

## **Kiyohiko G Nishimura: Asian markets at the crossroads**

Keynote address by Mr Kiyohiko G Nishimura, Deputy Governor of the Bank of Japan, at the OECD-ADBI 12th Roundtable on “Capital market reform in Asia”, Tokyo, 8 February 2012.

\* \* \*

### **0. Introduction**

Good morning, Distinguished Guests, Ladies and Gentlemen. I am delighted and honored to have the opportunity to deliver this keynote address at the OECD-ADBI 12<sup>th</sup> Roundtable in Tokyo.

This Roundtable was established in 1999 immediately after the Asian Financial Crisis. It aims at providing an opportunity for experts who have a wide range of backgrounds, including policymakers, and those working in financial industries and academia, to exchange frank and candid views on the development of Asian financial markets. Although it was unfortunately canceled last year owing to the Great East Japan Earthquake, it is my distinct pleasure to be invited this year once again. In this regard, I would like to convey my sincere appreciation to the relevant institutions, including the OECD and the ADBI, for their enthusiastic efforts to organize this valuable event. Moreover, I hope our most welcome guests, taking the opportunity to attend international conferences hosted in Japan, including this Roundtable, can experience firsthand the great progress Japan has made in recovering from the disaster.

### **1. Financial markets in Asia: resiliencies and vulnerabilities**

How should we evaluate the development of Asian financial markets over the recent past? To answer this question, let me begin by summarizing the resiliencies and vulnerabilities of Asian economies and financial markets at this moment.

#### ***Resiliencies***

As for the resiliencies, we can first point out the fact that Asian economies have achieved higher growth in the past several years than other regions of the world. Current accounts have in general recorded stable surpluses during this period (Chart 1). We should also commend the region’s authorities for their efforts in maintaining the relative soundness of their fiscal positions. Given these favorable economic conditions, some Asian jurisdictions, such as China, introduced prompt and large-scale fiscal stimulus measures, and contributed successfully to the recovery not only of the regional economy but also of the global economy as a whole.

Asian economies have also enhanced their resilience to various financial shocks through the flexible introduction and implementation of a number of macroprudential measures, including changes in the loan-to-value (LTV) ratio and the debt-to-income (DTI) ratio. These measures have contributed favorably to the stability of domestic financial systems, as well as the stability of prices of goods and services and financial assets. Moreover, they have introduced a number of regulatory measures, such as those relating to the foreign exchange positions held by financial institutions, the so-called financial levy, and the minimum holding period of bonds for nonresident investors. These measures have steadily taken effect since they were announced and introduced.

#### ***Vulnerabilities***

On the other hand, there are also vulnerabilities in the region. First, there still remains the double-mismatch of currency and maturity in the banking sector (Chart 2). This problem was identified in the wake of the Asian Financial Crisis of 1997. When banks finance short-term

money in foreign currencies, swap it to local currency, and invest in long-term domestic assets, they incur risks both in terms of currency and maturity. For some external reasons, if short-term foreign currency funding becomes difficult in the market, banks tend to face funding problems. Moreover, if their local currency depreciates significantly at the same time, they also encounter an increase in unhedged foreign currency liabilities in terms of local currency, and eventually have to deal with the deterioration of their balance sheets. In fact, when Lehman Brothers collapsed, such vulnerability emerged in some Asian economies.

Second, in the Asian region including Japan to some extent, the financial intermediation function has traditionally been served by indirect financing, mostly through banks (Chart 3). Although it has gradually declined in some jurisdictions in recent years, the reliance of firms on indirect financing is still structurally high. Given this financing structure, when a large negative shock hits financial institutions, nonfinancial corporations are likely to find it hard to get smooth debt financing from these financial institutions, almost regardless of these nonfinancial corporations' financial soundness.

Third, from a wider perspective, there is still the issue of scant investment opportunities in Asian local currencies. Abundant savings in Asia have not been invested sufficiently within the region, and have thus eventually been invested outside the region, such as in bonds in the United States and developed Europe.

To put it in a different perspective, the Asian financial sector remains insufficient both in terms of its variety and its depth, in contrast with the strength of its non-financial sectors, especially manufacturing. High reliance on bank finance implies the underdevelopment of regional bond markets. It is also often mentioned that the immature local derivatives market makes appropriate risk-taking transactions difficult, as risk-hedging instruments are limited. Moreover, owing to less-developed securitization markets in the region, Asian economies do not sufficiently enjoy the merits of the securitization schemes that attract a variety of investors depending on their risk-taking capacities (Charts 4 and 5).

Fourth, meanwhile, there are some jurisdictions in Asia that rely significantly on so-called micro-finance. Micro-finance is indispensable particularly for the sustainable growth of emerging markets and developing economies, and as such has been a main agenda item of the G-20. However, there is one caveat. The main agents of micro-finance are nonbank financial institutions that, unlike banks, are not tightly supervised by the authorities, but which, like banks, take deposits and provide credit to customers. This means that it could become a risk factor in the financial system, if the market share of loans and deposits by micro-finance agents becomes non-negligible.

## **2. Policy responses by the Asian authorities**

### ***Current regional initiatives***

How have the Asian authorities responded to these vulnerabilities? Among many, I would like to introduce the following two projects that have been particularly effective in the past ten years.

The first is a project aimed at developing liquid bond markets to bridge abundant local savings and local investments. The Executives' Meeting of East Asia and Pacific Central Banks, EMEAP, consisting of eleven central banks and monetary authorities in the region, established the Asian Bond Fund investment trust, and became the initial buyers by investing in sovereign and quasi-sovereign bonds in the eight member jurisdictions.<sup>1</sup> Also, as part of

---

<sup>1</sup> When it was launched in 2003, the Asian Bond Fund was limited to investment only in U.S. dollar-denominated bonds. However, since 2005, the Fund has begun to include those denominated in the local currencies of the eight members, with the aim of raising awareness among private investors. Each listed fund

the process of ASEAN+3, the authorities have launched the Asian Bond Markets Initiative (ABMI). Under the current initiative, there are four main issues that were raised and have been implemented since 2008, namely i) the facilitation of demand for local currency-denominated bonds, ii) the promotion of their issuance, iii) the improvement of the regulatory framework, and iv) the improvement of the relevant infrastructure for the bond market.<sup>2</sup> Owing in part to these projects initiated by the regional authorities, the Asian bond market has developed steadily, although still not deep enough and varying across jurisdictions.

The second is a project aimed at building a mutual framework of foreign currency liquidity provision in times of crisis, called the Chiang Mai Initiative (CMI). The CMI started building a bilateral currency swap network in the region, which involves a contingent claim on foreign currency reserves held by each ASEAN+3 authority. The CMI has since enhanced its effectiveness by increasing its size and the number of participants.<sup>3</sup> The authorities are discussing expansion of the scope to cover crisis prevention, as well as to assess the sufficiency of the size.

To ensure the effective implementation of crisis prevention and liquidity support in times of crisis, it is essential for the authorities to monitor closely the regional economy and financial markets, and exchange their views on respective macroeconomic policies. The ASEAN+3 authorities thus established their own but independent surveillance unit, called the ASEAN+3 Macroeconomic Research Office (AMRO), in Singapore in April 2011. In addition, the top-level Finance Ministers' Meeting will be expanded from 2012 to include the region's central bank governors in the Finance Ministers' and Central Bank Governors' Meeting.

### ***Remaining challenges***

However, challenges remain. Although there have been improvements in some areas, as I have mentioned, I would like to raise the following five points.

#### **(1) To Solve Double-Mismatch of Currency and Maturity**

The first is about the double-mismatch of currency and maturity. This structural issue has not changed fundamentally in the past ten years. According to BIS statistics, cross-border credit denominated in local currencies from foreign banks to local residents has grown rapidly in the 2000s (Chart 2). However, their reliance on foreign currencies is still large. Fundamental vulnerability continues to be found also with respect to maturity mismatch, although the mismatch has reportedly been improving to some extent.<sup>4</sup>

#### **(2) To Change Bank-Centered Financial Structure and High Reliance on Foreign Institutions**

Second, the bank-centered structure of the financial intermediary function also remains basically unchanged. Moreover, Asian region's funding relies heavily on foreign financial

---

has steadily been recognized by investors, although the extent of this recognition varies across the markets. Moreover, the Fund has been functioning as a catalyst for improving market infrastructure, such as deregulation and exemption of withholding taxes for nonresident investors, through its reviewing process among the EMEAP members.

<sup>2</sup> The most notable recent achievement of the ABMI is the establishment in November 2010 of a trust fund in the ADB, called the Credit Guarantee and Investment Facility (CGIF). The CGIF plans to start its credit guarantee operations for local currency-denominated corporate bonds issued in the ASEAN+3 jurisdictions in the first half of 2012.

<sup>3</sup> In 2010, the authorities evolved the CMI framework from its original bilateral swap arrangements to the multilateral Chiang Mai Initiative Multilateralization (CMIM), which is a collective decision-making framework signed by all member jurisdictions in the single contract.

<sup>4</sup> In the BIS statistics on cross-border credit outstanding by maturity, it is not evident that borrowing of less than one-year maturity has been decreasing. However, the authorities report the considerable reduction in those of very short-term maturities.

institutions. For example, in the areas of project finance and trade finance, the Asian region has continued to depend considerably on foreign financial institutions, particularly European banks. In fact, in the wake of the European sovereign debt problem, net capital outflows were observed from August to December last year, except in October. Recent data suggests that capital flows returned to the region in January. As such, Asian financial markets have suffered from high volatility caused by the development of global capital flows, which is more or less the same problem they experienced in the Asian Financial Crisis. The background to this is that the market infrastructures, such as those of bond markets, remain less developed. Although the Asian bond market has certainly been developing as I mentioned earlier, the corporate bond market, in particular, remains limited in its depth and liquidity.<sup>5</sup>

### (3) To Develop Collateralized Transactions Markets

Third, let me emphasize the importance of collateralized transactions markets, including the repurchase agreement of securities, in order to develop deep and resilient financial markets. Short of a full blown crisis, but still relatively strained conditions such as found in the current European debt problem, market participants tend to prefer collateralized to uncollateralized transactions, when counterparty risks are strongly recognized among them. This indicates the utmost importance of having a solid market foundation of eligible bond transactions in order to secure stable financial transactions, regardless of rain or shine in financial conditions. In this regard, the cross-border collateral arrangement (CBCA) made between the Bank of Japan and the Bank of Thailand in November last year has the potential to be expanded throughout Asia. In fact, at almost the same time, a CBCA was announced between the Bank Negara Malaysia and the Monetary Authority of Singapore. Meanwhile, the EMEAP formed an action group, and has been discussing the promotion of CBCAs within the region.

### (4) To Foster Financial Innovation

The fourth challenge is to develop innovative financial products, appropriate for an aging population in the region. In Asia, the population is aging at a steady but faster pace, not only in Japan but also in other economies such as China, Korea, and Thailand (Chart 6). Financial innovation is therefore essential to offer a flexible variety of enhanced financial products appropriate to the particular stage in the life cycle of the population. In this regard, the development of securitization seems a key factor. I recognize that securitization, especially in its complex forms, has suffered from a negative image since the Lehman shock. However, simple, plain-vanilla type securitization products may contribute to the realization of appropriate risk-adjusted returns on financial transactions including lending, leading to more active operations of financial institutions. Moreover, as the credit intermediary channel becomes multi-layered to complement conventional lending, the risk tolerance of the financial system would be enhanced through risk diversification. Thus, it is important to “reinstall” useful securitization technologies into the system.

In this regard, let me mention, for example, Asset-Based Lending (ABL), which is collateralized lending based on business assets held by firms. By utilizing effectively a variety of their assets, firms do not have to rely on conventional real estate collaterals and personal credit guarantees when borrowing. ABL is particularly useful in providing opportunities for firms at different stages in their life cycles, such as during start-up, business expansion, and business transformation, when it is difficult to obtain sufficient financing through conventional

---

<sup>5</sup> In Japan, although the amount outstanding of corporate bonds has been increasing, the market size continues to be limited compared to that of government bonds, and we have to admit that the market liquidity is low. There are also a limited number of issuances of corporate bonds with non-investment grades, which has long been an issue in Japan. Against this background, market participants established the “Forum on the Activation of Corporate Bond Market”, and have been discussing a number of ways in which the market may be improved. Moreover, as the issuance of securitized products has stagnated since its peak in fiscal year 2006, we need to revitalize the securitization market as well.

bank borrowings. ABL may thus lead to the enhancement of the surveillance capacities of financial institutions through the necessity of continuous monitoring of such firms. The promotion of this kind of ABL could contribute to the enhancement of economic growth potential, and I believe it is a useful scheme also for Asia in the future. In this regard, the Bank of Japan established the “Special Rules for Equity Investments and Asset-Based Lending to Enhance the Fund-Provisioning Measure”, which has been in effect since summer 2010. The special rules were established with the aim of further enhancing financial institutions’ efforts to strengthen the foundations for economic growth through the use of a wider range of financial techniques.

#### (5) To Enhance Financial Inclusion

The fifth challenge is financial inclusion. From the perspective of developing deep financial markets, it is also important to improve infrastructures so that more of the world’s population has access to financial services. There are reportedly more than 2.5 billion adults who are excluded from accessing financial services, and also tens of millions of small enterprises that are facing serious financing problems. Financial inclusion is a project with the aim of resolving the problem of inaccessibility to fundamental financial services. The project is expected to improve the lives of underprivileged people, and provide fundamental financial support to small enterprises, leading to the realization of sustainable economic growth through the increase in personal consumption and the creation of job opportunities. As the European debt problem gets worse and uncertainties grow in the global economy, financial inclusion has an important role to play in improving the welfare of emerging markets and developing economies with high growth potentials, and thus in ensuring global economic stability (Chart 7).

Financial inclusion has been discussed in the framework of international forums such as the G-20 and APEC. Meanwhile, in the area of financial education, closely related to financial inclusion, the OECD has introduced valuable initiatives to enhance global cooperation by, for example, publishing the report, “Recommendation on Principles and Good Practices for Financial Education and Awareness” in 2005, and also by establishing the International Network on Financial Education. I support wholeheartedly further development of these initiatives, as financial education, like financial inclusion, is essential for the stability of the global financial system, and thus for sustainable growth of the global economy.

### **3. Financial internationalization**

Next, I would also like to express my views on financial internationalization, especially, the recent development of “renminbi internationalization”, one of the agenda items of this Roundtable.

Generally speaking, the internationalization of a currency indicates that its settlement, calculation, and value-storage functions have expanded beyond a certain jurisdiction. To maintain these functions, it is assumed that capital movements are liberalized, and international customs such as commercial contracts are adhered to. In other words, if these fundamental conditions are breached, or altered artificially or politically, true financial internationalization cannot be realized.

#### ***New kid on the block – renminbi on the rise***

From this point of view, let me take a look at the recent development of so-called renminbi internationalization. In recent years, we have observed an increase in renminbi-denominated trade settlements, the establishment of an offshore renminbi market, and the expansion of renminbi-denominated financial products in Hong Kong. In addition, some central banks and monetary authorities in emerging markets and developing economies have recently announced the inclusion of the renminbi in their foreign currency reserves. As such, the

renminbi has been used increasingly in cross-border financial transactions, attracting greater attention from all over the world.

China began taking steps towards currency internationalization in order to improve the renminbi's settlement function. The Chinese authorities intended to reduce Chinese firms' excessive reliance on the U.S. dollar in their trade settlements, and to mitigate the foreign exchange risks of huge U.S. dollar holdings in the corporate and government sectors, as the impact of the Lehman shock spread throughout the global financial system.

Cross-border trade settlements in renminbi first started in July 2009 as a trial across a limited region, namely between 365 designated firms in the city of Shanghai and four cities of Canton Prefecture and ASEAN, Hong Kong, and Macau. The amount has since expanded to record just under RMB 600 billion (about JPY 7 trillion) in the third quarter of 2011 (Chart 8).

However, the development intended by China means simply that we can use renminbi for cross-border financial transactions that used to be settled only in foreign currencies. It should be kept in mind that the development has not contributed significantly to the mitigation of capital regulations. While the volume of renminbi has increased in offshore markets as it is employed in cross-border trade settlements, there remains very limited room for offshore renminbi to flow back to the mainland under the current strict capital regulations imposed by the Chinese authorities. For this reason, there has been a growing need for developing offshore renminbi markets to meet the demand of agents who hold renminbi outside the mainland and wish to invest them in the market. In fact, the Hong Kong offshore market has been playing a major role in absorbing such offshore renminbi liquidity.

It would be implausible to assume that renminbi "internationalization" will be further developed without significant capital-flow deregulation. In fact, the current strict regulations on capital inflows to the mainland have gradually become an obstacle to the further development of offshore renminbi markets themselves. The need for issuance of renminbi-denominated bonds, so-called dim-sum bonds, is after all limited. In the Hong Kong renminbi offshore market, the amount outstanding of issuance of dim-sum bonds is currently around RMB 70 billion, which is much smaller than renminbi-denominated deposits of about RMB 600 billion. If China wishes to promote further the internationalization of the renminbi, it may be necessary to address the issue of capital account liberalization.

### ***Future synergy between renminbi and yen***

Nevertheless, the renminbi has steadily and increasingly been used in settlements outside the mainland. Depending on developments in the liberalization of capital transactions, the presence of the renminbi is expected to increase in the Asian region. Against this background, what do we think about the status of the Japanese yen? The yen is used internationally as a currency that is always tradable and has a well-established settlement infrastructure, in line with the U.S. dollar, euro, and British pound. Meanwhile, the amount of trade between Japan and China, the two economic giants in Asia, has expanded by 2.5 times since 2001, reaching about JPY 26.5 trillion in 2010. During the same period, the number of firms that have extended their operations from Japan to China has increased by 1.5 times to about 22,000. However, the amount of trade settlements denominated in either yen or renminbi is very limited. Taking into consideration the long and profound ties between the two countries, as well as their importance to Asian regional trade, mitigating foreign exchange risks incurred by exporters and importers, and reducing their transaction costs, by promoting trade settlements denominated in both currencies would have considerable significance (Chart 9).

Currently, the U.S. dollar is generally used as the intermediary currency when conducting currency transactions between yen and renminbi on foreign exchange markets. As a result, the price of the yen and renminbi is determined by the cross-currency rate of yen-U.S. dollar and renminbi-U.S. dollar, thereby requiring U.S. dollar settlements. If a direct exchange market between the yen and renminbi is developed and has a certain degree of liquidity, one

benefit will be a reduction in transaction costs, as the price will be set directly without the U.S. dollar as intermediary. Moreover, without settlements in U.S. dollars, there is also the merit of a reduction in currency settlement risks for financial institutions. As such, the development of financial and foreign exchange markets denominated in yen and renminbi is an important issue for financial stability, not only for Japan and China but also for the rest of Asia (Chart 10).<sup>6</sup>

I believe the yen and Japanese government bonds have an important role to play in the process of developing financial and foreign exchange markets in Japan and China, and thus in the whole Asian region. For example, to develop highly-liquid and deep bond markets, price transparency in the market is indispensable, as is a stable risk-free yield curve as the basis for pricing. The improved market-based function of interest rates formation is also an essential factor for the development of risky product markets, including corporate bond markets, as well as for determining appropriate foreign exchange rates that reflect economic fundamentals. In Europe, German government bonds function as a benchmark not only for financial products in Germany but also for fixed income products traded in the rest of Europe. Currently in Asia, I believe Japanese government bonds are a leading candidate to act as such a benchmark, as they are always stably priced, and promptly traded and settled. Moreover, their issuance volume is large enough, and their credit rating is reasonably high.

In Japan, we have strived to improve the financial infrastructure, including the payment and settlement system. As you know, the issuance of Japanese government bonds is the largest in the world, and there exists a well-developed local currency-denominated bond market. The Bank of Japan operates the payment and settlement system for Japanese government bonds, and has worked continuously over the past more than ten years to improve market functions. As a result, the Japanese government bond market has maintained its high liquidity. In this regard, please allow me to repeat the importance of promoting cross-border collateral arrangements between other Asian neighbors, with the use of such highly-liquid Japanese government bonds as an effective means.

#### **4. Concluding remarks**

I have so far explained the current assessments on Asian economies and financial markets and the relevant developments in the region's financial internationalization. Now, let me wrap up by summarizing my views once again on the points that are crucial for Asia's future development.

##### ***A balance between domestic and external demands***

The growth in Asian economies since the 1970s has been driven mainly by exports. As a dividend of successful economic growth, the increasing numbers of people in the middle income class have contributed significantly to the steady increase in domestic demand since the mid-2000s, thereby leading current global economic growth. Nevertheless, it is undeniable that the region remains vulnerable to external shocks through the trade channel, as evidenced by the Lehman shock. As population pyramids change and the region's

---

<sup>6</sup> To support the growing economic ties between Japan and China, the leaders of Japan and China agreed on December 25 last year to enhance financial transactions between the two countries, specifically through promoting the use of the yen and renminbi in cross-border transactions between the two countries, and in support for the development of direct exchange markets between the two currencies. These agreed areas will be mutually promoted by establishing the "Joint Working Group for Development of Japan-China Financial Markets". Meanwhile, the global community has also begun to pay attention to developments in "renminbi internationalization". For example, on January 16 this year, the Hong Kong Monetary Authority and HM Treasury of the United Kingdom announced the establishment of a forum with the aim of mutually promoting offshore renminbi operations between Hong Kong and London.

economies develop, Asia needs to be vigilant in isolating the potential contagious effects of external shocks, such as the deleveraging of assets by European banks, through a steady transition to an economy driven also by domestic demand.

### ***Further development in local bond markets***

To increase resilience against external shocks and reduce volatility in asset prices, it is important to develop deep local capital markets and enhance their functions and resistance to the influences of capital flows in the region as a whole. As I mentioned earlier, higher volatility in Asian stocks and bonds causes higher volatility in their currencies. Volatile asset price leads to an unstable financial system, and is thus an obstacle to sustainable economic growth. What is important in the region is to enhance the market capacity for receiving capital flows, or in other words, to dramatically improve the situation of being “a big fish in a small pond”.

### ***Regional financial cooperation and collaboration***

It is essential for each jurisdiction to harmonize its market regulations and practices with the global standards in promoting cross-border transactions. However, unilateral effort by a single jurisdiction has its limitations. Collective effort is also needed to build the investment foundations by actively utilizing regional forums, such as ASEAN+3 and EMEAP, to create a regional investment class. While respecting diversity across jurisdictions, we should not introduce arbitrary regulations or ignore global contractual practices.

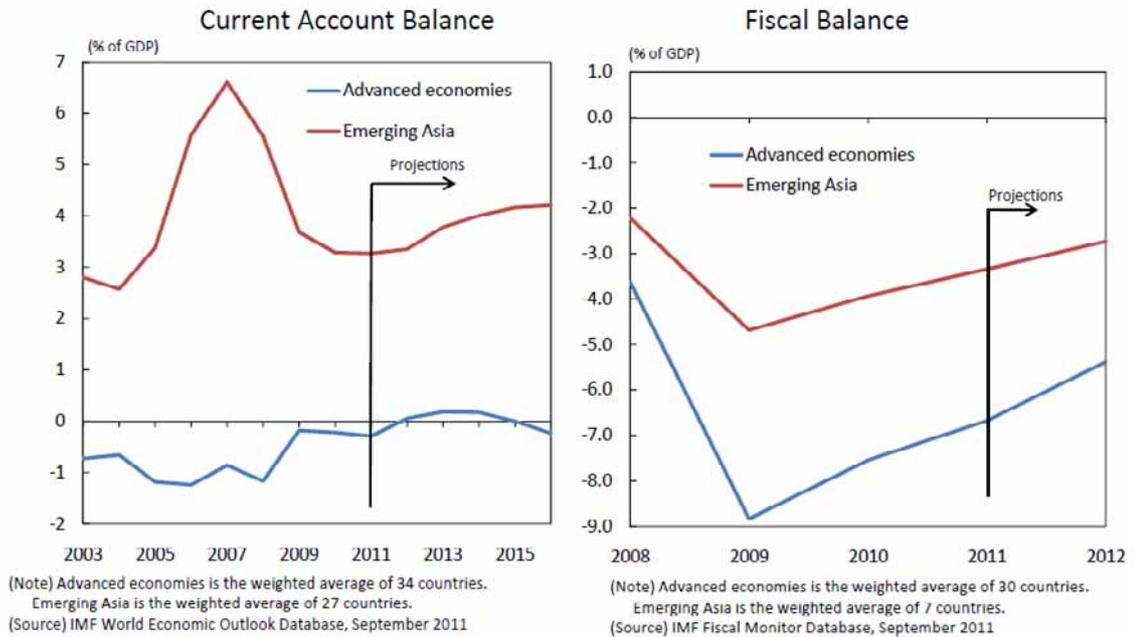
Needless to say, we cannot completely prevent financial crises. However, we can improve our resiliency in times of crisis by preparing multi-layered safety nets as backstops in the financial system. Such safety nets include the development of deep and liquid capital markets, the establishment of currency swap networks, and cross-border collateral arrangements that provide local currency liquidity by accepting foreign currency assets as eligible collateral.

It is often said that Asia is the region with the widest variety of cultures, social structures, and developmental stages. As traditional financial theory tells us, the appropriate combination of these diversities offers welfare gains. In the process of deepening the mutual ties between Asian economies, improvements in market function through regional financial cooperation will provide better investment opportunities for households, firms, and financial institutions, and thus contribute to more effective resource allocation in the region. The activities of ASEAN+3 and EMEAP, particularly their resolute efforts since the Asian Financial Crisis, have proven that financial cooperation based on mutual understanding and respect will always enable us to find effective measures in any circumstances. The Bank of Japan would like to continue contributing to the development of Asian financial markets, through its active participation in the initiatives of regional financial cooperation and collaboration.

Thank you for your kind attention.

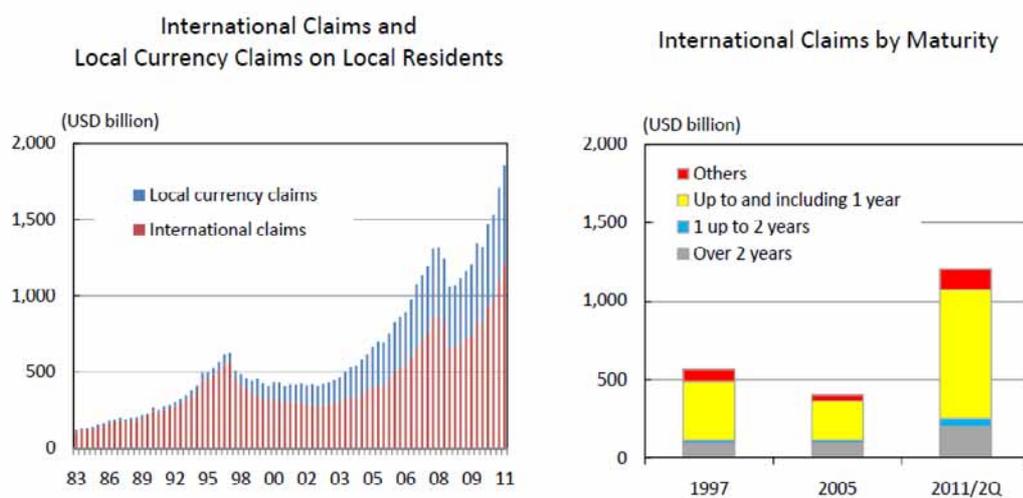
(Chart 1)

## Asia's Resilience: Current Account Balance and Fiscal Balance



(Chart 2)

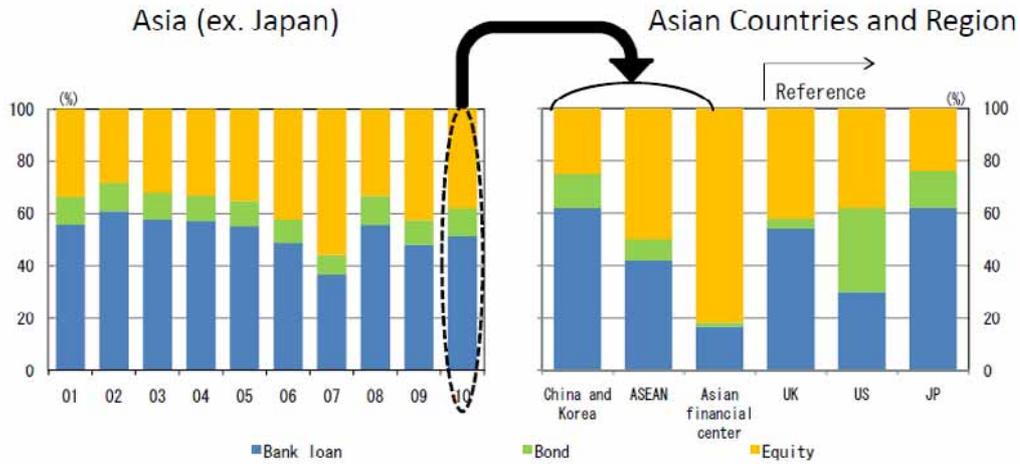
## Asia's Vulnerabilities: Double Mismatch



(Note) Local currency claims are the local currency denominated claims held by local branches/subsidiaries of foreign banks on residents.  
International claims are the claims (denominated mainly in foreign currencies) held by foreign banks on residents and the foreign currency denominated claims held by local branches/subsidiaries of foreign banks on residents.  
All figures are the aggregate of ASEAN countries, China, and Korea.  
(Source) BIS Consolidated Banking Statistics

(Chart 3)

## Asia's Vulnerabilities : Underdeveloped Bond Market



(Note) Asia is the aggregate of China, Hong Kong, Korea, Indonesia, Singapore, Malaysia, the Philippines, and Thailand.  
 Bank loan is the loans by domestic banks. Bond is the local currency bonds issued by local residents. Equity is the market capitalization.  
 ASEAN is the aggregate of Indonesia, Malaysia, the Philippines, and Thailand. Asian financial center is the aggregate of Hong Kong and Singapore.  
 (Source) IMF; BIS; WFE

(Chart 4)

## Asia's Vulnerabilities : Underdeveloped Securitization Market

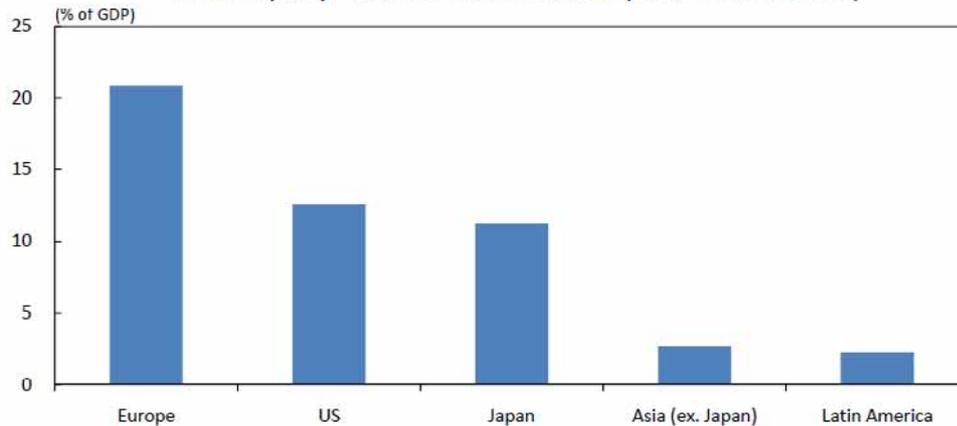
	Asia (ex. Japan)	Japan
% Change in Newly Issued Amount from 2006 to 2011		
Corporate Bonds	376.4%	25.0%
Securitized Products	-10.7%	9.5%
Securitized Products / Corporate Bonds (Newly Issued Amount in 2011)	3.5%	28.7%

(Source) Dealogic DCM Analytics

(Chart 5)

## Asia's Vulnerabilities: Underdeveloped Derivatives Market

Notional Amounts Outstanding of  
OTC Equity-Linked Derivatives (End-June 2010)



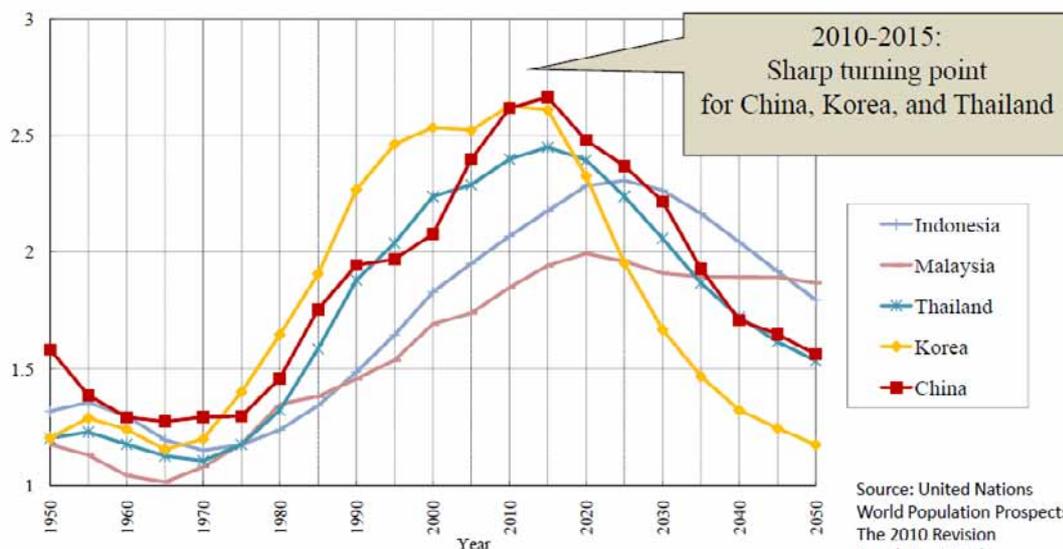
(Note) 2009 GDP data is used for Cuba and North Korea. GDP data of Estonia, Bolivia, Colombia, Guatemala, Suriname, Cambodia, Fiji, Laos, Maldives, Myanmar, Nepal, and Papua New Guinea are estimates. GDP data of Latin America do not include the Falkland Islands (Islas Malvinas).

(Source) BIS Triennial Central Bank Survey 2010; Bloomberg; IMF World Economic Outlook Database, September 2011; United Nations

(Chart 6)

## Population Dividends: Some Will See a Sharp Turn

**Inverse Dependency Ratio: Ratio of Working-Age Population to the Rest = How many people of working age have to provide for one dependent person?**



Source: United Nations World Population Prospects: The 2010 Revision Population Database

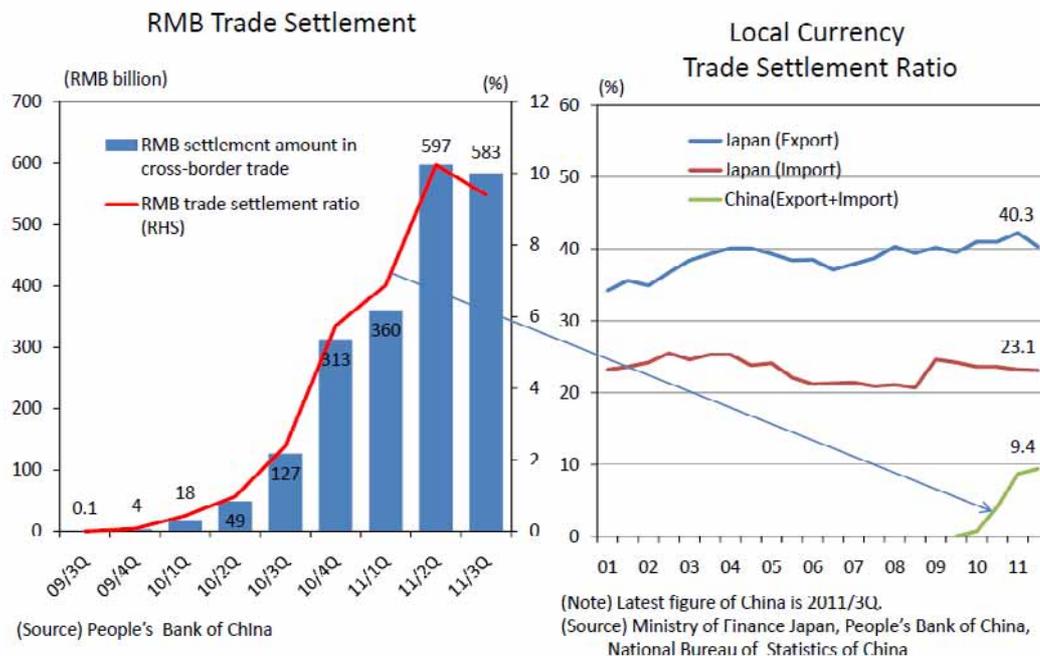
# Financial Inclusion

- No access to formal financial services
  - 2.5 billion working-age adults (over half the world's adult population)
  - 11-17 million formally registered SMEs (45-55% of total <25-30 million>)

(Source) Global Partnership for Financial Inclusion

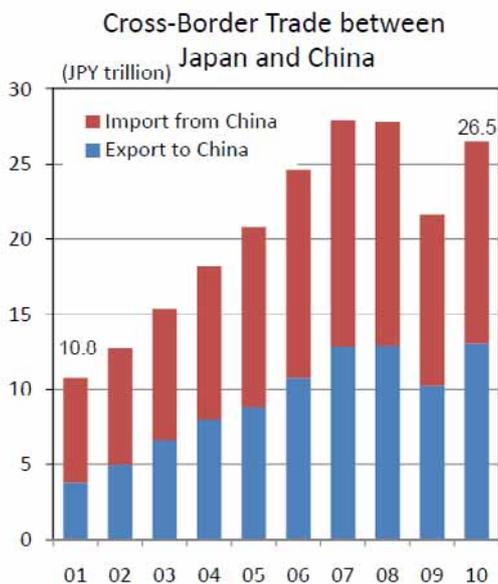
(Chart 8)

## JPY and RMB as Settlement Currencies

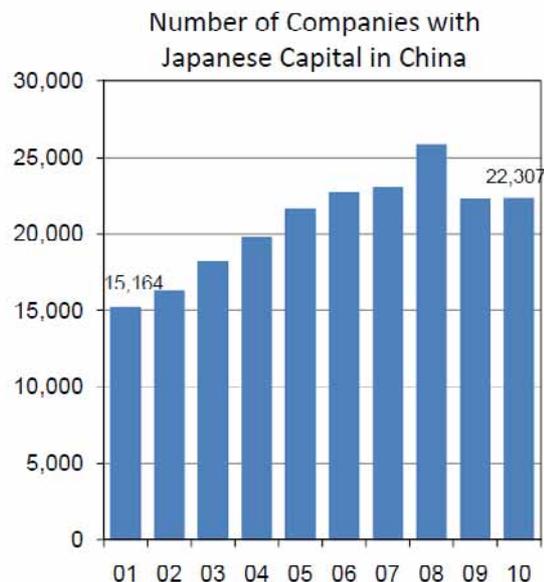


(Chart 9)

## Deepening Trade Relationship between Japan and China



(Source) Ministry of Finance of Japan, Trade Statistics



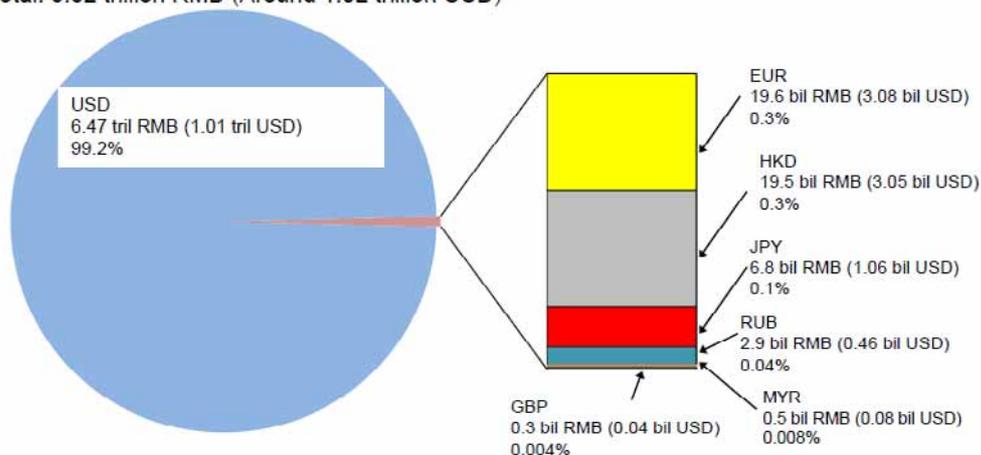
(Source) China trade and external economic statistical yearbook

(Chart 10)

## Direct Exchange Market between JPY and RMB

### Trade Amount at Shanghai Inter-Bank Spot FX market (RMB / FX)

Total: 6.52 trillion RMB (Around 1.02 trillion USD)



(Note) Australian Dollar and Canadian Dollar started to be traded against RMB in November 2011.

(Source) People's Bank of China, "China monetary policy report," 2011/3Q.