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# **Will the Renminbi Devalue?**

by

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# Will the Renminbi Devalue?

Lawrence J. Lau<sup>1</sup>

March 2016

**Abstract:** The Renminbi surprised the World markets by its unexpected devaluations first in August 2015 and then in January 2016. Will the Renminbi devalue again? In this paper, the questions of whether the Renminbi is over-valued, whether the level of Chinese official foreign exchange reserves is adequate, and whether a devaluation is in the best interests of China are considered. The paper also discusses the risks faced by the Renminbi. But the most important consideration is how the confidence of the Chinese people in the Renminbi, which depends on whether it retains its purchasing power, both domestic and overseas, can be credibly maintained. The conclusion of this paper is that the Renminbi is unlikely to devalue abruptly and significantly going forward, even though there may be small fluctuations in the Renminbi exchange rate.

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<sup>1</sup> Lawrence J. Lau is the Ralph and Claire Landau Professor of Economics at the Chinese University of Hong Kong and the Kwoh-Ting Li Professor in Economic Development, Emeritus, of Stanford University. He is most grateful to Mrs. Ayesha Macpherson Lau and Professor Yanyan XIONG for their helpful comments and suggestions

## **1. The Recent History of the Renminbi Exchange Rate**

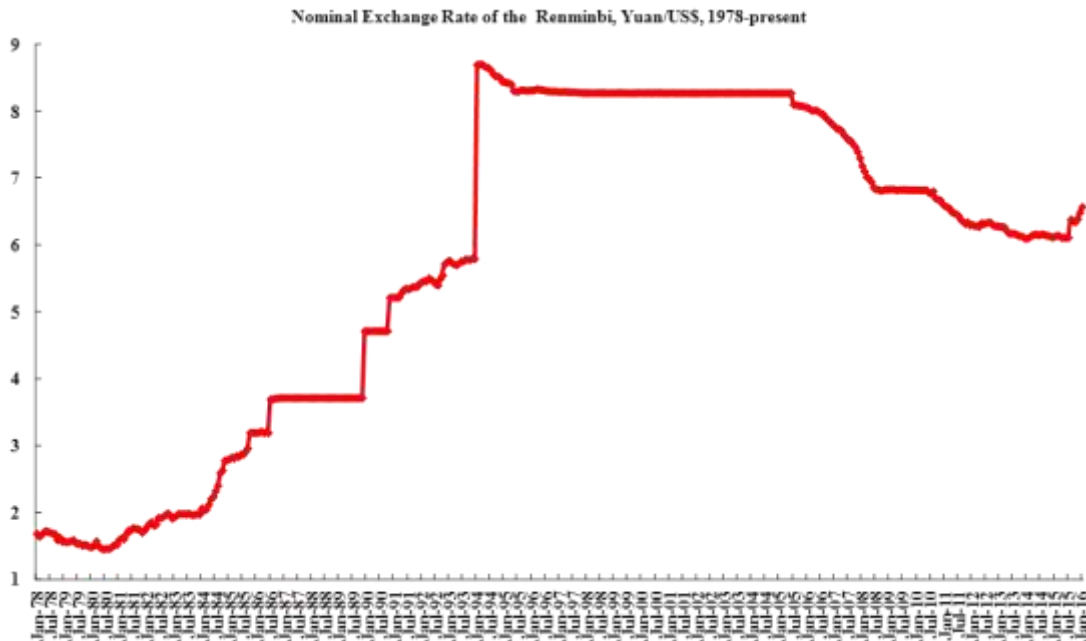
Before 1980, the Chinese Yuan used to be worth quite a bit, with an exchange rate of between 1 and 2 Yuan per U.S. Dollar (hence worth much more than the Hong Kong Dollar at the time). With the Chinese economic reform and opening to the World, the Renminbi devalued steadily against the U.S. Dollar from 1980 until the end of 1993. At the beginning of 1994, it undertook a significant one-time devaluation, to 8.7 Yuan per U.S. Dollar, and became current-account convertible at the same time. Since 1994, it appreciated with respect to the U.S. Dollar in both nominal and real terms until August 2015, to about 6.1 Yuan per U.S. Dollar. In the interim, there were two stretches, 1997-2005 and 2008-2011, both in response to financial crises elsewhere, during which it was essentially pegged to the U.S. Dollar.

Then in two trading days beginning with August 11, 2015, when the People's Bank of China, the central bank, changed the method for determining the opening central rate in the foreign exchange market each day, the Renminbi abruptly devalued by approximately 4%. This was the largest devaluation of the Renminbi since 1994. The unexpected devaluation surprised the global capital markets, affected confidence both domestically and overseas, and even contributed to the delay by the U.S. Federal Reserve Board in raising the U.S. interest rate last year.

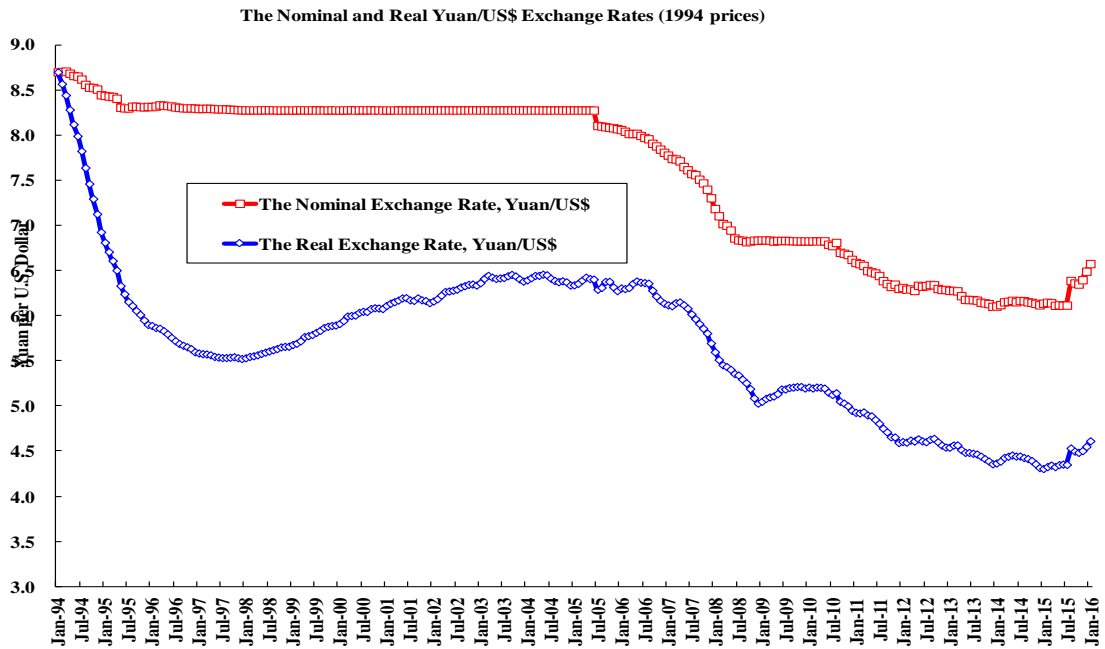
Towards the end of 2015, the International Monetary Fund, satisfied that the Renminbi had become "freely usable", decided to include the Renminbi as part of the basket of major currencies (which includes the US\$, the Euro, the British pound and the Japanese Yen) constituting the "Special Drawing Right (SDR)", with a weight of 10.92%, which is greater than those of the British pound and the Japanese Yen (effective on October 1, 2016). This marked a milestone in the process of internationalization of the Renminbi. In the meantime, the Chinese interbank foreign exchange market was opened further to a more diversified group of overseas institutional investors. In December 2015, in part to reduce the foreign exchange market's fixation on the Yuan-Dollar exchange rate, the China Foreign Exchange Trade System (CFETS) began to release a Yuan exchange rate composite index that measures the Renminbi's strength relative to a trade-weighted basket of 13 currencies, including the U.S. Dollar, the Euro, and the Japanese Yen. In January 2016, the Renminbi devalued once again by more than 1%, but has held steady at around 6.5 Yuan per U.S. Dollar since then. (See Charts 1 and 2).

At the present time, the Renminbi exchange rate relative to the CFETS basket of currencies is approximately the same as it was at the beginning of 2015, which means that it has neither revalued nor devalued on a net basis over this period. This is possible despite the devaluation of the Renminbi with respect to the U.S. Dollar of approximately 5% during the same period because the U.S. Dollar appreciated even more relative to all other major currencies, including the Euro and the Japanese Yen. In fact, since 2005, the Renminbi has appreciated a great deal more with respect to the Euro and the Yen than the U.S. Dollar, and the Yuan/Euro and Yuan/Yen exchange rates have also been much more volatile than the Yuan/Dollar rate. (See Chart 3).

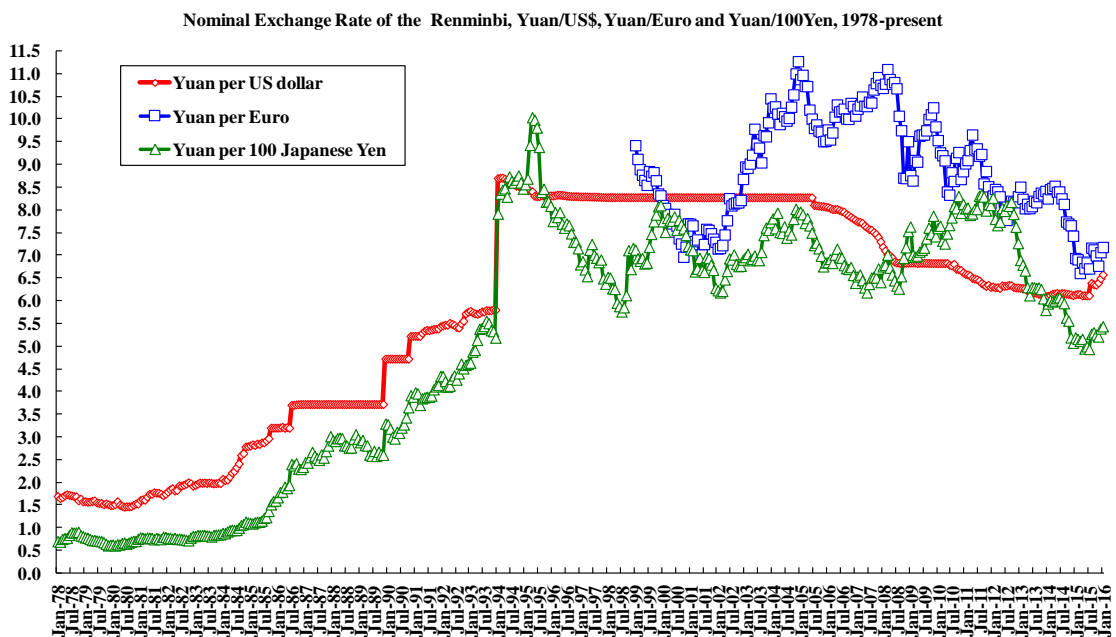
**Chart 1: Nominal Exchange Rate of the Renminbi, Yuan/US\$, 1978-present**



**Chart 2: The Nominal and Real Yuan/US\$ Exchange Rates since 1994**



**Chart 3: Nominal Exchange Rate of the Renminbi, Yuan/US\$, Yuan/Euro, and Yuan/100Yen, 1978-present**



The question to be considered in this paper is whether the Renminbi will devalue in the future. The Chinese economy has been slowing down, from an average annual real rate of growth of close to 10% to around 6.5%, in a process of transition to a “new normal”. On the basis of this decline in the growth rate, many

Western economic analysts and asset managers, in particular those of hedge funds, have been saying for more than a year that a hard landing is likely for the Chinese economy and that the Renminbi is due for a significant devaluation of perhaps up to 20%. The hedge fund managers have certainly put their money where their mouths are—they have accumulated considerable short or equivalent positions on the Renminbi in all the major offshore Renminbi centers, in both deliverable and non-deliverable forms. Moreover, given all the rumors of a pending significant devaluation, many Chinese enterprises have also decided to hedge—for example, with exporters delaying the repatriation of their export proceeds and under-invoicing, importers accelerating the payment of their import bills and over-invoicing, borrowers with foreign-currency denominated loans pre-repaying the loan principals and interest, and outbound foreign direct investors rushing to complete their deals—resulting in significant net capital outflows during the past year. There was also some evidence of capital flight. Against this background, will the Renminbi devalue?

## **2. Is the Renminbi Over-Valued?**

First of all, it is necessary to consider whether the Renminbi is over-valued. If it is not over-valued, then a devaluation cannot be economically justified. Just because some currency speculators claim that the Renminbi is over-valued, and have acted accordingly, does not mean that the Renminbi is in fact over-valued. A reliable indicator of whether a currency is over-valued or under-valued is whether the balance of the current account or trade in goods and services is negative or positive. If a country consistently runs a large trade deficit (surplus), then its currency is likely to be over-valued (under-valued). In 2015, Chinese exports of goods and services grew 3.5% from US\$2.48 trillion to US\$2.56 trillion<sup>2</sup>, but imports of goods and services fell 3.7% from US\$2.19 trillion to US\$2.11 trillion<sup>3</sup>. As a result, the Chinese trade surplus in goods and services increased from US\$284 billion to US\$456 billion, or from 2.7% to 4.2% of its GDP (see Chart 4). The expectation is that China will

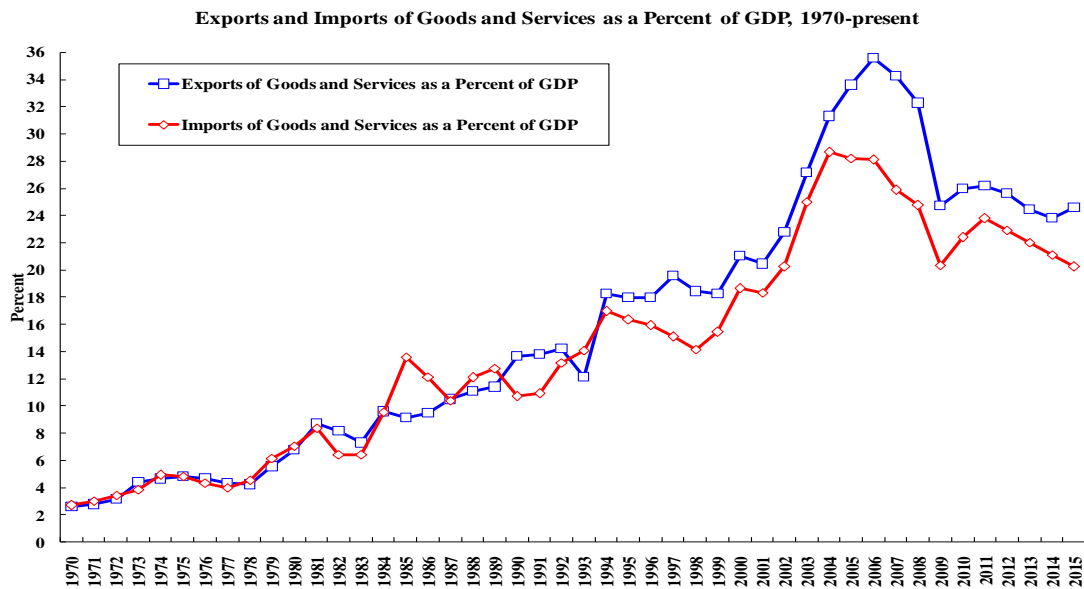
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<sup>2</sup> But exports of goods alone fell 8.4% from US\$2.34 trillion to US\$2.15 trillion and exports of services alone remained essentially flat at US\$2.30 trillion in 2015. However, exports of goods in value-added terms is believed to have fallen by approximately 1% in 2015.

<sup>3</sup> Imports of goods alone fell 13.3% from US\$1.81 trillion to US\$1.57 trillion and imports of services alone rose 14.8% to US\$440 billion in 2015.

continue to have a substantial trade surplus in the foreseeable future. Thus, the Renminbi is not likely to be over-valued. If any currency is over-valued today, it is probably the U.S. Dollar, and not the Renminbi.

**Chart 4: Chinese Exports and Imports of Goods and Services as a Percent of Chinese GDP, 1952-present**



Of course, part of the current Chinese trade surplus can be attributed to the huge decline in the price of oil since 2014. While the quantity of crude oil imported by China did not decline, the value did decline very substantially, enlarging the value of the trade surplus. Moreover, because of the delay in repatriation of exports proceeds and the acceleration of import payments, the trade surplus has not yet been fully reflected in the current level of foreign exchange reserves. However, as further discussed below, it will be eventually.

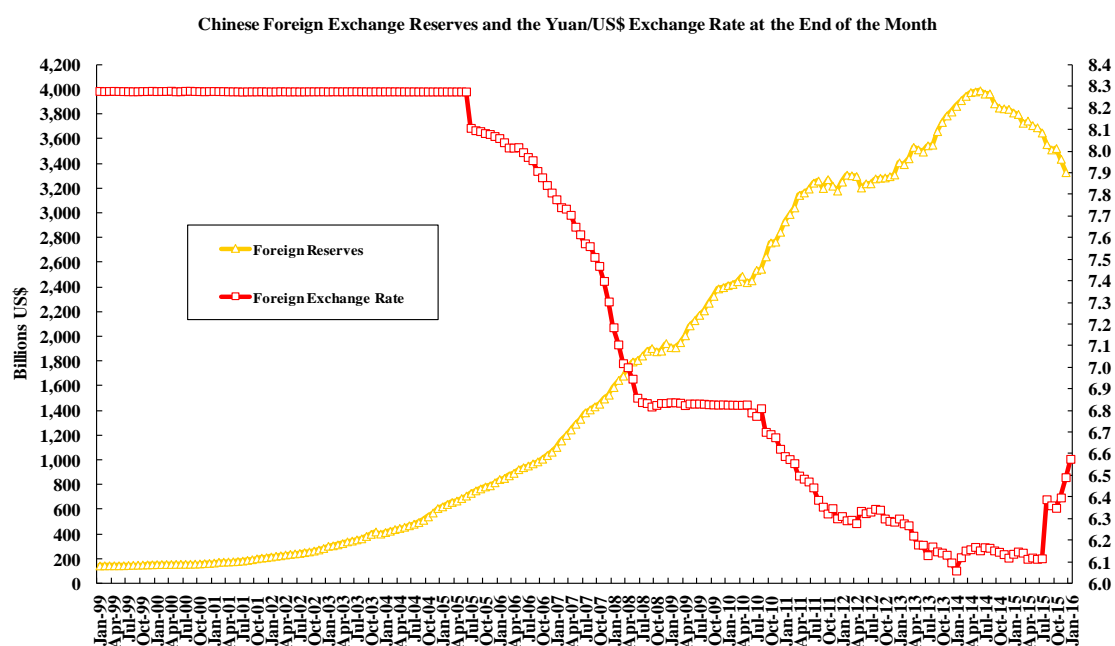
### 3. Are Chinese Foreign Exchange Reserves Adequate?

But if the Renminbi is not over-valued, then what is the justification for a devaluation? One indicator that some analysts point to is the decline in the level of Chinese official foreign exchange reserves held by the People’s Bank of China (the central bank of China) over 2015. The level of Chinese official foreign exchange reserves reached a peak of almost US\$4 trillion in mid-2014. Then it fell to



US\$3.843 trillion and US\$3.330 trillion at the end of 2014 and 2015 respectively. As of the end of January 2016, the level of Chinese reserves stood at US\$3.23 trillion. It fell further to US\$3.20 trillion at the end of February but a much slower rate (See Chart 5.) However, even with these recent declines, China still has the largest official foreign exchange reserves in the World, followed by Japan. The question is whether at this current rate of net outflow of over US\$500 billion a year, the Chinese official foreign exchange reserves are still adequate.

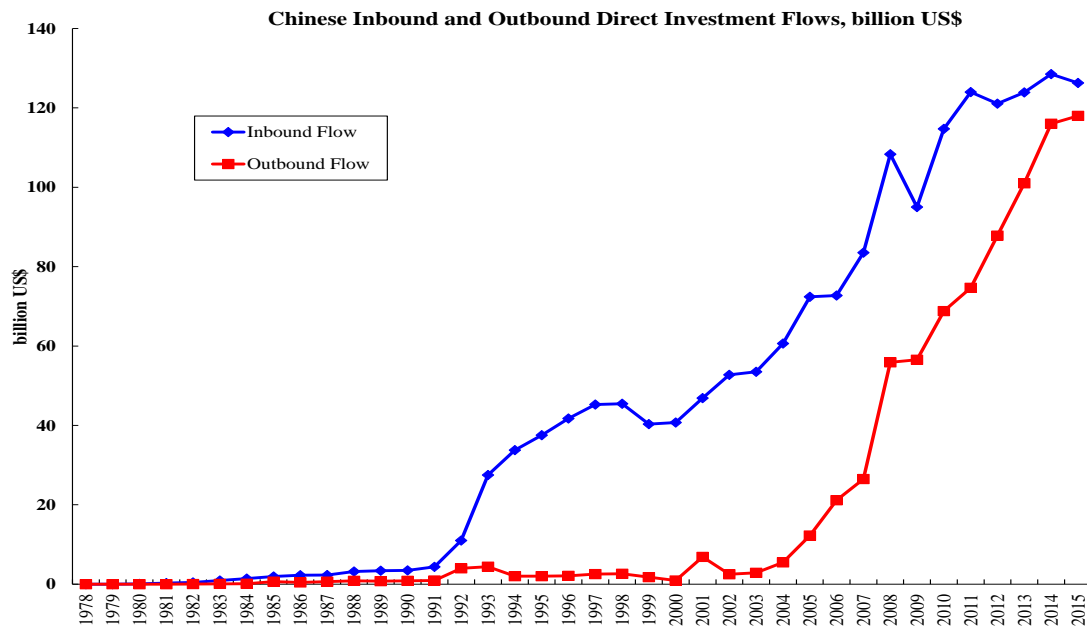
**Chart 5: Chinese Official Foreign Exchange Reserves and the Yuan/US\$ Exchange Rate**



The answer hinges on how much of the approximately US\$500 billion net outflow is one-off in nature or likely to be recurrent. At the present time, Chinese official foreign exchange reserves amount to more than a year and a half of Chinese imports, more than three times what the International Monetary Fund would regard as adequate. In addition, China also has an annual trade surplus in goods and services of over US\$450 billion. The inbound direct investment flow of US\$126.3 billion and the outbound direct investment flow of US\$118 billion in 2015 were approximately balanced. Despite the rapid growth of Chinese outbound direct investment in recent years, the inbound direct investment flow still exceeds the outbound flow every year (see Chart 6). Under normal circumstances, the level of foreign exchange reserves should have risen by approximately US\$450 billion, the

amount of the trade surplus. Instead, reserves declined by more than US\$500 billion in 2015, implying a gross outflow totaling approximately US\$950 billion (US\$450 billion plus US\$500 billion) from the official foreign exchange reserves<sup>4</sup>. What explains this large gross outflow?

**Chart 6: Chinese Inbound and Outbound Direct Investment Flows, billion US\$**



One way to think about this problem is to suppose that the repatriation of export proceeds is delayed by an average of three months and that payment for imports is accelerated also by an average of three months because of the expectation that the Renminbi will be significantly devalued. This would decrease the foreign exchange earned through exports by approximately US\$640 billion<sup>5</sup> and increase foreign exchange expended on imports by US\$525 billion<sup>6</sup>, for a total of foregone foreign exchange of US\$1.165 trillion in 2015. An additional possible source of “apparent” outflow is the income from and capital loss (or gain) of the invested

<sup>4</sup> This is not to deny that there might also have been capital flight by both Chinese and foreign enterprises and households in China. Given the economic slowdown in China, and the corresponding decline in the rate of return, it is natural that enterprises and households may wish to seek better returns abroad. However, the expected rates of return worldwide are also not that high. Thus, if the expectation of the Renminbi exchange rate can be stabilized, there should not be a massive capital flight.

<sup>5</sup> This is approximately one-quarter of the actual exports of goods and services in 2015 of US\$2.556 trillion.

<sup>6</sup> This is approximately one-quarter of the actual imports of goods and services in 2015 of US\$2.102 trillion.

foreign exchange reserves. Assuming that the foreign exchange reserves are invested two-thirds in short-term U.S. Dollar instruments, which have negligible returns, and one-third in other major currencies, also with negligible returns but a devaluation relative to U.S. Dollars of 10%, the capital loss in 2015 may be estimated as approximately US\$120 billion, resulting in a possible total decline of the official foreign exchange reserves of US\$1.285 trillion. This is larger than the US\$950 billion figure above for the actual total outflow<sup>7</sup> but is of the same order of magnitude. (Of course, all of this is purely conjectural.) Thus, the hedging activities will result in a temporary surge in the outflow of foreign exchange; but most of the outflowed foreign exchange will eventually return because the exporters need Renminbi to pay for their wages and other expenses in China and importers cannot afford to prepay their imports further and further in advance. When the public is convinced that the Renminbi will not be devalued, hedging activities will be reversed, things will return to normal and the level of foreign exchange reserves should begin to rise again. What about capital flight? There might well have been some capital flight. However, it is important to realize that capital flight is mostly one-off—because once capital leaves, it is gone, and it cannot leave a second time. What is clear is that the US\$500 billion net decline in foreign exchange reserves cannot be recurrent. Moreover, China is supposed to still have capital controls in place. The existing laws and regulations on capital control can and should be more strictly enforced.

It is also true that many Chinese enterprises, both state-owned and private, are on a spending spree overseas, buying up all kinds of assets. And they will need to use foreign exchange. However, as mentioned above, inbound and outbound foreign direct investments are approximately balanced at this time. Net foreign direct investment flow is unlikely to exceed a couple hundred billion U.S. Dollars at a maximum in the foreseeable future<sup>8</sup>. Moreover, many of these acquisitions can be substantially financed in the investee country in the currency of the investee and do not necessarily require full cash payment in foreign exchange. Financing in the investee country has the additional advantage of providing a natural long-term hedge for the Chinese outbound direct investor against exchange rate risks as potential

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<sup>7</sup> This actually suggests that our estimated outflow due to the hedging activities may have been too large.

<sup>8</sup> If outbound direct investment becomes too large, the government can always tighten up the approval process and/or require the outbound Chinese direct investor to finance its investment in whole or in part offshore.

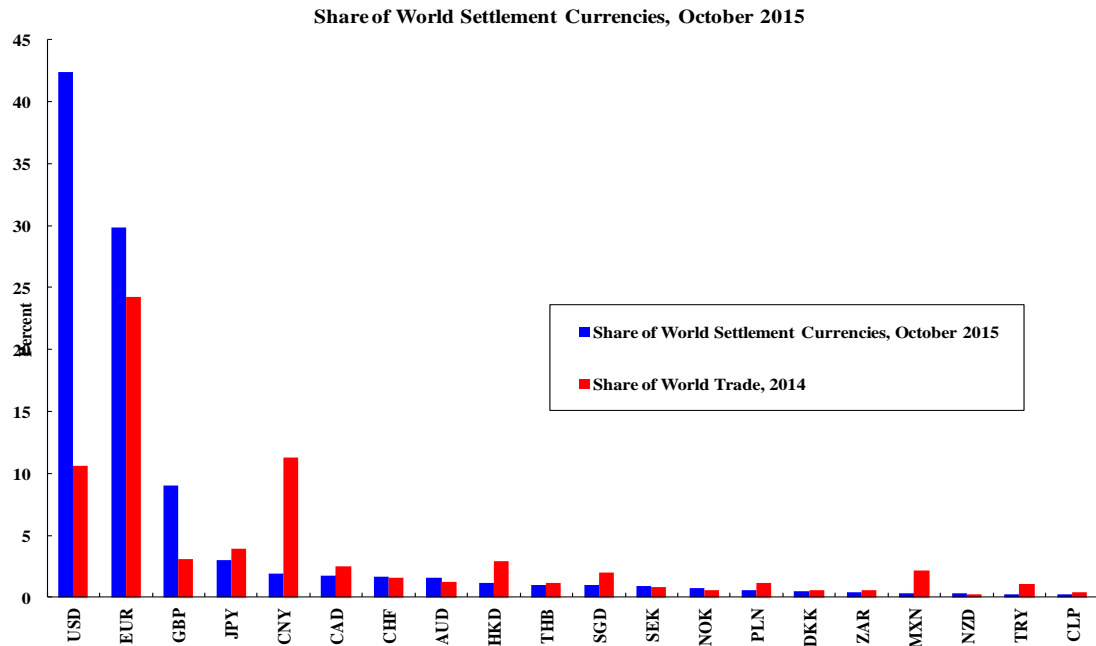
changes in the value of assets and revenues caused by changes in the exchange rate of the investee country can be offset against potential changes in the values of liabilities and interest payments caused by the same.

Now suppose public confidence in the Renminbi can be restored, and the market no longer expects that there will be significant devaluation, then the repatriation of export proceeds, the payment of imports and the repayment of foreign loans will all return to business as usual and capital outflow will stop. There will be a surge in the level of official foreign exchange reserves, followed by a steady annual increase equal to the trade surplus (or decrease equal to the trade deficit, if any) less net outbound direct and portfolio investment.

Another way of assessing the adequacy of the official foreign exchange reserves of a country is to look at the degree to which a country's own currency can be used for the invoicing, clearing and settlement of its international transactions. If a country can use its own currency for some of its international transactions, it does not need to maintain as high a level of official foreign exchange reserves for transaction purposes. The United States can use its own currency for all of its international transactions. Thus, it does not need to maintain any official foreign exchange reserves. However, most other countries have to maintain a large official foreign exchange reserves to enable transactions with countries that do not trust their own currencies. If neither one of two trading partner countries trust each other's currencies, then a third currency acceptable to both will have to be used.

After the demise of the Bretton Woods system in 1971, the U.S. Dollar has become the currency of choice for international transactions. It is thus no accident that most international transactions are settled in U.S. Dollars and that most central banks and monetary authorities hold a large proportion of their foreign exchange reserves in U.S. Dollars. As of October 2015, the U.S. Dollar accounted for 43% of the World settlement of international transactions even though U.S. international trade accounted for only slightly more than 10% of World trade. In contrast, the Renminbi accounted for just a little more than 2% of the World settlement even though its share of World trade was similar to that of the U.S. (See Chart 7.)

**Chart 7: Distribution of World Trade Settlement Currencies versus World Trade, October, 2015**

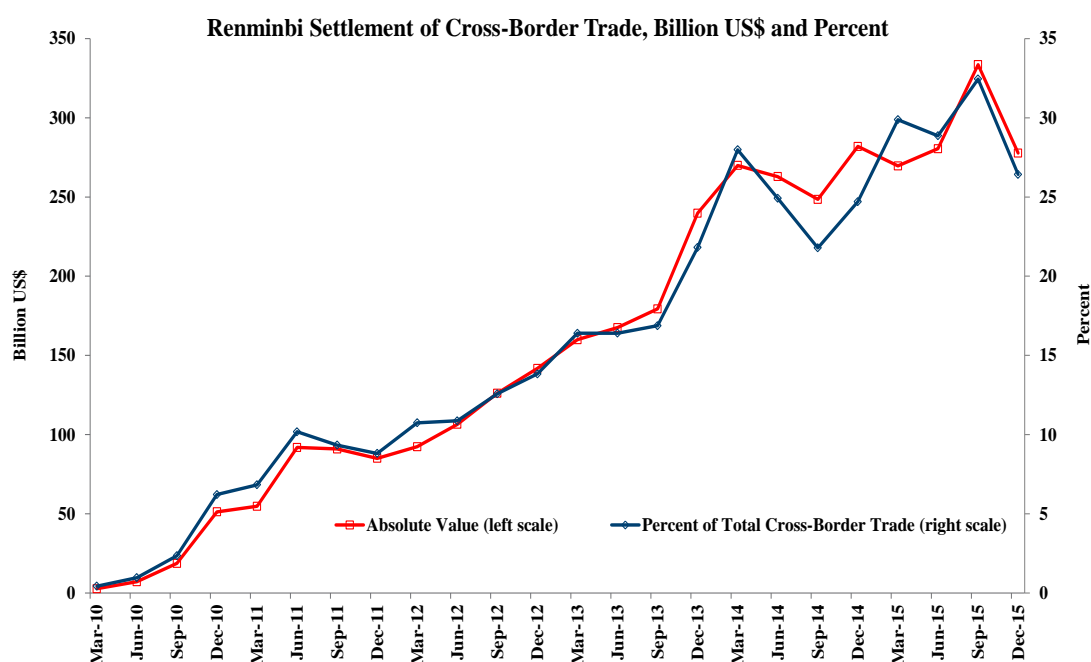


Own currency settlement between two trading partner countries is actually preferred by both exporters and importers because it reduces transactions costs and exchange rate risks. For example, if a Chinese exporter exports to India, it may not be willing to accept the Indian Rupee, and may demand to invoice and be paid in U.S. Dollars. This means that there are at least two currency conversions for this transaction, first from Rupee to U.S. Dollar, and then from U.S. Dollar to the Renminbi. The transactions costs are therefore doubled. Moreover, there are also the exchange rate risks in the two currency conversions—the risk in the Rupee/US\$ exchange rate and the risk in the Yuan/US\$ exchange rate, which must also be assumed by the respective transacting parties in China and India. Such risks exist because of the time lag between the placing of an export order and the arrival of and payment for an import shipment, which is typically months or even longer.

To the extent that Chinese cross-border trade can be invoiced, cleared and settled directly in Renminbi, China can manage with a lower level of official foreign exchange reserves. In 2010, Chinese exporters and importers began to use the Renminbi as an invoicing, clearing and settlement currency for their international transactions. Starting from virtually zero in the first quarter of 2010, Chinese cross-border trade settled in Renminbi increased rapidly to 26.4% of total Chinese

cross-border trade by the fourth quarter of 2015, or an annualized rate of more than US\$1.1 trillion (see Chart 8). (Actually, the proportion of Chinese cross-border trade settled in Renminbi already reached 32.4% in the third quarter of 2015 and would have grown higher were it not for the unexpected Renminbi devaluation of 4% in August 2015.). Thus, in principle, China does not need to maintain quite as much official foreign exchange reserves, and should be able to allow the level of its foreign exchange reserves to decline without incurring additional risk. Moreover, going forward, there is still significant room for the growth of Renminbi invoicing, clearing and settlement of Chinese international transactions. Currently, approximately 50% of Japanese international transactions is settled in Yen.

**Chart 8: Renminbi Settlement of Chinese Cross-Border Trade, Billion US\$ and Percent**



China may continue to experience a net capital outflow in the future, which is natural and expected as its enterprises (and in time its households) diversify their investments to overseas. If and when capital controls are completely lifted, there will be a significant one-time stock adjustment as Chinese enterprises and households re-balance their portfolios to include more foreign assets. However, this may also be accompanied by capital inflows resulting from foreign investors also re-balancing their portfolios to include more Chinese assets. In any case, the stock adjustments in

both directions are likely to be one-time occurrences, to be followed by more stable annual flows in both directions.

Still another useful way of looking at the adequacy of foreign exchange reserves is that they are maintained in part to enable the central banks and monetary authorities to keep the exchange rate stable. If there is short-term speculative pressure to appreciate that is not justified by the macroeconomic fundamentals, the central bank can buy foreign exchange with the domestic currency, keeping the exchange rate stable, and in the process increasing the level of official foreign exchange reserves. Conversely, if there is short-term speculative pressure to devalue, the central bank can sell foreign exchange to buy the domestic currency, again keeping the exchange rate stable, and in the process decreasing the level of official foreign exchange reserves. Thus, the up and down movements in the level of official foreign exchange reserves are precisely what enable the central bank to keep the exchange rate stable. If the central bank tries to keep the official foreign exchange reserves at a constant level, the result is inevitably much greater volatility in the exchange rate. But there is really no good economic justification for keeping the level of official foreign exchange reserves constant. Fluctuations in the level of foreign exchange reserves are in fact the substitutes for fluctuations in the exchange rate and provide the buffers for maintaining exchange rate stability.

Based on the above analysis, we conclude that the current level of Chinese official foreign exchange reserves of US\$3.20 trillion is quite adequate, especially taking into account that the Renminbi can now be used in the invoicing, clearing and settlement of more than a quarter of Chinese international trade transactions. Moreover, in addition to the official foreign exchange reserves held by the People's Bank of China, both the China Investment Corporation (the sovereign wealth fund of China) and the Chinese National Social Security Fund, hold significant net foreign assets, which can be used to supplement the official foreign exchange reserves if it ever becomes necessary.

#### **4. Is a Devaluation in the Best Interests of China?**

It is well known and well understood that stable exchange rates facilitate cross-border trade and cross-border long-term direct and portfolio investments. Volatile exchange rates have the opposite effect. The Chinese economy needs a

relatively stable exchange rate in order to continue to grow and prosper. A devaluation of the Renminbi at this time is likely to affect confidence both at home and abroad, encouraging negative expectations on the exchange rate. It is also likely to attract more currency speculation, leading potentially to even greater volatility in the exchange rate. And expectations of a devaluation, even if economically unjustified, can be very dangerous because they can be self-fulfilling, certainly in the short run.

Would a devaluation of the Renminbi increase Chinese exports? A small devaluation of the Renminbi per se is unlikely to increase Chinese exports significantly, especially given that most of the rest of the World economies are in either recession, stagnation, or a slow recovery, even though it may increase the profits of Chinese exporters marginally in Renminbi terms. Moreover, in order for a devaluation to increase Chinese exports meaningfully, it may have to be on the order of 15% or higher. But it is not really in the best interests of China to return to making garments, shoes and stuffed toys all over again, with the low standard of living that it implies for its workers. Furthermore, the Chinese economy has also grown too large to be sustainable by increases in exports alone. At the same time, the external environment is not that favorable for international trade, which only grew at the lowest rates over the past couple of years.

In addition, a devaluation is helpful only to the extent that the potential competitors do not also devalue in response. If the competitors also devalue, then not only is there no competitive advantage gained, but the terms of trade will also deteriorate significantly. It is therefore also not in the best interests of China to try to compete with the other East Asian developing economies through devaluation. Instead, China will be much better off trying to move up the value chain in its exports, as Japan, Hong Kong, Taiwan and South Korea did before.

Finally, a devaluation that is not well communicated and/or justified can affect confidence in the currency and by extension in the economy negatively. A loss of confidence can lead to negative expectations about the future, and such expectations can be self-fulfilling. Negative expectations on the part of enterprises and households can cause cutbacks in their investment and consumption respectively, which in turn can lead to no or low economic growth. No or low economic growth will confirm and reinforce the negative expectations, creating a vicious cycle of negative expectations and no or low growth feeding on each other. This is what has



been happening in Japan for over two decades. It is critically important for China to maintain public confidence and avoid falling into a similar trap.

## **5. The Risks of Short-Term Capital Flows**

What lessons can be learnt from the 1997-1998 East Asian currency crisis, the 2008 global financial crisis, the 2013 tapering crisis and the 2015 Swiss Franc crisis? One lesson is that free and unregulated short-term capital flows, both outbound and inbound, can be greatly de-stabilizing to the exchange rate and the capital market of an economy. Short-term capital inflows and outflows pose particular risks to developing economies because they unnecessarily increase the degree of volatility of the exchange rate and therefore discourage international trade and long-term international direct and portfolio investment. They also disrupt the local capital markets.

In fact, while economic theory tells us that voluntary trade between two countries always benefit both (even though possibly to different degrees), and long-term direct investment benefits both the investor and the investee countries, it says nothing about the benefits and costs of short-term cross-currency capital flows to either the origin country or the destination country. Short-term capital inflows cannot be productively employed in the destination country because of a double mismatch: currency mismatch and maturity mismatch. Borrowing in a foreign currency when the potential revenue is in the domestic currency and borrowing short-term funds to finance long-term projects are both formulae for economic disasters down the road.

Even with the ending of the “Quantitative Easing 3 (QE3)” by the U.S. Federal Reserve Board, the quantitative easing policies being pursued by the European Central Bank and the Bank of Japan will continue to provide an immense amount of liquidity to the World capital markets—as much as US\$1.5 trillion in a year. Central banks and regulatory agencies should monitor capital flows regularly and if necessary adopt measures to discourage short-term capital inflows. They should be ready with instruments such as direct intervention in the foreign exchange market, capital controls, negative rate of interest for non-resident deposits, and a Tobin tax on capital account inflows and outflows, if necessary. At this time, they will do well to discourage short-term borrowing in foreign currencies and encourage repayment of

short-term foreign-currency denominated loans. They should also limit the use of leverage in the buying and selling of currencies and their derivatives as well as stock indexes and their derivatives, especially by non-residents.

One way to discourage and reduce short-term capital flows is the imposition of a Tobin tax on both inbound and outbound capital account flows (but exempting all current account flows). The Tobin tax was first proposed by the late Prof. James Tobin, Nobel Laureate in Economic Sciences, as a currency transaction tax that would discourage short-term speculation in the aftermath of the East Asian currency crisis of 1997-1998. It can be applied to cross-border capital account currency exchange transactions as a device for discriminating between long-term and short-term capital flows. Suppose a Tobin tax of 1% is imposed on all capital account flows. Then a one-month round-trip from U.S. Dollars into Renminbi and back will imply a cost of 24% per annum, which should be sufficiently prohibitive to discourage most currency speculators. For a direct investor with a five-year time horizon, the cost is only 0.4% per annum, which is completely affordable.

Moreover, it is not well known, but a Tobin tax can make possible the trilemma called “The Impossible Trinity”. “The Impossible Trinity”, a concept due to Prof. Robert Mundell, Nobel Laureate in Economic Sciences, states that it is impossible for an economy to satisfy all three of the following conditions at the same time: (1) A fixed exchange rate; (2) Free capital movement (complete absence of capital controls); and (3) An independent monetary (that is, interest rate) policy. It should be noted that this trilemma actually has no direct relevance for China because China still maintains capital controls (although probably not as tightly as they can or should be). However, the imposition of a Tobin tax makes it possible to maintain an interest rate differential between domestic capital and international capital, thus allowing the domestic central bank or monetary authority to have some degree of flexibility in its monetary, and in particular, interest rate policy, even in the presence of free capital movement (but subject to the Tobin tax) and a fixed (stable) exchange rate.

How does this work? Suppose the Renminbi is pegged to the U.S. Dollar and there is free capital movement, only subject to the payment of a Tobin tax of 1% upon entry and 1% upon exit. Suppose the U.S. interest rate is zero, or very close to zero and the Chinese interest rate for one-year fixed deposits is 2% per annum. In principle, U.S. investors can invest in one-year fixed Renminbi deposits and earn 2%

per annum and then convert back into U.S. Dollars at the fixed exchange rate the end of one year. If this were indeed the case, China would be flooded with U.S. Dollar inflows, and the Renminbi interest rate would fall to zero. However, with the 1% Tobin tax, the U.S. investors would be able to earn nothing net, and hence would not invest in one-year Renminbi fixed deposits. Thus, for the one-year Renminbi interest rate, there would be at least a range of flexibility of 2% up or down relative to the one-year U.S. interest rate; for the one-month Renminbi interest rate, there would be a possible 24% range up or down for the Renminbi interest rate, more than enough for China to have an independent interest rate policy. However, the long-term interest rates of both China and U.S. would converge even with a Tobin tax. For example, with a 1% Tobin tax, the maximum potential difference in the annual interest rate on ten-year bonds between China and the U.S. would be 0.2%.

## **6. Beware of Predatory Speculation**

At the present time, the rates of interest in the developing economies are expected to rise as the U.S. interest rate rises, and their currencies are also expected to devalue relative to the U.S. Dollar. There may be many opportunities for predatory speculation against these economies and their currencies by hedge funds. A “double-short” strategy, as employed by George Soros back in 1992 against the Bank of England, that is, selling short simultaneously a country’s currency and its bonds (or stock index), can potentially be very profitable for hedge funds (provided that they are big enough). This is because if the country tries to defend its exchange rate, it will have to be buying back its own currency and in so doing reduces domestic liquidity and hence causing its interest rate to rise, or it may raise its interest rate directly as part of the defense. In either case, the domestic interest rate will rise, and the price of its bonds (and stock index) will fall. Thus, the hedge fund will gain from either its short-selling of the currency, or from its short-selling of the bonds (or stock index), or both. This was what happened to many of the East Asian economies during the 1997-1998 East Asian currency crisis.

The current environment in which rising interest rates and falling exchange rates are expected in many developing economies provides the ideal situation for predatory speculators to strike. That is why governments and central banks must remain vigilant. A “voluntary” devaluation in the presence of a significant trade

surplus may be taken as a sign of weakness and an invitation to predatory speculators to further attack the currency. It can also undermine domestic public confidence. The appropriate response to predatory speculation is to reduce the permissible leverage in short-selling the currency and the bonds (or stock index) and to impose or tighten (the enforcement of) capital controls if necessary. With capital controls still in place in China, it is not so easy for speculators to attack the Renminbi directly in China, but the attack on the Renminbi can be launched at the offshore Renminbi centers, especially Hong Kong, the largest offshore Renminbi center of them all. Limiting permissible leverage will help the offshore Renminbi centers to defend themselves against predatory speculation. In addition, Chinese financial institutions with operations in Hong Kong can perform a useful but also profitable function by arbitraging between the offshore and onshore Renminbi exchange rates so as to prevent the gap between them from becoming too wide.

## **7. The Long-Term Goals of Renminbi Internationalization**

What are the longer-term goals of Renminbi internationalization? The Renminbi is on course to become a major international currency for transaction purposes. It will be increasingly used in international transactions involving Chinese nationals as one or both of the transacting parties. Over time, it may even be used in transactions between third-party countries, especially those that run a trade surplus vis-a-vis China and hence have a ready source for Renminbi balances<sup>9</sup>. What the Renminbi needs to do is hold its exchange rate steady and not to adjust its value abruptly. By reducing its volatility relative to the U.S. Dollar, the Renminbi can become the preferred currency for international transactions purposes for other countries. Eventually, it may also be used as a unit of account for cross-border credit, debt and loan transaction purposes. For example, some of the loans to be made by the Asian Infrastructural Investment Bank (AIIB) can be denominated in whole or in part in Renminbi if the borrowers so wish; and some of the long-term projects under the “One Belt, One Road” initiative can be partially financed through the issuance of Renminbi-denominated bonds.

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<sup>9</sup> For example, other countries, such as Russia, Iran and the Shanghai Organization countries, may find it convenient to use Renminbi for their international transactions.

It is also the objective of the People's Bank of China for the Renminbi to become capital account convertible in time, possibly with appropriate safeguards that will reduce short-term capital inflows and outflows, such as a Tobin tax on capital account flows, so that the exchange rate can be determined by supply and demand on the foreign exchange market free from the influence of short-term currency speculation. A Tobin tax can also be used as a transitional device, as a zero rate for the Tobin tax is equivalent to full capital account convertibility.

Does the Renminbi aspire to become a major international reserve currency to be widely held by other central banks and monetary authorities as both a store of value and an investment asset? The benefit of being a major international reserve currency is the potential of seigneurage, that is, the rewards from the provision of an international medium of exchange. A country with international seigneurage does not need to balance its trade, as other countries are perfectly willing to accept its currency and bonds as payment for their exports (but these are only pieces of paper with almost zero marginal costs to the issuing country). The U.S., by providing most of the World's medium of international exchange (see Chart 7), has been and continues to be a major beneficiary of seigneurage. However, in order for a country to benefit from its seigneurage, it must be prepared to run a large trade deficit vis-a-vis the rest of the World as a whole, as the U.S. has been doing. Otherwise, it can derive little real benefit. Thus, for a mercantilist country, such as Japan, that is unwilling to run a large trade deficit, the potential real benefit from its currency serving as a major international reserve currency is small. It is also not clear that China at its present stage of development would want to run a large trade deficit. China actually aims at balancing its international trade in goods and services. So the real benefit of the Renminbi becoming a major international reserve currency, apart from bragging rights, is not likely to be large.

Another potential cost of becoming a widely held major international reserve currency is the risk of other central banks and monetary authorities selling the currency and bonds denominated in the currency en masse for political reasons at an inopportune moment. If it happens, not only will the exchange rate be greatly de-stabilized but the credit and financial markets and the capital market in general

will be negatively affected as well<sup>10</sup>. So unless a country is too big to fail, like the U.S., so that other countries will (collectively) refrain from selling its currency or its bonds out of their own self-interests, or is universally popular, like Switzerland, it is probably somewhat risky to have large amounts of its currency and bonds held by other central banks and monetary authorities.

But by far the most important objective is for the Renminbi to avoid losing the confidence of the Chinese people. This means China must try to maintain the purchasing power of the Renminbi, both domestically and abroad, at a stable level if at all possible.

## **8. Concluding Remarks**

Since the Renminbi is not over-valued, and a devaluation is not in the best interests of China, and China has the ability to stabilize the Renminbi, it is unlikely that the Renminbi will devalue significantly.

There is no reason for China to want to challenge U.S. Dollar hegemony. However, it does want to maintain a relatively stable exchange rate so as to facilitate and promote its cross-border trade and direct investment. Exporters, importers and foreign direct investors, both inbound and outbound, all prefer a stable exchange rate. Moreover, for the Chinese people, it is even more important for the value of Renminbi to remain stable in terms of its purchasing power, both domestically and abroad. An abrupt devaluation of the Renminbi will have a direct negative impact on their confidence in the Renminbi and in the economy. It is also in China's interests to promote the use of the Renminbi, its own currency, as a medium of international exchange and eventually as an international store of value. All of this requires a relatively stable exchange rate vis-a-vis the U.S. Dollar.

In order to maintain long-term relative stability of the Renminbi exchange rate, given the continuing and rising strength of the U.S. Dollar relative to all other currencies, it is not unreasonable for the Yuan to appreciate a little less than the U.S. Dollar relative to the other major currencies going forward and thus to devalue slightly relative to the U.S. Dollar. This would allow the Yuan to avoid a sharp

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<sup>10</sup> For example, Japan may be reluctant to have other East Asian central banks and monetary authorities hold large amounts of Yen bonds for fear that they may decide to sell for domestic political reasons such as a visit by senior Japanese government officials to the Yasukuni shrine.

devaluation relative to the other major currencies if and when the U.S. Dollar eventually weakens and to appreciate with respect to the U.S. Dollar then. The Renminbi exchange rate would thus be less volatile than the other currencies.

As both Premier LI Keqiang and Governor ZHOU Xiaochuan have assured the public recently, and for the reasons laid out above, the Renminbi is unlikely to devalue abruptly and significantly. In fact, even though the Renminbi has devalued relative to the U.S. Dollar during the past year, it has actually appreciated relative to most other currencies. Measured against a trade-weighted basket of currencies, the Renminbi is almost exactly where it was at the beginning of 2015. Looking ahead, there will likely be small fluctuations in the Renminbi exchange rate but no significant devaluations or, for that matter, revaluations.