

# The Chinese Economy and the Renminbi

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# Outline

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- ◆ The World Economic Situation
- ◆ The Chinese Transition to a New Normal
- ◆ The Renminbi
- ◆ Concluding Remarks

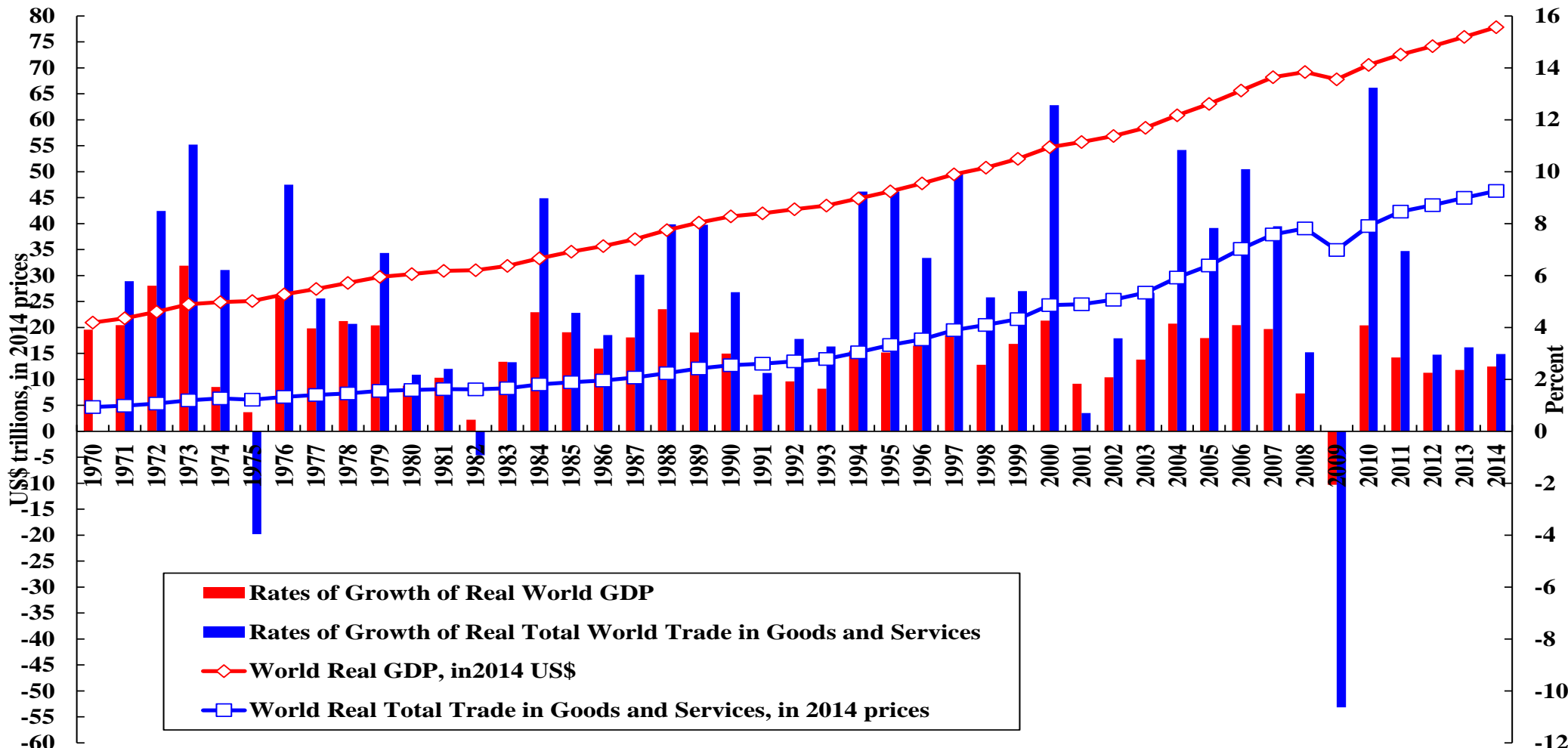
# The World Economic Situation

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- ◆ Slowing growth of real GDP and trade
- ◆ The ineffectiveness of monetary policy
- ◆ Insufficient aggregate demand
- ◆ The rise of protectionism
- ◆ Geopolitical uncertainties

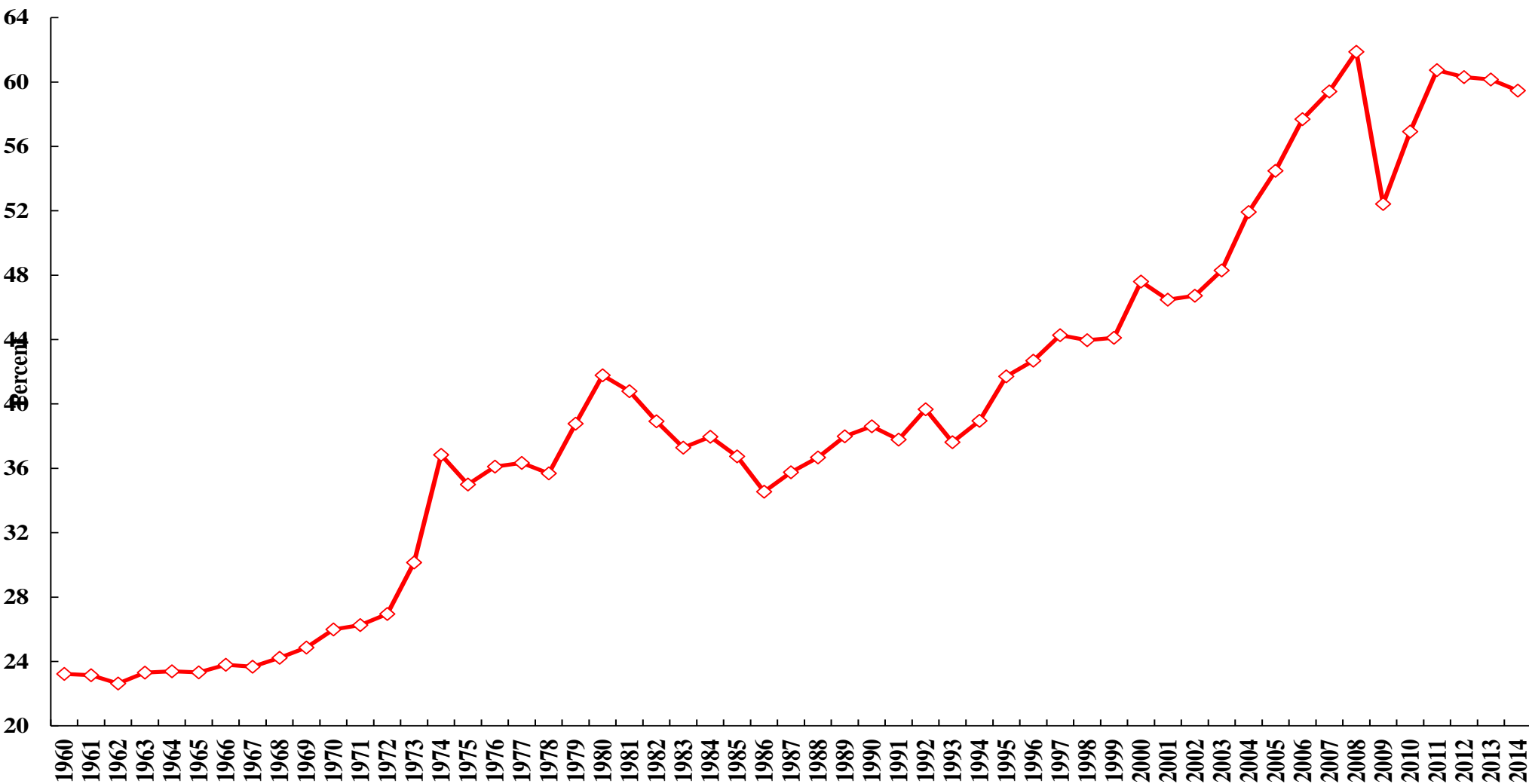
# Real World GDP and Trade in Goods and Services and Their Growth Rates (2014 US\$)

World Real GDP and Real Total Trade in Goods and Services and Their Growth Rates  
(in 2014 US\$)



# Total World Trade in Goods and Services as a Percentage of World GDP since 1960

Total World Trade in Goods and Services as a Percentage of World GDP since 1960



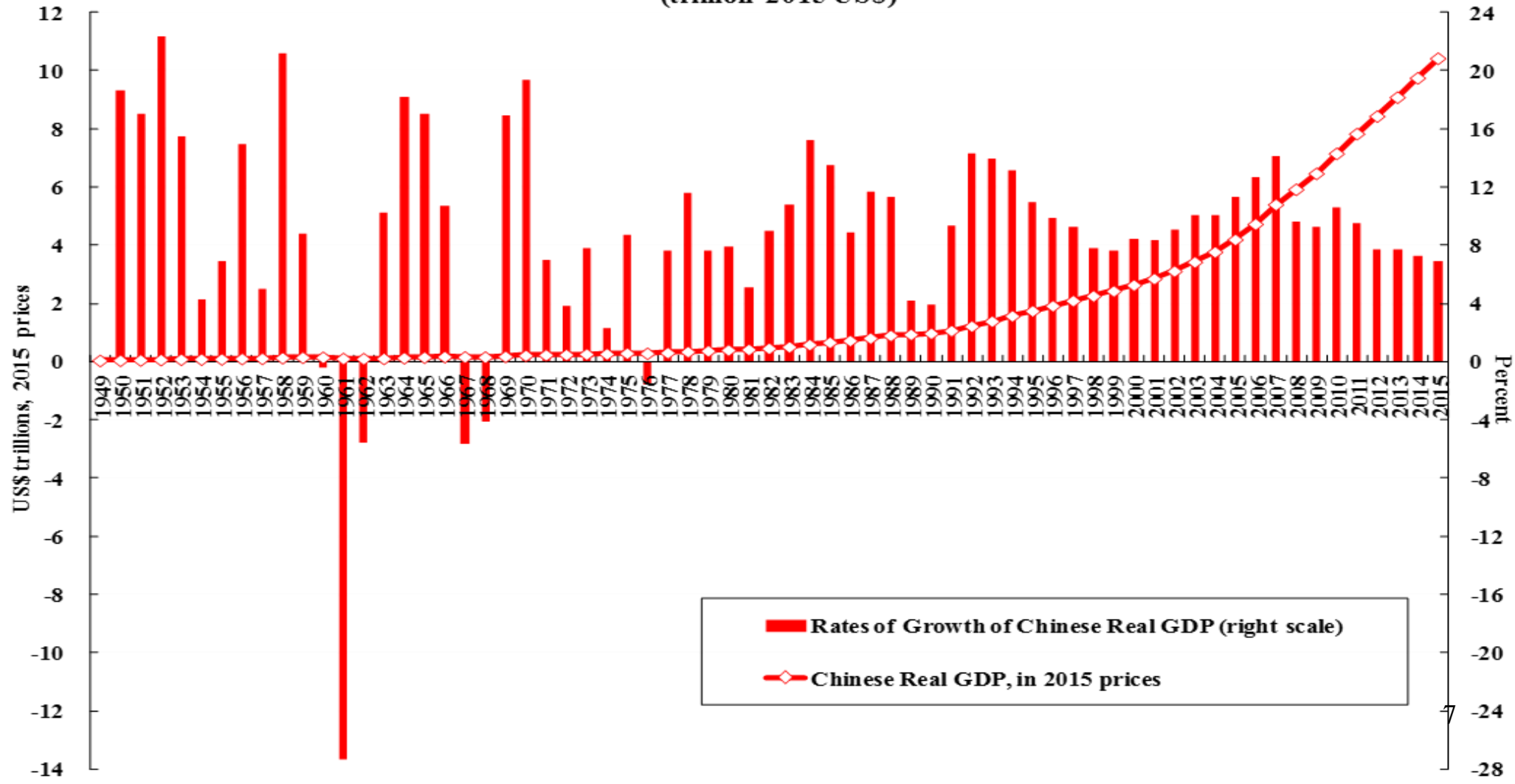
# The Chinese Transition to a New Normal

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- ◆ Historically unprecedented rates of growth
- ◆ Slowdown is inevitable
- ◆ L-shaped recovery should be viewed positively
- ◆ China as a surplus economy
- ◆ Potential sources of growth of aggregate demand

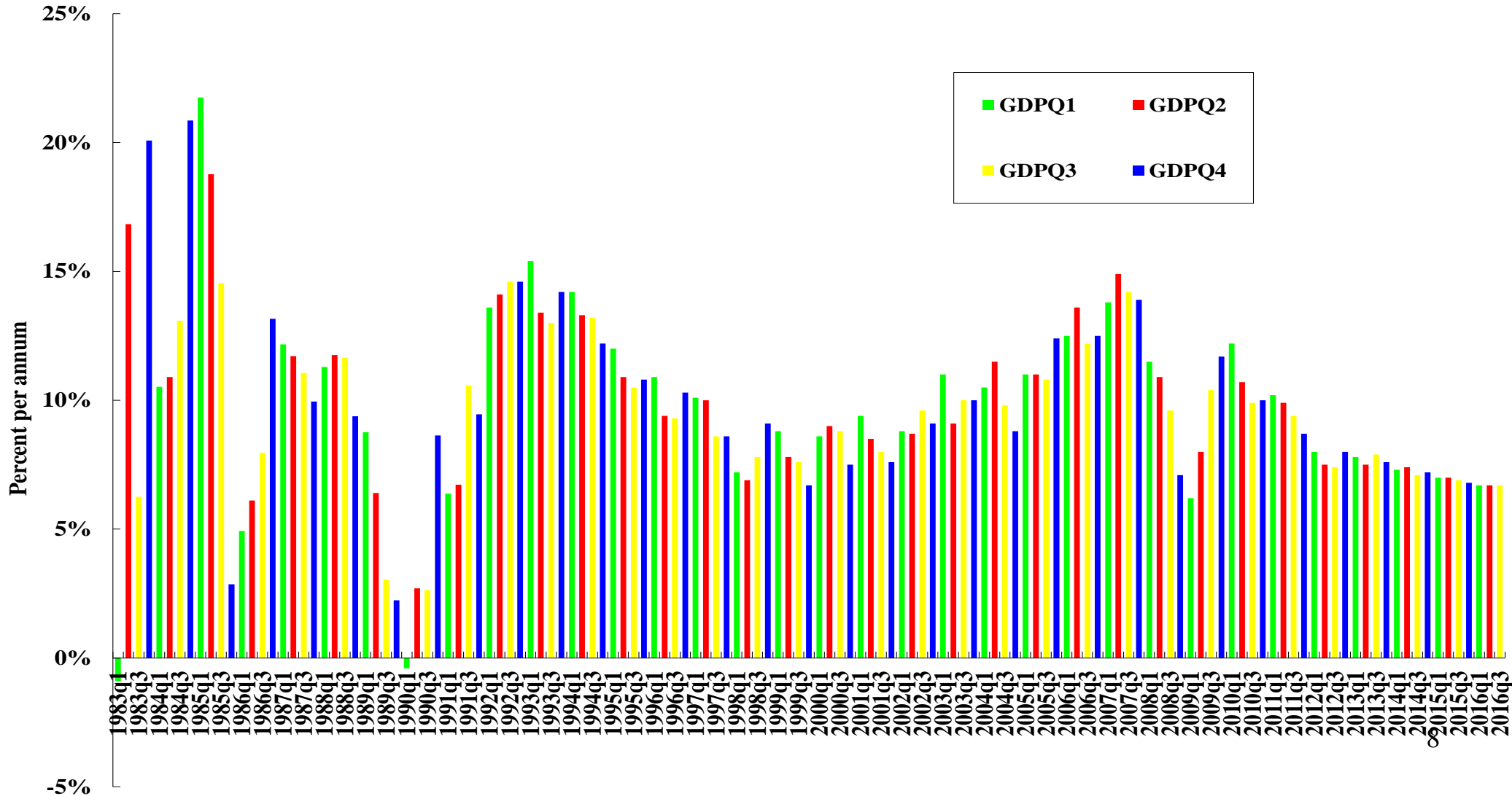
# Historically Unprecedented Rates of Growth

Chinese Real GDP and Its Rates of Growth since 1949  
(trillion 2015 US\$)



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

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





# Slowdown is Inevitable

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- ◆ Elasticity of output with respect to an input  
= Percentage change in output/Percentage change in input
- ◆ Rate of growth of output  
= Output elasticity of labor x Rate of growth of labor  
+ Output elasticity of capital x Rate of growth of capital  
+ Technical progress (Rate of growth of total factor productivity (TFP))
- ◆ The rate of growth of labor (hours) eventually becomes negligible (or even negative) as the surplus labor runs out and the population takes more leisure.
- ◆ The rate of growth of capital eventually slows down as the capital stock becomes bigger and bigger through accumulation over time.
- ◆ Technical progress over the long term depends on cumulative investment in human capital and R&D and is unlikely to average more than 2 percent per annum.
- ◆ Moreover, many significant improvements in economic welfare are not reflected in the GDP as conventionally measured, for example, more leisure, cleaner environment, better health and longer life expectancy.

# L-shaped Recovery Should be Viewed Positively

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- ◆ L-shaped recovery is not necessarily negative. It all depends on where the horizontal part of the L is located.
- ◆ What the authoritative figure in the People's Daily article meant to convey is that there would be steady growth at around 6.5 percent per annum going forward, but no plan to pump up the economy back to a higher rate of growth through fiscal stimuli. There would be no V-shaped recovery, or for that matter not even a U-shaped recovery.

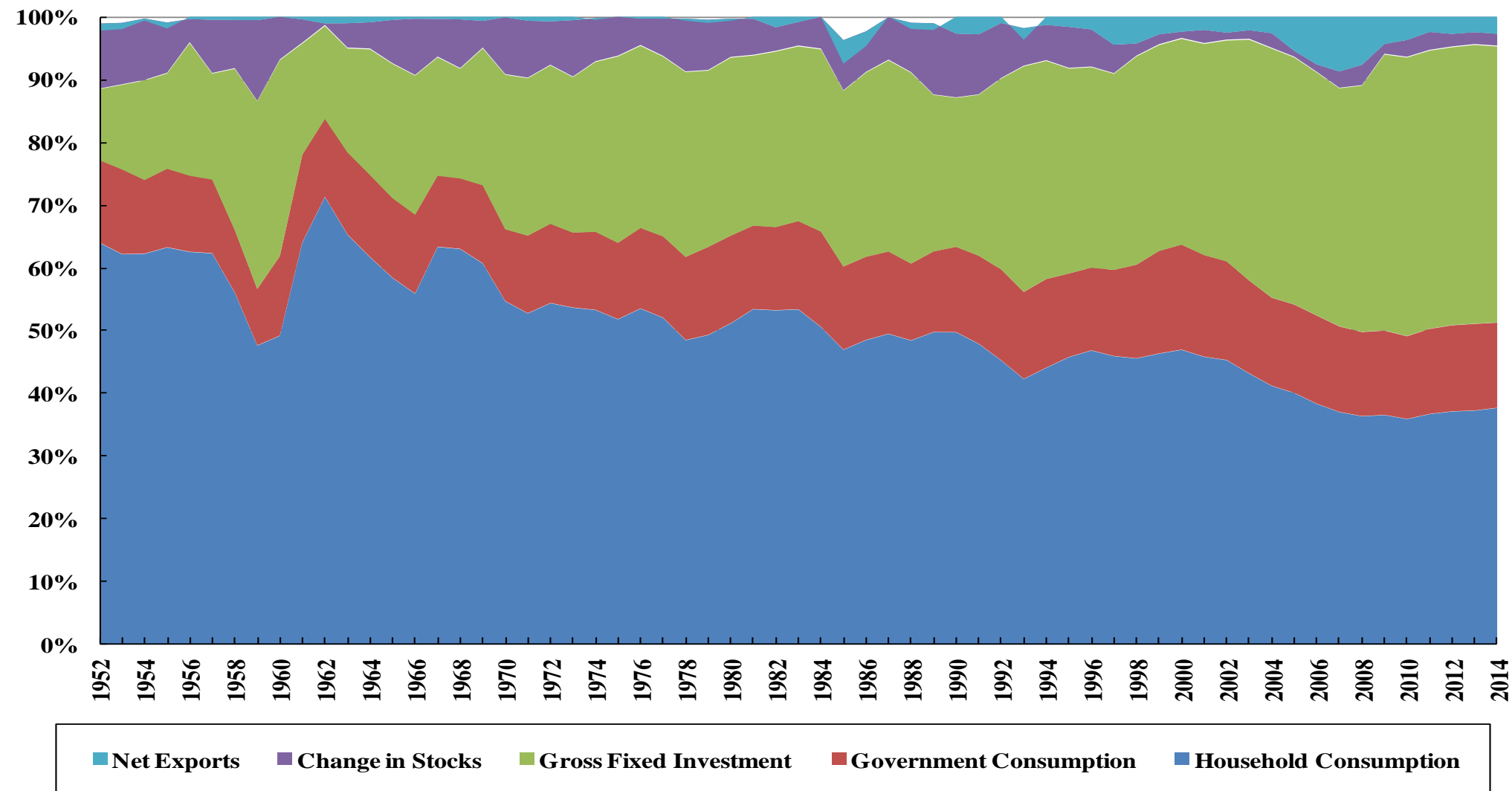
# China as a Surplus Economy

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- ◆ The Chinese economy today has so much excess capacity that supply is not a constraint. The constraint on output is aggregate demand. If there is demand, there will be supply. The Chinese economy has no difficulty whatsoever in generating a 6.5% growth of real output as long as there is demand.

# The Composition of Chinese GDP by Expenditure

The Composition of Chinese GDP by Expenditure



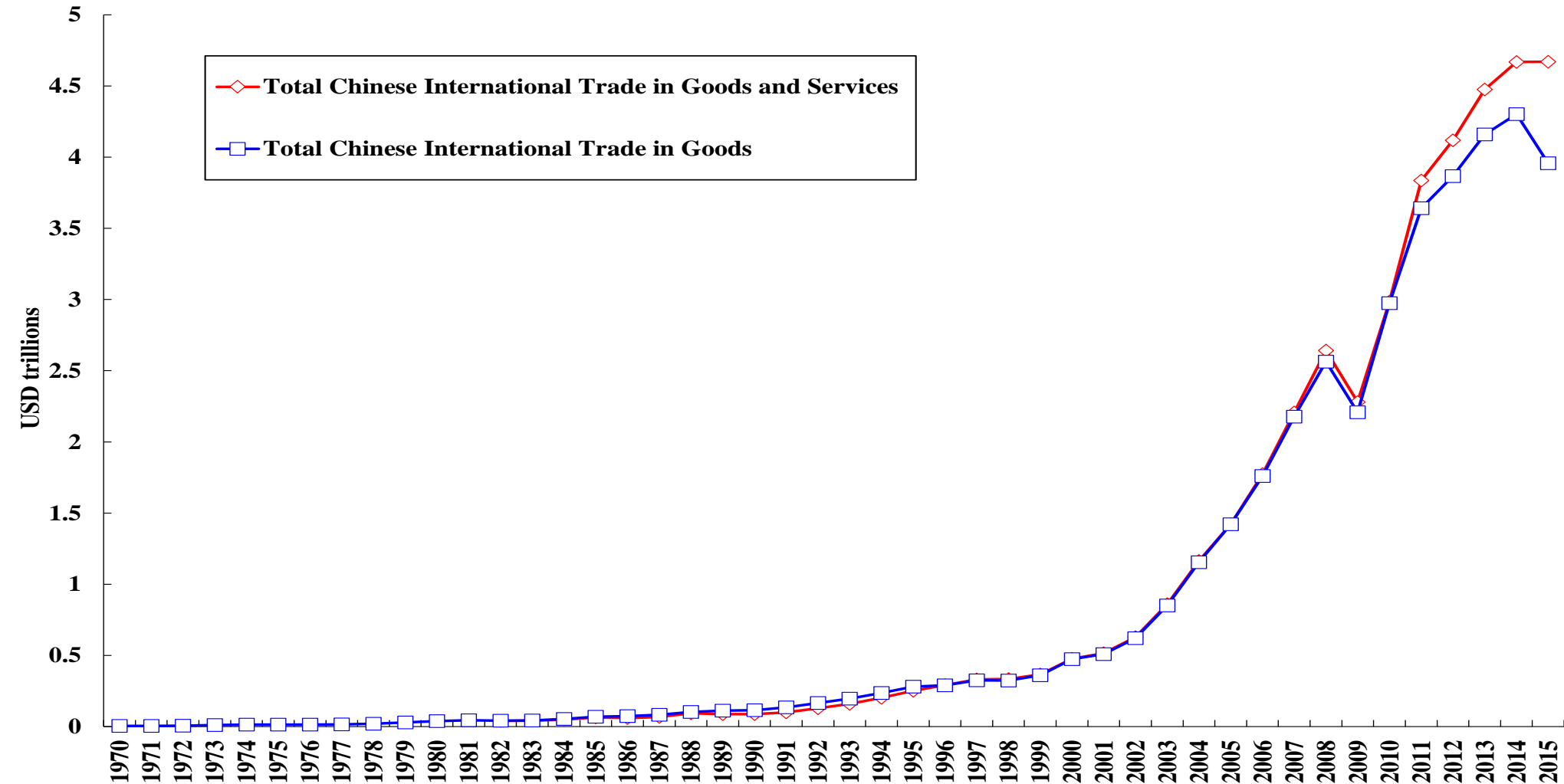
# Potential Sources of Aggregate Demand

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- ◆ The rate of growth of exports (and in particular that of the export surplus) has also been falling.
- ◆ The rate of growth of fixed investment has been falling, and rightly so, in view of the excess production capacity in many manufacturing sectors and in residential housing in other than first-tier cities (part of the supply side reform).
- ◆ Even though the rate of growth of real household consumption has been growing at approximately one and a half times the rate of growth of real GDP, it alone is not enough because of the low base.
- ◆ Public infrastructural investment such as high-speed railroads, urban mass transit systems and other urban public works, public Wi-Fi towers, affordable housing and clean energy will continue to provide a steady aggregate demand.

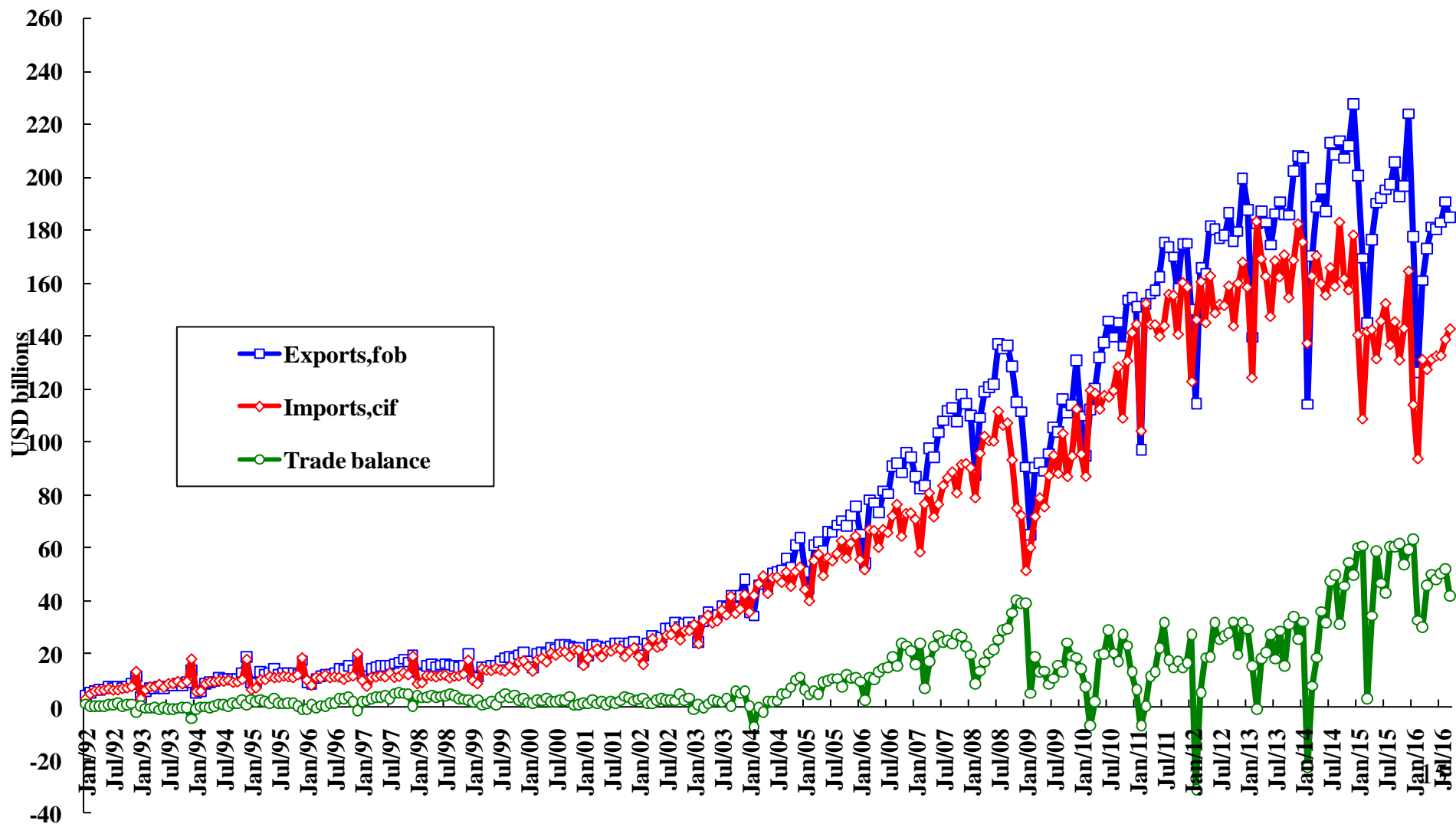
# Total Mainland Cross-Border Trade in Goods and Services and in Goods Alone, US\$ trillions

Total Mainland Cross-Border Trade in Goods and Services and in Goods Alone, US\$ trillions



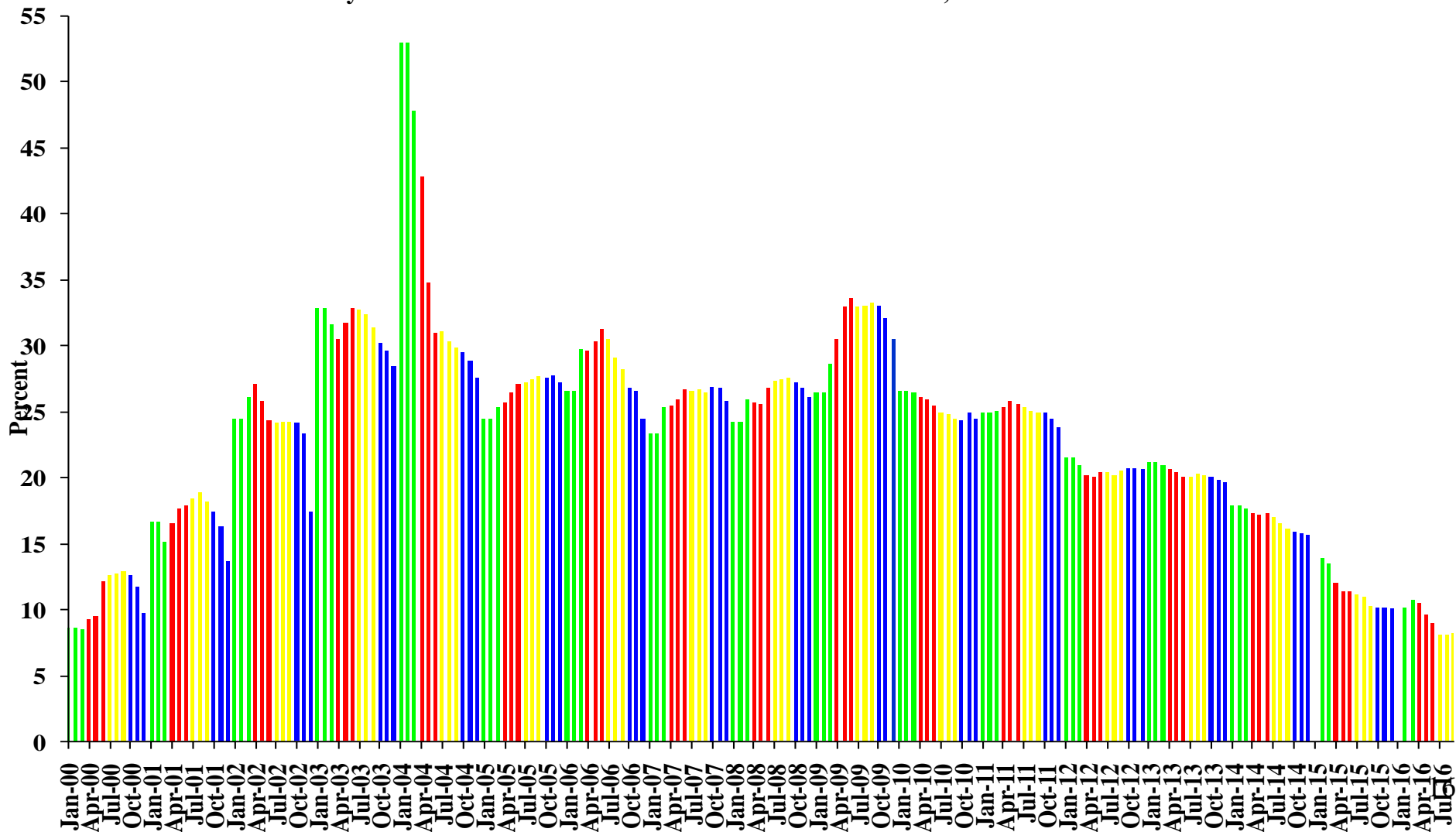
# Chinese Monthly Exports, Imports and Trade Balance in Goods, US\$ Billions

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



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

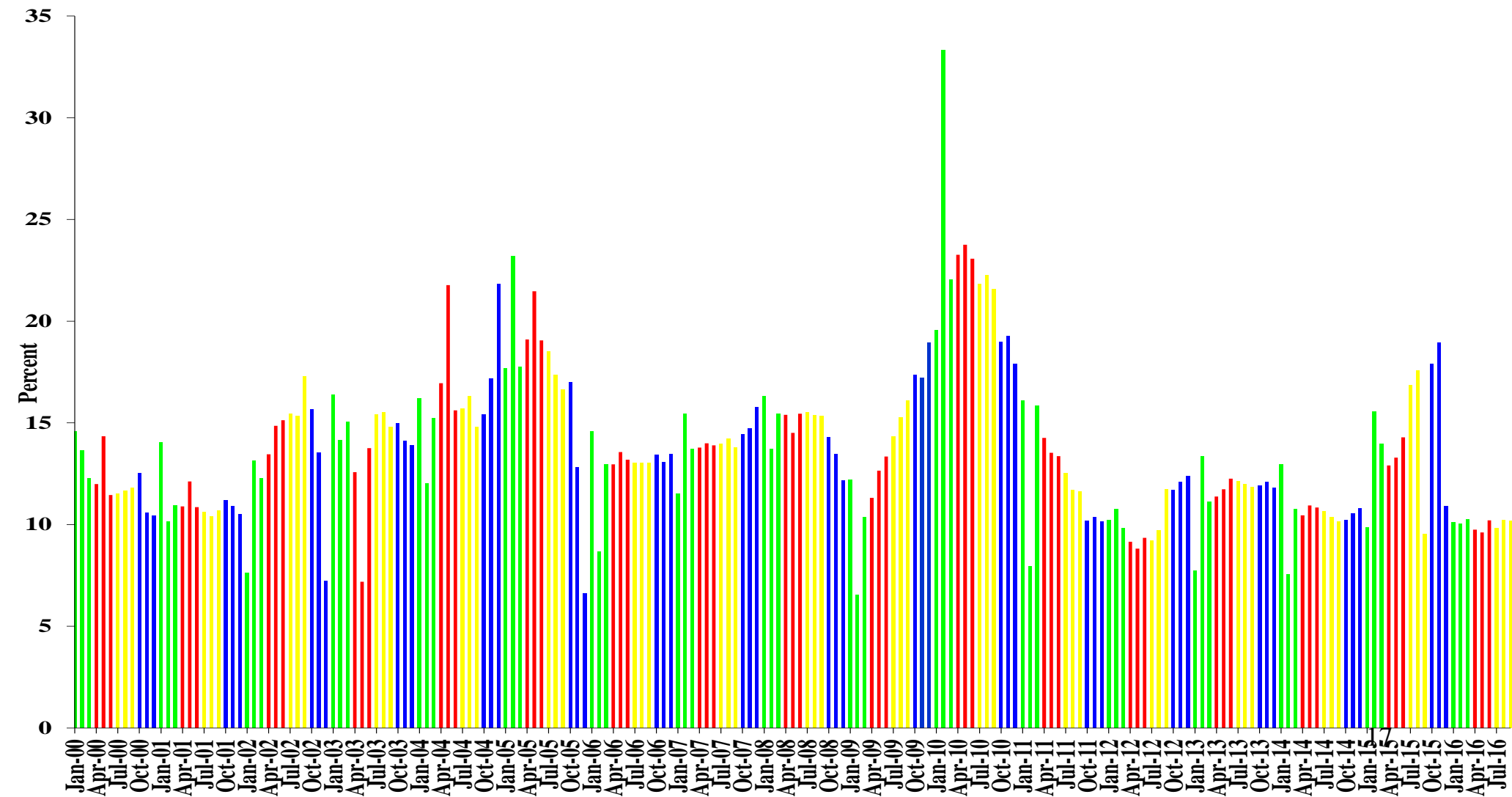
Monthly Rates of Growth of Chinese Fixed Assets Investment, Year-over-Year





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

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



# Potential Sources of Aggregate Demand

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- ◆ Investment in R&D, currently at 2.1% of GDP, is planned to increase to 2.5% in 2020. It can be increased at a faster rate, with more emphasis on basic research.
- ◆ Public goods consumption (education, health care, elderly care, and environmental protection, preservation and restoration—clean air, water and soil) can provide the additional aggregate demand. Alleviation of poverty and environmental clean-up and restoration are the only two mandatory targets within the Thirteenth Five-Year plan.
- ◆ Universal access to the internet and the improvement of the environment is a de facto redistribution of income because both the rich and the poor will benefit equally from the improvements in the environment.

# The Renminbi

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- ◆ The Renminbi as an international medium of exchange
- ◆ The Renminbi as an international store of value (Renminbi in the Special Drawing Rights (SDR) Basket)
- ◆ The evolution of the Renminbi exchange rate
- ◆ The use of own currency for invoicing, clearing and settlement
- ◆ Regional exchange rate co-ordination

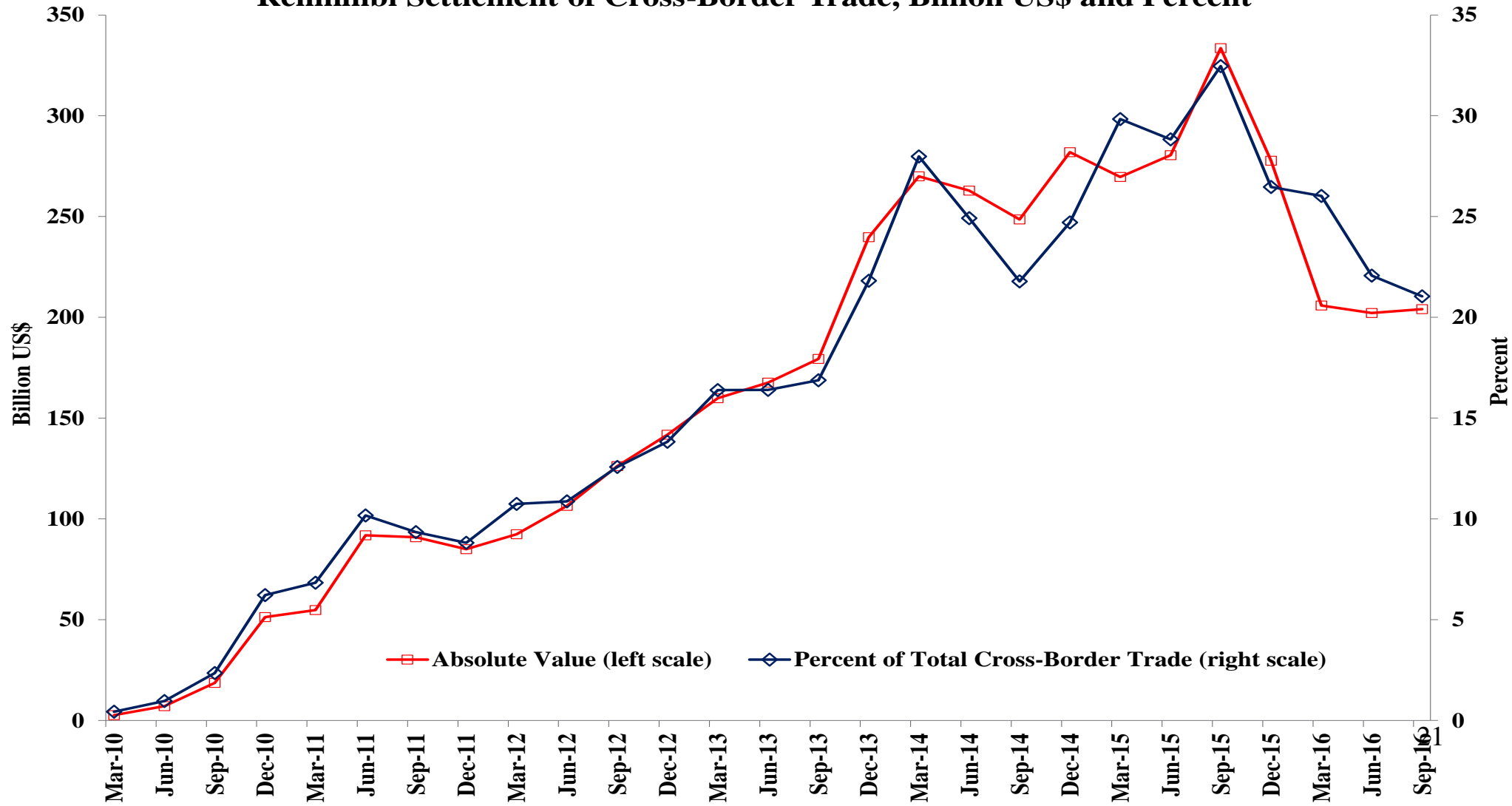
# The Renminbi as an International Medium of Exchange

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- ◆ Mainland cross-border trade used to be all settled in U.S. Dollars. However, since 2010, it has been increasingly denominated and settled in Renminbi. As of 2016Q3, more than one-fifth (21 percent, or at an annualized rate of more than US\$800 billion) of total Mainland trade was settled in Renminbi, compared to almost nothing in 2010Q1.
- ◆ Hong Kong is currently by far the largest and most active offshore center for Renminbi clearing, settlement, trading and financing, with an average daily volume of transactions approaching 1 trillion Yuan.

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

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



# The Renminbi as an International Medium of Exchange

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- ◆ At present, the Renminbi is used for the settlement of international transactions to a much lesser extent than warranted by the Mainland share in world trade. In the following Charts, the world currencies are ranked from left to right in descending order of the sizes of their respective shares in world payments in selected periods.
- ◆ The U.S. Dollar was the undisputed champion as of July 2016, accounting for 41.3% of world settlement, even though the U.S. itself accounted for only 11.7% of world trade in 2015, followed by the Euro, which accounted for 31.3% of world settlement (with the Euro Area accounting for 25% of world trade). The Chinese Yuan, with not quite 2%, was in the fifth place in terms of world settlement, while the Mainland also accounted for 11.1% of world trade.

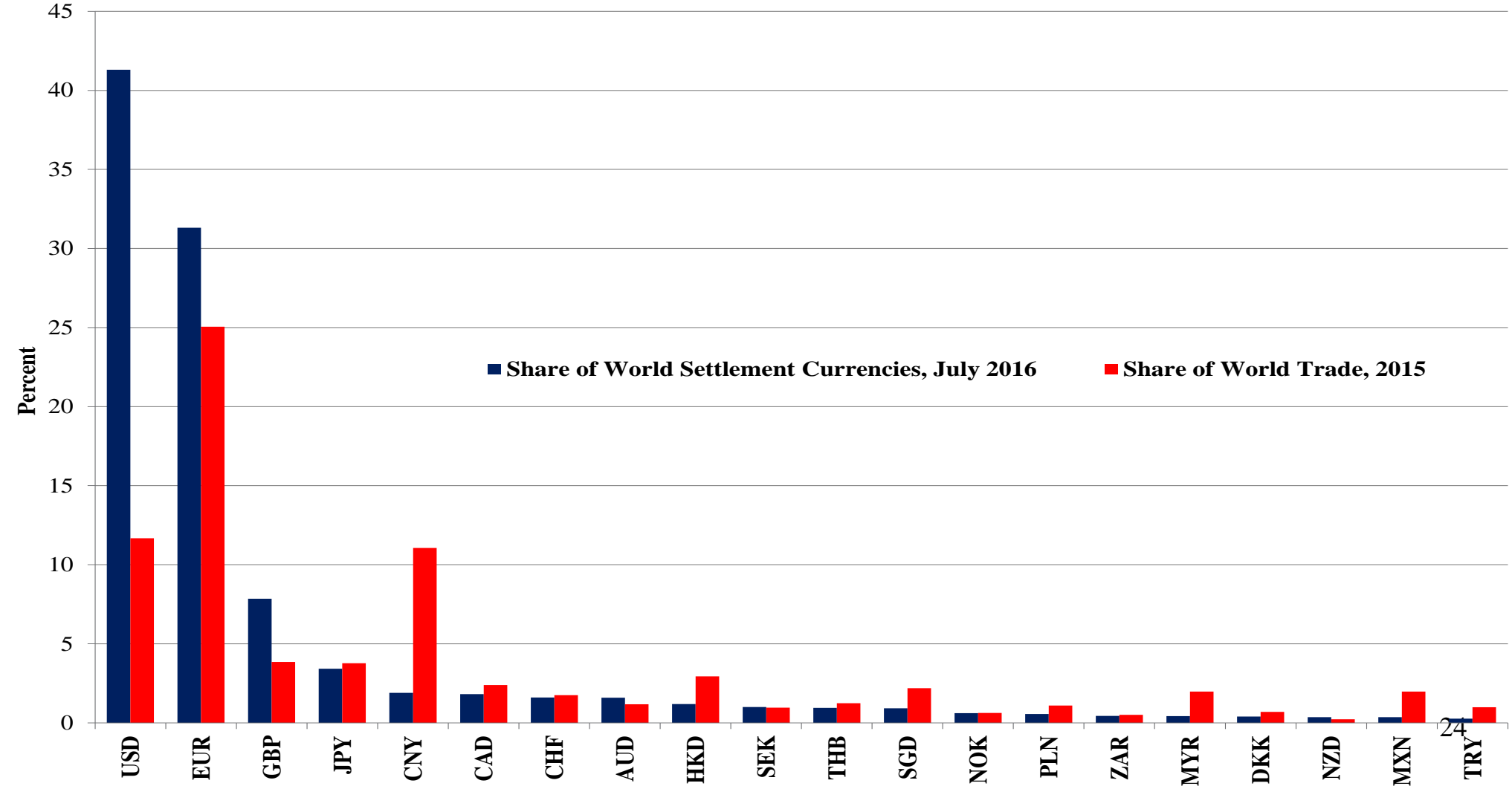
# The Renminbi as an International Medium of Exchange

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- ◆ In contrast, the Japanese Yen accounted for 3.4% of world payments with Japan accounting for 3.8% of world trade in 2015.
- ◆ If the Japanese experience is any guide, it shows that there is still a great deal of room for the Renminbi to grow in terms of its share of world settlement.
- ◆ This would eventually mean even less need for the People's Bank of China to maintain a high level of official foreign exchange reserves for transactions purposes.

# Distribution of World Trade Settlement Currencies versus World Trade, July 2016

Share of World Settlement Currencies, July 2016





# The Renminbi as an International Medium of Exchange

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- ◆ It is useful to examine the changes over time of the use of different currencies in world payments. In the charts that follow, the shares of the top twenty currencies used in world settlement at selected dates between 2010 and 2016 are presented in blue columns in the order of their relative sizes from left to right, starting from the highest (using data from SWIFT), and compared to the shares of the respective country or region in world trade presented in red columns.
- ◆ An economy's share of world trade is an important, but not the only, determinant of whether its currency is widely used as a medium of international exchange. Every economy prefers to use its own currency for the settlement of its international transactions because it minimizes both risks and transactions costs.

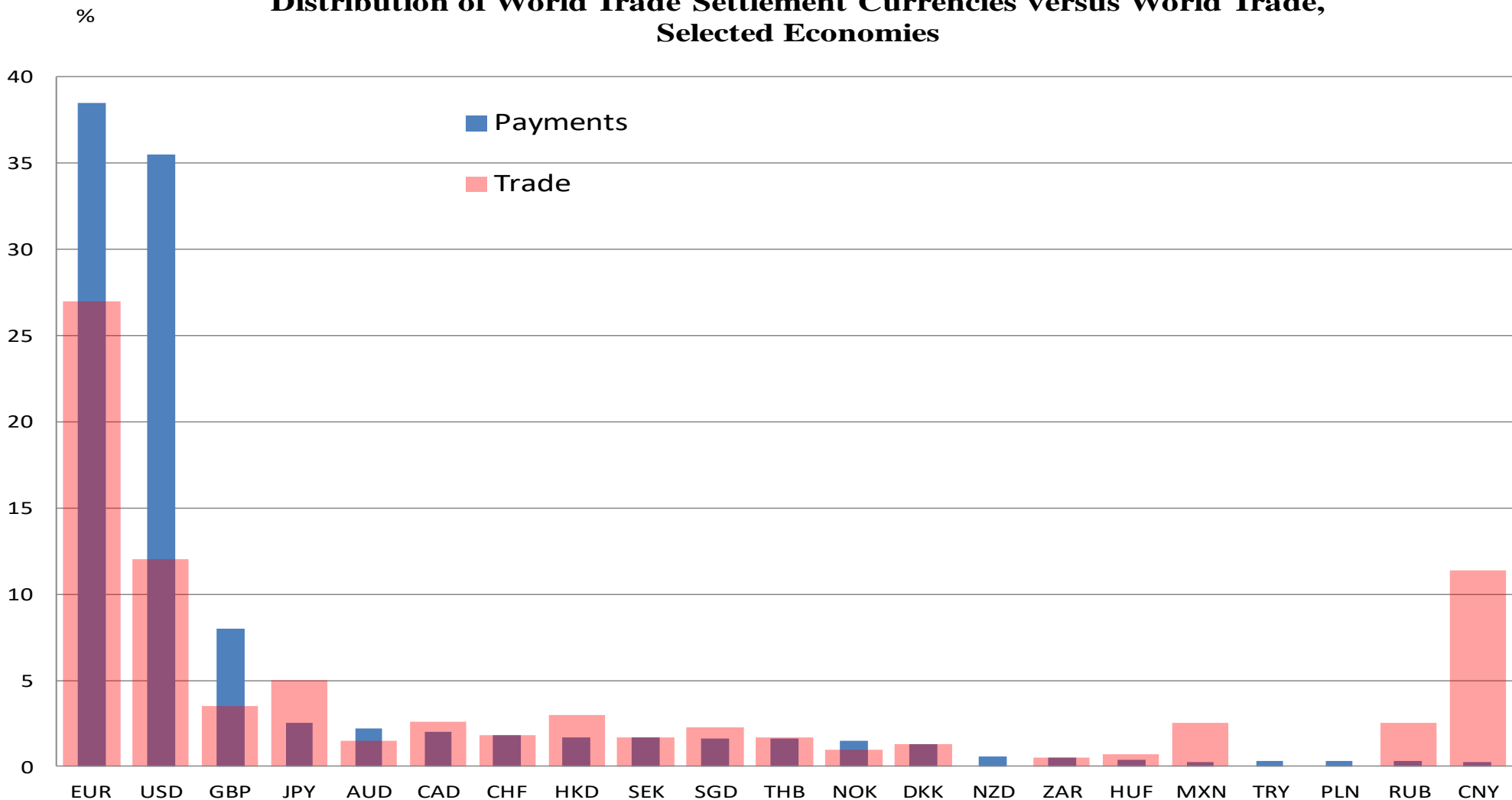
# The Renminbi as an International Medium of Exchange

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- ◆ In 2010, even after the European sovereign debt crisis broke out, the Euro was still the most widely used currency for invoicing, clearing and settlement purposes, accounting for almost 40% of the total world payments, but only a little more than 25% of total world trade. The U.S. Dollar was a close second, accounting for a little over 35% of world payments but only around 12% of world trade. The British Pound was third, accounting for not quite 9% of the world payments and 3% of world trade. The Renminbi was in the 21st place in terms of its share of total world payments despite its more than 10 percent share in world trade.

# 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

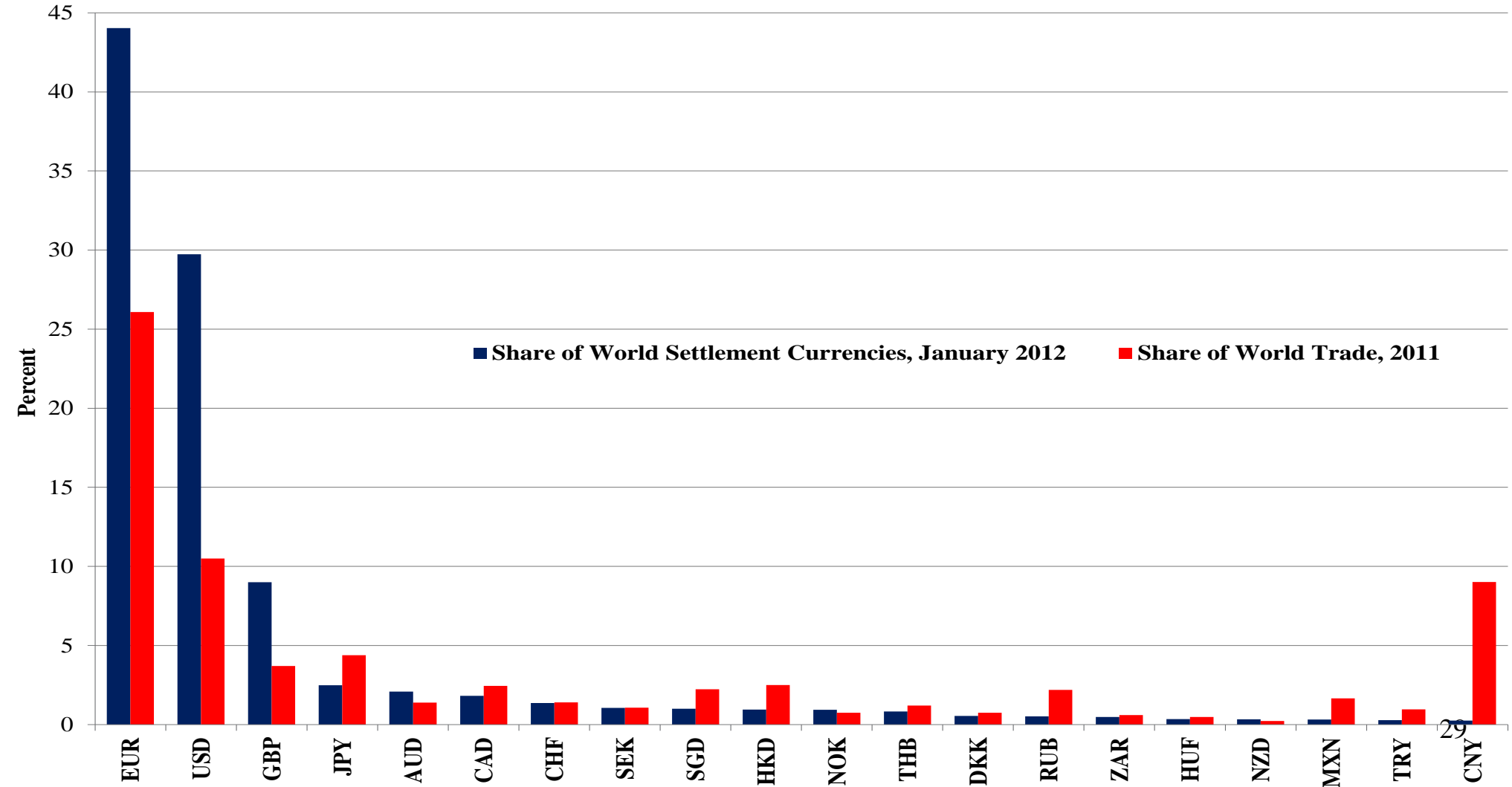
# The Renminbi as an International Medium of Exchange

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- ◆ In January 2012, the Renminbi became the 20<sup>th</sup> most used currency for world payments, with 0.3%, despite a world trade share of 9%. The Euro's share of world payments went up to 44%, followed by the U.S. Dollar with almost 30%. (This was a period during which the U.S. Dollar was devaluing with respect to almost all of the other currencies because of the “Quantitative Easing” in the U.S.)
- ◆ By December 2012, the Renminbi advanced to the 14<sup>th</sup> place. The share of the Euro fell to just below 40% and that of the U.S. Dollar rose to more than 33%.
- ◆ By December 2013, the Renminbi advanced to the 8<sup>th</sup> place, ahead of the Hong Kong Dollar. The share of the U.S. Dollar rose to almost 40% and the share of the Euro fell to 33.2% even though the shares of world trade of the United States and the Euro Area remained essentially unchanged.

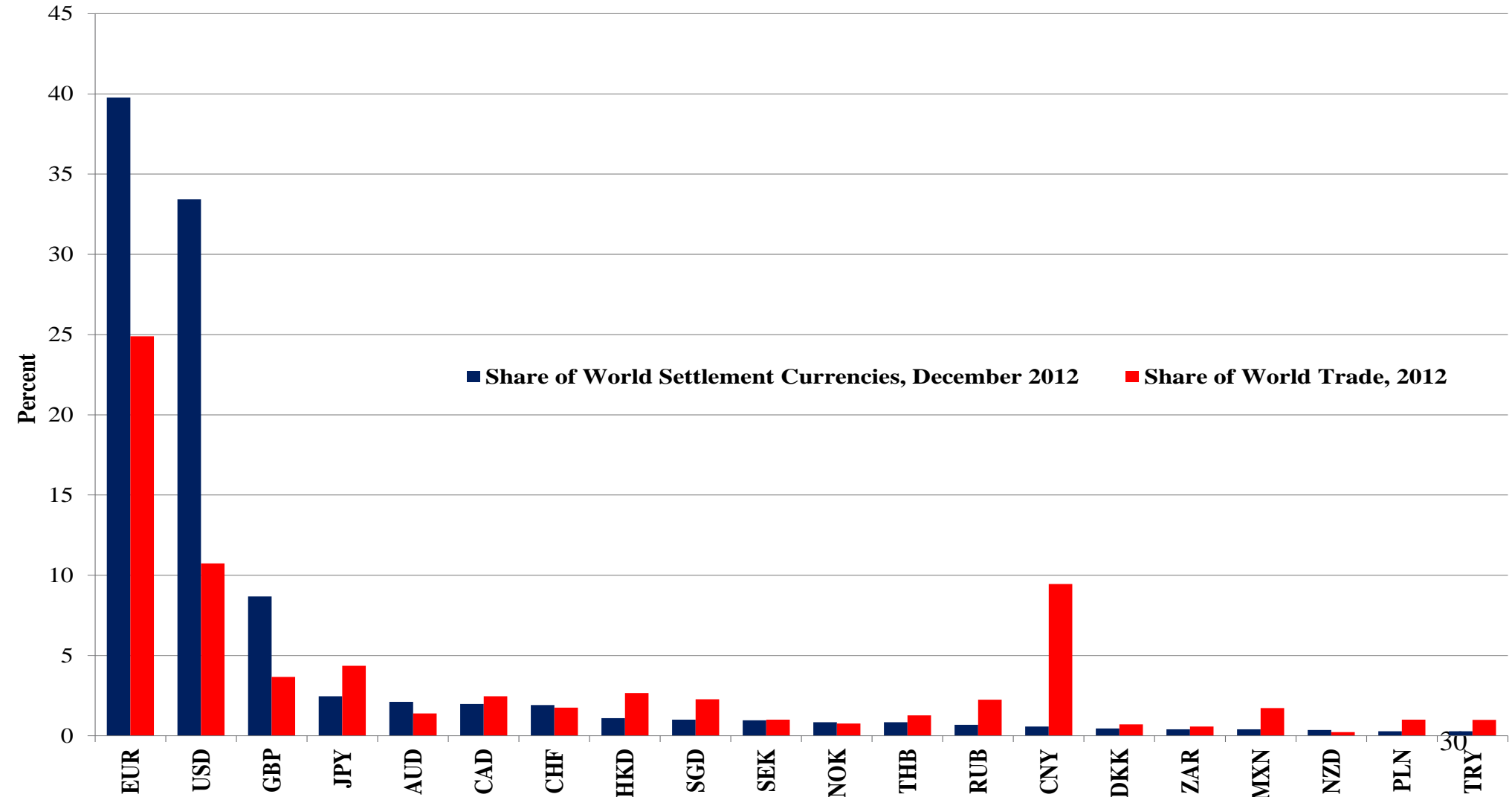
# Distribution of World Trade Settlement Currencies versus World Trade, Jan. 2012

Share of World Settlement Currencies, January 2012



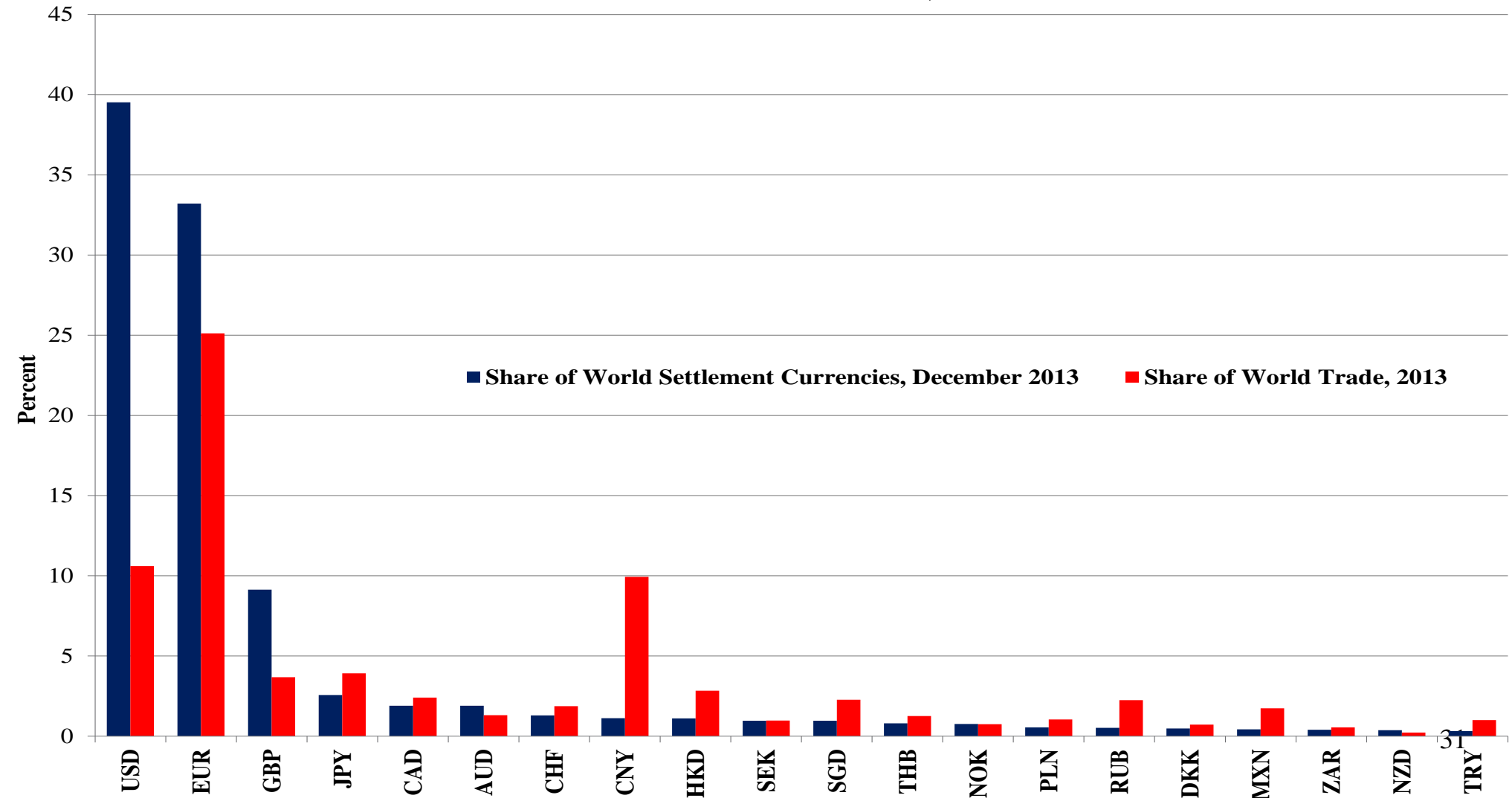
# Distribution of World Trade Settlement Currencies versus World Trade, Dec. 2012

Share of World Settlement Currencies, December 2012



# Distribution of World Trade Settlement Currencies versus World Trade, Dec. 2013

Share of World Settlement Currencies, December 2013



# The Renminbi as an International Medium of Exchange

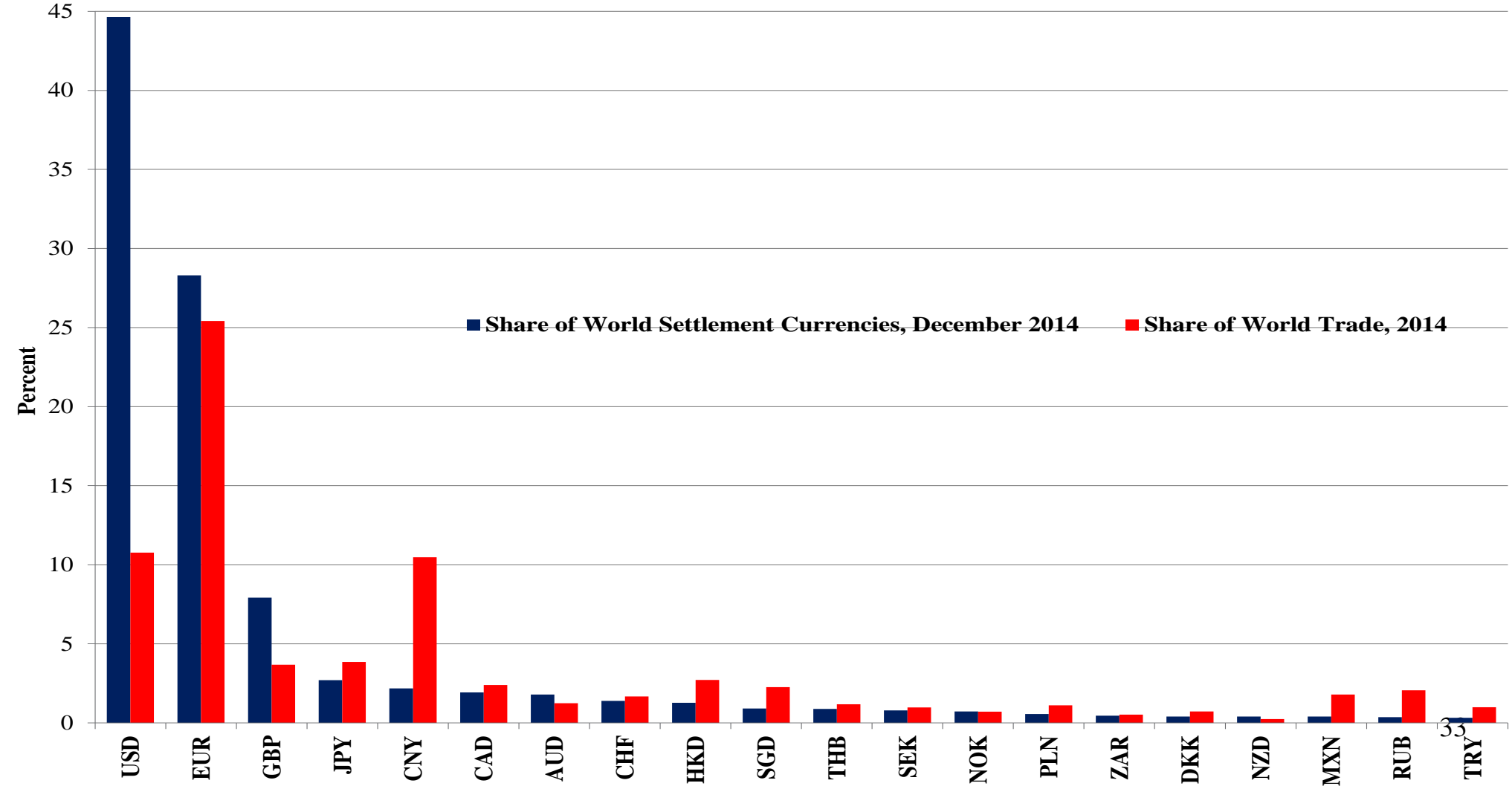
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- ◆ By December 2014, the Renminbi became the 5<sup>th</sup> most used currency for world payments, with 2.2%, despite a world trade share of 10.5%. The U.S. Dollar's share of world payments went up to almost 45%, followed by the Euro with a little more than 28%.
- ◆ By December 2015, the Renminbi remained in the 5<sup>th</sup> place for world payments, with 2.3%. The share of the U.S. Dollar was just below 44% and that of the Euro just above 29%.
- ◆ By July 2016, the Renminbi remained in the 5<sup>th</sup> place behind the British Pound and the Japanese Yen, with 1.9%. The share of the U.S. Dollar fell to 41% and the share of the Euro rose to 31% even though the shares of world trade of the United States and the Euro Area remained essentially unchanged.
- ◆ Throughout the period 2010-2016, the U.S. Dollar and the Euro combined accounted for more than 70% of world payments.



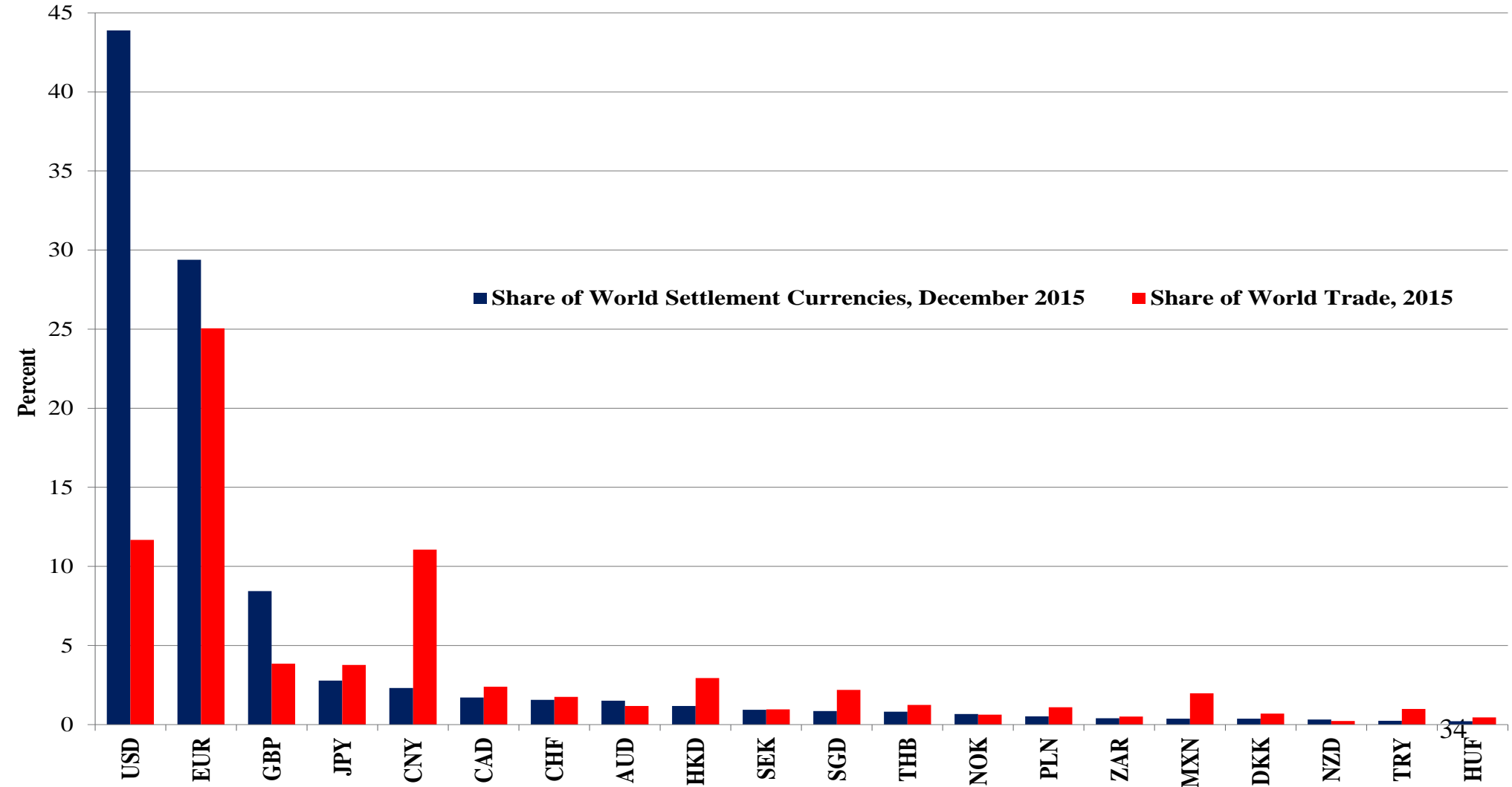
# Distribution of World Trade Settlement Currencies versus World Trade, Dec. 2014

Share of World Settlement Currencies, December 2014



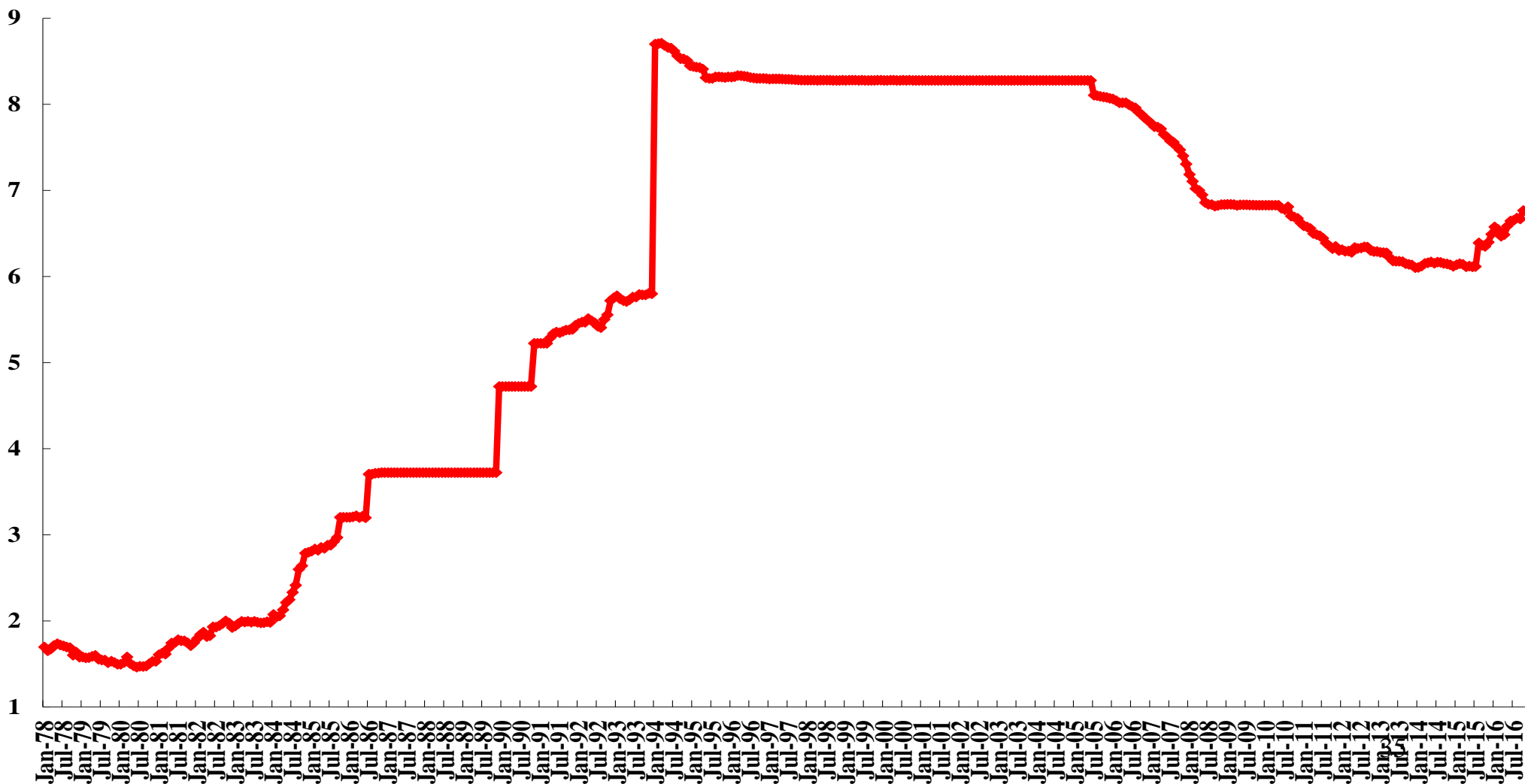
# Distribution of World Trade Settlement Currencies versus World Trade, Dec. 2015

Share of World Settlement Currencies, December 2015



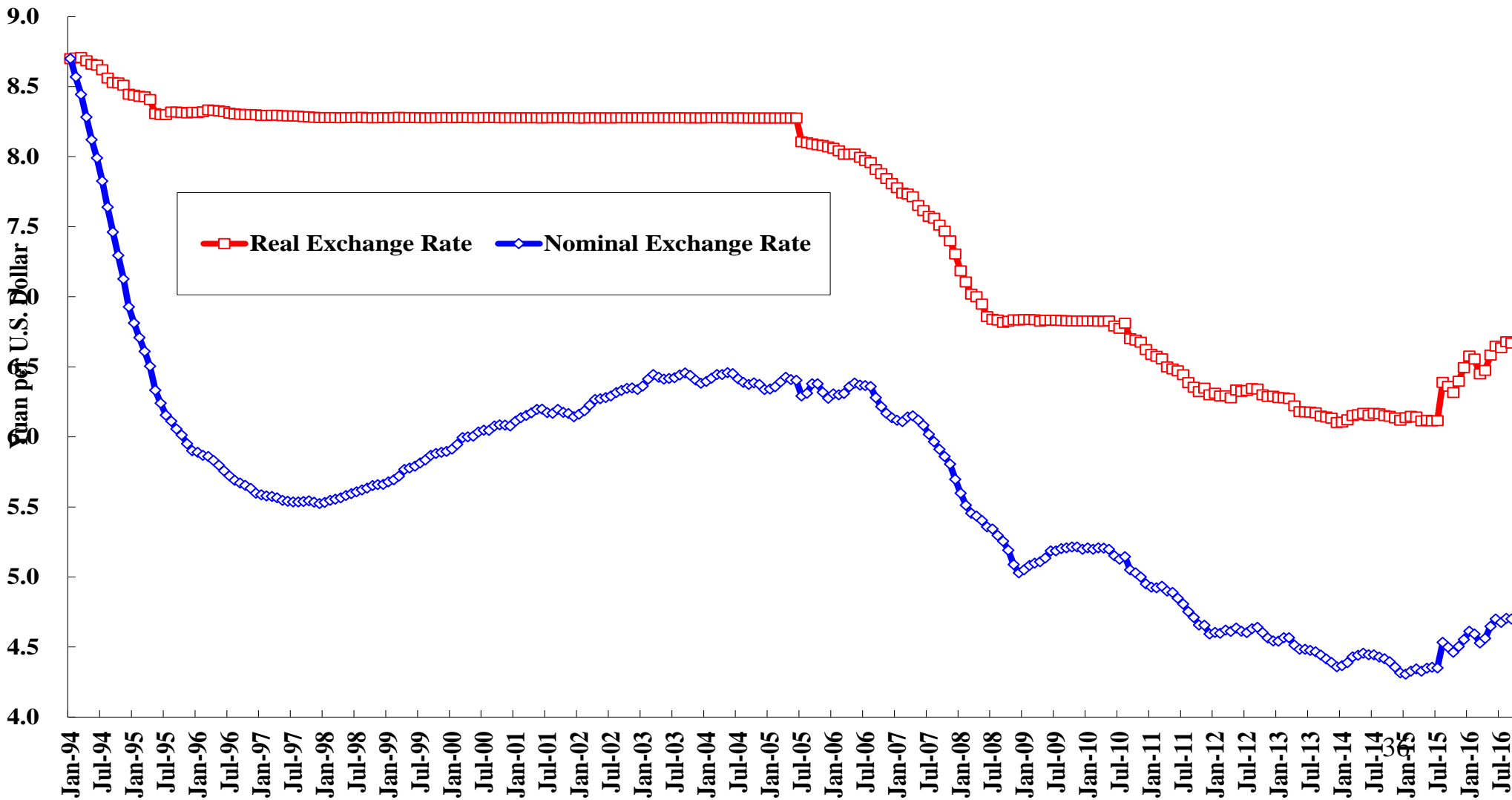
# The Yuan/US\$ Nominal Exchange Rate

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



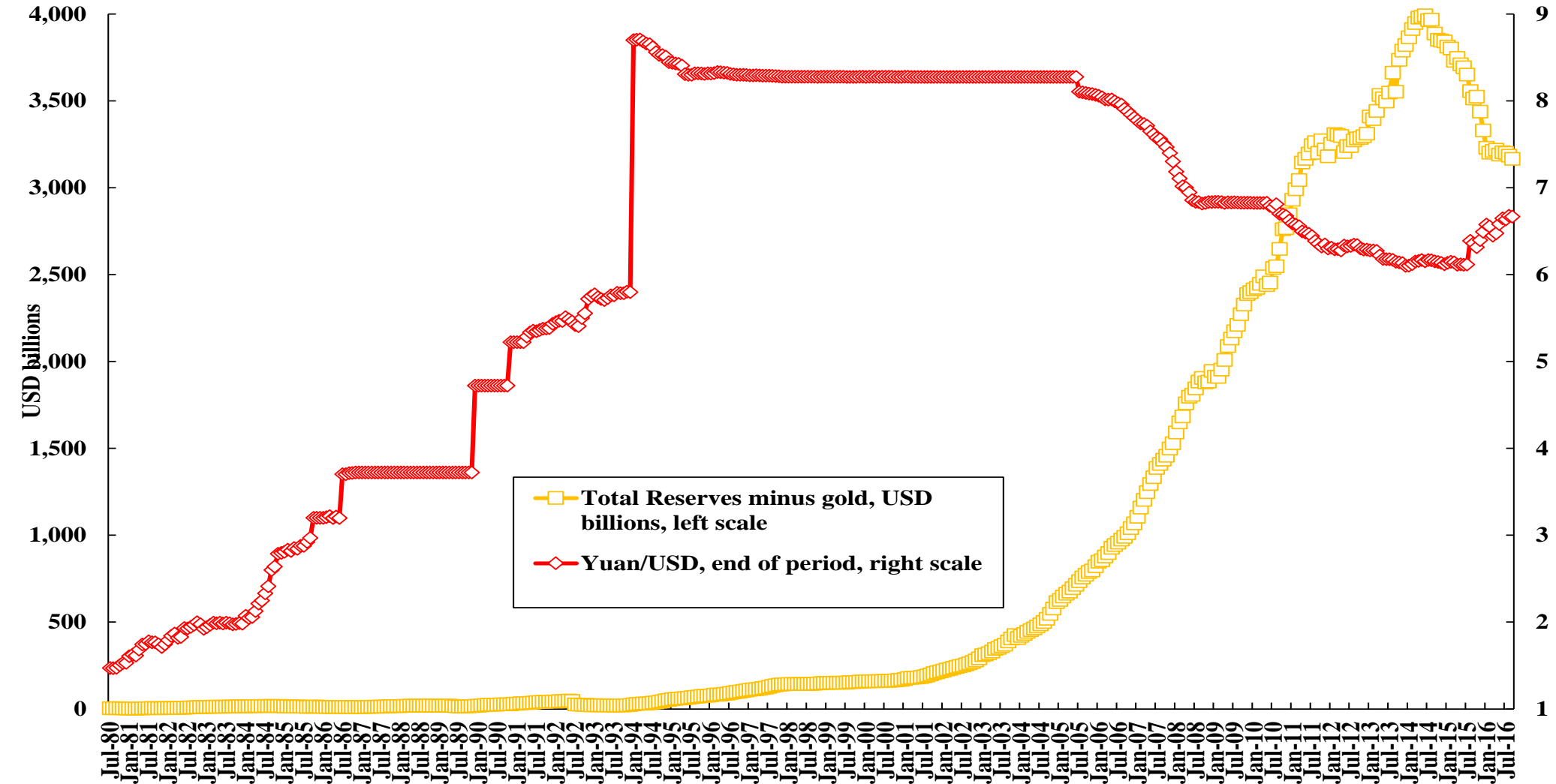
# The Nominal and Real Yuan/US\$ Exchange Rates (1994 prices)

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



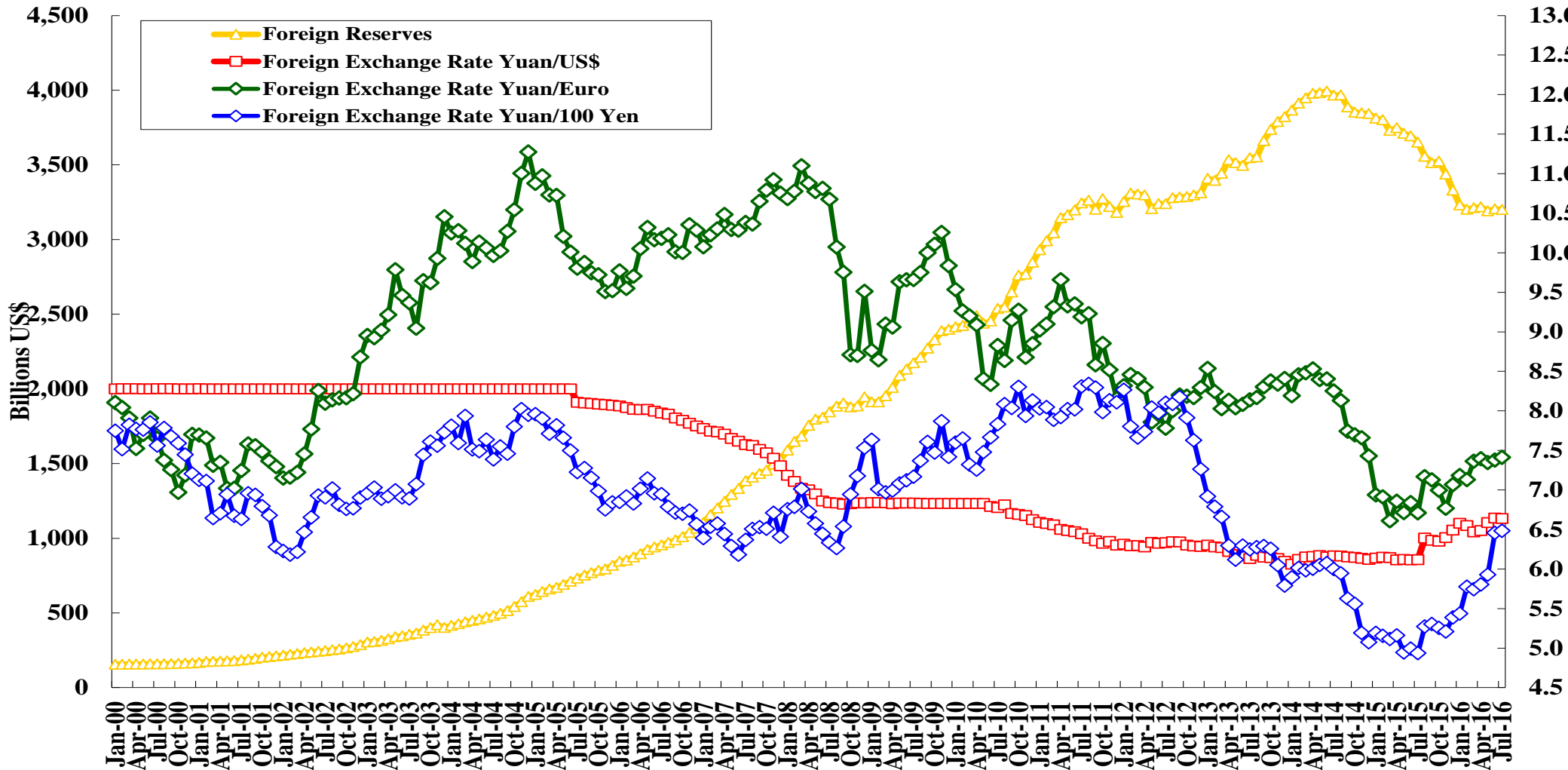
# Chinese Foreign Exchange Reserves and the Yuan/USD Exchange Rates

Chinese Foreign Exchange Reserves and the Yuan/USD Exchange Rates

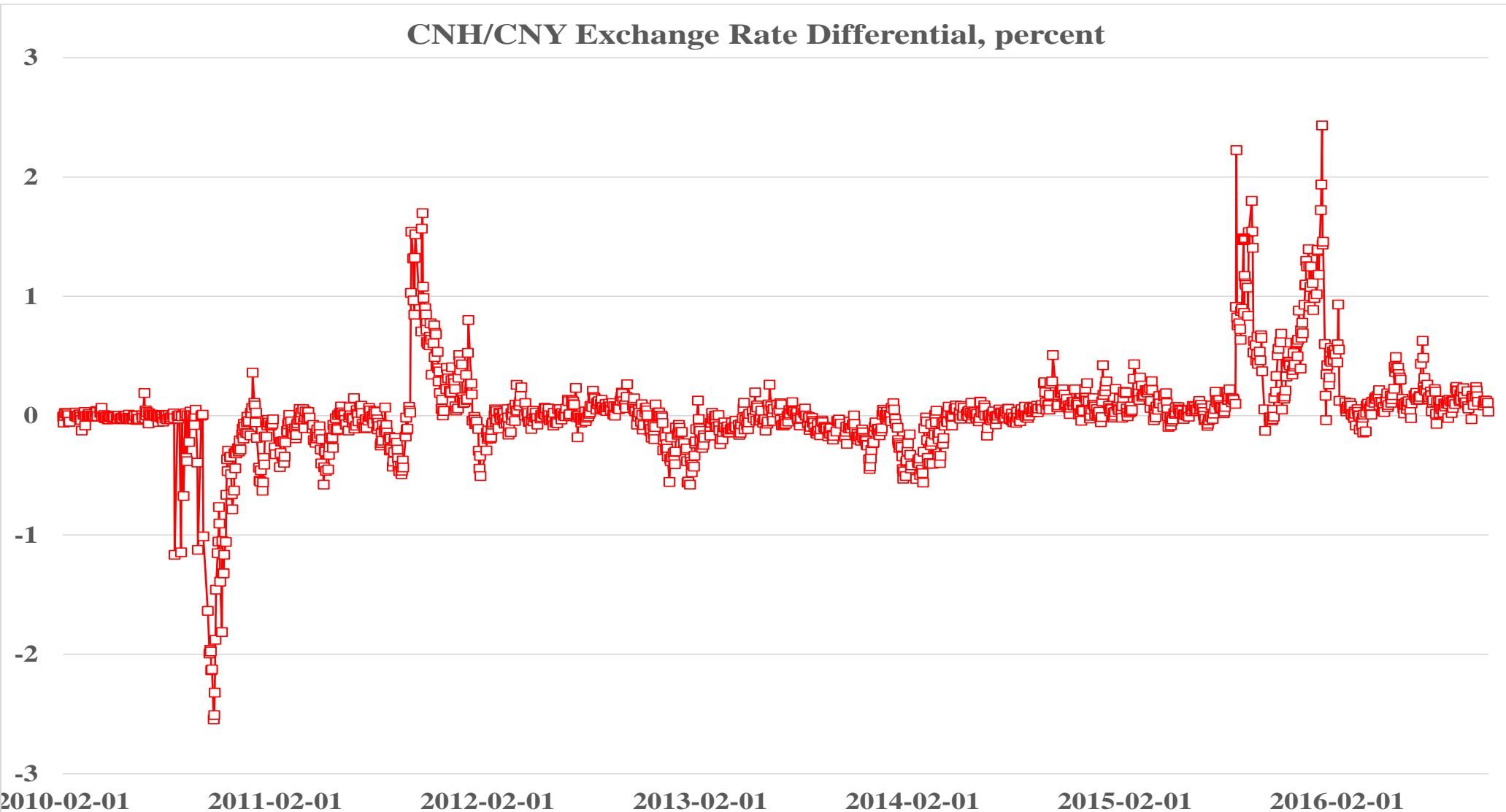


# Chinese FX Reserves and the Yuan/US\$, Yuan/Euro and Yuan/100 Yen Exchange Rates

Chinese Foreign Exchange Reserves and the Yuan/US\$, Yuan/Euro and Yuan/100 Yen Exchange Rate at the End of the Month

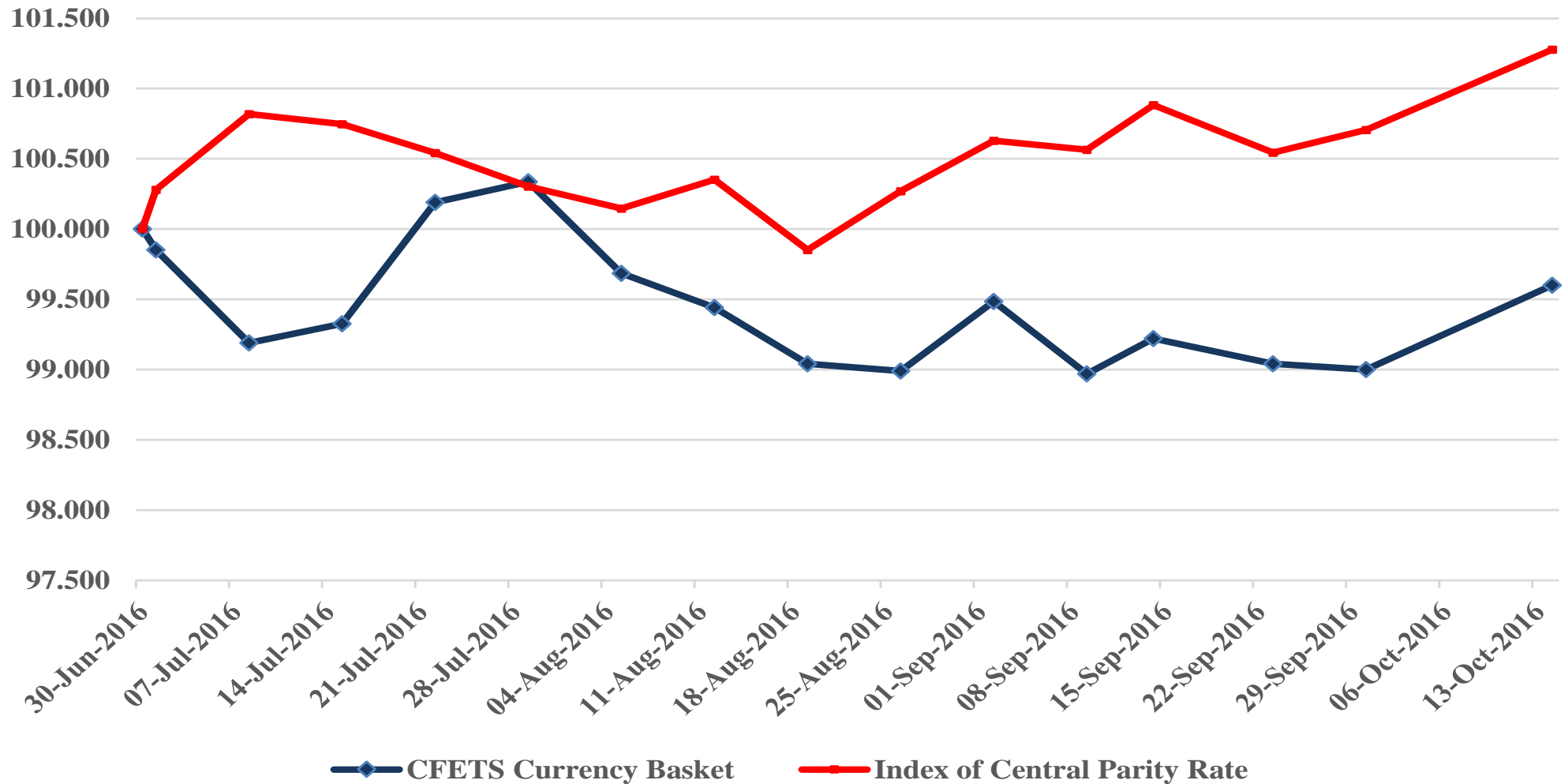


# CNH/CNY Exchange Rate Differential since 2010, percent



# Comparison of the Central Parity Rate and CFETS Indexes (30 June 2016 = 100)

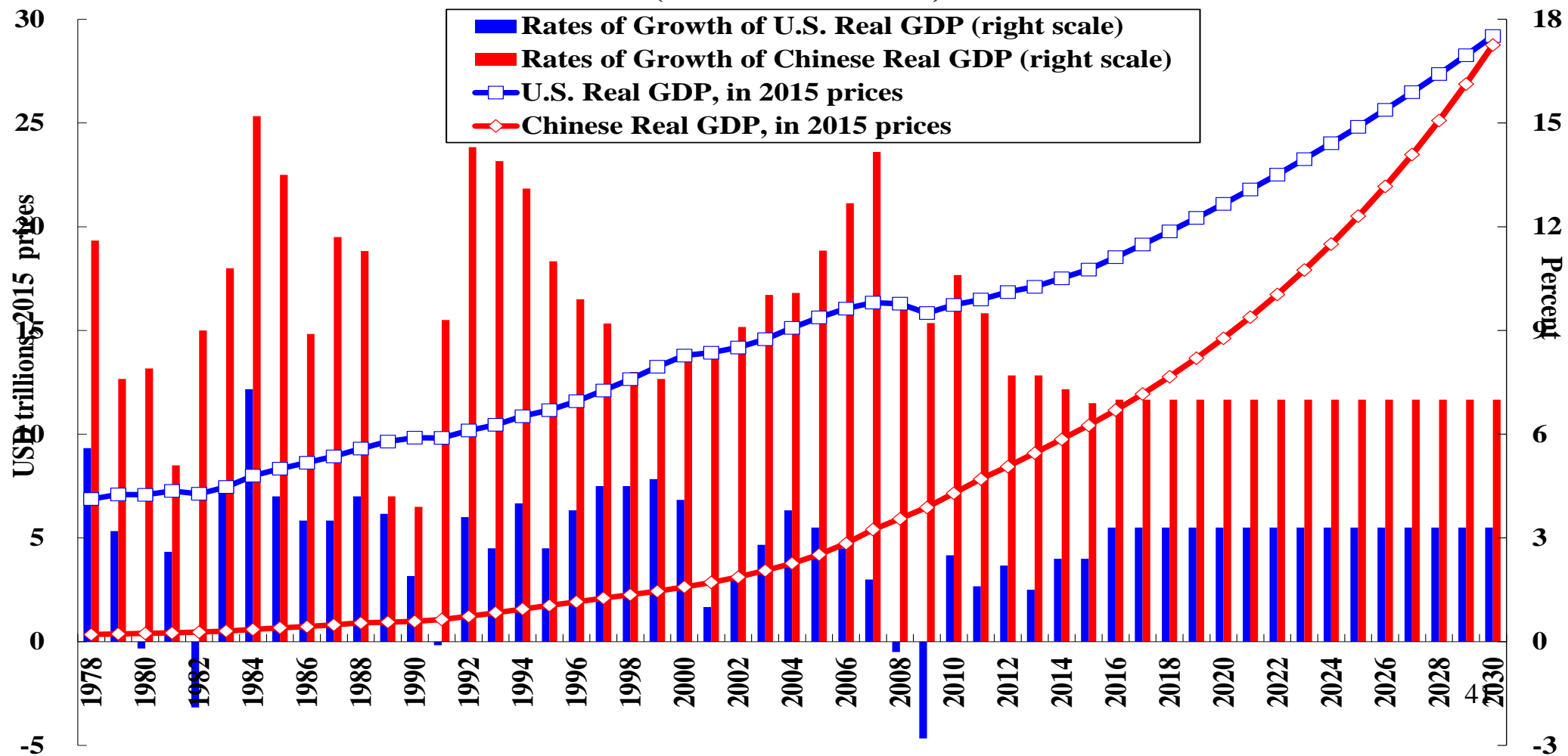
## Comparison of the Central Parity Rate and CFETS Indexes





# Actual and Projected Levels and Growth Rates of Chinese and U.S. Real GDP (2015 tril. US\$)

The Actual and Projected Level and Annual Rate of Growth of Chinese and U.S. Real GDP (trillion 2015 US\$)



# Concluding Remarks

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- ◆ The Chinese economy should be able to grow at an average annual rate of between 6 and 7 percent for the next decade or even longer.
- ◆ There is excess productive capacity and as long as there is demand, there will be supply.
- ◆ The Chinese government has many instruments at its disposal and is pragmatic enough to use any or all of them if necessary.
- ◆ The Renminbi will not follow the U.S. Dollar but will move with reference to a basket of currencies. It is likely to devalue with respect to the U.S. Dollar when the U.S. Dollar strengthens relative to the other currencies, but appreciate with respect to the U.S. Dollar when the U.S. Dollar weakens relative to the other currencies. The net effect is a more stable and less volatile Renminbi exchange rate compared to the U.S. Dollar exchange rate.