

Chinese Economic Development Trends

Lawrence J. Lau 刘遵义

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

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

Hopu Capital Annual General Meeting
Sanya, 11th April 2014

Tel: (852)3550-7070; Fax: (852)2104-6938

Email: lawrence@lawrencejlau.hk; WebPages: 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

- ◆ Introduction
- ◆ The Chinese Economy in the Global Context
- ◆ The Macroeconomic Outlook
- ◆ Sources of Sustainable Growth of Aggregate Demand
- ◆ The Internationalisation of the Renminbi
- ◆ Projections of the Future
- ◆ Concluding Remarks

Introduction

- ◆ The most important development in the global economy during the last three and a half decades is the opening of the Chinese economy and its participation in the World.
- ◆ As a result, the centre of gravity of the World economy, in terms of both GDP and international trade, has been shifting gradually from North America and Western Europe to East Asia, and within East Asia from Japan to China.

Introduction

- ◆ China has become the second largest economy by GDP as well as the second largest trading nation by value of total trade in goods and services in the World.
- ◆ The Chinese economy has also been growing and continues to grow at much higher rates than North American and European economies and Japan.
- ◆ China, with a saving rate in excess of 40%, is a potential large foreign direct and portfolio investor to the rest of the World.

Introduction

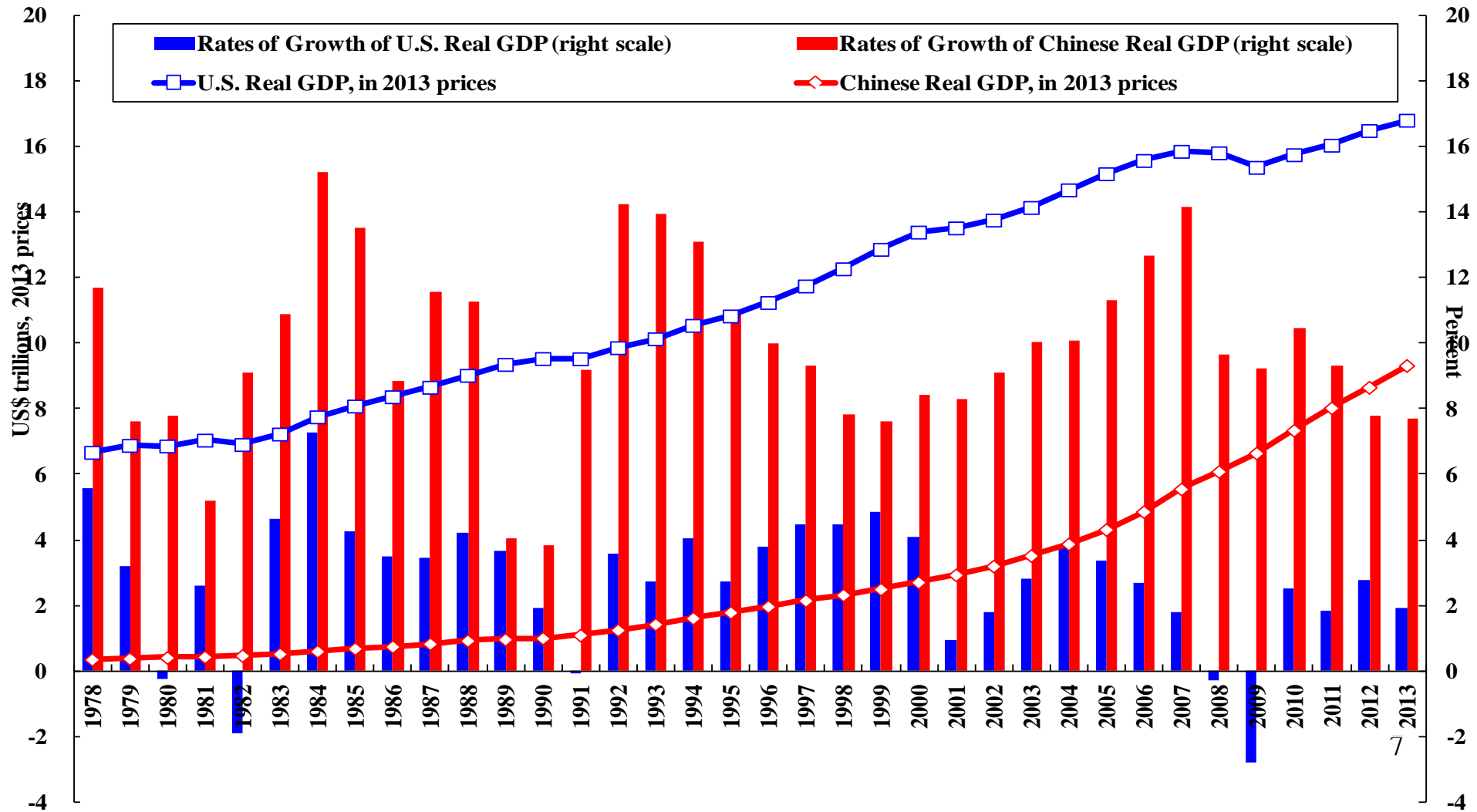
- ◆ The East Asian economies have been steadily coming into their own and becoming less dependent on the developed economies, enabling a “partial de-coupling” of the East Asian economies from the developed economies of the West.
- ◆ The fact that the Chinese economy could continue to grow, albeit at a somewhat lower rate, even as the U.S. and European economies went into recession, lends credence as well as empirical support to the “Partial De-Coupling Hypothesis”.
- ◆ However, the Chinese economy is not large enough to turn the World around. The idea of a G-2 group of countries consisting of only China and the United States leading the World economy is premature.

The Chinese Economy in the Global Context: GDP

- ◆ China has made tremendous progress in its economic development since it began its economic reform and opened to the World in 1978. China is currently the fastest growing economy in the World—averaging 9.8% per annum over the past 36 years. It is historically unprecedented for an economy to grow at such a high rate over such a long period of time.
- ◆ Between 1978 and 2013, Chinese real GDP grew more than 26 times, from US\$356.5 billion to US\$9.32 trillion (in 2013 prices), overtaking Japan and becoming the second largest economy in the World, after the U.S., in 2010.
- ◆ By comparison, the U.S. GDP (approximately US\$16.8 trillion) was less than 2 times Chinese GDP in 2013.

Real GDPs and Their Annual Rates of Growth: China & the U.S. (2013 US\$)

The Real GDP and Its Annual Rates of Growth of China and the U.S.
(trillion 2013 US\$)

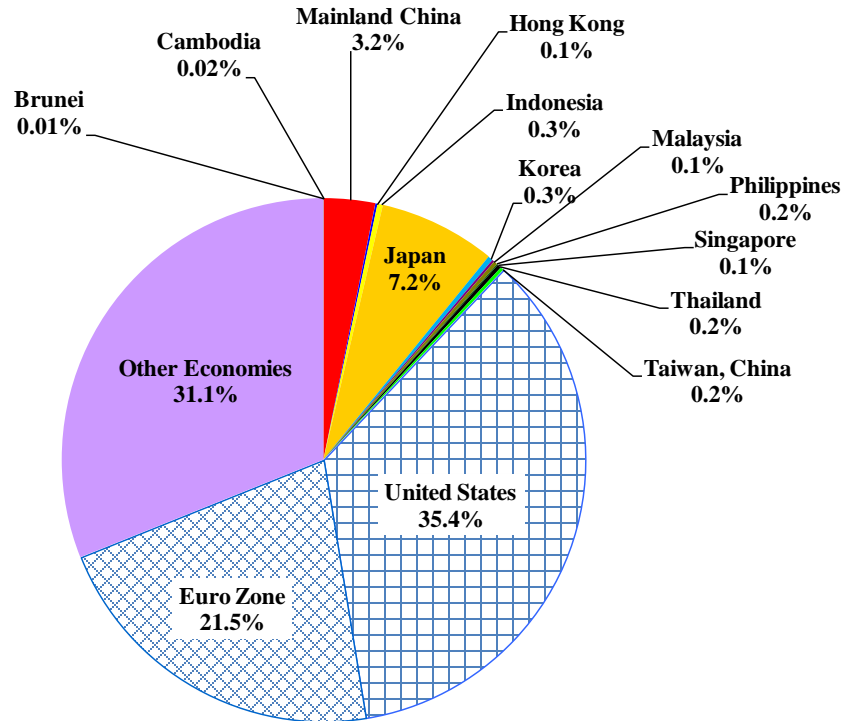


The Chinese Economy in the Global Context: GDP

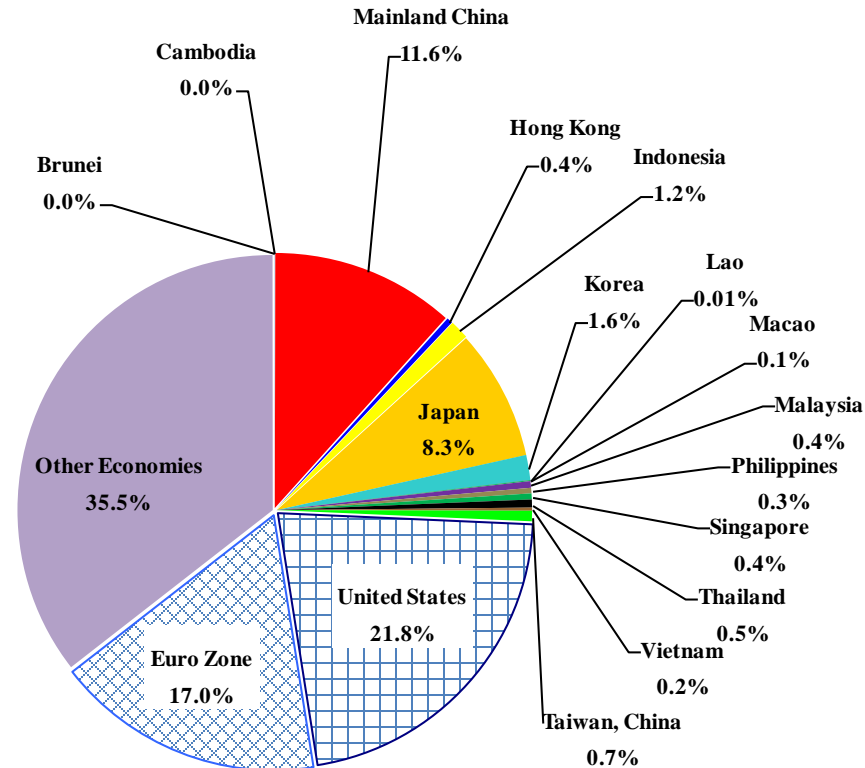
- ◆ In 1970, the United States and Western Europe together accounted for over 60% of World GDP. By comparison, East Asia (defined as the 10 Association of Southeast Asian Nations (ASEAN)--Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam--+ 3 (China, Japan and the Republic of Korea) and South Asia combined accounted for less than 15% of World GDP.
- ◆ In 1990, the United States and Western Europe together still accounted for over 55% of World GDP while East Asia and South Asia combined accounted for not quite 20% of World GDP.
- ◆ By 2012, the share of United States and Western Europe in World GDP has declined to approximately 45% whereas the share of East Asia and South Asia have risen to 30%.

The Distribution of World GDP, 1970 and 2012, US\$

The Distribution of World GDP in 1970



The Distribution of World GDP in 2012

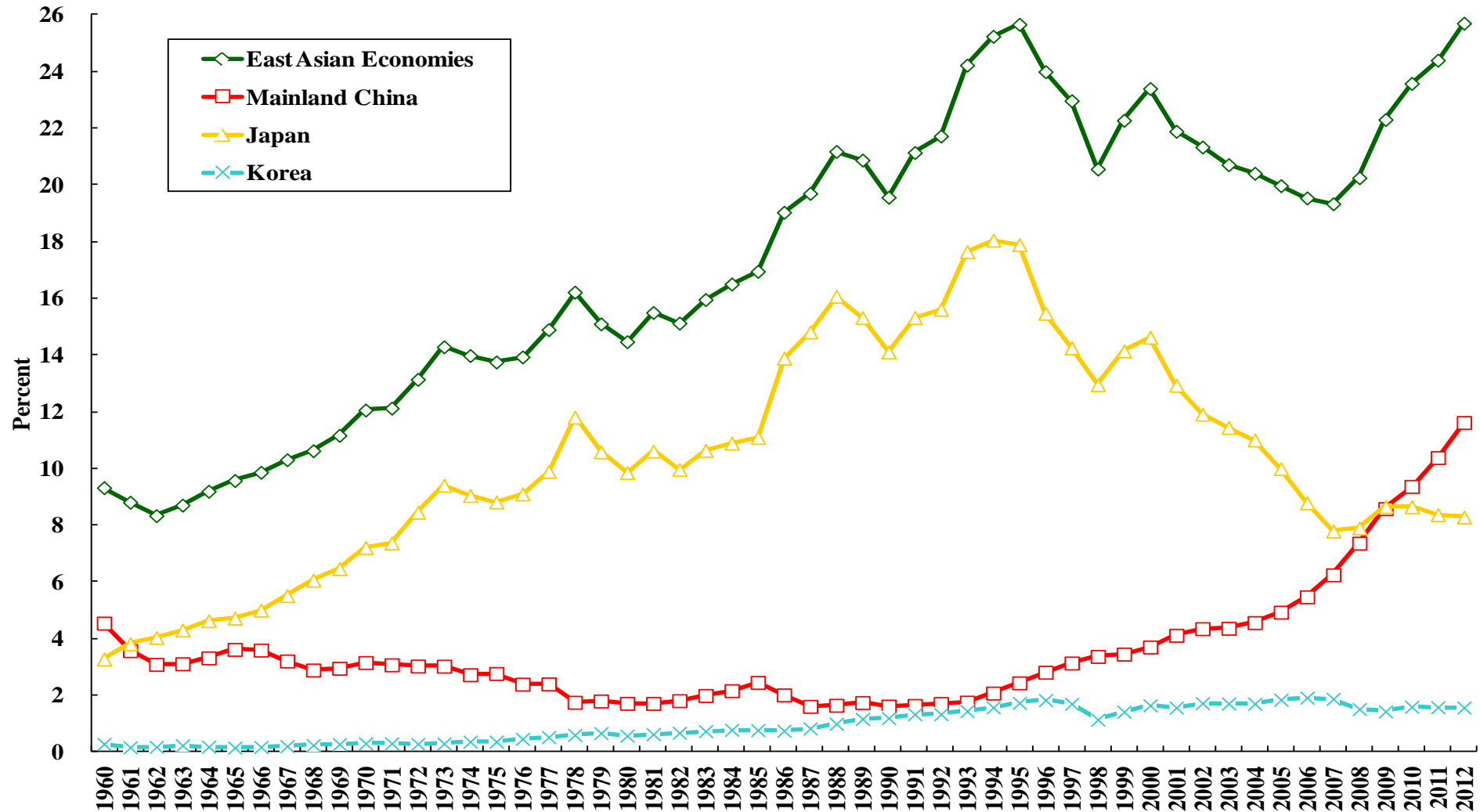


The Chinese Economy in the Global Context: GDP

- ◆ The East Asian share of World GDP rose from just above 10% in 1970 to approximately 25% in 2012.
- ◆ The Japanese share of World GDP declined from a peak of 18% in the mid-1990s to 8% in 2012.
- ◆ The (Mainland) Chinese share of World GDP rose from 3% in 1970 and only 4% in 2000 to over 11% in 2012.

The Shares of East Asia, China, Japan and South Korea in World GDP, 1960-present

The Shares of East Asia, China, Japan and South Korea in World GDP, 1960-present



The Chinese Economy in the Global Context: GDP per Capita

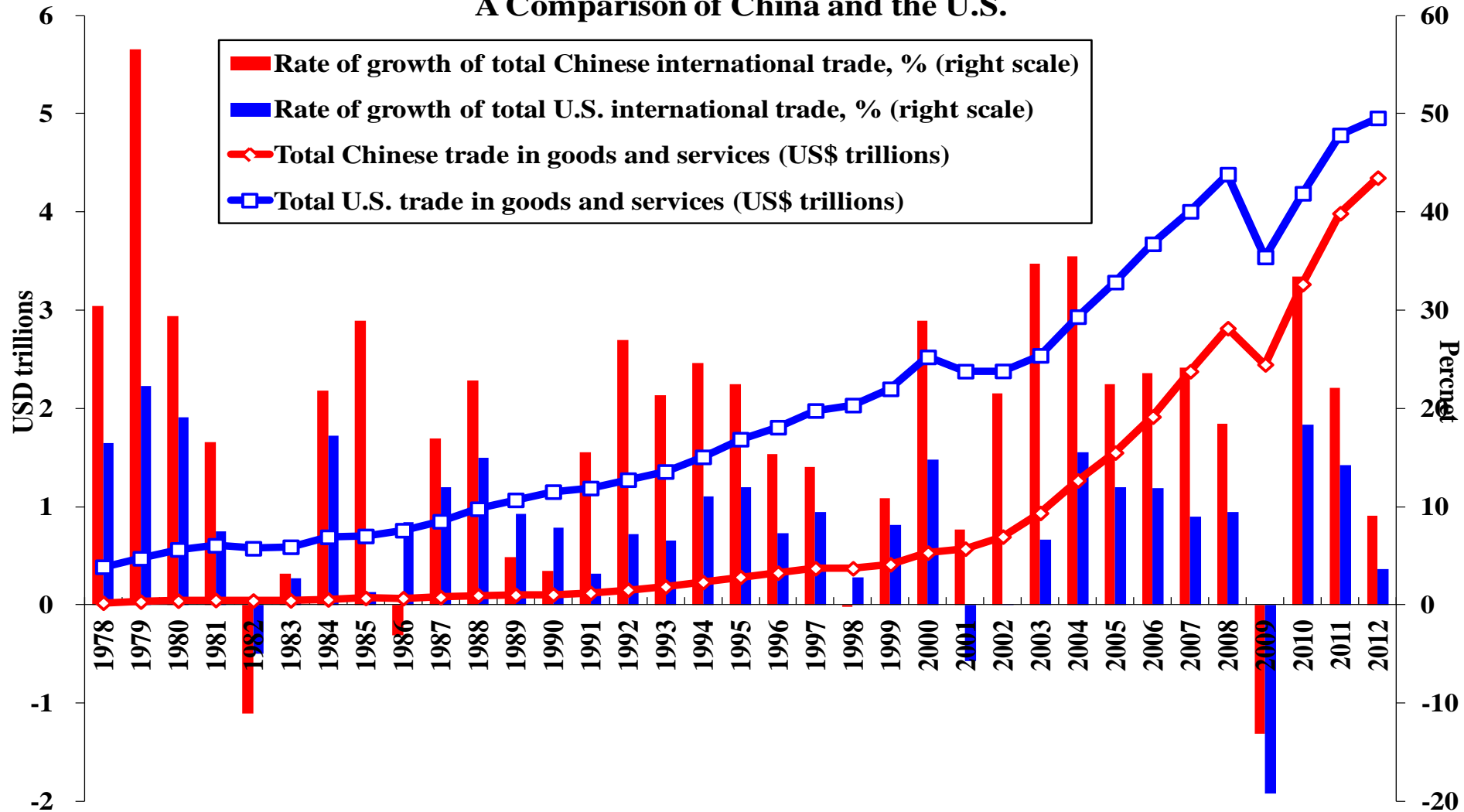
- ◆ Despite its rapid growth, in terms of its real GDP per capita, China is still a developing economy.
- ◆ Between 1978 and 2013, Chinese real GDP per capita grew 18.5 times, from US\$370 to US\$6,850.5 (in 2013 prices).
- ◆ By comparison, the U.S. GDP per capita of approximately US\$53,086, was 7.7 times Chinese GDP per capita in 2013.

The Chinese Economy in the Global Context: International Trade

- ◆ Chinese international trade has grown very rapidly, especially after it acceded to the World Trade Organisation (WTO) in 2001.
- ◆ China has also grown into the second largest trading nation in the World in terms of the total value of international trade in goods and services (US\$4.61 trillion in 2013), just after the U.S. (US\$5.02 trillion).
- ◆ While China is the largest exporting nation in terms of goods and services (US\$ 2.425 trillion in 2013), followed by the U.S. (US\$2.271 trillion), the U.S. is the largest importing nation in terms of goods and services (US\$2.75 trillion), followed by China (US\$2.19 trillion). China is also the largest exporting nation in terms of goods alone, followed by the U.S. The U.S. is the largest exporting as well as importing nation in terms of services, followed by respectively the United Kingdom and Germany.

International Trade & Its Rate of Growth: A Comparison of China and the U.S.

The Value of International Trade and Its Rate of Growth:
A Comparison of China and the U.S.

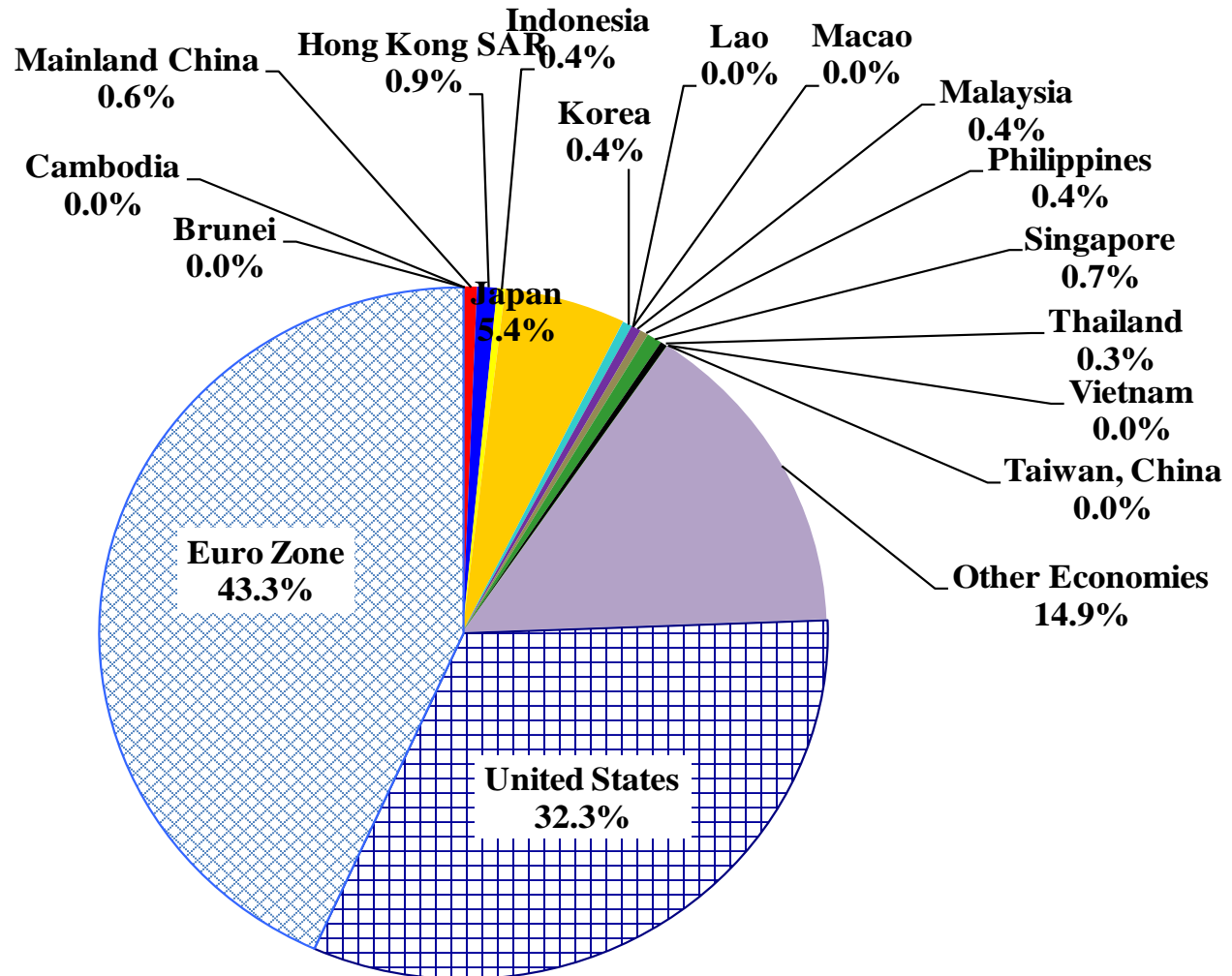


The Chinese Economy in the Global Context: International Trade

- ◆ In 1970, the United States and Western Europe together accounted for over 60% of World trade. By comparison, East Asia and South Asia combined accounted for less than 10% of World trade.
- ◆ In 1990, the United States and Western Europe together still accounted for approximately 55% of World trade while East Asia and South Asia combined accounted for just over 10% of World trade.
- ◆ By 2012, the share of United States and Western Europe in World trade has declined to below 45% whereas the share of East Asia and South Asia has risen to 30%.
- ◆ The regional distribution of international trade parallels approximately the regional distribution of GDP.

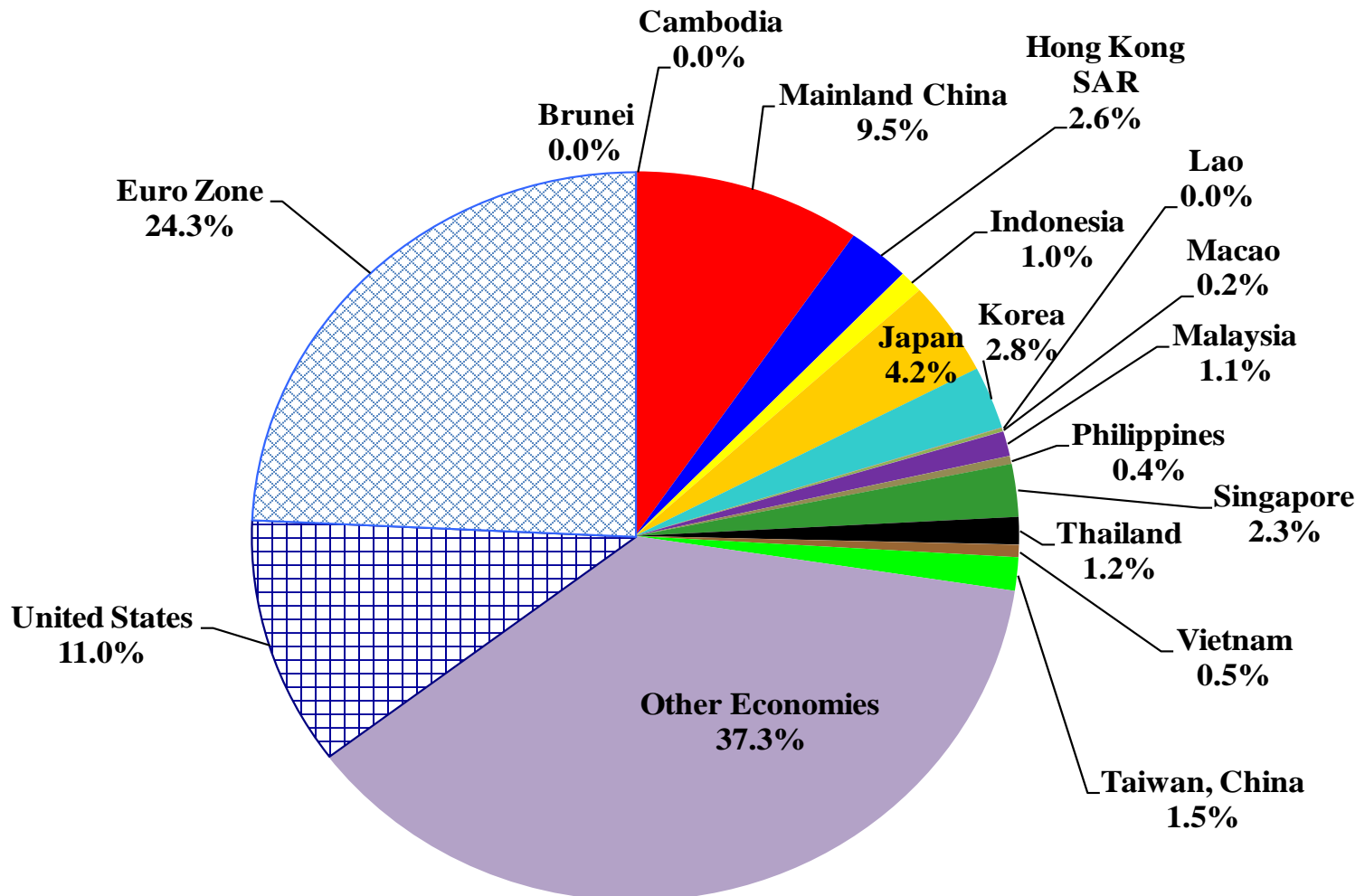
The Distribution of Total International Trade in Goods and Services, 1970

The Distribution of Total International Trade in Goods and Services in 1970



The Distribution of Total International Trade in Goods and Services, 2012

The Distribution of Total International Trade in Goods and Services in 2012

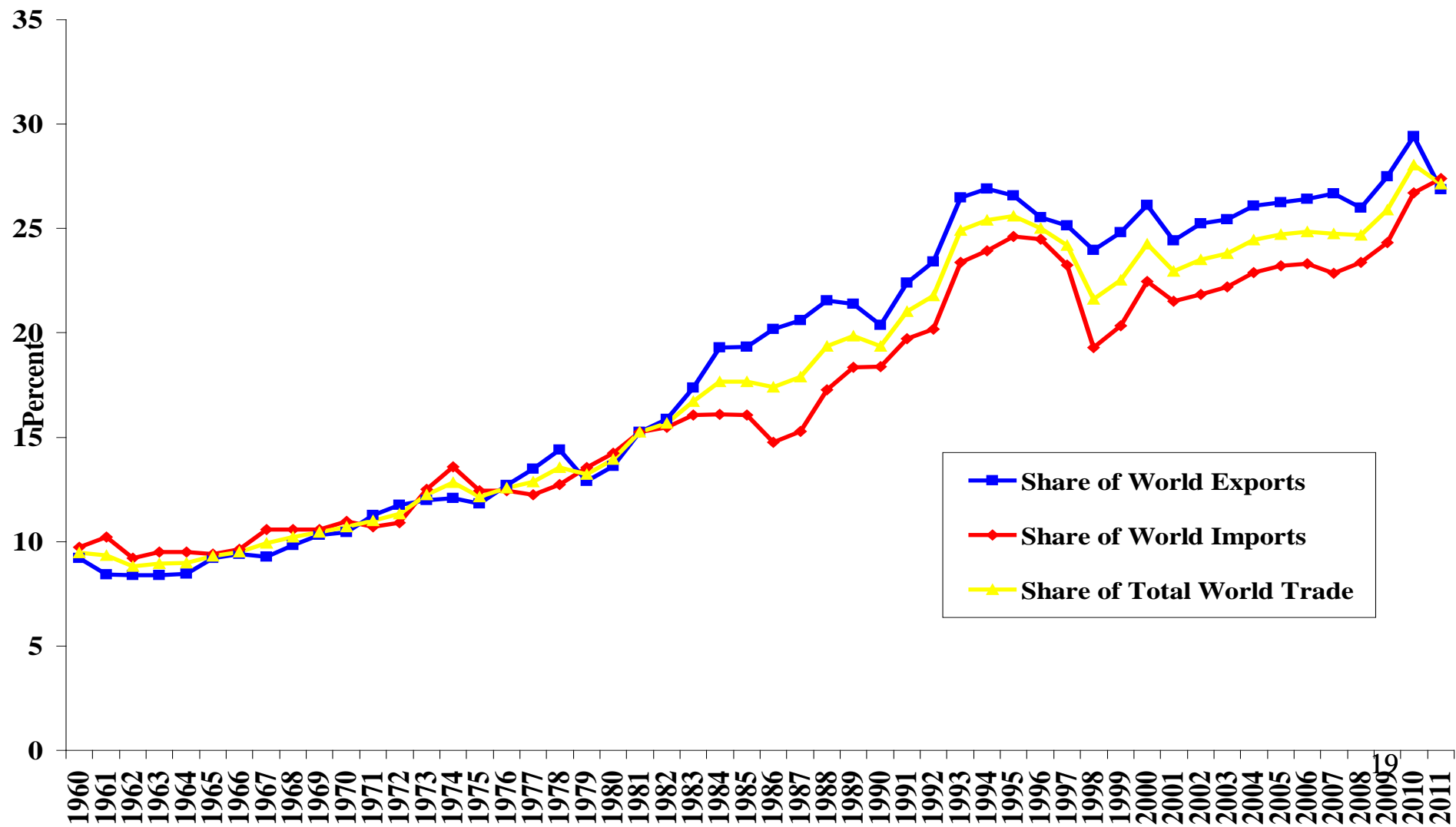


The Chinese Economy in the Global Context: International Trade

- ◆ The East Asian share of World trade rose from 9.9% in 1970 to 25.8% in 2012.
- ◆ The Chinese share of World trade rose from 0.7% in 1970 to 10.7% in 2012.
- ◆ Chinese international trade accounted for 41.2% of East Asian international trade in 2012.
- ◆ China runs a trade deficit with almost every East Asian economy.

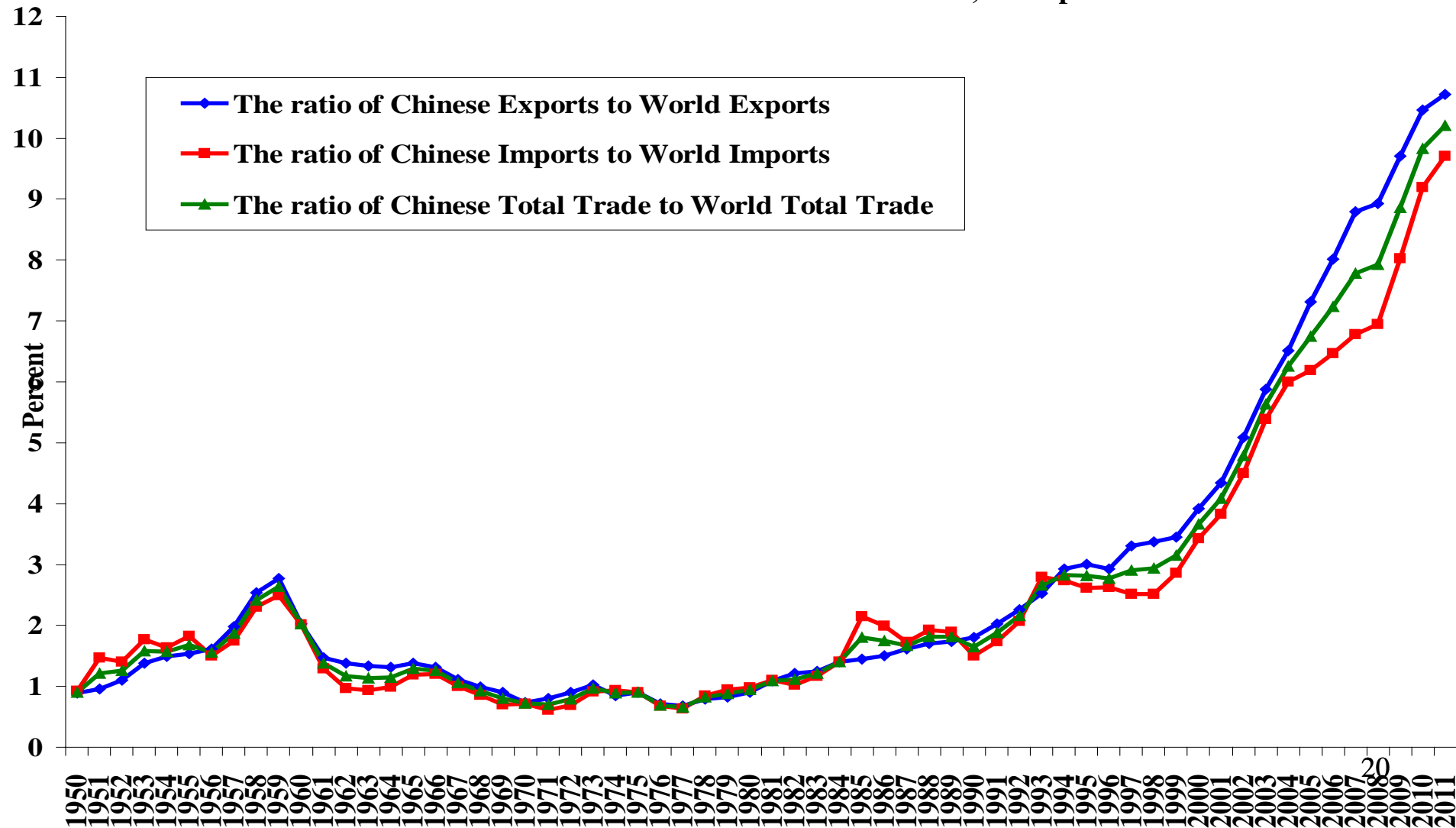
The Rising Share of East Asian Trade in Total World Trade, 1960-present

The Rising Share of East Asian Trade in Total World Trade, 1960-present



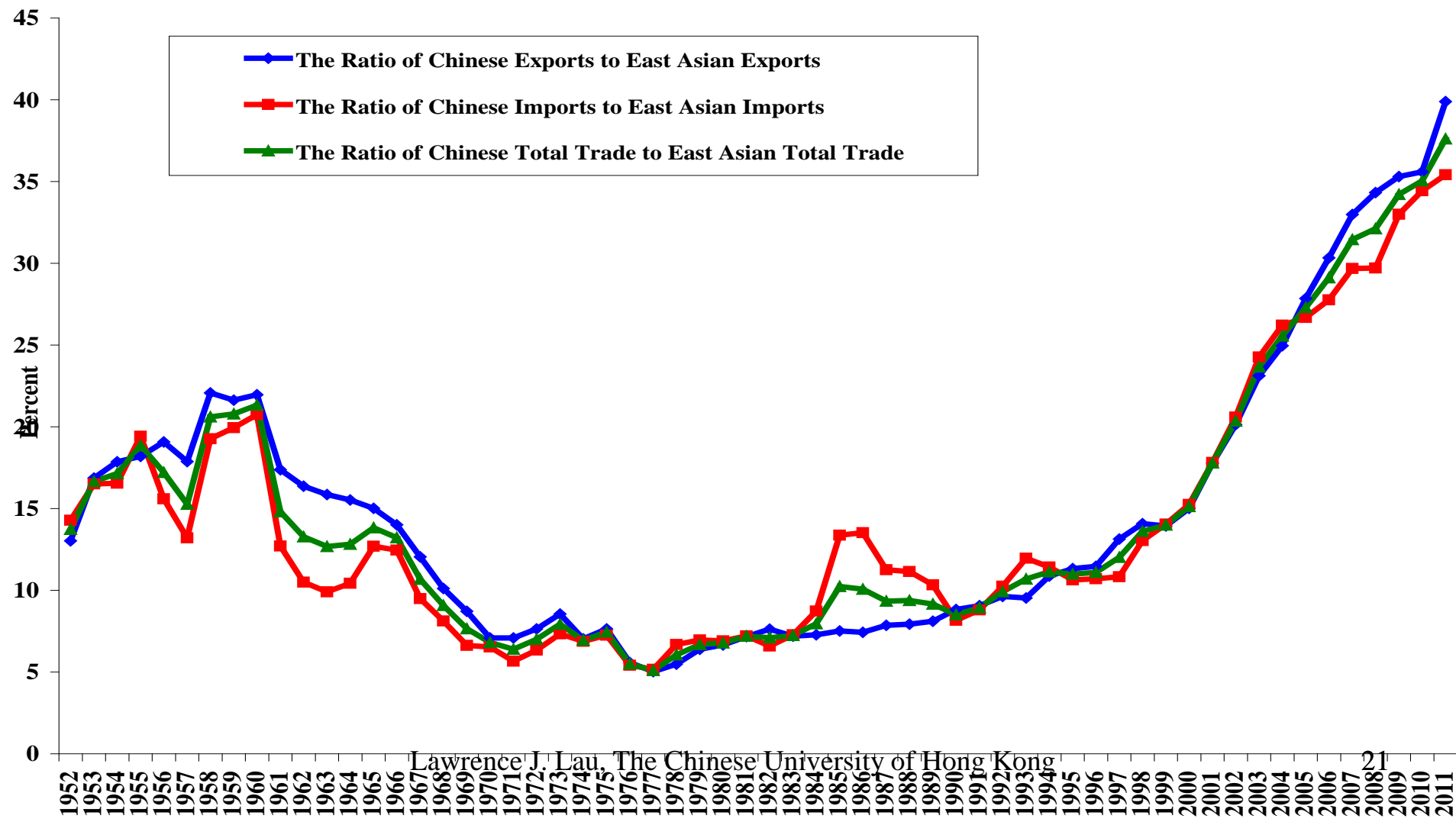
The Share of China in Total World Trade, 1950-present

The Share of Chinese Trade in Total World Trade, 1950-present



The Share of China in Total East Asian Trade, 1952-present

The Share of Chinese Trade in Total East Asian Trade, 1952-present

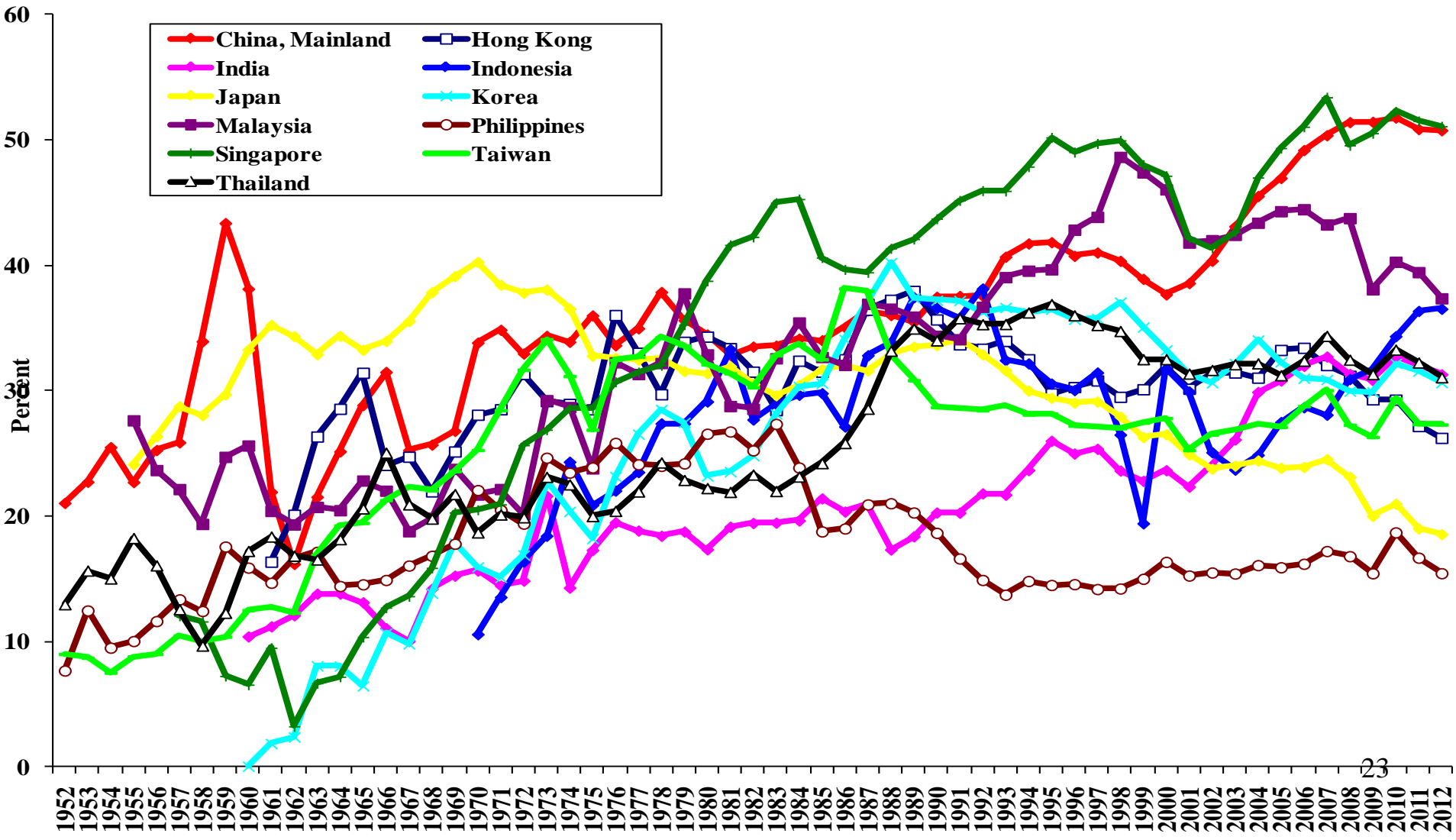


The Chinese Economy in the Global Context: High Saving Rate

- ◆ Economic growth in East Asia has been under-pinned by a high domestic saving rate (see the following chart), with the Philippines being a notable exception.
- ◆ A high domestic saving rate means, among other things, that most of the East Asian economies can finance all of their domestic investment needs from their own domestic savings alone. Thus, they can achieve a high rate of growth of their tangible capital stocks without having to depend on the more fickle foreign capital inflows (including foreign direct investment, foreign portfolio investment, foreign loans or foreign aid).

Saving Rates of Selected Asian Economies (1952-present)

Savings Rates of Selected East Asian Economies



The Chinese Economy in the Global Context: High Saving Rate

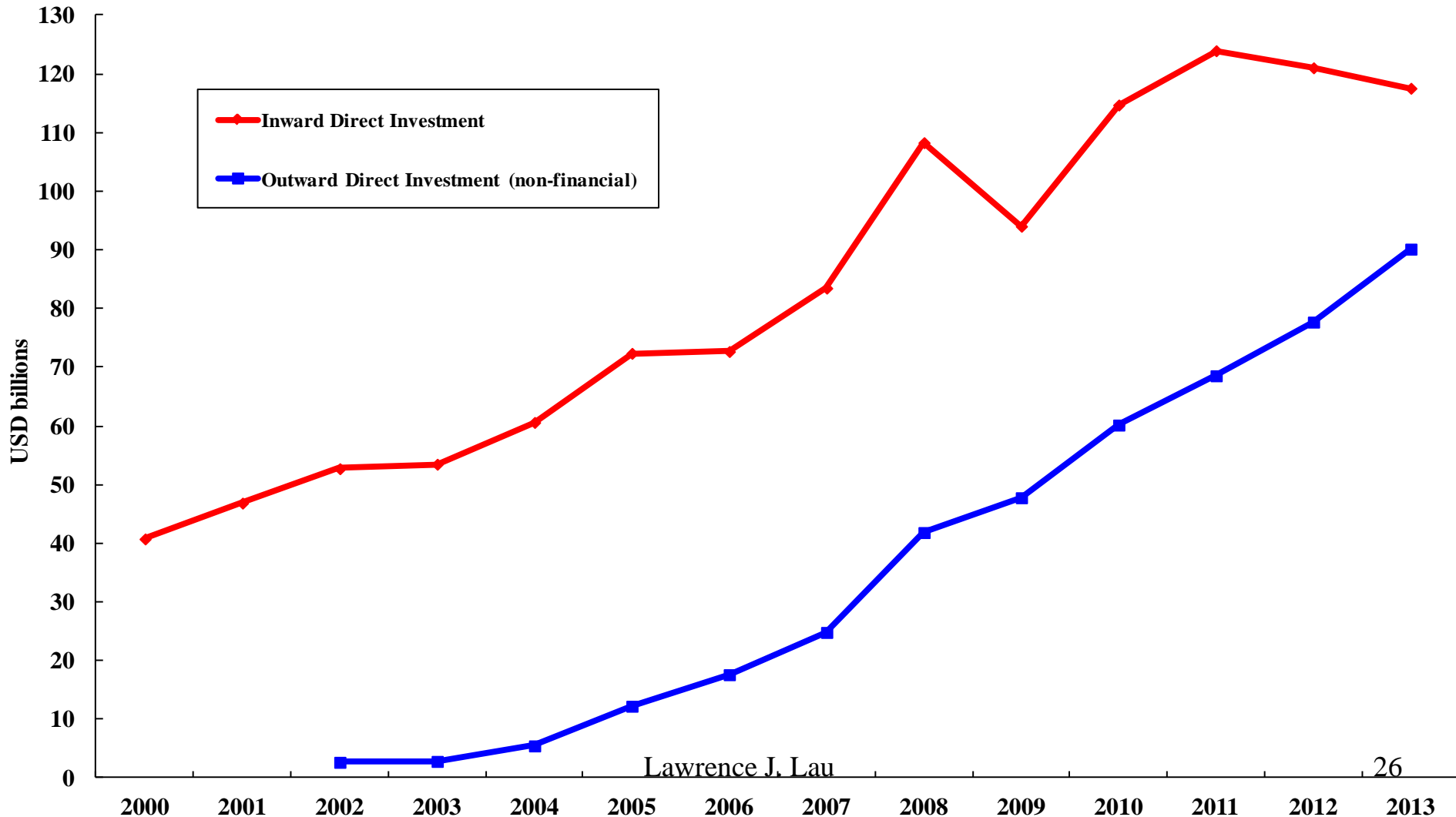
- ◆ Chinese economic growth since 1978 has been supported by a high domestic saving rate, on the order of 30% and above, enabling a consistently high domestic investment rate. The Chinese saving rate has fluctuated around 40% since the early 1990s and has at times approached or even exceeded 50% in more recent years.
- ◆ Hence the Chinese economy is also more immune from external disturbances.

The Chinese Economy in the Global Context: High Saving Rate

- ◆ 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.
- ◆ Chinese enterprises and households are poised to become major foreign direct as well as portfolio investors overseas, based on the huge pool of savings and the desire and need for portfolio diversification.
- ◆ They will create a demand for Renminbi-denominated assets abroad.

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

Chinese Inward and Outward Direct Investment, in USD billions

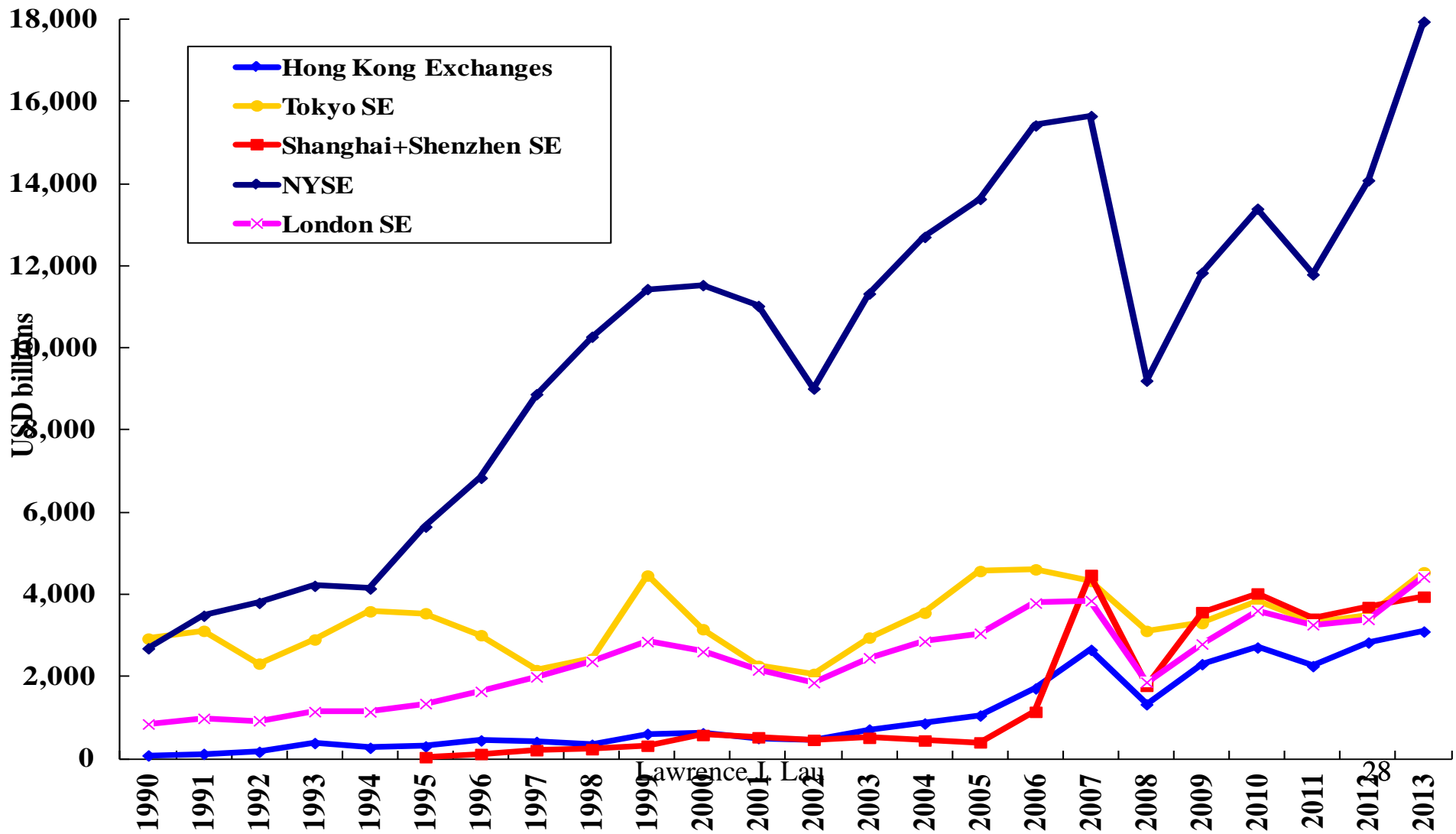


The Chinese Economy in the Global Context: Capital Markets

- ◆ Over the years, the capital markets in East Asian economies have also grown. At year end 2013, the combined market capitalisation of all East Asian stock exchanges amounted to US\$15.8 trillion, behind the market capitalisation of U. S. stock exchanges of US\$24.0 trillion but ahead of the market capitalisation of all European stock exchanges combined of US\$13.2 trillion.
- ◆ Again, this is a relatively recent phenomenon. For example, the Chinese stock exchanges at Shanghai and Shenzhen did not even get started until the mid-1990s.
- ◆ The total market capitalisation of Chinese stock exchanges is comparable in magnitude to those in Hong Kong, London and Tokyo.

End of Year Market Capitalisation of Selected Stock Exchanges

End of Year Market Capitalisation of Selected Stock Exchanges, in USD billions



Market Capitalization of Stock Exchanges

Year End 2013 (US\$)

- ◆ U.S.A. 24.0 trillion
- ◆ Europe 13.2 trillion
- ◆ East Asia 15.8 trillion

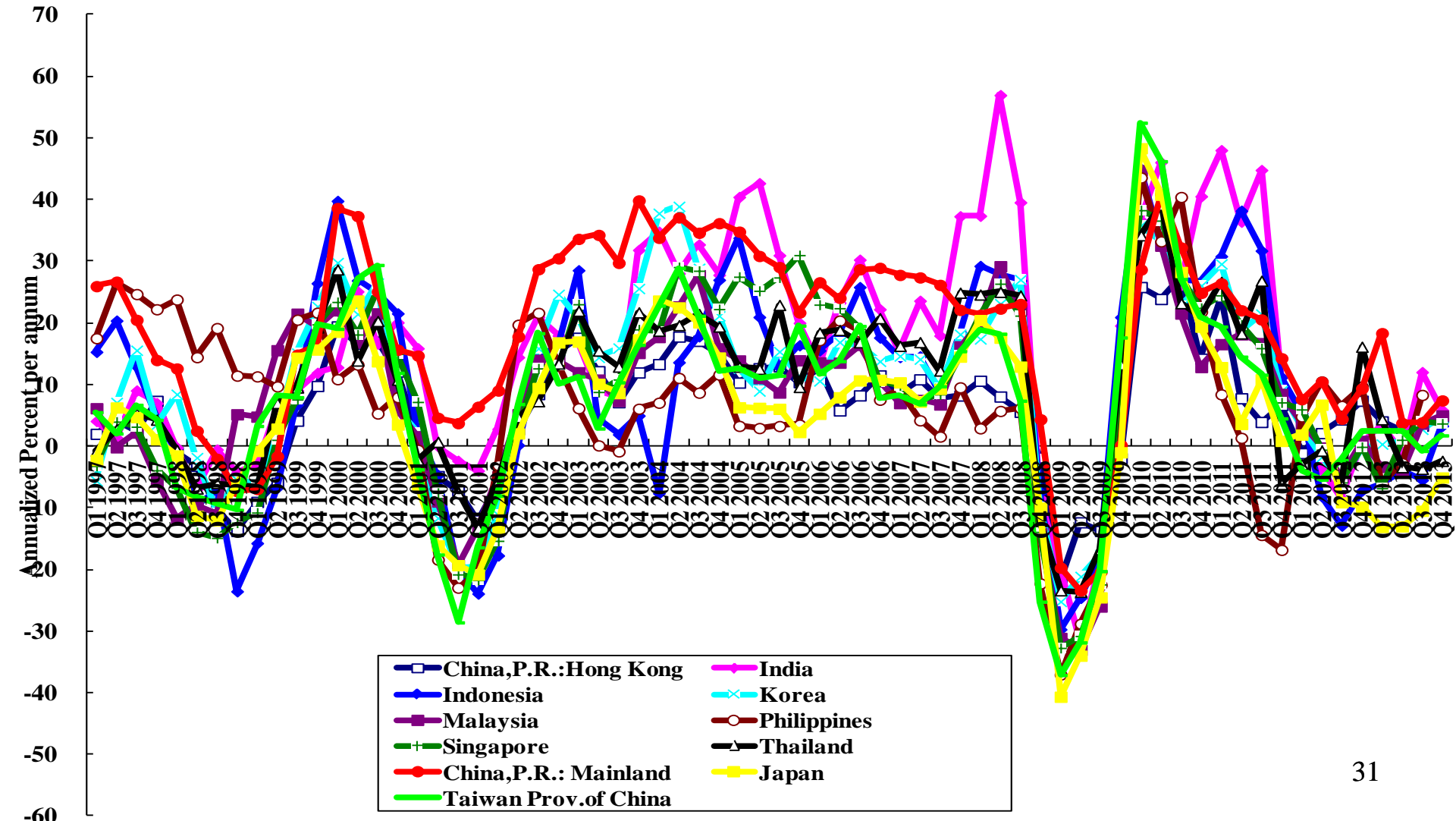
- ◆ Exchanges:
 - ◆ U.S.A.: NASDAQ and NYSE
 - ◆ Europe: Athens Exchange, BME Spanish Exchanges, Budapest SE, Cyprus SE, Deutsche Borse, Irish SE, London SE group, Luxembourg SE, NYSE Euronext (Europe), Oslo Bors, SIX Swiss Exchange
 - ◆ East Asia: Bursa Malaysia, Hong Kong Exchanges, Indonesia SE, Korea Exchange, Philippine SE, Shanghai SE, Shenzhen SE, Singapore Exchange, Taiwan SE, Thailand SE, Tokyo SE Group
- ◆ Data source: World Federation of Exchanges

The Chinese Economy in the Global Context

- ◆ Why was the Chinese economy able to survive successive financial crises, beginning with the 1997-1998 East Asian currency crisis, as well as quantitative easing (QE1, II and III) relatively unscathed?
- ◆ China has been relatively insulated from the financial disturbances in the World economy because it has capital control and does not have to depend on foreign capital due to its high domestic saving rates. Potential contagion is therefore minimised. (It was even spared the Bernard Madoff swindle which actually caught quite a few wealthy European investors.)
- ◆ The following charts show that while Chinese exports and imports fluctuate like those of other economies, its rate of economic growth is relatively much more stable than others.

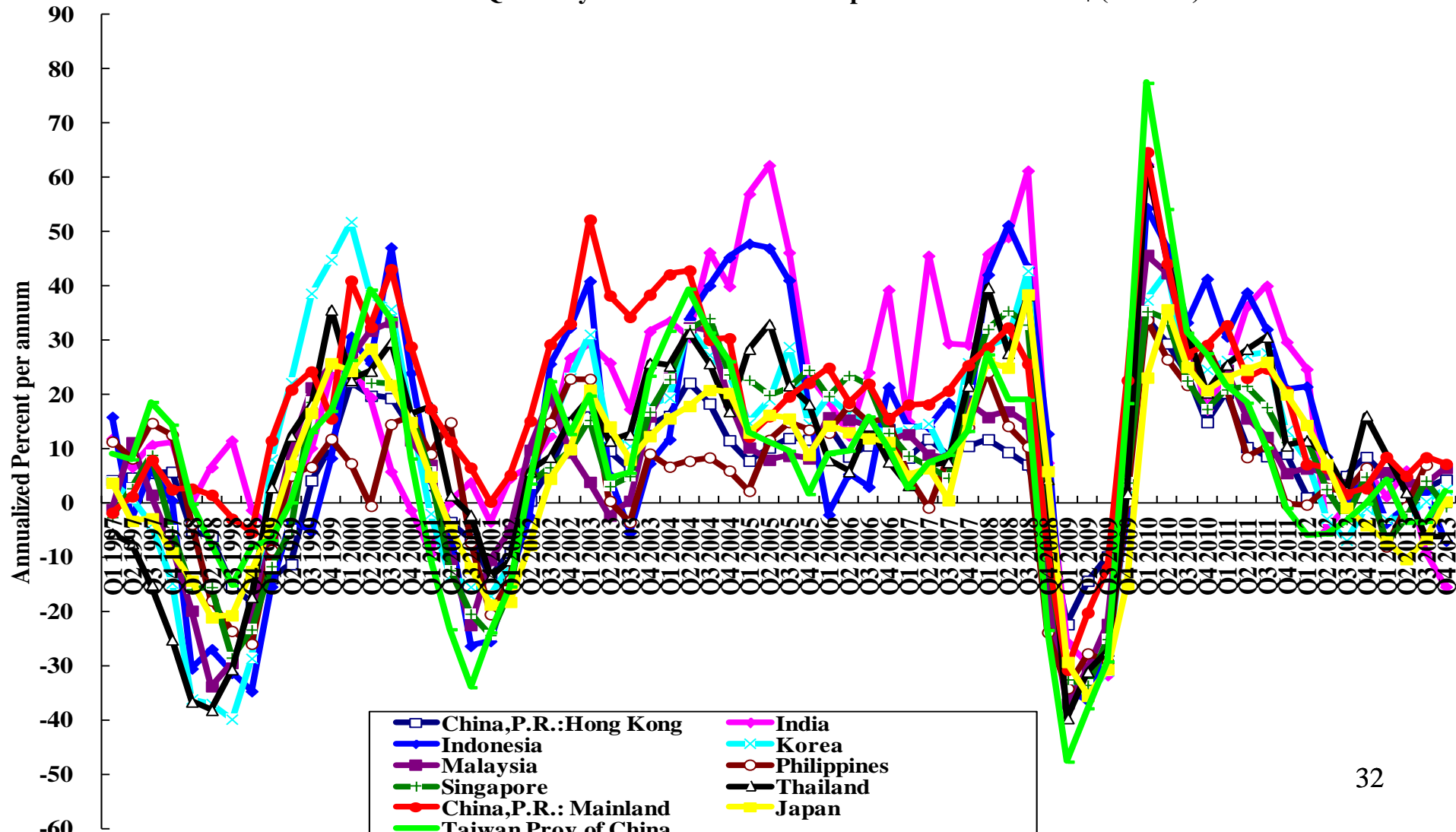
Quarterly Rates of Growth of Exports of Goods: Selected East Asian Economies

Year-over-Year Quarterly Rates of Growth of Exports of Goods in US\$ (Percent)



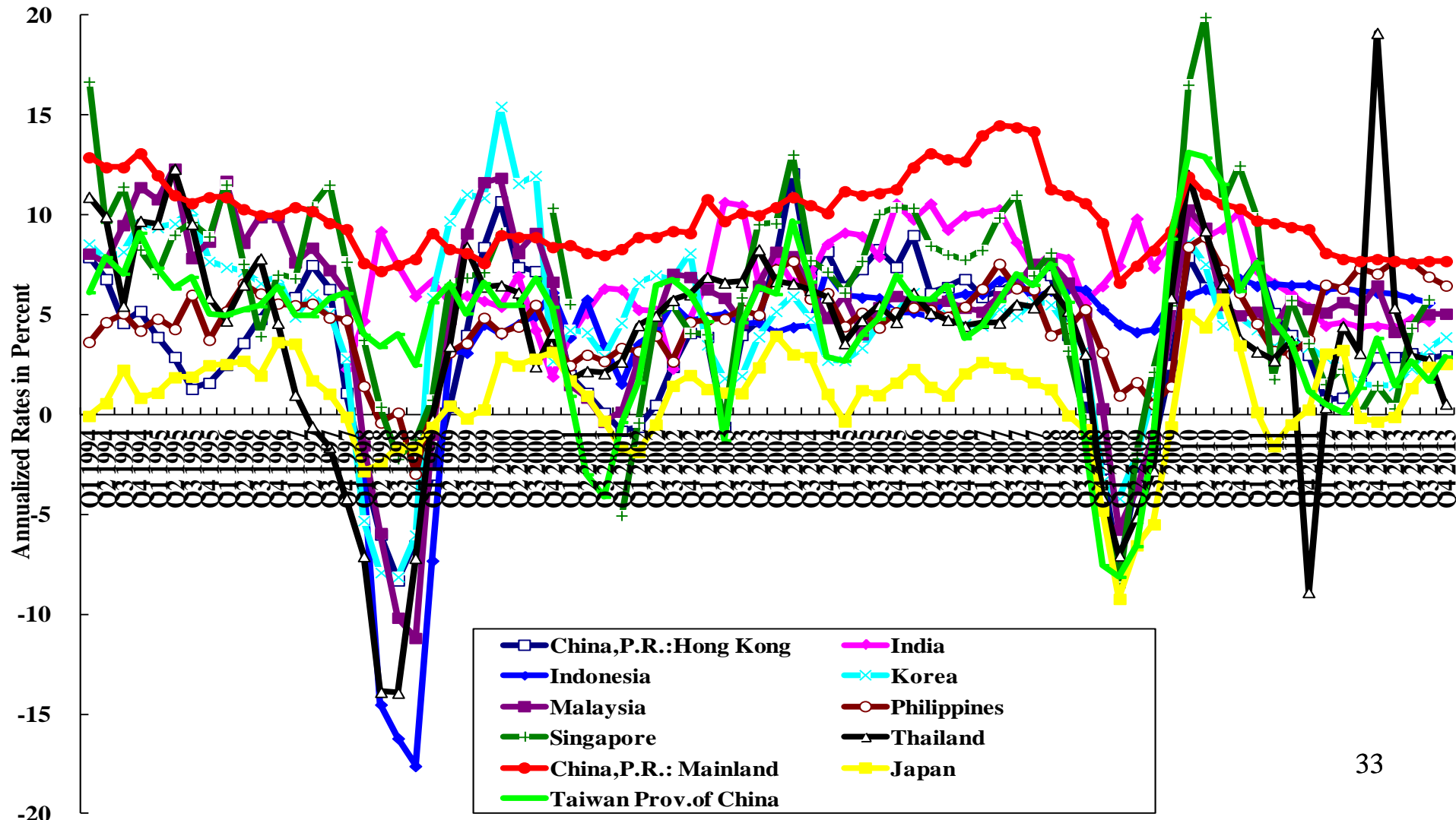
Quarterly Rates of Growth of Imports of Goods: Selected East Asian Economies

Year-over-Year Quarterly Rates of Growth of Imports of Goods in US\$ (Percent)



Quarterly Rates of Growth of Real GDP, Y-o-Y: Selected East Asian Economies

Quarterly Rates of Growth of Real GDP, Year-over-Year, Selected East Asian Economies

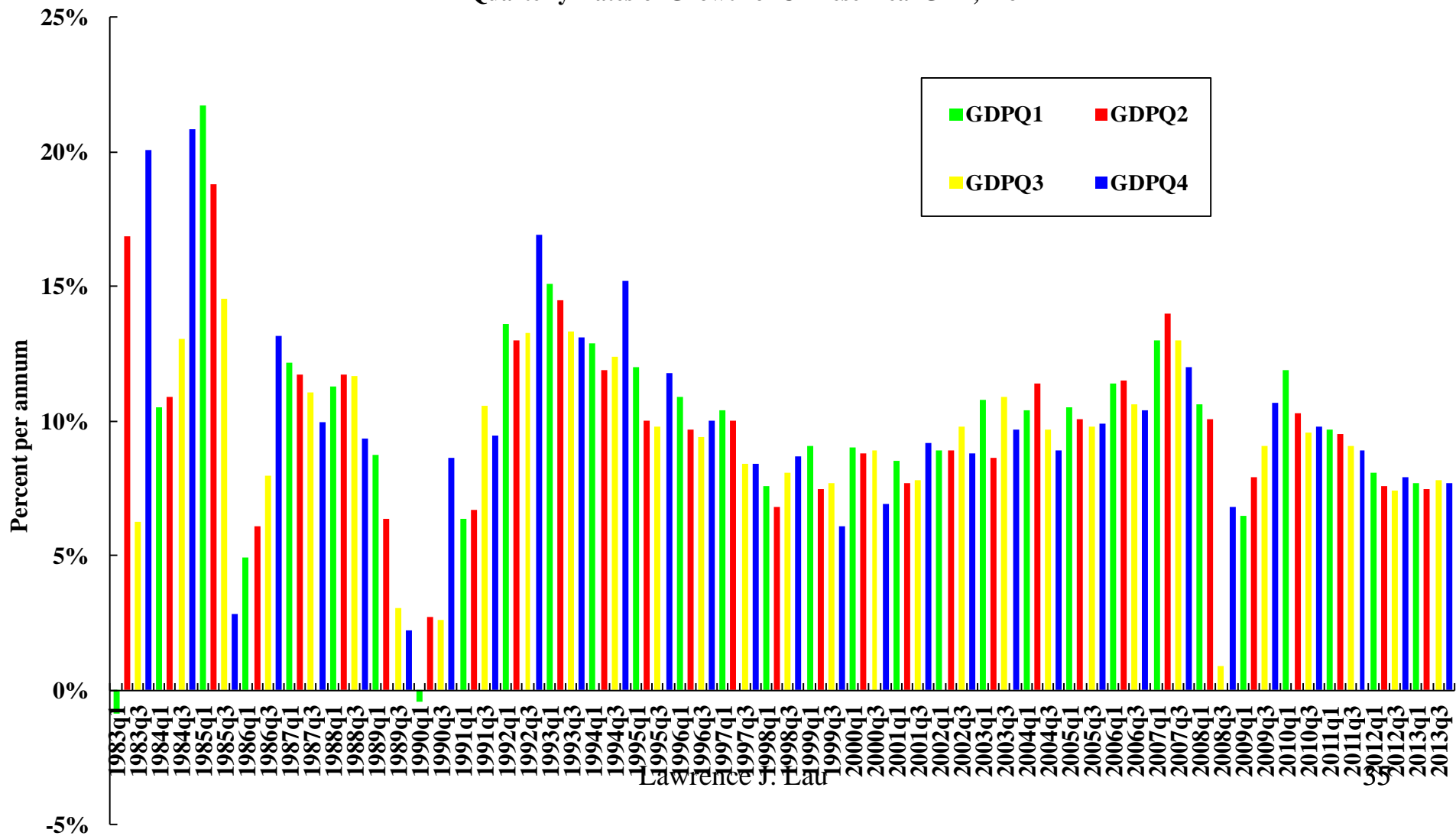


The Macroeconomic Outlook: GDP

- ◆ The Chinese economy grew 9.2% in 2009, 10.4% in 2010, 9.3 % in 2011, 7.7% in 2012 and 2013 even as the European and U.S. economies remained in recession. However, the slowdown is unmistakable.
- ◆ In 2013Q3, the rate of growth of real GDP was 7.8%, Y-o-Y, and in 2013Q4, 7.7%, Y-o-Y. All the indicators suggest that the Chinese rate of growth has stabilised between 7% and 8%. The target growth rate of the Chinese economy for 2014 is around 7.5%.
- ◆ The official target average growth rate for the Twelfth Five-Year Plan (2011-2015) period is a relatively modest 7%. A real rate of growth of over 7% per annum is definitely achievable for 2014.

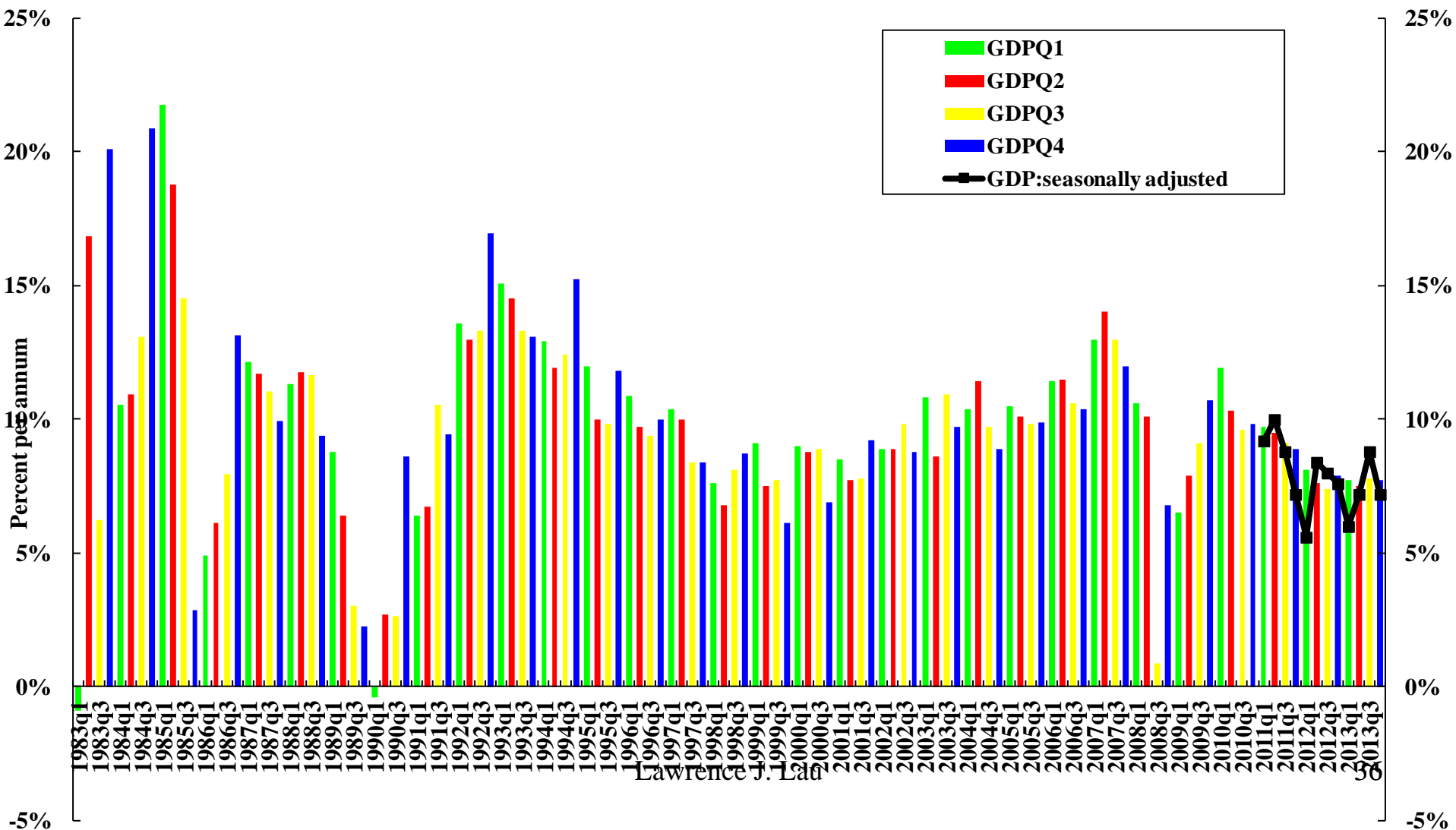
Quarterly Rates of Growth of Chinese Real GDP, Y-o-Y

Quarterly Rates of Growth of Chinese Real GDP, Y-o-Y



Quarterly Rates of Growth of Chinese Real GDP, Y-o-Y and Seasonally Adjusted

Quarterly Rates of Growth of Chinese Real GDP, Y-o-Y and Seasonally Adjusted

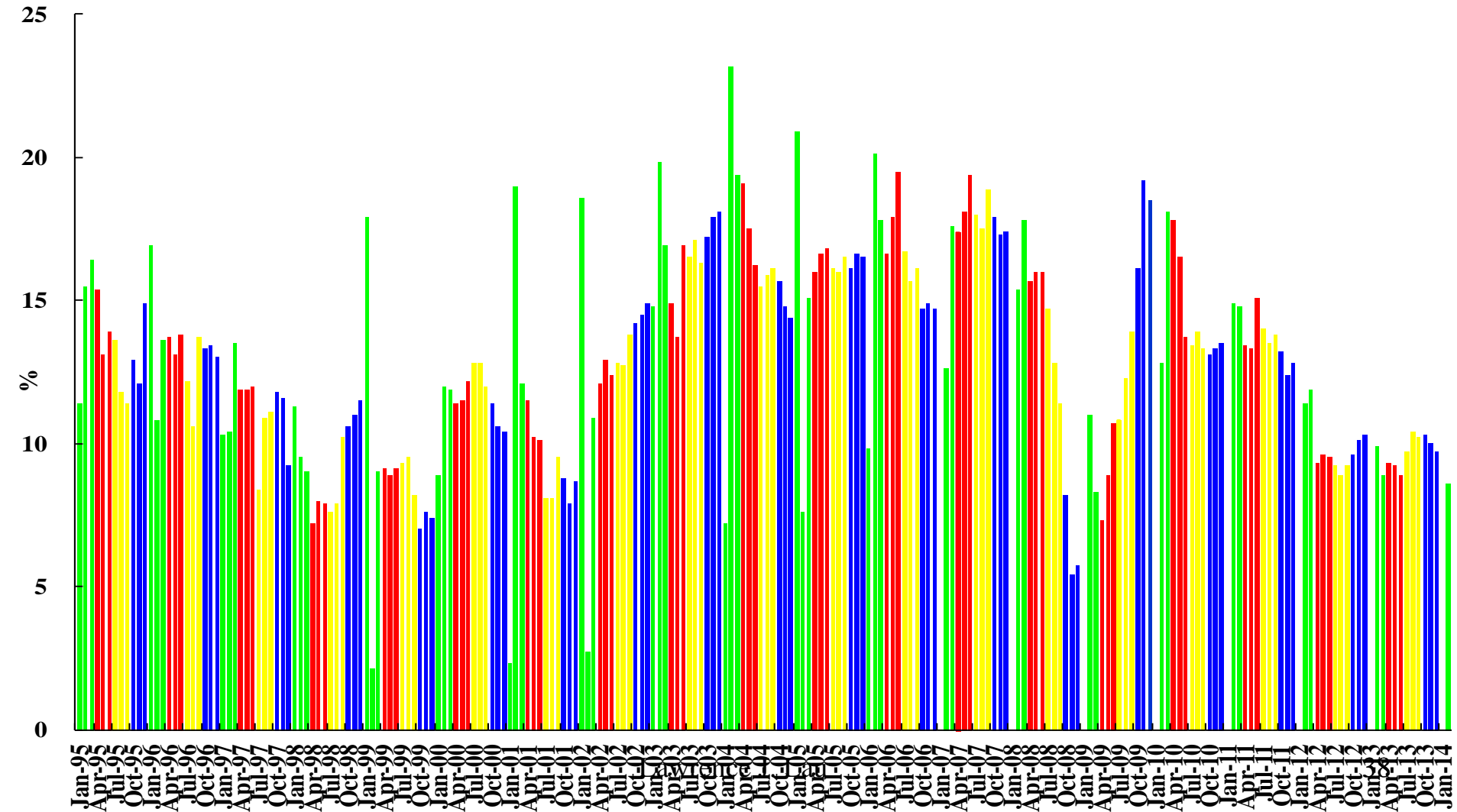


The Macroeconomic Outlook

- ◆ The recent slowdown in the Chinese economy is due, in part, to the ending of the 4 trillion Yuan stimulus programme introduced in late 2008, in part to the continued weakness in exports to the United States and Europe, and in part, to the change in the inventory behaviour of importers in the United States and Europe (attempting to minimise the holding of inventory). But it should be viewed as a positive development.
- ◆ As the economic reform measures adopted at the Third Plenary Session of the Central Committee of the Chinese Communist Party in November 2013 are implemented, it should lead to a boost in the productivity of the Chinese economy, the so-called “reform bonus.”

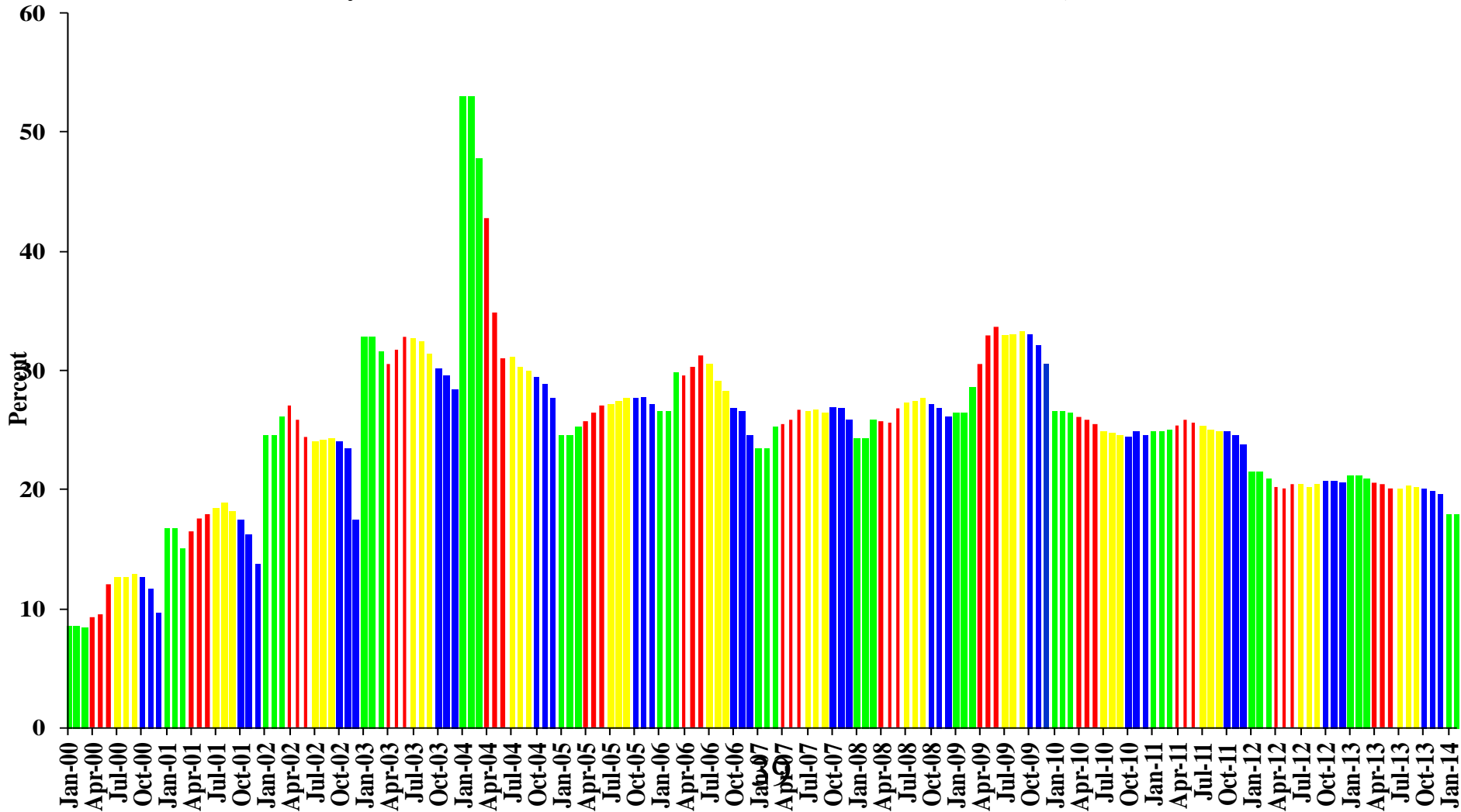
Monthly Rates of Growth of Real Value-added of the Industrial Sector, Y-o-Y

Monthly Rates of Growth of Real Value-Added of the Industrial Sector, Year-over-Year



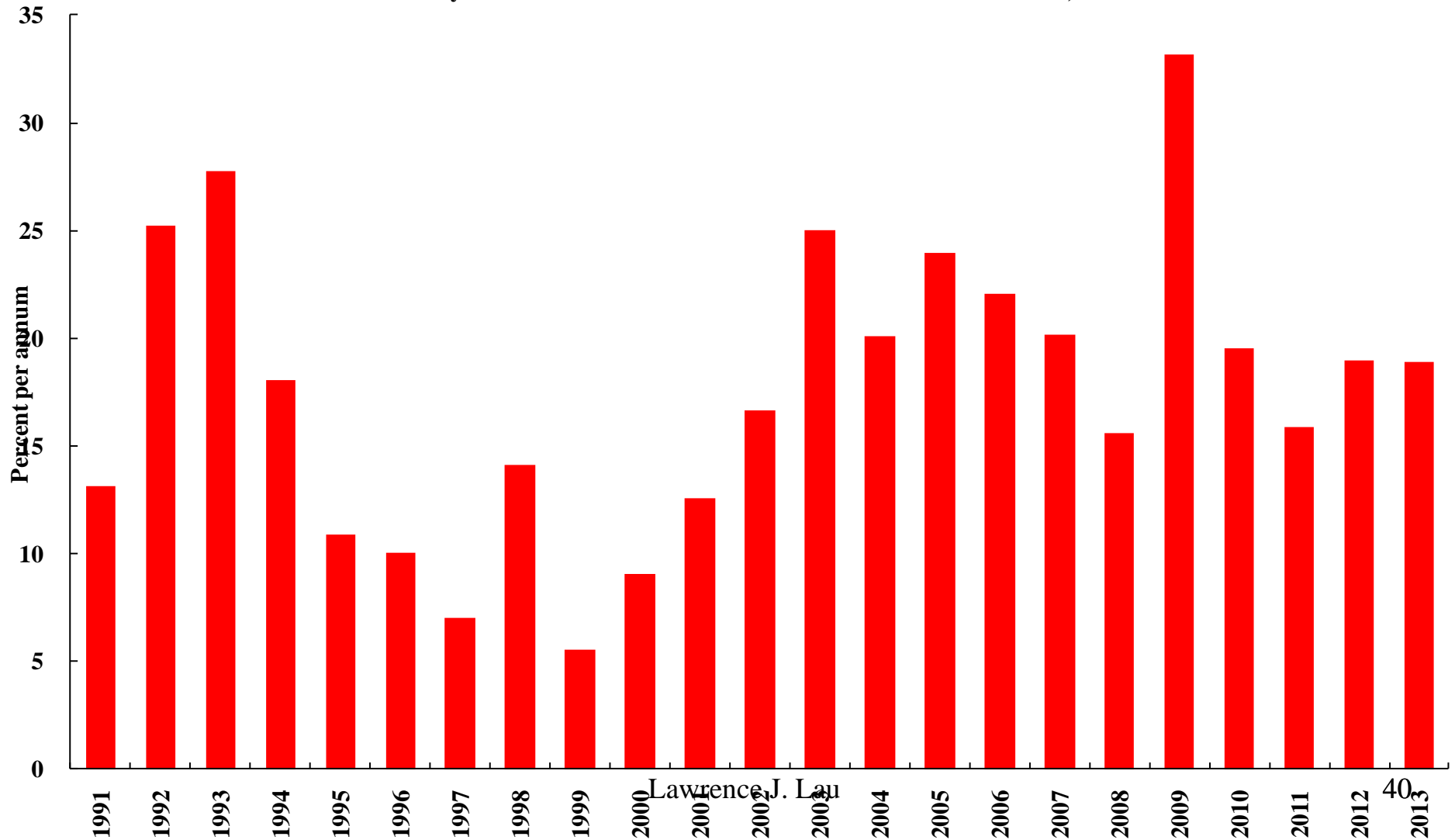
Monthly Rates of Growth of Chinese Fixed Assets Investment, Y-o-Y

Monthly Rates of Growth of Chinese Fixed Assets Investment since 2000, Year-over-Year



Annual Rates of Growth of Chinese Real Fixed Assets Investment, Y-O-Y

Annually Rates of Growth of Chinese Real Fixed Assets Investment, Y-O-Y



The Metaphor of the “Wild Geese Flying Pattern”

- ◆ The metaphor of the "wild-geese-flying pattern" of East Asian economic development over time, introduced by Professor Kaname Akamatsu (1962), suggests that industrialisation will spread from economy to economy within East Asia as the initially fast-growing economies, beginning with Japan, run out of surplus labour and face labour shortages, rising real wage rates, and quota restrictions on their exports.
- ◆ Thus, East Asian industrialisation spread from Japan to first Hong Kong, and then Taiwan, and then South Korea, and then Southeast Asia (Thailand, Malaysia, Indonesia), and then to Guangdong, Shanghai, Jiangsu and Zhejiang in Mainland China. During this industrial migration, the large trading firms such as Mitsubishi, Mitsui, Marubeni and Sumitomo of Japan and Li and Fung of Hong Kong played an important role as financiers, intermediaries, quality assurers, and managers of logistics and supply chains.

The Metaphor of the “Wild Geese Flying Pattern”

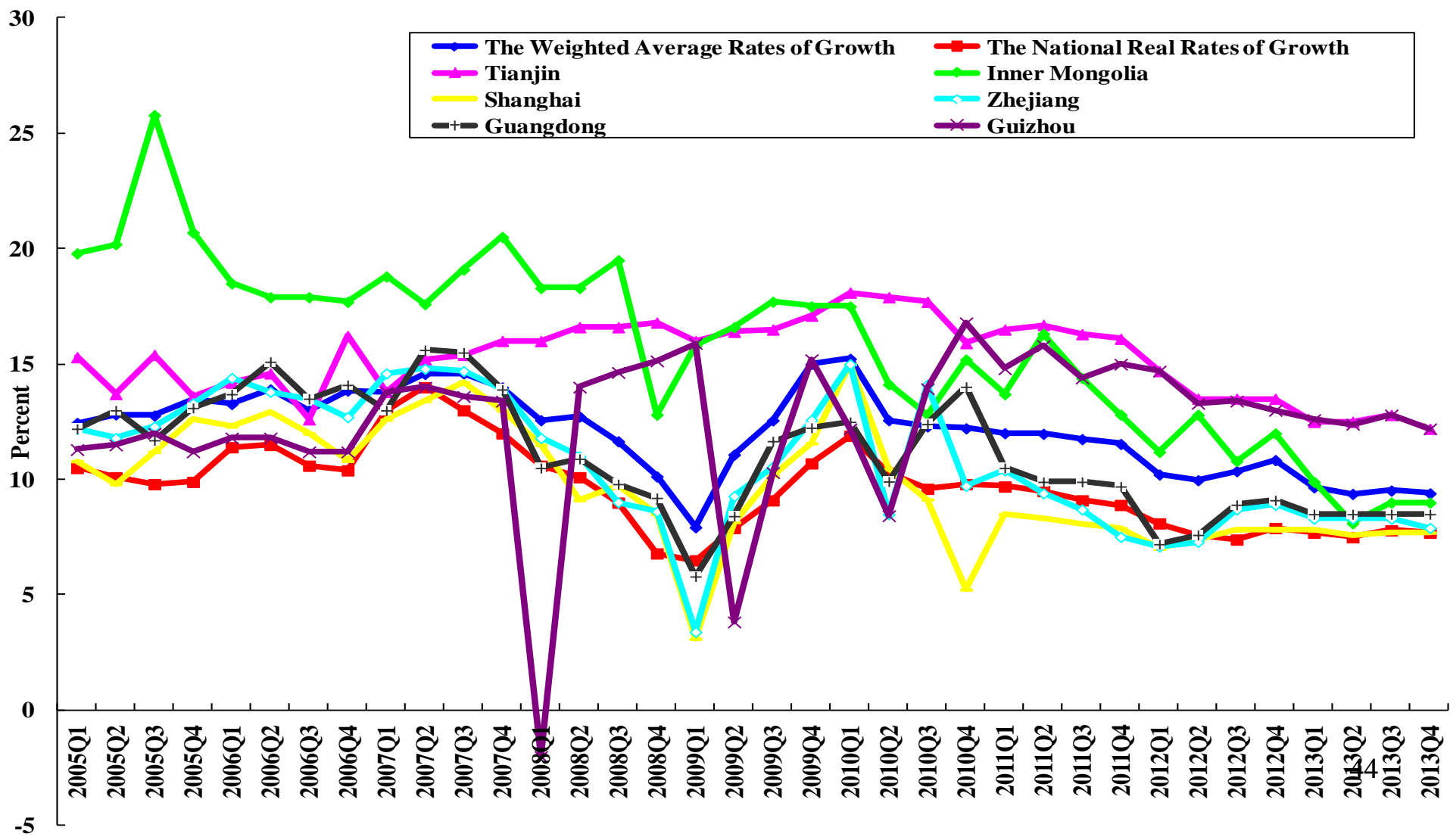
- ◆ This metaphor actually applies not only to East Asia but also to China itself. Within China, industrialisation first started in the coastal provinces, regions and municipalities. It has begun to migrate and spread to other provinces, regions and municipalities in the interior—to Chongqing, Henan, Hunan, Jiangxi, Shaanxi and Sichuan. As the coastal provinces, regions and municipalities slow down in their economic growth, the central and western provinces, regions and municipalities will take their turn as the fastest growing areas in China. China as a whole will be able to maintain a relatively high rate of growth for many years to come.

The Metaphor of the “Wild Geese Flying Pattern”

- ◆ The economies of the Chinese coastal regions such as the Pearl River Delta (Guangdong Province) and the Yangzi River Delta (Jiangsu and Zhejiang Provinces and Shanghai Municipality) would have slowed down a long time ago had it not been for the couple of hundreds of million migrant labourers that flocked to these regions from the interior, constantly replenishing the supply of surplus labour there.

Quarterly Rates of Growth of Selected Chinese Provincial GDPs, Year-over-Year

Quarterly Rates of Growth of Selected Chinese Provincial GDPs, Year-over-Year

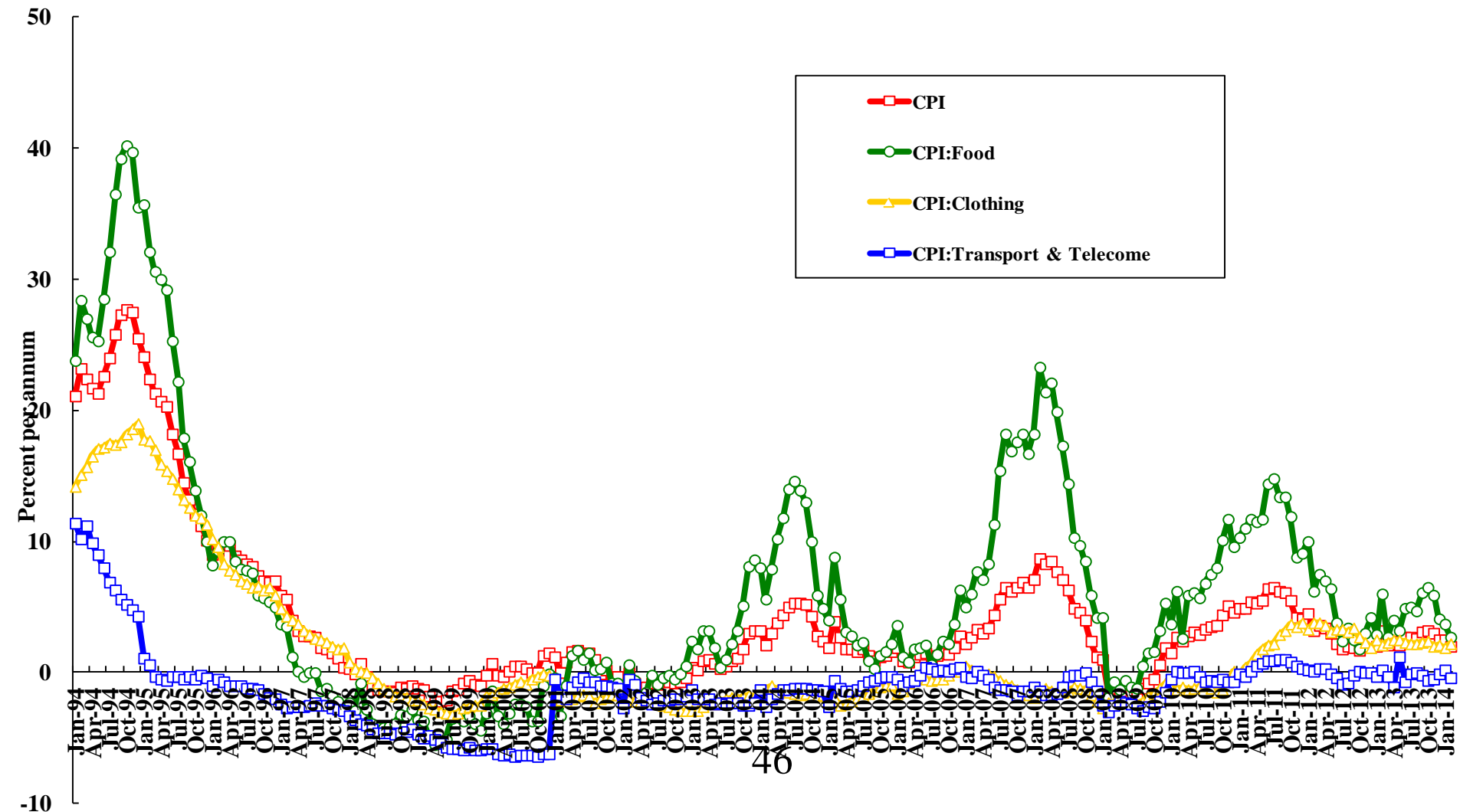


The Macroeconomic Outlook: Inflation

- ◆ For 2012, the rate of inflation was 2.6%, down from 5.4% in 2011. For 2013, the rate of inflation was also 2.6%.
- ◆ For 2014, the monthly rates of inflation as measured by the CPI year-over-year were 2.5% and 2% in January and February respectively. There was little indication that inflation would rise significantly in the near term, especially given the excess production capacity in many industries such as steel, cement, plate glass, etc., and favourable agricultural harvests.
- ◆ The government target for 2014 is to keep the rate of inflation below 3.5%, which appears quite feasible at this time.

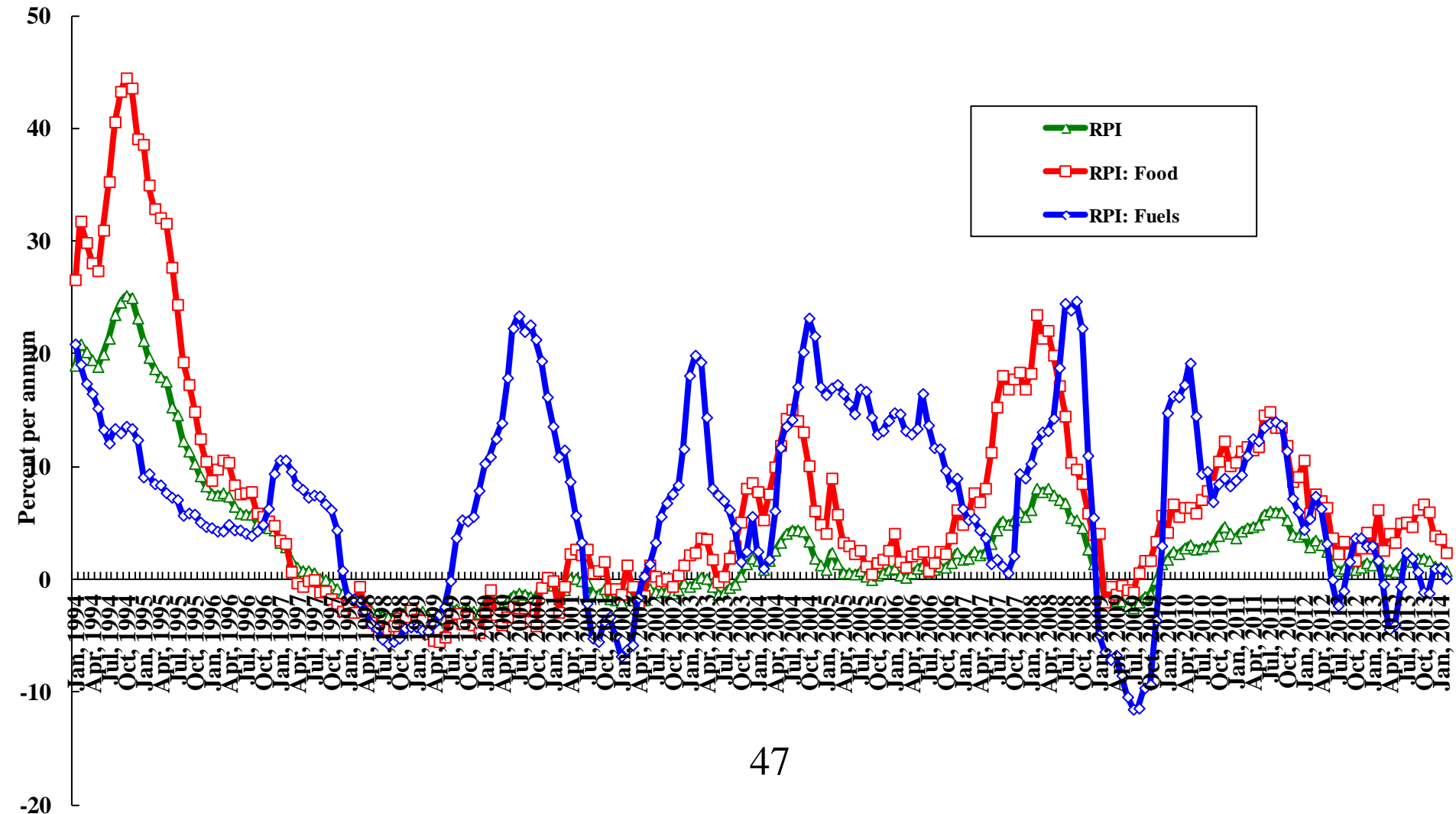
Monthly Rates of Change of the Consumer Price Index (CPI), Y-o-Y

Monthly Rates of Change of Consumer Price Index and Its Components since 1994, Y-o-Y



Monthly Rates of Change of the Retail Price Index, Y-o-Y

Monthly Rates of Change of Retail Price Index and Its Components Since 1994, Y-o-Y



The Macroeconomic Outlook: Inflation

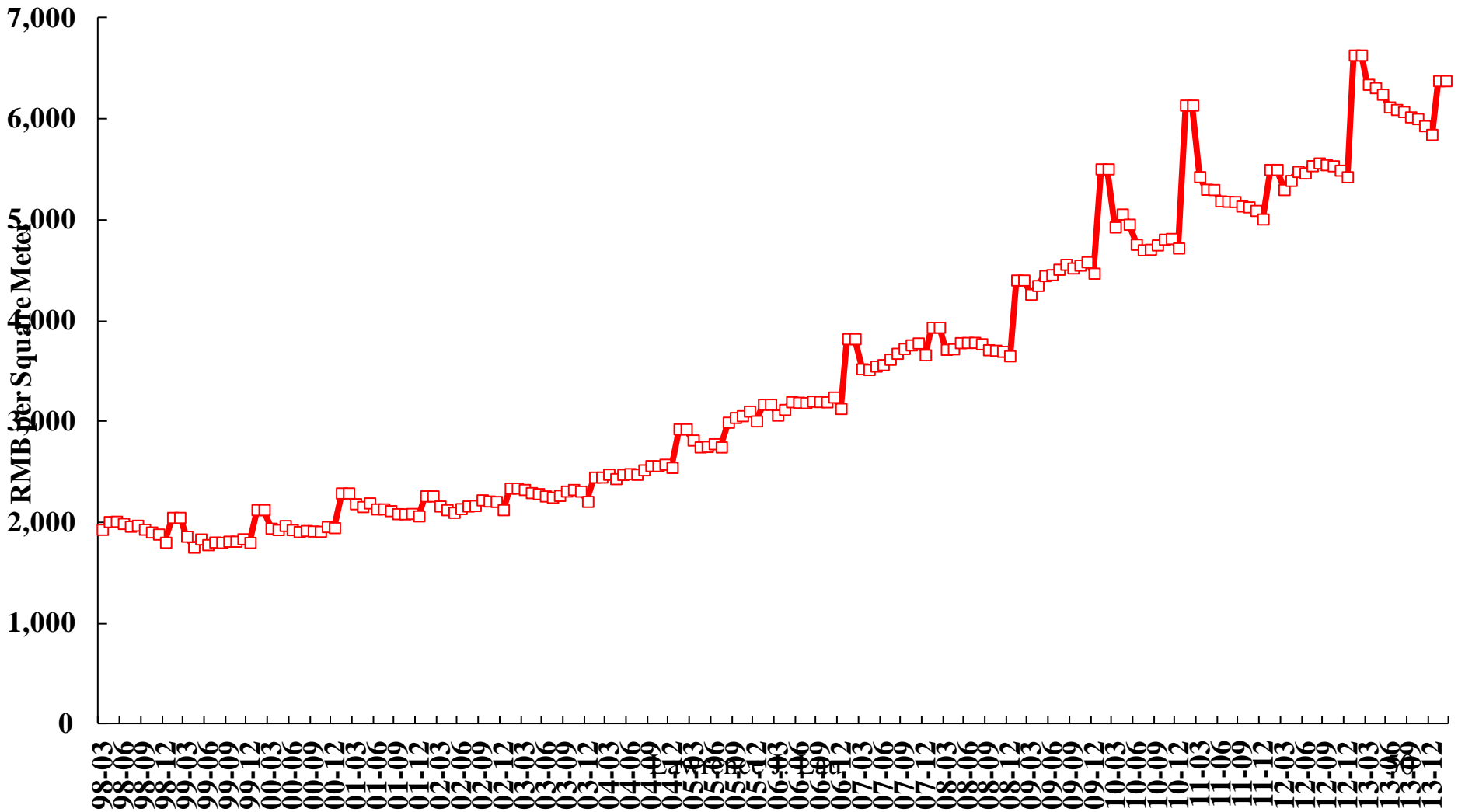
- ◆ It should be noted that the bulk of the increase in the consumer price index (approximately 70%) has been caused by increases in food prices (principally the prices of pork and vegetables), due mostly to weather and the natural production cycle and possibly hoarding and market manipulation and not to monetary factors.
- ◆ The core rate of inflation, that is, the rate of inflation net of the changes in the prices of agricultural and energy goods, has remained relatively tame, below 2% per annum level, as has been the case in the past few years.

The Macroeconomic Outlook: Inflation

- ◆ Moreover, given the hugely excess production capacity in many key industries, such as steel, cement, and glass, it is unlikely that there will be much inflation in the prices of manufactured goods in the next couple of years.
- ◆ However, there has been significant inflation in the prices of real assets such as real estate in the past few years due to the implementation of the economic stimulus package and the resulting significant increases in the rates of growth of money supply and commercial bank credit. These increases in the prices of real estate feed into rental rates of both residential and non-residential real estate and through them directly and indirectly into the consumer price index.

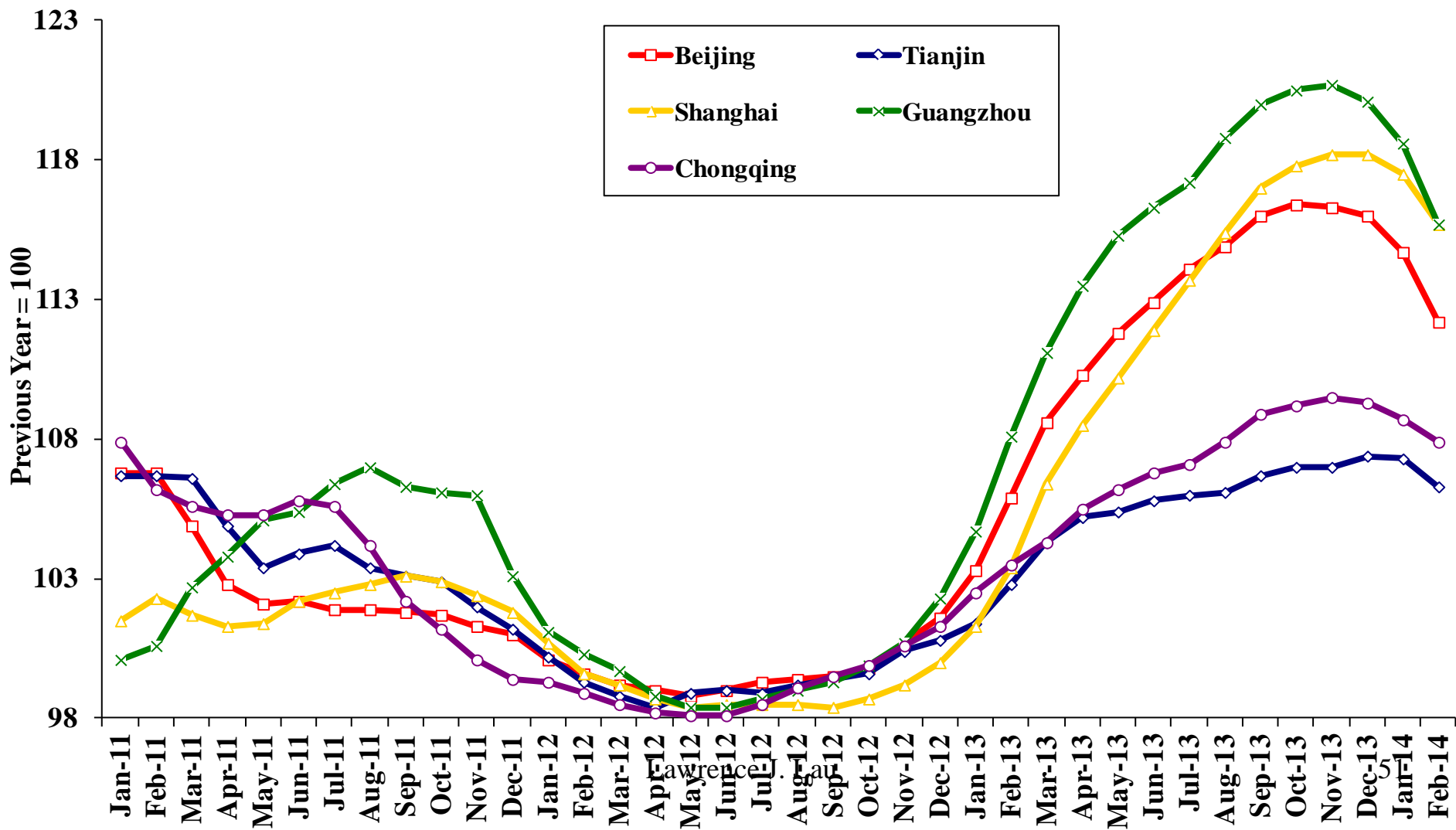
Average Housing Price in China, Yuan/Square Meter since March 1998

Average Housing Price in China, RMB per Square Meter



Price Index of New Residential Units, Selected Cities, Y-o-Y, since 2011

Price Index of New Residential Units, Selected Cities, Year-over-Year



The Macroeconomic Outlook: Inflation

- ◆ There is not much any central bank can do about agricultural prices. No head of a central bank anywhere in the World has been able to control the weather or for that matter the hog cycle.
- ◆ The key in reining in increases in asset prices, especially real estate prices, is to ensure that there is a continuing dependable and steady supply of such assets going forward. Only the expectation of sufficient future supply availability can dampen price expectations. The Government must therefore try to create the expectation of regular increases of actual and potential supply of real estate through both its stated policy and its actual behaviour.

The Macroeconomic Outlook: Inflation

- ◆ Price bubbles can be caused by self-fulfilling expectations. For example, if the public expects housing prices to go up by 25% a year, and behaves accordingly, that is, rushes out to buy before the prices actually go up, the prices will in fact be driven up by 25% or even more.
- ◆ Expectations of price increases bring future buyers into the present, thus greatly increasing current demand, but the current physical supply of real estate can only adjust upwards slowly, and so large actual price increases are bound to result.
- ◆ If the public can be convinced that residential housing units will be just as available or even more available next year compared to this year, there will be no reason for anyone to rush out to buy something now. Thus, the real estate price bubble can be more readily contained.

The Macroeconomic Outlook: Inflation

- ◆ Other instruments for controlling asset prices in addition to the rate of interest include the strict control, perhaps even prohibition, of financing of any non-owner-occupied residential unit, and increasing the equity (down payment) ratio. The introduction of a property tax as a source of revenue for local governments will also help to discourage speculation as well as reduce the dependence of local governments on revenue from the sale of land leases and hence their incentive for maintaining expectations of high and rising land prices.
- ◆ Some measures have been taken to contain the asset price bubble. For example, state-owned enterprises that have not been explicitly authorised are now forbidden to invest in real estate. Bank lending rules have also been tightened so as to discourage the purchases of more than one residential unit by a single household.

The Macroeconomic Outlook: Inflation

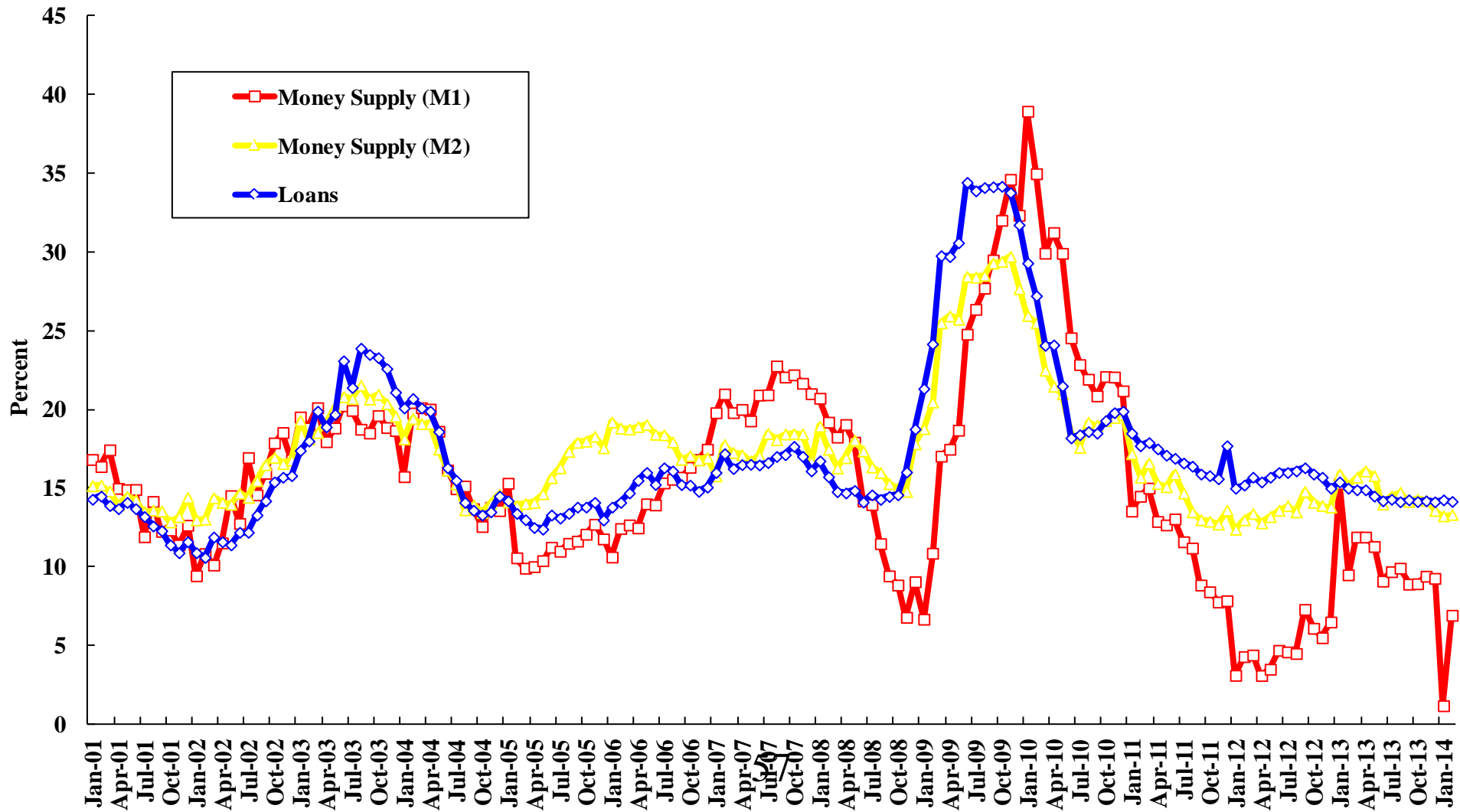
- ◆ In some Chinese cities, non-residents are no longer allowed to purchase residential property.
- ◆ However, measures designed to prohibit non-residents from buying residential property cannot help fundamentally if the total supply is not increased. Non-residents need housing and their demands will simply be re-directed to the rental housing market with the real estate being owned by residents.

The Macroeconomic Outlook: Money Supply and Credit

- ◆ The rates of growth of money supply (both M1 and M2) and loans have also declined significantly and stabilised at pre-global crisis levels. However, the data on loans may not have reflected the “loans” made available through shadow banking.
- ◆ However, recently, in response to a slowing economy, the People’s Bank of China, the central bank, after increasing the rates of interest (the minimum lending rate and the maximum deposit rate) and the reserve requirement ratio repeatedly, has begun to reduce both of them.

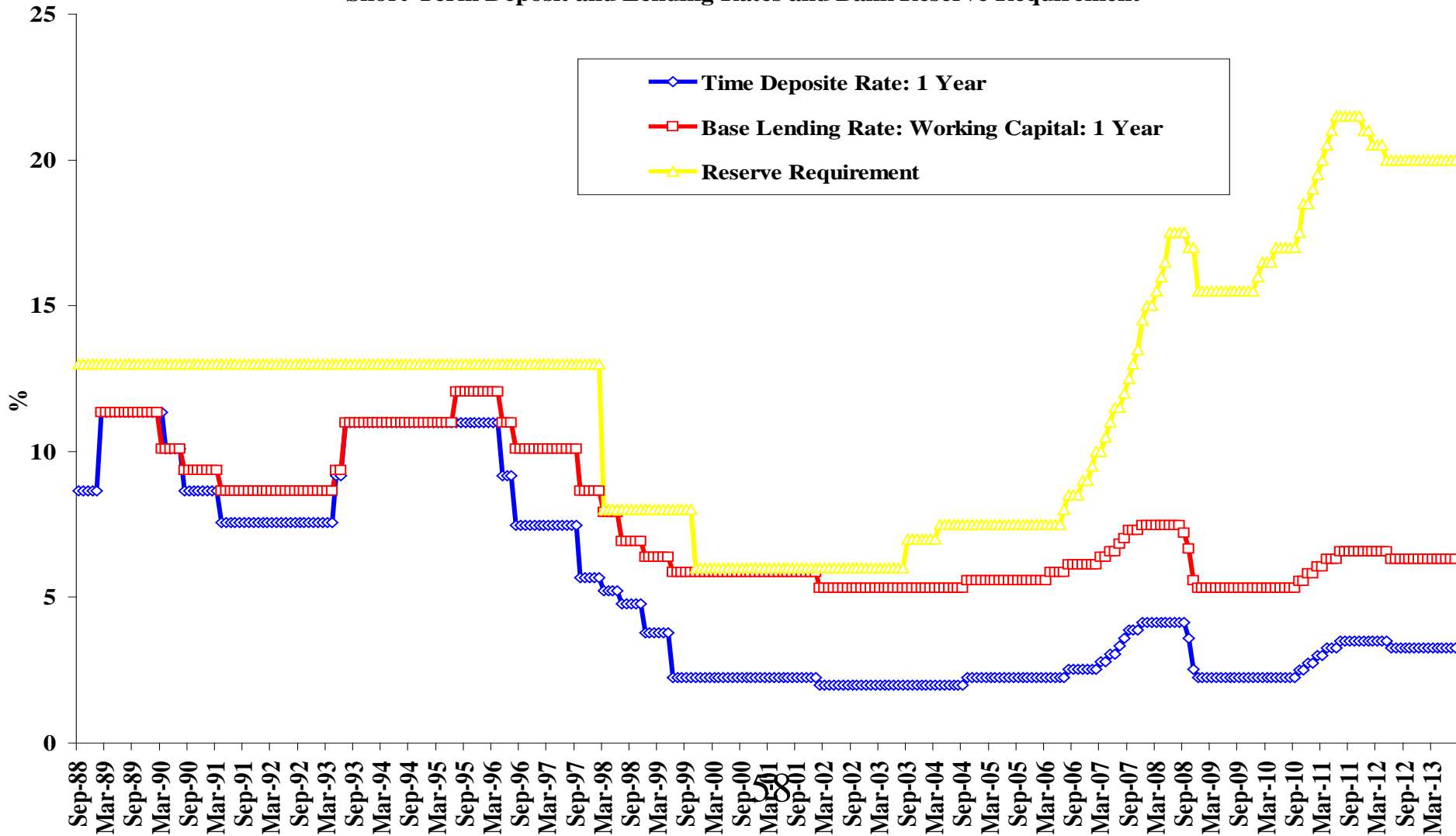
The Rates of Growth of Money Supply and Loans, Year-over-Year

The Rates of Growth of Money Supply and Loans, Year-over-Year



Short-Term Deposit and Lending Rates and Bank Reserve Requirement

Short-Term Deposit and Lending Rates and Bank Reserve Requirement



The Macroeconomic Outlook: Interest Rates

- ◆ Until June 2012, the China Banking Regulatory Commission has been setting maximum deposit and minimum lending rates on the Mainland, guaranteeing an interest rate spread of some 300 basis points for Chinese commercial banks. On 8th June 2012 and again on 6th July 2012, these maximum and minimum rates for one-year deposits and loans were lowered by 0.25% and 0.31% each time to 3.00% and 6.00% respectively.
- ◆ At the same time, the banks were given the flexibility to raise the deposit interest rate to 1.1 times of the base (maximum) rate and to lower the lending interest rate first 0.8 and then 0.7 times the base (minimum) rate instead of the previous 0.9 times.

The Macroeconomic Outlook: Interest Rates

- ◆ With the new flexibility, the deposit rate can in principle be raised by 0.3% to 3.3%, so that it will be able to beat the current rate of inflation and deliver a positive real return to the depositors. This is a good development. However, major banks do not seem to have taken advantage of this opportunity to raise deposit rates.
- ◆ More recently, the restrictions on the lending rates have been almost totally removed. However, it is not likely that the “average” lending rate will come down much because of the chronic excess demand for credit in China.
- ◆ Despite the successive removal of the restrictions on the lending rates, the actual lending rates have not come down. In fact, the “effective” lending rates have gone up because of the shift to “shadow loans” from regular loans.

The Macroeconomic Outlook: Exports

- ◆ Trade statistics in 2013 are not completely reliable because of the possible inclusion of fake or fictitious exports. The purpose of these fake or fictitious exports was to circumvent capital inflow controls. While the exports are fictitious, the payments for the exports are allowed into China as export proceeds under current accounts.
- ◆ Most of the activities occurred through Hong Kong. 2013H1 (first half) exports to Hong Kong increased Y-o-Y by an incredible 42.6%, whereas in May and June the rates of increase were only 7.7% and -7.0% respectively, indicating that the massive increases in Chinese exports during the first few months of were probably bogus.

The Macroeconomic Outlook: Shadow Banking

- ◆ “Shadow banking” has become more common in Mainland China in the last couple of years. Shadow banking arises in response to various restrictions on bank lending and other requirements: total quota on the value of loans outstanding and its rate of increase, capital requirements, leverage ratios, reserve requirements, etc.
- ◆ The fundamental idea of “shadow banking” is to move both “deposits” and “loans” off the bank’s balance sheet and hence reduce the size of its total assets and liabilities through various devices, circumventing all the requirements and restrictions such as capital requirements, reserve requirements, leverage ratio requirements as well as loan quotas.

The Macroeconomic Outlook: Shadow Banking

- ◆ “Deposits” can be moved off a bank’s balance sheet but retained under the bank’s control through the use of various wealth management products and trust products. This also allows a higher “interest rate” to be paid to the “depositors”.
- ◆ Through these wealth management and trust accounts and with the assistance of trust companies, the funds can be “lent” to various enterprises. The “borrowers” will have to pay higher interest rates than regular bank loans and additional fees to the bank as well as other intermediaries in the credit supply chain.

The Macroeconomic Outlook: Shadow Banking

- ◆ Shadow banking appears to have advantages for everyone except possibly for the shareholders of the banks and for the regulator. The net result, however, is a significantly lower actual capital ratio and a significantly higher actual leverage, increasing the risks to the bank and to the financial sector as a whole.

The Macroeconomic Outlook: Shadow Banking

- ◆ There is also the problem of maturity mis-match: wealth management products are typically short-term, and loans are typically of longer duration. Moreover, there is also reliance on interbank lending, which is also short-term in nature. Thus, a serious problem may arise when the wealth management accounts fail to roll over a “loan” and interbank liquidity is insufficient to cover the shortfall. But Chinese commercial banks in general have not paid too much attention to this potential problem of maturity mis-match, counting on the central bank to bail them out if and when it becomes necessary.

The Macroeconomic Outlook: Shadow Banking

- ◆ The proportion of financing accounted for by conventional bank loans was over 90 percent 10 years ago but has since fallen to below 50%. Shadow banking probably accounts for 17-20 trillion Yuan worth of “loans”, approximately 30% of GDP, still considerably lower than the percentage in other major developed economies. But the commercial banks are involved in 60% of the shadow banking activities in China, much more than the commercial banks in other countries and regions.
- ◆ To the extent that the commercial banks are involved, this means that the implicit hidden liabilities of the commercial banks and hence their leverage ratios are much higher than are represented on their balance sheets.

The Macroeconomic Outlook: Shadow Banking

- ◆ The problem is that the commercial banks are ultimately responsible for these “shadow loans”, which are initially off-balance-sheet but if the “borrowers” default, they will have to be taken back onto the balance sheet, forcing recognition of large losses similar to what happened to Enron and to the major commercial banks in 2006-07 when they had to take back on to their balance sheets the losses of their sub-prime mortgage loan special purpose vehicles.
- ◆ Shadow banking can pose huge risks to the financial system because of the potential of over-leveraging. Moreover, there is unlikely to be sufficient provision against non-performing “shadow loans”. The Chinese regulators are aware of these problems and have been taking steps to control and restrict shadow banking.

The Macroeconomic Outlook: Local Government Debt

- ◆ Concern has also been expressed on the local government debt in Mainland China. The total value has increased significantly especially since 2008Q4.
- ◆ A 2011 report by the National Audit Office estimated that total local government debt in 2010 at 10.7 trillion Yuan (\$1.74 trillion), or 27% of the then GDP. Between 2010 and 2012, the total local debt level probably increased by another 10-15%, with the proportion of the GDP remaining approximately the same. At the moment, only 1% of the local government loans is reported to be non-performing.
- ◆ It is unlikely that all of the local government debt would become non-performing. Even if half of the local government debt eventually becomes non-performing, part of it would likely be assumed by the central government, which will still have a relatively low public debt to GDP ratio of approximately 40% compared to 150% for the U.S. and 250% for Japan.

The Macroeconomic Outlook: Local Government Debt

- ◆ Total central government public debt may be estimated at between 15 and 20 trillion Yuan; total local government debt, may be estimated at approximately 20 trillion Yuan. Private household debt may be estimated at 16 trillion Yuan and enterprise debt at around 70 trillion Yuan. To put all of these figures into perspective, the GDP in 2013 was 57 trillion Yuan.
- ◆ However, these debt levels should not cause worries. The debt to GDP ratio in China is lower than those in all the developed economies. In addition, China has a high national saving rate. Its public debt is almost exclusively denominated in Renminbi and held mostly by Chinese nationals. The Government deficit is low and the rate of growth of government revenue has been higher than the rate of growth of GDP. All of this suggests that the debt problem is manageable.

Sources of Sustainable Growth of Aggregate Demand

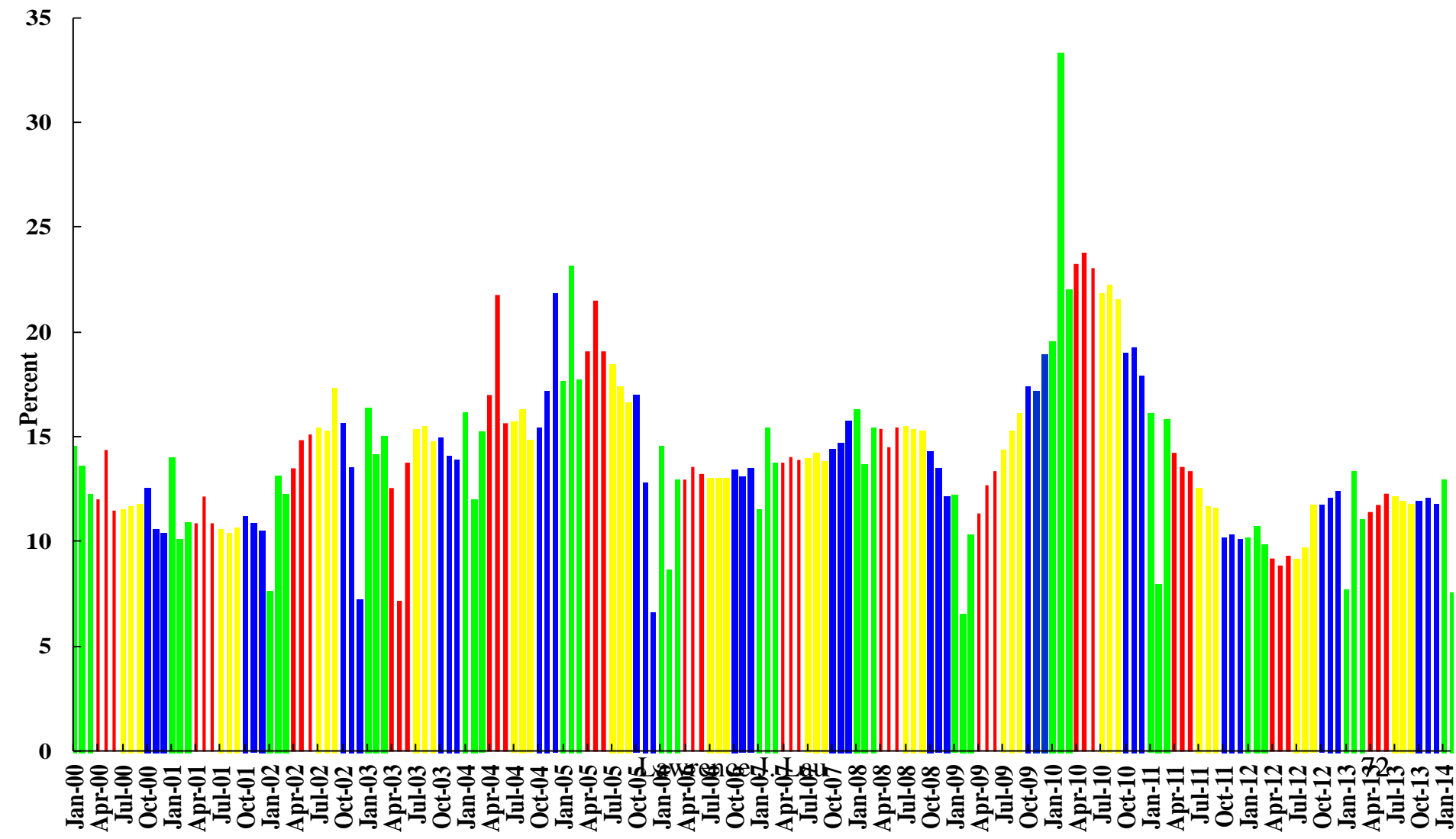
- ◆ The Chinese economy is not supply-constrained but demand-constrained—there is excess capacity in almost all of the manufacturing sectors—steel, cement, glass, etc.; and as long as there is adequate aggregate demand, the aggregate supply will be there to meet the demand. Thus, the Chinese GDP is primarily determined by aggregate demand.
- ◆ Chinese exports, or net exports, is unlikely to grow very fast in the future, partly because of its already very large market shares in many internationally traded manufactured goods, and partly because the rise in Chinese real wage rates and the appreciation of the Renminbi since 2005 have made Chinese labor-intensive goods no longer that competitive.

Sources of Sustainable Growth of Aggregate Demand

- ◆ Continuing Chinese economic growth going forward will therefore have to depend mostly on the growth of internal demand and not on exports.
- ◆ Chinese household consumption is sometimes viewed as a potential sustainable source of growth of Chinese domestic aggregate demand.
- ◆ Chinese household consumption has actually been growing quite rapidly, as indicated by the double-digit monthly year-over-year rates of growth of real retail sales since the first quarter of 2009. The rates of growth of real retail sales declined in 2011 but have since risen again and exceeded the rates of growth of real GDP and real household income significantly.

Monthly Rates of Growth of Chinese Real Retail Sales, Y-o-Y

Monthly Rates of Growth of Chinese Real Retail Sales since 2000, Year-over-Year



Sources of Sustainable Growth of Aggregate Demand

- ◆ The Chinese household saving rate, as distinct from the much higher national saving rate, currently stands at approximately 30% (for urban households).
- ◆ However, the consumption-savings behaviour of Chinese households on the Mainland today appears to be little different from ethnic Chinese households in Hong Kong and Taiwan at the same level of per capita household income, with an average saving rate of urban households of approximately 30%. Thus, the Chinese household saving rate is not likely to fall significantly in the foreseeable future. Increases in consumption must come from increases in household income rather than decreases in the household saving rate.

Sources of Sustainable Growth of Aggregate Demand

- ◆ Chinese household consumption can be expected to increase significantly faster than GDP only if Chinese household (disposable) income as a share of GDP rises significantly and sustainably. There are structural reasons why this is unlikely to occur in the short run even though in the longer run, the income share of labour, which currently stands at less than 50%, is likely to rise in China.
- ◆ Household income can be increased through increases in wages and salaries but also through increases in the cash dividend payouts from state-owned enterprises. Recently, the Chinese Government has called for an increased cash dividend payouts from state-owned enterprises.

Sources of Sustainable Growth of Aggregate Demand

- ◆ Increased cash dividend payouts have many advantages in addition to increasing household income and thereby household consumption.
- ◆ They increase government revenue, both directly, as the government is a major shareholder in many publicly listed enterprises and will receive the increased cash dividends, and indirectly, through the increased individual income taxes collected on the cash dividends paid to the other shareholders. The increased government revenue can in turn be used to increase public consumption—e.g., the provision of public services such as education and health care, the preservation and restoration of the environment, etc.

Sources of Sustainable Growth of Aggregate Demand

- ◆ An increased cash dividend payout by the state-owned enterprises reduces their excess retained earnings so that they can no longer make investments at will—it will have to apply for loans and hence their investment projects will have to be justified to and evaluated by the lenders. This may help to reduce over-investment in certain industries.

Sources of Sustainable Growth of Aggregate Demand

- ◆ Increased cash dividend payouts may make long-term holding of shares more attractive and may attract a different breed of investors. It will encourage investors to hold their shares longer and hence indirectly improve corporate governance as only long-term shareholders pay any attention to corporate governance.
- ◆ An increased cash dividend payout provides a support level for the price of the shares of a publicly listed enterprise. Thus, the government does not need to worry as much about supporting the market.

Sources of Sustainable Growth of Aggregate Demand

- ◆ The ability to pay cash dividends on the part of an enterprise actually provides a real verification of the true profitability of an enterprise. An enterprise with only virtual or fictional or only accounting profits does not have the ability to pay out cash dividends whereas it can always declare stock dividends.
- ◆ The average cash dividend yield of common stock listed on Shanghai and Shenzhen stock exchanges has been rising slowly from 1.04% in 2009 to 1.14% in 2010 and 1.82% in 2011. Potentially the higher cash dividend yield can attract many more long-term investors into the Chinese stock market.

Sources of Sustainable Growth of Aggregate Demand

- ◆ Even though household consumption cannot increase very quickly, there is a great deal of room for government-financed public consumption of public goods, for example, education, health care, environmental preservation, protection and control. The provision of public goods by the government can greatly increase the welfare of the average people.

Sources of Sustainable Growth of Aggregate Demand

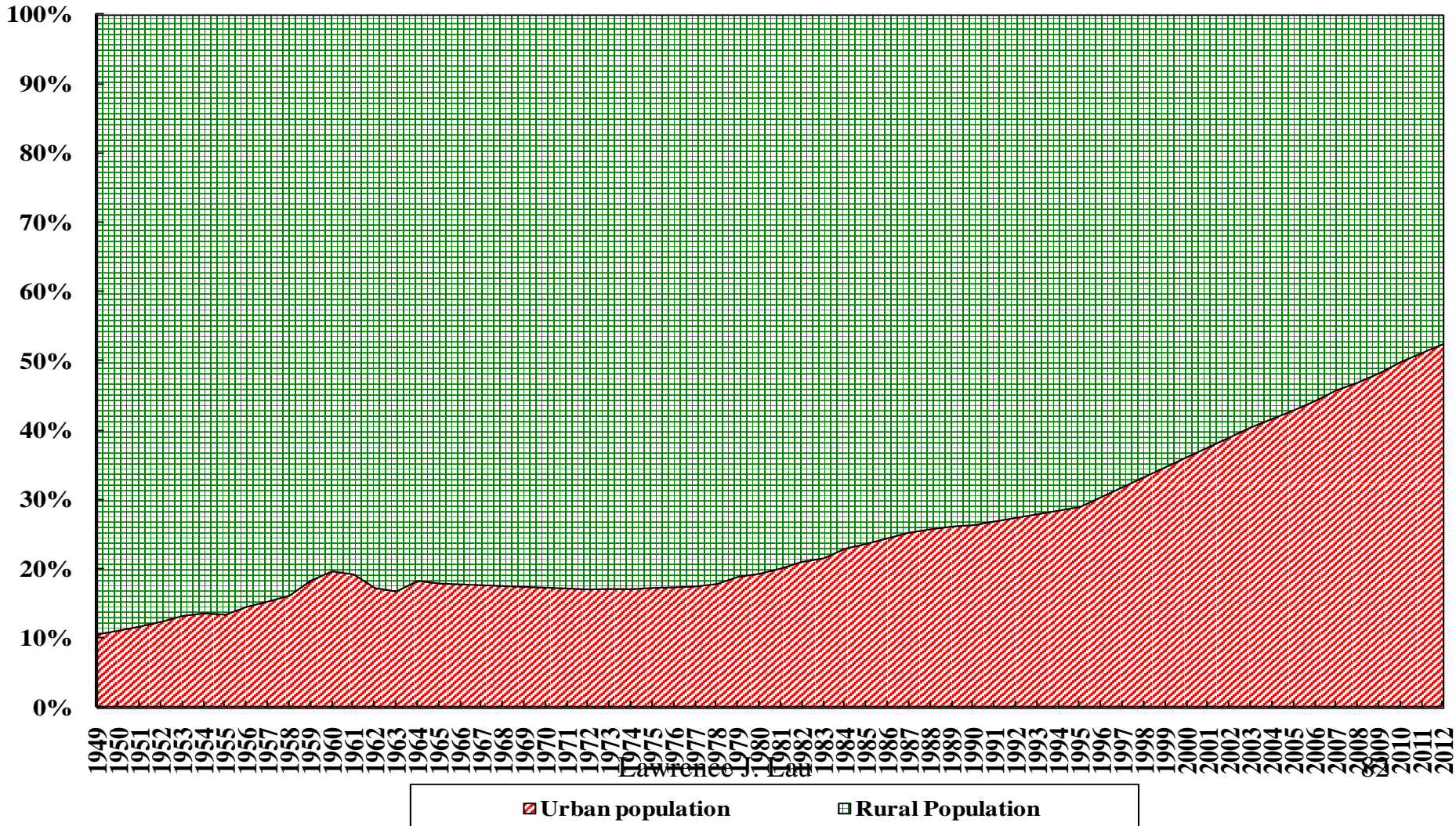
- ◆ The possible areas that have the potential of generating sustainable increases in aggregate demand, in addition to household consumption and public infrastructural investment (e.g., high speed railroads, mass-transit systems, power plants, etc.), include:
 - ◆ (1) Acceleration of urbanisation;
 - ◆ (2) Residential housing;
 - ◆ (3) Education and health care and the application of high technology in these sectors; and
 - ◆ (4) Conservation of energy, environmental protection and preservation, and promotion of the green economy.

Sources of Sustainable Growth of Aggregate Demand: Urbanisation

- ◆ The share of rural population in China was just under 90% in 1949. By 1978, the beginning of the Chinese economic reform and opening to the World, the share of rural population was 82%. At the end of 2011, the share was 48.7%.
- ◆ It is expected to continue to fall during the period of the Twelfth Five-Year Plan, 2011-2015, to 47%. It is possible that this goal may be exceeded.
- ◆ The rate of decline of the share of rural population has been approximately 1 percentage point per year, about the same rate of decline as the share of employment of the primary (agriculture) sector.
- ◆ It is expected that the share of rural population will continue to decline by 1 percentage point a year until 2040, when the share of rural population will have fallen to approximately 20%.

The Shares of Rural and Urban Population in China, 1949-Present

The Shares of Rural and Urban Populations in China



Sources of Sustainable Growth of Aggregate Demand: Urbanisation

- ◆ Instead of making the existing cities larger and more crowded, urbanisation is likely to proceed under the administration of Premier LI Keqiang by building new cities in the rural areas, particularly in the central and western regions, taking advantage of the traditional market towns and bringing capital and technology to labour rather than the other way around.
- ◆ The urbanisation drive will generate a great deal of aggregate demand as new cities are developed and built. The real challenge lies in the subsequent deployment of complementary capital, physical and human, to the new cities to support the creation of employment for its residents. While cities often generate their own internal demands, especially in terms of services of various kinds, ultimately a source of sustainable external earnings is required so as to enable the import of essential resources from beyond the borders of the individual cities.

Sources of Sustainable Growth of Aggregate Demand: Urbanisation

- ◆ Urbanisation in the rural areas is greatly facilitated if the rural households currently living on and working with their land can have their property rights recognised and made transferable and if the household registration (hukou) system can be reformed so as to allow conversion from a rural residency to an urban residency under certain conditions. This is one of the issues that will be tackled under the resolutions of the Third Plenum.

Sources of Sustainable Growth of Aggregate Demand: Urbanisation

- ◆ The inter-urban communication and transportation infrastructure needs to be further planned and improved, especially with the building of new cities. Super-high-speed trains are promoted as the preferred mode of transportation between major cities over air travel, resulting in significant savings of time as well as energy consumption.
- ◆ Central planning of new cities, with regard to their locations, layouts, land use, densities, and intra-urban communication and transportation infrastructure, is necessary—left entirely to the market system, it will result in urban sprawls and slums and a heavy reliance on the private automobile, which neither China nor the World can afford from the point of view of energy consumption and carbon emission, as well as their effects on air pollution and on congestion.

Sources of Sustainable Growth of Aggregate Demand: Urbanisation

- ◆ Mass-transit systems should be the principal means of intra-urban transportation for existing as well as new cities, and as mentioned above, this requires planning and cannot be left to the market.
- ◆ With at least a couple of hundreds of Chinese cities of over say 2 million in population and requiring mass-transit systems, the planning, designing, building and operating mass-transit systems can become a huge new industry with significant domestic and eventually export demands.
- ◆ In order to economise on the use of the scarce land resource, and to assure the efficiency and environmental friendliness of the urban transportation system, high density land use should be mandated in the cities.

Sources of Sustainable Growth of Aggregate Demand: Residential Housing

- ◆ One important source of sustainable aggregate demand is owner-occupied residential housing. Despite significant development of residential housing during the past thirty years, there is still a great deal of room for it to grow, especially in the interior provinces and regions and for the middle-to-lower-middle income households.
- ◆ Owner-occupied residential housing has been a major engine of growth for many countries and regions for decades during their periods of fastest economic growth. There is no question that there is a huge potential demand in China.

Sources of Sustainable Growth of Aggregate Demand: Residential Housing

- ◆ The demand for residential housing also generates with it the derivative demands for furniture, electric home appliances such as air-conditioners, refrigerators, washing machines, and television sets, curtains, carpets, household goods and services and with them a great deal of employment and activities for not only large enterprises but also small and medium enterprises.
- ◆ In order to promote owner-occupied residential housing for all, one has to assure that there is both the supply and the demand. Supply can be promoted by making sure that land is available at an affordable cost and is used efficiently (that is, predominantly high-density use). Demand can be promoted by making available long-term (say 35 years), Lawrence J. Lau fixed interest-rate mortgages, ⁸⁸

Sources of Sustainable Growth of Demand: Education and Health Care

- ◆ This is the time to increase support for the education sector across the board—primary, secondary and tertiary—and for the health care sector, expanding the accessibility, availability and affordability in the rural areas.
- ◆ Both the physical structures as well as the human resources of primary and secondary schools and of hospitals need to be upgraded, especially in the rural and low-income areas. More new schools and hospitals can be built around the country, especially in the rural areas and in the interior provinces.

Sources of Sustainable Growth of Demand: Education and Health Care

- ◆ In addition, China should adopt a policy of assuring low-cost or no-cost access to the internet by all students in China everywhere, all the way down to the primary school level. Promoting and making universal the laptop or the tablet is one way to achieve this goal. Many Chinese households are able to afford laptop computers and tablets—the difficulty is having inexpensive and ready access to the internet.

Sources of Sustainable Growth of Demand: Education and Health Care

- ◆ Making the internet accessible, available and affordable everywhere in China (certainly from all the educational institutions) will greatly narrow degree of inequality of education (and information) between the urban and rural areas and reduce the so-called digital divide between the rich and the poor. It will be a great equaliser, because on the internet, for example: a student in Qinghai, one of the poorest provinces in China, will have more or less the same access to information as a student in Shanghai; large and small enterprises will compete more or less equally on the worldwide web.
- ◆ This will also create a great deal of domestic demand for the high-technology sector.

Sources of Sustainable Growth of Demand: Education and Health Care

- ◆ Public health and preventive medicine should be widely promoted. Food and drug safety should be a top priority and high technology can be applied to testing and certification of food and drugs under the supervision of institutions with public credibility, such as the Chinese Academy of Sciences or the Chinese Academy of Engineering.

Sources of Aggregate Demand:

Environmental Protection & Green Tech

- ◆ Green technologies can find significant application in the residential housing sector—in terms of heating, cooling, lighting, provision of electricity and hot water, etc.
- ◆ The mass-transit systems provide an indispensable alternative to the use of the automobile. “A car in every garage” would be a nightmare for China and for the World. Cities should be planned so that the residents do not require the use of an automobile in their everyday life (although they may well own an automobile for weekend and leisure use).

Sources of Aggregate Demand:

Environmental Protection & Green Tech

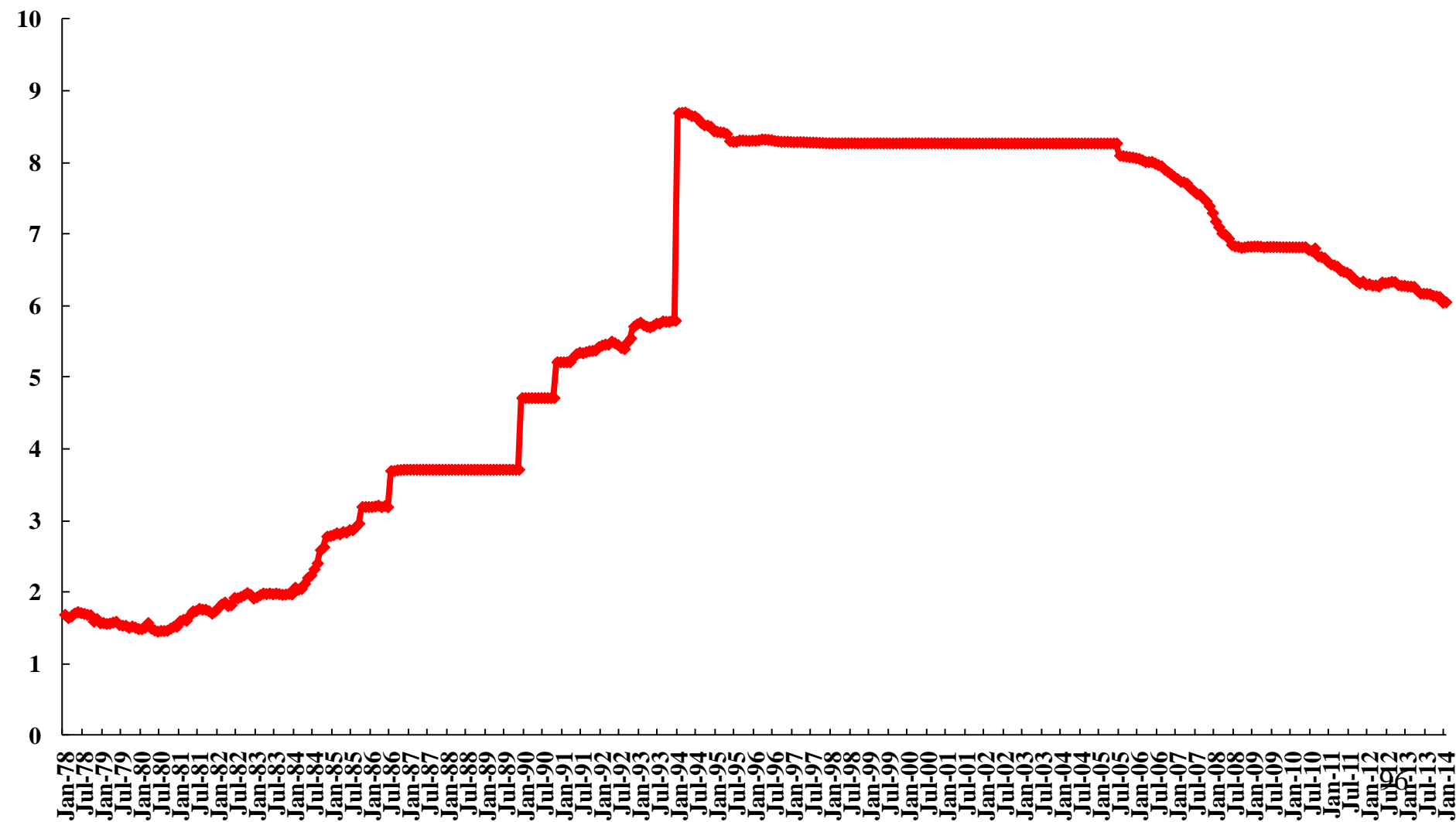
- ◆ China has an advantage in introducing technologies for green or greener vehicles because it has, at this time, still relatively little sunk costs. (An electric car consortium has been formed recently to develop an electric car suitable for China.) China also has a substantial incentive in developing clean coal technologies, having large coal reserves itself. China also has very large shale oil and gas reserves.
- ◆ It can also introduce and promote alternative renewable and clean sources of energy, such as solar power and wind power based on its own huge internal demand. However, the most promising directions are in energy conservation—the energy consumption/GDP ratio in China is still too high relative to other economies at a similar stage of economic development—and in the increased utilisation of hydro-electric and nuclear power for electricity generation. A gasoline tax can be imposed to bring the retail price of gasoline in China to Japanese and Western European levels so as to discourage automobile use.

The Internationalisation of the Renminbi

- ◆ The Renminbi/U.S.\$ exchange rate has undergone huge changes during the past 36 years (see the following chart).
- ◆ In 1978, US\$1 is worth less than 2 Yuan.
- ◆ The Yuan was steadily devalued with respect to the US\$ and for a while in the early 1990s there were dual exchange rates: an official rate and an “adjustment” rate determined in a market restricted to Chinese exporters and importers with import licenses (and for those who can remember, foreign exchange certificates (FECs)).

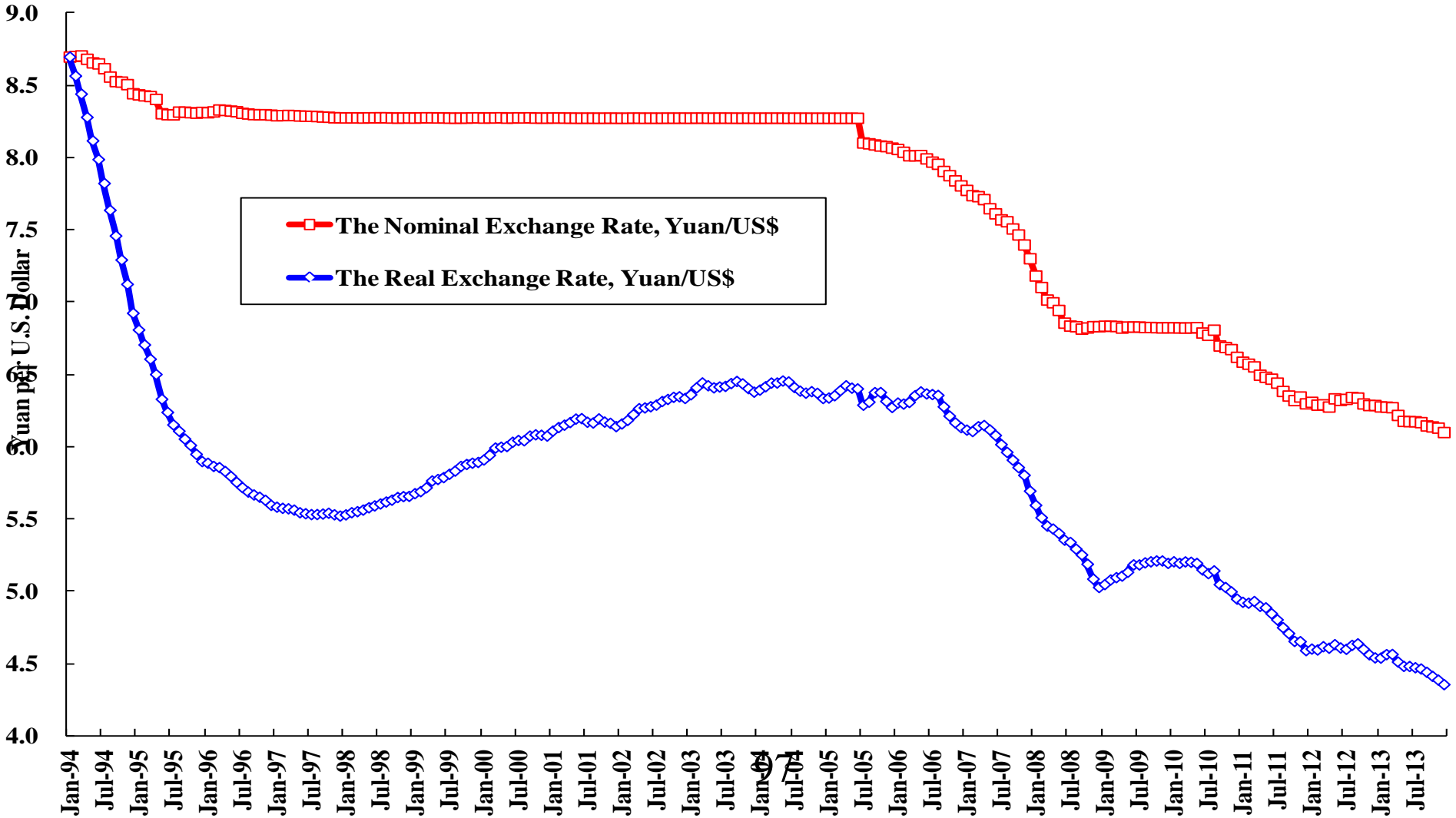
Nominal Exchange Rate of the Renminbi, Yuan/US\$, 1978-present

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



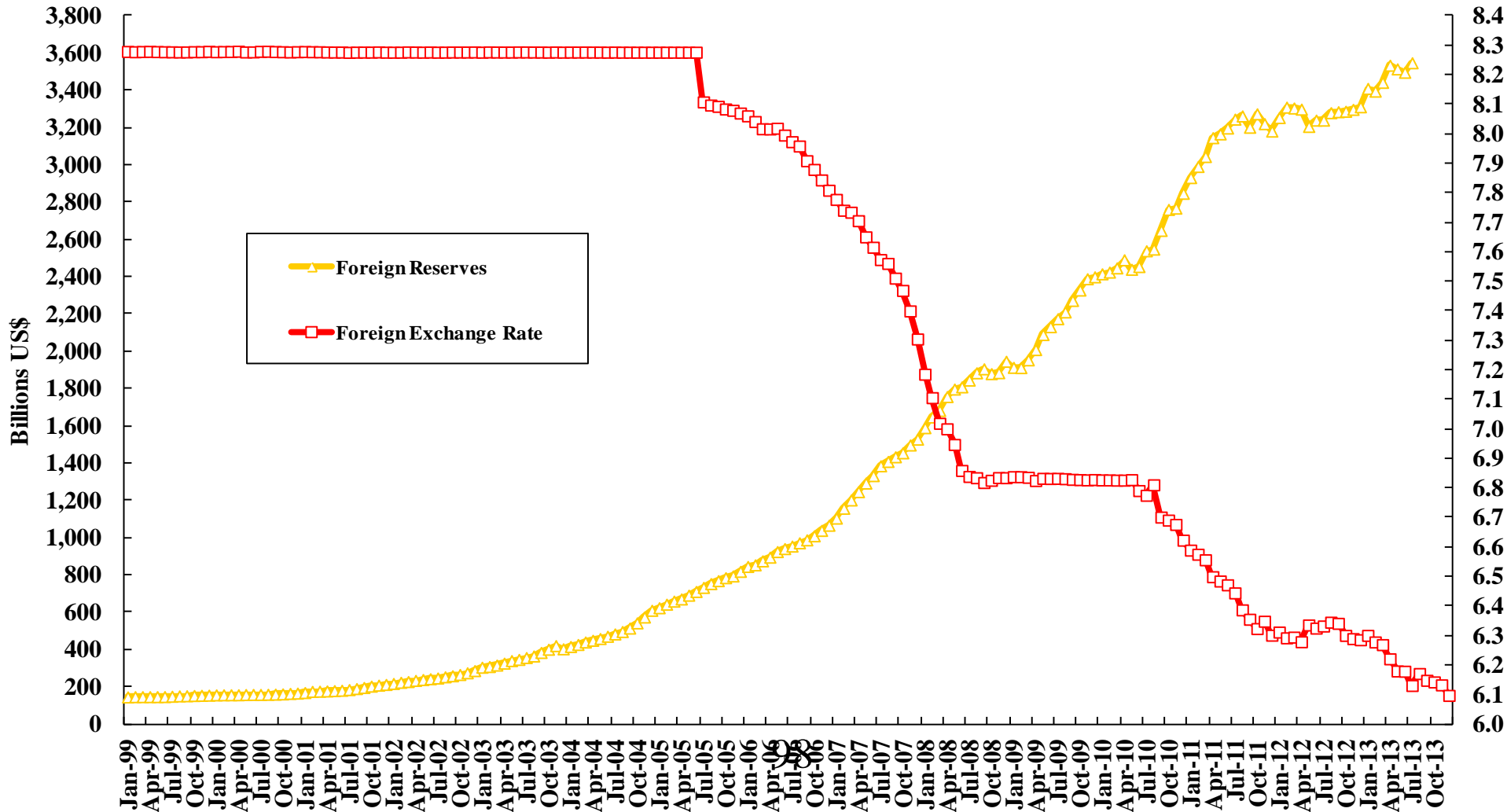
The Nominal and Real Yuan/US\$ Exchange Rates

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



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 Internationalisation of the Renminbi

- ◆ In 1994, the two exchange rates were unified at 8.7 Yuan/U.S.\$ with the adoption of current account convertibility.
- ◆ The Renminbi appreciated slowly to 8.3 Yuan/U.S.\$ when the 1997-1998 East Asian currency crisis hit, then the exchange rate was held fixed until 2005.
- ◆ In response to large trade surpluses and pressure from the United States, the Yuan was allowed to appreciate since 2005. It has since cumulatively appreciated by approximately 30%.
- ◆ The current exchange rate of approximately 6 Yuan/U.S.\$ is probably close to the equilibrium rate as the Chinese trade surplus is now only around 2% of its GDP. It is expected to decline further. In the 12th Five-Year Plan, the objective is to achieve internationally balanced trade.

The Internationalisation of the Renminbi:

The Different Meanings

- ◆ 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 denominated or 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 possibly between and among its trading partner countries and regions themselves, on a voluntary basis.

The Internationalisation of the Renminbi: The Different Meanings

- ◆ (3) The Renminbi as a “Store of Value”. This means the holding of Renminbi and Renminbi-denominated assets long term by individuals and institutions. When Renminbi is held by central banks and monetary authorities of other countries and regions, it serves as a foreign exchange reserve currency.
- ◆ (4) The Renminbi as an “International Funding Currency”. This means money is raised by non-Chinese entities through the issuance of financial instruments such as bonds and stocks denominated and if appropriate traded in Renminbi.
- ◆ (5) The Renminbi as a “Major International Reserve Currency” like the U.S. Dollar and the Euro, widely held in the form of Renminbi or Renminbi-denominated assets by central banks and monetary authorities of other countries and regions as part of their foreign exchange reserves.

The Current Role of the Renminbi:

As an International Medium of Exchange

- ◆ 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 at the retail level 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 Dollar and the Euro.

The Current Role of the Renminbi: As an International Medium of Exchange

- ◆ 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 was extended to the whole of Mainland China at the end of 2011 and settlement was allowed to take place in locations other than Hong Kong such as Singapore and Taipei.
- ◆ The Renminbi is increasingly used as an invoicing and settlement currency for cross-border transactions, especially those involving Chinese enterprises as transacting parties.

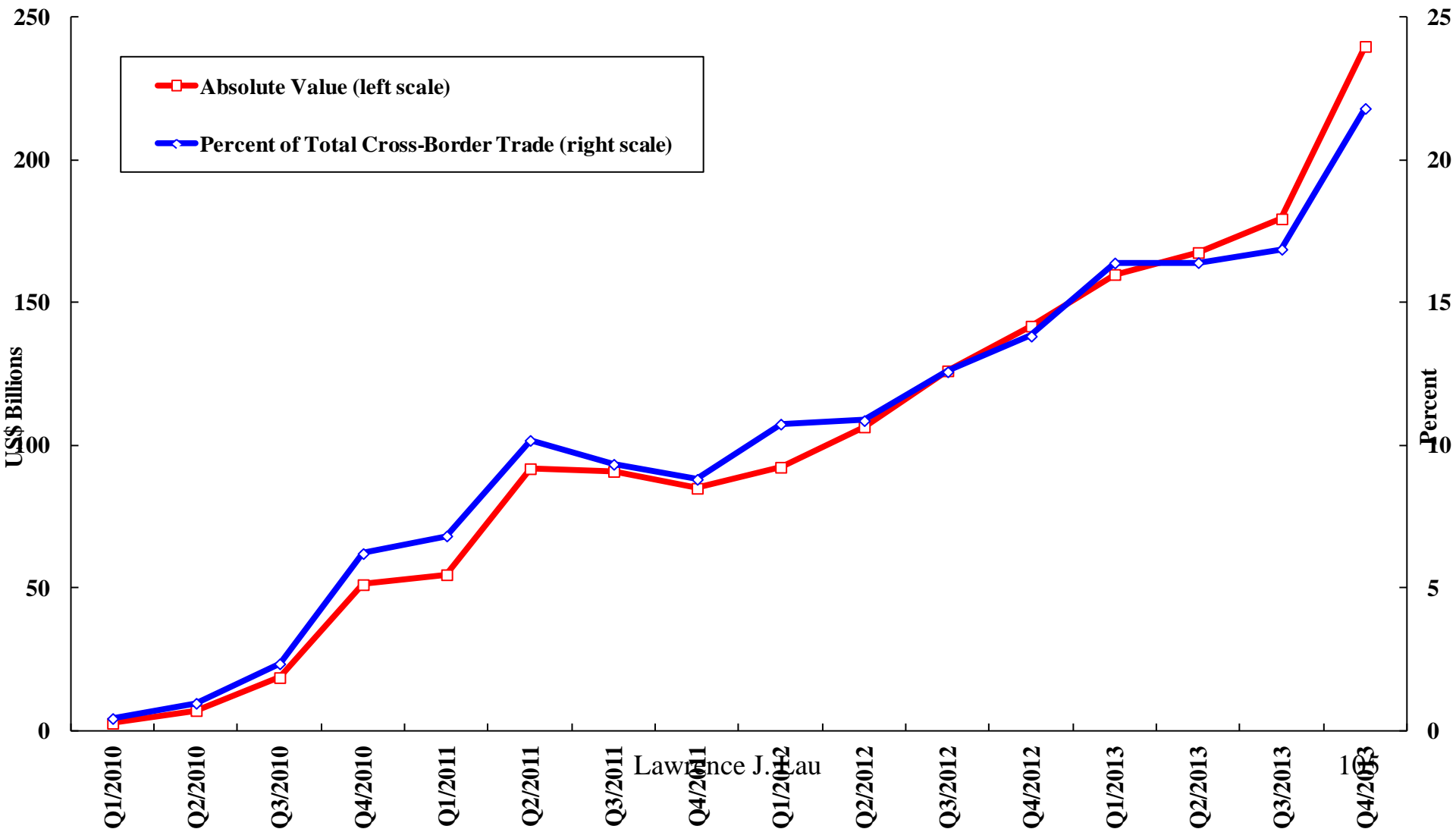
The Current Role of the Renminbi:

As an International Medium of Exchange

- ◆ The proportion of Mainland Chinese international trade settled in Renminbi has grown rapidly, from almost nothing in 2010Q1 to US\$240 billion in 2013Q4 or 21.8% of the total value of trade in goods and services. In absolute value, some US\$960 billion of Chinese international trade is now settled in Renminbi annually.
- ◆ The Renminbi is also used for foreign direct investment and portfolio investment both inbound and outbound, but its use can be further liberalised.
- ◆ The central banks and monetary authorities of many countries and regions have entered into swap agreements with the People's Bank of China, the central bank of China, which facilitates the use of Renminbi as an invoicing and settlement currency.

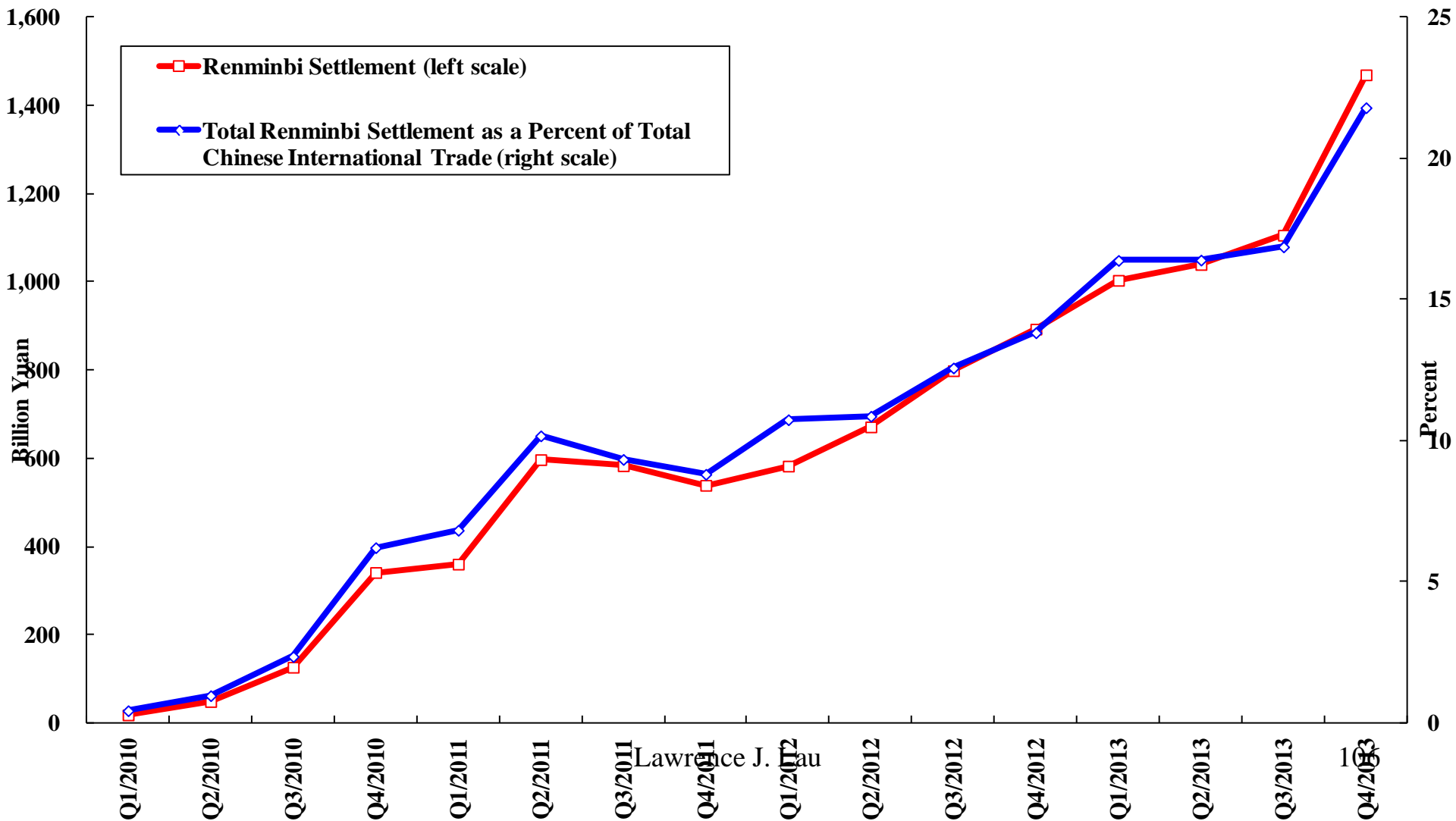
Renminbi Settlement of Chinese Cross-Border Trade, Billion US\$ and Percent

Renminbi Settlement of Chinese Cross-Border Trade



Renminbi Settlement of Chinese Cross-Border Trade, Billion RMB and Percent

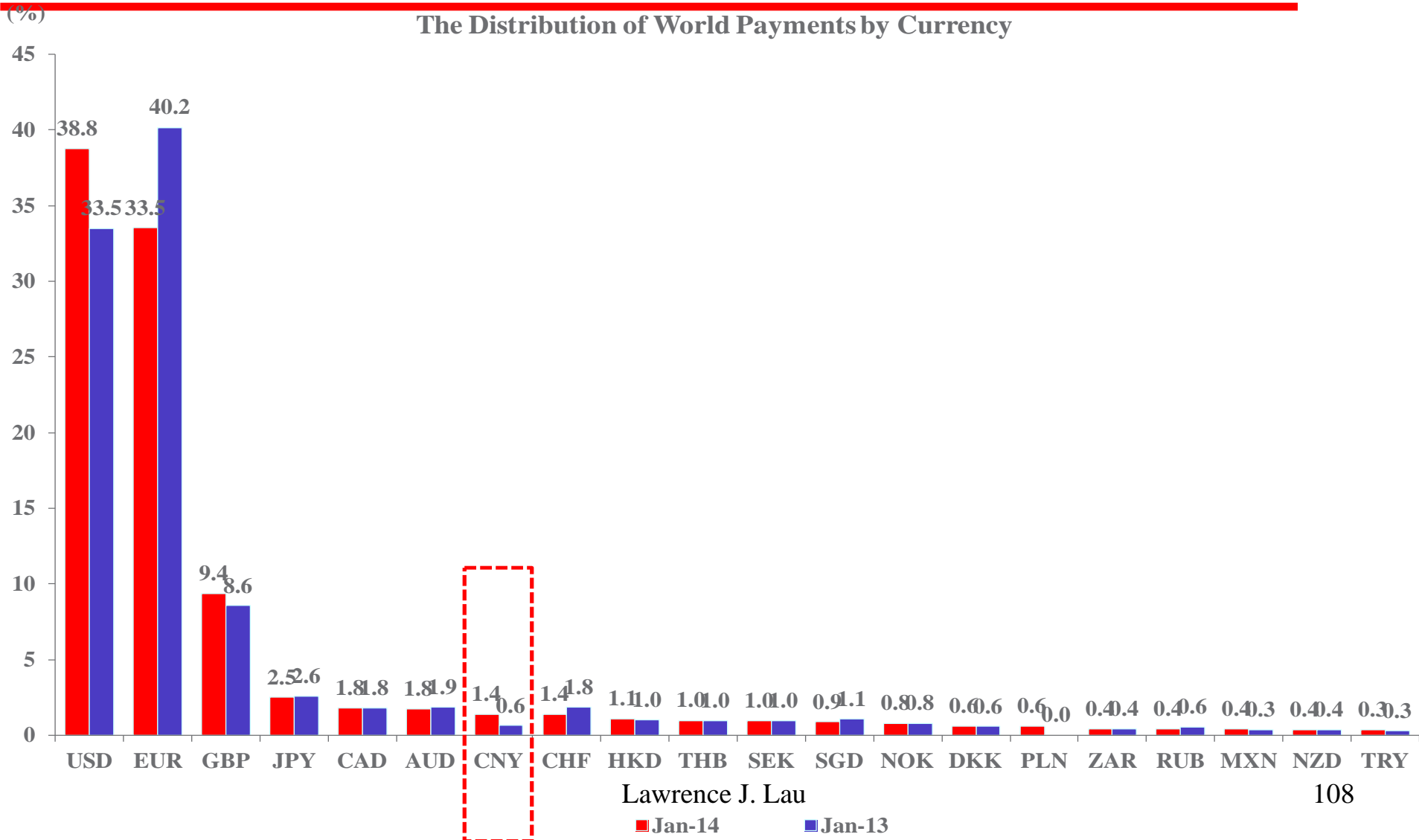
Renminbi Settlement for Cross-Border Trade



The Current Role of the Renminbi: As an International Medium of Exchange

- ◆ In the following chart, the distribution of world payments by currency in January 2014 and January 2013 is presented. The U.S. Dollar has re-taken the top spot as the most widely used international medium of exchange from the Euro, accounting for 38.8% of all payments, followed by the Euro with a 33.5%. (The European sovereign debt crisis and the continuing recession in the Euro Zone must have been a factor in the decreased use of the Euro for international payments.)
- ◆ The share of Renminbi in world payments has increased rapidly from 0.6% (the 13th place) to 1.4% (the 7th place) between 2013 and 2014, overtaking the Swiss Franc and the Hong Kong Dollar.

The Distribution of World Payments by Currency

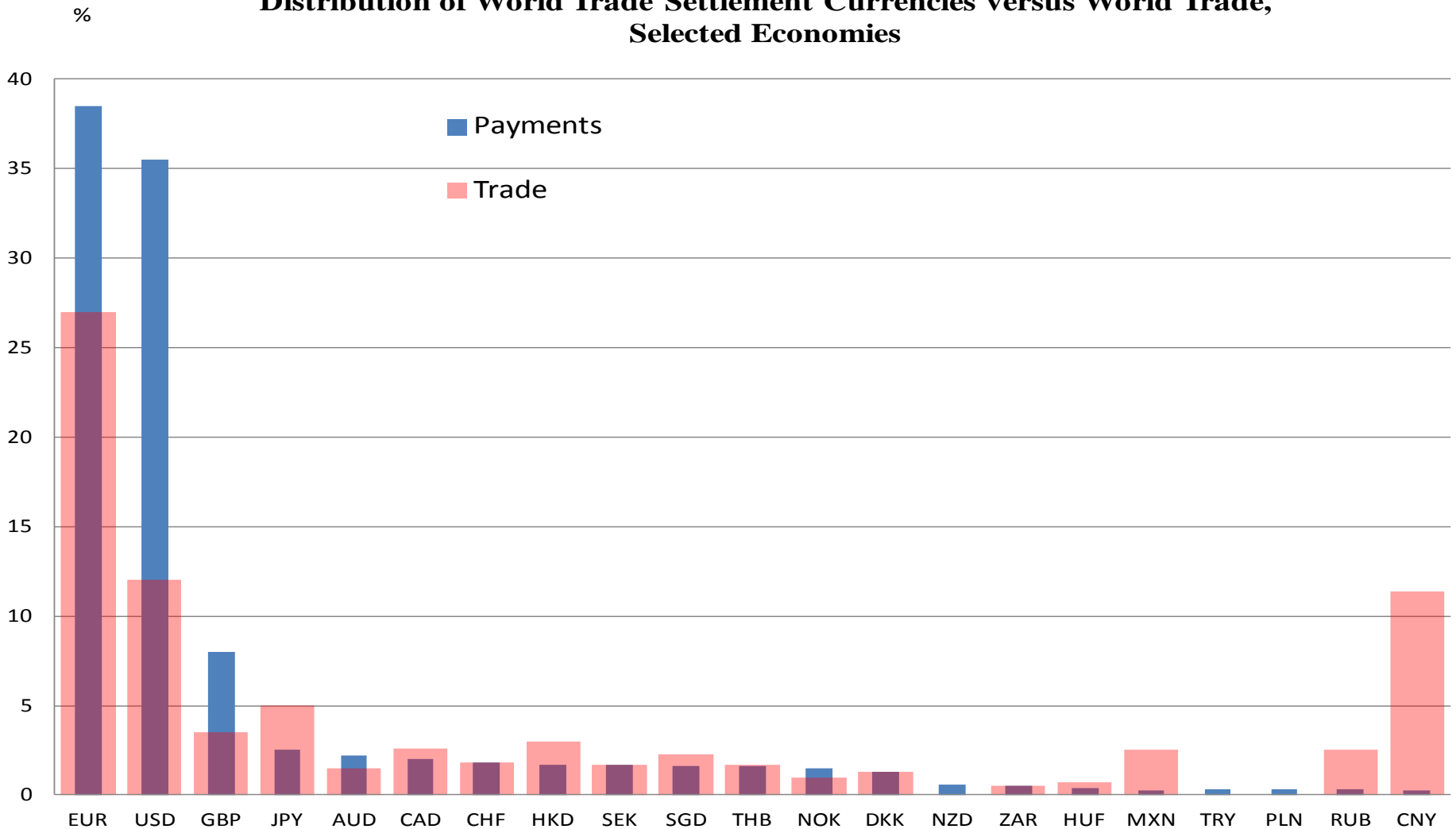


The Current Role of the Renminbi: As an International Medium of Exchange

- ◆ In the following charts, the share of each major country in world trade is compared to the share of its currency used in world trade settlement in 2010 and in 2012-2013. Even though China accounted for more than 11% of world trade, Renminbi accounted for only 1.4% of world trade settlement in 2012-2013; while the U.S. had a similar share of world trade as China, the U. S. Dollar accounted for almost 40% of world trade settlement in 2012-2013.
- ◆ While the use of Renminbi for world trade settlement has increased significantly in just a few years, there is still plenty of room for the expansion of the use of Renminbi for cross-border trade settlement in the future.

Distribution of World Trade Settlement Currencies versus World Trade, 2010

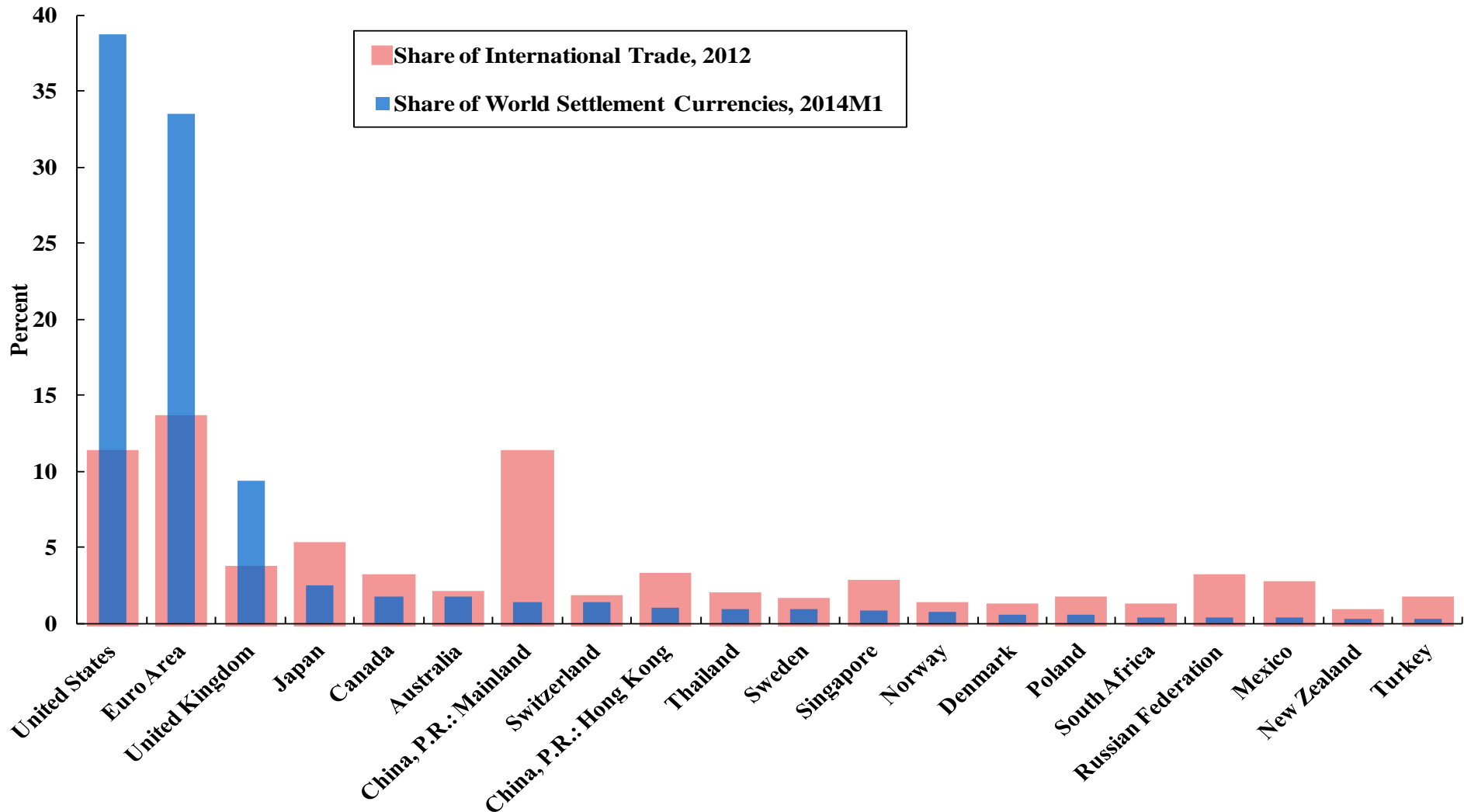
Distribution of World Trade Settlement Currencies versus World Trade, Selected Economies



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

Distribution of World Trade Settlement Currencies versus World Trade, 2012-2013

Distribution of World Trade Settlement Currencies versus World Trade



The Current Role of the Renminbi: As an International Medium of Exchange

- ◆ The benefits to Chinese exporters and importers and their trading partners in the importing and exporting countries and regions of using either the Renminbi or the latter's own respective local currencies as the invoicing and settlement currency for cross-border transactions, instead of a third currency such as the U.S. Dollar or the Euro, 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);

The Current Role of the Renminbi: As an International Medium of Exchange

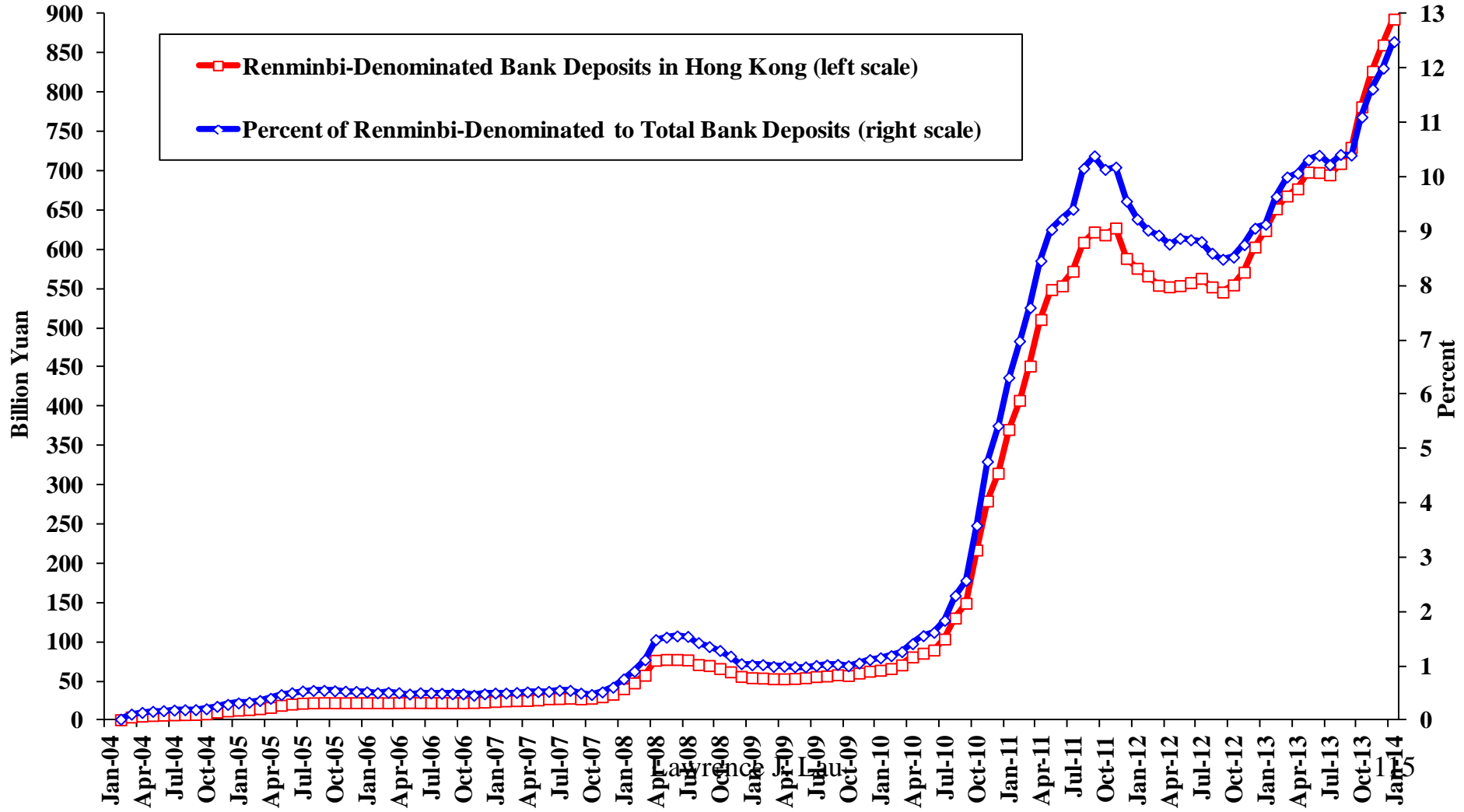
- ◆ (3) Reduction of foreign exchange reserves needed to be held for liquidity and transactions demand purposes by the respective central banks or monetary authorities.
- ◆ The Yen and the Renminbi and some other East Asian currencies have come of age, just as the Western European currencies recovered in the aftermath of World War II—it is no longer necessary to rely on a third currency for invoicing and settlement purposes.

The Current Role of the Renminbi: As a Store of Value

- ◆ The Renminbi is increasingly used a store of value outside of the Mainland. 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 slightly more than 12.5% (in January 2014) of total bank deposits in all currencies, attesting to the willingness of Hong Kong residents to accept and to hold the Renminbi.
- ◆ Commercial banks in Taiwan have also recently begun to offer Renminbi deposit accounts. Renminbi deposits at the end of January 2014 accounted for 21% of foreign currency deposits and 3% of total deposits.
- ◆ Thus, the elimination of all forms of capital controls has not been necessary for the Renminbi to be used as a medium of exchange or 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

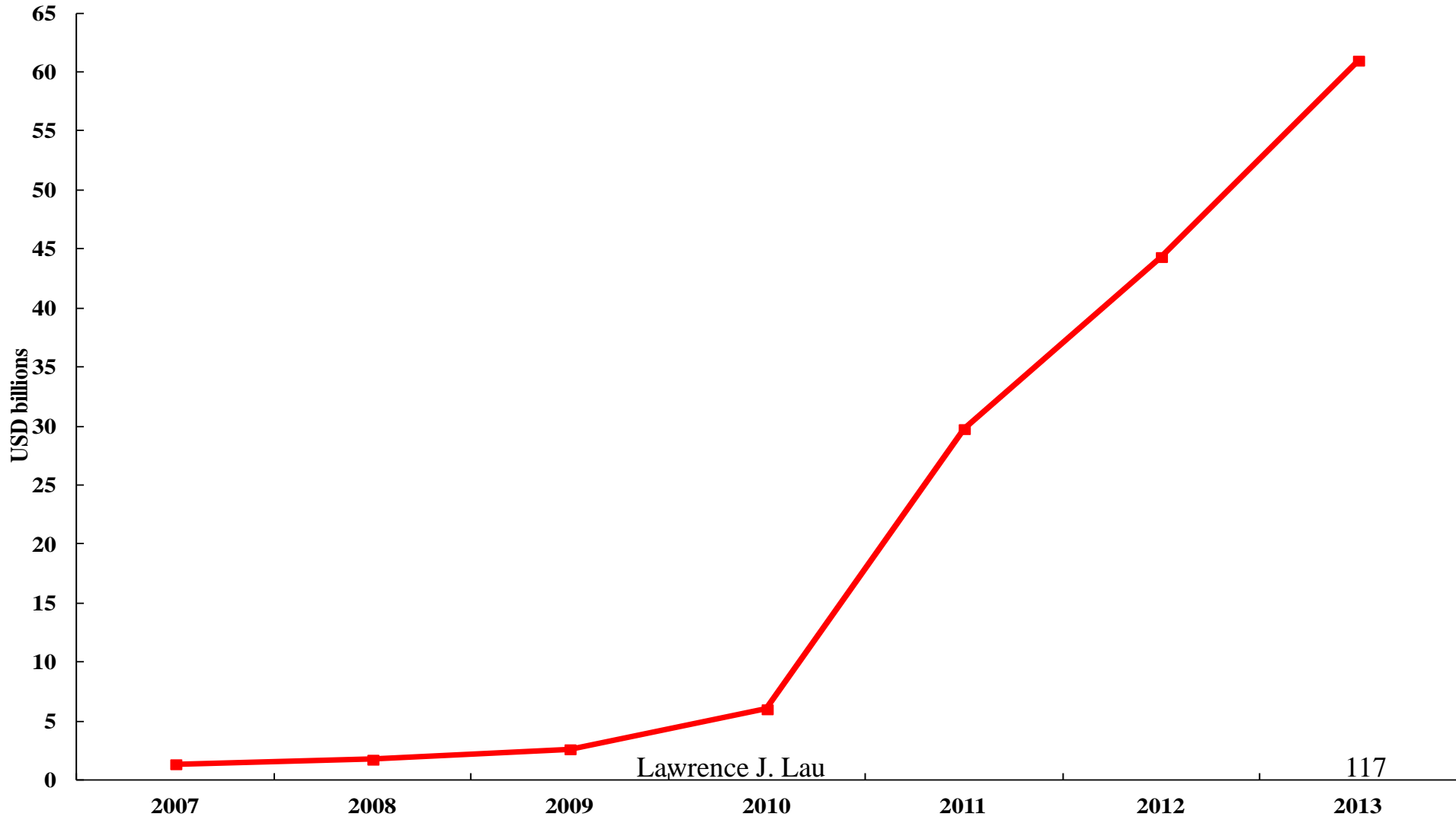


The Current Role of the Renminbi: As an International Funding Currency

- ◆ 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 outside the Mainland of China--will have to develop gradually and voluntarily as a certain scale is required for such use to be efficient.
- ◆ 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). This market is likely to continue to grow in the future.
- ◆ More recently, the Hong Kong Monetary Authority has announced the establishment of a benchmark RMB interest rate known as the RMB Hong Kong Inter-Bank Offer Rate (HIBOR). The existence of such a benchmark rate should facilitate significantly the use of the RMB as an international funding currency.

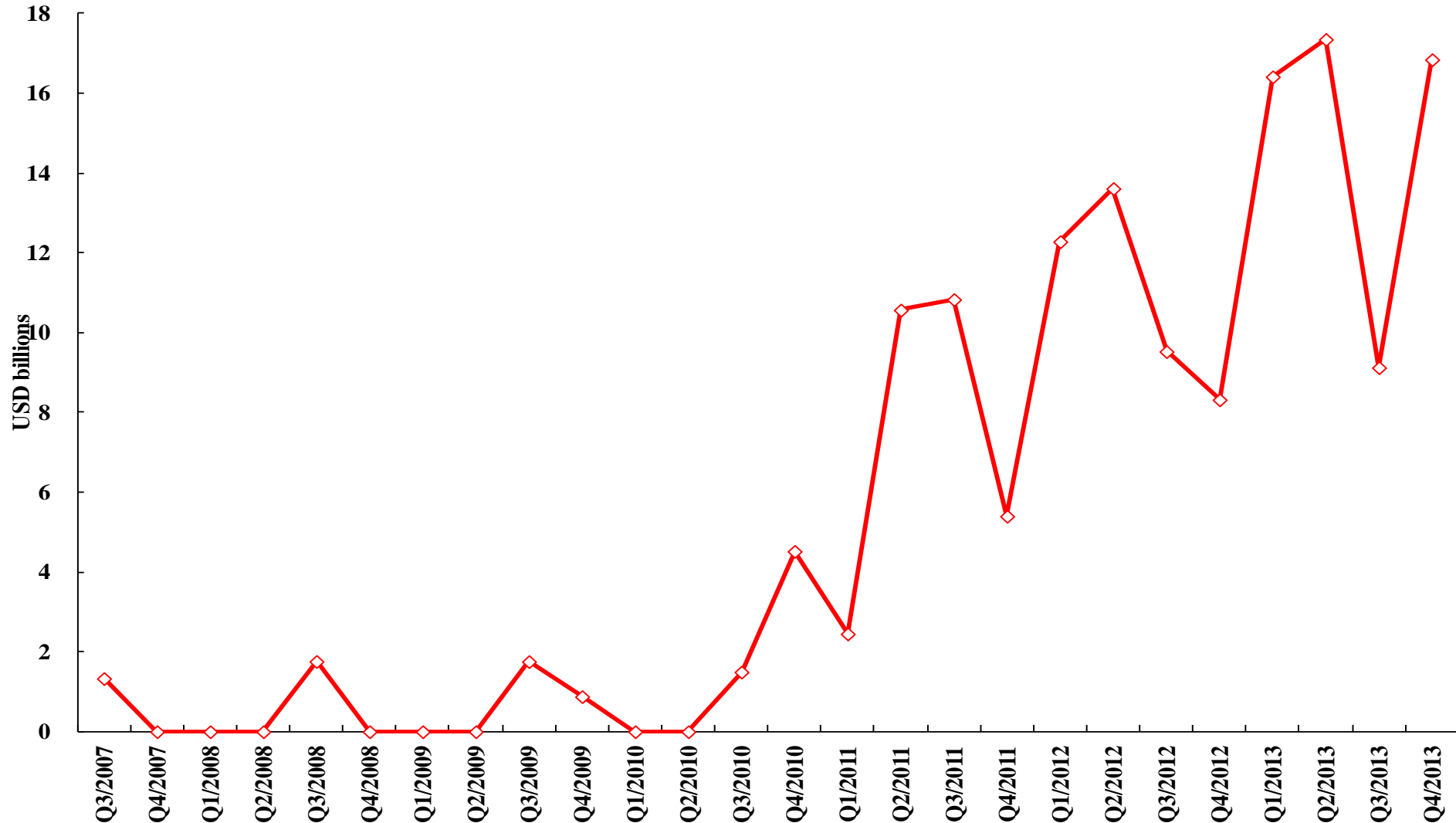
Renminbi-Denominated Bonds Issued in Hong Kong

Renminbi-Denominated Bonds Issued in Hong Kong (Gross Issuance)



Renminbi-Denominated Bonds Issued in Hong Kong (Gross Issuance)

Renminbi-Dominated Bonds Issued in Hong Kong (Gross Issuance)



The Current Role of the Renminbi: As an International Funding Currency

- ◆ However, the expansion of the offshore Renminbi 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.
- ◆ Second, the Renminbi funds raised offshore do not automatically qualify to be repatriated to the Mainland to be used there.
- ◆ Third, the pool of Renminbi deposits in Hong Kong is less than 1% of the total Renminbi deposits on the Mainland,

The Future Role of the Renminbi:

As an International Medium of Exchange

- ◆ It the future, it is possible that the Renminbi can be used directly in the trading of Renminbi-denominated securities, for example, on the Hong Kong Stock Exchange. If realised, this will allow (Mainland) Chinese investors to buy and sell these securities abroad even in the absence of capital accounts convertibility.
- ◆ The Renminbi can also be used by other countries and regions to settle cross-border trade among themselves if they are not willing to accept one another's currency for whatever reason as long as they have access to Renminbi (and especially if one of the trading partners has limited access to the U.S. Dollar and/or the Euro, e.g., Iran and possibly Russia).

The Future Role of the Renminbi:

As an International Medium of Exchange

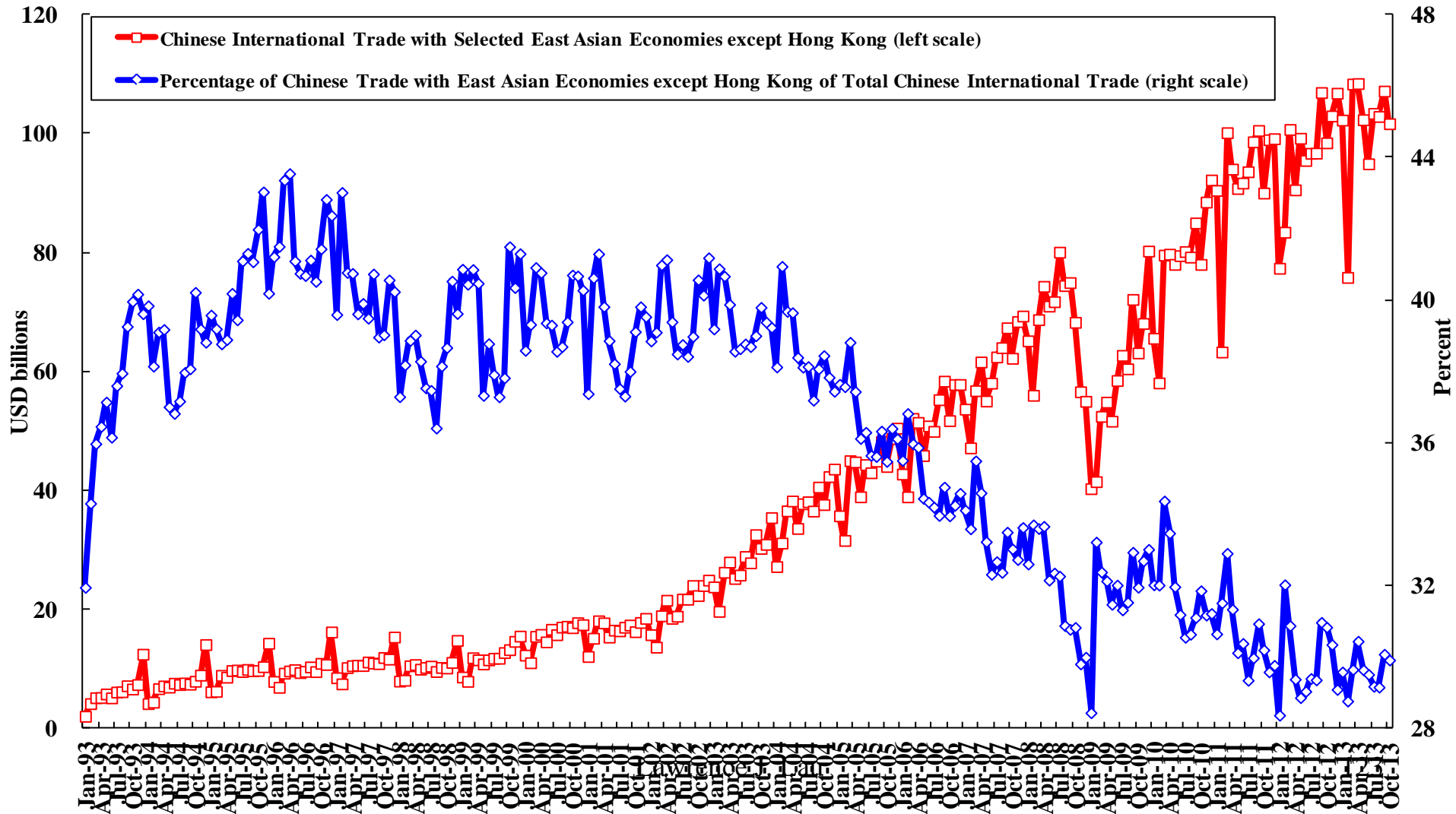
- ◆ In 2012, approximately US\$1.15 trillion, or 30%, of Chinese international trade is conducted with East Asian economies other than Hong Kong. (Hong Kong is a major export destination of Mainland China; however, a large proportion of its imports from China is re-exported from Hong Kong to other destinations, including the U.S. and Europe, around the World.)
- ◆ Moreover, while China runs a relatively small trade surplus vis-a-vis the World as a whole, it runs a large trade deficit with East Asian economies other than Hong Kong. What this means is that the East Asian economies will have ample room to earn and accumulate Renminbi balances if they wish to do so.

The Future Role of the Renminbi: As an International Medium of Exchange

- ◆ Thus, potentially, the Renminbi can not only be used as a settlement currency instead of the U.S. Dollar by Chinese exporters and importers with their trading partners in East Asia, but also by other East Asian economies in the settlement of trade transactions among themselves on a voluntary basis as they all have the ability to earn large quantities of Renminbi through their respective trade surpluses vis-a-vis China.

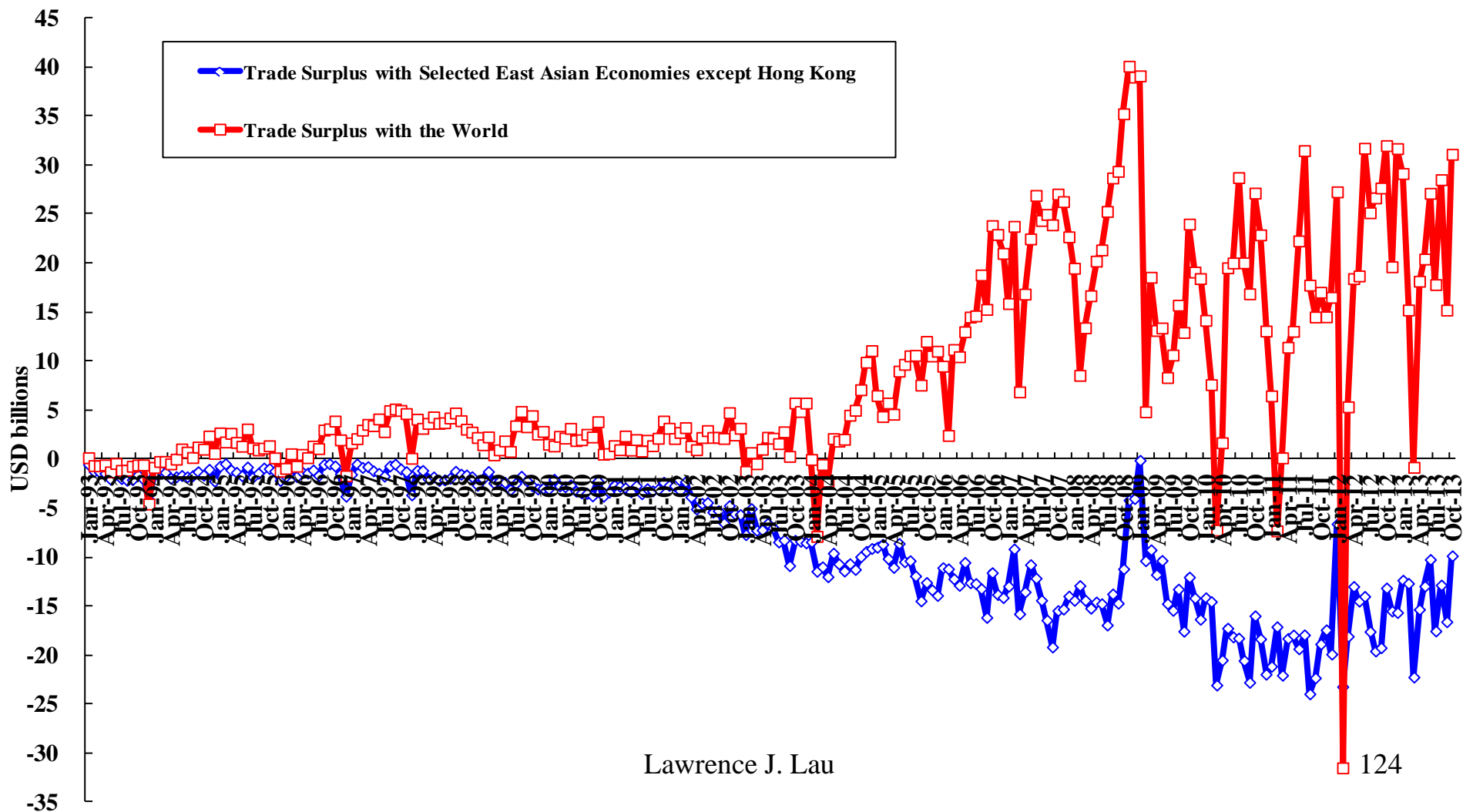
Chinese International Trade with East Asian Economies except Hong Kong

Chinese International Trade with Selected East Asian Economies except Hong Kong



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 Future Role of the Renminbi: As an International Medium of Exchange

- ◆ Eventually, it is possible that the East Asian economies may even issue bonds denominated in Renminbi because they all have a trade surplus vis-a-vis China and hence will have the ability to service the Renminbi-denominated debt and the pool of Chinese savings is huge and Chinese investors are natural customers for Renminbi-denominated assets.

The Future Role of the Renminbi: Towards Capital Accounts Convertibility

- ◆ The long-term trend of the exchange rate of the Renminbi relative to U.S. Dollar is likely to hold steady or appreciate modestly over the next few years although there may well be fluctuations in the short term caused by speculative inflows and outflows. A stable or modestly appreciating exchange rate of the Renminbi should facilitate its further internationalisation.
- ◆ Capital account convertibility of the Renminbi is expected to be achieved before 2020. It can occur sooner if short-term capital flows, both outbound and inbound, can be appropriately “discouraged”.

The Future Role of the Renminbi:

Towards Capital Accounts Convertibility

- ◆ Full convertibility implies the removal of all controls on capital flows, inbound and outbound.
- ◆ International trade flows are relatively stable. Foreign direct investment flows, both inbound and outbound, are basically long-term in nature and hence also relatively stable on the whole. The same is true of long-term portfolio investment flows.
- ◆ However, short-term flows that are susceptible to abrupt changes in magnitude and direction (e.g., hot money) can greatly destabilise the financial markets of a country, including its foreign exchange market, credit market and capital market, impacting the real economy negatively.
- ◆ But the most compelling argument against short-term cross-currency international capital flows is that, with the exception of short-term trade-related financing, they are not socially productive.

The Future Role of the Renminbi:

Towards Capital Accounts Convertibility

- ◆ Short-term cross-currency capital inflows 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, further exacerbated by the currency mismatch.
- ◆ Moreover, as they flow in and out of the destination country, they cause the exchange rate and/or the interest rate of the destination country to become excessively volatile, inhibiting not only the flows of cross-border trade and long-term investment but also the development of the domestic real economy.
- ◆ Thus, it is desirable to be able to distinguish between long-term capital flows, which should be encouraged, and short-term capital flows, which should be discouraged.

The Future Role of the Renminbi: Towards Capital Accounts Convertibility

- ◆ A Tobin tax, originally proposed by the late Prof. James Tobin, Nobel Laureate in Economic Sciences, can be an effective means of distinguishing between short- and long-term capital flows. It may be defined as a tax of say 1% on all spot conversions of a foreign currency into Renminbi or vice versa that are not related to underlying current-account transactions.
- ◆ Thus, foreign currency transactions related to the exports or imports of goods and services will be exempted from such a 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.
- ◆ Such a 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, and thereby discourage short-term cross-currency capital flows.

The Future Role of the Renminbi: Towards Capital Accounts Convertibility

- ◆ If every time a foreign currency is converted into Renminbi or vice versa, a tax of say 1% is levied, then a round-trip within a month would amount to an effective cost of more than 24% per annum, whereas for a direct investment with a long time horizon of say 5 years, the tax will amount to only 0.4% per annum, virtually nothing.
- ◆ In February, 2013, the European Commission published proposals for a financial transaction tax (FTT), which is also a form of Tobin tax. Only 11 of the 27 member states of the European Union (EU) will participate in the FTT, including France, Germany, Italy and Spain.

The Future Role of the Renminbi: As a Major International Reserve Currency

- ◆ 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 Future Role of the Renminbi: As a Major International Reserve Currency

- ◆ While the Renminbi is not yet fully convertible, 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 underpin 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 Future Role of the Renminbi: As a Major International Reserve Currency

- ◆ "The People's Bank of China already has bilateral currency swap agreements in place with many central banks and monetary authorities such as those of Albania, Argentina, Australia, Belarus, Brazil, The Euro Zone, Hong Kong, Hungary, Iceland, Indonesia, Kazakhstan, Republic of Korea, Malaysia, Mongolia, New Zealand, Pakistan, Russia, Singapore, Thailand, Turkey, Ukraine, The United Arab Emirates, the United Kingdom and Uzbekistan, and many more such agreements are expected.

Source: The list of countries is available on the website of People's Bank of China.

(<http://www.pbc.gov.cn/publish/huobizhengceersi/3135/index.html>)

The Future Role of the Renminbi: As a Major International Reserve Currency

- ◆ 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 the seigneurage: 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 Future Role of the Renminbi: As a Major International Reserve Currency

- ◆ 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 Future Role of the Renminbi: As a Major International Reserve Currency

- ◆ A further “cost” is the possibility that as a currency becomes widely held by the central banks and monetary authorities of other countries and regions as part of their foreign exchange reserves, it is subject to the risk that the foreign central banks and monetary authorities 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 Future Role of the Renminbi: As a Major International Reserve Currency

- ◆ 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 as part of their foreign exchange reserves. For example, consider the Hong Kong Dollar and the Singapore Dollar.
- ◆ The Japanese Yen is fully convertible but the Japanese Government has not promoted its use by other countries as a major international reserve currency.
- ◆ Whether the Renminbi will eventually become a major international reserve currency remains to be seen, as there are both benefits and costs, as pointed out above.

The Future Role of the Renminbi: Not As an Object of Gambling and Speculation

- ◆ China should avoid having the Renminbi exchange rate become an object of gambling and speculation by the hedge funds of the World.
- ◆ The daily volume of foreign exchange transactions worldwide amounts to approximately US\$5.3 trillion. This is equivalent to approximately US\$1.5 quadrillion per year. The total annual volume of international trade, including trade among countries and regions that do not require currency conversion such as within the Euro Zone, is approximately US\$20 trillion, or only 1.3% of the total volume of foreign exchange transactions. Are all these transactions necessary?

The Future Role of the Renminbi: Not As an Object of Gambling and Speculation

- ◆ This shows that the bulk of foreign exchange transactions consists of short-term gambling and speculation, causing unnecessary fluctuations in the currency exchange rates, which generate no benefits to real economies but create large profits for bankers handling these transactions (operating the casinos, so to speak, even though there have also been allegations of price-fixing in foreign exchange markets by the major multinational banks).
- ◆ The volatility of the exchange rates, caused by such speculation also benefits the U.S. Dollar as the dominant and only safe haven currency.

The Future Role of the Renminbi:

Enabling Settlement in Own Currencies

- ◆ Own currency settlement between trading partner countries is preferred by both exporters and importers because it reduces transactions costs and exchange rate risks. It also makes it less necessary to maintain large official foreign exchange reserves.
- ◆ However, one cannot, in general, expect international trade to be bilaterally balanced for every pair of trading partner countries. Under own-currency settlement, some countries may wind up with an excess amount of another country's currency while others may have an insufficient amount of another country's currency. Thus pooled settlement makes sense, so that within a given group of countries, the excess foreign currency held by one country can be used to offset the shortfall of another country.

Settlement of International Transactions in Own Currencies in Western Europe (1950s)

- ◆ This netting out should work well within a group, especially if every country in the group has more or less balanced trade with the rest of the group as a whole.
- ◆ The Bank for International Settlements in Basel performed this group settlement function for the Western European countries in the 1950s and early 1960s as they recovered from World War II but had not yet developed the confidence in one another's national currencies. U.S. aid under the Marshall Plan underpinned the operation of the settlement system by providing U.S. Dollars to settle any remaining balance after netting out amongst the Western European countries themselves.

The Future Role of the Renminbi: Enabling Settlement in Own Currencies

- ◆ A similar Bank for East Asia Settlements can be established to perform the same function for East Asian economies on a voluntary basis, enabling them, if they so choose, to settle in their own currencies. China, and perhaps also Japan, with their large official foreign exchange reserves, can provide any remaining settlements necessary in terms of either the Yuan (or the Yen) or another major international reserve currency such as the U.S.\$ or the Euro.

The Future Role of the Renminbi: Real Exchange Rate Coordination

- ◆ The real exchange rate between two currencies is the exchange rate after adjusting for the relative rates of inflation between the two economies.
- ◆ Stable real exchange rates are beneficial to the real economy. Exporters, importers, direct investors and long-term portfolio investors all prefer stable relative real exchange rates.

The Future Role of the Renminbi: Real Exchange Rate Coordination

- ◆ Real exchange rate coordination among a group of consenting countries and regions, in response to their current account surpluses and deficits and relative rates of inflation, can help to avoid the adoption of “beggar thy neighbour” policies by and potentially ruinous competitive devaluation among them.
- ◆ Moreover, if there were effective real exchange rate coordination among the group, it will facilitate the adjustment of the exchange rates en bloc vis-a-vis a major international reserve currency because then no one economy within the group will be relatively advantaged or disadvantaged.

The Future Role of the Renminbi: Real Exchange Rate Coordination

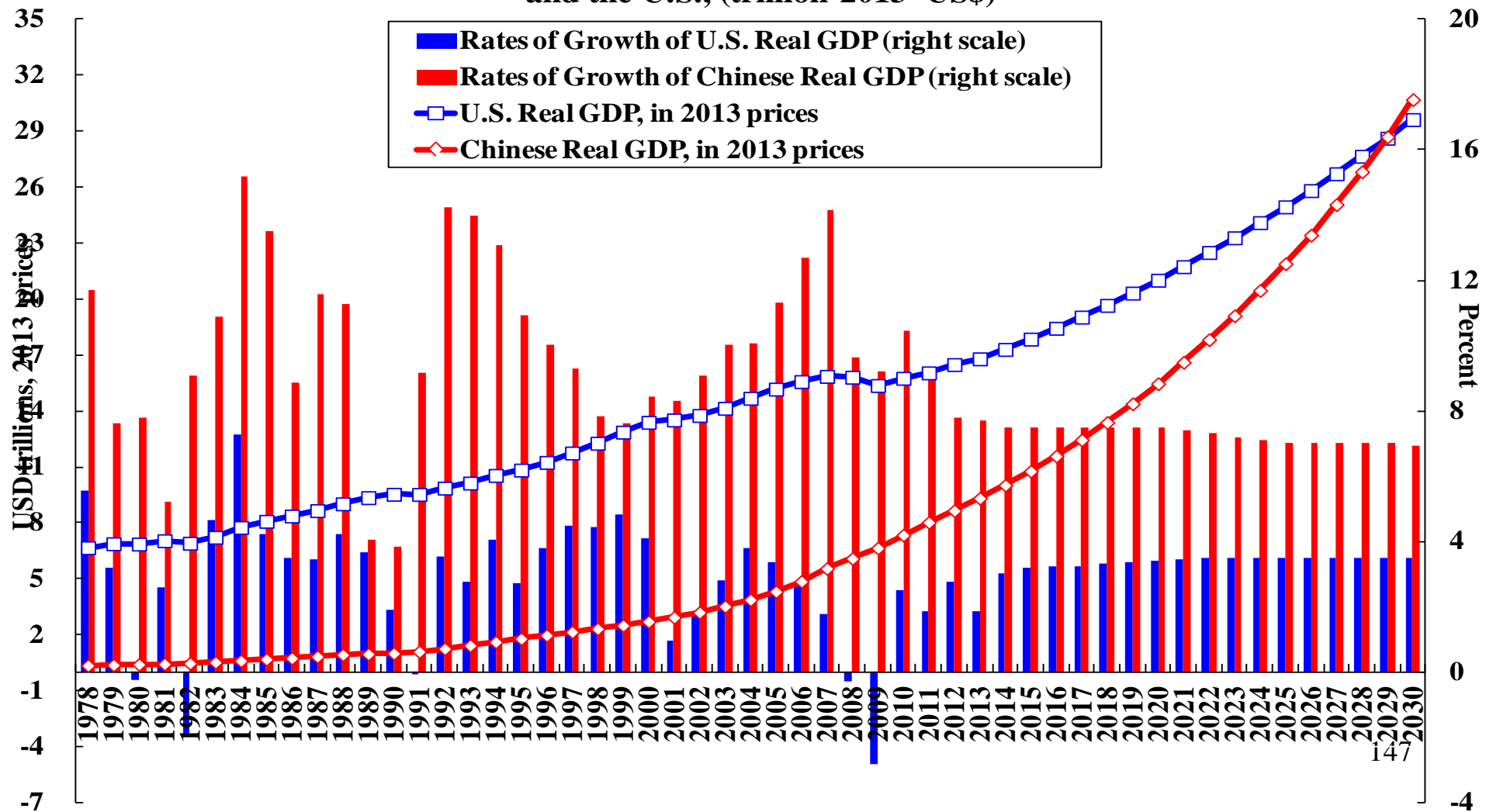
- ◆ Such real exchange rate coordination is best carried out among a group of countries with extensive trade and investment relations among themselves such as the ASEAN + 3 on a voluntary basis.
- ◆ With effective real exchange coordination among a group of economies, any currency within the group is as good as any other currency within the group, including the Renminbi.
- ◆ If real exchange rate coordination is successful among East Asian economies—or the most important trading countries among them, it can develop into an East Asian “Currency Snake”.
- ◆ Under real exchange coordination, the relative exchange rate parities within the coordinated group of economies will return to Bretton-Woods-like stability, but without the use of gold.

Projections of the Future

- ◆ It is projected that the Chinese and the U.S. economies will grow at average annual real rates of approximately 7.3% and 3.3% respectively between 2013 and 2030. Chinese real GDP is projected to catch up to U.S. real GDP in approximately 15 years' time--around 2029, at which time both Chinese and U.S. real GDP will exceed US\$28 trillion (in 2013 prices). This is more than three times the Chinese GDP and not quite two times the U.S. GDP in 2013. By then, China and the U.S. will each account for approximately 15% of World GDP.
- ◆ One may consider that the projected rates of economic growth for China and the U.S. may be a little on the optimistic side. However, the year in which the two GDPs become approximately the same will not be too far off. ¹⁴⁶

Actual and Projected Real GDPs and Their Annual Rates of Growth: China & the U.S.

Actual and Projected Real GDPs and their Annual Rates of Growth of China and the U.S., (trillion 2013 US\$)

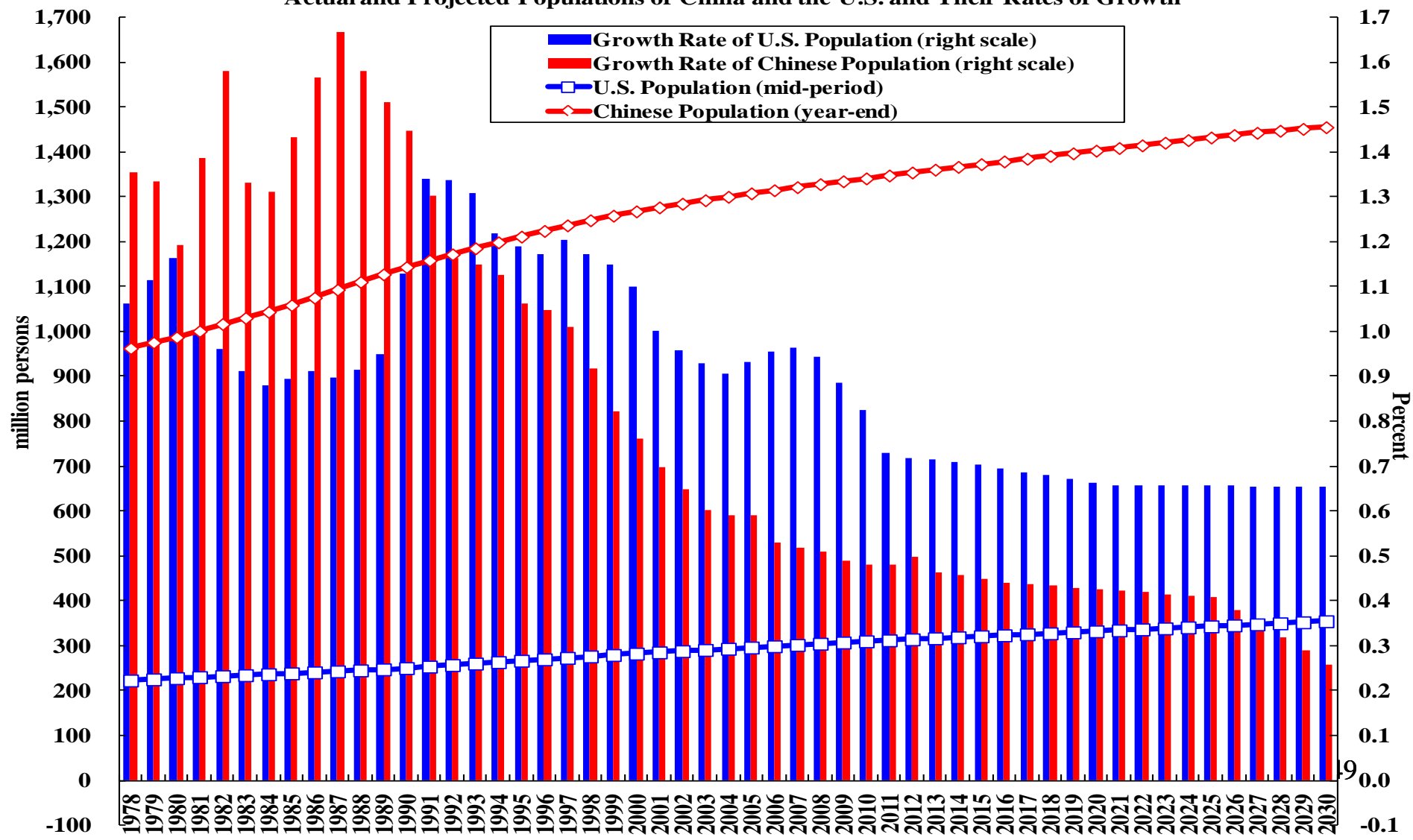


Projections of the Future

- ◆ In the next few decades, Chinese population is projected to reach a plateau around 2045 and then become more or less stationary. Some population projections suggest that Chinese population will reach a peak in 2035; however, this scenario does not appear likely as the Chinese population policy is likely to be modified long before 2035.

Actual and Projected Chinese and U.S. Populations & Their Rates of Growth

Actual and Projected Populations of China and the U.S. and Their Rates of Growth

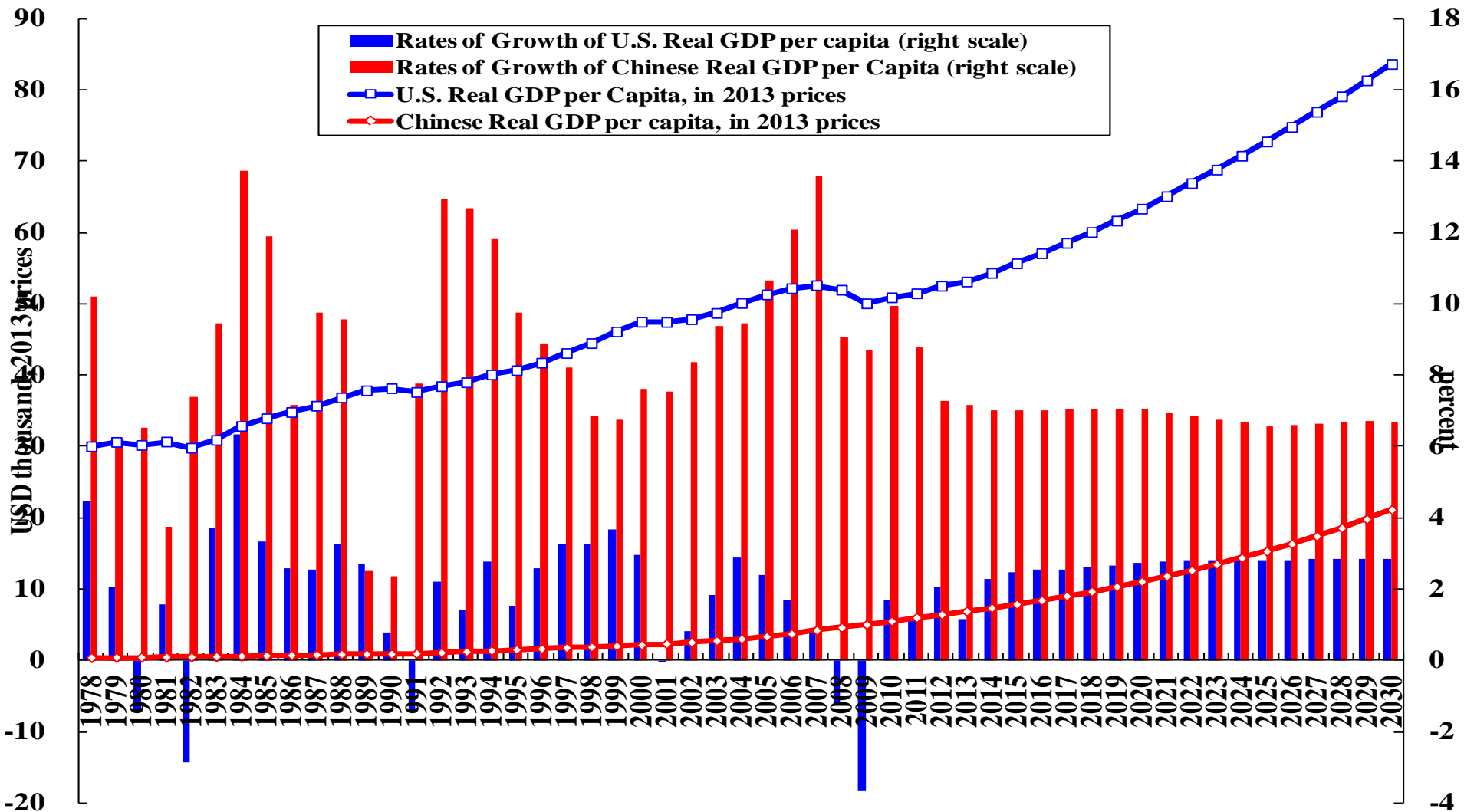


Projections of the Future

- ◆ By 2030, the Chinese real GDP per capita is projected to exceed US\$21,000 (in 2013 prices), which would still be just a quarter of the projected then U.S. real GDP per capita of US\$83,600.
- ◆ It will take around 45 years from now, almost till 2060, for China to catch up to the United States in terms of real GDP per capita.
- ◆ By that time, Chinese GDP is likely to be more than three times the U.S. GDP, and will account for perhaps 30 percent of World GDP (depending on the rates of growth of other economies, especially the developing economies of today).
- ◆ According to Angus Maddison, China accounted for 30%₁₅₀ of World GDP in early 19th Century.

Actual and Projected Real GDP per Capita's and their Annual Rates of Growth

Actual and Projected Real GDP per Capita and their Annual Rates of Growth of China and the U.S., (thousand, 2013 US\$)



Concluding Remarks

- ◆ The centre of gravity of the global economy has been gradually shifting to East and South Asia from North America and Europe. The centre of gravity of the East Asian economy has been gradually shifting to China from Japan.
- ◆ The Chinese economy is partially de-coupled from the developed economies of North America and Europe.
- ◆ On the basis of its strong economic fundamentals, China should be able to continue to grow at an average annual rate of at least 7% for the next couple of decades, more or less independently of what happens in the rest of the World.

Concluding Remarks

- ◆ The national saving rate in China, currently standing at approximately 45%, will remain high even though it is expected to decline gradually.
- ◆ The decline will be caused not so much by a decline in the saving rate of Chinese households, but by a decline in the saving rate of Chinese enterprises through increased distribution of cash dividends to shareholders, including both households and the government, or through reduced profits resulting from rising wages.
- ◆ Even with a decline in the national saving rate, Chinese domestic saving should continue to be adequate to finance the domestic investment needs without relying on foreign investment and/or foreign loans.

Concluding Remarks

- ◆ Surplus labour will continue to exist—In 2012, the agricultural sector employs over 30% of the Chinese labour force but produces only 10% of the Chinese GDP.
- ◆ There will not be a “real” labour shortage despite the decline of the “working-age population”—the existing retirement ages of 55 for women and 60 for men are too low given the lengthened life expectancy of the Chinese population. One possible compromise is to raise the retirement age to 65 but require senior executives to give up their administrative leadership positions at age 60.
- ◆ The “one-child policy” is already in the process of being modified, for example, a married couple with one of the spouses being a single child is allowed to have two children. Further changes are possible in the future but their effects will not be felt for another two decades or more.

Concluding Remarks

- ◆ There are very significant returns to scale in the Chinese economy—both technological economies of scale as well as market economies of scale—that remain to be exploited.
- ◆ Intangible capital, that is, R&D capital, patents, other intellectual property such as brand names, are highly productive in a large economy because once the fixed cost of invention/innovation is amortised, the rest is almost all pure profit.

Concluding Remarks

- ◆ Chinese economic growth will be marginally, but not critically, affected by a large decline in its exports, as demonstrated by its experience in the past several years as well as during the 1997-1998 East Asian currency crisis. Thus, it will be able to survive even prolonged economic recessions in the European and U.S. economies.
- ◆ China is a large continental country like the United States and will similarly develop into a largely internal-demand driven economy. International trade and international investment will not have a decisive impact on the Chinese economy in the future. Eventually, Chinese exports as a percent of its GDP should be relatively low, in the teens,

Concluding Remarks

- ◆ The long-term sustainable sources of Chinese aggregate demand will all be internal: urbanisation (building new cities), public infrastructure, mass-transit systems, household and public consumption, residential housing, investment in education and health care, environmental protection and preservation, energy conservation and renewable energy, and the green economy.
- ◆ Chinese household consumption will rise, as GDP per capita and wage rate rise and the social safety net is gradually perfected. A comprehensive income tax reform which integrates all personal income categories and lowers the tax burden on the low and middle income brackets but raises the tax rates on higher income brackets may also increase aggregate household consumption.
- ◆ But the national saving rate may remain high for a long time.

Concluding Remarks

- ◆ While the Chinese economy has not been export-led for quite some time now, it will remain investment-led at least for a while—including infrastructural investment, investment in urbanisation and in agricultural mechanisation, and investment in the supply of public goods (for example, clean air, clean water, clean earth, education and health care).
- ◆ The provision of public goods such as education, health care, clean environment, by the government can greatly increase the welfare of the average people. It is also an effective means for redistribution, narrowing the degree of actual inequality in the consumption of services.

Concluding Remarks

- ◆ 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 use of the Renminbi for the denominating, invoicing, clearing and settlement of Chinese international transactions will continue to rise over time, especially in its trade with East Asian economies.
- ◆ Chinese trade with the U.S. and Europe will probably continue to be denominated and settled in U.S. Dollar and Euro respectively.

Concluding Remarks

- ◆ The Renminbi may perhaps even be used in the settlement of trade among East Asian economies themselves, on a voluntary basis. This is because almost all East Asian economies have a trade surplus vis-a-vis China and hence can have a ready supply of Renminbi to be used for settlement of trade among themselves if they so wish.
- ◆ To the extent the East Asian economies may potentially have an excess of Renminbi it may be more economically and efficient for them to settle in Renminbi than in U.S. Dollars because it will involve one fewer currency conversion.

Concluding Remarks

- ◆ Capital account convertibility of the Renminbi, in the sense that both inbound and outbound capital controls will be effectively lifted, is expected to be achieved before 2020.
- ◆ It can occur sooner if short-term speculative capital flows (hot money), both outbound and inbound, which do not do the real economy any good, can be appropriately “discouraged”. The imposition of a Tobin tax on cross-border capital flows, which effectively differentiates between short-term and long-term capital flows, may be useful in controlling the inflow and outflow of hot money.

Concluding Remarks

- ◆ 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 the seigneurage of being a major international reserve currency that is widely held by central banks elsewhere in the World, China will likely have to run a significant trade deficit which it may not be willing to do. Moreover, there is also the risk of other central banks deciding to dump the currency and assets denominated in the currency at inopportune times.