

## **Some Observations and Analyses on Savings Ratio**

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Respected Governor Zeti, Ladies and Gentlemen, Good Morning!

It is my great pleasure to attend this meeting, and I thank the colleagues at the Bank Negara Malaysia for their hospitality and considerate arrangements.

While the impact of the financial crisis is still unfolding and further analysis is called for, the current situation reminds us of the Asian financial crisis ten years ago. It inflicted enormous impact on the East Asian countries, including Malaysia. During the crisis, Malaysia, through a series of macroeconomic measures, maintained the stability of the Ringgit, boosted market confidence and managed a quick recovery of the economy. In the decade thereafter, with increasingly adaptable monetary and exchange policies, the Bank Negara Malaysia successfully phased out the temporary capital restrictions, and facilitated financial market development and economic growth.

The Bank Negara Malaysia celebrates its 50<sup>th</sup> anniversary this year. China and Malaysia have a fair share of similarities. First, both countries are members of EMEAP and the BIS Asian Consultative Council (ACC), and share valuable experience in working together. Second, both are emerging market economies at similar stage of development. Our governments and peoples weathered the 1997 Asian financial crisis and managed to ride out the crisis after much adversity. Third, in July 2005, our two countries launched significant reforms on the exchange rate formation mechanism and had much experience to share with each other. At present, many East Asian countries, including China and Malaysia, have high savings ratios and considerable foreign reserves. In this regard, there are a number of issues of common interest worth discussing.

Today, the global economy is once again put to the test. The distinct feature of the current crisis is that it originated in the advanced economies and spilled over to the rest of the world. There have been intense discussions with diverse opinions as to the causes of the current crisis. Much concern has been shown to the high savings ratio in East Asia and oil-producing countries and the low household savings ratio in the U.S. Some believe that the high savings ratios in these countries are one of the major reasons behind global imbalance and the current crisis. At the same time, people are trying to find out which policy measures are effective in meaningfully influencing the savings ratio.

Attempts to pinpoint any factor as the key contribution to savings ratio have been inconclusive. Some members of academia maintain that high savings is related to the level of wealth as measured by per capita GDP. Some analysts believe it is related to exchange rate, financial intermediation, the development of capital market, national tradition, demographic structure, and the social security system.

Opinions also diverge on whether exchange rate is correlated with savings ratio. They are correlated to some degree, but the coefficients are generally low and the correlation usually statistically insignificant. It therefore seems over simplistic to believe that adjusting exchange rate may influence savings ratio. In July 2005, China carried out the reform of the RMB exchange rate formation mechanism. Meanwhile, we emphasized the importance of shifting the growth pattern to increase the contribution of domestic demand to growth. A series of measures have been adopted to stimulate domestic demand. The economic restructuring package underscored encouraging rural consumption, developing the services sector, especially the cultural and recreational industry, and adjusting the consumption structure and pattern.

Identifying the key contribution to savings ratio is a major policy challenge for all countries concerned. In the face of diverse opinions, it is important that we truly understand the contribution of different factors to savings ratio before we can come up with an effective policy tool kit to adjust savings ratio.

### **I. High savings ratio in East Asia and oil-producing countries can be attributed to a number of causes**

The generally high savings ratio in East Asia can be attributed to multiple causes:

First, national tradition. Influenced by Confucianism, people in the region value thrift, self-discipline, low profile, and are against extravagancy.

Second, culture. We may be able to trace the cultural differences from a large number of textbooks and classic readings. For instance, Latin American countries are comparable to East Asian countries in terms of national wealth. However, savings ratios in these countries are low, and this can be attributed to the cultural differences in the region, where people have a higher propensity of consumption and tend to quickly use up all their salaries.

Third, family structure. In East Asian countries, families feature close bonds between family members, and the society relies heavily on families, which are given great social responsibilities. In China, for example, a typical family takes care of the old, raises children, and is responsible for children's education (including overseas education) and skill training. In contrast, families in some developed countries shoulder fewer responsibilities, as the will to shoulder responsibility for each other between generations is less strong.

Fourth, demographic factor and stage of development. As indicated by the Life Cycle Hypothesis by Frank Modigliani, as the share of working age population increases, household savings will increase accordingly. When we look at the phase of economic growth, in times of exceptionally high economic growth, most of the incremental income will be saved, resulting in an unusually high savings ratio. Therefore, it is understandable that China has a high savings ratio, as both conditions apply in China's situation.

A comparison between Japan and the U.S. can also serve to demonstrate the contribution of these factors in determining savings ratio. Similar to the U.S., Japan is a developed country with

high per capita income. The social security system in the two countries each has its own weaknesses. However, Japan's savings ratio is much higher than that in the U.S. This can be largely ascribed to cultural elements, family value and demographic feature in Japan, which are fairly similar to those in other East Asian countries.

Some believe savings ratio is more closely related to the adequacy of social security system, arguing that an inadequate social security system leads to high savings ratio. Though intuitive, this argument lacks adequate statistical and empirical support. It is based on the assumption that human behaviors are rational and people increase their savings for future healthcare and pension needs. This assumption, however, does not necessarily stand. The Central Provident Fund (CPF) system in Malaysia and Singapore that requires mandatory savings has been established under the exact opposite assumption that people do not always behave rationally.

High savings ratio in oil-producing countries has its natural reasons. Endowed with rich oil resources that far exceed their normal consumption demand, oil-producing countries naturally accumulate their wealth in the form of savings. Chart 4 shows that trade surplus in oil-producing countries has been much larger than in East Asian countries since 2000.

The elementary textbooks on economics always start with "supply and demand and prices", which lead the readers to believe that certain prices, for instance, exchange rate or interest rate, determine the behavior of savings and consumption. However, things are much more complicated than what the textbook tells us. The level of savings ratio is influenced by a large number of factors, and it is over simplistic to conclude that the savings ratio can be meaningfully adjusted by adjusting nominal exchange rate. Factors such as national tradition, culture, family features, demographic structure and social security system cannot be changed in the short term. Even when some policies can be proved effective, they take a long time to do so. In this regard, there are still many issues that need in-depth and detailed studies.

## **II. Implications of the Asian Financial Crisis for savings ratio in East Asia**

Savings in GDP are composed of household, corporate and government savings. If total savings exceed domestic investment, the surplus will take the form of foreign reserves. We notice that the drastic increase of imbalance of savings and trade started after 1997. It is therefore worthwhile looking at the impact of the Asian financial crisis on the savings behavior of these countries.

Asian countries were seriously shocked and alarmed by the Asian financial crisis. The attack of speculative capital led to plunging exchange rates and capital flight and nearly exhausted all foreign reserves, leaving a great sense of vigilance for East Asian countries in macroeconomic management. In the years that followed, countries in the region boosted exports, amassed trade surplus and accumulated large foreign reserves. It is fair to say that the high savings ratio and massive accumulation of foreign reserve in recent years in East Asian countries reflect the lessons learnt from, and the natural reaction to the Asian financial crisis.

**The large savings and foreign reserves of these countries are also the result of defensive reactions against predatory speculation.** At the time, large capital inflows and the ensuing

sudden stop and reversal as well as the rampant speculations of the hedge funds exacerbated the situation. People were shocked and frustrated by these speculative behaviors. At the onset of the crisis, Malaysia saw a weakening export, plummeting stock market and sharply depreciating currency. Despite criticism from some countries and international institutions, the Malaysian government imposed temporary capital restrictions and safeguarded currency stability. In Hong Kong SAR, which was also attacked by hedge funds, stock prices plunged, and its linked exchange rate regime was severely tested.

The belief prevailed in the region that unregulated predatory speculation was an important factor behind the crisis, and it highlighted tremendous potential risks to the international financial system. It was hoped that the international community would bring it under necessary regulation. However, for some reason, the authorities of the countries concerned were against regulating predatory speculative capital flows, and failed to see the need to adjust the regulatory frameworks. At the same time, international financial institutions failed to perform its regulatory responsibility over abnormal capital flows. East Asian countries are thus forced to amass foreign reserves to defend themselves.

**To some extent, the increase of savings ratio and current account surplus in East Asian countries are a result of the rescue plan of the international financial institutions.** The rescue plan kept silent on international speculative capital flows, which otherwise should have been put under scrutiny. Instead, excessive and stringent conditionalities were imposed, demanding that the crisis countries adopt stringent fiscal and monetary policies, raise interest rates, cut fiscal deficits and increase foreign reserves. In the decade thereafter, East Asian countries have learnt the lessons, increased savings and foreign reserves and successfully enhanced their resilience to financial crisis.

**Of course, East Asian countries had their own problems.** Vulnerabilities existed in economic development patterns, foreign debt management as well as institutional capacity. Sweeping structural reforms on corporate and financial sectors have been launched since the crisis.

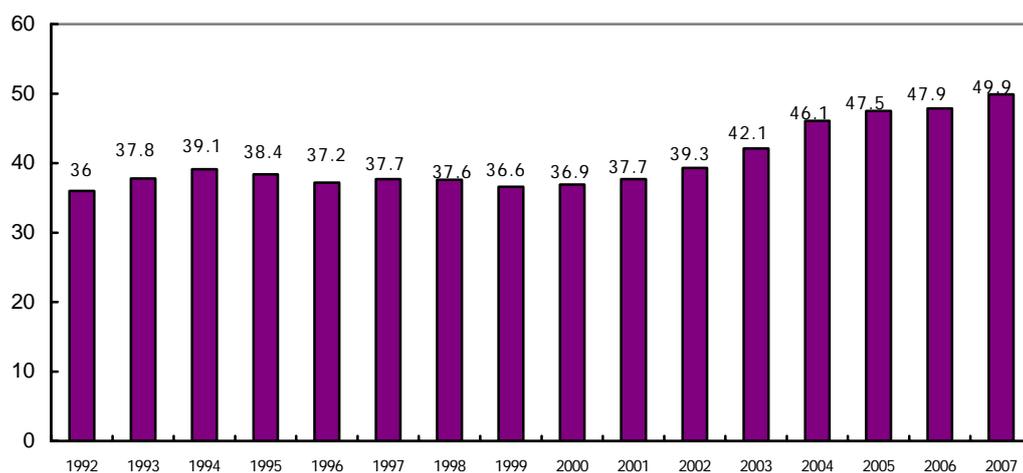
Meanwhile, a large number of countries improved their social security system, and reformed the education and healthcare systems. However, it takes time for these efforts to take effect.

### **III. Can China adjust its savings ratio effectively?**

During the Asian financial crisis, some western academia suggested devaluing yuan. Some others preferred a stable yuan, for the sake of preventing competitive devaluation. China, as a responsible large country, did not devalue and paid the price—a fairly slow recovery. The endeavor of the Chinese authorities to maintain the stability of RMB against all odds contributed to stemming the spread of the financial crisis.

After the crisis, as the market-oriented reform deepened, China intensified the efforts in reforming its corporate and government sectors. Profitability of enterprises, especially SOEs, increased; fiscal position improved and household income increased steadily. Savings ratio began to increase significantly from 2002. (Chart 1)

**Chart 1: China's Savings ratio in 1992-2007 (%)**



Source: National Bureau of Statistics of China

**The policy intention of the Chinese authorities to lower savings ratio is clear, but in-depth research is needed as for specific measures to take.** Boosting domestic demand and encouraging consumption have been important components of the national economic policies since 2005. These policies would eventually bring down the savings ratio. However, in-depth and systematic analysis is needed to identify factors influencing the savings ratio, their elasticity, and the adjustment measures to take.

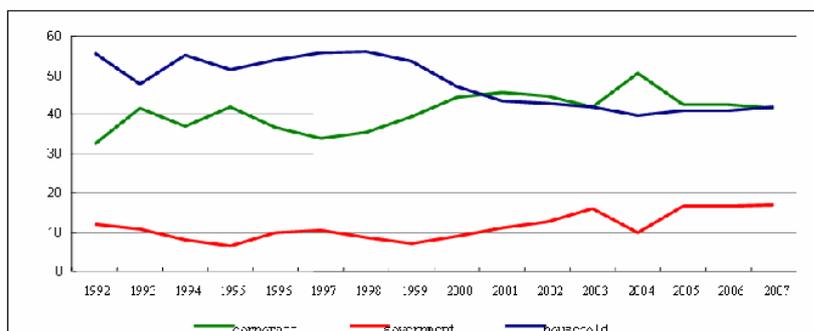
**The surge of savings ratio since 2002 is not evenly distributed between household savings and corporate savings, with the increase of corporate savings outpaced that of household savings.** Corporate savings ratio increased to 49.9% in 2007 from 37.5% in 1998. The disposable income of the corporate sector accounted for 13% of the total national disposable income. This ratio increased to 22.5% in 2007. During the same time period, the share of government disposable income to the total increased by only 2 percentage points.

**The proportion of corporate savings to GDP in China is high compared with other countries in the world. This is closely related to the unsolved problem of cost/profit distortion of enterprises during China's economic transition.** Under the planned economy, housing, healthcare, and pension were provided by the enterprises and the government, diminishing the incentives to save. Savings were even considered "mandatory" as people queued up in the shops, but not being able to buy anything. After the reform of pension, housing and healthcare system in the 1990s, the "iron bowl" (lifelong secure job and welfare) system no

longer existed and the enterprises stopped providing pension and housing for free. However, effective social security system had not been in place either. Households had to pay for the long-term expenditures, significantly increasing the incentive for precautionary savings. On the other hand, the real cost of labor takes time to be reflected in the cost of the enterprises. As a result, the corporate sector increased their savings but decreased the contribution to social security. In other words, the extraordinary profits from cost distortion did not go to pension, healthcare and housing for employees, where it should go. This broadly explained the increase in household and corporate savings. This is also why some people suggested that part of the equities of state-owned listed companies should be designated to the social security fund.

Chart 2

### Shares of Corporate, Government and Household Savings in National Savings (%)



Source: National Bureau Statistics of China; the People's Bank of China

### Despite China's commitment and endeavor, the reforms in some areas are yet incomplete.

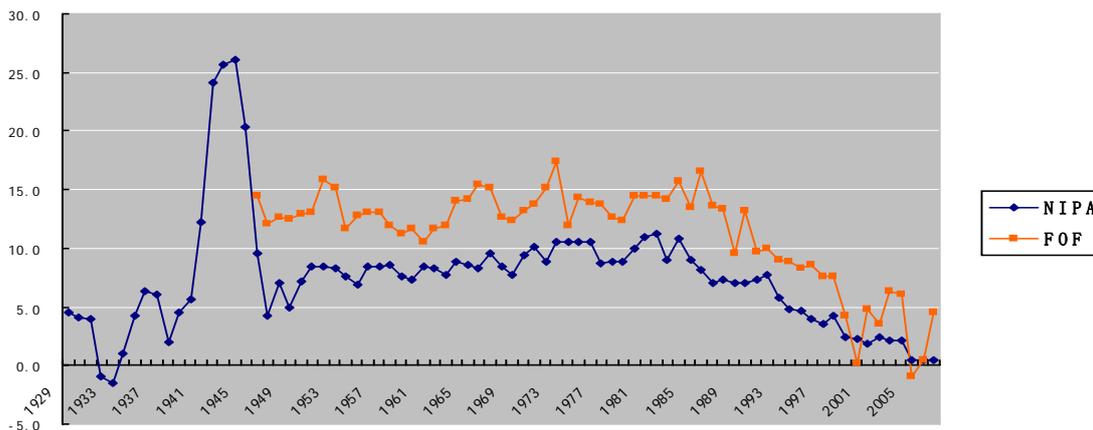
Although private enterprises in China are already market-driven and free of cost distortion, market reform of the public sector was not complete and further breakthrough is called for. Considerable achievements have been made in the reform of SOEs. However, the lack of clearly-defined and fully monetized cost structure affect the adjustment of savings ratio. It is therefore important to expedite the reform of the public sector and the transition of the functions of the government.

### IV. Observations of low household savings ratio in the U.S.

Movement of U.S. savings ratio in recent years went through two phases (Chart 3): phase one, for a long time before the mid-1990s, the US household savings ratio ranged between 7-10%; phase two, after 1997, savings ratio declined remarkably and the "twin deficits" worsened drastically, especially trade deficit. There are many attempts to explain this phenomenon, one of which attributed the low savings to the so-called "euphoria" on the U.S. economic performance since the mid-1990s. Specifically speaking, in late 1980s and early 1990s, after the collapse of the central planning system of the former Soviet Union and Eastern Europe, growth in that region slipped into a downward trajectory; the Japanese economy, in the 1990s, was also trapped in prolonged stagnation; EU's economic performance was lackluster due to structural problems including rigid labor market. The United States, on the other hand, boasted the optimal economic

system in the world. The only remaining challenge, in terms of economic system, came from the Asian model. If you recall, Paul Krugman once criticized that Asian economic growth relied too much on factor inputs without improvements of productivity. After the crisis, the Asian economy suffered heavy blows. The recipe prescribed by the IMF corroborated the confidence in the U.S. model.

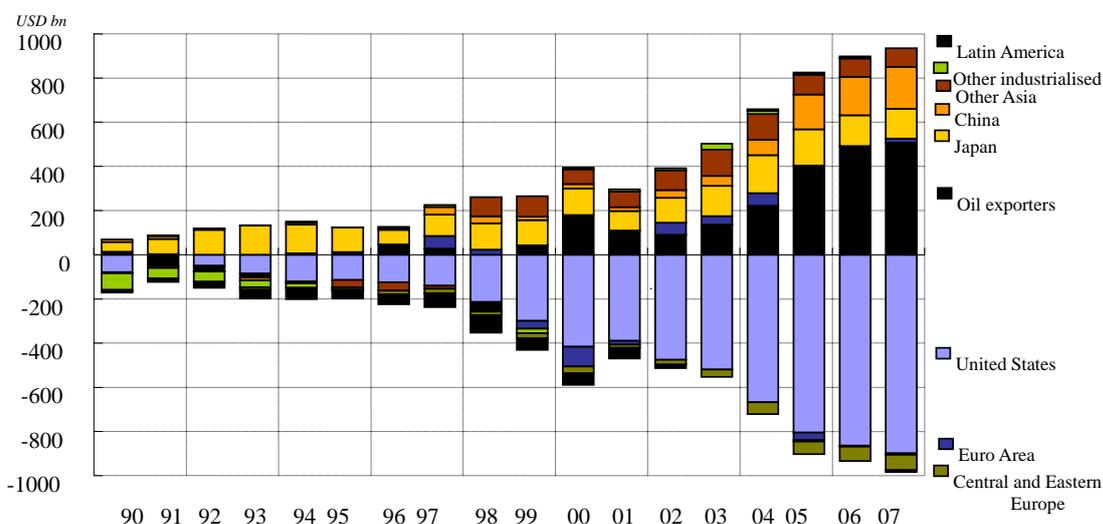
**Chart3: Comparison of National Income and Product Accounts and Flow of Funds Accounts Personal Savings ratios as a Percentage of Disposable Personal Income, 1927-2007**



Source: U.S. Department of Commerce, Bureau of Economic Analysis.

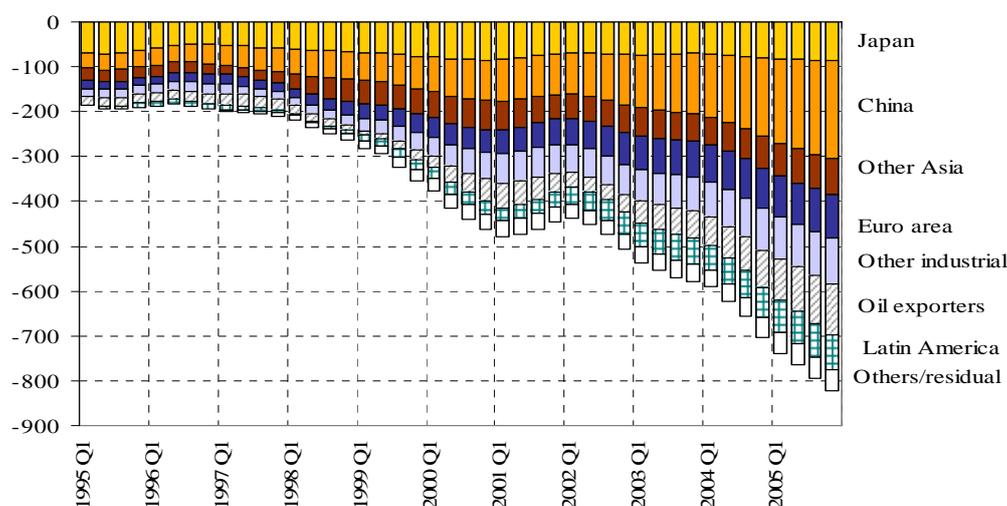
In contrast, the US economy showed strong flexibility and resilience, recovering rapidly from the 9.11 attack and the burst of IT bubble at the turn of the century. All these exacerbated the euphoria sentiment in the market, which in turn influenced the saving behavior of the U.S. households. Given the unprecedented magnitude of the current financial crisis, major adjustments to the euphoria sentiment can be expected.

**Chart 4. Current account positions (yearly data)(1990-2007, annual data, in USD billion)**



Source: IMF (World Economic Outlook and Direction of Trade Statistics) and ECB staff calculations.

**Chart5. Bilateral trade position with the US (1998Q1 – 2005Q4, cumulated year-to-date, in USD billion)**



Source: IMF (World Economic Outlook and Direction of Trade Statistics) and ECB staff calculations.

The time series shows that this round of low savings and high consumption in the U.S. commenced in late 1990s. In contrast, the savings ratio of East Asian countries did not surge until after the Asian financial crisis. China's savings ratio began to increase even later, after 2002. The difference in time distribution indicates that there is no significant causal relationship between the two.

## V. Options for savings ratio adjustment

In sum, global savings imbalance exists and the causes are multiple. It seems inappropriate to conclude that savings ratio is only related to exchange rate. It is unrealistic to expect long-term features to change in the short run. One should, instead, adopt a broader and more comprehensive view in examining this issue.

**First, a composition of recipe is needed.** The growth pattern of high consumption and low savings of some economies can hardly sustain, and must be reviewed. The current situation in the U.S., however, does not present itself as the optimal time to raise its savings ratio, and policy makers are expected to strike a balance between increasing savings and stimulating consumption to facilitate the economic recovery. On the other hand, to bring down savings ratio, East Asian nations should attend to various aspects including economic growth pattern, industrial structure, pricing mechanism, etc., carry out a package of comprehensive adjustments and reforms, and strive for medium term effects. It cannot be denied that reform of the exchange rate formation mechanism is part of this recipe. When tackling the ongoing financial crisis and conducting economic adjustment, the Chinese government has focused on boosting domestic demand, aiming for robustness of the economic growth by stimulating consumption. The RMB 4-trillion yuan stimulus package, one of the largest in size globally, is tilted towards expenditure programs. The program underscores public welfare, job creation, and income growth for the rural areas and the underprivileged groups.

**Second, countries and international institutions should strengthen their cooperation and intensify the regulation of the cross-boarder speculative capital flows.** Although cross-boarder hot money refrained somewhat from their usual aggressive approaches after the LTCM event, and relevant regulatory authorities started to reassess the situation, the current financial crisis underscores the importance of remaining vigilant against speculative capital movement, and enhancing the transparency of cross-boarder capital flows. International financial institutions and countries concerned should help developing countries establish a robust early-warning system and guard against attacks from predatory speculation. International cooperation should be strengthened to improve the rescue mechanism. In case of temporary BOP difficulties in emerging markets, international rescues should be fast, and conditionalities should be kept at minimum. This would encourage countries to lower savings and expand domestic demand.

**Third, appropriate measures should be taken to channel savings into developing countries and emerging markets.** The U.S. and other advanced economies do not wish to see large inflows of global savings while these savings need an ideal destination. As a matter of fact, savings flowing from emerging markets to the advanced economies is neither rational nor consistent with the intention of the advanced economies to increase their domestic savings. The adjustment of savings ratio in East Asian countries will not see immediate effects. Meanwhile, savings in oil-producing countries may remain at a high level so long as oil prices remain elevated. Therefore, global savings imbalance will remain for some time in the future. The top priority at present is to facilitate the rational flow of savings and improve its allocation efficiency around the world. One way to do so is to redirect surplus savings to other developing countries and emerging markets, those with abundant resources, low labor cost, but inadequate capital for development. These economies are the future growth engines of the global economy.

**Finally, the reform of the international monetary system should be advanced.** Currently, a bulk of international trade and financial transactions are priced and settled in U.S. dollar. It is also the most important reserve currency. The IMF data showed that foreign reserves denominated in the U.S. dollar accounted for 63.9% of the total by the end of 2007. When countries increase savings and if these savings are in the form of dollar denominated foreign reserves, capital will inevitably flow into the U.S.. The deleveraging process may call for capital inflow to the U.S. in the short run, but over the long run, large capital inflows are not in the interest of adjusting the economic growth model of the U.S. . Moreover, the over-concentration of foreign assets in one particular currency may end up in undesirable scenarios. Therefore, in addition to closer regulatory cooperation, and efforts for more rational allocation of savings flow, the international community should move forward in reforming the international monetary system. Efforts should be made to monitor the economic and financial policies in major reserve currency countries and to enhance the status of SDR, so as to steadily advance the international monetary system towards diversification over the long run.

Thank you!