

# The Internationalisation of the Renminbi

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Lawrence J. Lau, Ph. D.

Ralph and Claire Landau Professor of Economics, The Chinese Univ. of Hong Kong  
and

Kwoh-Ting Li Professor in Economic Development, Emeritus, Stanford University

Executive Leadership Programme  
Institute of Global Economics and Finance  
The Chinese University of Hong Kong  
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Tel: (852)3550-7070; Fax: (852)2104-6938

Email: [lawrence@lawrencejlau.hk](mailto:lawrence@lawrencejlau.hk); WebPages: [www.igef.cuhk.edu.hk/ljl](http://www.igef.cuhk.edu.hk/ljl)

\*All opinions expressed herein are the author's own and do not necessarily reflect the views of any of the organisations with which the author is affiliated.

# Outline

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- ◆ Is the Renminbi Under-Valued?
- ◆ The Meaning of Internationalisation
- ◆ The Renminbi as an Invoicing and Settlement Currency for Cross-Border Transactions
- ◆ The Renminbi as an International Funding Currency
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- ◆ The Renminbi Exchange Rate Determination Mechanism
- ◆ Concluding Remarks

# Introduction

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- ◆ The World economy has been depending on the United States to supply the international liquidity (international money supply) to support international transactions in trade and investment and for any other purposes. The international transactions balances used by most economies consist of U.S. dollars held as foreign exchange reserves in their respective central banks, which in turn have mostly been earned through trade surpluses with the United States and other economies.

# Introduction

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- ◆ The rapid growth of international trade and investment during the past two decades has significantly increased the demand for international liquidity. However, the United States may no longer be willing or able or both to continue to supply the international liquidity post the global financial crisis. For example, it may start running trade surpluses instead of deficits and therefore reducing the outflow of U.S. Dollars to the rest of the World.
- ◆ Moreover, the U.S. Dollar exchange rate may also become much more volatile going forward.

# Introduction

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- ◆ Three questions will arise:
- ◆ Will the supply of international liquidity continue to be adequate without the U.S. continuing to export U.S. Dollars?
- ◆ Are there alternatives to the use of the U.S. Dollar as an international currency?
- ◆ Will central banks around the World be willing to continue to hold a large proportion of their foreign exchange reserves in U.S. Dollars?
- ◆ This means the role of the Renminbi in the World economy must be re-examined.

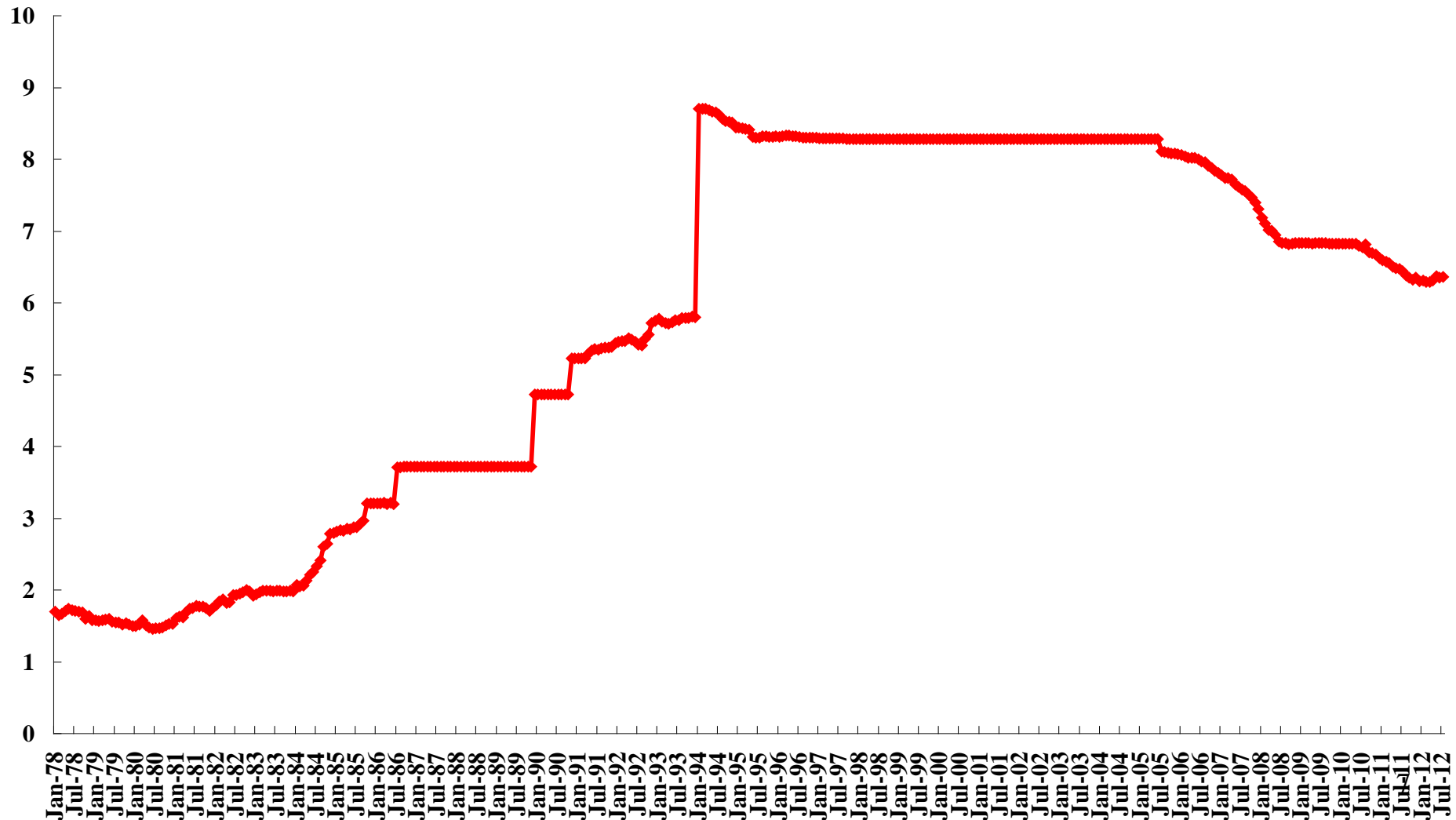
# Introduction

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- ◆ The Renminbi has been current accounts (including trade in both goods and services) convertible since 1994, when China undertook a major foreign exchange policy reform, coupled with a significant devaluation at the time.
- ◆ The Renminbi has also over time become essentially long-term capital accounts convertible. Capital movements related to inbound and outbound foreign direct investment, and foreign portfolio investment in the forms of “Qualified Foreign (or Domestic) Institutional Investor (QFII or QDII)” as well as the repatriation of principal and profits are readily approved.
- ◆ However, it has not yet become fully short-term capital accounts convertible. There still exist both inbound and outbound controls on capital movements perceived to be short-term in nature in China.

# Nominal Exchange Rate of the Renminbi, Yuan/US\$, 1978-present

Nominal Exchange Rate of the Renminbi, Yuan/US\$, 1978-present



# Introduction

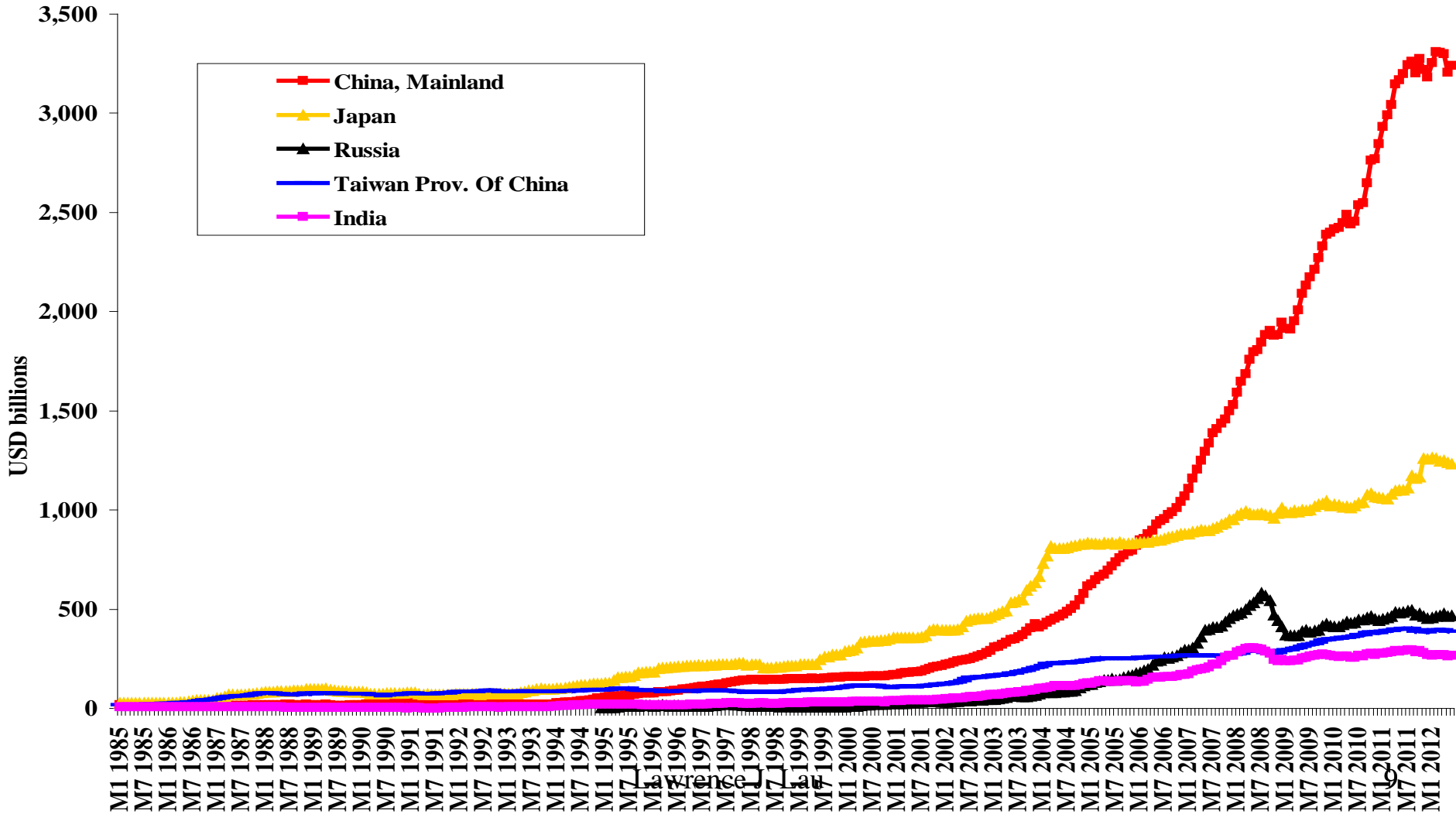
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- ◆ Today, the People's Bank of China, China's central bank, has the World's largest official foreign exchange reserves, in excess of US\$3.2 trillion, almost all of which has been acquired during the past decade, followed by Japan with US\$1.2 trillion.
- ◆ The People's Bank of China, China's central bank, is now the World's largest holder of U.S. Treasury securities, with not quite US\$1.2 trillion, followed by Japan as a close second.



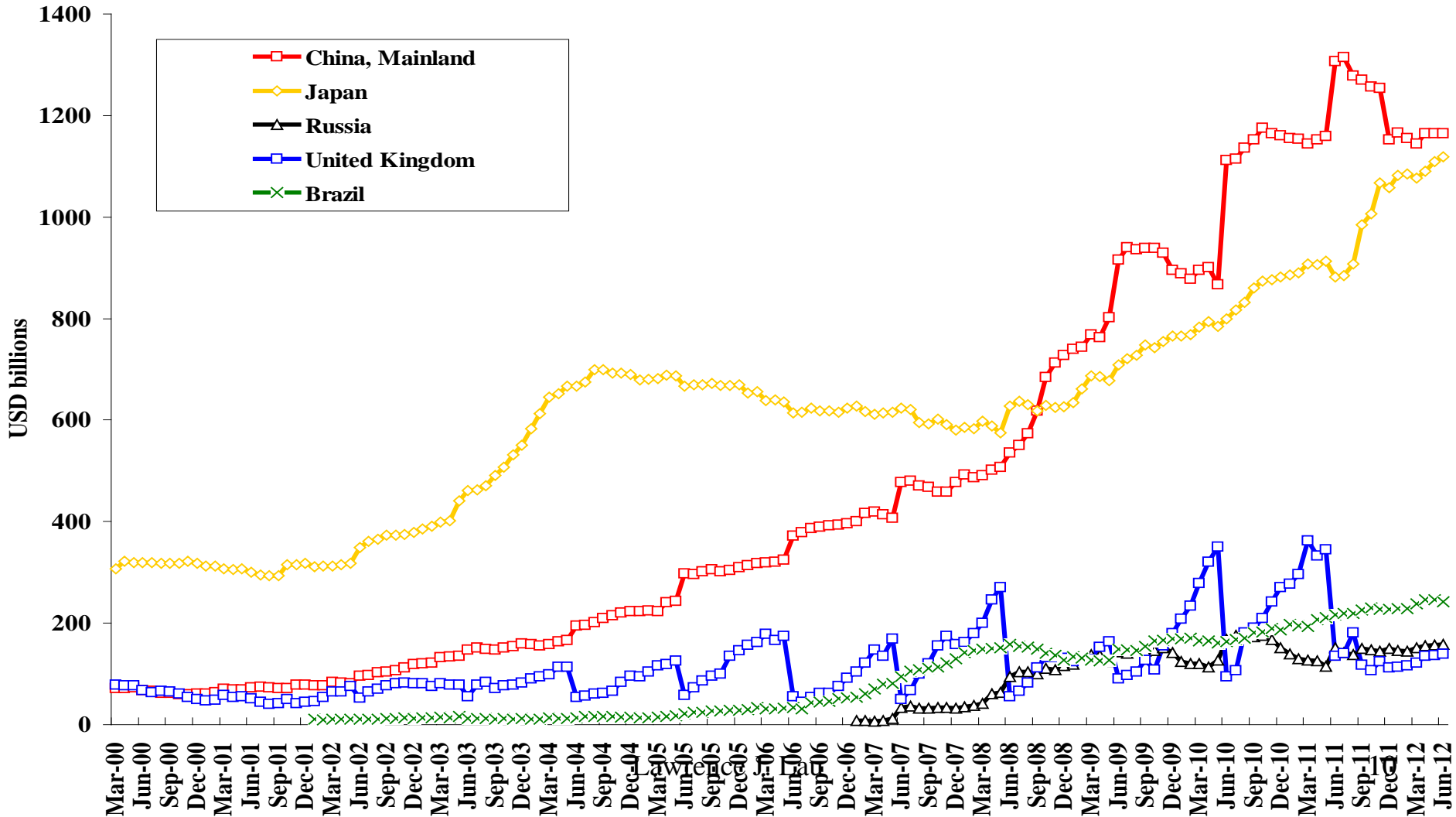
# Total Foreign Exchange Reserves minus Gold, Selected Countries and Regions

Total Reserves minus Gold of Selected Countries and Regions



# Major Foreign Central Banks' Holdings of U.S. Treasury Securities

Major Foreign Central Bank's Holders of U.S. Treasury Securities



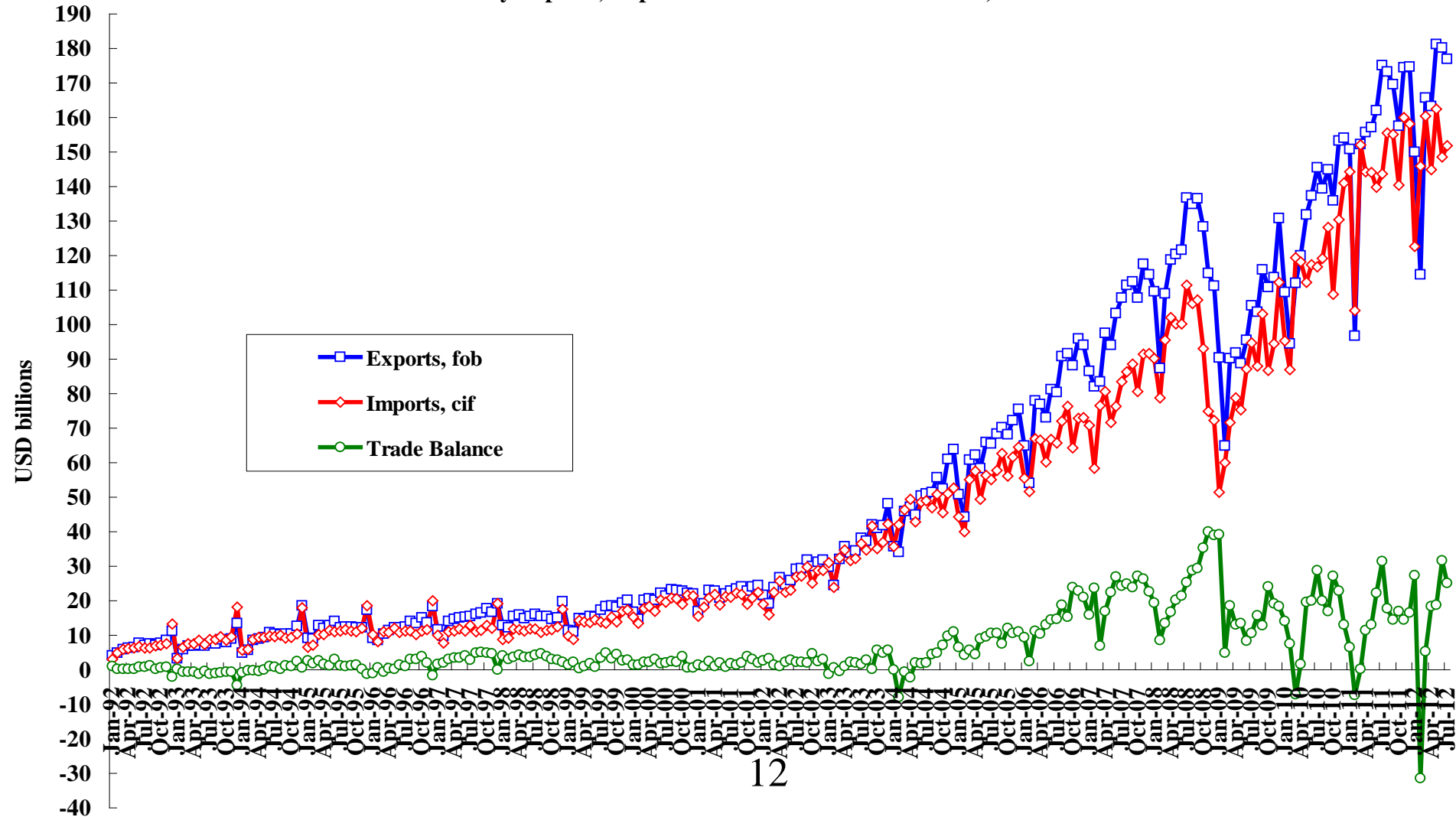
# Introduction

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- ◆ Most of the Chinese foreign exchange reserves has been built up through its trade surpluses vis-a-vis the World since 2005, through income earned abroad, and through foreign investment and hot money inflows. It should be noted that China did not have much of a trade surplus vis-a-vis the World, only a relatively modest level of foreign exchange reserves, before 2005.
- ◆ The Chinese trade surplus began to decline in 2008, to just 2 percent of its GDP in 2011. If current trends continue, the goal of essentially balanced international trade can probably be achieved no later than 2015, as provided by China's Twelfth Five-Year (2011-2015) Plan, without necessarily any large adjustment in the nominal Yuan/U.S. Dollar exchange rate.

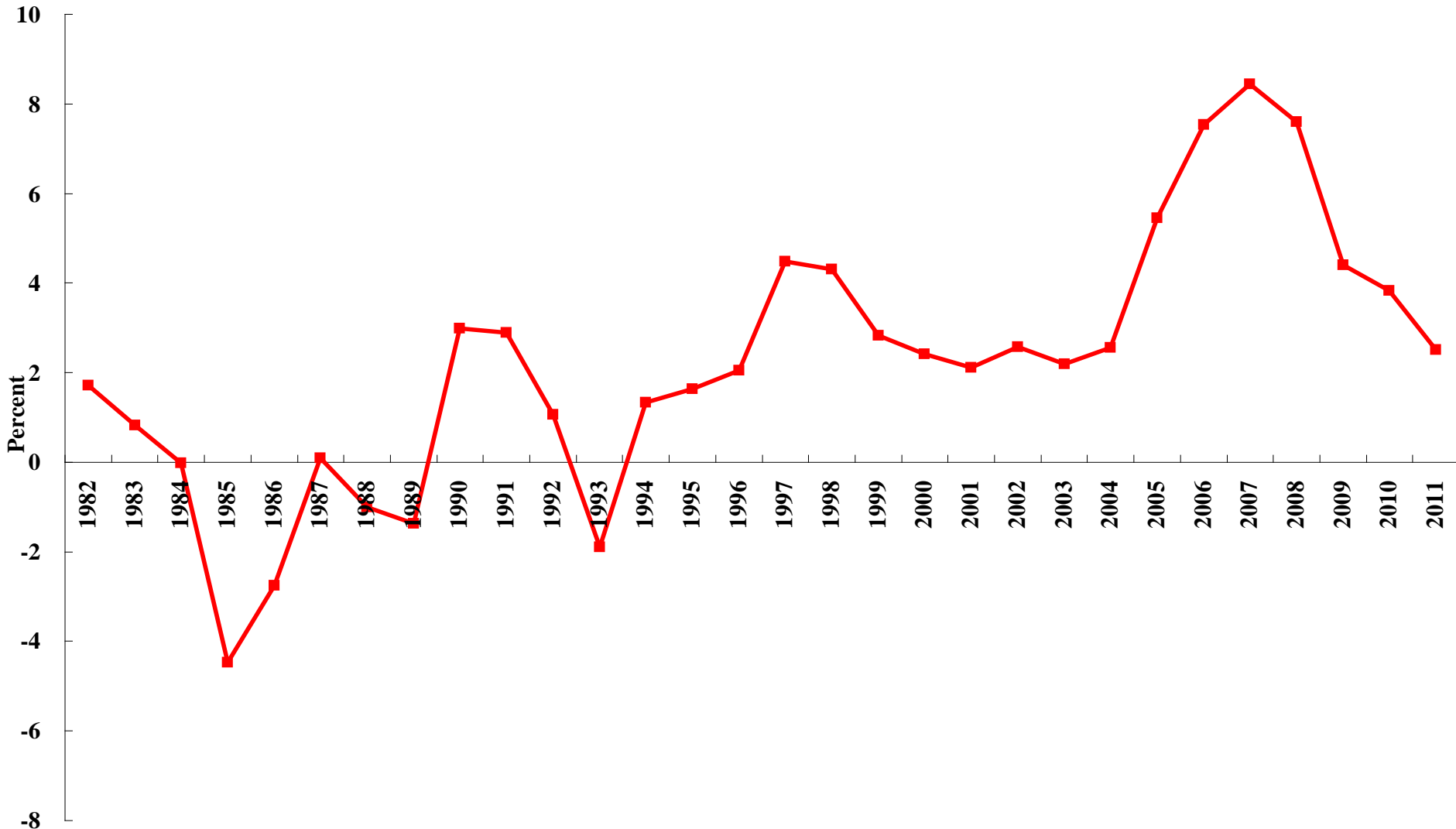
# Chinese Monthly Exports, Imports and Trade Balance, US\$ Billions

Chinese Monthly Exports, Imports and Trade Balance of Goods, in U.S. Dollars



# Chinese Trade Balance of Goods & Services as a Percent of GDP, 1982-

Chinese Trade Balance of Goods and Services as a Percent of GDP



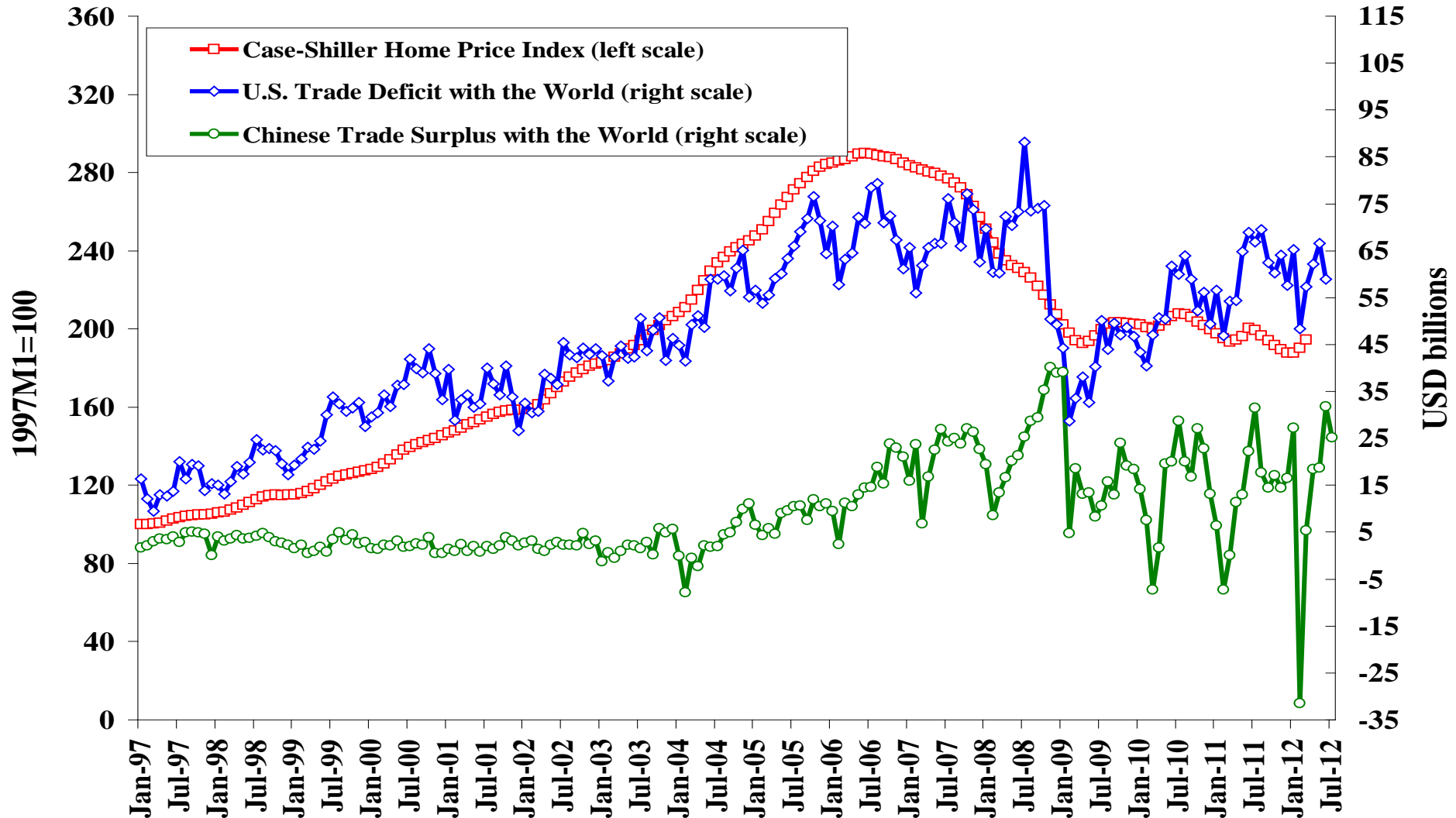
# Introduction

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- ◆ There have been allegations that the Chinese trade surpluses were the source of global imbalances that caused the global financial crisis.
- ◆ However, this was not possible as the U.S. housing price bubble, as measured by the Case-Shiller U.S. Home Price Index, already began to rise in the late 1990s, reaching a peak in 2006, whereas China only began to have a significant trade surplus in 2005, which continued rising until 2008.
- ◆ Moreover, the Case-Shiller U.S. Home Price Index correlates almost perfectly with the U.S. trade deficit vis-a-vis the World.

# Case-Shiller U.S. Home Price Index, Chinese Trade Surplus & U.S. Trade Deficit, Bill. US\$

Case-Shiller U.S. Home Price Index, Chinese Trade Surplus and U.S. Trade Deficit



# Introduction

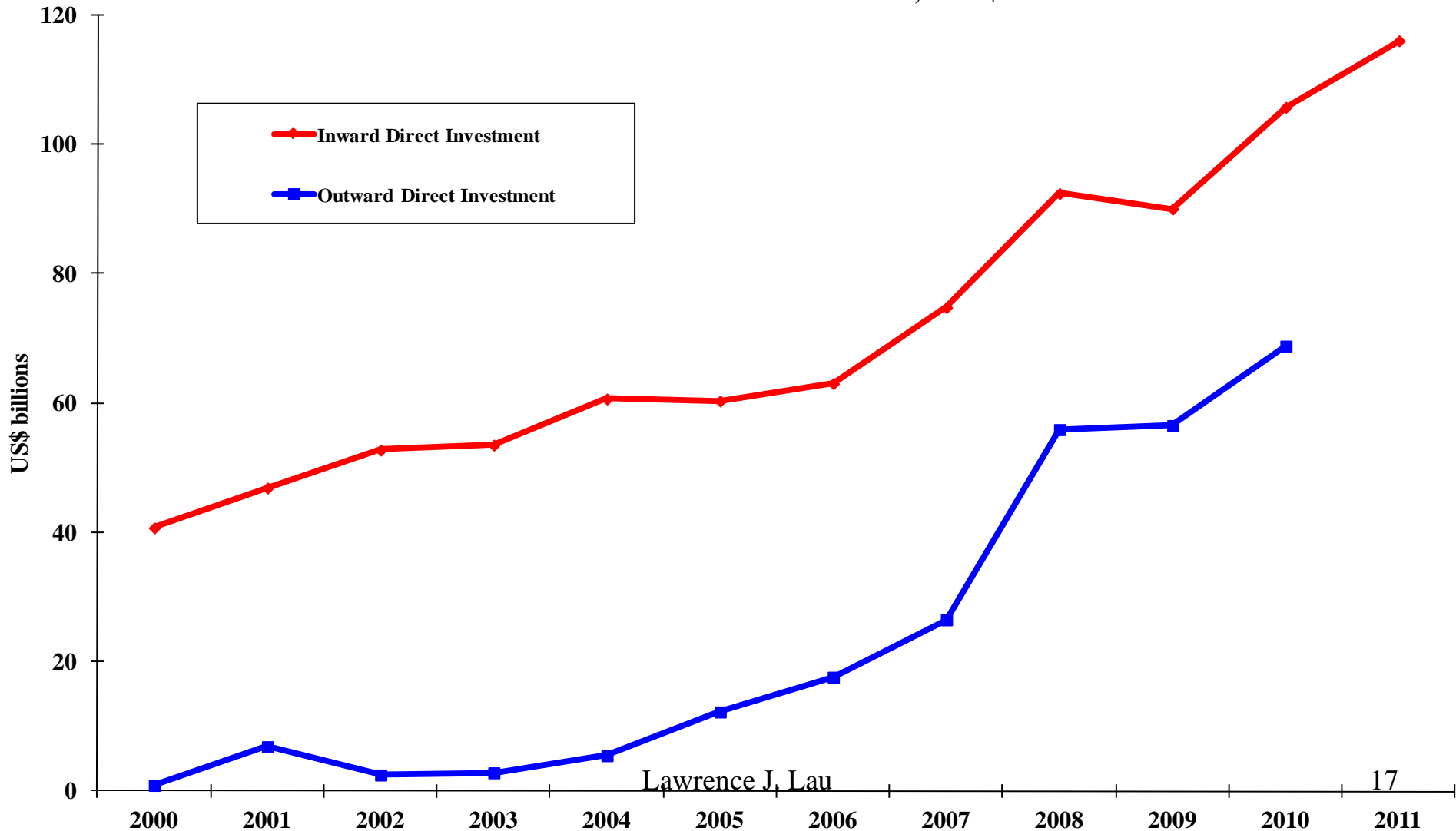
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- ◆ Chinese outbound investment, both direct and portfolio, has also been increasing since the mid-2000s. If current trends continue, China may well become a net foreign direct investor in a couple of years, reversing the direction of one of the sources of increase of its foreign exchange reserves.
- ◆ China may also become a net foreign portfolio investor in time as channels for Chinese portfolio investment overseas increase (including “Qualified Domestic Institutional Investors,” an International Board on the Shanghai Stock Exchange, and Exchange-Traded-Funds (ETFs)). Chinese investors, who have been restricted to investing only domestically, can benefit from a one-time geographical diversification of their investment portfolios given the opportunity.



# Chinese Inbound and Outbound Foreign Direct Investment, in US\$ Billions

Chinese Inward and Outward Direct Investment, in US\$ billions



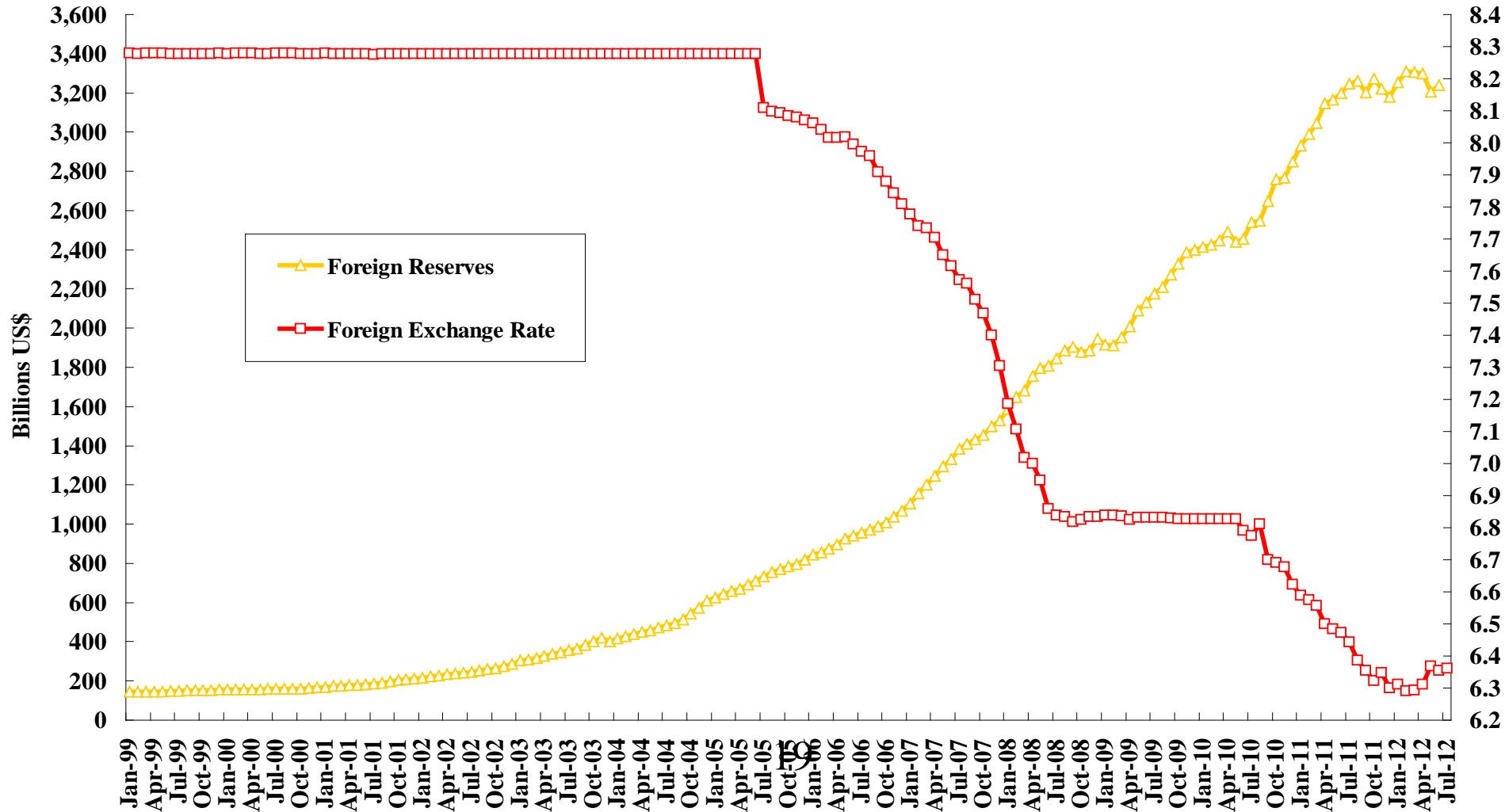
# Introduction

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- ◆ Beginning in 2005, partly in response to the then trade surpluses vis-a-vis the World, the Renminbi/US\$ exchange rate has been appreciating in both nominal and real terms, interrupted briefly by the intensified continuation of the global financial crisis brought about by the collapse of Lehman Brothers in September, 2008. Cumulatively, the Renminbi has appreciated, in real terms, more than 30% since mid-2005.

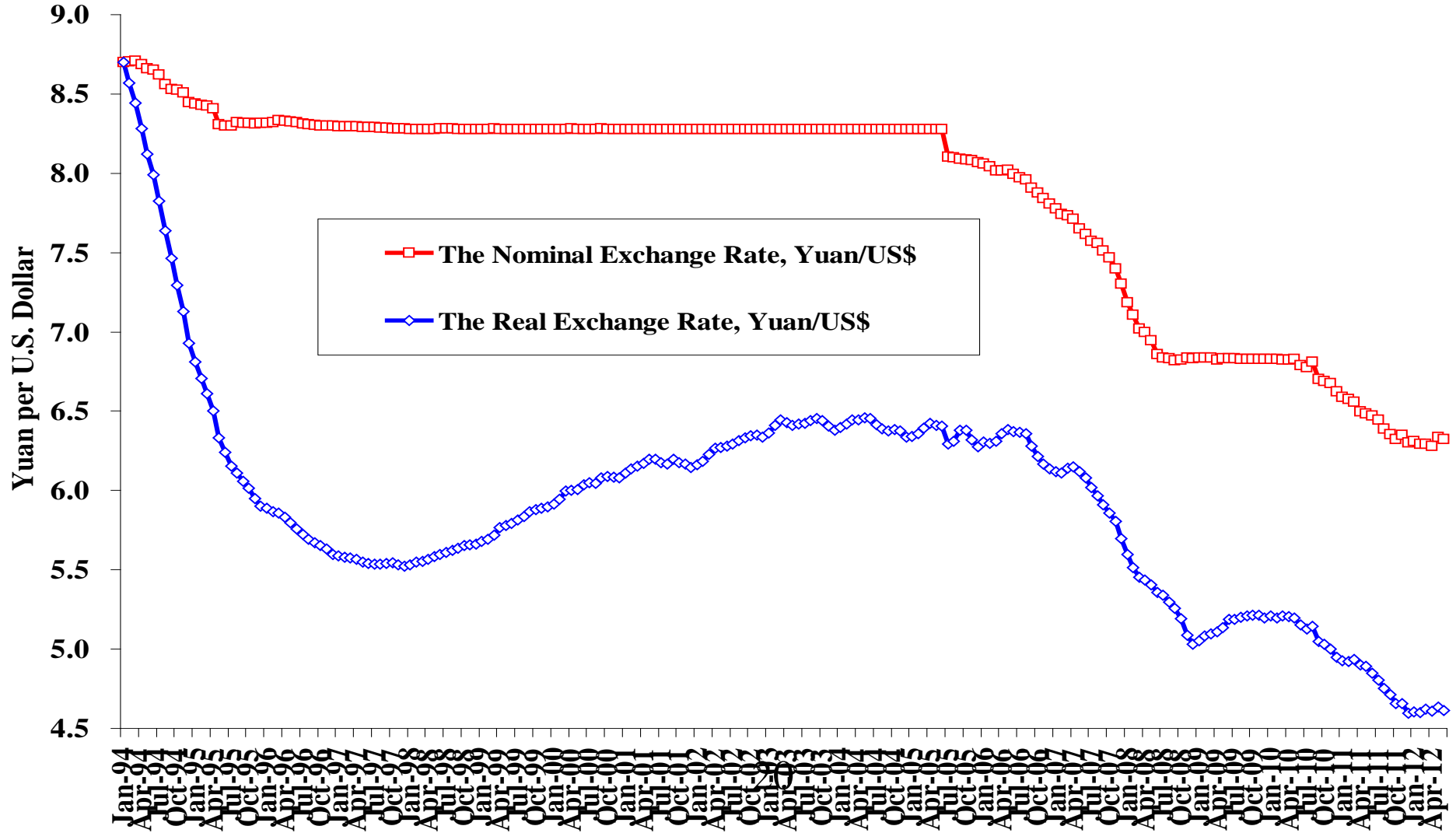
# Chinese Foreign Exchange Reserves and the Yuan/US\$ Exchange Rate

Chinese Foreign Exchange Reserves and the Yuan/US\$ Exchange Rate at the End of the Month



# The Nominal and Real Yuan/US\$ Exchange Rates

The Nominal and Real Yuan/US\$ Exchange Rates (1994 prices)



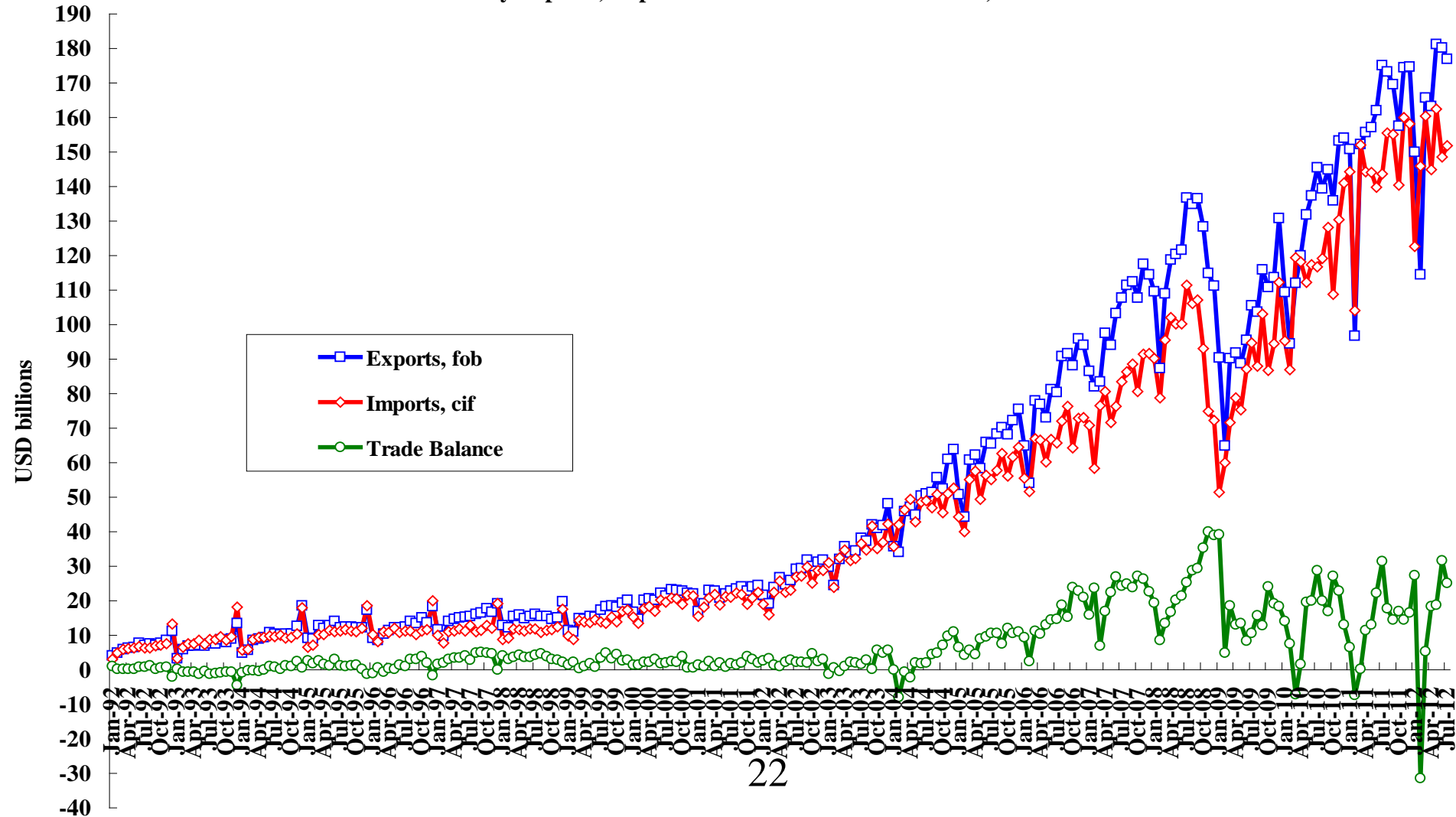
# Is the Renminbi (Yuan) Under-Valued?

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- ◆ The currency of a country is considered under-valued if the country runs persistent surpluses in trade in goods and services combined vis-à-vis the entire World. It is considered over-valued if it runs persistent trade deficits vis-a-vis the World.
- ◆ A bilateral trade surplus, even a persistent one, says nothing about whether a country's currency is under-valued because it may still have a near zero or even negative trade balance vis-à-vis the entire World. Most oil-importing countries have persistent bilateral trade deficits with oil-exporting countries. And that does not necessarily mean the currencies of the oil-importing countries are over-valued relative to the respective oil-exporting countries.

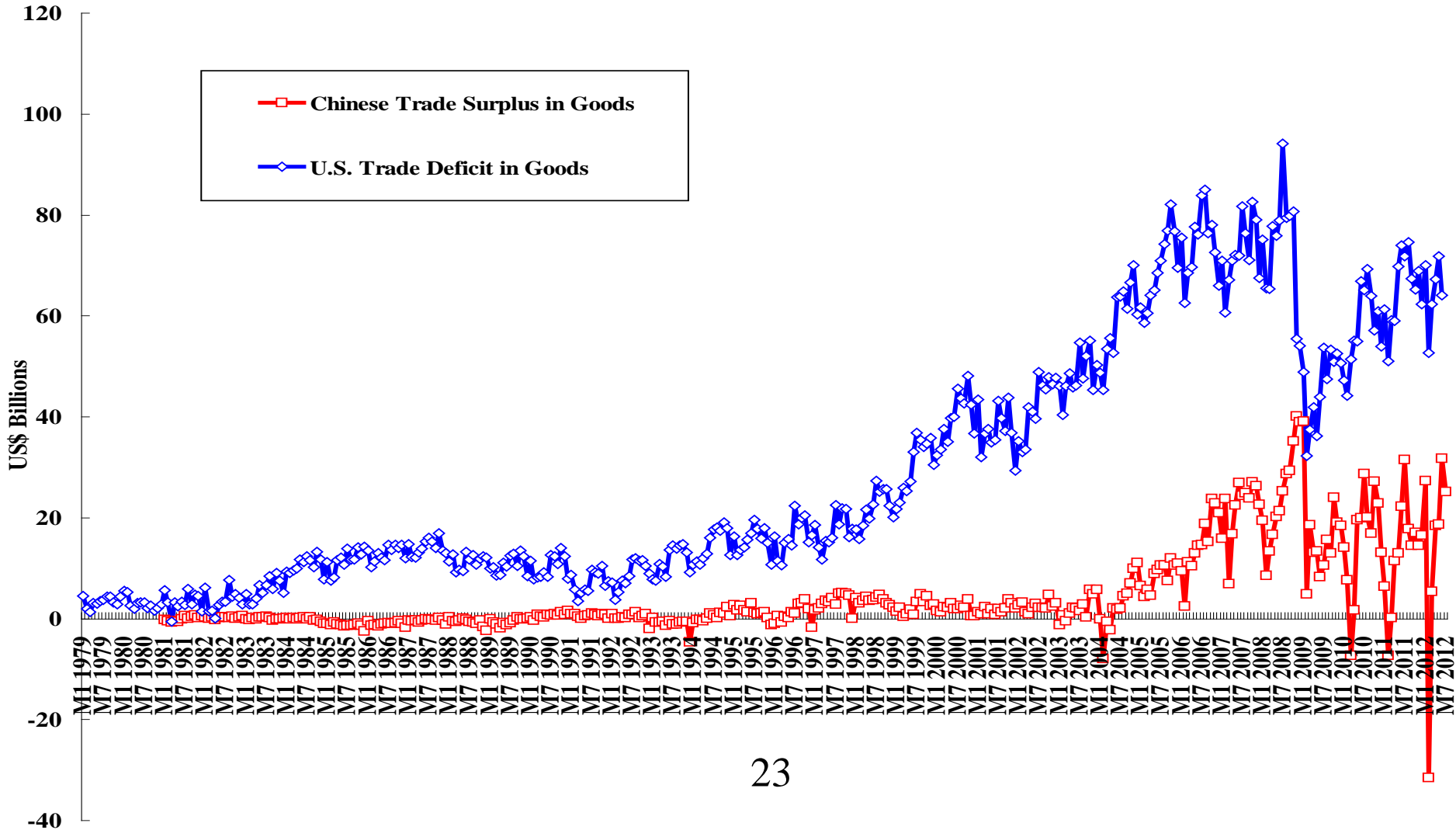
# Chinese Monthly Exports, Imports and Trade Balance, US\$ Billions

Chinese Monthly Exports, Imports and Trade Balance of Goods, in U.S. Dollars



# Monthly Chinese Surplus and U.S. Deficit with the World, Trade in Goods, Bill. US\$

Monthly Chinese Surplus and U.S. Deficit with the World, Trade in Goods, Billion US\$



# Is the Renminbi (Yuan) Under-Valued?

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- ◆ The statistics on Chinese trade balances over the past three decades indicate that China has had essentially balanced trade in goods and services combined with the World until 2005. Its trade surplus vis-à-vis the World began to rise in 2005, reaching a peak in 2008, and then began to decline rather precipitously, partly in response to the global financial crisis. It has continued to fall and remained relatively low, especially when considered as a percentage of Chinese GDP.
- ◆ In contrast, the large U.S. trade deficit with the World existed since at least 1998, long before 2005, before China had any trade surplus with the World. What this means is that while there is evidence that the U.S. Dollar might have been and continues to be over-valued, there is no evidence that the Renminbi was under-valued prior to 2005.



# Is the Renminbi (Yuan) Under-Valued?

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- ◆ In July 2005, the Renminbi was allowed to begin to appreciate. There was a pause in late 2008, immediately after the bankruptcy of Lehman Brothers, but then the Renminbi resumed appreciation in 2010. Cumulatively, the Renminbi has appreciated, in real terms, more than 30% since mid-2005.
- ◆ The Chinese trade surplus is expected to continue to decline until it returns to an essentially balanced situation as was the case before 2005.
- ◆ The long-term goal of the Chinese Government is to reduce the Chinese trade surplus vis-à-vis the World to zero. If the current trend continues, the goal of zero annual trade balance can probably be achieved by 2015, without necessarily any large adjustment in the nominal Yuan/U.S. Dollar exchange rate.

# The Meaning of Internationalisation

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- ◆ The internationalisation of the Renminbi can mean different things to different people. It basically implies the use of the Renminbi for various purposes outside of Mainland China.
- ◆ (1) The Renminbi as a Unit of Account in cross-border trade transactions. This means that the prices and values are quoted in terms of the Renminbi (however, they do not necessarily imply settlement in Renminbi).
- ◆ (2) The Renminbi as a Medium of Exchange. This means the use of the Renminbi for actual settlement of transactions, including cross-border trade transactions between China and its trading partner countries and regions, and eventually between and among its trading partner countries and regions themselves.

# The Meaning of Internationalisation

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- ◆ (3) The Renminbi as a Store of Value. This means the holding of Renminbi as a long-term asset by individuals and institutions. When it is held by central banks and monetary authorities of other countries and regions, it is a foreign exchange reserve asset.
- ◆ (4) The Renminbi as a major international reserve currency like the U.S. Dollar and the Euro.
- ◆ There are also conditions that are necessary for some of these uses to be realised, such as the stability of the Renminbi exchange rate, the level of Chinese foreign exchange reserves, and the convertibility of the Renminbi. These will be discussed in turn.

# The Internationalisation of the Renminbi

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- ◆ The Renminbi has been current accounts convertible since 1994. However, it has not become fully capital accounts convertible. There still exist both inbound and outbound capital controls in China. Some categories of capital movements require prior government approval. But individual Chinese citizens can remit up to US\$50,000 per person overseas each year, with few questions asked.

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ Since China began its economic reform and opening in 1978, the U.S. Dollar has been used as the principal medium of exchange for Chinese cross-border transactions.
- ◆ In fact, the U.S. Dollar has been used as the principal medium of exchange for almost all cross-border transactions in East Asia.
- ◆ This is because very often two potential trading partner countries do not wish to accept each other's currency, but both will accept the U.S. Dollar. This means that short of strict bartering, their trade will not take place, in the absence of the U.S. Dollar. Thus, the U.S. Dollar, as a medium of international exchange, provides a genuinely useful service, enabling trade that otherwise would not have occurred.

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ The willingness to accept and to hold a non-local currency depends on whether the currency is convertible, but it does not need to be fully or freely convertible, in the sense of a total absence of capital controls on the part of the non-local currency-issuing country.
- ◆ A person or a firm may be quite willing to accept and to hold a non-local currency, fully convertible or not, if he (it) knows that the next person (firm) he (it) comes across is also likely to accept the currency.
- ◆ And the more people there are who accept a currency, the more additional people there will be who are also willing to accept the currency. This is known as a “network” effect or externality. The U.S. Dollar benefits from this “network” externality.

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ Thus, even though the Renminbi is not de jure fully or freely convertible, it has gradually become de facto convertible in some economies in East Asia because of its wide general voluntary acceptance. The Renminbi is today widely accepted and used in Hong Kong, Macau, Laos, Myanmar, and other border areas as a medium of exchange and a store of value even though it is not legal tender in these places.
- ◆ Chinese visitors to Hong Kong use the Renminbi freely in the streets to pay for goods and services. The Renminbi can also be exchanged for Hong Kong Dollar freely in the streets and through the Hong Kong Dollar into other “hard” foreign currency such as the US\$ and the Euro.

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ One reason for the high degree of confidence in the Renminbi in these countries and regions is the high level of Chinese foreign exchange reserves, which provides the assurance that the exchange rate of the Renminbi will be stable.
- ◆ If necessary, the Renminbi can be used to purchase goods and services from China. The Renminbi is, after all, accepted and used by at least 1.34 billion people.



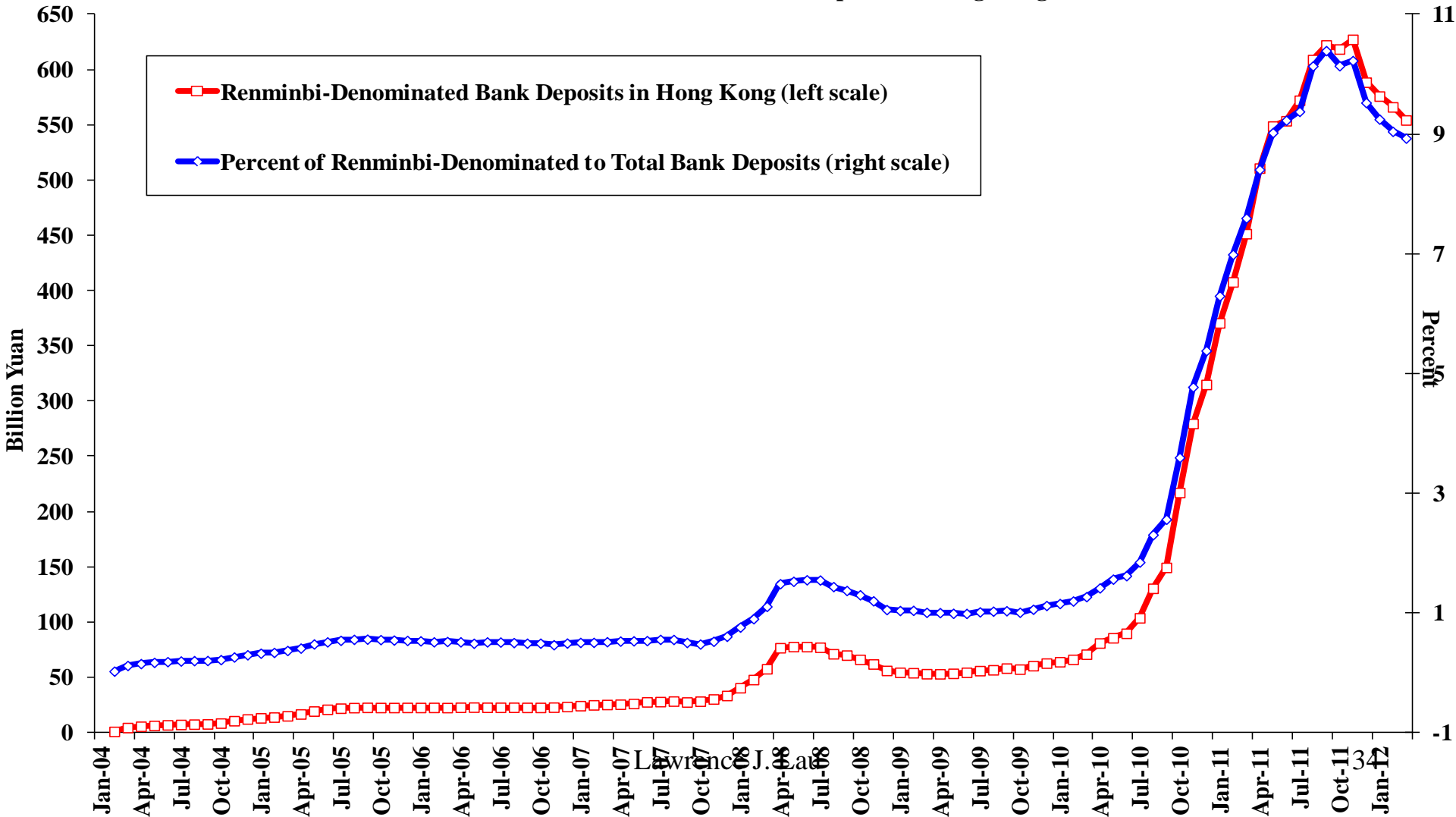
# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ In Hong Kong, Renminbi bank deposits held by its residents, including both individuals and firms, have grown rapidly in the past couple of years to almost 9% of total bank deposits in all currencies, attesting to the willingness of Hong Kong residents to accept and to hold the Renminbi (see the following Chart).
- ◆ Thus, the elimination of all forms of capital controls has not been necessary for the Renminbi to be used as a medium of exchange and a store of value outside Mainland China. There can be wide general acceptance of the Renminbi even in the absence of its full convertibility.

# Renminbi-Denominated Bank Deposits in Hong Kong

Renminbi-Denominated Bank Deposits in Hong Kong



# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ Similarly, whether a currency can be used in the denomination and settlement of international trade and capital transactions depends on its acceptability to the parties of the transactions. It will be acceptable if there are other ready potential users of the currency.
- ◆ Thus, for example, an overseas exporter to China may be quite willing to accept Renminbi as payment as long as it knows that importers of Chinese goods and services in its country can use the Renminbi balances to pay for the imports.
- ◆ A non-local currency will be even more acceptable if the central bank issuing the currency is committed to its redemption or exchange into other “hard” currencies such as the US\$, Euro or Yen with other central banks through prior agreements.

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ Chinese exporters and importers in selected provinces, municipalities and regions have been permitted to settle their cross-border trade transactions in Renminbi in Hong Kong since 2009 on a voluntary basis, by mutual agreement between the exporter and the importer in each case. The practice has been extended to the whole of Mainland China by the end of 2011.
- ◆ More recently, the use of own local currencies of the trading partner countries for settlement of international trade transactions, for example, among China, Japan and South Korea, has also become an option.

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ Settlement in Renminbi is welcomed by both exporters and importers because it reduces transactions costs and exchange rate risks. For example, an importer on the Mainland can pay an exporter in Thailand directly in Renminbi, without having to convert it into U.S. Dollars first and hence also without having to assume any exchange rate risk. While it is true that a Thai exporter may have to convert the Renminbi into Thai Baht, there is only one currency conversion, from Renminbi to Baht, instead of two currency conversions, first from Renminbi to US\$ and then from US\$ to Baht.
- ◆ Moreover, the Thai exporter may prefer to denominate its exports to China and settle in Renminbi, because the Renminbi is expected to appreciate relative to the US\$ over time.

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ Similarly, an exporter on the Mainland may prefer to denominate and settle in Renminbi because it reduces both transactions costs and exchange rate risk (most of its costs are in Renminbi).
- ◆ One may, quite legitimately, raise the question of why importers elsewhere will want to agree to denominate and settle their imports from China in Renminbi since it is expected to appreciate over time. While it is certainly true that importers in a country will resist the denomination of their imports in an appreciating currency, but if the importers are faced with the choice between denominating and settling in Renminbi or denominating and settling in U.S. Dollars but at a 3 percent higher price, they may well want to consider the Renminbi option, especially if exporters in that same country can generate Renminbi balances that can be used by the importers to pay for the imports.

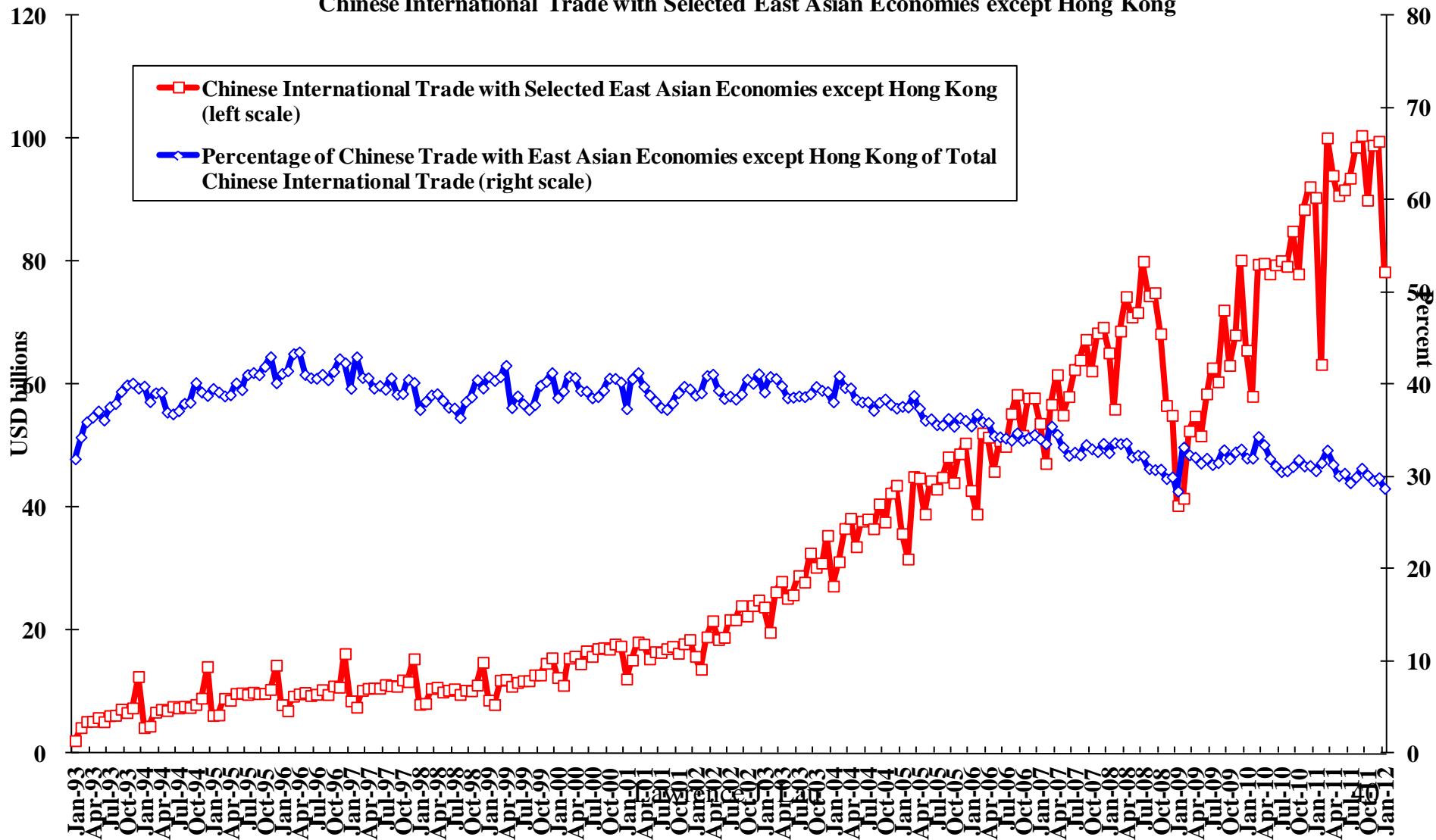
# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ In 2011, approximately US\$1.11 trillion, or 30%, of Chinese international trade is conducted with East Asian economies other than Hong Kong. (Hong Kong is a major export destination of Mainland China; however, a large proportion of its imports from China is re-exported from Hong Kong to other destinations, including the U.S. and Europe, around the World.)
- ◆ Potentially, the Renminbi can be used as a settlement currency by Chinese exporters and importers with their trading partners in East Asia on a voluntary basis, with the possible exceptions of Japan and South Korea.

# Chinese International Trade with East Asian Economies except Hong Kong

Chinese International Trade with Selected East Asian Economies except Hong Kong





# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ Chinese trade with Japan and South Korea may be denominated and settled in the respective trading partner countries' own currencies at the choices of the exporters and importers themselves.
- ◆ With the United States and Europe, the invoicing and settlement currency will probably remain the U.S. Dollar and the Euro in the foreseeable future. The same may be true of trade with most of the oil exporting countries in the Middle East, and with India and Russia.

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ With other trading partner countries that are not part of East Asia or the Euro Zone, the choice will most likely be between the US\$ and the Renminbi.
- ◆ Chinese trade with Africa and Latin America may well be partially denominated in Renminbi, especially Africa, as China becomes the major source of development aid and loans to Africa.

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ If the Renminbi, or the other trading partner's currency, is to be used as the invoicing and settlement currency for trade between China and its trading partner, it will also create the demand for a direct foreign exchange market between the two currencies.
- ◆ For example, up to 2011, trade between China and Japan has been mostly settled in U.S. Dollars. Thus, payment by a Chinese importer to the Japanese exporter has to be first converted from Renminbi into U.S. Dollar and then from U.S. Dollar into Japanese Yen.

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ Moreover, the Yuan/Yen exchange rate has been determined by the cross-rate between the Yuan/U.S. Dollar rate and the Yen/U.S. Dollar rate. More recently, a direct foreign exchange market between the Yuan and the Yen has been established to facilitate the settlement of transactions between China and Japan in their own currencies. The trading volume on this market has now approached US\$500 million a day.
- ◆ A similar direct foreign exchange market between the Yuan and the New Taiwan Dollar is also being established.
- ◆ There is already in existence a direct foreign exchange market between the Yuan and the Hong Kong Dollar.

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ If Chinese trade with East Asia can be invoiced and settled in Renminbi, the requirement of foreign exchange reserves for transaction purposes at the People's Bank of China, especially U.S. Dollars, can be significantly reduced; and the People's Bank will be able to reduce its holdings of foreign exchange reserves.
- ◆ In addition, direct foreign exchange markets between the Yuan and other East Asian currencies will further reduce the need for U.S. Dollar balances.
- ◆ If all of this happens, the US\$ assets held in the foreign exchange reserves of the East Asian central banks and monetary authorities for transactions purposes can also be reduced.

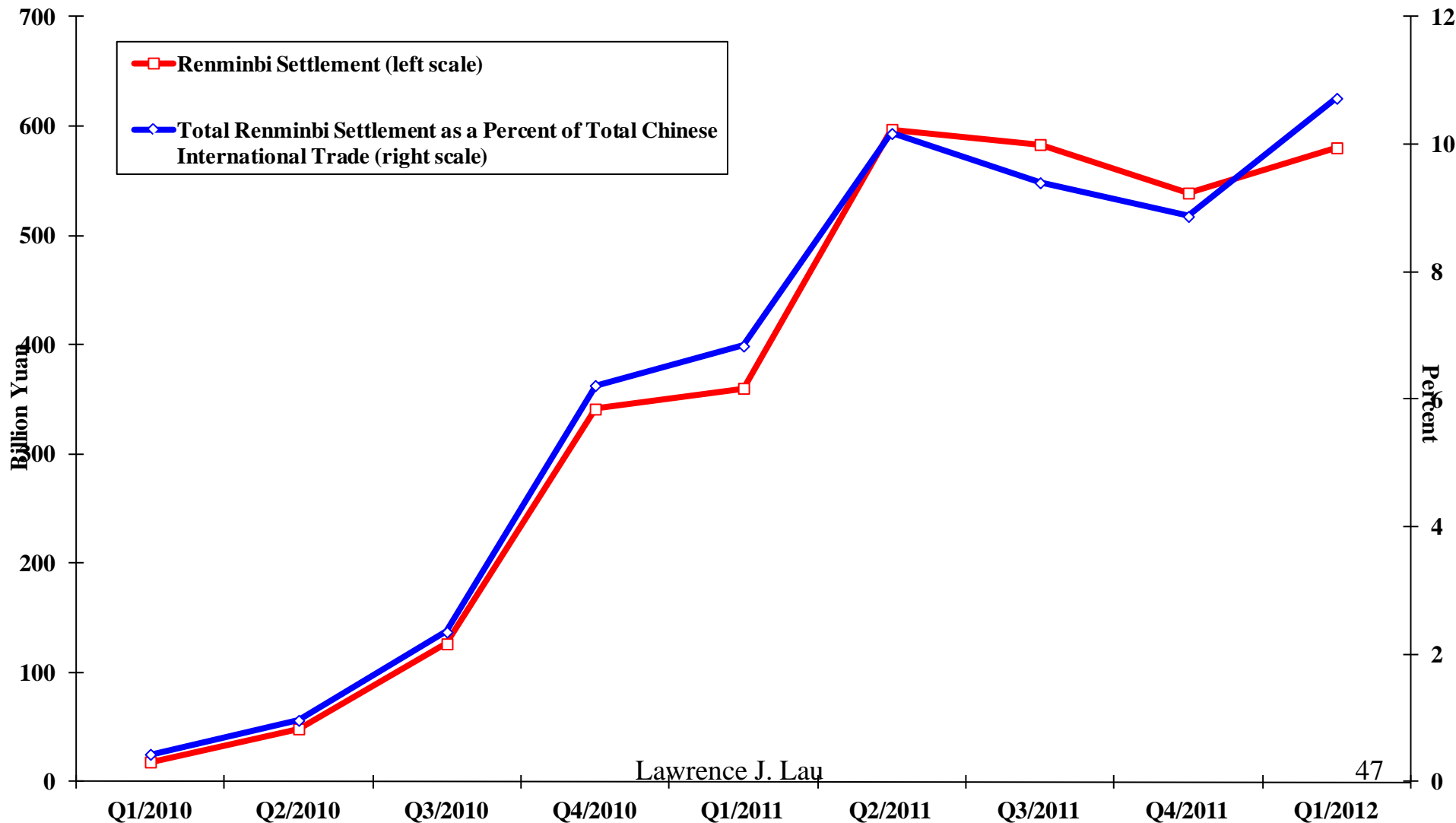
# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ The proportion of Mainland Chinese international trade settled in Renminbi has grown rapidly, from almost nothing in 2010Q1 to over 10% by 2012Q1 (see the following Chart). In absolute value, some US\$350 billion of Chinese international trade is now settled in Renminbi annually.
- ◆ This proportion may be expected to increase further in the future, especially as a bureaucratic problem having to do with VAT tax rebates for Chinese exports that in effect prevented some Chinese exporters from accepting Renminbi for payment has been resolved.

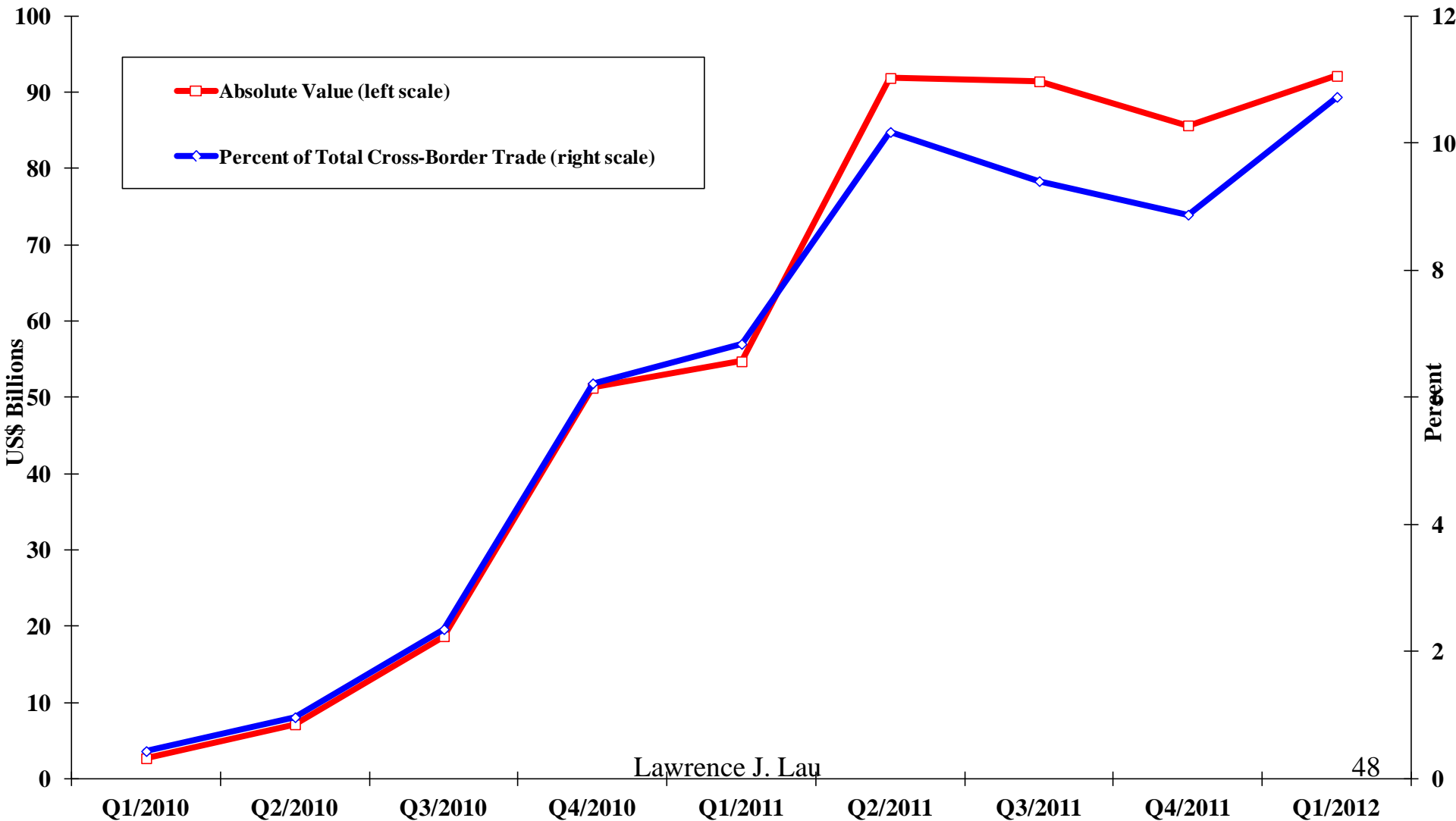
# Renminbi Settlement of Cross-Border Trade, Billion Yuan and Percent

Renminbi Settlement of Cross-Border Trade



# Renminbi Settlement of Cross-Border Trade, Billion US\$ and Percent

Renminbi Settlement of Cross-Border Trade





# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ Thus far, trade settlement in Renminbi is predominantly for Chinese imports. In order for Renminbi settlement to be more widely used by Chinese exporters, overseas importers must be able to have access to Renminbi themselves. This will take some time but as exporters to China in these economies choose to be paid in Renminbi, their Renminbi balances will in principle be available for the importers.
- ◆ Moreover, as mentioned above, it can be anticipated that Chinese exporters will eventually offer two prices—one in Renminbi and one in U.S. Dollars (which would take into account the expected appreciation of the Renminbi) for overseas importers to choose so as to minimise their exchange rate risks.

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ Currently, the cost of hedging against exchange rate fluctuations of the Renminbi is high and can only be done in the non-deliverable-forward market (for example, in Singapore) and only for relatively short durations.
- ◆ This is yet another reason why even though it is now possible for the settlement of Chinese trade transactions in Renminbi, only a relatively small proportion, 10%, of Chinese trade is denominated and settled in Renminbi.
- ◆ The use of the Renminbi as a trade settlement currency may be facilitated by an offshore (deliverable) forward market for Renminbi established by or under the authority of the People's Bank of China with participation restricted to bona fide exporters and importers to and from China with active current-account transactions.

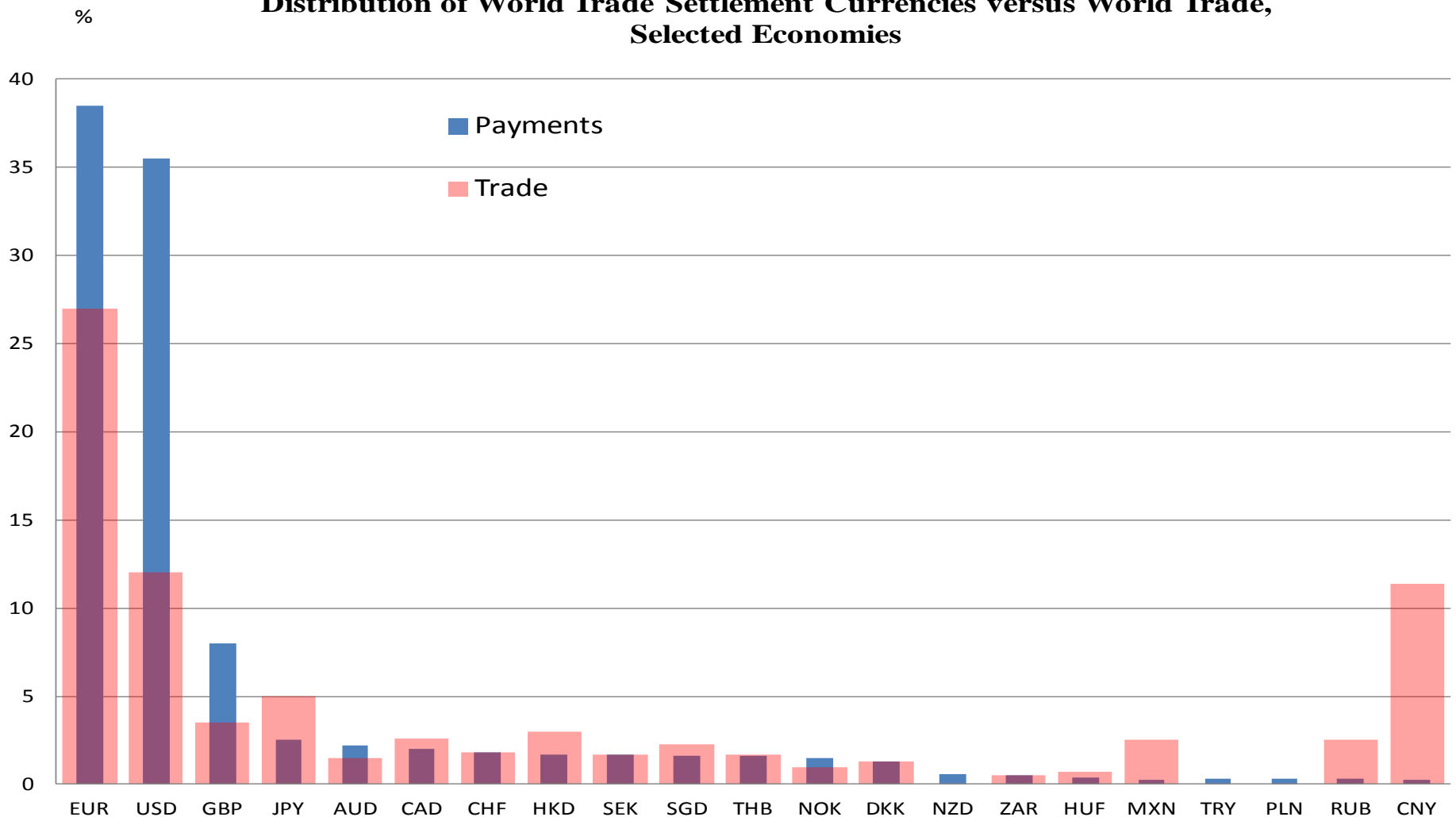
# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ There is actually plenty of room for the expansion of the use of Renminbi for cross-border trade settlement by Chinese exporters and importers.
- ◆ In the following chart, the share of each major country in world trade is compared to the share of its currency used in world trade settlement in 2010. Even though China accounted for more than 10% of world trade, Renminbi accounted for less than 1% of world trade settlement; while the U.S. had a similar share of world trade as China, the U. S. Dollar accounted for more than 35% of world trade settlement.
- ◆ In this regard, the Japanese Yen was also under-represented in terms of its use as a settlement currency relative to its share of world trade—approximately half of Japanese international trade is settled in Japanese Yen (other sources suggest an even lower percentage—32%).

# Distribution of World Trade Settlement Currencies versus World Trade

**Distribution of World Trade Settlement Currencies versus World Trade, Selected Economies**



Source: SWIFT Value Analyser. Trade (import/export) 2010, in value., WTO working paper, Daiwa

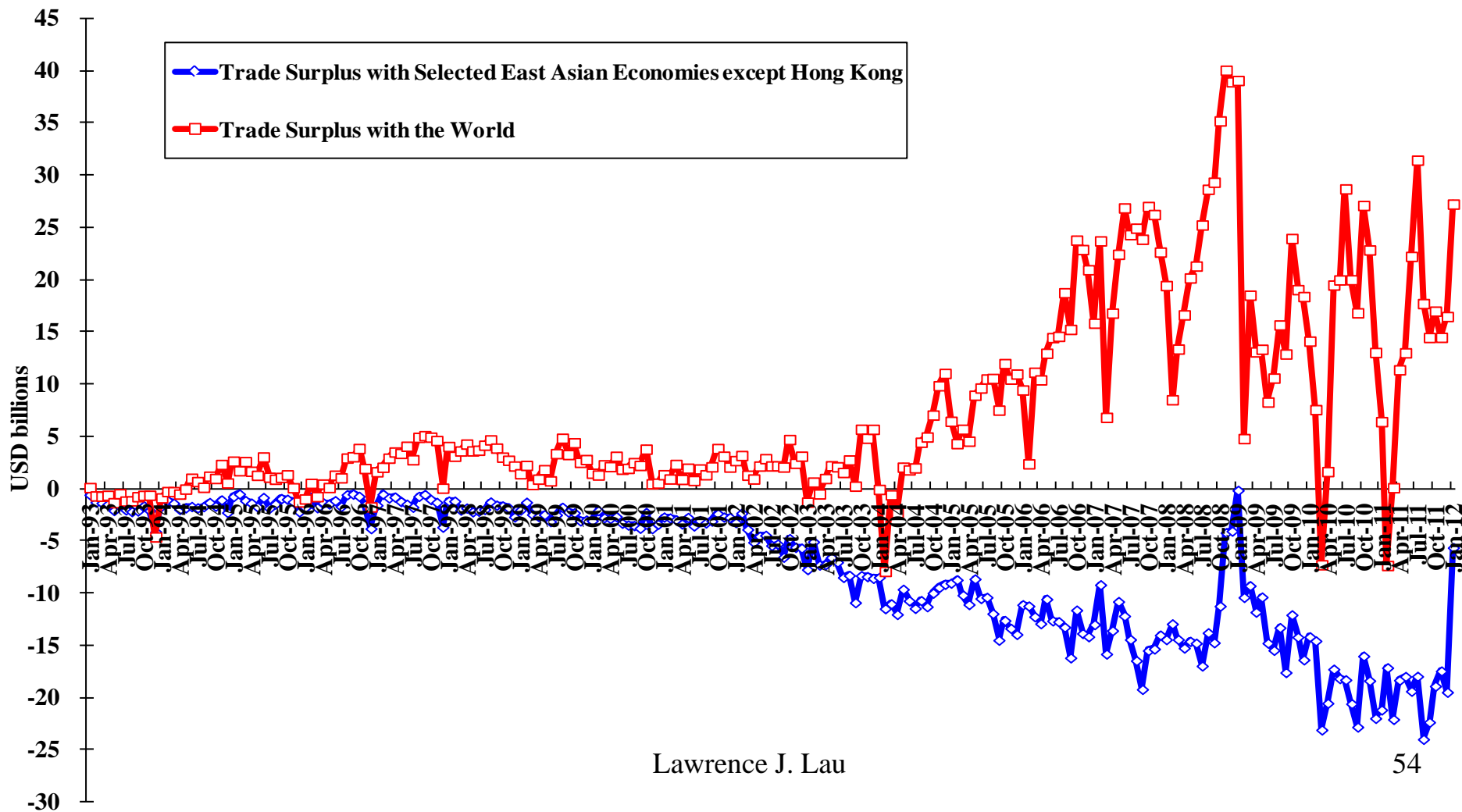
# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ It is also possible for the Renminbi to be used for the settlement of some cross-border transactions among East Asian economies eventually because almost all of them have large trade surpluses vis-à-vis Mainland China and hence will have ample supplies of Renminbi to settle trade transactions among themselves potentially if they so choose.
- ◆ However, if trade settlement in Renminbi becomes a widespread practice among East Asian economies, it may also lead to an increase of the demands of these central banks for Renminbi-denominated assets to be held as part of their foreign exchange reserves.

# Chinese Trade Surplus with the World and East Asian Economies except Hong Kong

Chinese Trade Surplus vs. Chinese Trade Surplus with Selected East Asian Economies except Hong Kong



# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ If other East Asian economies, such as Hong Kong, Indonesia, South Korea, Malaysia, Singapore and Thailand, begin to use either their own local currencies or the Renminbi as their settlement currency for trade amongst themselves, it would further reduce the demand for U.S. Dollars for international transactions purposes and hence the proportion of the foreign exchange reserves that the central banks or monetary authorities of these economies hold in terms of U.S. Dollar-denominated assets.

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ An alternative to the denomination and settlement of international transactions in a international reserve currency such as the U.S. Dollar is the denomination and settlement in the own currencies of the trading partner countries.
- ◆ In May 2011, the Ministers of Finance of China, Japan and South Korea, meeting on the sidelines of the Asian Development Bank annual meeting in Hanoi, issued a statement to the effect that they would study the use of their own currencies in trade settlement with one another.



# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ China, Japan and South Korea, if they so wish, can denominate and settle international trade transactions among themselves in their own respective currencies. For example, on an entirely voluntary basis, Chinese exporters to Japan can quote their prices and invoice in either Chinese Yuan or Japanese Yen, as may be mutually agreed individually between them and the Japanese importers. The same applies to Japanese and Korean exporters—each of them can choose to invoice in the own currencies of either the exporting or the importing country.

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ Trade settlement in the own currencies of the trading partner-countries is straightforward if the bilateral trade is basically balanced. A problem arises only when there are persistent surpluses or deficits. The central bank of the surplus country will wind up holding the currency of the deficit country. What can be done to reassure the surplus country that it will not lose out by holding the currency of the deficit country for more than a short term?

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ What is needed are credible commitments through mutual agreements by the respective central banks concerned to convert the currencies of their respective countries presented by another central bank into U.S. Dollars or Euros or any other so-called “hard” currencies, or even gold at a pre-agreed parity, or its own inflation-indexed bonds (to be credible, such inflation-indexed bonds must be available to and held by the domestic population).
- ◆ With such assurances, central banks will feel comfortable holding the currencies of the other countries for potential transactions purposes.

# The RMB as an Invoicing and Settlement Currency for Cross-Border Transactions

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- ◆ The benefits to China and its trading partner countries of using either the Renminbi or the latter's own local currency as an invoicing and settlement currency for cross-border transactions include:
  - ◆ (1) Reduction of the transactions costs of cross-border transactions (one currency conversion rather than two);
  - ◆ (2) Reduction of foreign exchange risk for exporters and importers of goods and services (one less currency risk);
  - ◆ (3) Reduction of foreign exchange reserves held for liquidity and transactions demand purposes.
- ◆ The Yen and the Renminbi and some other East Asian currencies have come of age, just as the Western European currencies recovered in the aftermath of World War II—it is no longer necessary to rely on a third currency for invoicing and settlement purposes.

# The Renminbi as an International Funding Currency

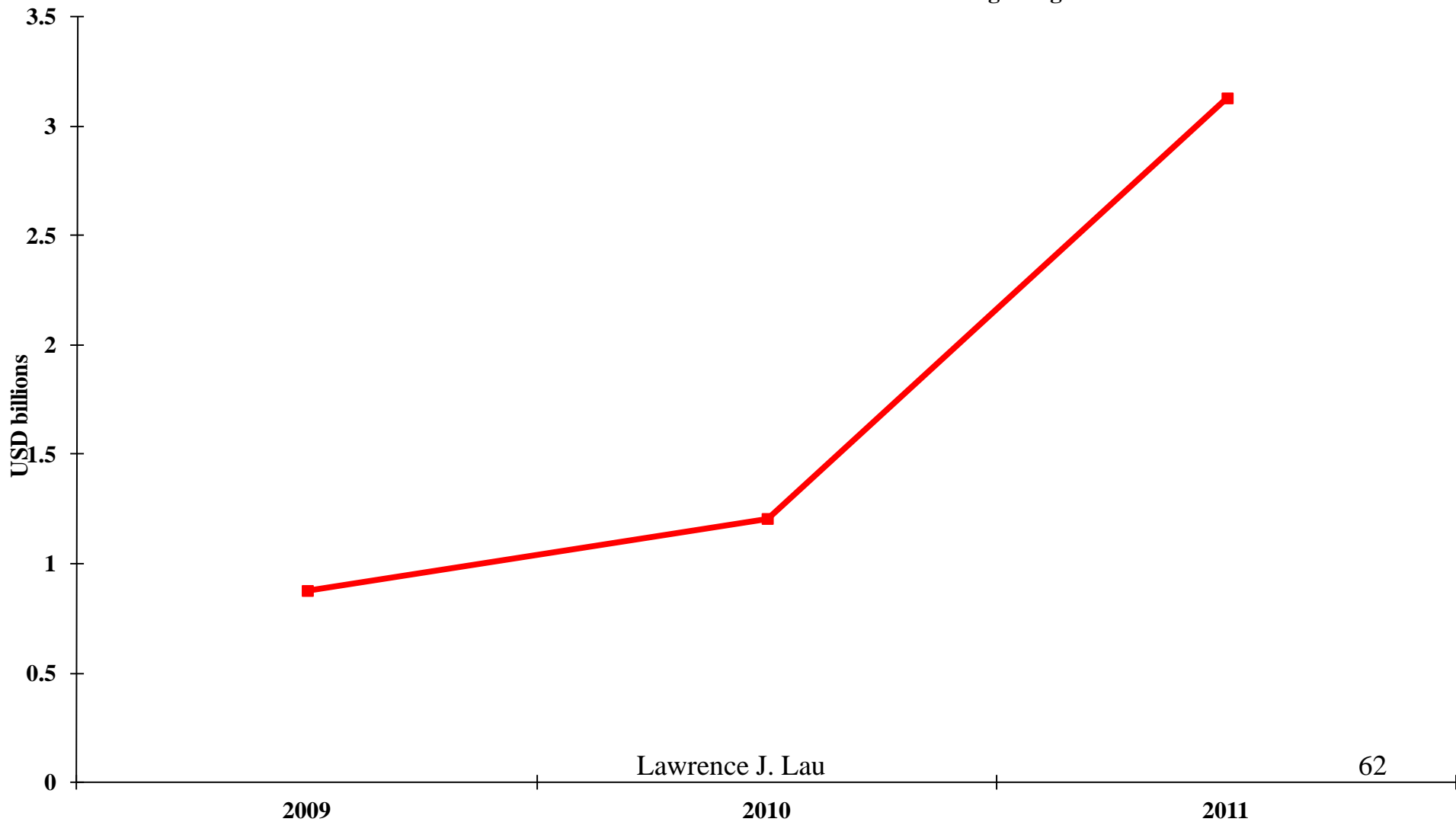
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- ◆ Less straightforward is the use of the Renminbi as an international funding currency—that is, as a currency for loans and equity investment and other capital-raising exercises by individuals and firms in other countries. This use of the Renminbi will have to develop gradually and voluntarily.
- ◆ There have been Renminbi-denominated bond issues in Hong Kong by the Chinese Government, China Development Bank, Chinese enterprises and foreign enterprises (the so-called “Dim Sum” bonds). (See the following Chart.) This market is likely to continue to grow in the future.

# Renminbi-Denominated Bonds Issued in Hong Kong

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Renminbi-Denominated Bonds Issued in Hong Kong



# The Renminbi as an International Funding Currency

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- ◆ However, the expansion of this offshore market may be constrained by a number of factors.
- ◆ First, since the Renminbi is expected to appreciate relative to the U.S. (and hence Hong Kong) Dollar in the long run, it is risky for a borrower to borrow in Renminbi unless it has or expects to have a stable source of revenue denominated in Renminbi, such as direct investors on the Mainland.

# The Renminbi as an International Funding Currency

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- ◆ Second, the Renminbi funds raised offshore do not automatically qualify to be repatriated to the Mainland to be used there. Specific approval by the People's Bank of China is required. Thus, even though the rate of interest for Renminbi in Hong Kong is much lower than that on the Mainland, there is not as much interest rate arbitrage as one may expect.
- ◆ Repatriation of Renminbi funds raised offshore back to the Mainland is regulated because it may disrupt the credit markets on the Mainland by virtue of the significantly lower rate of interest offshore, by at least 300 basis points.



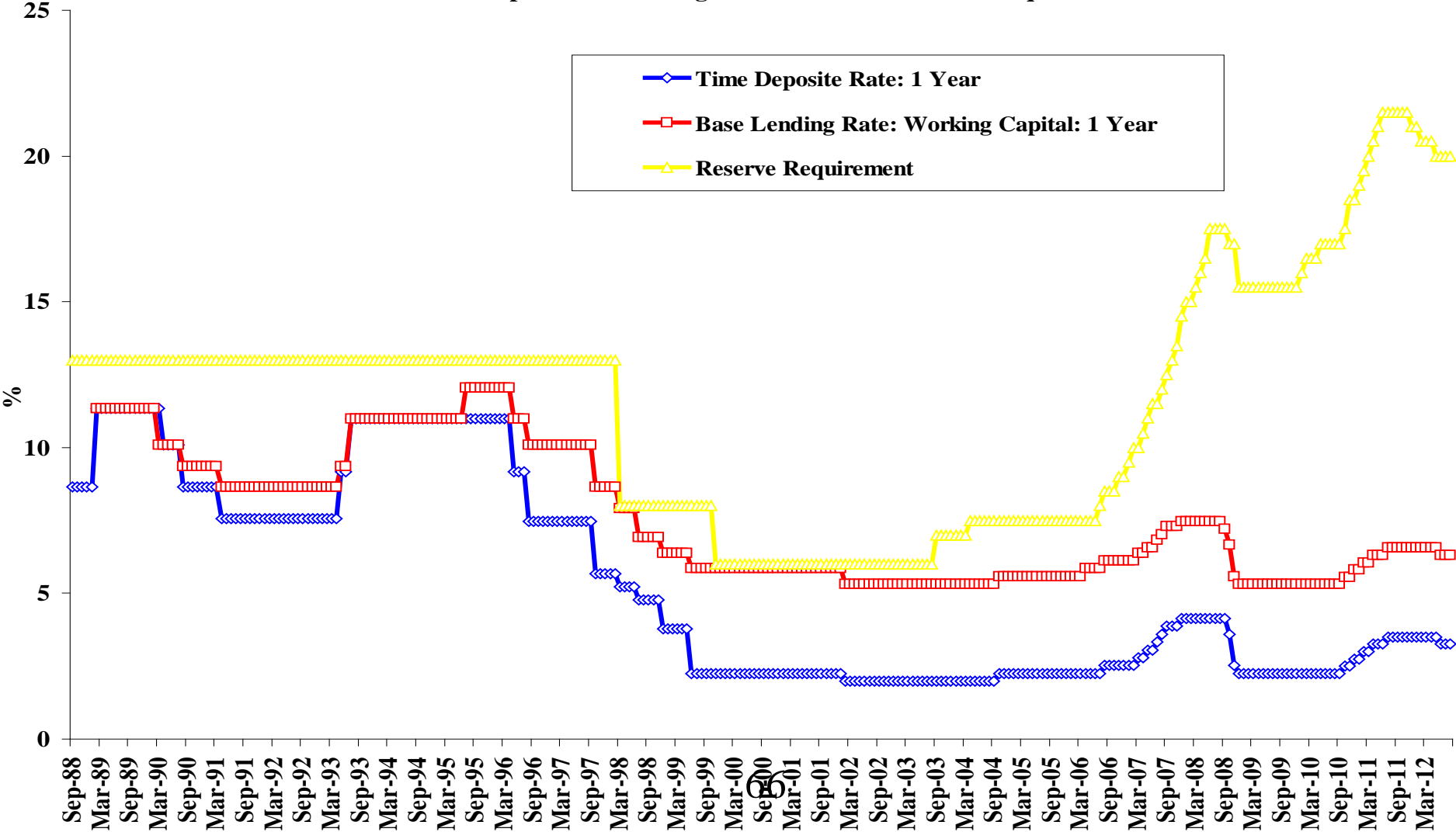
# The Renminbi as an International Funding Currency

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- ◆ Third, the pool of Renminbi deposits in Hong Kong is tiny relative to total Renminbi deposits. Renminbi deposits in Hong Kong amount to approximately US\$100 billion compared to a total Renminbi deposit base of US\$13 trillion on the Mainland. There is therefore a limit to how large the potential market for Renminbi funding in Hong Kong can become.
- ◆ Thus, in the foreseeable future, the onshore and the offshore markets will likely remain reasonably segregated. Foreign firms interested in obtaining Renminbi funding to use on the Mainland should consider raising it on the Mainland through equity or bond issues or through loans if they cannot obtain prior approval for repatriation of offshore Renminbi.

# Short-Term Deposit and Lending Rates and Bank Reserve Requirement

Short-Term Deposit and Lending Rates and Bank Reserve Requirement



# The Renminbi as an International Reserve Currency

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- ◆ Central banks consider many factors when they decide on the currencies and their relative proportions to hold as their foreign exchange reserves: safety, liquidity, transactions demand for trade and investment, credit worthiness, the relative investment opportunity and rate of return, and diversification.
- ◆ In particular, the “network” effect is important—central banks like to hold their foreign exchange reserves in currencies that other central banks also like to hold, thus greatly facilitating settlement among them and enhancing liquidity.
- ◆ That is why foreign exchange reserves are typically held in U.S. Dollars, Euros, Japanese Yen, and Swiss Francs.

# The Renminbi as an International Reserve Currency

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- ◆ While the Renminbi is not yet fully convertible in the sense of total absence of inbound as well as outbound capital controls, it may nevertheless be maintained as part of foreign exchange reserves by a central bank of another economy as long as there is a credible commitment by the People's Bank of China to convert any Renminbi balances presented by a foreign central bank into U.S. Dollars or Euros or any other so-called “hard” currencies.
- ◆ The huge foreign exchange reserves of the People's Bank underpins such commitments. Foreign central banks can then hold the Renminbi balances for potential transactions purposes with China or other economies willing to accept the Renminbi.

# The Renminbi as an International Reserve Currency

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- ◆ The People's Bank of China already has bilateral currency swap agreements in place with many central banks or monetary authorities such as those of Argentina, Belarus, Hong Kong, Indonesia, Japan, South Korea, Malaysia, Mongolia and many more such agreements are expected.

# The Renminbi as an International Reserve Currency

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- ◆ There are both benefits and costs for a country's currency to be used by other countries as a major international reserve currency. One “benefit” is of course the “bragging rights”, that the central banks of other countries and regions are willing to hold a country's currency is a positive affirmation of the economic performance of this country.
- ◆ The real economic “benefit” to the issuing country of a major international reserve currency is actually seigniorage: The issuing country can pay for its imports by printing money (or what amounts to more or less the same thing, bonds). The citizens of the exporting country can either keep the foreign currency received themselves or sell it to its central bank. The central bank puts the foreign currency it purchases into its foreign exchange reserves and continues to hold it as assets in the form of deposits or bonds. So the issuing country is able to acquire real goods of real value with essentially pieces of paper which it can print at will—a great advantage.

# The Renminbi as an International Reserve Currency

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- ◆ This (international ) seignorage is actually no different from the domestic seignorage enjoyed by every central bank which has the ability to print money or otherwise increase the domestic money supply at will. The government can purchase real goods and services with the money that the government prints.
- ◆ Foreign exchange reserves (in the form of bank deposits or bonds of the issuing country) are normally accumulated and held in the central bank of the receiving country for a long time, to the benefit of the issuing country. It is only when the receiving country decides to spend the money to buy goods and services from the issuing country or elsewhere that the issuing country has to export real goods and services to the receiving country or elsewhere in exchange.

# The Renminbi as an International Reserve Currency

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- ◆ The “cost” to the issuing country is that in order to really benefit from the seigneurage, it must in general run a trade deficit or become a long-term net purchaser of foreign assets. (If it has a chronic trade surplus, it does not need to print money (or bonds) to pay for its imports and other countries will have a hard time acquiring its currency.) And the larger the trade deficit, the larger is the benefit. However, a country with mercantilist tendencies does not like to run trade deficits and hence may not want its currency to become a major international reserve currency.



# The Renminbi as an International Reserve Currency

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- ◆ A further “cost” is the possibility that as a currency becomes widely held by the central banks of other countries as part of their foreign exchange reserves, it is subject to the risk that the foreign central banks holding its currency and assets denominated in its currency may decide at some point, for economic as well as non-economic reasons, to stop holding this currency and sell all the assets denominated in this currency that they hold, potentially creating havoc to the exchange rate, the interest rate and the financial markets of the country issuing the currency.

# The Renminbi as an International Reserve Currency

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- ◆ Of course, if the issuing country is “too big to fail,” as in the case of the United States, it is another matter altogether. The other central banks in the World cannot afford to liquidate their US\$-denominated assets without incurring significant losses themselves.
- ◆ This is one of the major reasons why the East Asian central banks, which together own the vast majority of the U.S. Treasury securities held by non-U.S. individuals and institutions, have not tried to sell down their holdings. It is in their collective self-interest to continue to hold on to U.S. Treasury securities because any attempt on the part of any central bank to sell a significant amount is likely to lead to a rush to the exit by all, resulting in huge damages and losses to everyone, including the U.S.

# The Renminbi as an International Reserve Currency

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- ◆ A currency can be fully convertible without becoming a major international reserve currency, that is, without being widely held by central banks around the World in significant amounts. For example, the Hong Kong Dollar and the Singapore Dollar are both fully convertible, but they are not major international reserve currencies, in part because of the lack of demand by other central banks.
- ◆ The Japanese Yen is fully convertible but the Japanese Government has not promoted its use by other countries as a major international reserve currency. Japan does not wish to have a persistent and large trade deficit with the rest of the World and will therefore be unable to take advantage of the potential benefit from seigniorage. Without a large trade deficit, it will be difficult for other economies to earn and to hold large net quantities of Japanese Yen. Japan also wishes to avoid the risk of the other central banks, especially those of East Asia, potentially dumping its bonds on the market because of political considerations.

# The Renminbi as an International Reserve Currency

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- ◆ Whether the Renminbi will eventually become a major international reserve currency remains to be seen, as there are both benefits and costs for a country's currency to be used by other countries as a major international reserve currency.
- ◆ At the present time, Hong Kong, Singapore, South Korea and Japan have all been considering investing part of their foreign exchange reserves in Yuan-denominated securities to diversify their portfolios, even though the Yuan (Renminbi) is not yet fully convertible.

# Towards Fuller Convertibility

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- ◆ When will the Renminbi become capital accounts convertible?
- ◆ The Renminbi is de facto long-term capital accounts convertible. The capital flows for both inbound and outbound direct investment are readily approved (once the projects themselves are approved). So are applications for “Qualified Foreign (or Domestic) Institutional Investors.”
- ◆ It also seems likely that an international board will be set up soon on the Shanghai Stock Exchange for the shares of firms outside of the Mainland to be listed. Exchange-Traded-Funds (ETFs) for both Mainland and non-Mainland shares are also being contemplated on the Hong Kong and Shanghai Stock Exchanges.

# Towards Fuller Convertibility

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- ◆ However, short-term capital flows, both inbound and outbound, if left unregulated, can greatly increase the volatility of the exchange rate, to the detriment of the Chinese economy, and as a minimum, complicate macroeconomic management and monetary policy. The principal challenge is how the short-term capital flows can be regulated under capital accounts convertibility.
- ◆ The Chinese economy has been a victim of speculative short-term capital inflows (hot money) despite the existence of controls on certain categories of capital movements, which have proved to be quite “leaky.” The increases in the Chinese foreign exchange reserves have been running much higher than the sum total of Chinese trade surplus, other current income from Chinese investments overseas and net foreign direct and portfolio investment into China in the past several years.

# Towards Fuller Convertibility

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- ◆ The observed exchange rate volatility worldwide today is actually largely unrelated to international trade flows or to direct investment flows, which have been quite stable on the whole. It may be related, in part, to short-term portfolio investment flows. However, it is mostly caused by the volatile short-term speculative international capital flows.
- ◆ Moreover, exchange rate volatility in itself also in turn attracts further speculation from hedge funds and other speculators taking advantage of the volatility to speculate on short-term exchange rate changes, and hence may lead to even more short-term international capital inflows or outflows and even greater exchange rate volatility.

# Towards Fuller Convertibility

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- ◆ But the most compelling argument against short-term cross-currency international capital flows is that they are not socially productive, in addition to increasing the volatility of exchange rates and disrupting the real economy.
- ◆ The theory of comparative advantage shows that two economies trading with each other voluntarily will both benefit, although possibly to varying degrees. This is the intellectual basis for supporting international trade, and in particular, free international trade.
- ◆ It is also well demonstrated that foreign direct investment undertaken in the absence of special privileges for the investor will always benefit both the investor-country and the investee-country. The same argument applies to long-term foreign portfolio investment.



# Towards Fuller Convertibility

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- ◆ However, there is no similar argument in favour of short-term cross-currency international capital movements, with the exception of short-term trade-related financing (but then the benefit flows from the trade itself). It is simply an article of faith that the freer the movement of capital, the better for the economy.
- ◆ Moreover, short-term non-trade-related capital inflows that can be withdrawn at short notice do not really benefit the destination country. On the contrary, they may cause significant harm, as the East Asian currency crisis of 1997-1998 and numerous Latin American currency crises amply demonstrated.

# Towards Fuller Convertibility

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- ◆ The problem with short-term cross-currency capital inflows is that they cannot be usefully deployed in the destination country. When they are used to finance long-term investment in the destination country, they invariably lead to trouble because of the maturity mismatch which is further exacerbated by the currency mismatch.
- ◆ However, as they flow in and out of the destination country, they cause the exchange rate of the destination country to become excessively volatile, inhibiting the flows of cross-border trade and long-term investment.

# Towards Fuller Convertibility

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- ◆ It is also not clear what good short-term capital outflows do to the origin country. (Under “Quantitative Easing II” of the U.S., if the liquidity created by the U.S. Federal Reserve Board had stayed in the U.S., it might have done the U.S. economy some good; but since most of it flowed out of the U.S., it is not clear whether and if so how it benefitted the U.S. economy. It did cause the other currencies to appreciate relative to the U.S. Dollar temporarily but did not seem to have a lasting effect.)
- ◆ Thus, short-term cross-currency capital flows should be discouraged at the same time that long-term capital flows, both inbound and outbound, should be encouraged.

# Towards Fuller Convertibility

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- ◆ What are some possible measures for regulating short-term cross-currency capital flows?
- ◆ It is in general not easy to distinguish between long-term and short-term cross-border capital flows. Possible regulatory devices include: sequestration or “quarantine” of inflows for a minimum period of one-year before they can be put to use or repatriated; imposition of a withholding tax on short-term income and capital gains; etc. One particular device is the imposition of a Tobin tax on currency conversions, to be discussed below.

# Towards Fuller Convertibility

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- ◆ A Tobin tax, originally suggested by the late Prof. James Tobin, Nobel Laureate in Economic Sciences, may be defined as a tax of say 0.5% (or 1%) on all spot conversions of a foreign currency into Renminbi or vice versa that are not related to current-account transactions.
- ◆ Thus, foreign currency transactions related to the exports or imports of goods and services will be exempted from such a Tobin tax. In practice, even capital account transactions below a certain threshold level, say 2 million Yuan (approximately US\$320,000 at current exchange rate), should probably also be exempted. (However, repeated conversions by the same individual or institution to take advantage of the exemption should be taxed.)
- ◆ The Tobin tax is intended to impose a penalty on short-term purely financial round-trip excursions from a foreign currency into the Renminbi or vice versa.

# Towards Fuller Convertibility

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- ◆ The Tobin tax is a rather effective way of “taxing,” and hence discouraging, short-term cross-currency capital flows. If every time a foreign currency is converted into Renminbi or vice versa, a tax of say 0.5% is levied, then a round-trip within a month would amount to an effective cost of 12% per annum, whereas for a direct investment with a long time horizon of say 5 years, the tax will amount to only 0.2% per annum, virtually nothing.

# Towards Fuller Convertibility

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- ◆ By discouraging and minimising unnecessary short-term cross-currency capital flows, the potential volatility of the exchange rate can be reduced. Stable relative real exchange rates can in turn encourage the growth of international trade, long-term cross-border direct investment and division of labour among economies. Long-term investors, both direct and portfolio, have an interest in a relatively stable Renminbi exchange rate.
- ◆ Expectations of relatively stable exchange rates will in turn discourage speculative short-term cross-currency capital inflows and outflows, further enhancing the stability of exchange rates.
- ◆ Thus, the use of a regulatory device for short-term capital flows such as a Tobin tax may enable fuller capital account convertibility to be achieved sooner in China. It may also provide a useful relatively stable transitional period for full capital account convertibility to be achieved eventually.

# The Renminbi Exchange Rate Determination Mechanism

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- ◆ Full convertibility, however, does not necessarily imply a freely floating exchange rate mechanism. For example, the Hong Kong Dollar is freely and fully convertible, but it has been rigidly pegged to the U.S. Dollar since 1983.
- ◆ Thus, even if the Renminbi becomes fully convertible (subject to a tax or other control over short-term capital inflows and outflows), China is likely to maintain a “managed floating exchange rate mechanism.” China must maintain the flexibility to manage its exchange rate—it is too important a price to be left completely to a market full of large potential short-term speculators.
- ◆ China should remember what happened to the “market-determined” exchange rates of East Asian economies during the East Asian currency crisis of 1997-1998 as well as the volatility of the Euro/US\$ rate since September 2008.



# The Renminbi Exchange Rate Determination Mechanism

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- ◆ Markets for the direct exchange between the Renminbi and currencies other than the US\$ and the Euro are in the process of being developed, for example, between the Yuan and the Japanese Yen, the Yuan and the Korean Won, the Yuan and the Russian Ruble and the Yuan and the New Taiwan Dollar. Direct exchange can reduce transactions costs and benefit traders in both the exporting and the importing countries.

# The Renminbi Exchange Rate Determination Mechanism

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- ◆ A direct exchange market with sufficient volume can reduce reliance on the cross-rates. For example, the Yuan/Yen exchange rate today is probably determined by dividing the Yuan/US\$ rate by the Yen/US\$ rate since the market for the two latter rates are much “thicker.” However, if eventually there is sufficient volume for direct exchange between the Yuan and the Yen, the Yuan/US\$ rate or the Yen/US\$ rate may be determined in part by the Yuan/Yen rate. Ultimately, it is a matter of the relative volumes of these foreign currency markets.
- ◆ When there are multiple currency-pair markets for direct exchange, the management of a floating exchange rate becomes more complicated, due to the fact that all pairs of exchange rates are ultimately related. Thus, it will be necessary to pay attention to more than one currency-pair market.

# Concluding Remarks

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- ◆ The international monetary system is in need of restructuring. There are, however, other alternatives than the use of Renminbi as another major international reserve currency. For example, a multilateral settlement mechanism similar to what the Bank for International Settlements did for the Western European economies in the 1950s may work within East Asia, with settlement in own currencies supplemented with other currencies in the event of chronic surpluses or deficits.

# Concluding Remarks

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- ◆ Paradoxically, the global financial crisis of 2007-2009 has accelerated the pace of internationalisation of the Renminbi. China will be internationalising the Renminbi gradually and in a planned and orderly manner. It has already made a beginning by allowing the Renminbi to be used on a voluntary basis as an invoicing and settlement currency in its international trade transactions.
- ◆ The Renminbi will be used more and more in the denomination and settlement of Chinese international trade with East Asian economies and perhaps even in the settlement of trade among East Asian economies, on a voluntary basis. Chinese trade with the U.S. and Europe will probably continue to be denominated and settled in U.S.\$ and the Euro respectively.

# Concluding Remarks

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- ◆ In time, perhaps within the next five years, the Renminbi will become effectively fully convertible, in the sense that both inbound and outbound capital controls will be effectively lifted. However, it is possible that short-term capital flows, which are of little economic benefit to the recipient economies, may continue to be under some form of control, for example, with the imposition of a Tobin tax.
- ◆ However, it is not at all clear whether it is in China's best interests to have the Renminbi become a major international reserve currency like the U.S. Dollar and the Euro. To benefit from being a major reserve currency that is widely held by central banks elsewhere in the World, China will likely have to run a significant trade deficit. Moreover, there is also the risk of other central banks deciding to dump the currency and assets denominated in the currency at inopportune times.

# Concluding Remarks

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- ◆ Relative stability of the Renminbi exchange rate is beneficial to the continued development of the Chinese economy, to the other East Asian economies and to the World, so long as Chinese trade is essentially balanced. It facilitates the development of cross-border trade and investment. It also enhances the potential benefits from using the Renminbi as a store of value.
- ◆ Maintenance of real exchange rate parities among East Asian economies, an East Asian version of the “European Monetary Snake”, is another possibility.

# Concluding Remarks

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- ◆ Adjustment of the relative exchange rates can depend on many factors: the long-term trade balance, the rate of inflation relative to those of other major trading partners, public confidence, etc. It is expected that the Chinese international trade with the World will be essentially balanced in the near future.
- ◆ However, it is not in China's long-term interests to have the Renminbi pegged rigidly to the U.S. Dollar, or for that matter, to a basket of foreign currencies.
- ◆ China must retain the flexibility to manage its exchange rate—China should therefore maintain a “managed floating exchange rate mechanism.”