, and analytical and innovation capabilities.

Building on the advantages referred to earlier, Tokyo could overcome its weaknesses. The regulatory and supervisory reforms undertaken so far since the creation of the Financial Services Agency (FSA) are laudable, but the FSA alone cannot make Tokyo a world-class international financial center.<sup>15</sup> The Ministry of Finance (MOF), the BOJ, and the FSA must work together to formulate a comprehensive strategy to transform Tokyo into a competitive, global financial center that can compete against Singapore; Hong Kong, China; and a future Shanghai. The MOF and the BOJ must work together to put in place market infrastructure to make Tokyo an attractive venue for conducting Asia-related financial businesses. The FSA could further improve the country's regulatory framework—or make its "better regulation" even better—by strengthening the core principles of consistency, effectiveness, efficiency, and transparency. The

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<sup>13</sup> With the hype of the PRC's economic growth and high expectations of Shanghai as a global financial center, Shanghai in September 2011 ranked fifth, surpassing Tokyo, although its ranking has come down to a lower level in recent years. Shenzhen, once ranked fifth in September 2009, surpassing Tokyo and even Shanghai, has also come down to a much lower ranking recently.

<sup>14</sup> If Tokyo could intermediate emerging Asia's savings for the region's investment, it would be even better, but this would not be easy.

<sup>15</sup> Since the separation of the Banking Bureau and Securities Bureau from the MOF and the establishment of the FSA, the official attempt to further internationalize the yen and to make Tokyo an international financial center has been divided between the MOF and the FSA. Unfortunately, no persistent collaborative efforts in these areas have been made among the authorities, including the BOJ, for a long time.

current regulatory philosophy is often criticized as too restrictive, non-responsive, and business-unfriendly despite improvements, and it needs to change to one that nurtures competition and innovation.

Transformation of Tokyo into a competitive international financial center will certainly enhance the role of the yen as an international currency.

#### **4.1.3 Tokyo as a Catalyst for More Efficient Financial Markets for Asia**

An additional reason for the need to forge a comprehensive strategy to transform Tokyo into a world-class international financial center is that without it Japan's financial services may start migrating elsewhere—to Singapore, Shanghai, and Hong Kong, China—and the international use of the yen may further decline. The rapid rise of the PRC may transform Shanghai into the largest Asian financial center—and, over the next 10–15 years, a global one—if the Government of the PRC commits to completing market-oriented reforms, including financial market liberalization, capital account opening, and creation of a market-based regulatory regime.<sup>16</sup>

Healthy competition among Asian financial centers—particularly Tokyo, Shanghai, Singapore, and Hong Kong, China—can help improve the quality of Asia's financial intermediation services, facilitate Asian financial integration, and expand financial businesses in Asia. Developing a truly global financial center in Asia—particularly in its time zone—is beneficial for Asian savers and investors as well as for global financial players as it allows diversification of global financial transactions into the tripolar regions (Europe, North America, and Asia) and reduces risks associated with time zone differences. In this sense, Japan's efforts to improve Tokyo's role as a competitive international financial center are important not only for Japan, but also for Asia and the world, as it encourages healthy competition among Asian cities to develop and deepen their respective financial markets, which benefits all consumers of financial services globally.

## **4.2 Strengthening Regional Financial Cooperation Initiatives**

The AFC of 1997–1998 and its spread across the region revealed several important points: financial systems and economic conditions were closely linked across East Asia; the IMF should not be relied upon alone for crisis management; and a regional self-help mechanism should be created to effectively prevent and manage financial crises. Based on this recognition, the Government of Japan proposed the creation of an Asian Monetary Fund (AMF) in 1997, but this attempt was aborted because of the objections by the US and the IMF, and lack of support by the PRC.<sup>17</sup> Despite such a

<sup>16</sup> The PRC authorities have decided to establish a Shanghai Free Trade Zone with a view to making Shanghai an international financial center. Although the PRC will likely host a competitive international financial center, Shanghai, in the near future, the immediate prospect for India is not so bright. The consensus view is that India will remain an inexpensive back office and information technology center and develop its own national financial center, like Mumbai, but it will not challenge the existing top international financial centers (Y/Zen Limited 2005).

<sup>17</sup> In the aftermath of the Thai baht crisis, Japan took an initiative to support Thailand by organizing a Thai rescue meeting in August 1997 in Tokyo, where the so-called “friends of Thailand” agreed on a financial support package for crisis-affected Thailand. Thereafter, Japan, with support from the “friends of Thailand,” proposed in September to establish an AMF to supplement IMF resources for crisis prevention and resolution. Its idea was to pool foreign exchange reserves of the East Asian economies, amounting to US\$100 billion, which could be mobilized to deter currency speculation or to contain a currency crisis in a member economy. The US and the IMF objected to Japan's proposal on the grounds of moral hazard and duplication. They argued that an East Asian country hit by a currency crisis would bypass the tough conditionality of the IMF and receive easy money from the AMF, thereby creating

setback, the ASEAN+3 finance ministers—the 10 ASEAN member states plus the PRC, Japan, and the Republic of Korea—embarked on several new initiatives for regional financial cooperation in 2000:

- regional economic surveillance (Economic Review and Policy Dialogue, ERPD);
- regional liquidity support system (Chiang Mai Initiative, CMI); and
- local-currency bond market development (Asian Bond Markets Initiative, ABMI).

#### **4.2.1 Economic Review and Policy Dialogue and Chiang Mai Initiative Multilateralization**

The ERPD is a regional economic surveillance process to promote macroeconomic and financial stability and prevent a financial crisis in the region. To support ERPD, the ASEAN+3 authorities created a surveillance unit to support economic surveillance, called the ASEAN+3 Macroeconomic Research Office (AMRO), in Singapore and expanded the ASEAN+3 process by including the central bank governors in addition to the finance ministers starting in May 2012. The CMI is a regional liquidity support facility, which started as a combination of a network of bilateral currency swap agreements among the members and the ASEAN Swap Arrangement. Then, the CMI was multilateralized in March 2010 to become the Chiang Mai Initiative Multilateralization (CMIM), with its total size set at US\$120 billion, which was later raised to US\$240 billion in May 2012. The ERPD is now considered an integral part of the CMIM.

The global financial crisis of 2007–2009 demonstrated the need to strengthen East Asia’s regional financial cooperation. While the crisis impacted many East Asian economies primarily through the trade channel, it also created shortages of international liquidity in a few countries, such as the Republic of Korea and Indonesia. The Republic of Korea encountered sudden capital flow reversals in the aftermath of the Lehman collapse in September 2008 and saw a rapid loss of foreign exchange reserves and sharp currency depreciation.<sup>18</sup> Unwilling to go to the IMF or the CMI for liquidity support, the authorities in the country chose to secure a US\$30 billion currency swap line from the US Federal Reserve System. This had an immediately positive, stabilizing impact on the financial and foreign exchange markets in Seoul. In addition, Japan and the PRC also provided bilateral currency swap lines for the Republic of Korea, which also contributed to the restoration of market confidence in Seoul. In 2009, the low won helped exports recover and reserves to accumulate to almost US\$250 billion by September. The won began to restore its value gradually.

One of the reasons the Republic of Korea did not go to the CMI for liquidity assistance in the fall of 2008 was that sufficient funds would have had to be linked with an IMF program. This would have created political problems within the country due to the “IMF stigma” stemming from its program and actions in the 1997–1998 financial crisis. Another reason was that the authorities considered the turbulence in the fall of 2008 not quite a crisis, and the CMI was not designed for non- or near-crisis situations. The Republic of Korea was fortunate in being able to secure a US Federal Reserve

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potential for moral hazard; and that an AMF would be redundant in the presence of an effective global crisis manager, the IMF. The PRC did not express any view, which meant a lack of support for the proposal.

<sup>18</sup> The Bank of Korea lost large amounts of foreign exchange reserves from US\$264 billion in March to just below US\$200 billion in November. The won started to depreciate rapidly, from a strong 907 won/US dollar recorded in October 2007 to 1,483 won/US dollar in November 2008.

currency swap line, but Indonesia was rejected by the Federal Reserve.<sup>19</sup> This illustrates the importance of strengthening the regional financing arrangement to make it accessible to countries that are fundamentally sound but are facing liquidity shortages. To address this problem, the total size of the CMIM was expanded to US\$240 billion and a new crisis prevention facility called the CMIM Precautionary Line (CMIM-PL) was introduced in May 2012, to prevent a crisis from taking place.<sup>20</sup>

An important feature of the CMIM is that crisis-affected members requesting short-term liquidity support can immediately obtain financial assistance up to an amount equivalent to 30% of the maximum amount that could be borrowed,<sup>21</sup> and that the remaining 70% is provided to the requesting member under an IMF program. Thus, the CMIM is closely linked with an IMF program and its conditionality. The CMIM's link with the IMF was designed to address the concern that the liquidity shortage of a requesting country may be due to fundamental policy problems, rather than a simple liquidity problem, and that the potential moral hazard problem could be significant in the absence of rigorous conditionality. Essentially, the CMI (or CMIM) has long been intended for crisis lending and hence has required conditionality. The lack of the region's capacity to formulate and enforce effective adjustment programs in times of crisis was a major reason for requiring the CMIM to be linked to IMF programs.<sup>22</sup>

#### **4.2.2 Next Agendas: Economic Review and Policy Dialogue, ASEAN+3 Macroeconomic Research Office, and Chiang Mai Initiative Multilateralization**

An important challenge is to strengthen the effectiveness of regional economic surveillance supported by AMRO in order to reduce, and ultimately dismantle, the CMIM–IMF link so that ASEAN+3 member economies can use the CMIM in both crisis and near-crisis situations without IMF programs. The key is to create conditions to promote further IMF delinking. For this purpose, AMRO should become a strong permanent secretariat for regional economic surveillance and liquidity support at times of financial and currency turmoil so that lending conditionality, independent of IMF programs, can be formulated in the event of CMIM-Stability Facility (CMIM-SF) activation.

More concretely, this paper recommends the following actions:

- Further reduce the CMIM–IMF link over time, ultimately to zero.

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<sup>19</sup> Although Indonesia did not face a currency crisis in the aftermath of the global financial crisis, it had some difficulty funding its fiscal needs internationally and the rupiah depreciated sharply. To cope with potential financial turbulence, the country obtained US\$5.5 billion in 2009 through a “standby loan facility”—or “deferred drawdown options”—with the funds provided by Japan, Australia, the Asian Development Bank, and the World Bank. Thus, multilateral development banks and bilateral agencies played a critical role in helping Indonesia secure contingency financial resources for budgetary support.

<sup>20</sup> The existing CMIM will now be called the CMIM Stability Facility (CMIM-SF) to distinguish it from the CMIM-PL. The maturity period of the CMIM-SF will be extended from 90 days to (i) 1 year with two renewals, totaling up to 3 years if it is linked to IMF programs; and (ii) 6 months with three renewals, totaling up to 2 years if it is IMF-delinked.

<sup>21</sup> Initially, the IMF-delinked portion of the CMI was 10% and it was raised to 20% in May 2005 and then to 30% in May 2012. This portion may be further raised to 40% in 2014 if conditions are met.

<sup>22</sup> Japan and the PRC, as potential creditor countries, argue that the CMIM's IMF link is essential. Potential debtor members of ASEAN+3, such as Malaysia, believe that the CMIM should not be linked to IMF programs.

- Clarify rules for activating CMIM lending—including the newly introduced precautionary lending facility (CMIM-PL)—and eschew policy conditionality in the event of externally or herd behavior-driven financial turbulence or crisis.
- Provide adequate resources to AMRO to make it a strong international institution with the required analytical expertise and policy experience to enable it to improve the quality of regional economic surveillance (ERPD), activate the CMIM, and formulate conditionality independent of the IMF.
- Further enlarge the size of the CMIM or increase the maximum amount of liquidity that each member economy—other than Japan and the PRC—can borrow so that a sufficient amount of liquidity could be secured for economies in need.
- Ensure that the precautionary facility (CMIM-PL) can be used at times of a near-crisis independent of IMF arrangements.
- Move beyond the simple “information sharing” stage to a more rigorous “peer review and peer pressure” stage, and eventually to a “due diligence” stage, to improve the quality of economic surveillance.
- Consider expanding membership to include Australia, India, and New Zealand.

Once these actions are taken, a new de facto AMF would emerge, capable of conducting effective surveillance, providing international liquidity in the event of a crisis or near-crisis, and formulating and monitoring policy conditionality. However, it may take some time to achieve these and flexible use of the CMIM for precautionary lending should be activated without conditions during the transition period, in the event of the type of financial turbulence that the Republic of Korea experienced in the fall of 2008.

At the same time, the IMF and AMRO/CMIM need to develop a coordination framework to strengthen complementarities and create synergies. This is because CMIM resources are unlikely to be sufficient to cope with a large-scale crisis or a region-wide crisis involving several economies and thus will have to work with the IMF, with or without the IMF link. While the European financial crisis provides a model for coordination between the global and regional financial safety nets, Asia will have to develop its own model for such coordination. Japan can play a pivotal role in bridging them in a coherent way.

## 4.3 Creating an Asian Currency Unit

### 4.3.1 Dollar, Yen, Renminbi, or a Basket?

Even when there is a strong case for exchange rate policy coordination in East Asia, the issue is how a mechanism can be introduced to achieve such coordination in the region. There are at least two ways to do this. One is for each economy to stabilize its currency to a common major international currency or a common basket of major international (and emerging East Asian) currencies. The other way is for these economies to jointly create a regional, cooperative system such as the Snake or Exchange Rate Mechanism (ERM) in Europe. Given that economic (particularly structural) convergence among the East Asian economies is not sufficiently advanced, that fiscal policy and financial supervision and regulation—key factors identified as a result of the recent eurozone financial crisis—are not adequately coordinated, and that political relationships are not sufficiently mature to support the creation of a tightly coordinated exchange rate system, the second option is harder to pursue, at least for now, and the first option appears more realistic. Only with sufficient economic

convergence—and with strong political consensus—can East Asia move to the stage of joint exchange rate stabilization.

The experience of the global financial crisis and Asia's diverse economic relationship with the major economies of the world have shown that the traditional practice of choosing the US dollar as the region's monetary anchor is no longer the best policy. An obvious alternative is to choose the yen, the RMB, or their combination as a monetary anchor, given the size and importance of Japan and the PRC in East Asia.

While the RMB's international role will rise over time with the PRC's strong growth performance and trade expansion, decades may have to pass before it becomes a fully convertible international currency that is equivalent to the US dollar, the euro, or the yen.<sup>23</sup> Some East Asian economies—particularly those with strong trade ties with the PRC—may consider pegging their currencies to the RMB as desirable from a trade perspective, but many other economies with increasingly open capital accounts will have limited incentive to do so because of the lack of the RMB's role in international clearance, financing, and liquidity holding, and the lack of transparent rules-based institutions. It may take a long time for the PRC to establish a truly independent, credible central bank, to put in place effective prudential and supervisory frameworks governing its financial systems, and to implement rule of law.

Other East Asian economies, however robust their monetary policies, are too small for their currencies to take on a meaningful international role. This clearly makes it desirable—even necessary—to introduce a mechanism for intraregional exchange rate stability based on a currency basket, as no single currency is capable of playing a dominant monetary anchor role at least in the near future.

#### 4.3.2 A Case for a Currency Basket System

From Japan's perspective, a currency basket system is an attractive and viable direction to suggest for emerging East Asian economies as the yen alone cannot become the region's key currency. A reasonable compromise would be for the yen to play a prominent role in the currency basket of emerging Asian economies. Three options may be considered for the region's currency basket:

- the SDR comprising the US dollar, the euro, the pound sterling, and the yen;
- an SDR+ currency basket comprising the US dollar, the euro, the pound sterling, the yen, and emerging East Asian currencies; or
- an ACU—a basket of East Asian currencies including the yen, the RMB, the won, the baht, the ringgit, etc.

The first two options above would not require a substantial degree of policy coordination because they rely on external nominal anchors. The third option requires

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<sup>23</sup> For the RMB to be widely held and utilized in third countries, the PRC economy must become fully open with respect to trade, investment, and finance. It was the openness and liquidity of US financial markets after all that heightened the dollar's international role and that made foreign investors willingly hold dollar-denominated assets. In addition, the US provided transparent, rules-based institutions that would protect private property and enable market participants to resolve any disputes based on laws. If the RMB is to play a significant role as an international currency, the PRC must liberalize its capital account, remove its exchange controls, and build deeper and more liquid financial markets. In addition, it needs to significantly improve the quality of domestic institutions. Practically speaking, this is not going to happen anytime soon. A precondition for capital account convertibility is that the country must complete its transition to a market economy and establish a sound and resilient financial sector. The PRC is still far from a free market economy, with extensive problems in its banking system and underdeveloped capital markets. At a minimum, completing this transition will require another 10–20 years.

either a certain degree of monetary policy coordination or a few major country central banks pursuing a form of inflation targeting together with soft exchange rate stabilization, in order to establish a regional nominal anchor. The first option is the simplest and the third option the most complex. One of the advantages of the second option is that it will be easier to move to the third option at a later stage by reducing weights on the dollar, the euro, and the pound sterling to zero.<sup>24</sup>

Japan's interest would be to maintain its monetary policy autonomy through free floating of the yen and enjoy relative stability of the yen against emerging Asian currencies. Pursuit of free floating is particularly important as long as the BOJ adopts QQE and, after its success, reverses its monetary policy toward tightening. The yen rate can be relatively stable against currencies of emerging East Asian economies, including the PRC, if they choose any one of these currency baskets as a reference currency. By so doing, emerging Asia could also enjoy more stable effective exchange rates, with less susceptibility to dollar–yen fluctuations than a standard US dollar-based system. Singapore has been managing its exchange rate in an SDR+ framework (the second option) as its basket apparently includes the US dollar, the euro, the pound sterling, the yen, and other major and regional currencies.

An SDR+ currency basket would be particularly suited to the PRC as the country may be hesitant to adopt a freely flexible exchange rate regime unless it is ready for advanced liberalization of capital accounts. Until then, an SDR+ basket system would serve the PRC best in maintaining a certain degree of exchange rate stability while allowing sufficient rate flexibility against the US dollar—particularly given the need for rebalancing in both countries. This system can protect the PRC and East Asia as a whole against the possibility of a sharp fall in the value of the US dollar.

#### 4.3.3 Using an Asian Currency Unit for Policy Dialogue and Coordination

An ACU would be useful at least in four ways (Kawai 2009):

- a statistical indicator summarizing the collective movement of Asian currencies,
- an accounting unit for operations of regional financial cooperation mechanisms,
- a currency basket used by the market, and
- an official unit of account for exchange rate policy coordination.

To support the ongoing process of market-driven economic integration in East Asia, a more systematic, coordinated approach is clearly needed. The creation of an ACU serves this purpose in various ways.<sup>25</sup>

The first is the introduction of intensive policy discussions on exchange rate policy as a part of regional economic and financial surveillance. The objective is to cultivate a culture that views the exchange rate as not merely a national concern but also a regional matter, and intensify discussions among policy makers in order to reach a consensus regarding the implications of large currency misalignments within East Asia.

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<sup>24</sup> An SDR+ currency basket is also defined as a basket of the US dollar, the euro, the pound sterling, and an ACU (which is a currency basket of the yen and other Asian currencies). If the weights on the dollar, the euro, and the pound sterling become zero, the SDR+ basket becomes an ACU.

<sup>25</sup> ASEAN+3 (plus Hong Kong, China) is a natural starting point for constructing an ACU because of its active financial cooperation efforts, including ERPD and CMIM. The ACU could be used as an index for monitoring exchange market developments, as accounting units for denominating operations of the CMIM and AMRO, as a private sector denomination for Asian bond issuance, bank deposits and loans, and trade invoicing, and as official units for currency market intervention. See papers included in Chung and Eichengreen (2007), particularly Chai and Yoon (2009); Kawai (2009); and Moon and Rhee (2009).

An ACU index could be used as a benchmark, a tool to measure the value of East Asian currencies as a whole against external currencies—such as the US dollar and the euro—as well as the degree of divergence of each currency's value from the regional average set by the ACU. Once the PRC adopts a more flexible exchange rate regime, both the ACU index movements and the divergences of component currency values can provide more meaningful information.

The second is the introduction of informal policy coordination to achieve both greater exchange rate flexibility vis-à-vis the US dollar and improved exchange rate stability within East Asia. Most emerging East Asian economies have adopted managed floating and the PRC may join this group by using a basket of SDR+ currencies as a loose reference, while economies with sufficient rate flexibility (such as Japan and the Republic of Korea) may continue their practices. By moving to a managed float policy targeted at an SDR+ currency basket (as is currently practiced in Singapore), the emerging economies could enhance the degree of extraregional exchange rate flexibility and intraregional stability. The currency weights in the basket could vary across economies, at least initially. How strictly national authorities wish to maintain the value of their currency in line with the basket currency could depend in each case on country conditions and preferences. National monetary authorities could maintain most of their autonomous policy making by combining an appropriately defined inflation targeting policy and a basket-based managed floating policy (Kawai and Takagi 2005). One advantage of this approach is that it does not require significant macroeconomic and structural convergence among the countries.

To be ready for such soft policy coordination, the region's authorities must become more serious about policy dialogue over capital flows, exchange rates, and macroeconomic management, using a set of economic and financial data, including an ACU index. Greater convergence of exchange rate regimes would be desirable to achieve a degree of intraregional rate stability, starting with similar managed floating regimes based on an SDR+ basket and then moving to an ACU-based basket once sufficient convergence has been achieved. With sufficient structural and economic convergence among East Asian economies, countries with floating currencies—such as Japan and the Republic of Korea—may eventually move to ACU-based systems. It is thus important for Japan to successfully achieve mild inflation (such as 2%), restore sustained growth, and normalize its monetary policy.

## 5. CONCLUSION

In view of the technology hub of Asia's production network and supply chains, it is in the interest of Japan to have intraregional exchange rate stability across the supply chain countries, including Japan itself. Securing financial stability in emerging East Asia is equally vital as the Japanese MNCs have established extensive business operations throughout the region and thus benefit from uninterrupted economic growth.

Despite the desirability of intraregional exchange rate stability, currently no coordination mechanism exists for exchange rate policies across East Asia as each economy pursues its own domestic objectives. An important strategy for Japan would be to support soft exchange rate policy coordination based on a gradual, step-by-step approach. The objective is to encourage the region's major economies to move toward adopting greater exchange rate flexibility against the US dollar and, at the same time, increasingly achieving greater intraregional exchange rate stability.

It is indeed natural for an expanding and increasingly integrated East Asia to create its own monetary zone because the relative economic size of the US—the provider of the

global international currency, the US dollar—will continue to shrink and the US Federal Reserve will continue to focus on domestic, not global nor East Asian, macroeconomic stability concerns in setting its monetary policy. While the PRC authorities may wish to see the RMB become East Asia's dominant international currency to rival the US dollar, the euro, and the yen, there is a reasonable possibility that this will never happen, at least in the foreseeable future, because of the country's significant domestic economic, social, and political problems. From a Japanese perspective, it would be desirable for the yen to be chosen as the region's most dominant anchor and reserve currency, but this is unlikely. This line of thinking leads to a case for policy cooperation between Japan and the PRC to secure Asia's monetary stability.

Japan has been cooperating with other ASEAN+3 members, particularly the PRC, to enhance regional policy dialogue (ERPD), set up AMRO, multilateralize and strengthen the CMI, and make progress on Asian bond market initiatives. The recent agreement between Japan and the PRC, also including the Republic of Korea, to mutually hold each other's sovereign debt as part of foreign exchange reserves is another sign of cooperation. The recent global financial crisis has been a catalyst for such developments.

If Japan wants to assume a leadership role in creating a stable monetary zone in Asia, it needs to make significant efforts at the national and regional levels and further strengthen financial cooperation. Practical steps that Japan could take include restoring sustained economic growth through Abenomics, transforming Tokyo into a globally competitive international financial center, further strengthening regional economic and financial surveillance (ERPD and AMRO) and regional financial safety nets (CMIM) and creation of an ACU index, and launching serious policy discussions focusing on exchange rate issues to achieve intraregional exchange rate stability.

First, all three arrows of Abenomics must be fully implemented and fiscal consolidation pursued. While the first arrow (aggressive monetary policy easing, called QQE) has been a success, the third arrow (a set of structural reforms for restoring growth) has yet to be implemented and the second arrow (flexible fiscal policy) must be targeted to support the growth strategy. In addition, medium-term fiscal consolidation needs to be embarked on to ensure sovereign debt sustainability under the mounting pressure of rising old age-related expenditures.

Second, the MOF, the BOJ, and the FSA must work together to upgrade Tokyo as a truly international financial center that can compete against Hong Kong, China; Singapore; and a rising Shanghai. This would include creating enabling conditions for establishing infrastructure and environmental investment funds for emerging Asia; currency settlements arrangements for emerging Asian currencies (such as the RMB and the won); and markets for emerging Asian currency instruments, such as RMB-denominated bonds—all in Tokyo. Japan should support RMB internationalization and its greater rate flexibility.

Third, Japan needs to strengthen its support for ERPD, AMRO, and the CMIM to ensure that financial and currency stability in emerging East Asia will be preserved. ERPD should strengthen policy dialogue on exchange rate policies and capital flow management among the finance ministers and central bank governors. Sufficient resources should be provided for AMRO so that it can function as an effective surveillance institution. The CMIM's link with the IMF should be reduced over time, ultimately to zero, by strengthening ERPD so that a de facto AMF will be created.

The creation of an ACU index is a step toward more systematic, coordinated institution building in East Asia that can support the ongoing process of market-driven economic integration. ASEAN+3 and Hong Kong, China will be a natural starting point to

construct an ACU because of significant economic integration and financial cooperation efforts among these economies. Once introduced and operative, the ACU can act as an important tool in regional economic surveillance, facilitate soft exchange-rate policy coordination, help deepen Asian financial markets, and contribute to further monetary and financial cooperation.

Fourth, Japan needs to continue to promote global macroeconomic and financial stability, particularly through the IMF. Japan as a member of the Group of Seven has long been engaged with other major developed countries in managing the global economy and finance through the provision of various types of global public goods. It needs to continue to play this role and become a bridge between the global and regional financial architectures, for example, by ensuring consistency and complementarity between the IMF and a future AMF.

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