

What Makes China Grow?

中國成長的動力

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*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

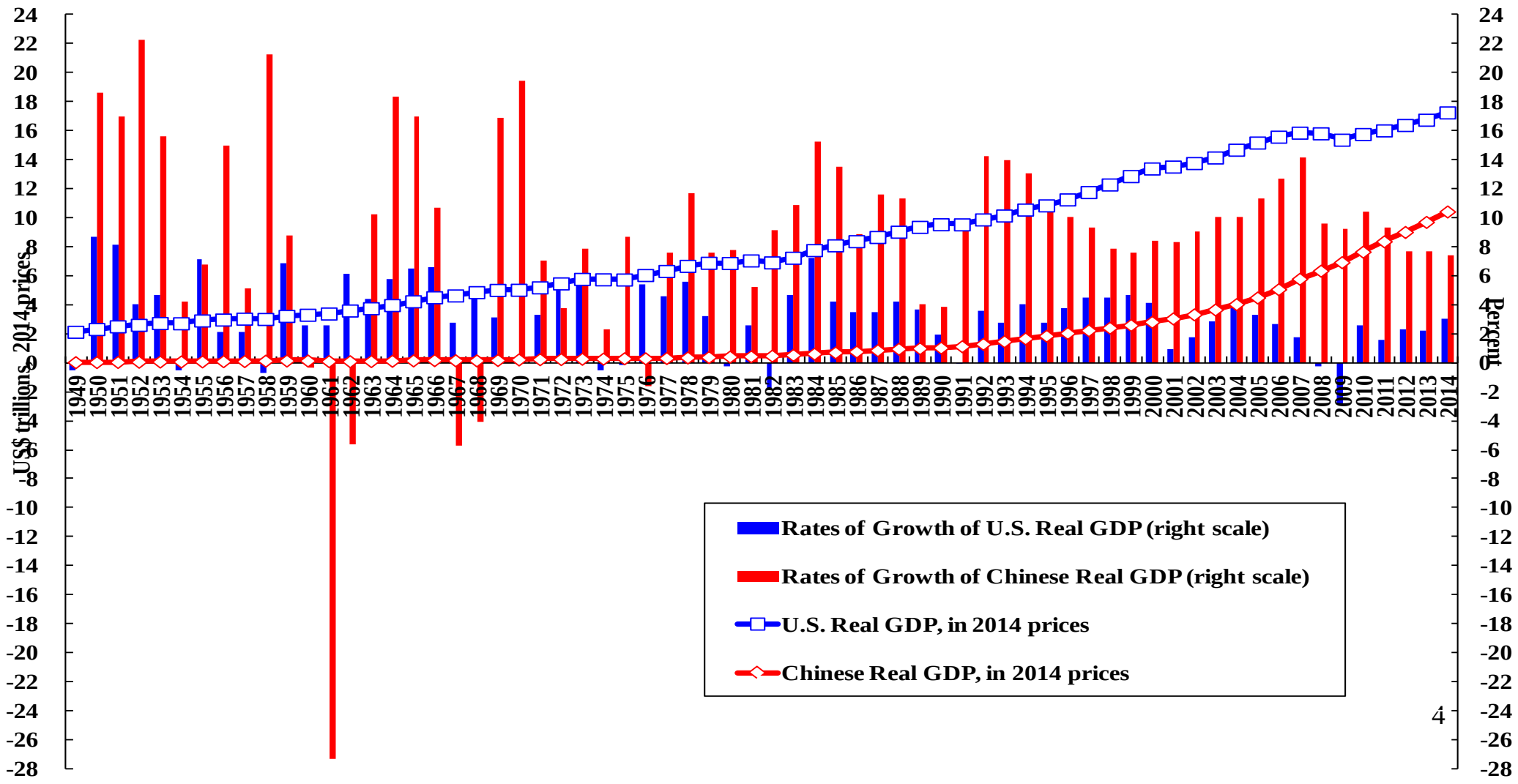
- ◆ Introduction
- ◆ The Chinese Economic Fundamentals
- ◆ The Inherent Economic Inefficiency of Central Planning
- ◆ The Benefits of an Open Economy
- ◆ The Transition from a Closed Centrally Planned to an Open Market Economy
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- ◆ The Short- and Medium-Term Economic Outlook
- ◆ The Long-Term Economic Outlook
- ◆ Concluding Remarks

Introduction

- ◆ 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 9.7% per annum over the past 37 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 2014, Chinese real GDP grew more than 28 times, from US\$372.1 billion to US\$10.4 trillion (in 2014 prices), to become the second largest economy in the World, after the U.S. By comparison, the U.S. GDP of approximately US\$17.3 trillion was 1.7 times Chinese GDP in 2014.
- ◆ Some researchers have suggested, on the basis of “purchasing-power-parity (PPP)” calculations, that the Chinese economy is now larger than the U.S. economy. However, PPP comparisons between economies are not reliable because they are highly sensitive to the set of prices chosen to evaluate the goods and services produced in the different economies.

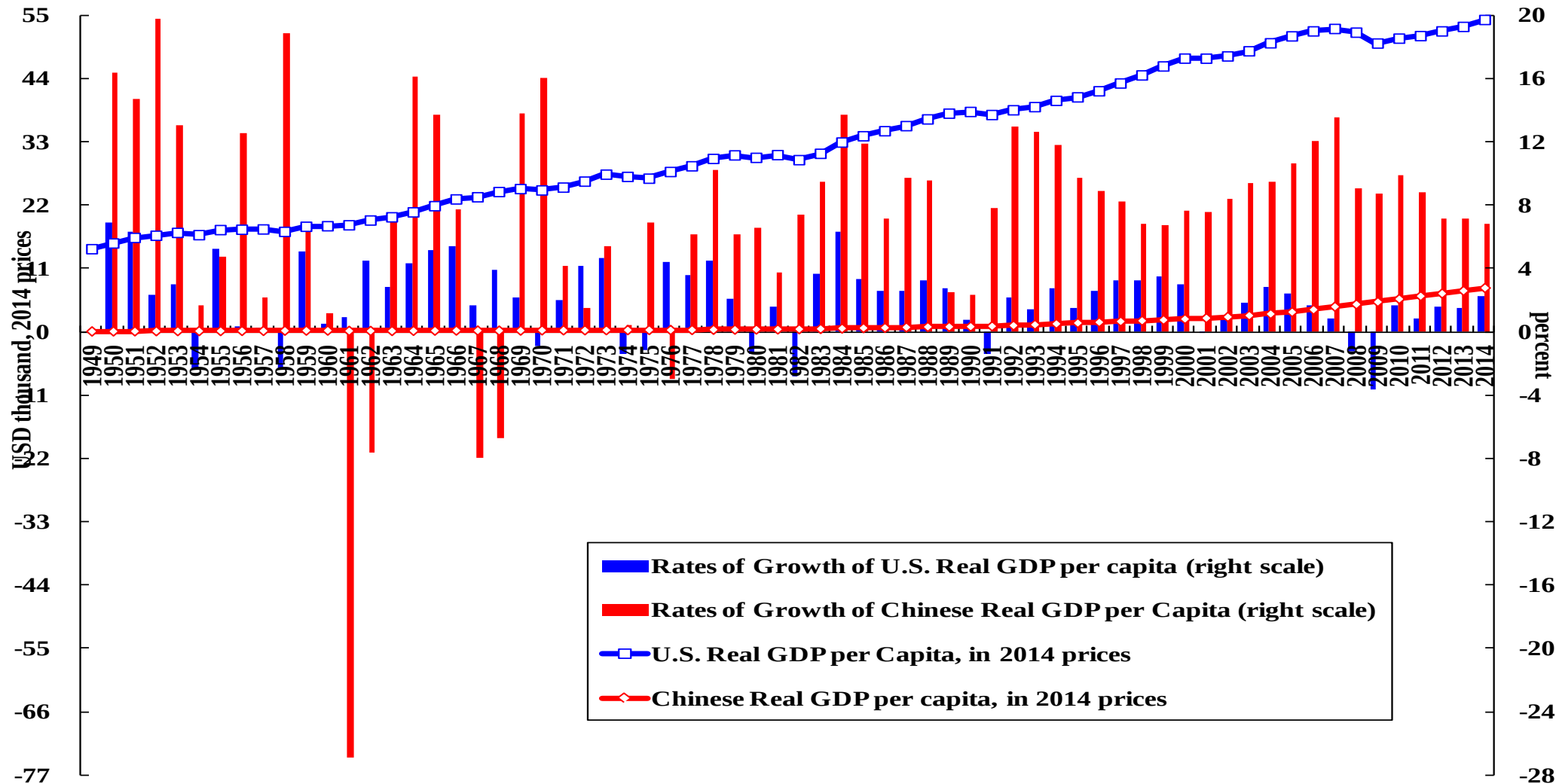
Chinese and U.S. Real GDPs and Their Rates of Growth (2014 US\$) since 1949

Chinese and U.S. Real GDPs and Their Rates of Growth since 1949 (trillion 2014 US\$)



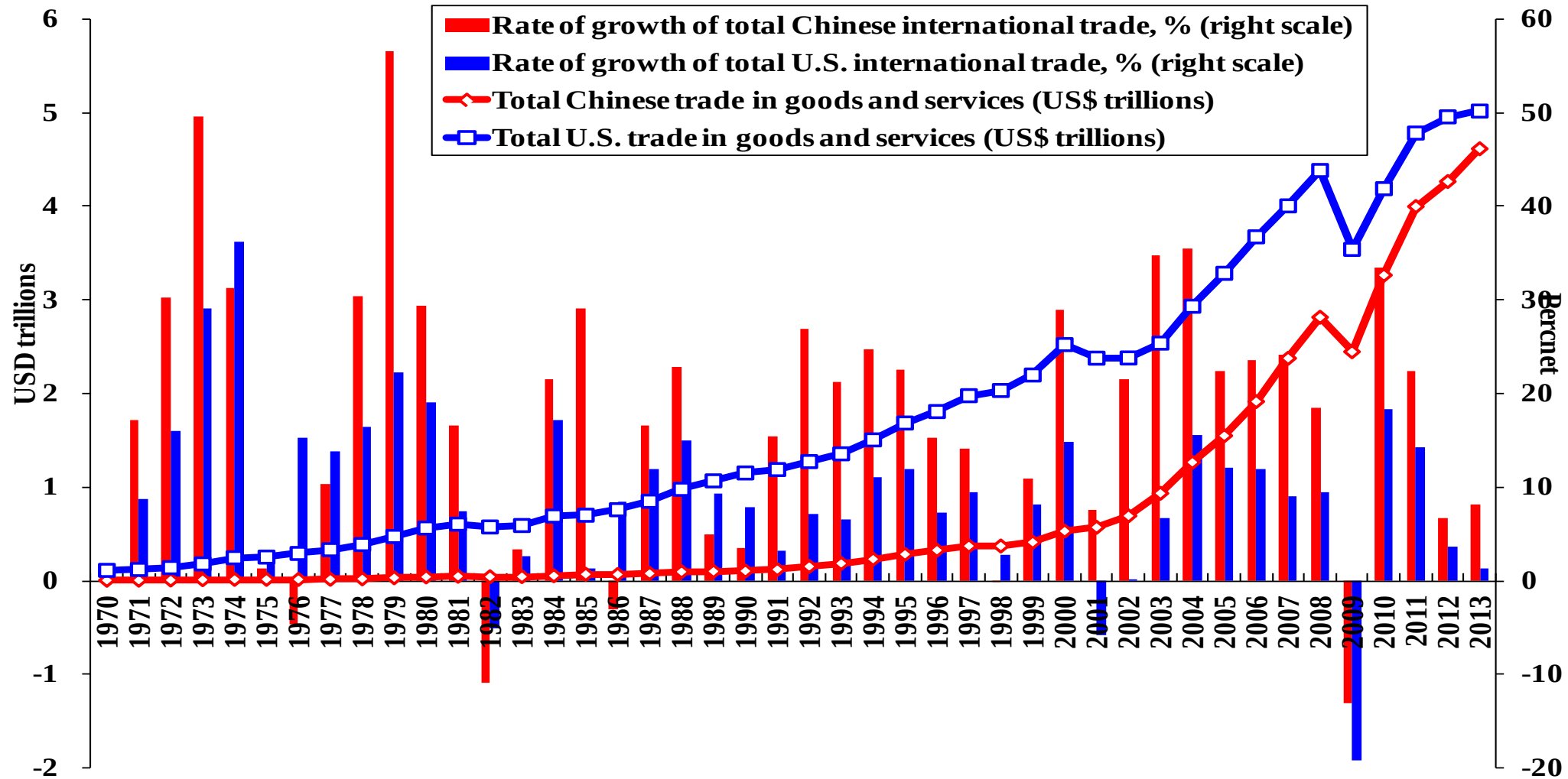
Chinese and U.S. Real GDP per Capita and Their Rates of Growth (2014 US\$) since 49

Chinese and U.S. Real GDP per Capita and Their Rates of Growth since 1949
(thousand, 2014 US\$)



Chinese and U.S. International Trade and Their Rates of Growth (US\$) since 1970

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



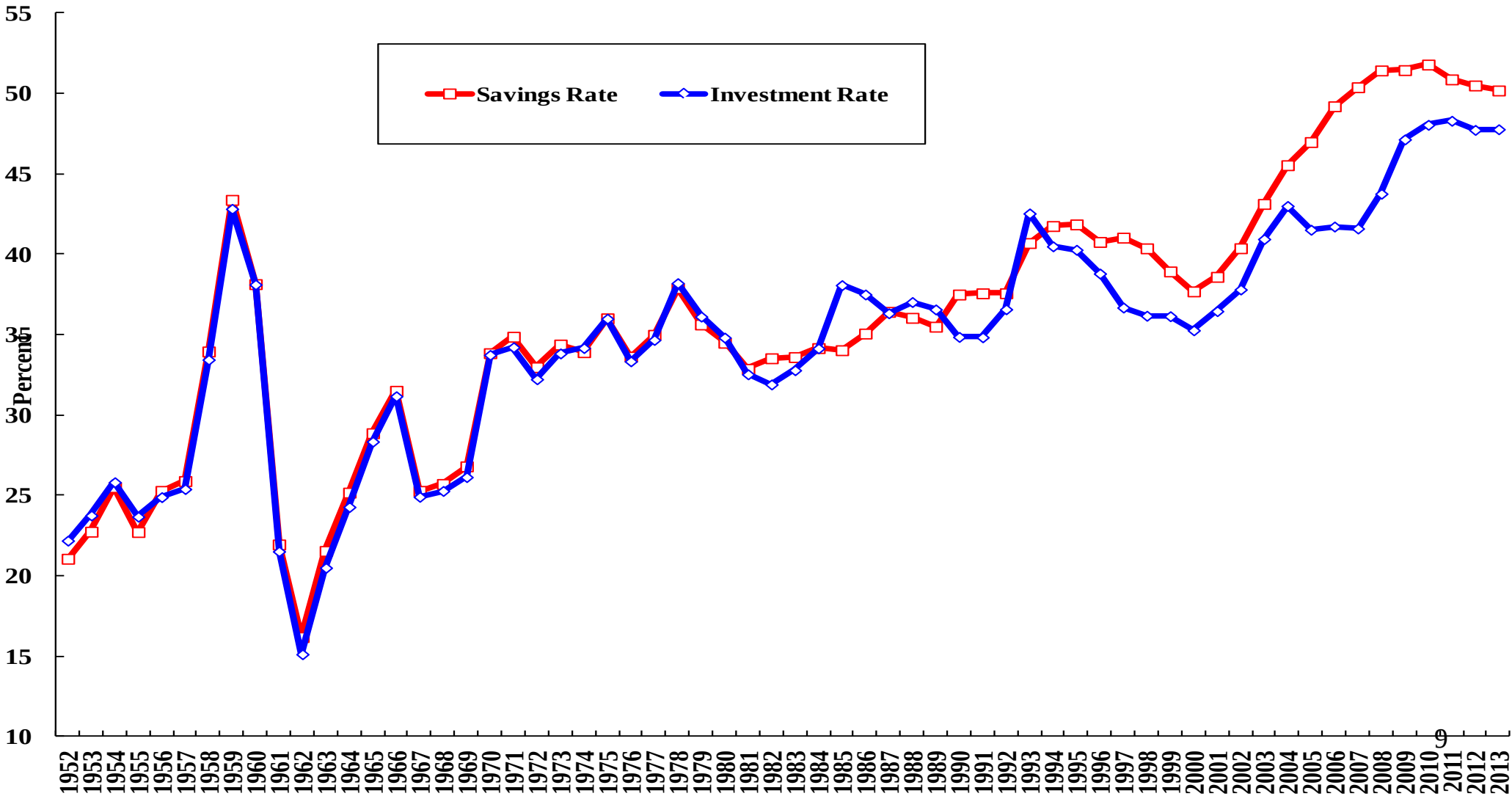
The Ranks of China as Trading Partner of Asia-Pacific Countries/Regions and Vice Versa, 2013

Country/Region	Chinese Rank as Trading Partner of Country/Region	Rank of Country/Region as Trading Partner of China
Australia	1	7
Brunei	3	104
Cambodia	1	78
Hong Kong	1	2
Indonesia	1	16
Japan	1	3
Korea	1	4
Laos	2	90
Macau	1	85
Malaysia	1	8
Myanmar	1	51
New Zealand	1	43
Philippines	2	27
Singapore	1	11
Taiwan	1	5
Thailand	1	13
United States	2	1
Vietnam	1	18

The Chinese Economic Fundamentals

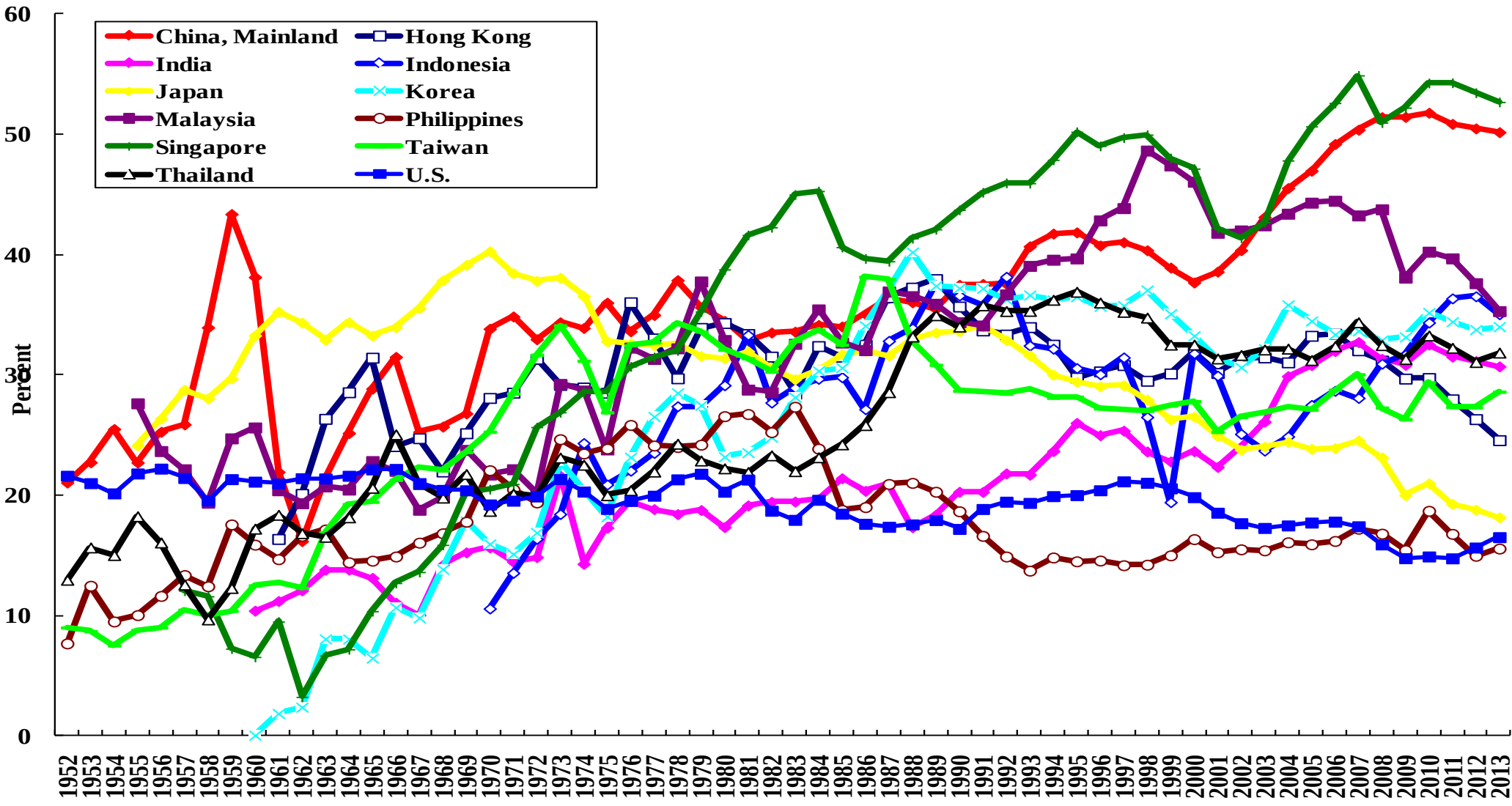
Chinese National Saving and Gross Domestic Investment as Percents of GDP

Chinese National Savings and Gross Domestic Investment as a Percent of GDP since 1952



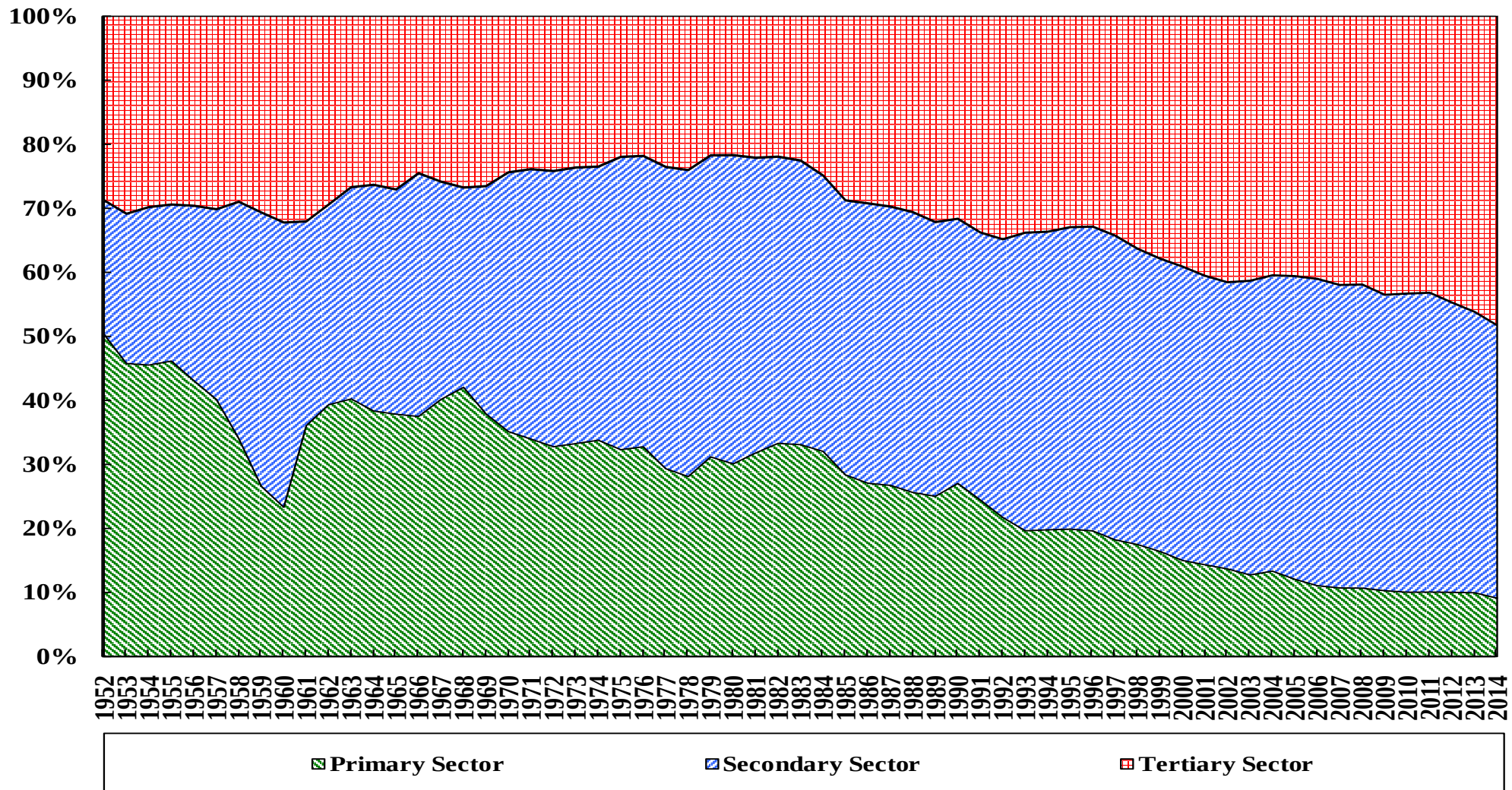
Saving Rates of Selected Economies, 1952-present

Savings Rates of Selected East Asian Economies



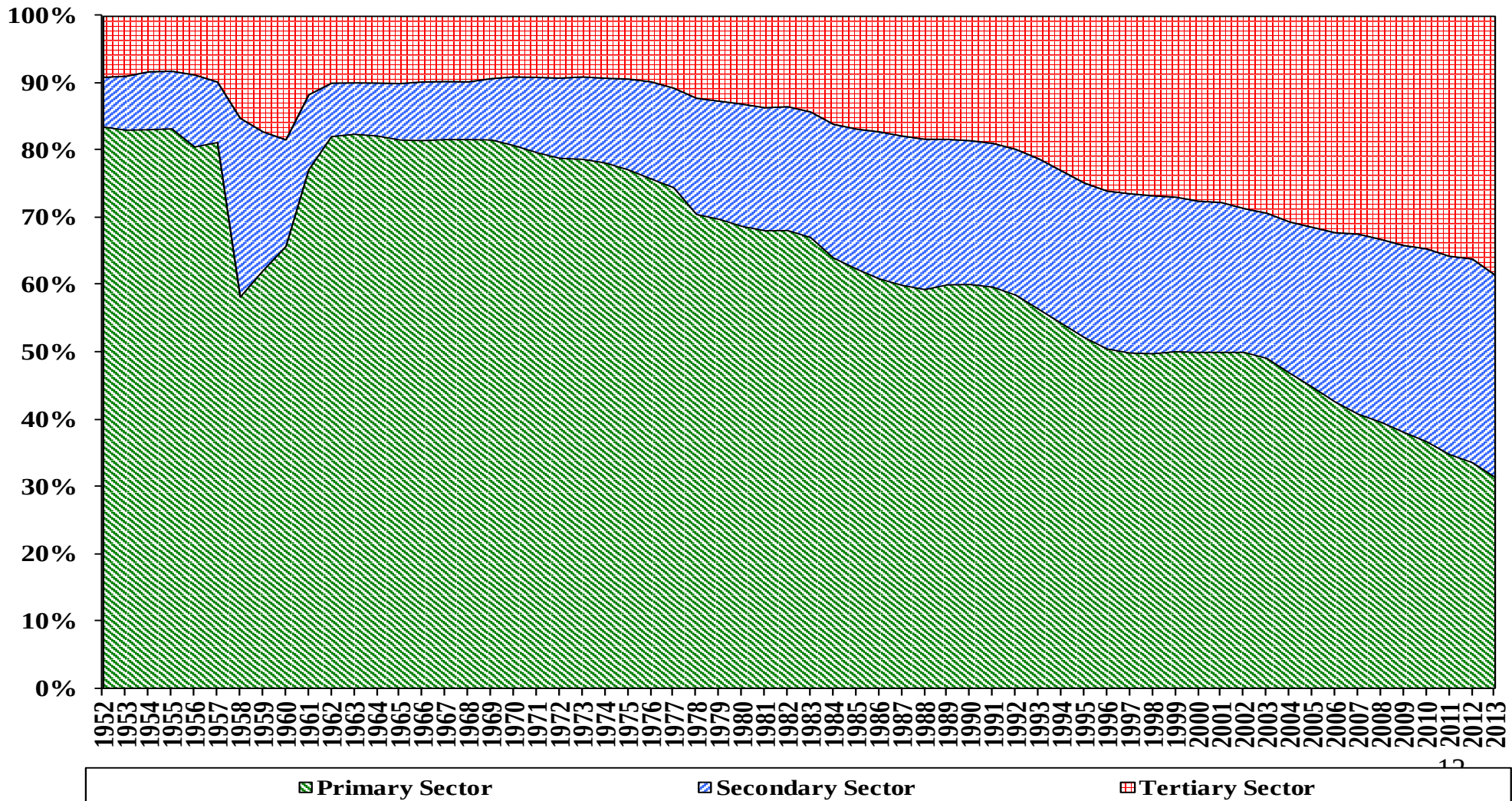
The Distribution of Chinese GDP by Originating Sector since 1952

The Distribution of GDP by Sector



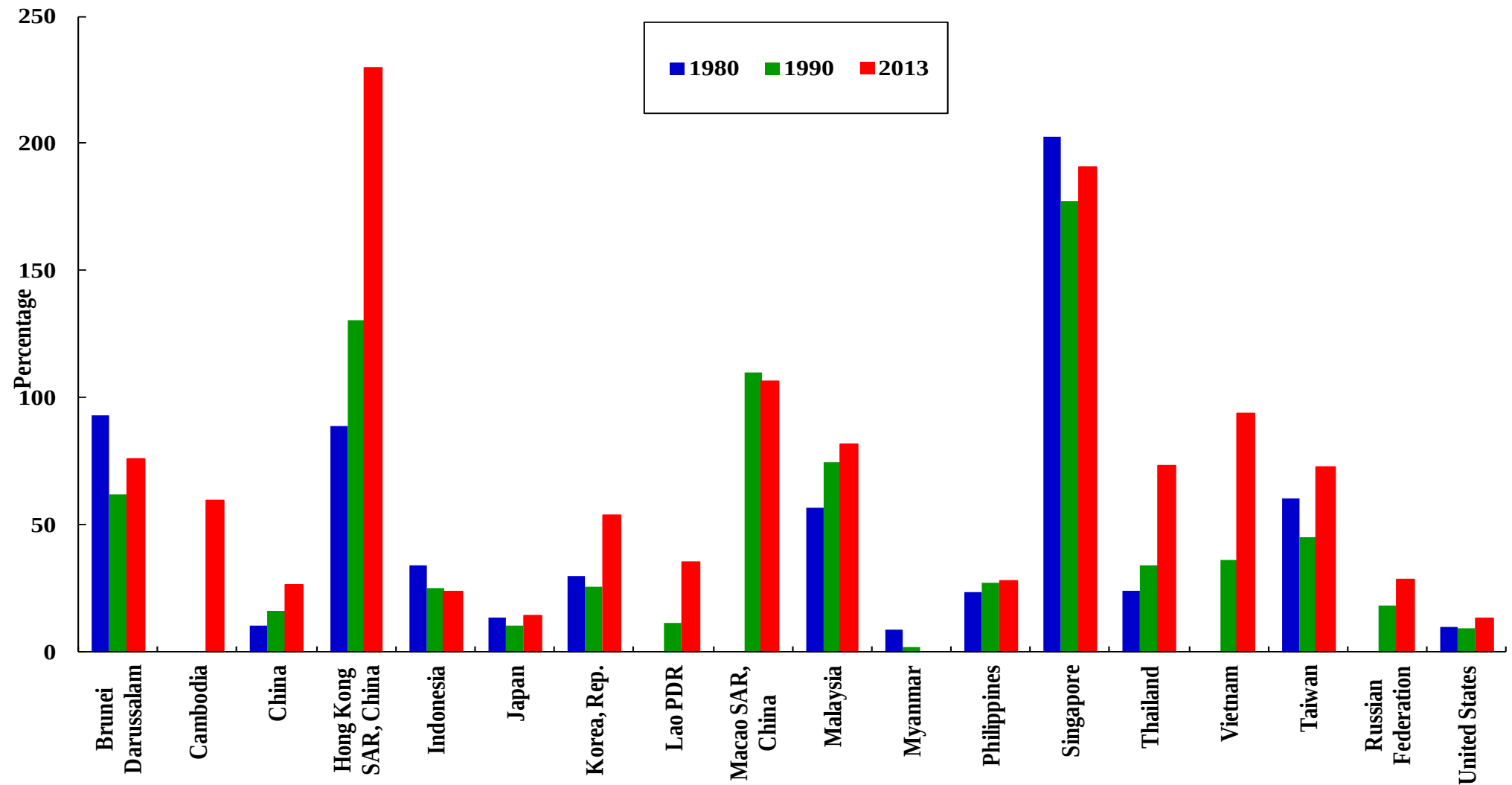
The Distribution of Chinese Employment by Sector since 1952

The Distribution of Employment by Sector since 1952



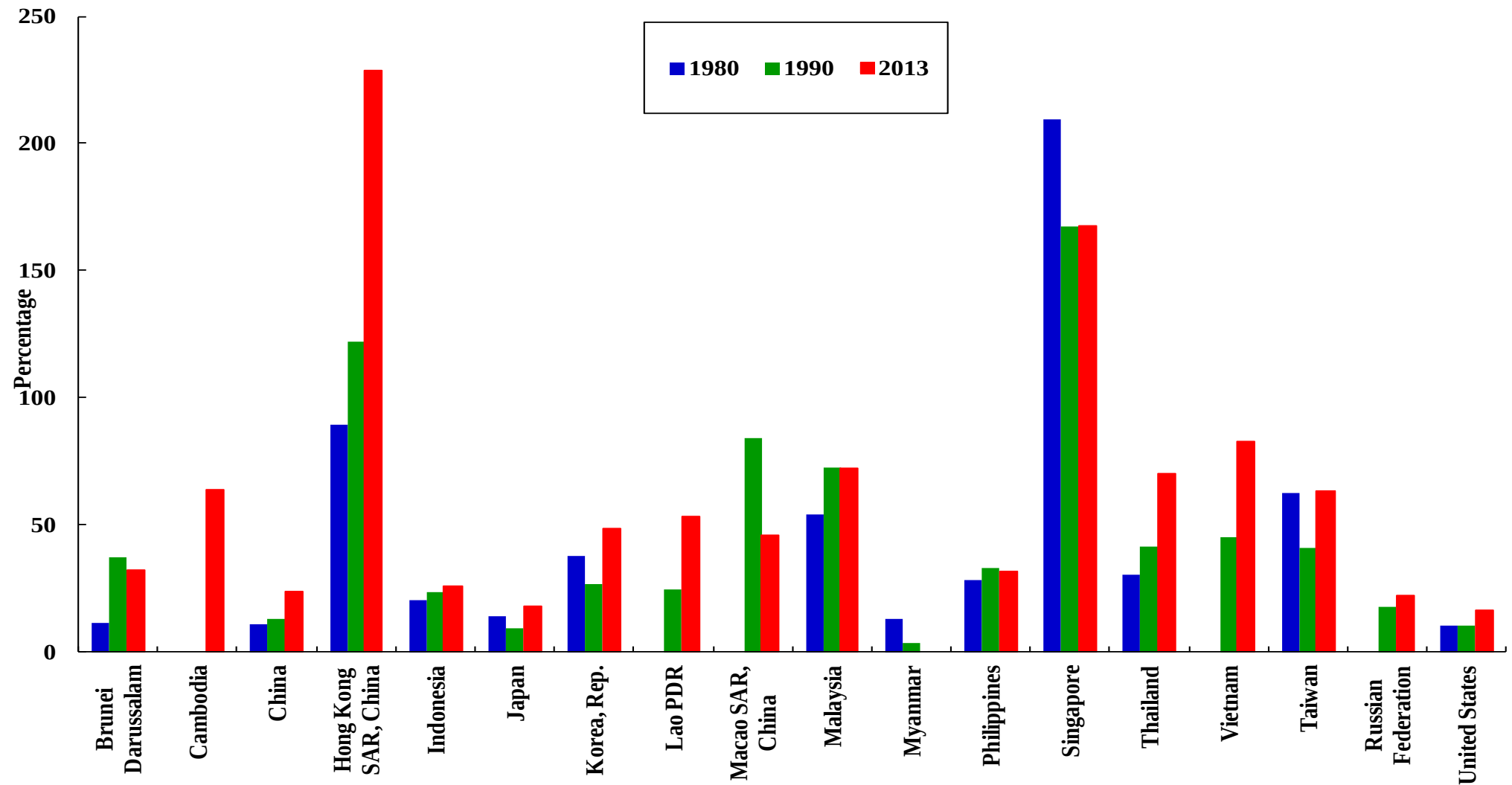
Exports of Goods and Services as a Percent of GDP: Selected Economies

Exports as a share of GDP of East Asian Economies



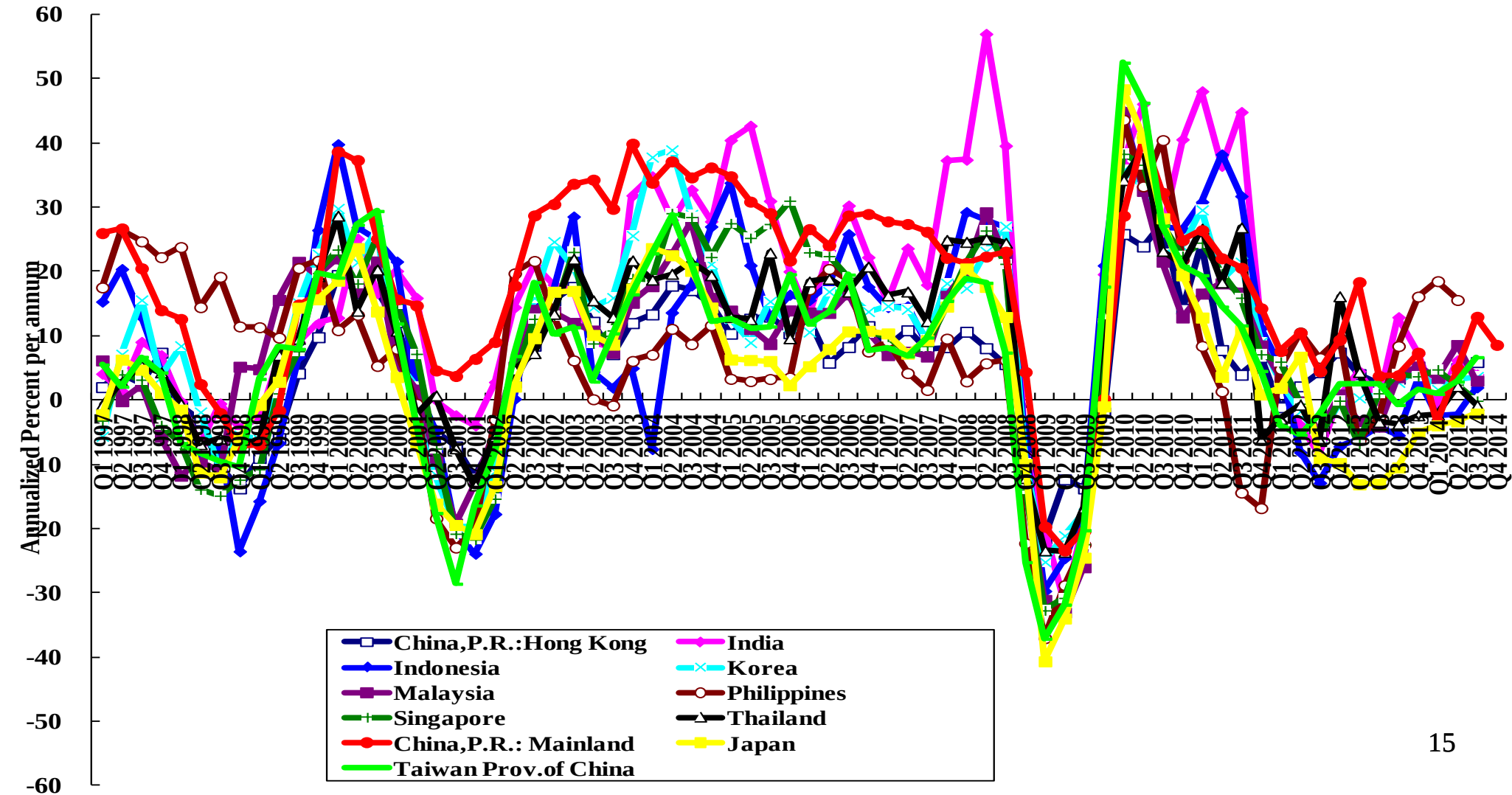
Imports of Goods and Services as a Percent of GDP: Selected Economies

Imports as a share of GDP of East Asian Economies



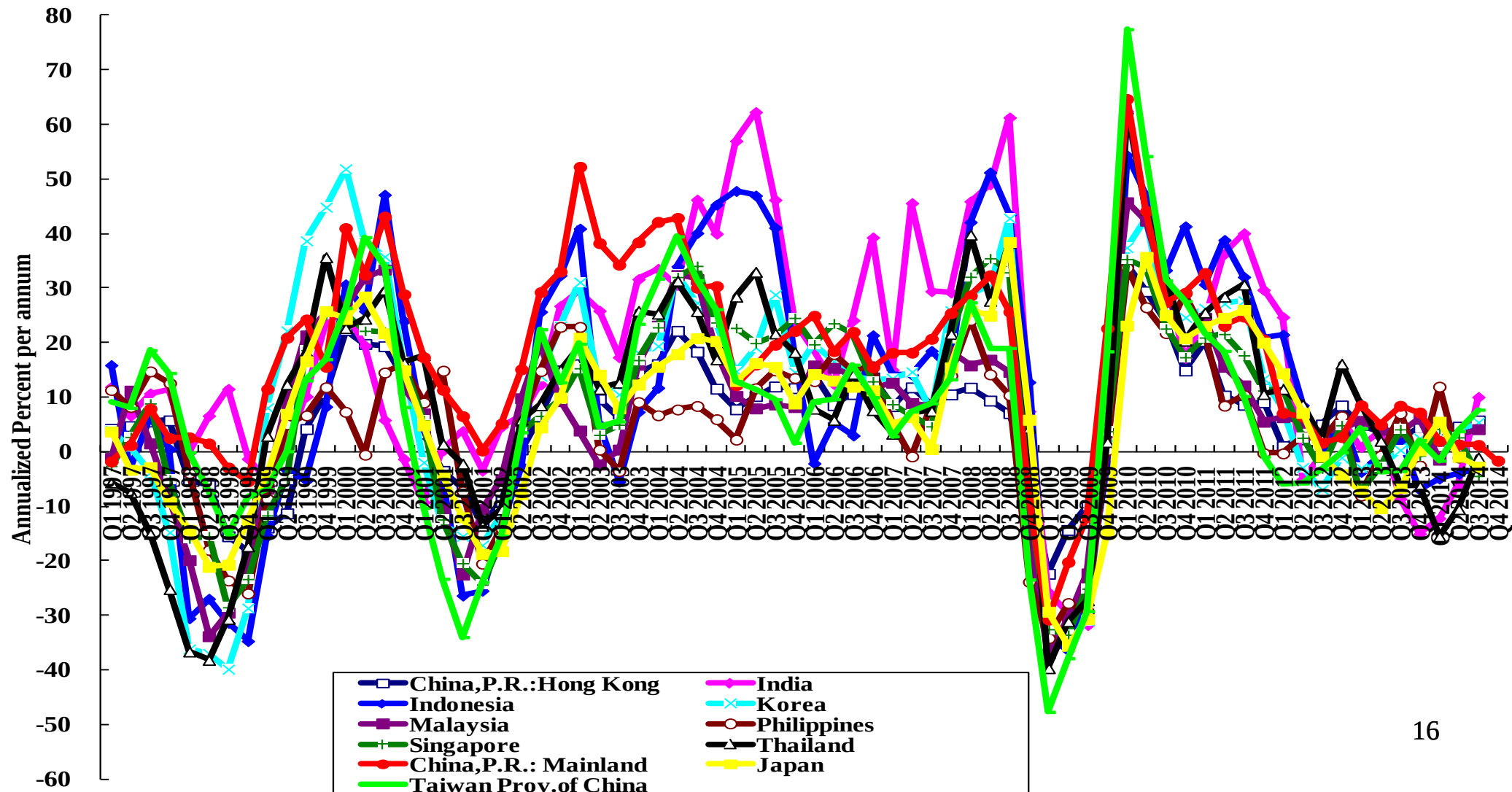
Quarterly Rates of Growth of Exports of Goods: Selected Asian Economies

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



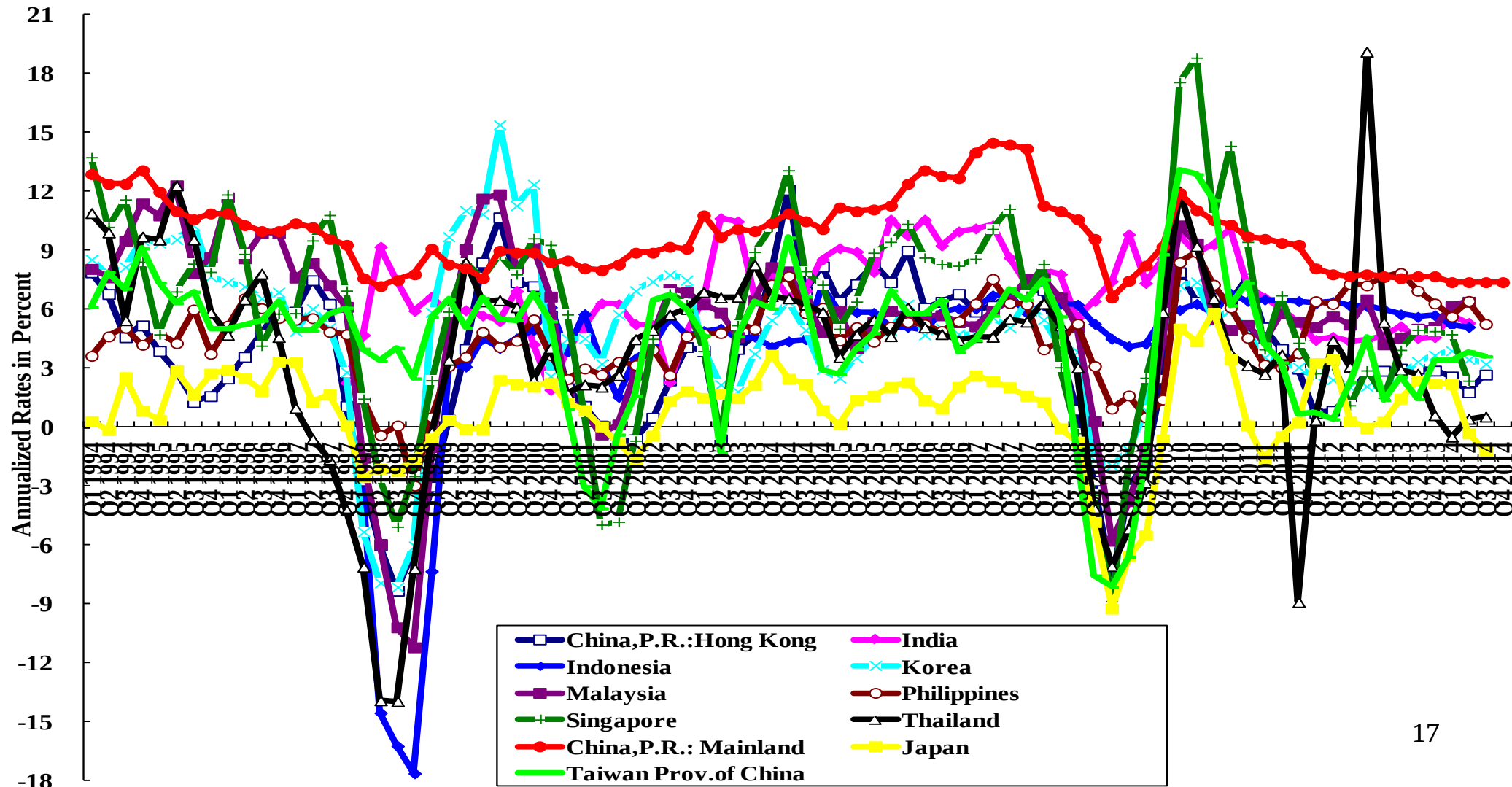
Quarterly Rates of Growth of Imports of Goods: Selected Asian Economies

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



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

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

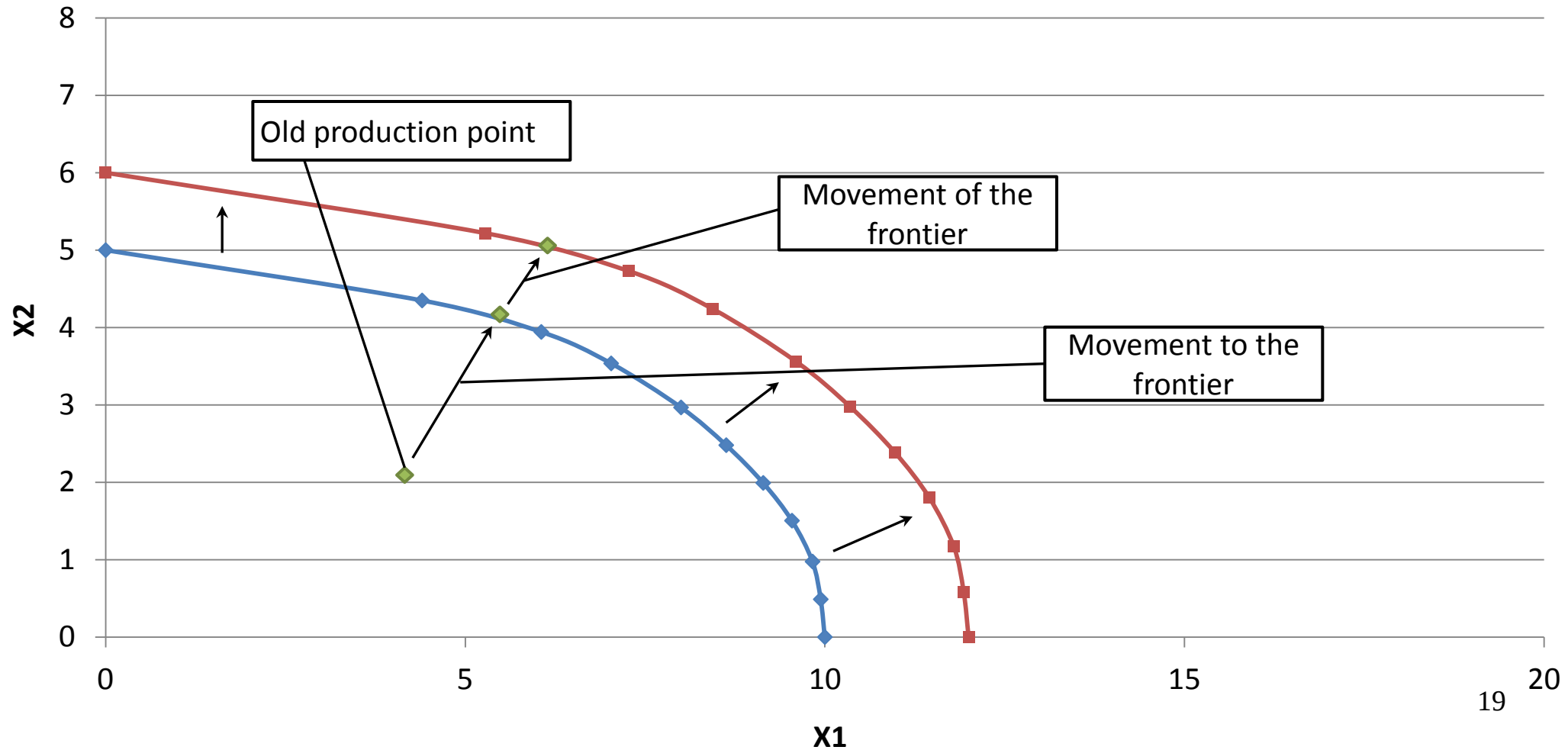


The Inherent Economic Inefficiency of Central Planning

- ◆ Incomplete information
- ◆ Failure to optimise
- ◆ Lack of incentives (the ratchet effect)

Movement of the Production Possibilities Frontier versus Movement to the Frontier

Production Possibility Frontier

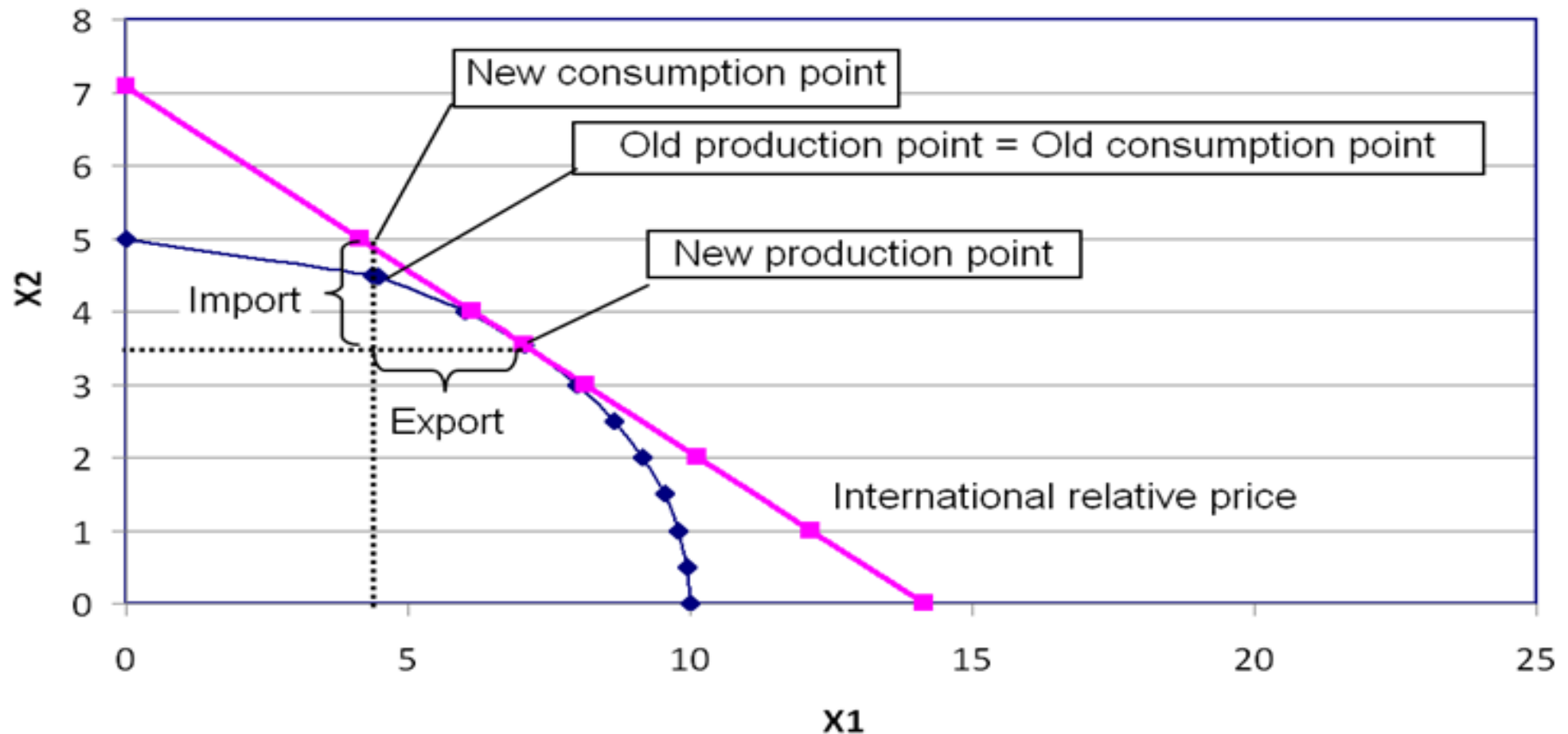


The Benefits of an Open Economy

- ◆ Comparative Advantage
- ◆ Imported Resources Augment Domestic Resources (Foreign Direct Investment, Foreign Portfolio Investment, Foreign Loans and Foreign Aid)
- ◆ Technology Transfer

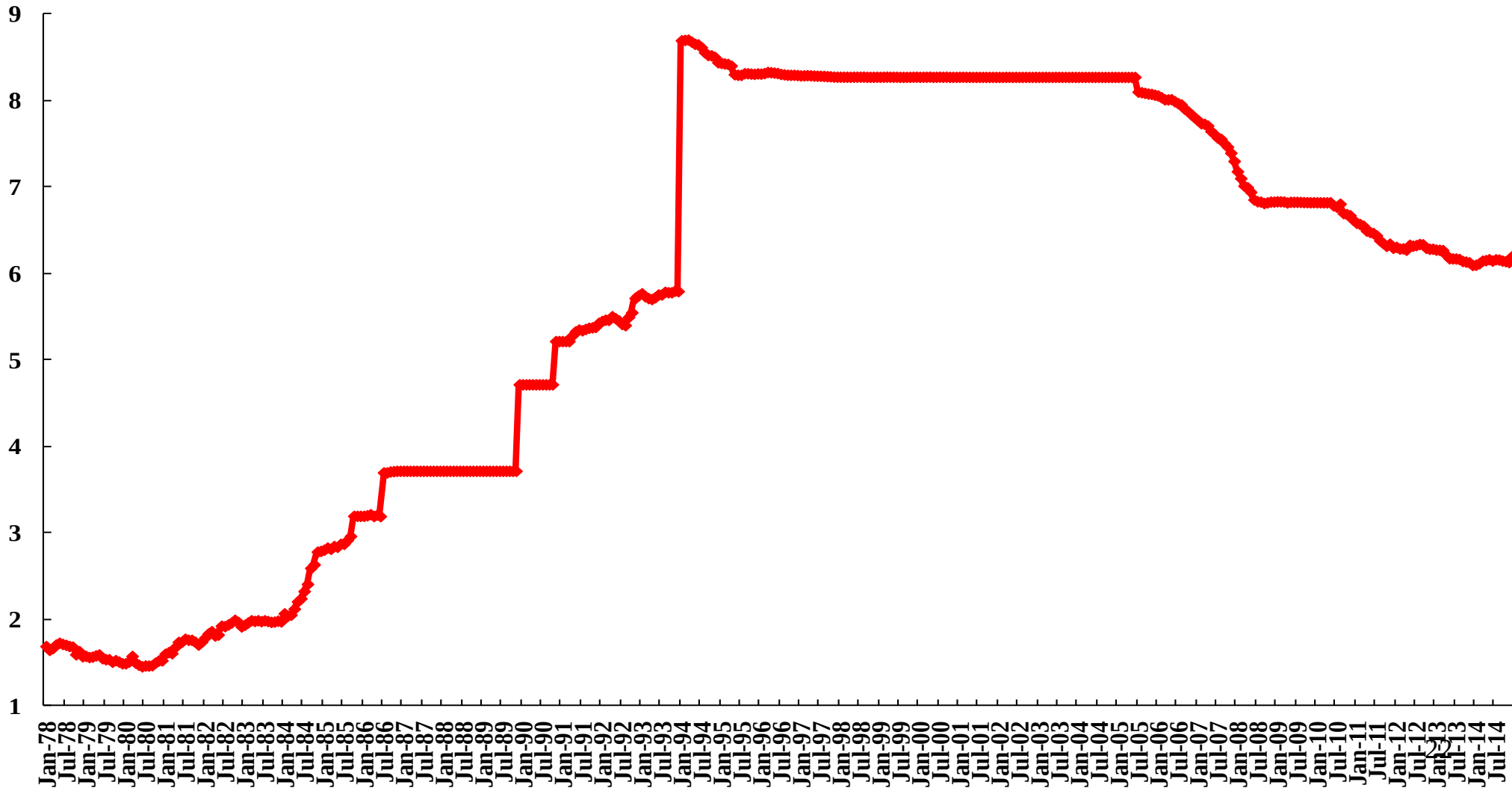
Opening the Economy Enhances Domestic Economic Welfare

Production Possibility Frontier Chart 3



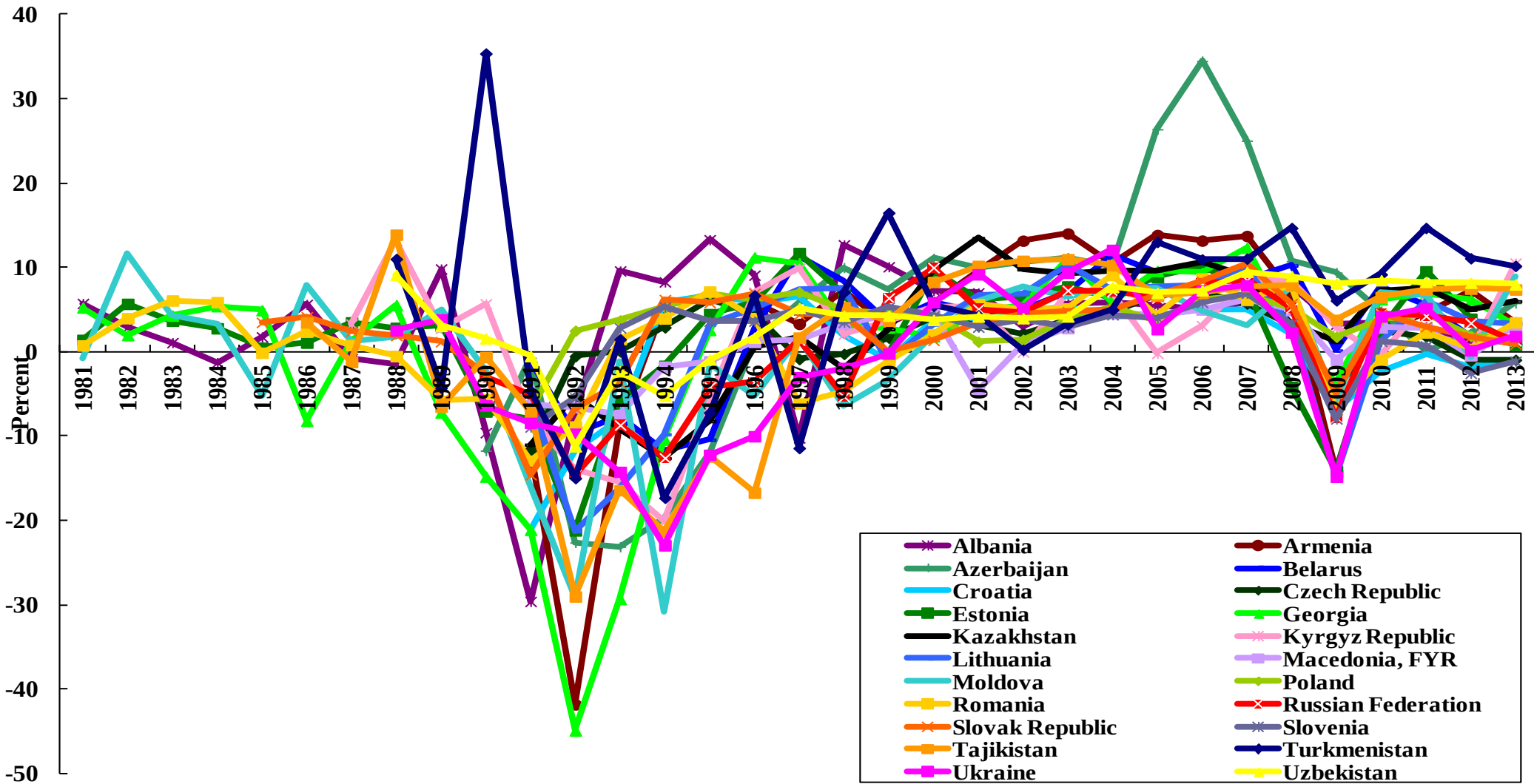
Nominal Exchange Rate of the Renminbi, Yuan/US\$, 1978-Present

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



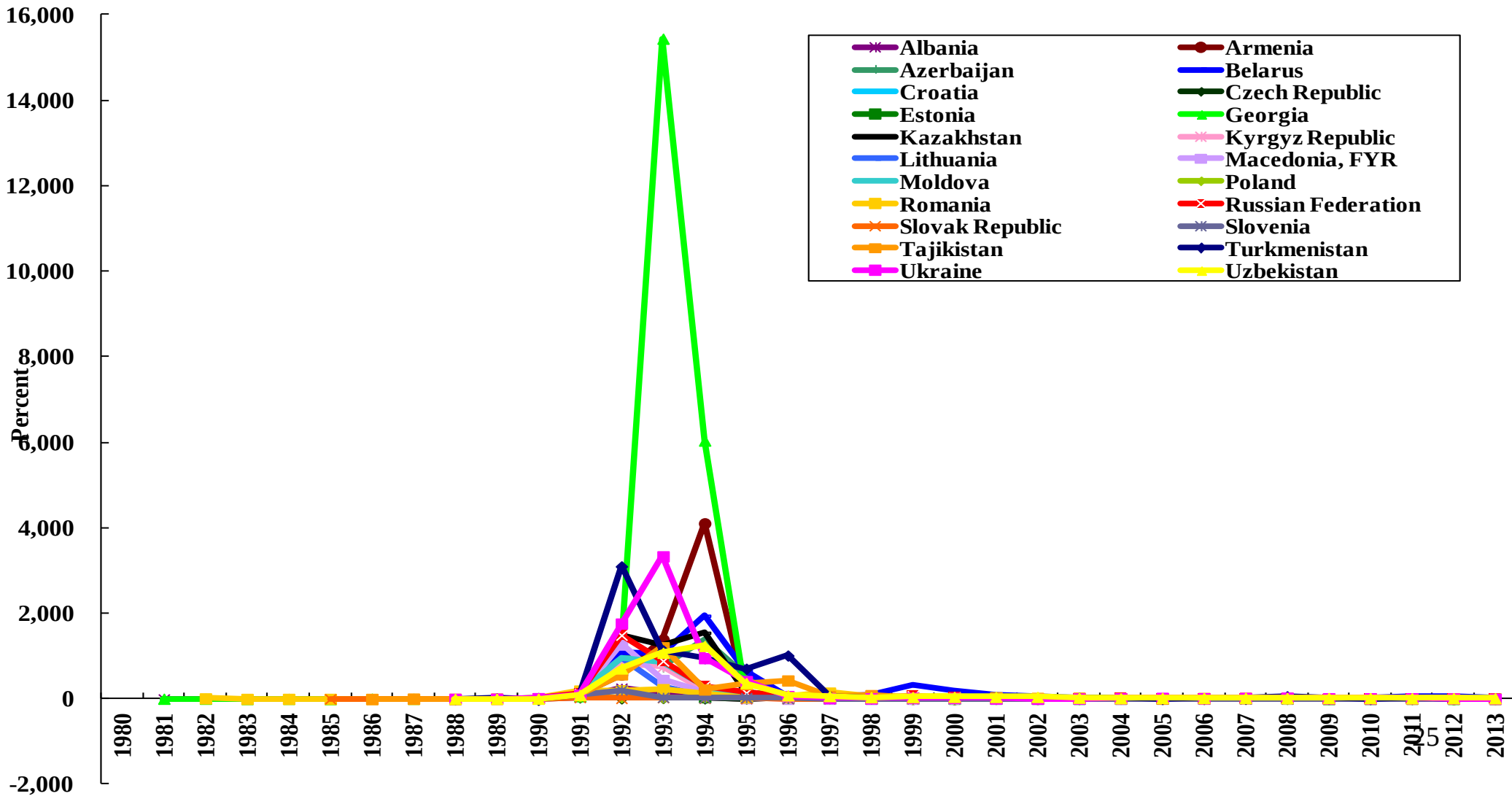
The Transition from a Closed Centrally Planned to an Open Market Economy

Rates of Growth of Real GDP of Former Soviet Union and East European Countries



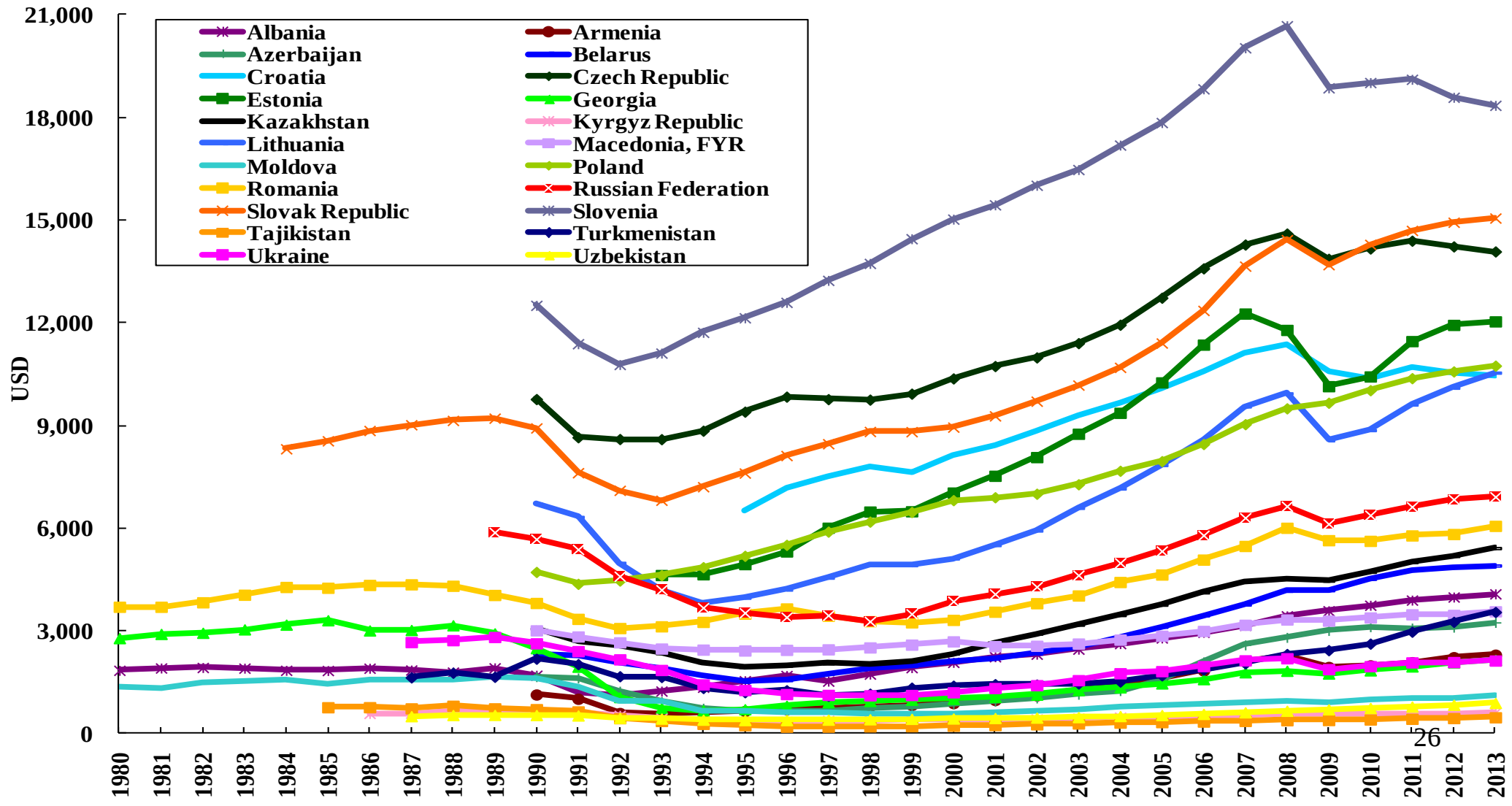
The Rates of Inflation of Former Soviet Union and East European Countries

The Changes of GDP Deflator of Former Soviet Union and East European Countreis



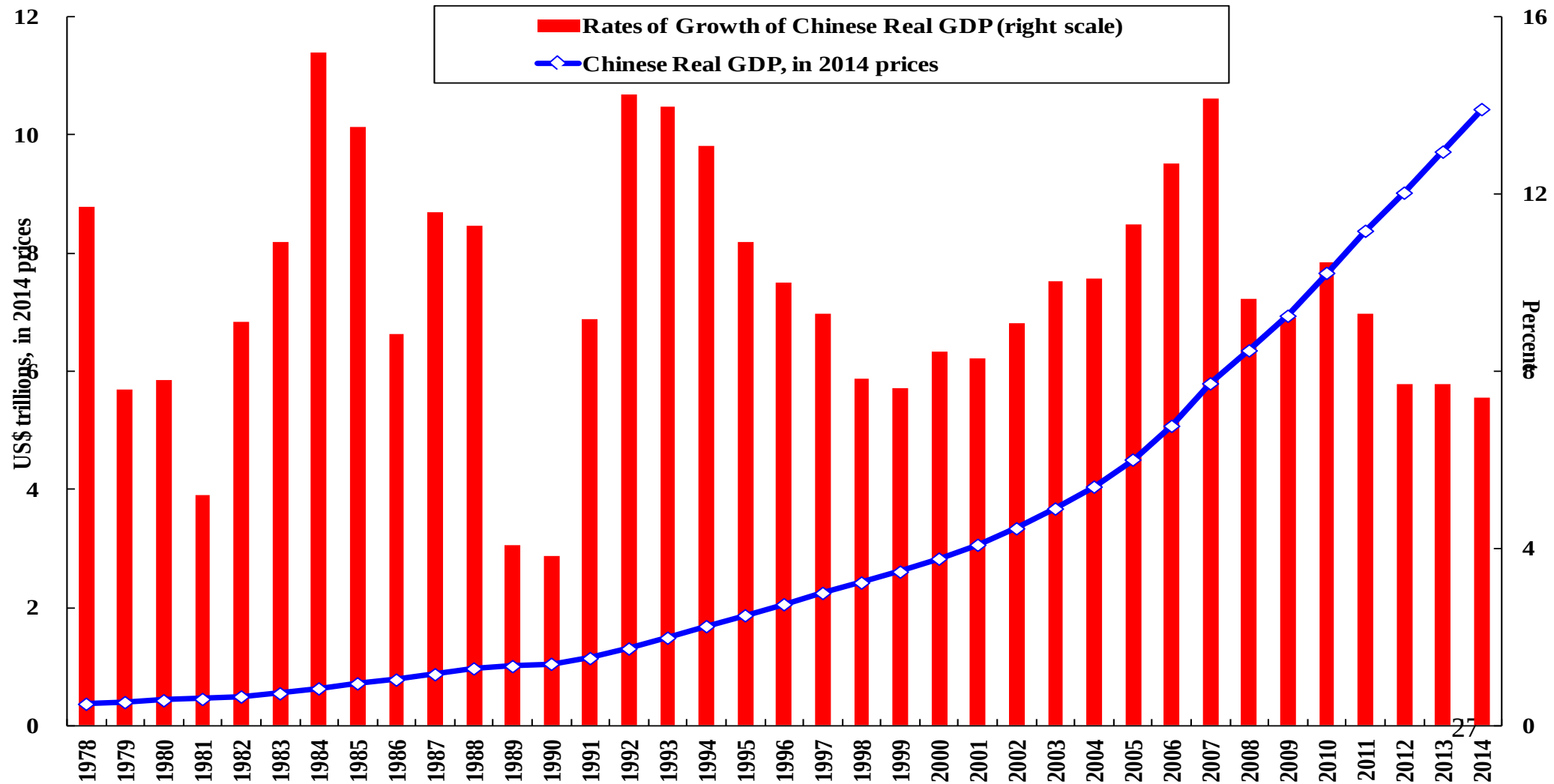
GDP per Capita of Former Soviet Union and East European Countries (2005 US\$)

GDP per capita of Former Soviet Union and East European Countries, in constant 2005 US dollars



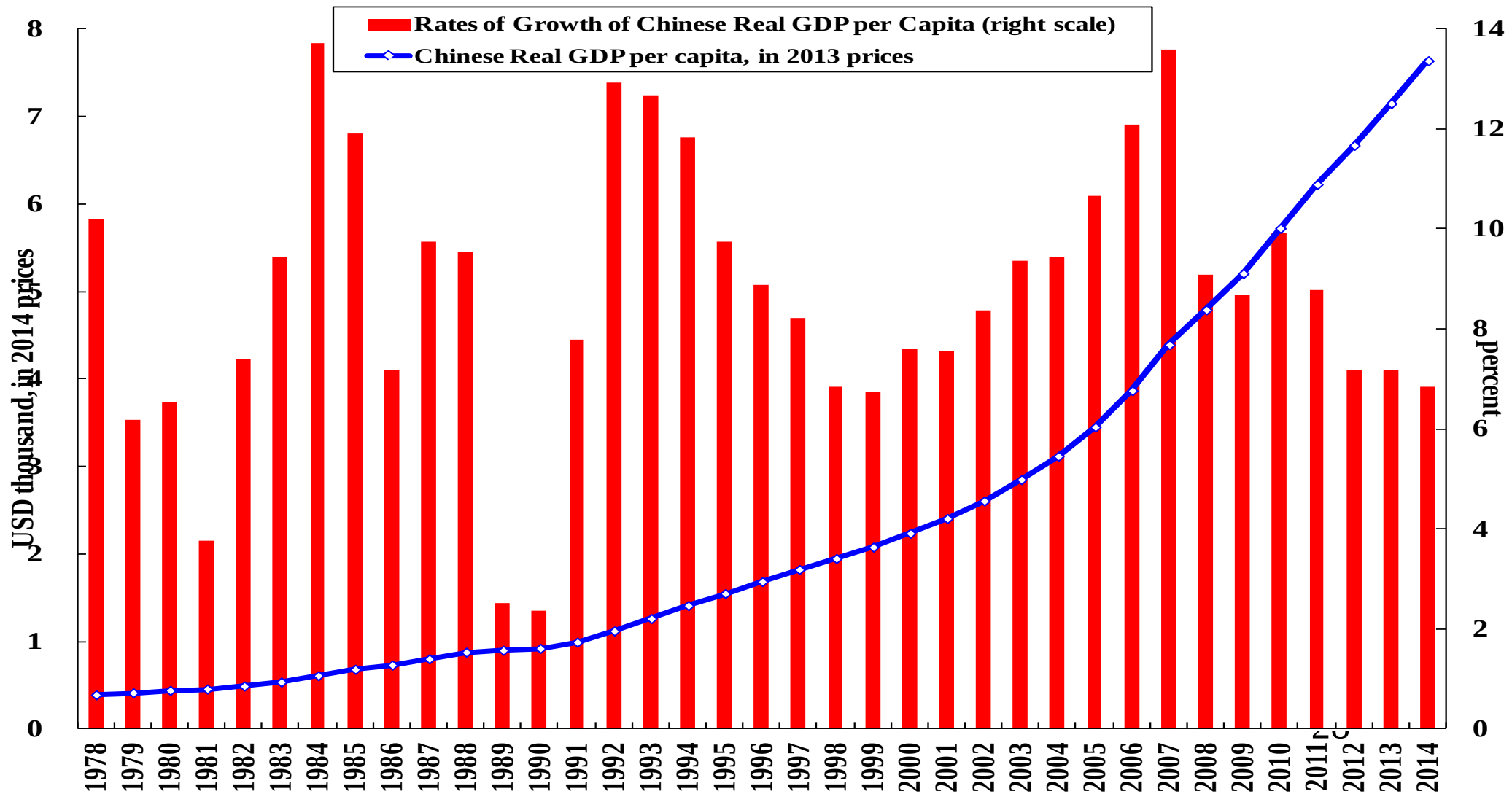
Chinese Real GDP and Its Rate of Growth (2014 US\$) since 1978

The Real GDP and Its Annual Rates of Growth of China (trillion 2014 US\$)



Chinese Real GDP per Capita and Its Rate of Growth (2014 US\$) since 1978

Real GDP per Capita and Its Annual Rates of Growth of China (thousand, 2014 US\$)



Reform without Losers— The Chinese Strategy for Economic Reform

- ◆ The “Dual-Track” strategy
- ◆ The “Processing and Assembly” operations
- ◆ “New People, New Way; Old People, Old Way”
新人新办法；旧人旧办法

The Monopsonistic Labour Market in China

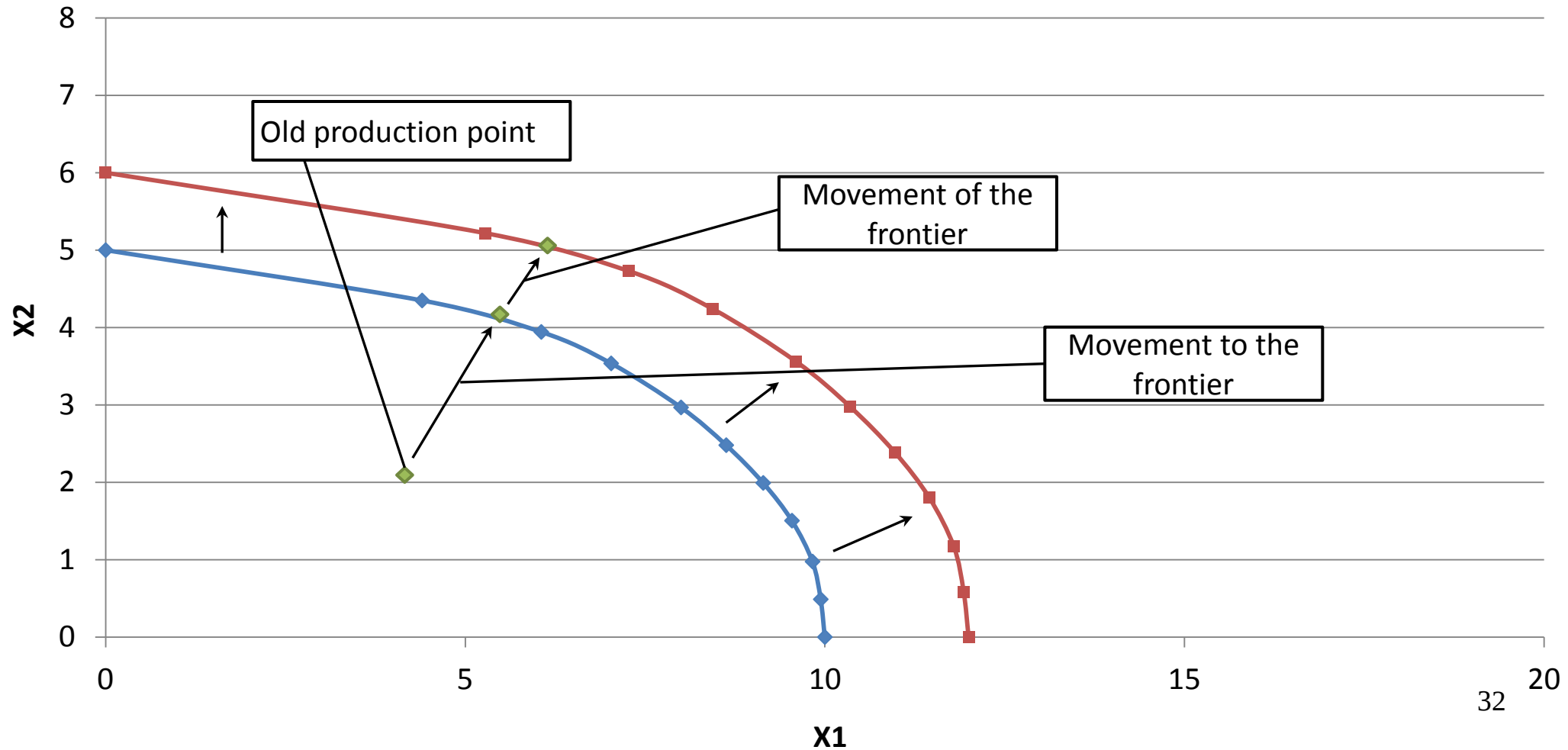
- ◆ Before the economic reform of 1978, the Chinese Government is the sole employer in China and could set the wage rates for all workers in the urban areas. The Chinese central government pursued a low-wage policy, resulting in a low share of labour.
- ◆ Even after the economic reform of 1978, the Chinese central government, together with all the local governments, its affiliated units, and the state-owned enterprises, remains the largest employer in China and exercises its monopsonistic power to keep the wage rates low.
- ◆ This low-wage policy has had two effects: first, it has kept both the labour share (and the household share) of GDP low; and secondly, it has created large profits for state-owned and other enterprises. This has resulted in a higher national saving rate in China than in most other economies as enterprises declare little cash dividends and their saving rates are close to 100 percent.
- ◆ It has been recently reported that the wages and salaries of civil servants will be raised by almost 60%. This is great news. It will also lead to a general increase in wages and salaries across the board.

The Sources of Chinese Economic Growth

- ◆ The initial slack resulting from central planning
- ◆ The growth of tangible capital and labour inputs
- ◆ The effects of economies of scale

Movement of the Production Possibilities Frontier versus Movement to the Frontier

Production Possibility Frontier



The Sources of Chinese Economic Growth: The Effects of Economies of Scale

- ◆ An economy with economies of scale will grow faster than an economy with constant returns to scale given the same rates of growth of the capital and labour inputs.
- ◆ The degree of returns to scale at the economy-wide level is not known. Edward F. Denison assumed that the degree of returns to scale is 1.1, that is, if all inputs are doubled, output will be increased by 1.1 times.

The “Wild Geese Flying Pattern”-- The Further Advantage of China’s Size

Towards a Surplus Economy

- ◆ China has evolved into a surplus capital economy because of its high national saving rate. The high national saving rate has enabled a high domestic investment rate, resulting in massively excess manufacturing capacities. The average capacity utilisation rate of many manufacturing industries is around 70%.
- ◆ Given the excess manufacturing capacities, Chinese Real GDP is actually not supply-constrained but aggregate demand-determined. If there is aggregate demand, there will be sufficient supply forthcoming to meet the demand.
- ◆ The growth of exports and fixed investment in manufacturing and residential housing can no longer be the principal drivers of the growth of Chinese aggregate demand.

Towards a Surplus Economy

- ◆ How did the surplus economy in China come about? It came about because of massively excess fixed investment in manufacturing. Fixed investment in manufacturing was undertaken by both state-owned and private enterprises without regard to its potential rate of return, often supported by local government officials.

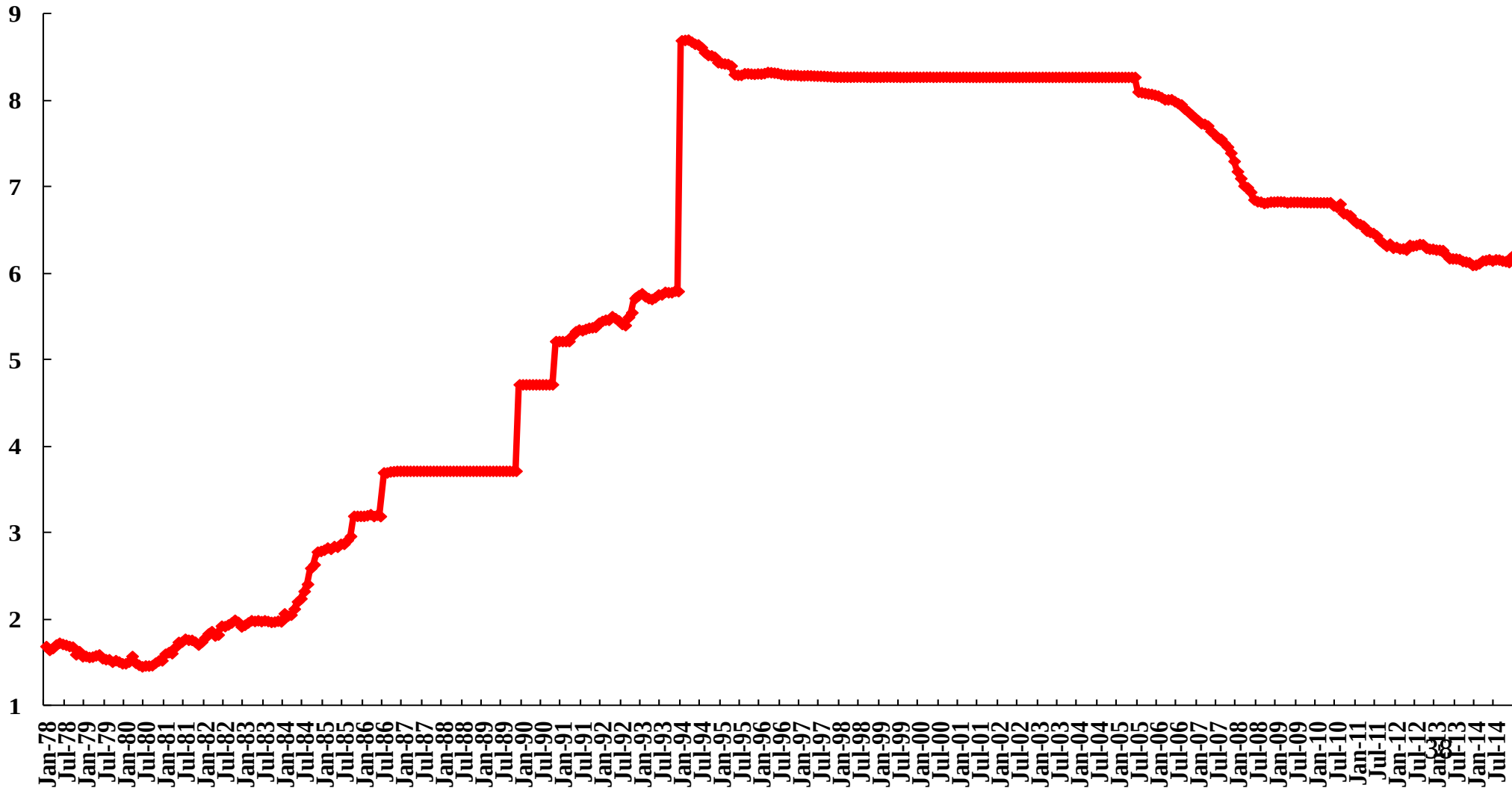
Towards a Surplus Economy:

The Chronically Excess Demand for Credit

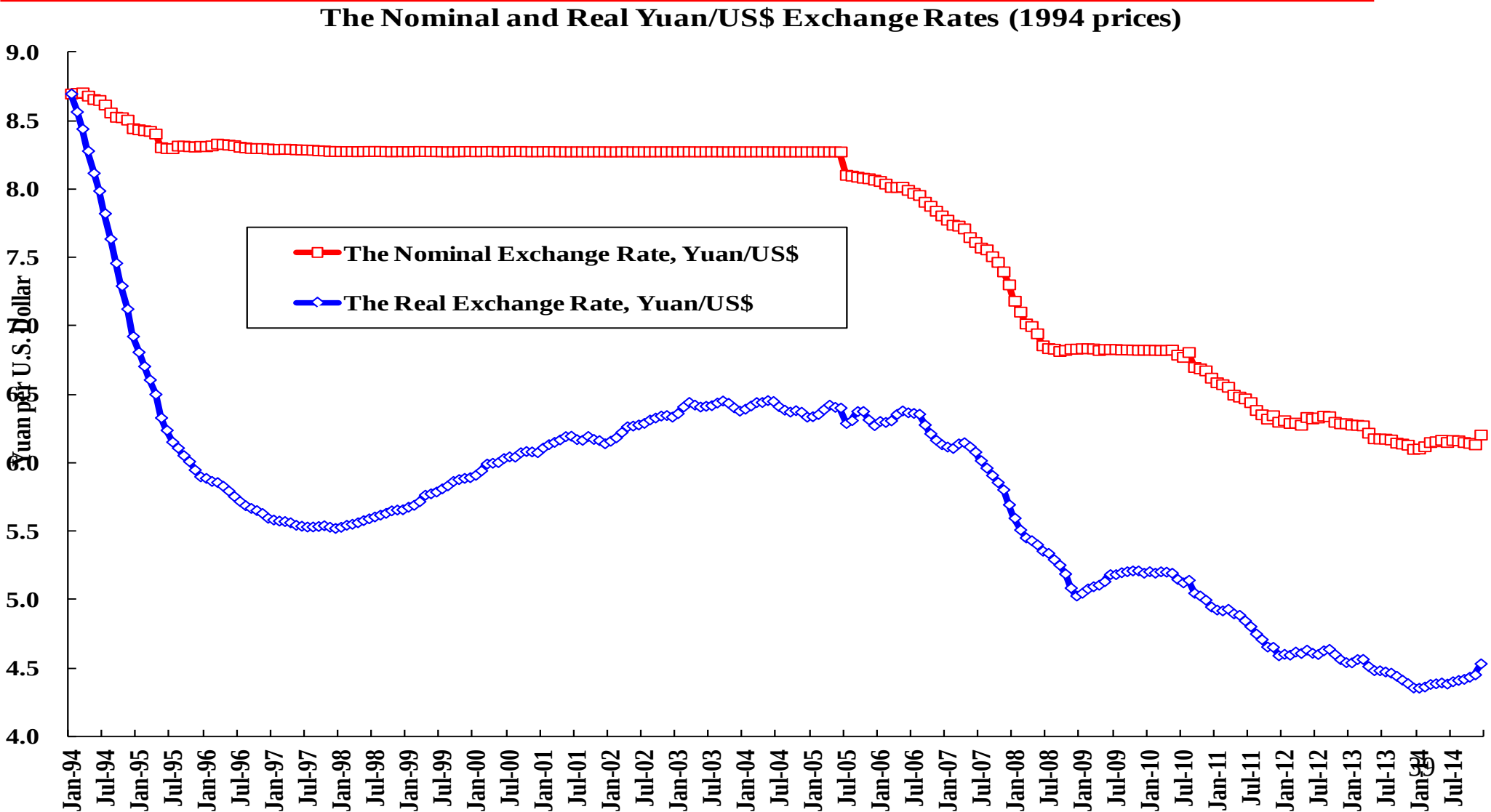
- ◆ However, even with a national saving rate in excess of 40%, there does not seem to be sufficient credit available in China. There seems to be a chronically excess demand for credit.
- ◆ One piece of evidence for the chronically excess demand for credit in China is the very high Renminbi rate of interest relative to the U.S.\$ rate of interest, even though the Renminbi has been appreciating in both nominal and real terms with respect to the U.S.\$ since 2005.
- ◆ This clearly contradicts the interest rate parity theory, which specifies that the rate of interest of the relatively appreciating currency should be lower than the rate of interest of the other currency by the percentage amount of the expected appreciation. (Granted that there exist capital control in China, but the control is at best leaky.) The Renminbi rate of interest has been much higher than the U.S.\$ rate of interest (see the following charts).

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

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

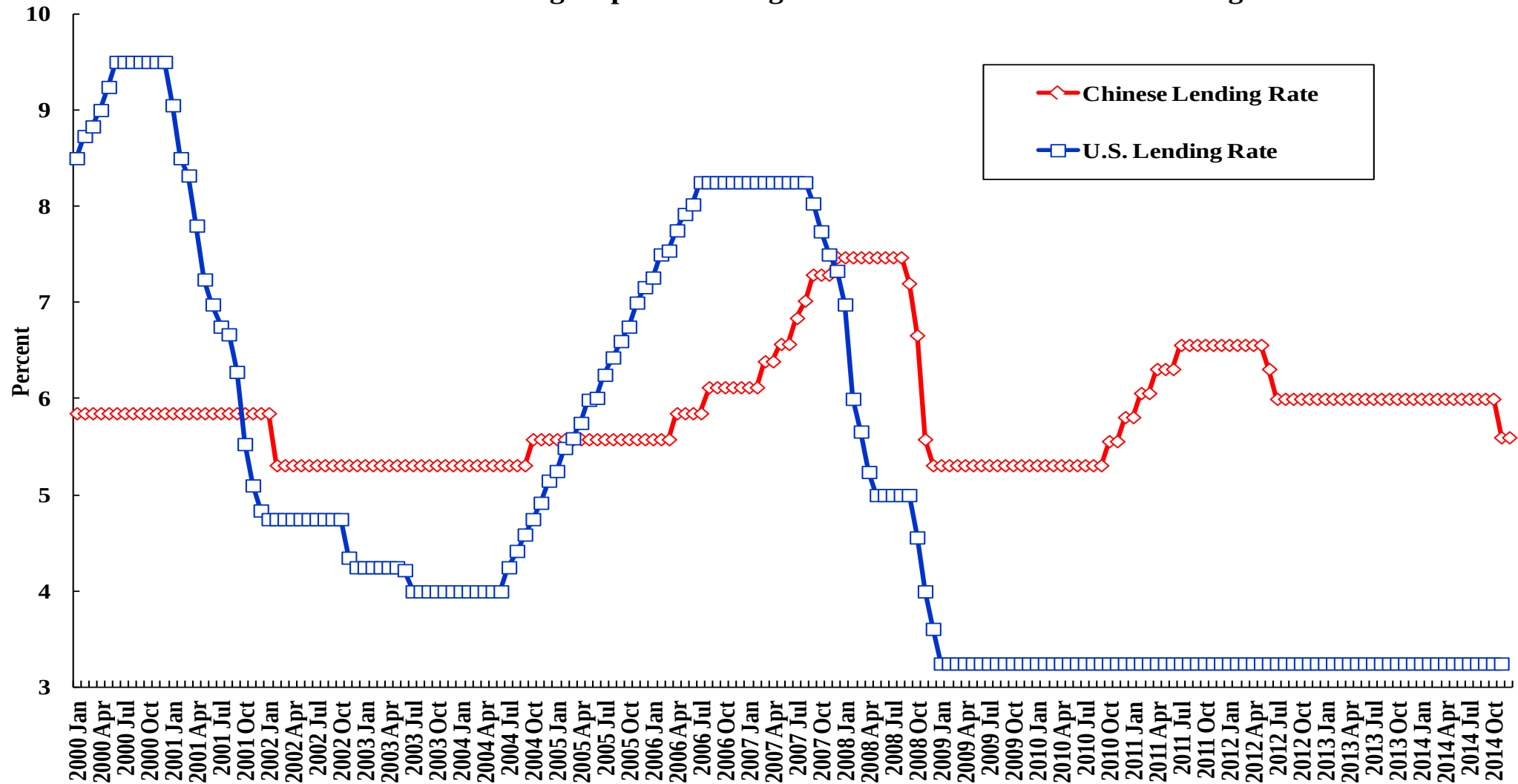


The Nominal and Real Yuan/US\$ Exchange Rates since 1994



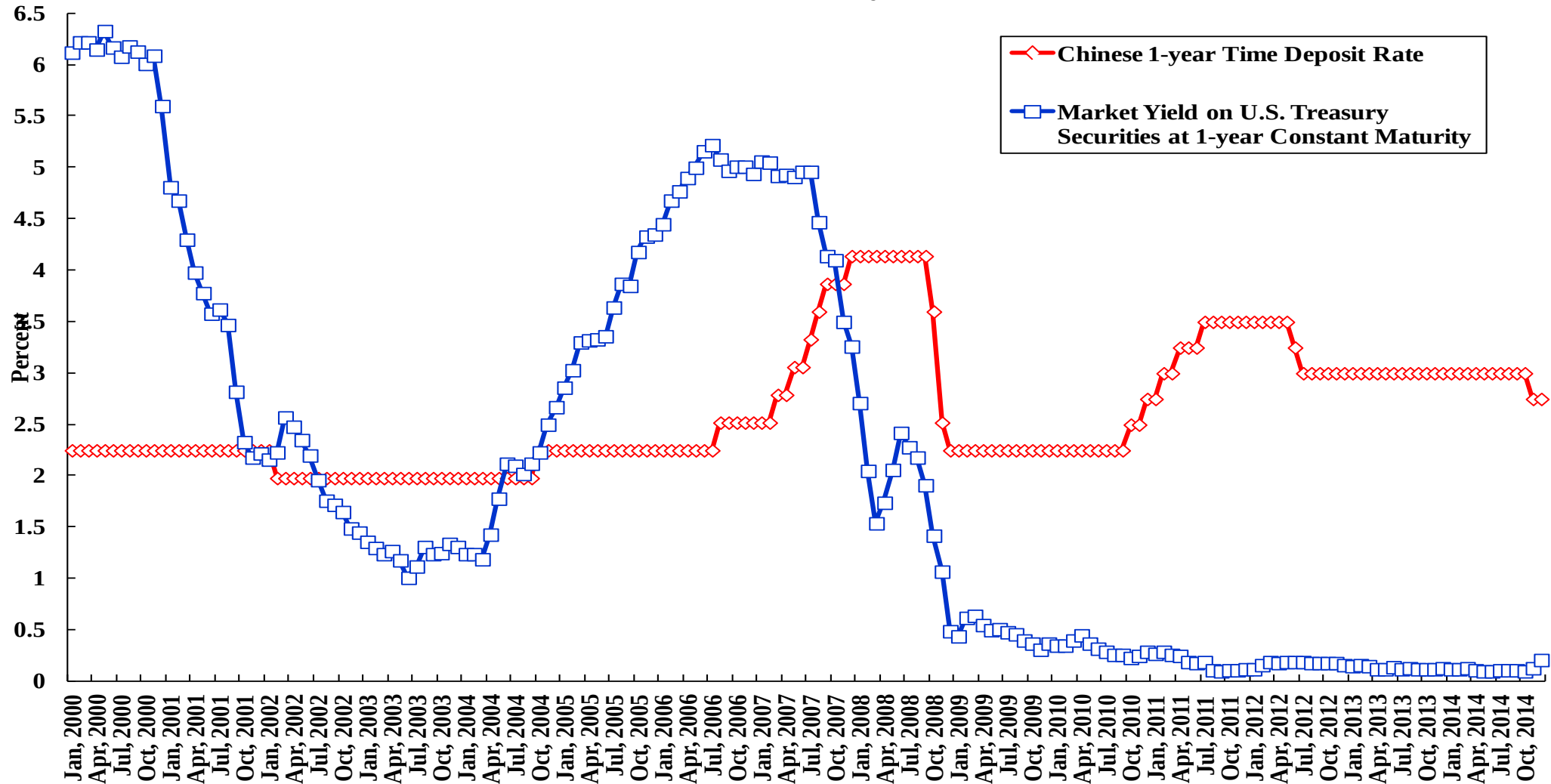
The Chronically Excess Demand for Credit: China-U.S. Lending Interest Rate Differential

Chinese 1-Year Working Capital Lending Rate and U.S. Short-Term Lending Rate



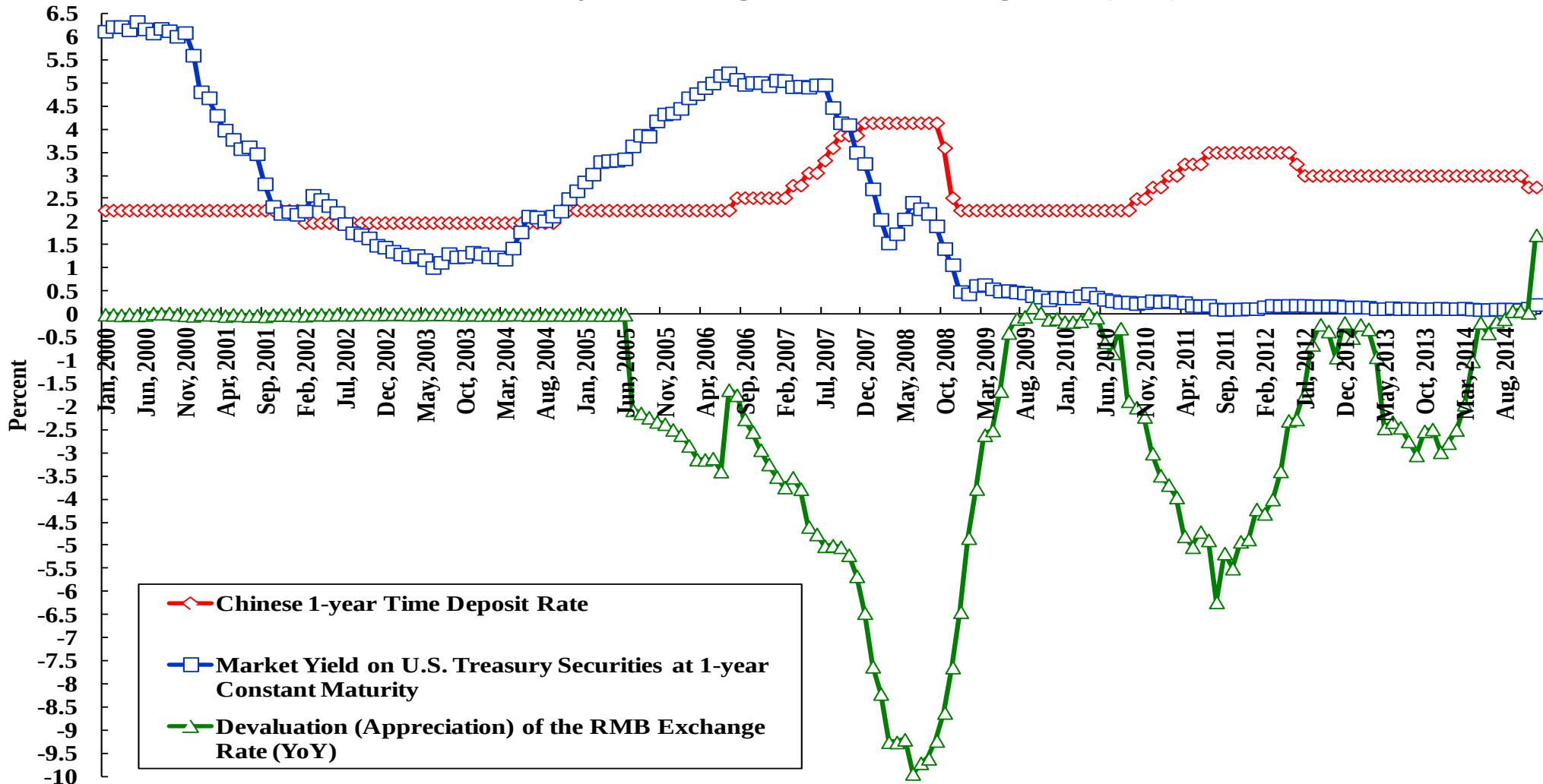
The Chronically Excess Demand for Credit: China-U.S. Deposit Interest Rate Differential

Chinese 1-Year Time Deposit Rate and Market Yield on U.S. Treasury Securities at 1-Year
Constant Maturity



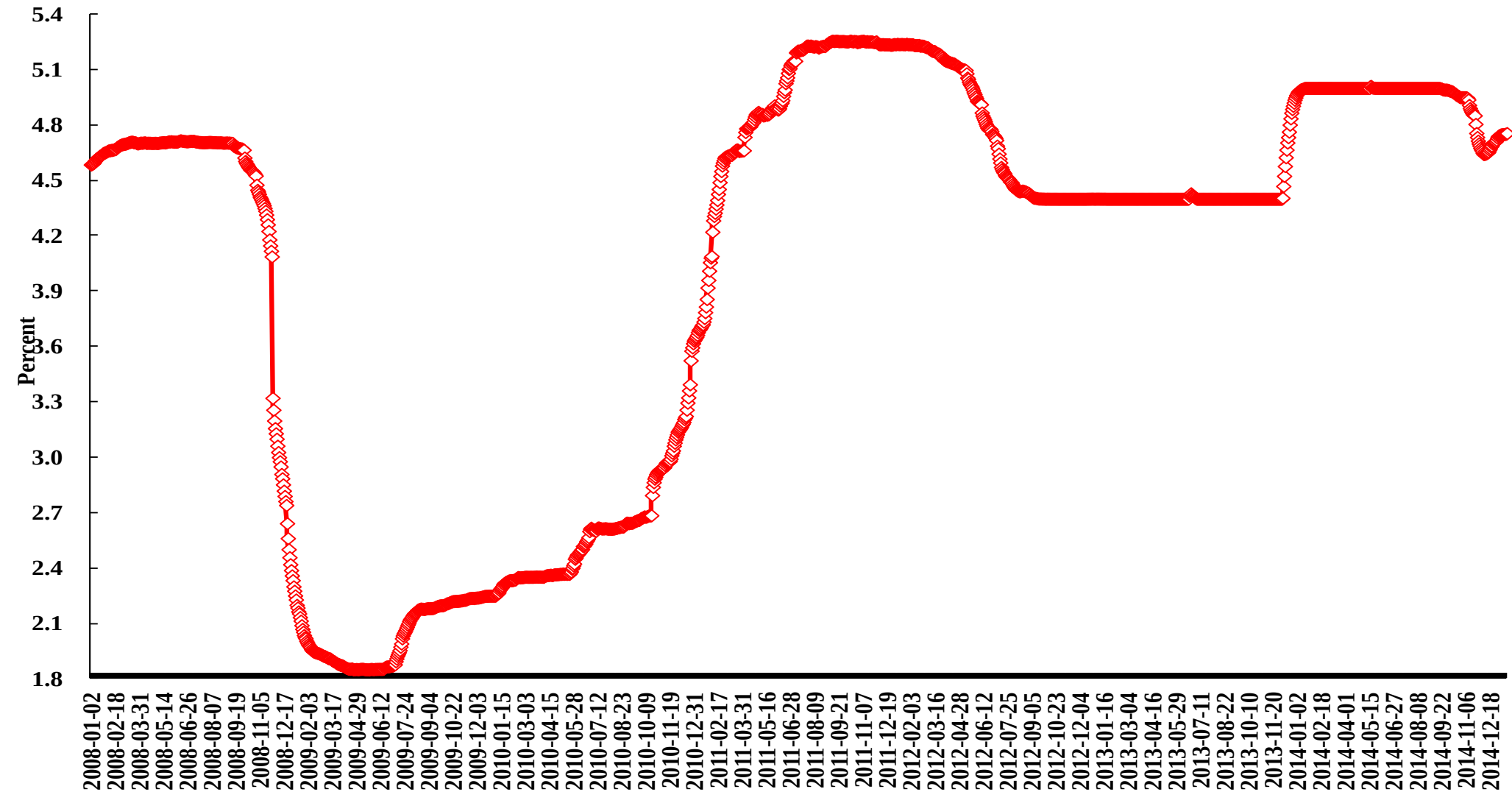
The Chronically Excess Demand for Credit: Inconsistency with Interest Rate Parity Theory

Chinese 1-Year Time Deposit Rate, Market Yield on U.S. Treasury Securities at 1-year
Constant Maturity and Changes of RMB Exchange Rate (YoY)



The Chronically Excess Demand for Credit: The High Rate of Interest (SHIBOR)

Shanghai Interbank Offered Rate, 1-year



Towards a Surplus Economy:

The Chronically Excess Demand for Credit

- ◆ The chronically excess demand for credit in China is caused by the fact that many borrowers or potential borrowers, including local governments, state-owned enterprises (SOEs) and private enterprises, do not plan to repay their loans if things do not work out as hoped. If borrowers do not plan to repay their loans when things turn sour, the level of the rate of interest does not matter very much to them. The result is a chronically excess demand for credit which results in a chronically high rate of interest in China.

Towards a Surplus Economy: Huge Excess Capacities in Manufacturing Sectors

- ◆ The fact that loans do not have to be repaid by the borrowers if things turn out badly leads to blind expansion of manufacturing capacities, resulting in huge excesses in industries such as steel, cement, glass, aluminum, ship-building, solar panels, residential housing, etc.
- ◆ It also means that a high interest rate alone is not an effective deterrent to borrowing and to investment—this explains why the Chinese central bank has had to resort to credit rationing.
- ◆ The chronically excess demand for credit is also in part responsible for the growth of “shadow banking” in Mainland China. Shadow banking has resulted in higher “effective” borrowing rates for those enterprises and individuals who are able to obtain credit because of the shift to making “shadow loans” rather than regular bank loans on the part of banks.

Towards a Surplus Economy: From Where Can Growth of Aggregate Demand Come?

- ◆ The growth of Chinese aggregate demand will come principally from domestic demand.
- ◆ Public infrastructural investment such as high-speed railroads, urban mass-transit systems (China and the World cannot afford “a car in every garage”), facilities for the support of universal free or low-cost internet access in urban areas, and affordable housing through urban slum clearance and renewal;
- ◆ Public goods consumption (including necessary related investments) such as education, health care, care for the elderly, and environment control, preservation and restoration--securing cleaner air, water and soil; and
- ◆ Household consumption, especially from the expanding and rising middle class.

Towards a Surplus Economy: The Potential Sources of Aggregate Demand

- ◆ However, both public infrastructural investment and public goods consumption require the leadership and support of the central and local governments.
- ◆ While expenditures on public goods consumption, including the necessary related investments, will count as GDP, some of the benefits of these expenditures may not be pecuniary, for example, cleaner air, water and soil, better education, better national health, etc., and may not be fully reflected in the conventional measurement of GDP. However, the increase in general welfare as a result of these expenditures is definitely real.
- ◆ Moreover, increasing public goods consumption is an effective method of redistribution in kind. For example, since everyone breathes the same air, if the air is cleaner, both the wealthy and the poor benefit equally; and better access to health care may benefit the lower-income households more. Expansion of public goods consumption can thus reduce the real income disparity.

The Importance of Expectations

- ◆ Expectations of the future are important determinants of enterprise and household behaviour, which in turn determines whether an economy grows or stagnates. The Chinese central government has the proven credibility to change expectations through its plans and actions.
- ◆ In 1992, Mr. Deng Xiaoping undertook his famous southern tour, which changed expectations in the entire country overnight. Enterprises started investing and households started consuming. As a result, 1992, 1993 and 1994 were boom years.
- ◆ In 1997, Premier ZHU Rongji held the Renminbi/US\$ exchange rate steady amidst the chaos of the East Asian currency crisis, and thus managed to maintain the confidence of the investors and consumers about China's economic future, keeping the economy growing.
- ◆ In 2008, Premier WEN Jiabao launched the 4 trillion Yuan economic stimulus programme, barely six weeks after the collapse of Lehman Brothers, which once again helped to hold the confidence of Chinese enterprises and households in their economic future.

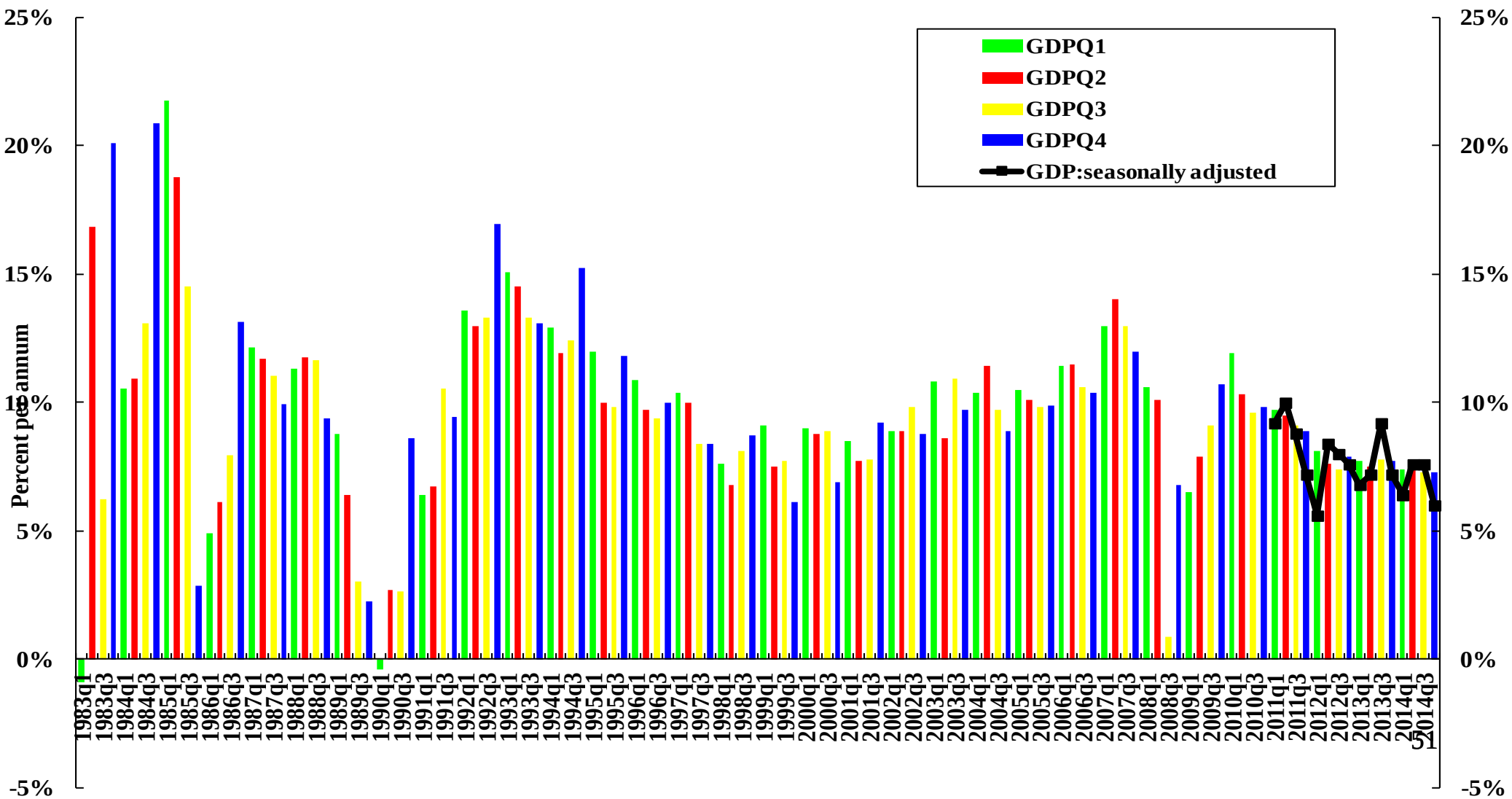
The Importance of Expectations

- ◆ In all of these cases, the Chinese government was able to turn around the very negative expectations about the future of the Chinese economy into positive ones, and in so doing greatly reduced the uncertainty pertaining to the future and increased general business confidence. These changes in turn fueled investment booms that resulted in the subsequent economic growth.
- ◆ Expectations often have the ability to be “self-fulfilling.” If everyone believes that the economy will do well and act accordingly, by investing and consuming, the economy will indeed turn out to do well, and vice versa.
- ◆ Expectations will continue to play an important role in the Chinese economy. A strong central government with the power to mobilise aggregate demand can credibly change expectations in a positive direction to keep the economy growing.

The Short- and Medium-Term Economic Outlook

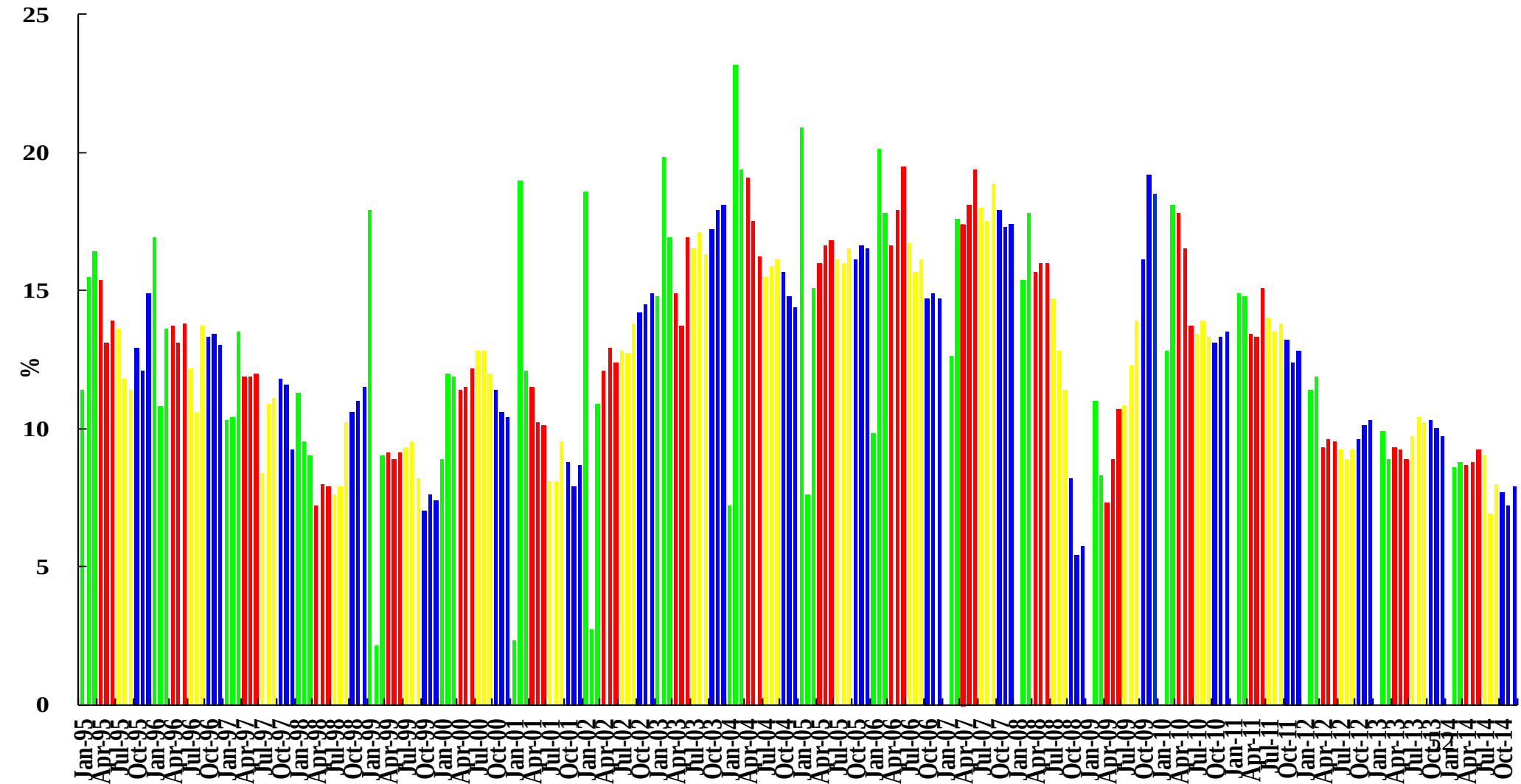
Quarterly Rates of Growth of Chinese Real GDP, Y-o-Y and Seasonally Adjusted

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



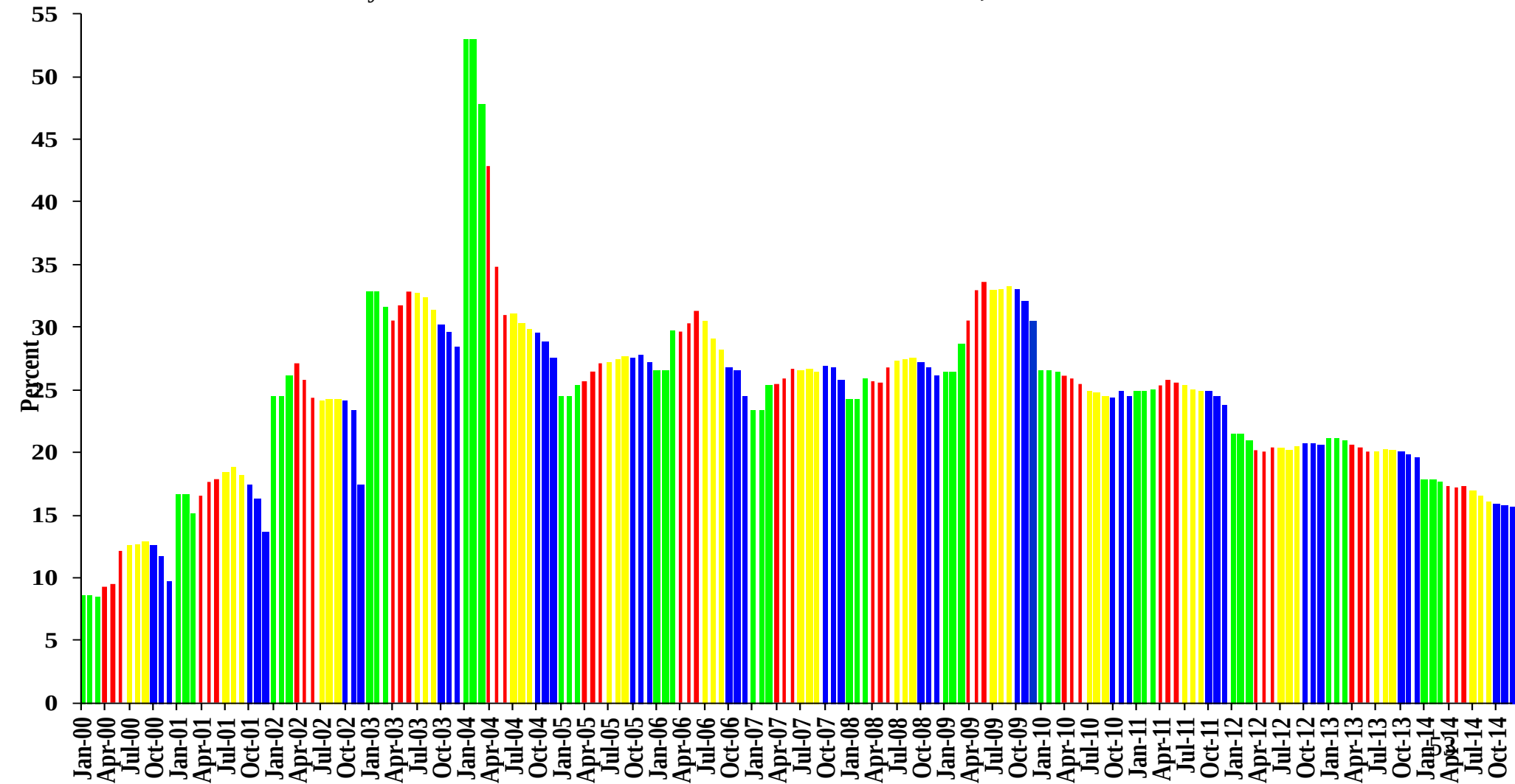
Monthly Rates of Growth of Real Value-Added of the Chinese Industry, Y-o-Y

Monthly Rates of Growth of Real Value-Added of the Chinese Industry, Year-over-Year



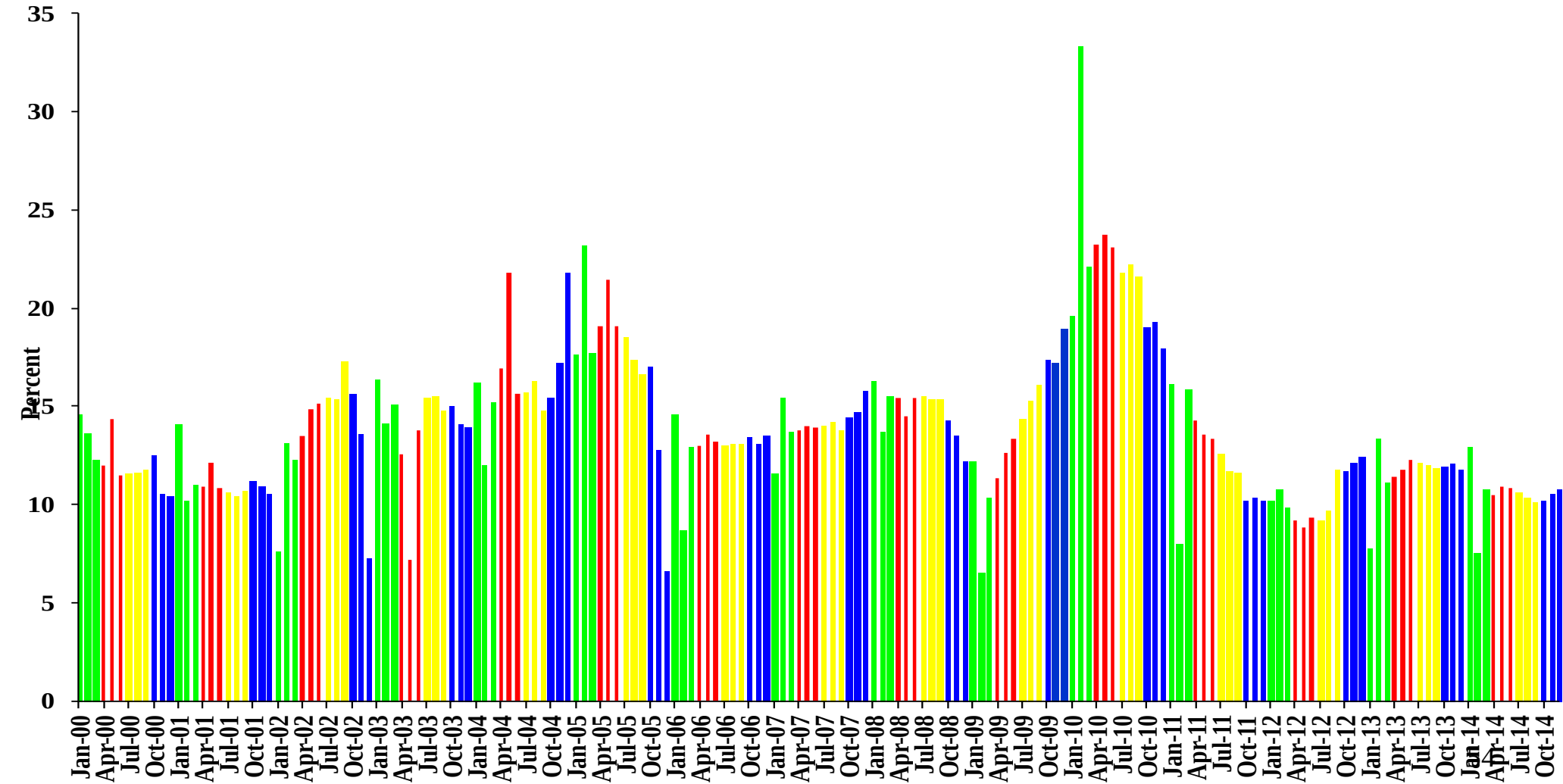
Monthly Rates of Growth of Chinese Fixed Assets Investment, Y-o-Y

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



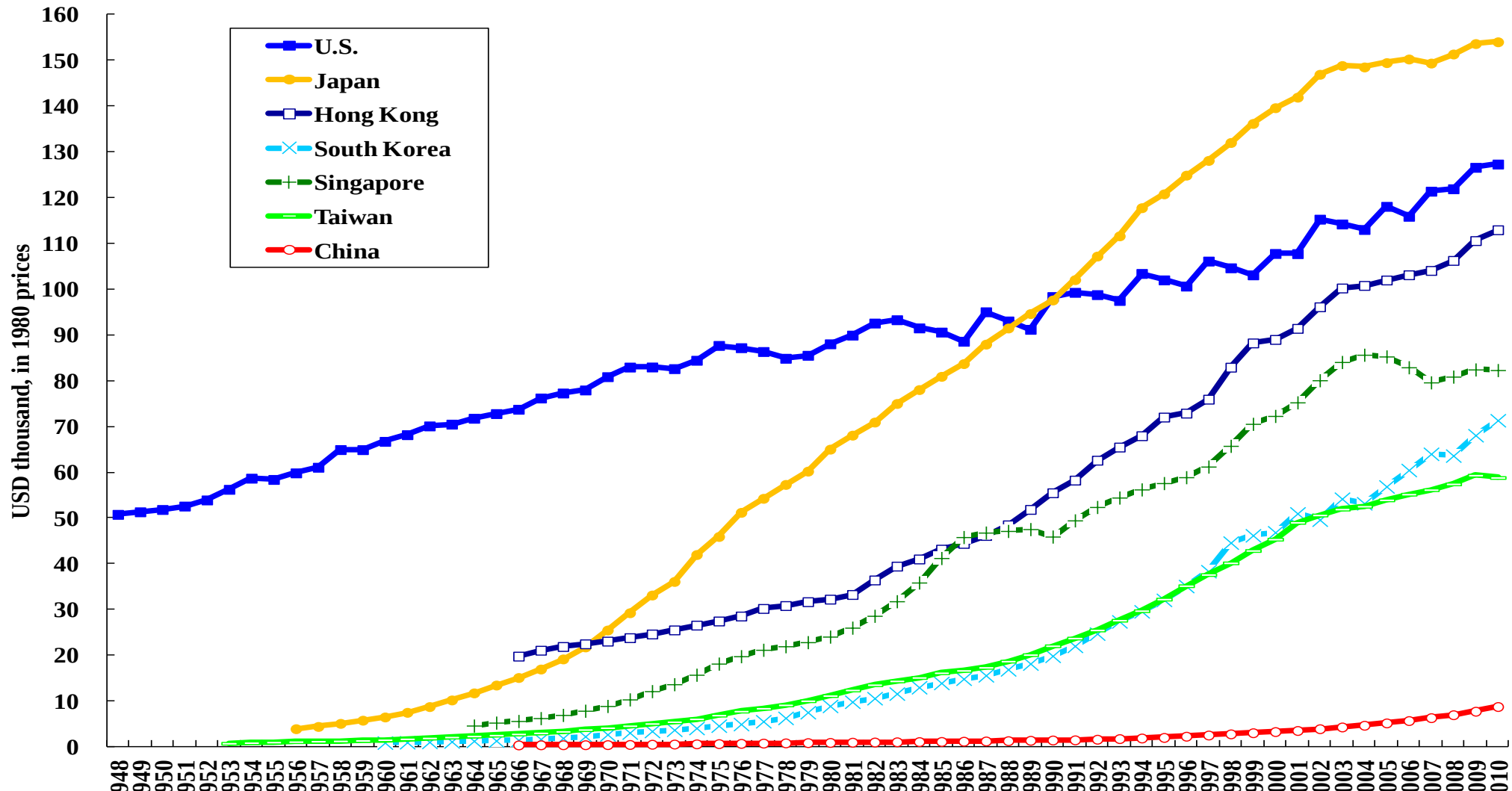
Near-Term Forecasts of Annual Rates of Growth of Chinese Real GDP

Forecasts of Annual Rates of Growth of Chinese Real GDP			
Forecasting Organisation	2015	2016	2017
Asian Development Bank	7.20%	NA	
The International Monetary Fund	6.80%	6.30%	
The Organisation for Economic Cooperation and Development	7.10%	6.90%	
The World Bank	7.10%	7.00%	6.90%
The Conference Board (U.S.)	5.90%	5.90%	
Fitch Ratings	6.80%	6.50%	55

The Long-Term Economic Outlook

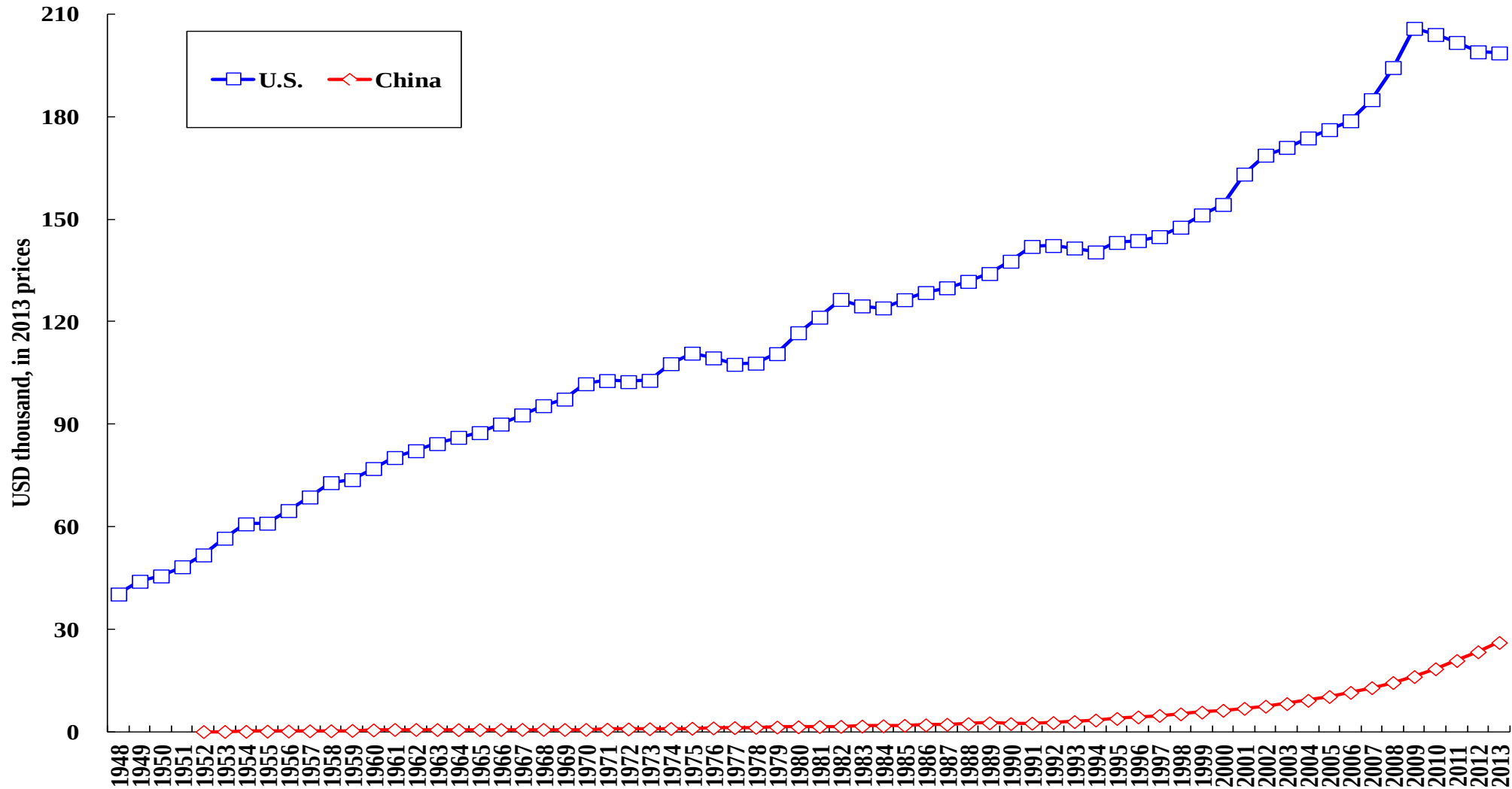
Tangible Capital per Unit Labour, 1980US\$, Selected Economies

Tangible Capital per Unit Labour for Selected Economies



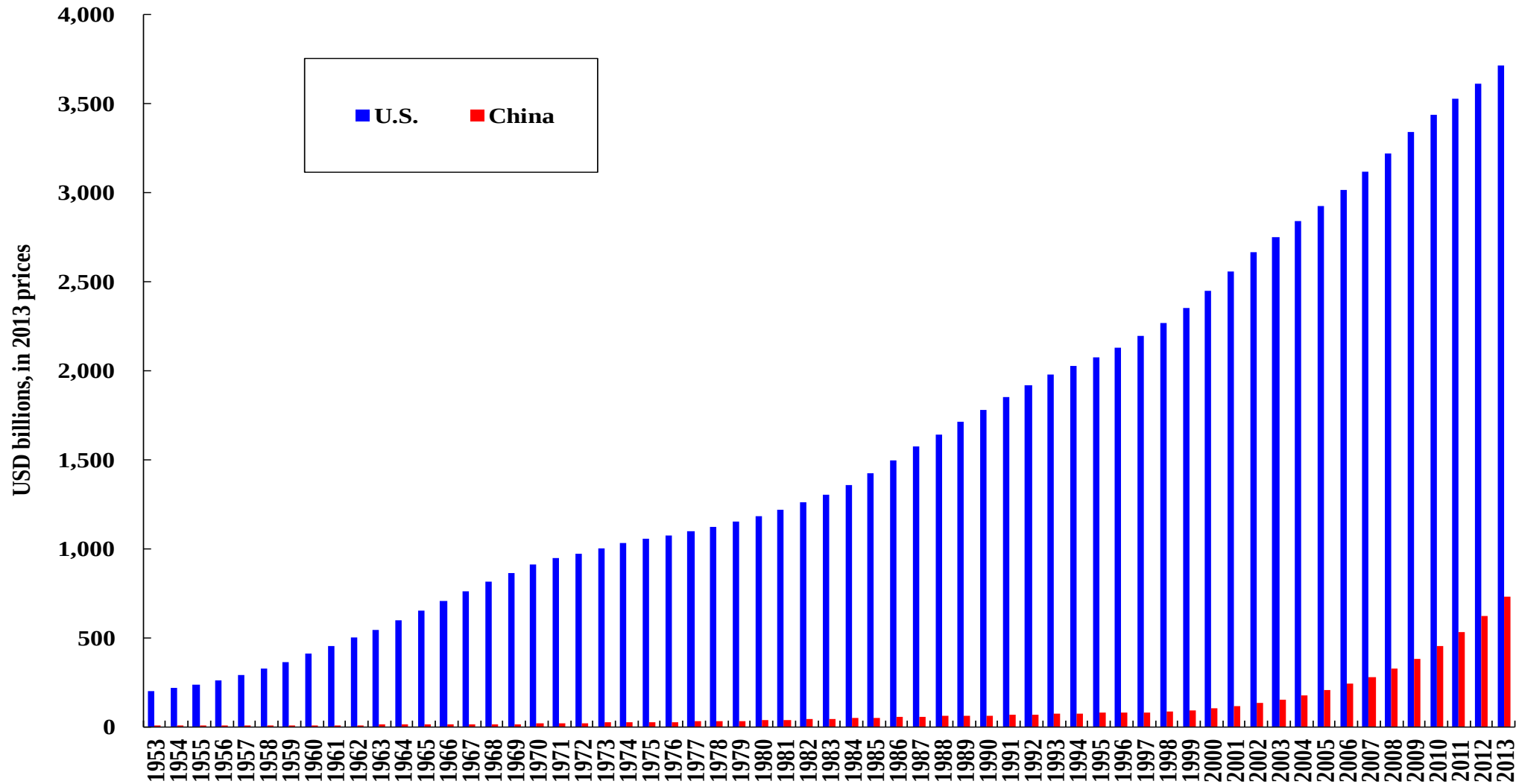
Tangible Capital per Unit Labour, 2013US\$, China and the U.S.

Tangible Capital per unit Labor of China and the U.S., in 2013 prices



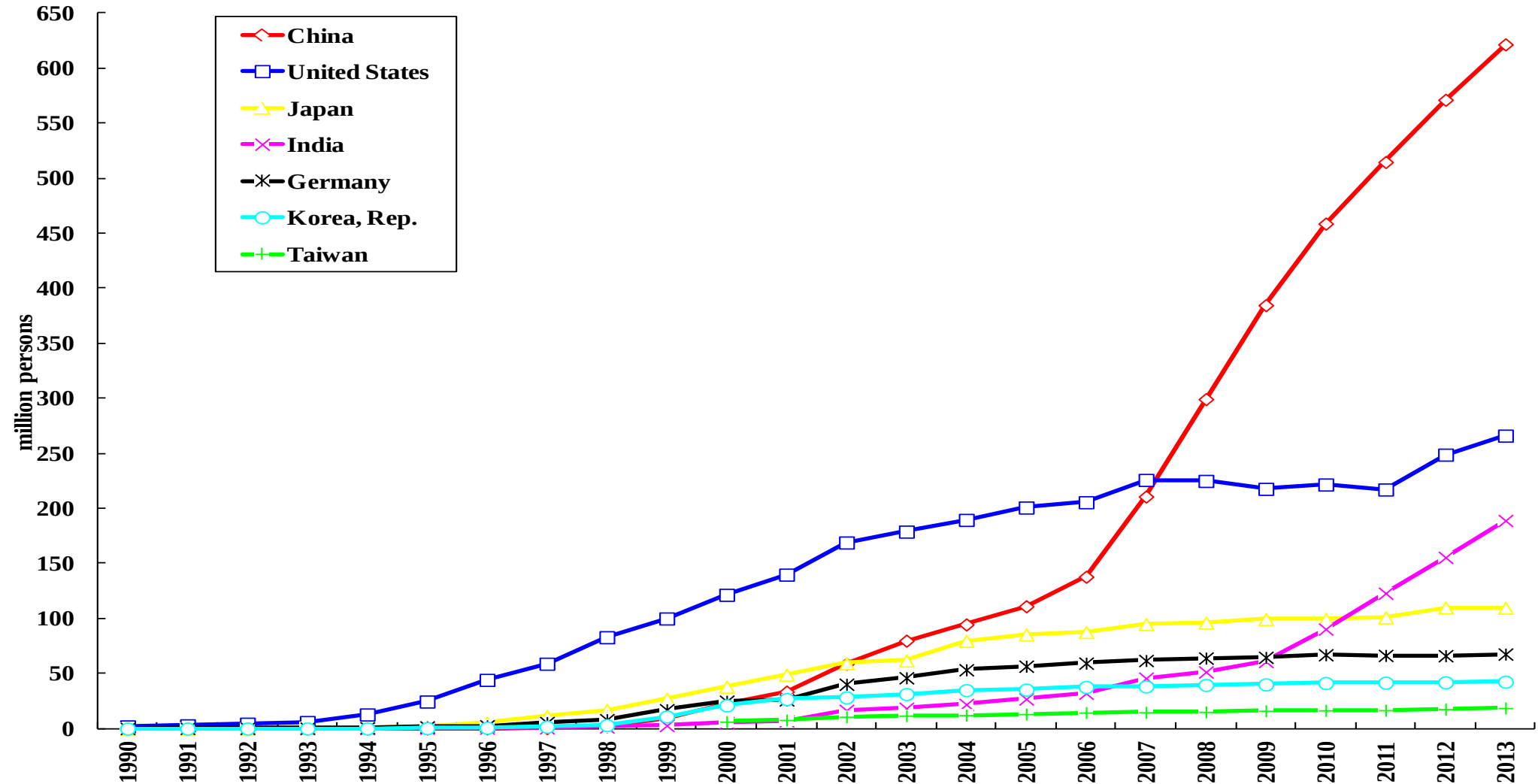
R&D Capital Stocks: A Comparison of China and the U.S., 2013 US\$

R&D Capital Stocks, U.S. vs. China



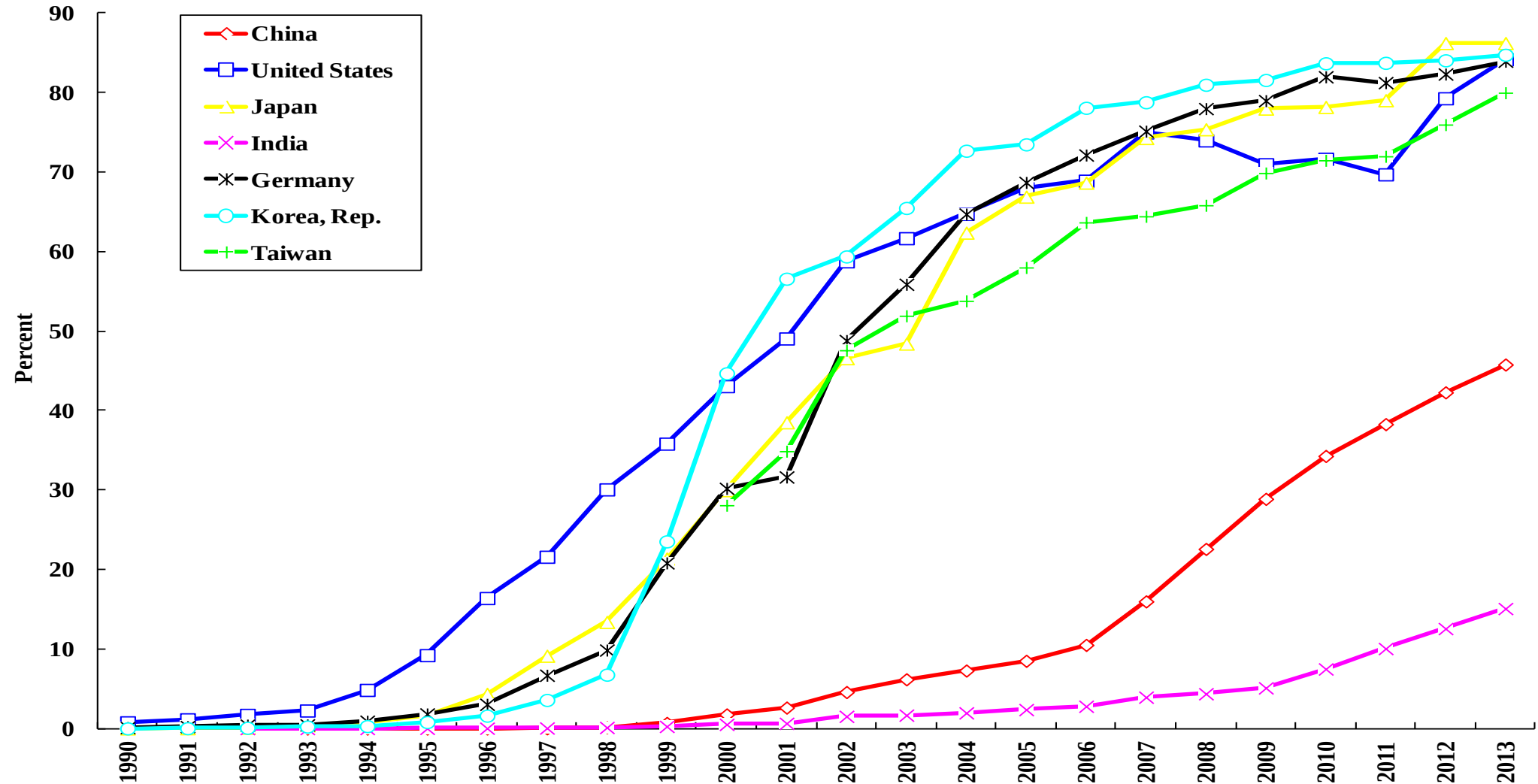
The Number of Internet Users in Selected Economies

The Number of Internet Users in Selected Economies, million persons



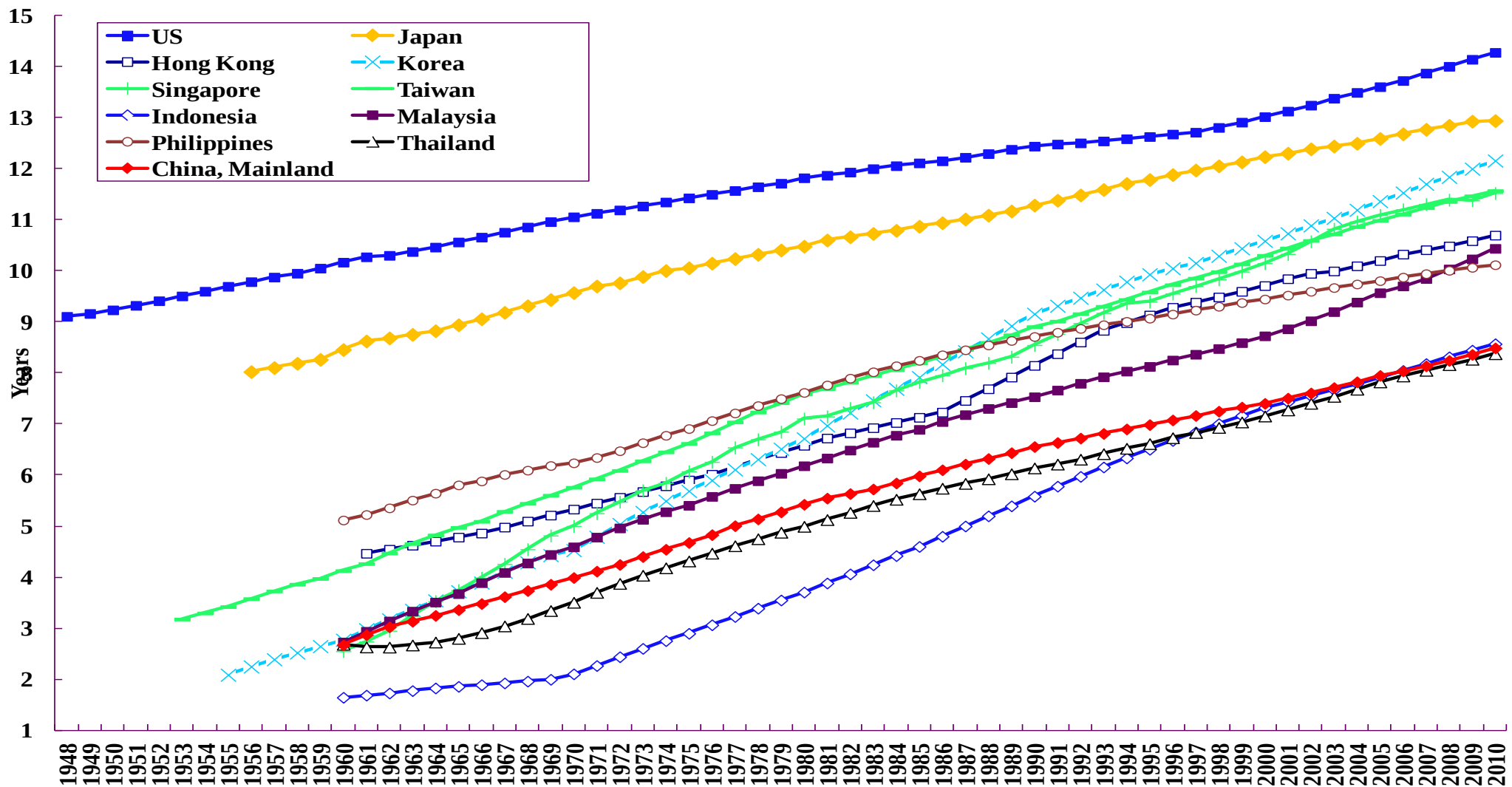
The Number of Internet Users as a Percent of the Population in Selected Economies

The Number of Internet Users as a Percent of the Population in Selected Economies



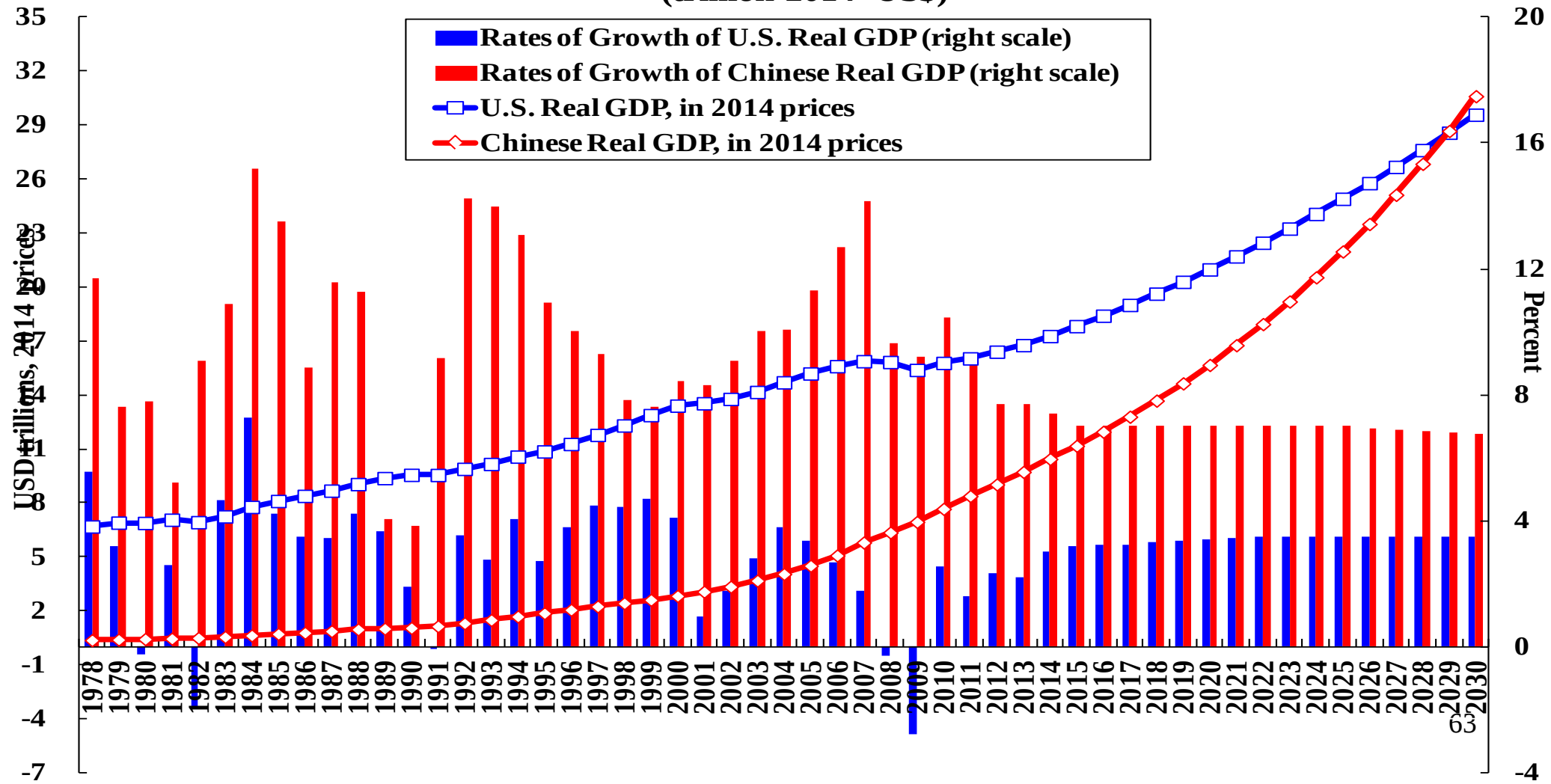
Average Number of Years of Schooling of Selected Economies (1945-present)

Average Number of Years of Schooling of Selected Economies (1945-present)



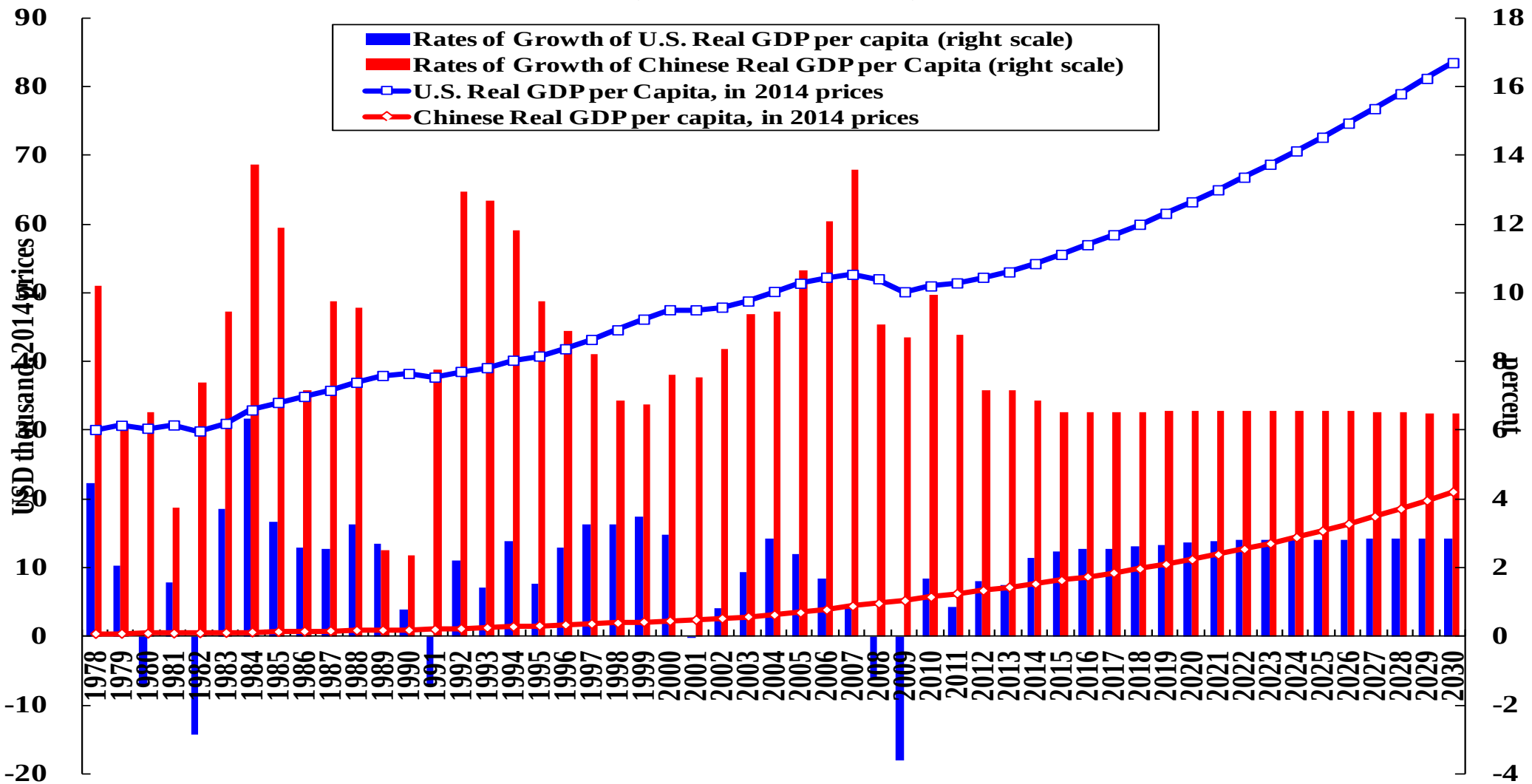
Actual and Projected Chinese and U.S. Real GDPs and Their Rates of Growth

Actual and Projected Chinese and U.S. Real GDPs and Their Rates of Growth
(trillion 2014 US\$)



Actual and Projected Chinese and U.S. Real GDP per Capita's and Rates of Growth

Actual and Projected Chinese and U.S. Real GDP per Capita and Their Rates of Growth
(thousand, 2014 US\$)



Concluding Remarks
