

What Makes China Grow?

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Introduction

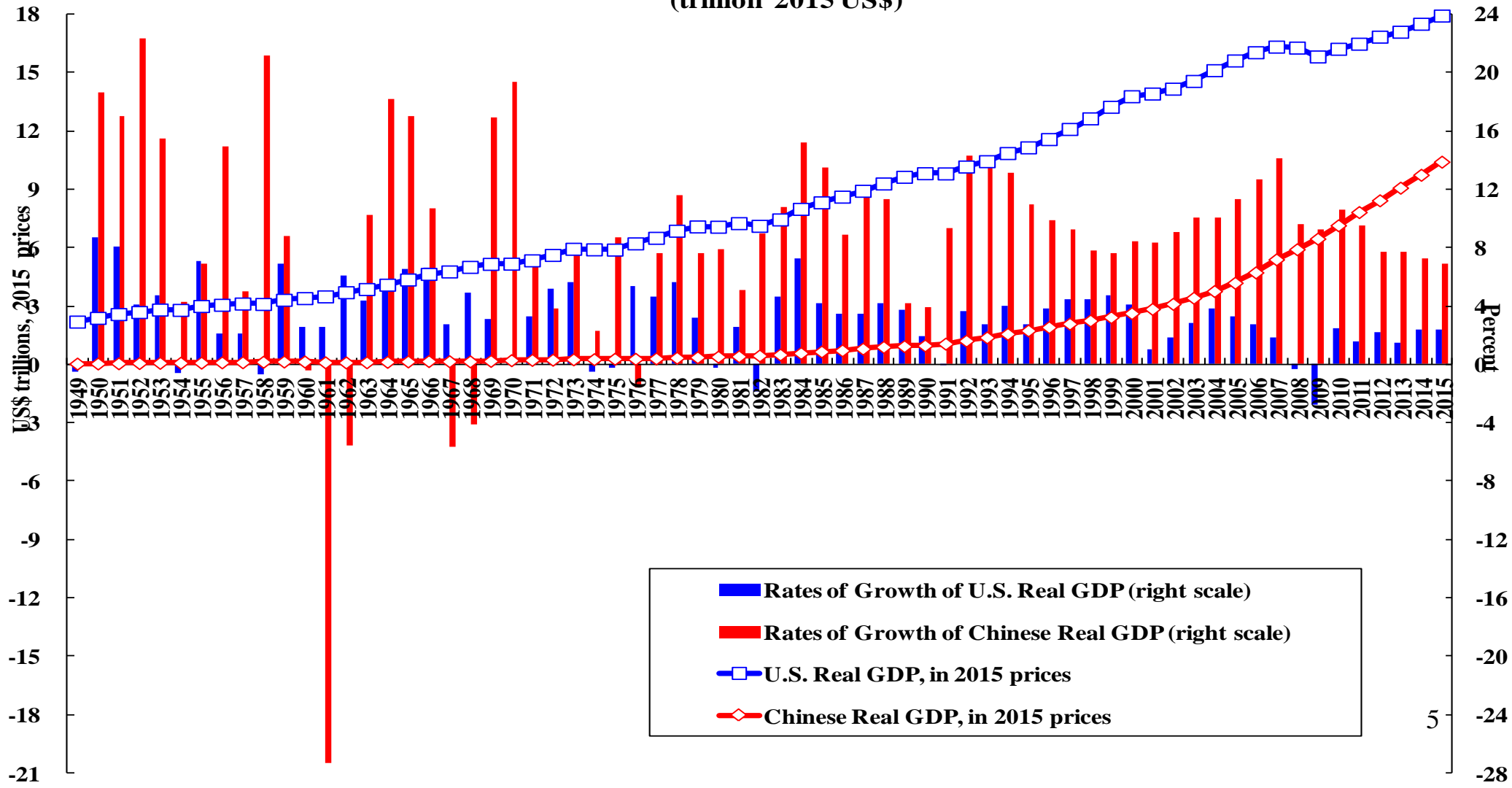
- ◆ China has made tremendous progress in its economic development since it began its economic reform and opened to the World in 1978. It is currently the fastest growing economy in the World—averaging 9.64% per annum over the past 37 years. It is historically unprecedented for an economy to grow at such a high rate over such a long period of time. However, the Chinese economy has begun to slow down, to an average annual rate of growth of around 6.5%, in a process of transition to a “New Normal”.
- ◆ Why has China been able to grow at such a high rate and for such a long period of time? What makes China grow? Will China be able to continue to grow at such a high rate in the future? (Even 6.5% per annum is a high rate of growth relative to many other economies.) 3

Introduction

- ◆ It is useful to compare the growth of Chinese and U.S. real GDP in both aggregate and per capita terms (see the following charts). The red and blue lines represent the levels of real GDP and real GDP per capita of China and the U.S. respectively. The red and blue columns represent the annual rates of growth of China and the U.S. respectively.
- ◆ Between 1978 and 2015, Chinese real GDP grew from US\$346 billion to US\$10.4 trillion (in 2015 prices), to become the second largest economy in the World, after the U.S. In 2015, Chinese GDP was just a hair more than 58% of the U.S. GDP of US\$17.9 trillion.
- ◆ However, despite its rapid economic growth in the aggregate, in terms of its real GDP per capita, China is still very much a developing economy.
- ◆ In 1978, the Chinese real GDP per capita was US\$360 (in 2015 prices) compared to the then US\$30,886 of the U.S. By 2015, the Chinese real GDP per capita had grown to US\$7,584, still only more than 13.6% of the U.S. GDP per capita of US\$55,759.

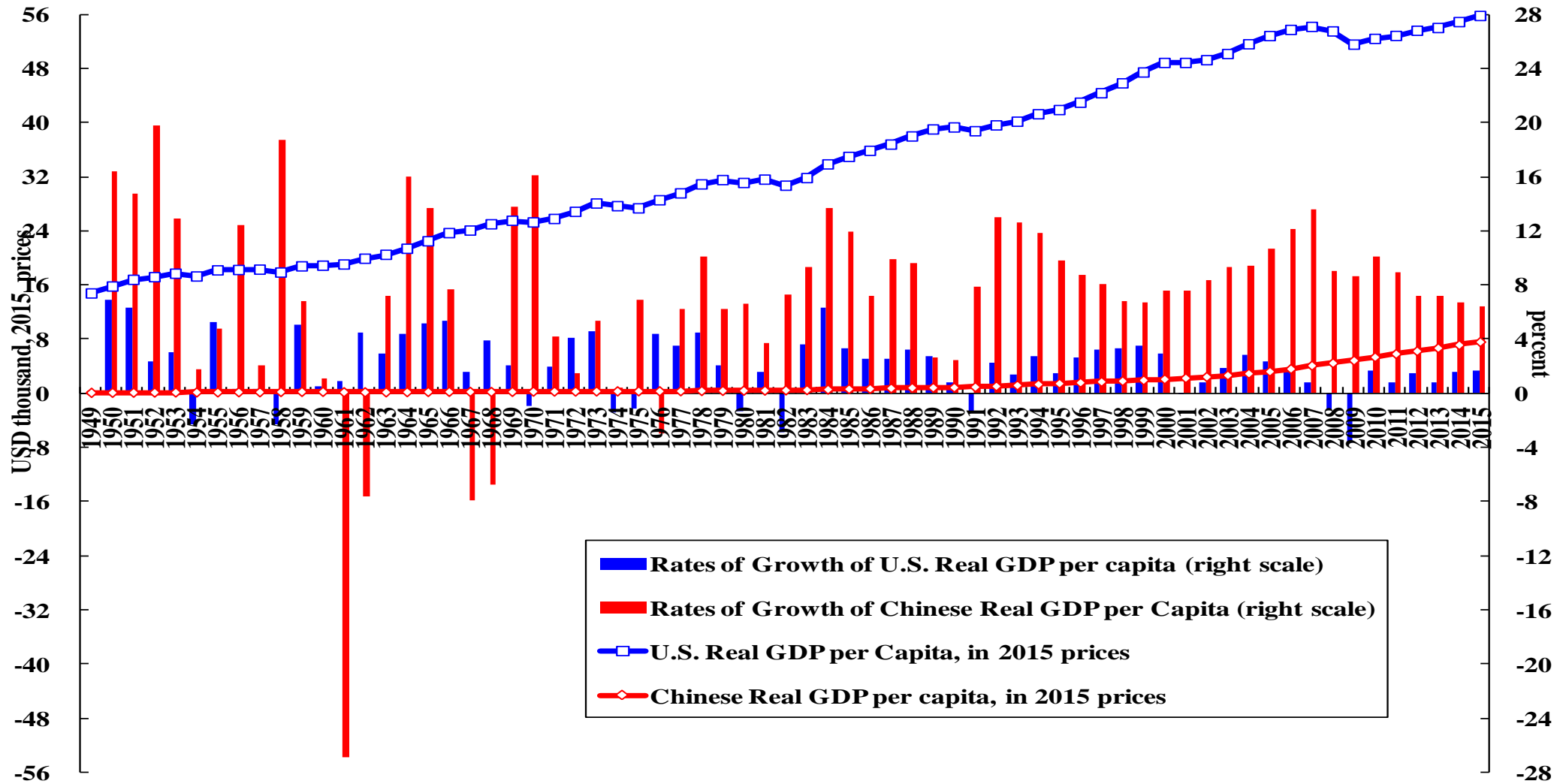
Chinese and U.S. Real GDPs and Their Rates of Growth since 1949 (2015 US\$)

Chinese and U.S. Real GDPs and Their Rates of Growth since 1949
(trillion 2015 US\$)



Chinese and U.S. Real GDPs per Capita and Their Rates of Growth since 1949 (2015 US\$)

Chinese and U.S. Real GDP per Capita and Their Rates of Growth since 1949
(thousand, 2015 US\$)

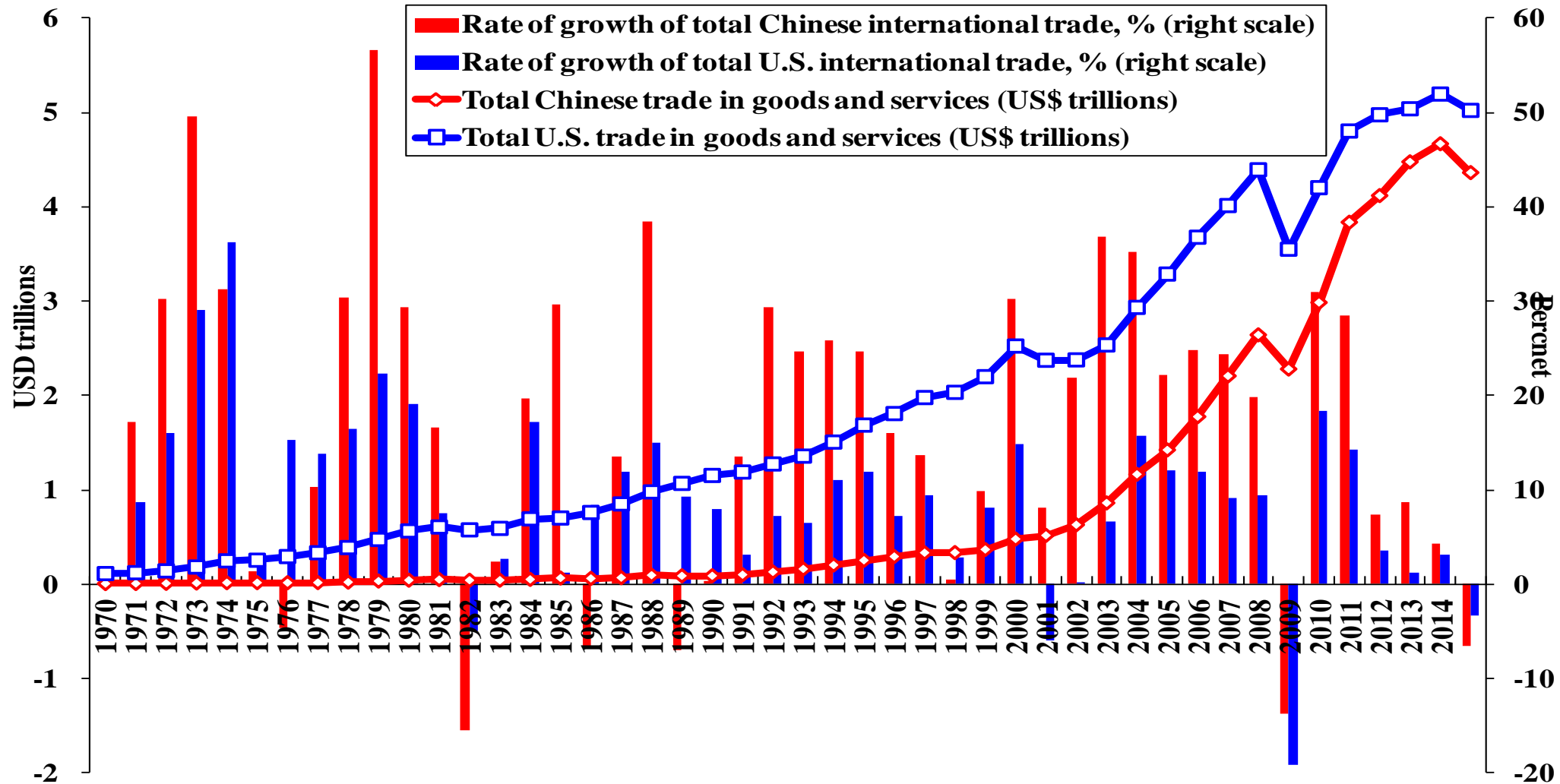


Introduction

- ◆ Chinese international trade in goods and services has also grown very rapidly since the beginning of its economic reform in 1978, and the rate of growth accelerated after Chinese accession to the World Trade Organisation (WTO) in 2001.
- ◆ Chinese total international trade grew from US\$20.3 billion in 1978 to US\$4.36 trillion in 2015, making China the second largest trading nation in the World, just after the U.S. with its total international trade of US\$5.02 trillion.

The Values of Chinese and U.S. International Trade and Their Rates of Growth, 1970- (US\$)

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



Introduction

- ◆ While China is the largest exporting nation in terms of goods and services (US\$2.362 trillion in 2015), followed by the U.S. (US\$2.242 trillion), the U.S. is the largest importing nation in terms of goods and services (US\$2.779 trillion), followed by China (US\$1.999 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.

China in the Global Economy

- ◆ The most important development in the global economy since 1980 is the reform and opening of the Chinese economy and its participation in the World.
- ◆ As a result, the centre of gravity of the global economy, in terms of both GDP and international trade, has been gradually shifting from North America and Western Europe to East Asia, and within East Asia from Japan to China.

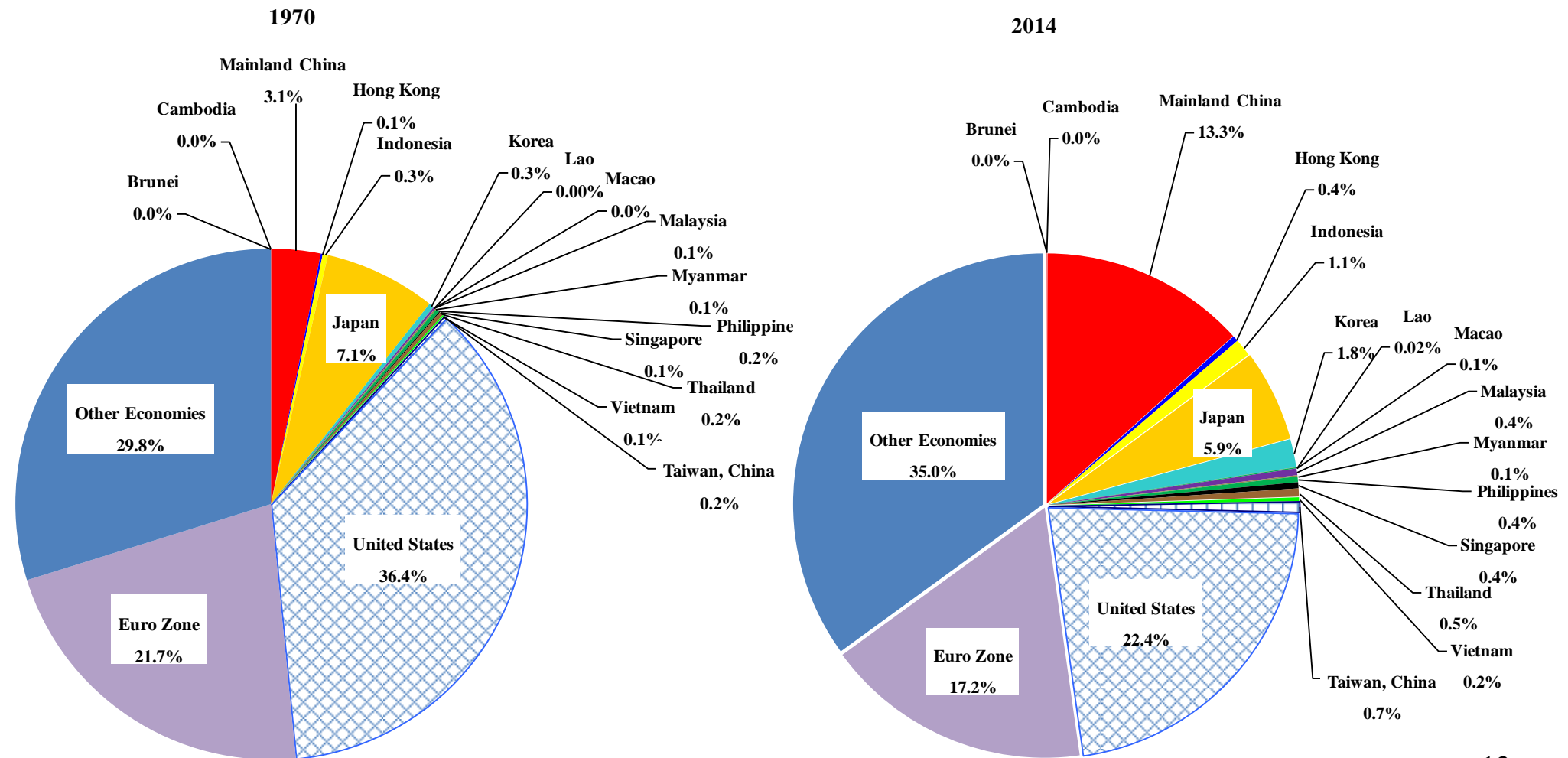
China in the Global Economy

- ◆ In 1970, the United States and Western Europe together accounted for almost 60% of World GDP. By comparison, East Asia (defined as the 10 Association of Southeast Asian Nations (ASEAN) countries--Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam, plus 3 (China including Hong Kong, Macau and Taiwan, Japan and the Republic of Korea)) accounted for approximately 10% of World GDP.
- ◆ Hong Kong, Republic of Korea, Singapore and Taiwan are also known collectively as the East Asian “Newly Industrialized Economies (NIEs)”.

China in the Global Economy

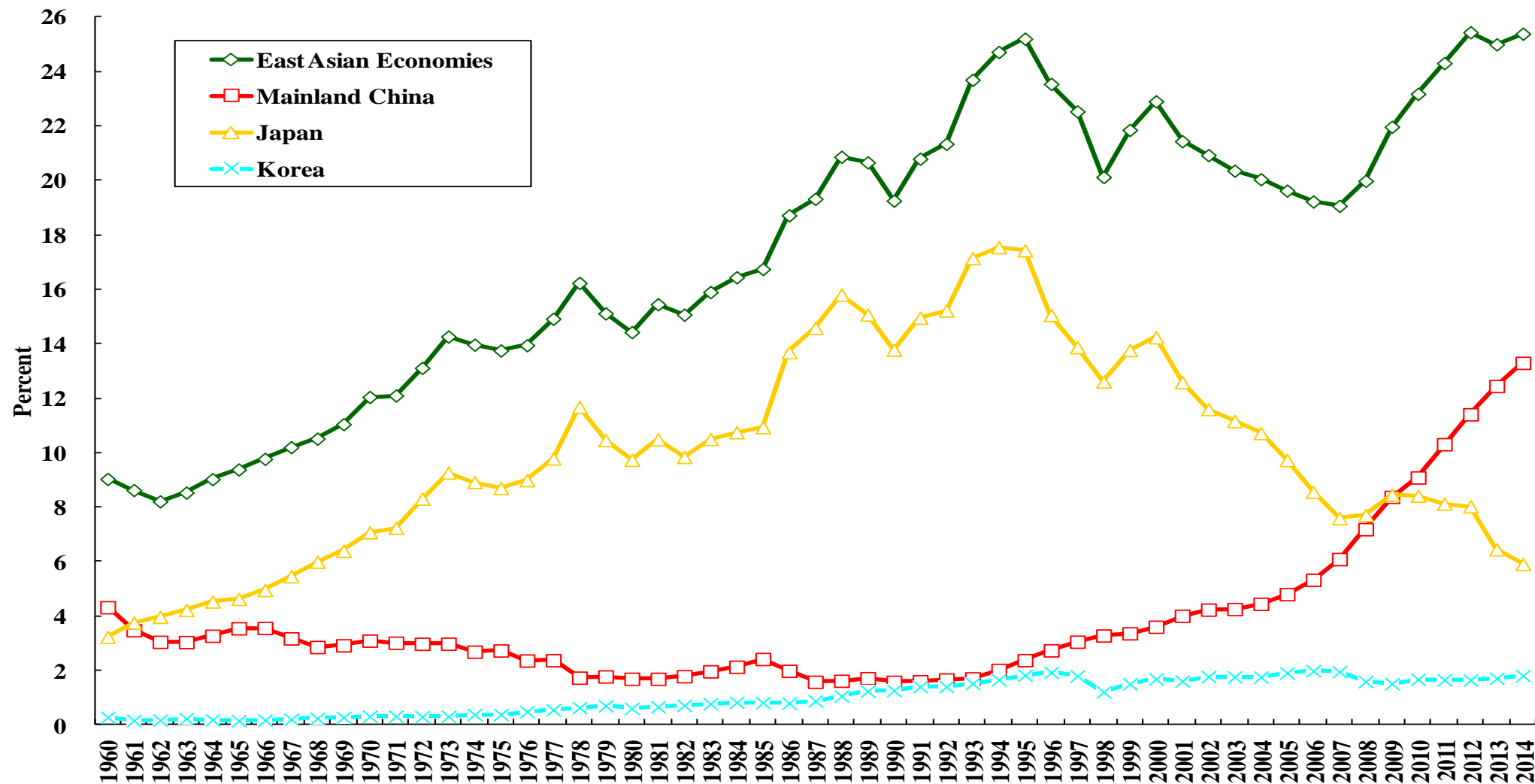
- ◆ By 2014, the share of United States and Western Europe in World GDP has declined to approximately 39.6% whereas the share of East Asia has risen to around 25.4%.
- ◆ The Japanese share of World GDP declined from a peak of almost 18% in the mid-1990s to 5.9% in 2014 while the Mainland Chinese share of World GDP rose from 3.1% in 1970 and less than 4% in 2000 to over 13.3% in 2014.

The Distribution of World GDP, 1970 and 2014, US\$



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

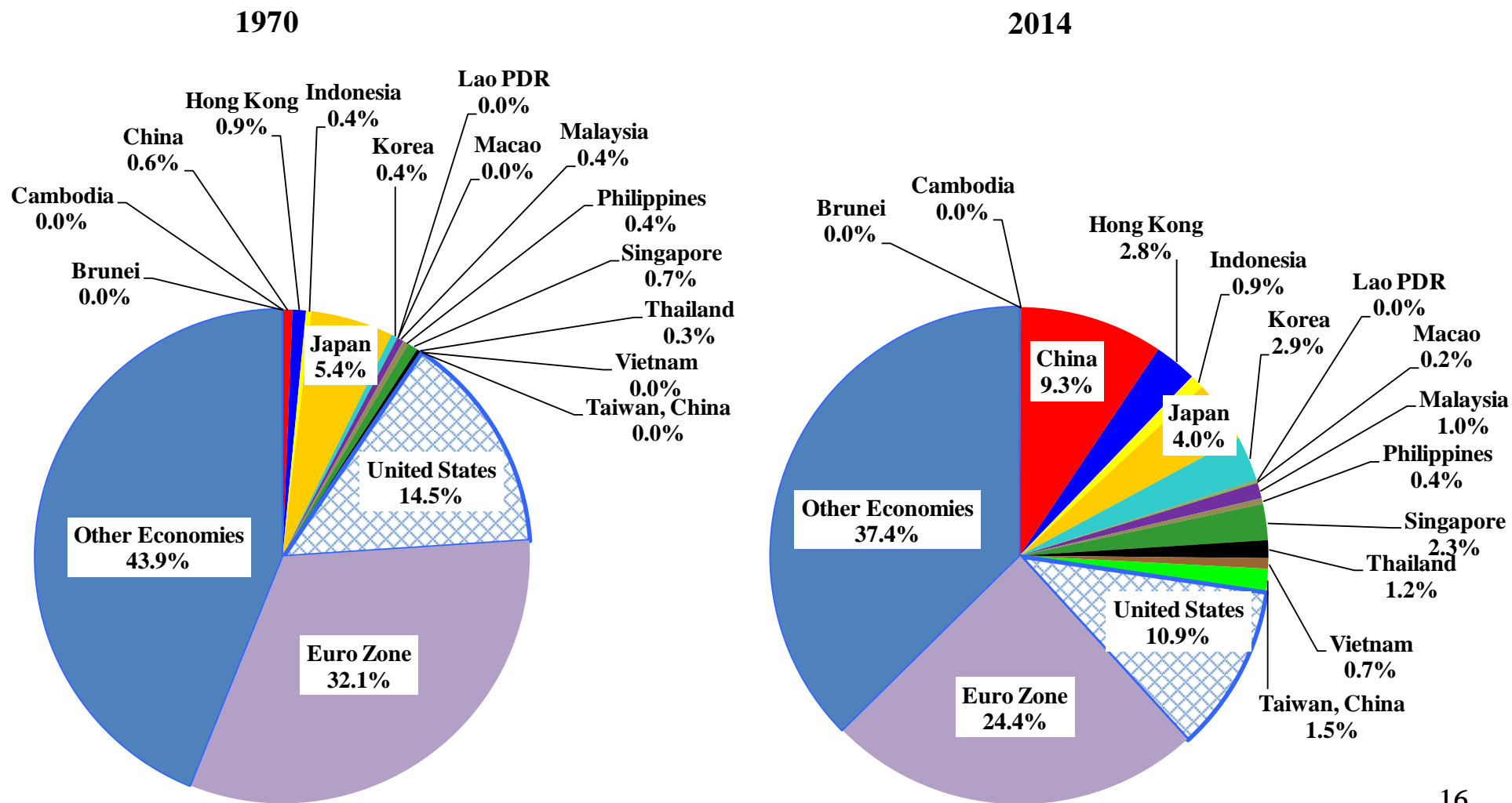


China in the Global Economy:

International Trade

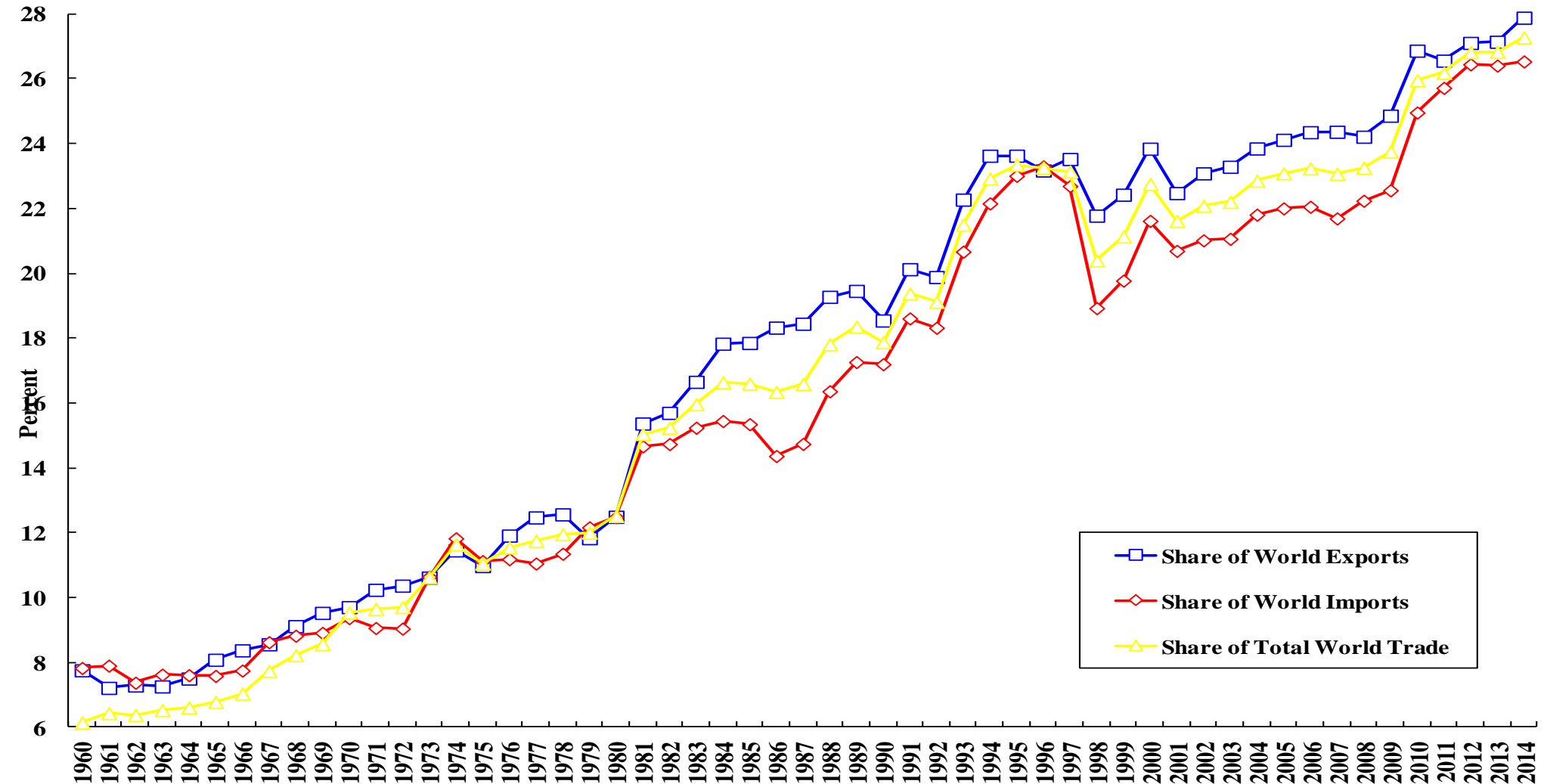
- ◆ In 1970, the United States and Western Europe together accounted for almost 46.6% of World trade in goods and services. By comparison, East Asia accounted for 9.5% of World trade.
- ◆ By 2014, the share of United States and Western Europe in World trade has declined to 35.1% whereas the share of East Asia has risen to almost 27.3%.
- ◆ The Chinese share of World trade rose from 0.6% in 1970 to 9.3% in 2014. The growth in Chinese international trade may be attributed in part to the reform of the Chinese exchange rate system in the early 1990s, which was accompanied by a significant devaluation of the Renminbi, and to Chinese accession to the World Trade Organisation in the 2001.

The Distribution of Total International Trade in Goods and Services, 1970 and 2014



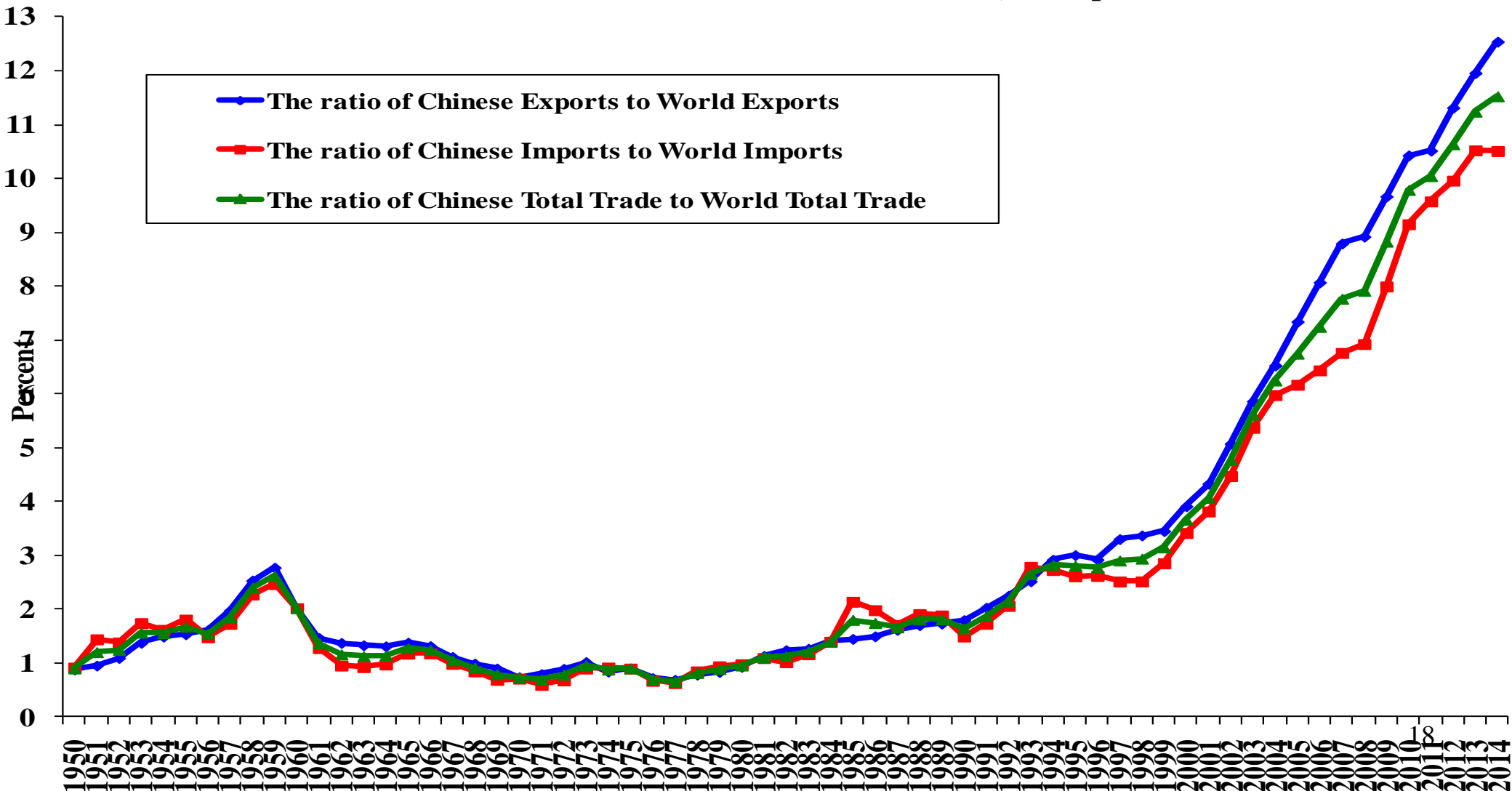
The Rising Share of East Asian Trade in Total World Trade, 1960-present

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



The Chinese Share of Total World Trade, 1950-present (in Goods only)

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

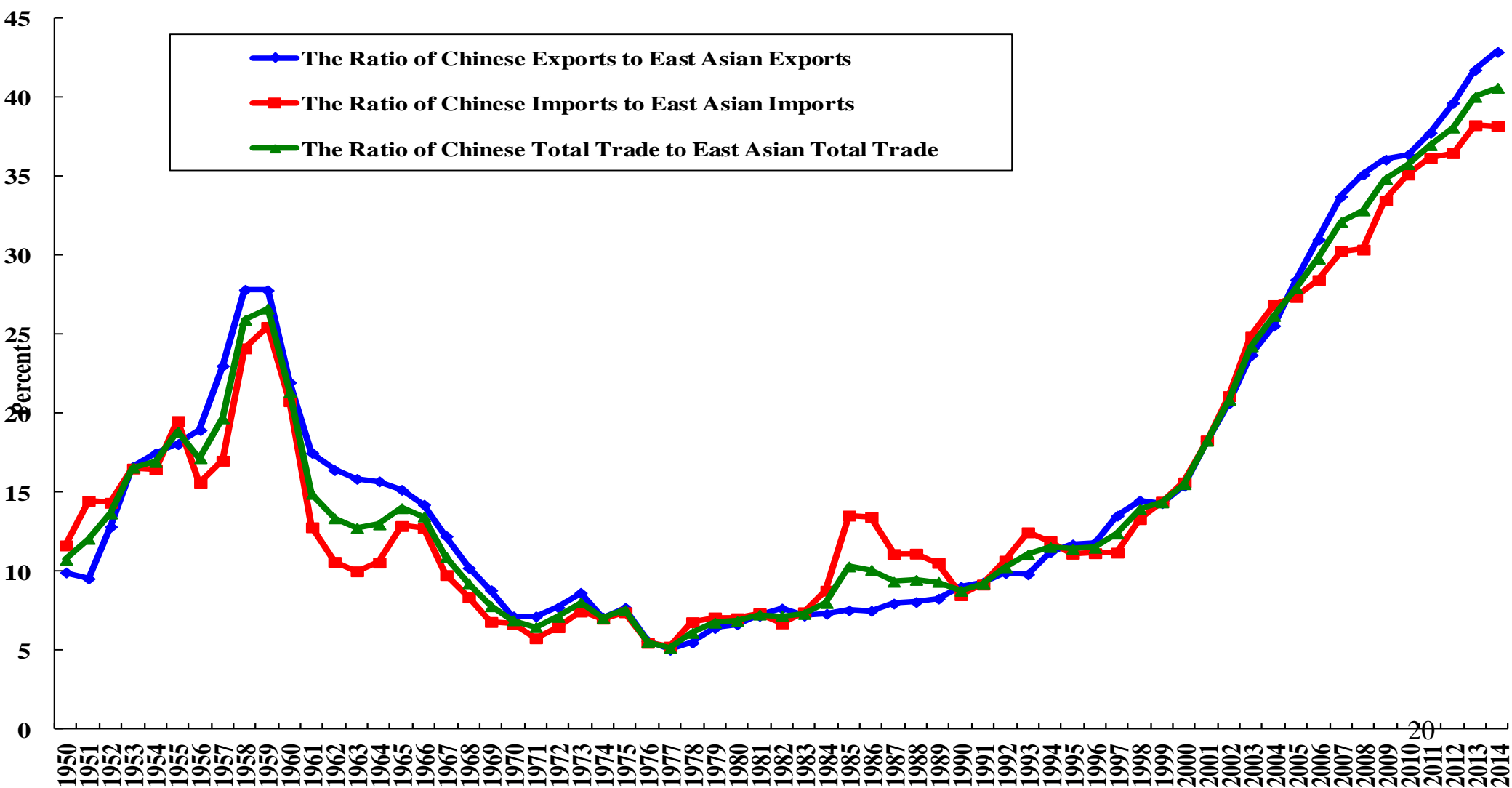


China in the Global Economy: International Trade

- ◆ Chinese international trade also accounted for 40.6% of East Asian international trade in 2014. China runs a trade deficit with almost every other East Asian economy.

The Chinese Share of Total East Asian Trade in Goods, 1950-present

The Share of Chinese Trade in Total East Asian Trade, 1950-present



China in the Global Economy:

International Trade

- ◆ China ranked as either the largest or the second largest trading partner of almost every economy in the Asia-Pacific region.
- ◆ In 2015 China has also become the largest trading partner country of the U.S., surpassing Canada.

The Ranks of China as Trading Partner of Asia-Pacific Countries/Regions and Vice Versa, 2014

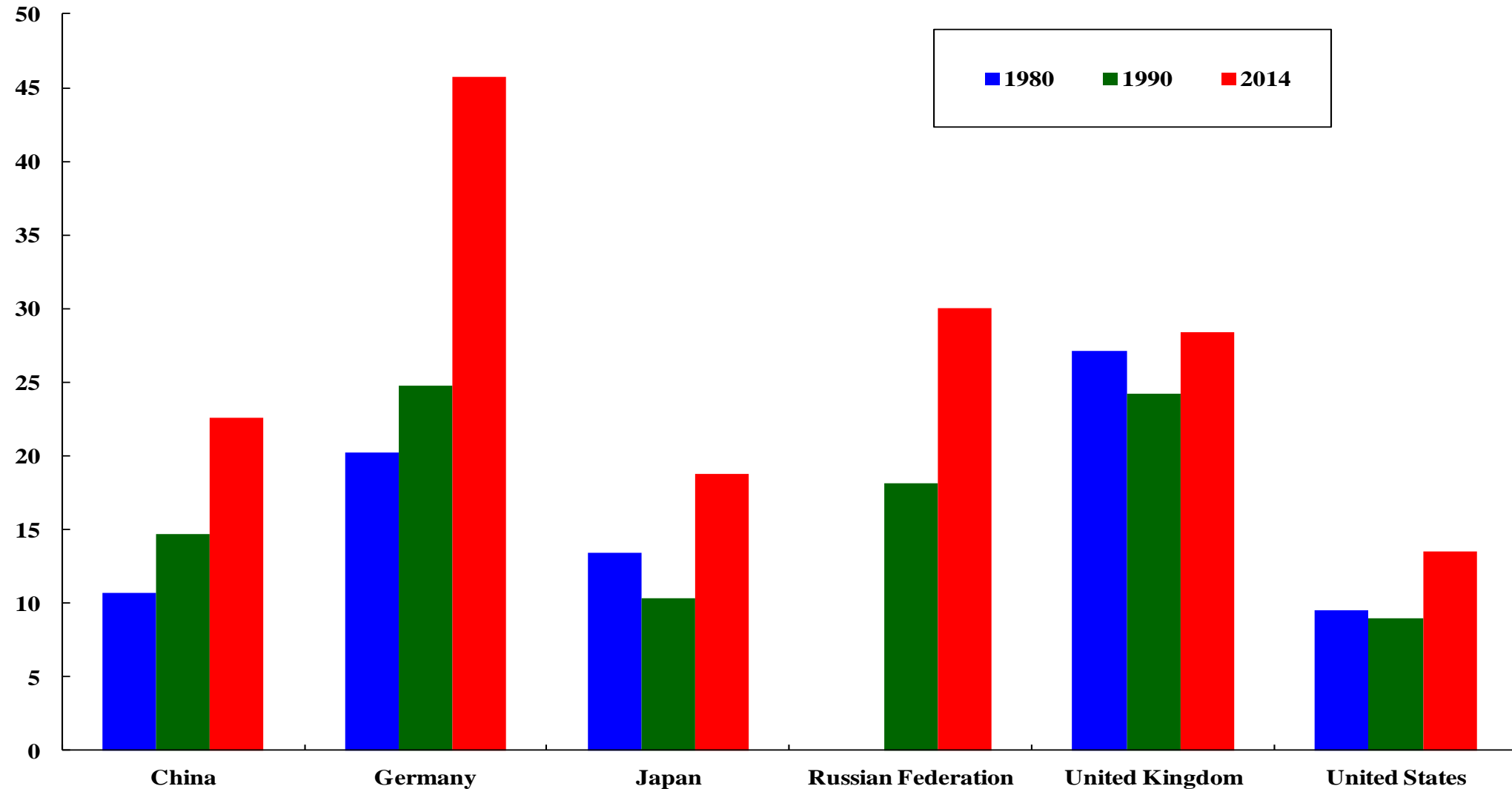
Country/Region	Chinese Rank as Trading Partner of Country/Region	Rank of Country/Region as Trading Partner of China
Australia	1	7
Brunei	3	105
Cambodia	2	85
Hong Kong	1	2
Indonesia	1	18
Japan	1	3
Korea	1	4
Laos	2	88
Macau	1	82
Malaysia	1	8
Myanmar	1	34
New Zealand	1	43
Philippines	2	25
Singapore	1	13
Taiwan	1	5
Thailand	1	15
United States	2	1
Vietnam	1	11

China in the Global Economy: International Trade

- ◆ Exports has become a relatively small percentage of Chinese GDP in recent years as the Chinese economy continues to grow.
- ◆ The low exports to GDP ratio is typical for large economies such as the U.S. and Japan (and will be part of the “New Normal”).

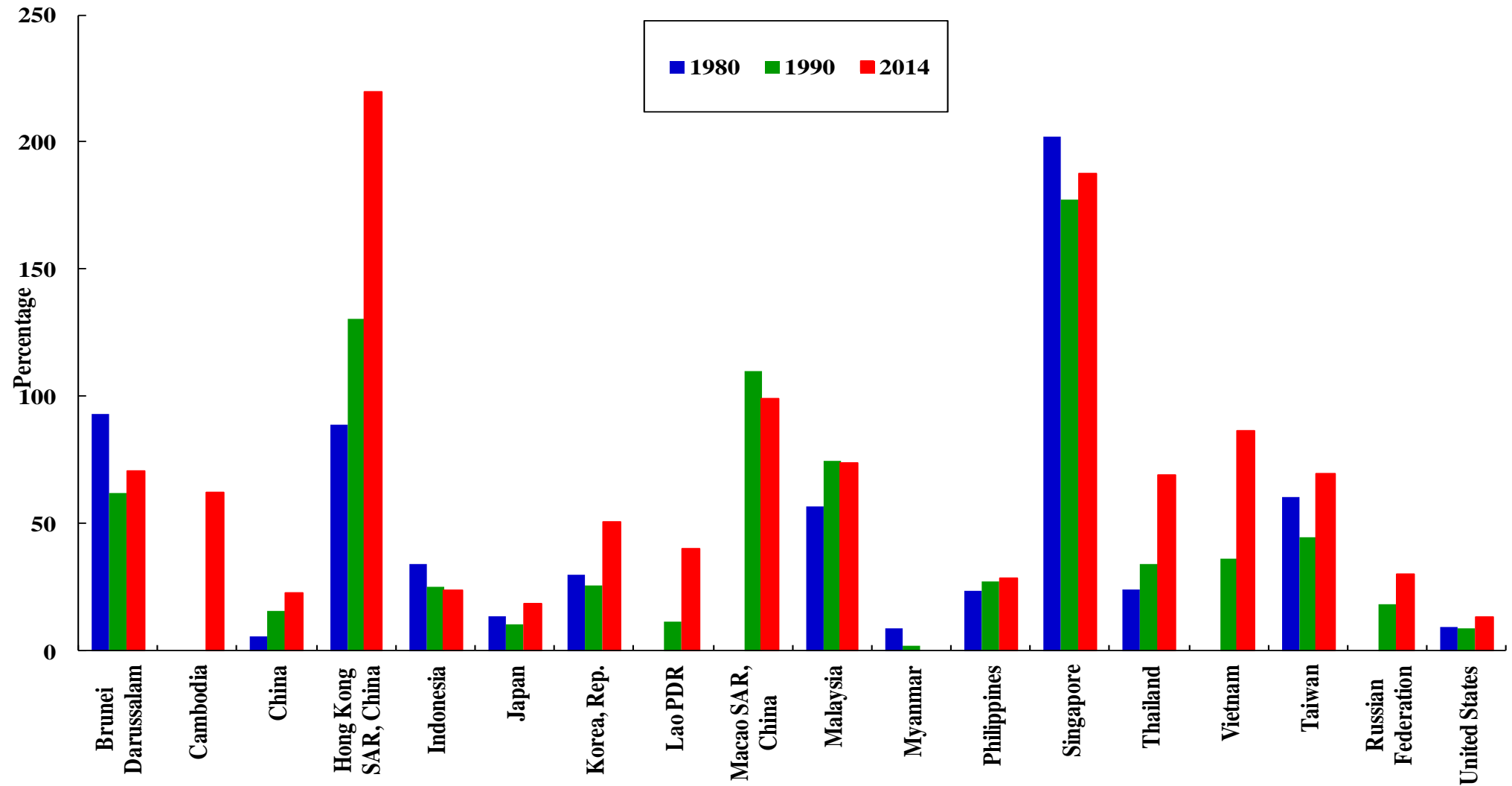
Exports of Goods and Services as a Share of GDP in Selected Economies

Exports of Goods and Services as a Share of GDP in Selected Economies



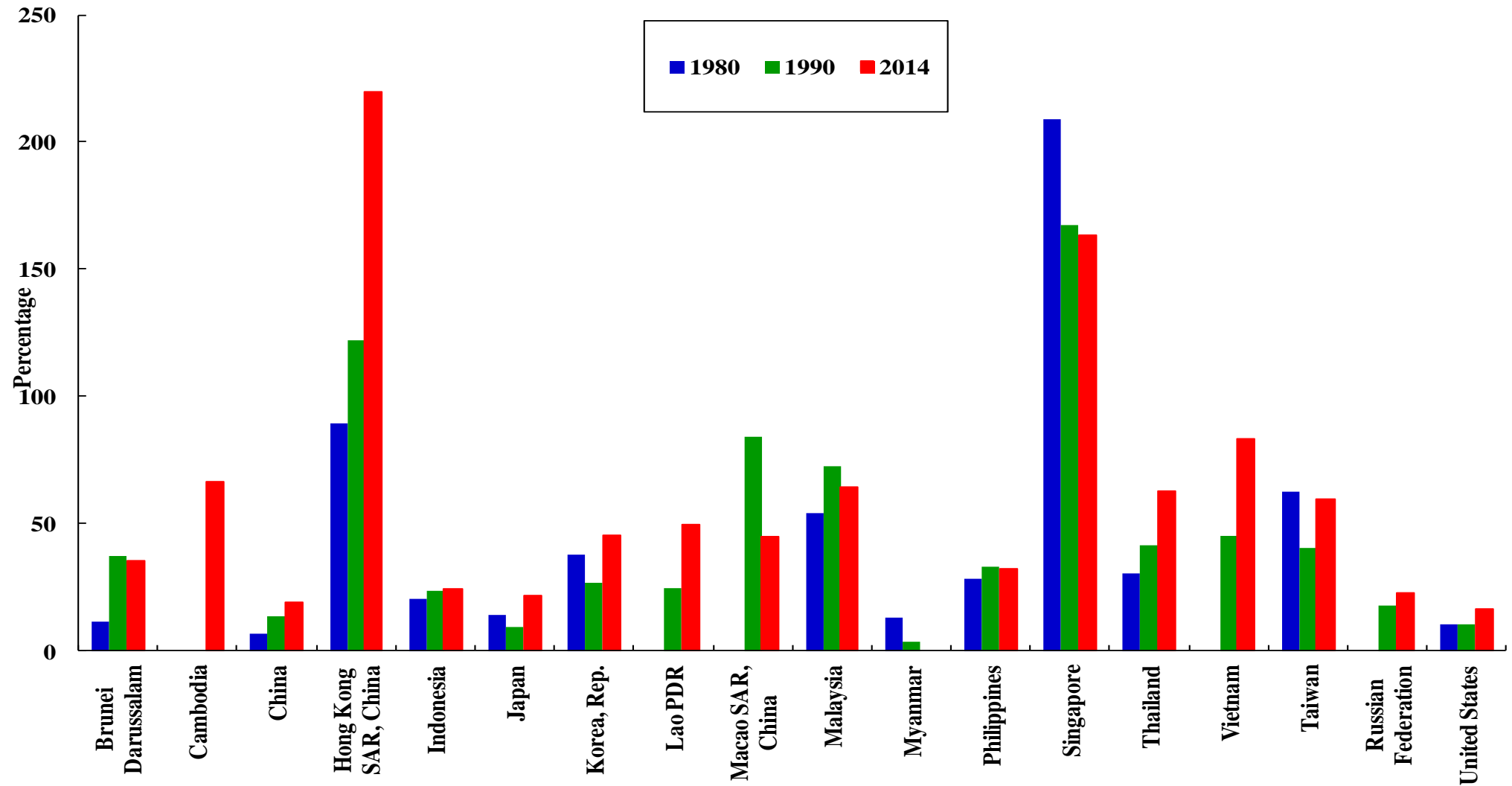
Exports of Goods and Services as a Percent of GDP: Selected Economies

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



The Chinese Economic Fundamentals

- ◆ Long-term economic growth of a country depends on the rates of growth of its primary inputs—capital (tangible or physical) and labor—and on technical progress (equivalently, the growth of total factor productivity)—that is, the ability to increase output without increasing inputs.
- ◆ The rate of growth of tangible or physical capital depends on the rate of investment on structure, equipment and basic infrastructure, which in turn depends on the availability of national savings and foreign investment and loans as well as foreign aid.
- ◆ The rate of technical progress depends on the cumulative past investment in intangible capital (including human capital and Research and Development (R&D) capital).

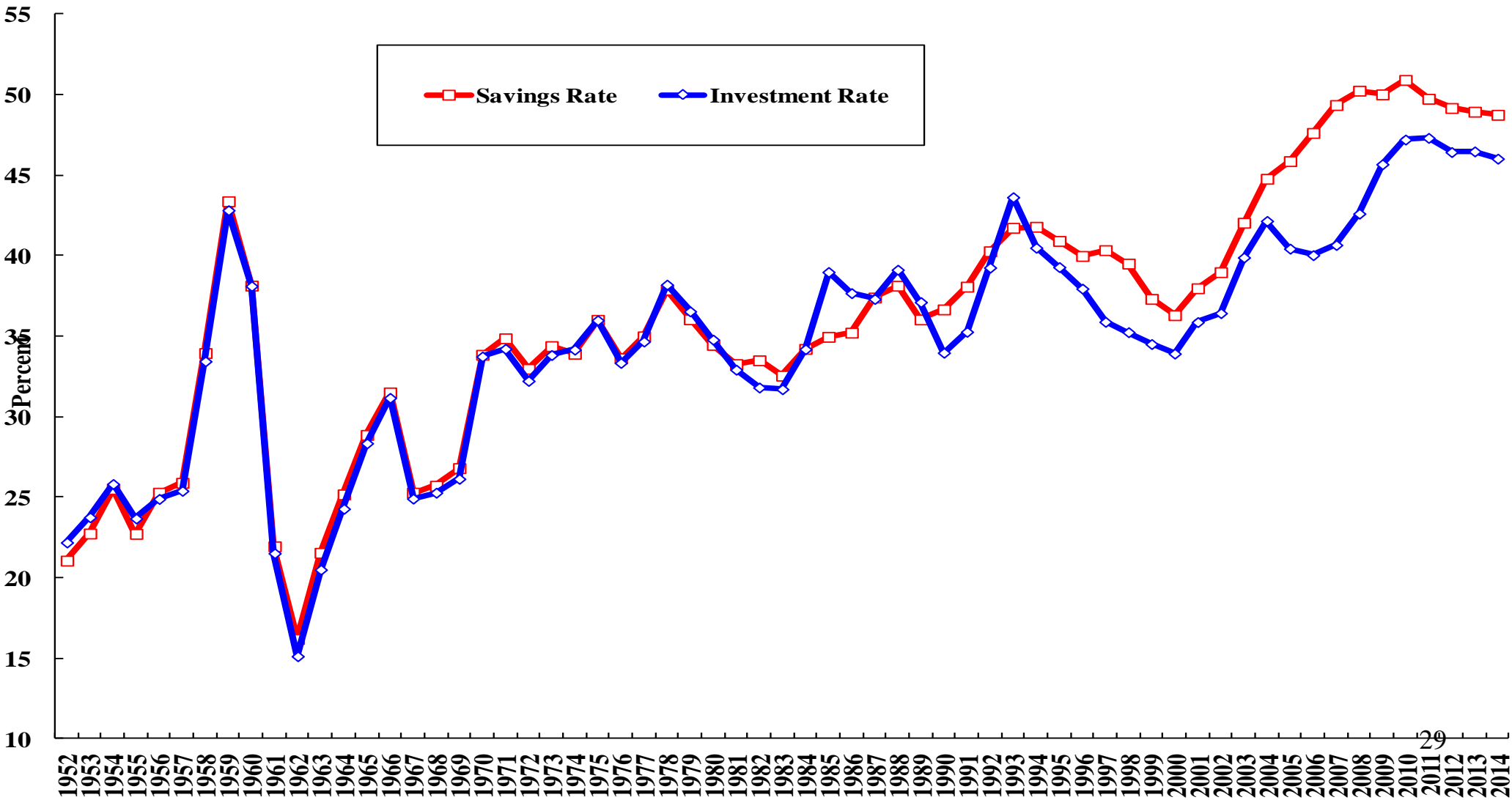
The Chinese Economic Fundamentals:

Capital

- ◆ Chinese economic growth since 1978 has been underpinned by a consistently high domestic investment rate, enabled by a national savings rate above 35% except for a brief start-up period in the early 1950s. The Chinese saving rate rose to around 40% in the early 1990s and has at times approached or even exceeded 50% in more recent years.
- ◆ The high Chinese saving rate means that the Chinese economy can finance all of its domestic investment needs from its own domestic savings alone, without having to depend on the more fickle foreign capital inflows (including foreign direct investment, foreign portfolio investment, foreign aid, or foreign loans).
- ◆ In particular, it does not need to borrow abroad and bear the potential risks of a large, short-term and often interruptible, foreign-currency denominated debt. The Chinese economy is therefore also more immune from external disturbances than other economies.
- ◆ Thus, the Chinese economy is assured of a high rate of investment and hence a high rate of growth of its tangible capital stock.

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



The Chinese Economic Fundamentals:

Capital

- ◆ In addition, since new resources are forthcoming each year from new savings, enabling new investments to be made, the necessity of restructuring, redeploying or privatising existing fixed assets is greatly diminished. Thus, the potentially politically divisive issues such as factory closings and lay-offs of redundant workers and the creation of “losers” can be avoided.
- ◆ A high national savings rate also allows the normally more efficient non-state sector greater room and greater scope for development and expansion (there is less “crowding out” by the investment of the government as well as the state-owned firms).
- ◆ However, tangible capital input-driven economic growth has its limitations, because as the stock of tangible capital relative to labor increases, the marginal productivity of tangible capital will begin to decline and will eventually reach a point when additional tangible capital is no longer productive. This is a point made by Prof. Paul Krugman in his influential article in Foreign Affairs.

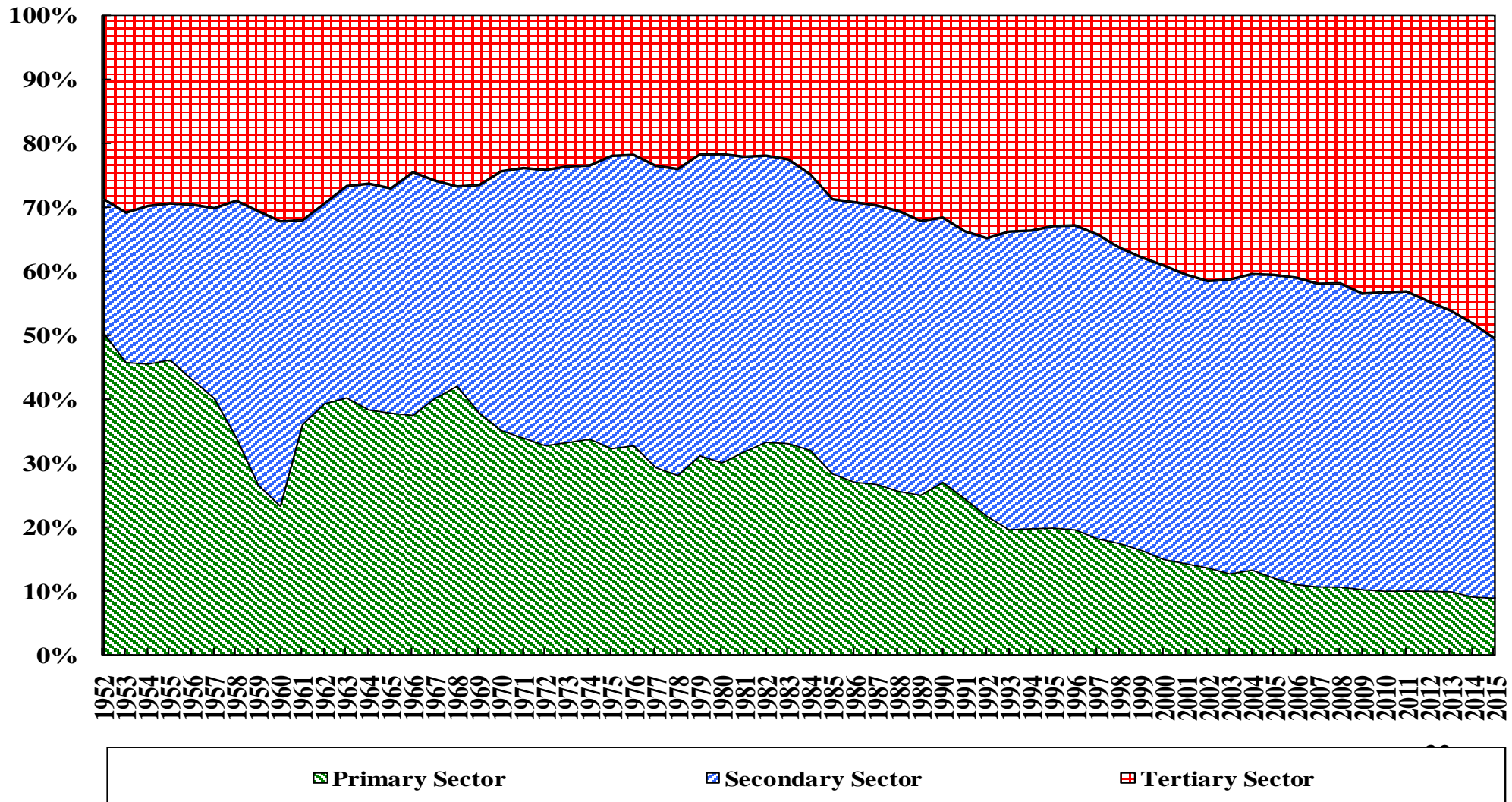
The Chinese Economic Fundamentals:

Labor

- ◆ China, like Japan, Taiwan, and South Korea in their respective early stages of economic development, has an unlimited supply of surplus labor—there is therefore no shortage of and no upward pressure on the real wage rate of unskilled, entry-level labor over an extended period of time.
- ◆ The distribution of Chinese GDP by production-originating sectors in 2015 was approximately: Primary (agriculture), 9.0%; Secondary (manufacturing, mining and construction), 40.5%; and Tertiary (services), 50.5%. (Note that mining is normally included in the primary sector in most other economies.)
- ◆ The distribution of employment by sector in 2014 was: Primary, 29.5%; Secondary, 29.9%; and Tertiary, 40.6%.
- ◆ The agricultural sector employed 29.5% of the Chinese labor force but produced only 9.2% of the Chinese GDP in 2014. Thus labor can be productively transferred to the other two sectors where labor productivities and wage rates are higher as long as complementary₃₁ capital and demand are available.

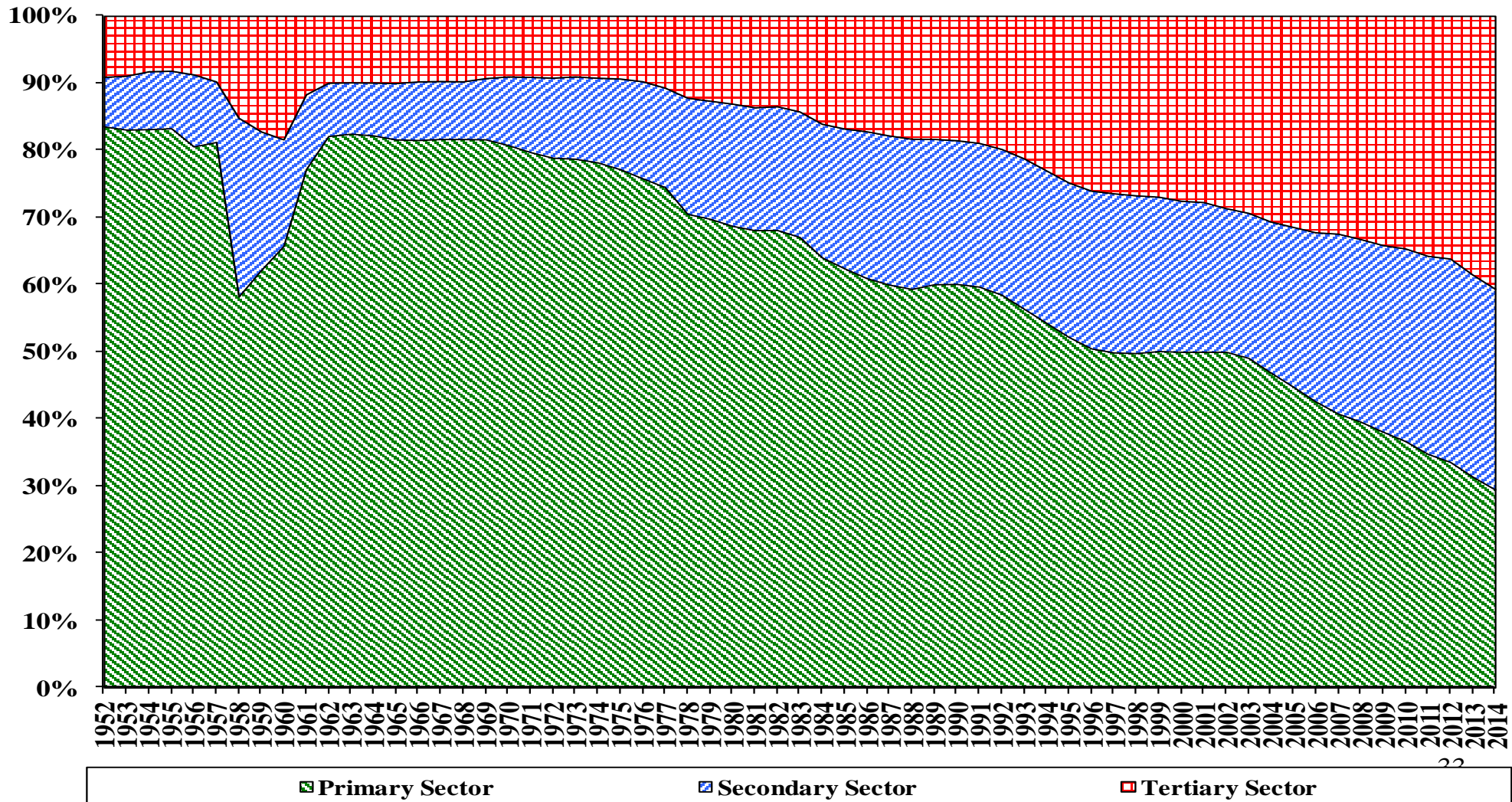
The Distribution of Chinese GDP by Sector Since 1952

The Distribution of GDP by Sector



The Distribution of Chinese Employment by Sector Since 1952

The Distribution of Employment by Sector since 1952



The Chinese Economic Fundamentals:

Intangible Capital

- ◆ China has a long tradition of emphasis on education and learning (human capital) and will continue to increase its investment in human capital. The enrollment rate of tertiary education has been rising rapidly and stands at over 30 percent today. It is expected to rise further over the next decades as private tertiary educational institutions become more numerous in response to demand and facilitated by government policy.
- ◆ China has also begun to increase its expenditure on Research and Development (R&D), with the target of 2.2 percent of GDP by 2015.
- ◆ However, relative to many other economies, China lags behind on investment in both human capital and R&D capital, especially on a per capita basis.

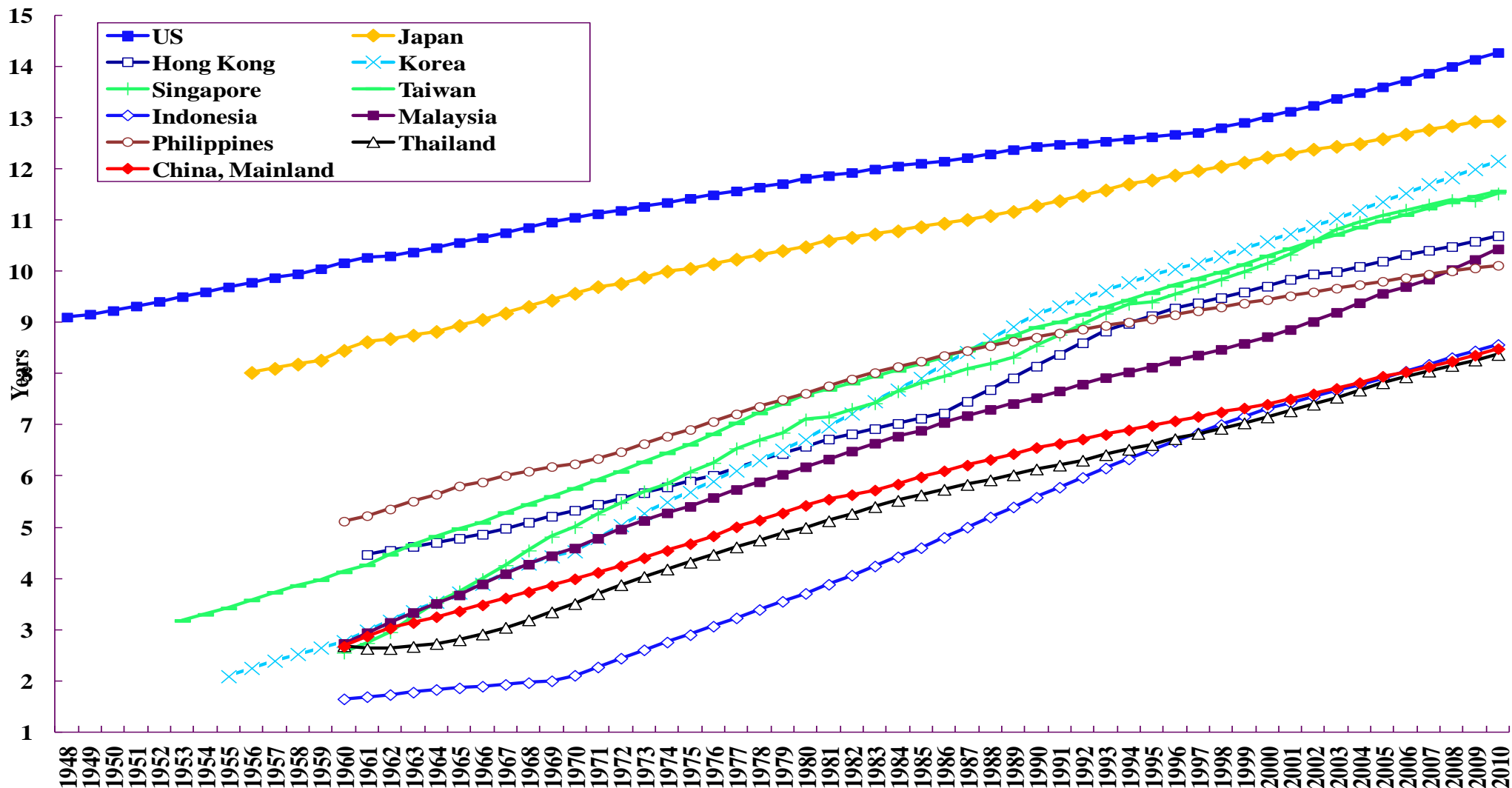
The Chinese Economic Fundamentals:

Human Capital

- ◆ One indicator of the level of human capital in an economy is the average number of years of schooling per person in the working-age population. In the following chart, the average number of years of schooling is compared across selected economies.
- ◆ By this measure, the United States and Japan are clearly the global leaders. South Korea has also been catching up fast. Most of the other East Asian economies also have quite rapidly increasing levels of human capital but it will take a while before they can catch up with the levels of human capital in the developed economies. China, Indonesia and Thailand have lagged behind in terms of investment in human capital.
- ◆ China has a different definition of working-age population—with a terminal age of 60--and so the number of school years per person in the customary working-age population, that is, up to 65, may well have been lower, given the lower enrolment rates at all levels of education 60 years ago.
- ◆ The number of school years per working-age person in China was probably around 9 years in 2014.

Average Number of Years of Schooling of Selected Economies (1948-present)

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

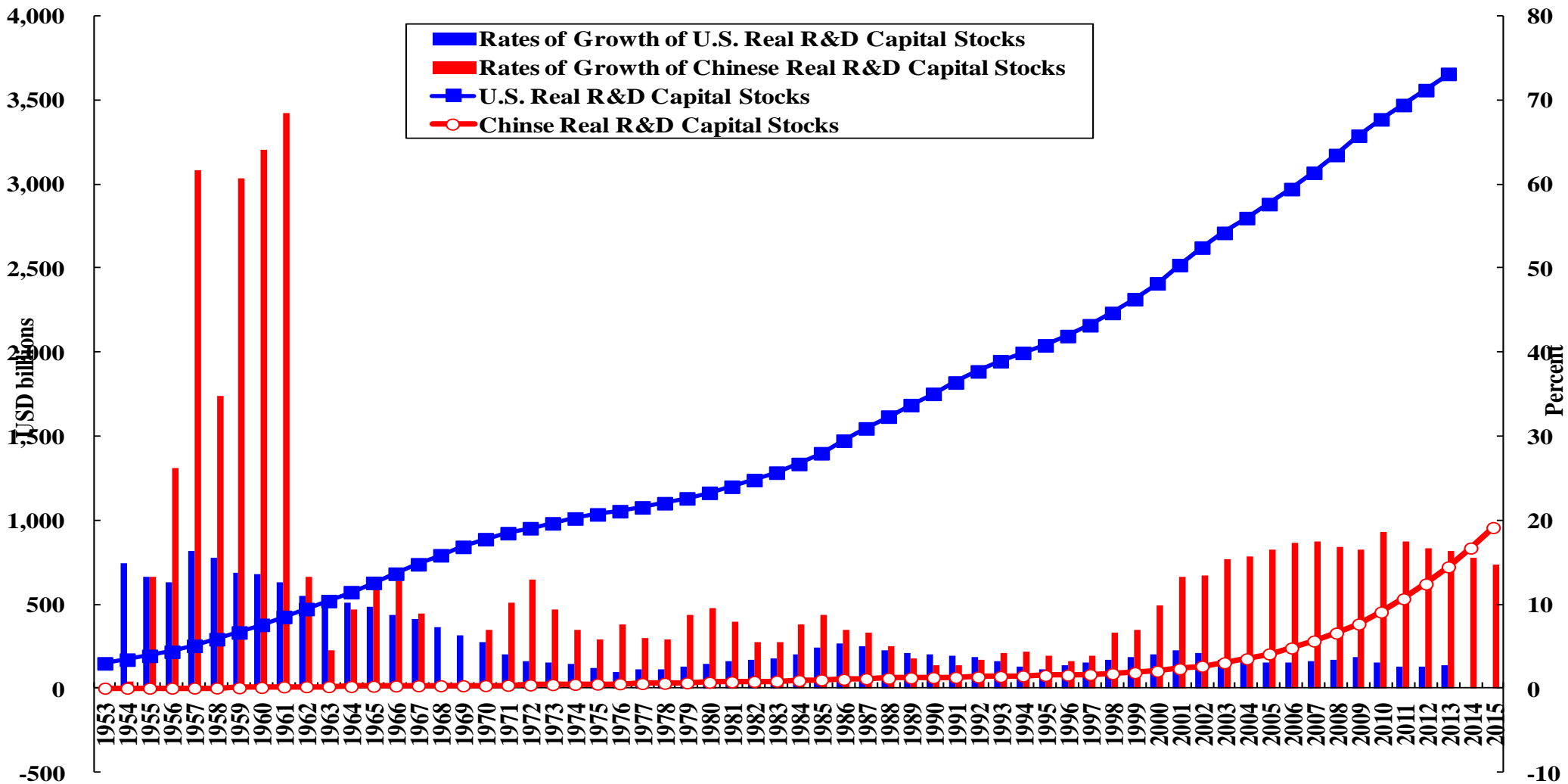


The Chinese Economic Fundamentals: R&D Capital Stock

- ◆ The R&D capital stock, defined as the cumulative past real expenditure on R&D less the depreciation of 10% per year, is an useful indicator of innovative capacity. It should quite properly be treated as capital since R&D efforts generally take years to yield any results.
- ◆ Lawrence J. Lau and Yanyan Xiong (2015), in their Working Paper, “Are There Laws of Innovation? Part I: Introduction”, have constructed R&D capital stocks for the Group-of-Seven (G-7) countries, the East Asian Newly Industrialized Economies (NIEs) and China. The R&D capital stocks of China and the U.S. are presented in the following chart.
- ◆ At US\$3.656 trillion in 2013 (in 2012 prices), the U.S. is the World leader in R&D capital stock. The Chinese R&D capital stock, at US\$722 billion in 2013, has caught up with those of most countries and regions with the exceptions of the U.S., Japan and Germany. ³⁷

R&D Capital Stocks and their Growth Rates: A Comparison of China and the U.S., 2012 US\$

Real R&D Capital Stocks and their Growth Rates: A Comparison of China and the U.S.
(Billion US\$, 2012 Prices)



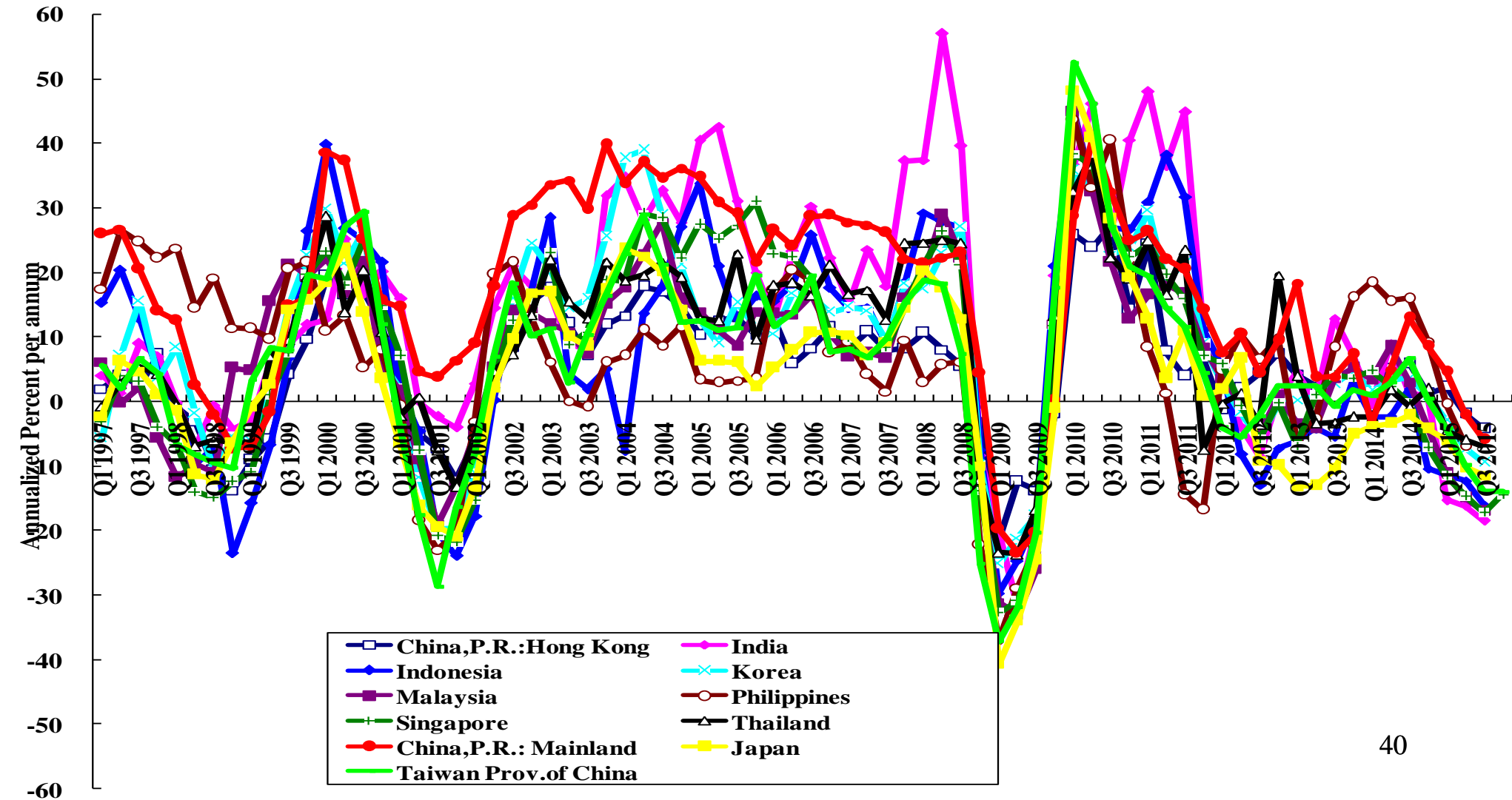
The Chinese Economic Fundamentals:

The Size of the Domestic Economy

- ◆ The huge domestic market of 1.37 billion consumers with pent-up demand for housing and transportation and other consumer goods and services (e.g., education, health care, and more recently, elderly care), enables the realization of significant economies of scale in production in many manufacturing industries, based entirely on the domestic market in China.
- ◆ The huge domestic market also greatly enhances the productivity of intangible capital (e.g., R&D capital and goodwill including brand building) by allowing the fixed costs of the R&D for a new product or process or advertising and promotion in brand building to be more easily amortized and recovered.
- ◆ Another important implication of the size of the domestic economy is the relatively low external dependence. Thus, while the rates of growth of Chinese exports and imports fluctuate like other economies, the rate of growth of Chinese real GDP has been relatively much more stable. (China is represented by a red line in the following charts.)

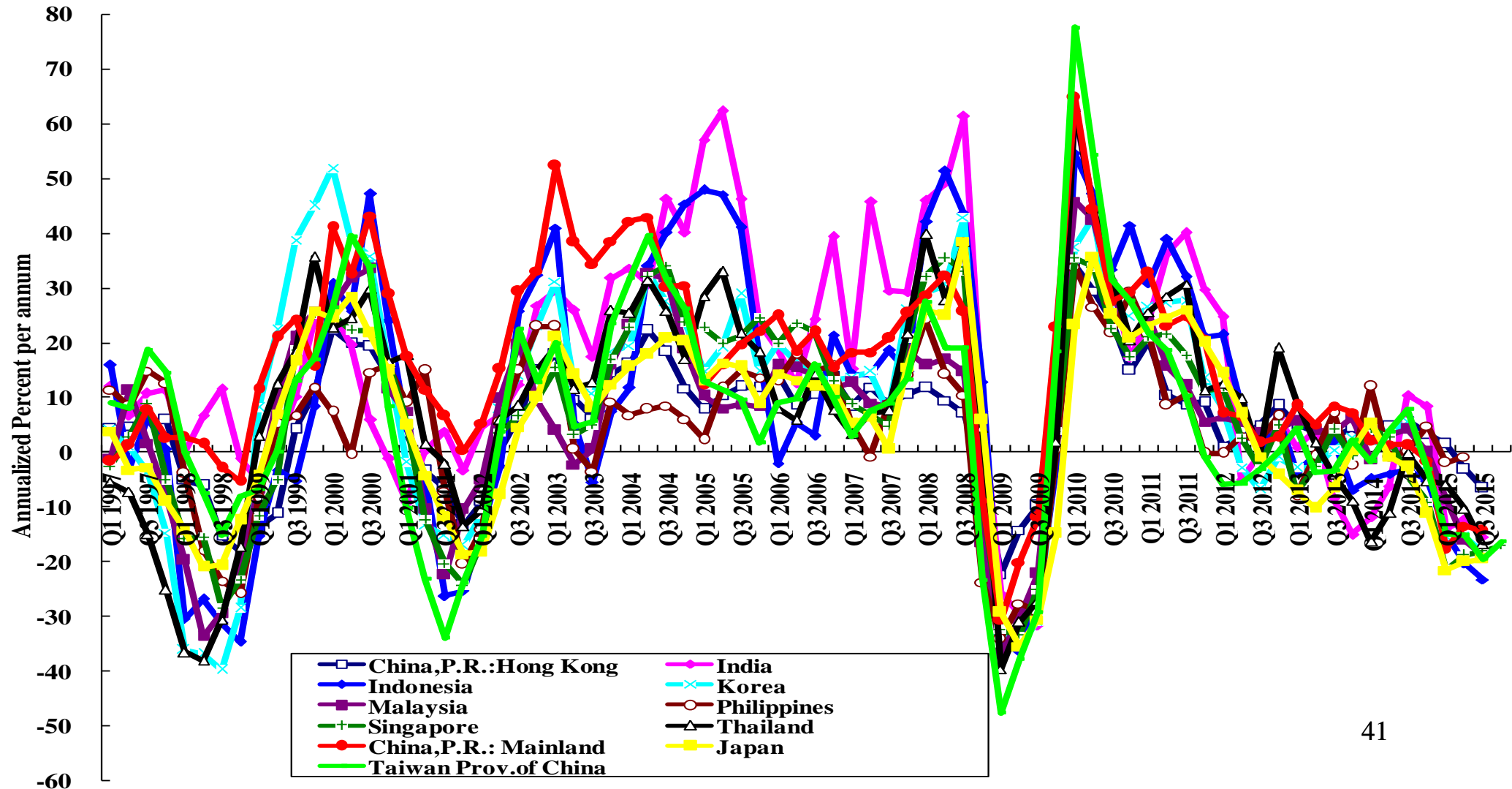
Quarterly Rates of Growth of Exports of Goods: Selected Asian Economies

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



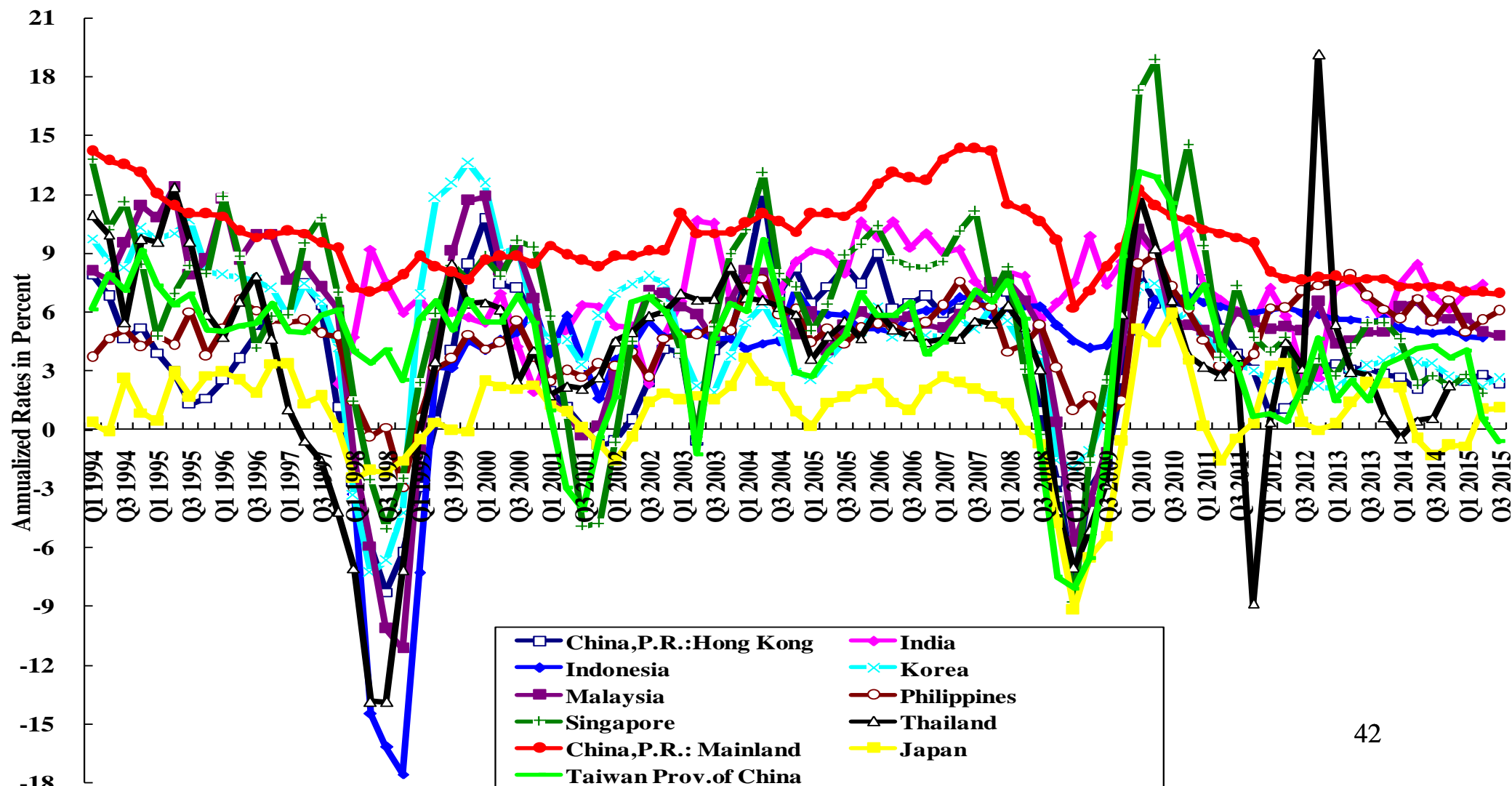
Quarterly Rates of Growth of Imports of Goods: Selected Asian Economies

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 Chinese Economic Fundamentals: Relative Backwardness

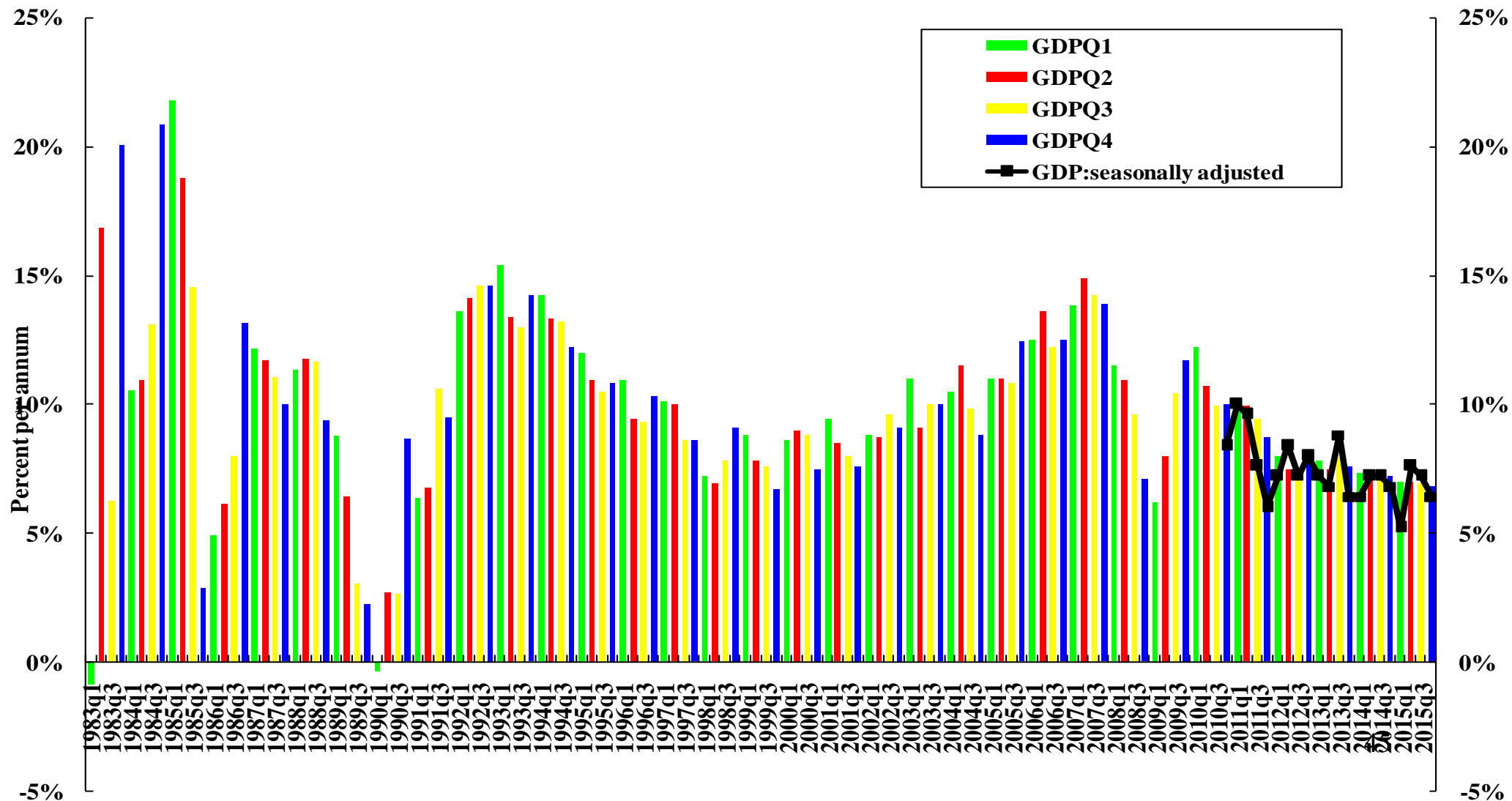
- ◆ In addition to a high national savings rate, a large pool of surplus labor, rising investment in intangible capital (human capital and R&D capital), and the large size of its economy, China also has the advantage of relative backwardness.
- ◆ Thus, the Chinese economy has:
 - ◆ The ability to learn from the experiences of successes and failures of other economies, e.g., by adopting an export-oriented rather than an import-substitution development strategy;
 - ◆ The ability to leap-frog and by-pass stages of development (e.g., the telex machine, the VHS video players, the fixed landline phones and the personal computer); and
 - ◆ The possibility of creation without destruction (e.g., online virtual bookstores like Amazon.com do not have to destroy brick and mortar bookstores which do not exist in the first place; internet shopping versus brick and mortar malls).

The Transition to a “New Normal” and the Thirteenth Five-Year (2016-2020) Plan

- ◆ Going forward, will the Chinese economy continue to grow at close to 10 percent per annum in the future? The short answer is no, for many reasons. The target rate of growth under the “New Normal” is likely to be 6.5 percent per annum as indicated in the Thirteenth Five-Year (2016-2020) Plan.
- ◆ Since 2013, the Chinese economy has been in the process of transitioning to a “New Normal”. The rate of growth of the Chinese economy has since been slowing down gradually from double-digit rates to 7.7% in 2013, 7.3% in 2014 and 6.9% in 2015, which is in accord with the Chinese plan.
- ◆ In 2015Q1, 2015Q2, 2015Q3 and 2015Q4, the annualized rates of growth were respectively 7.0%, 7.0%, 6.9% and 6.8%, Y-o-Y. Seasonally adjusted, they were 5.2%, 7.6%, 7.2% and 6.4% respectively.
- ◆ The target rate of growth of Chinese GDP in 2016 is between 6.5% and 7%.

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

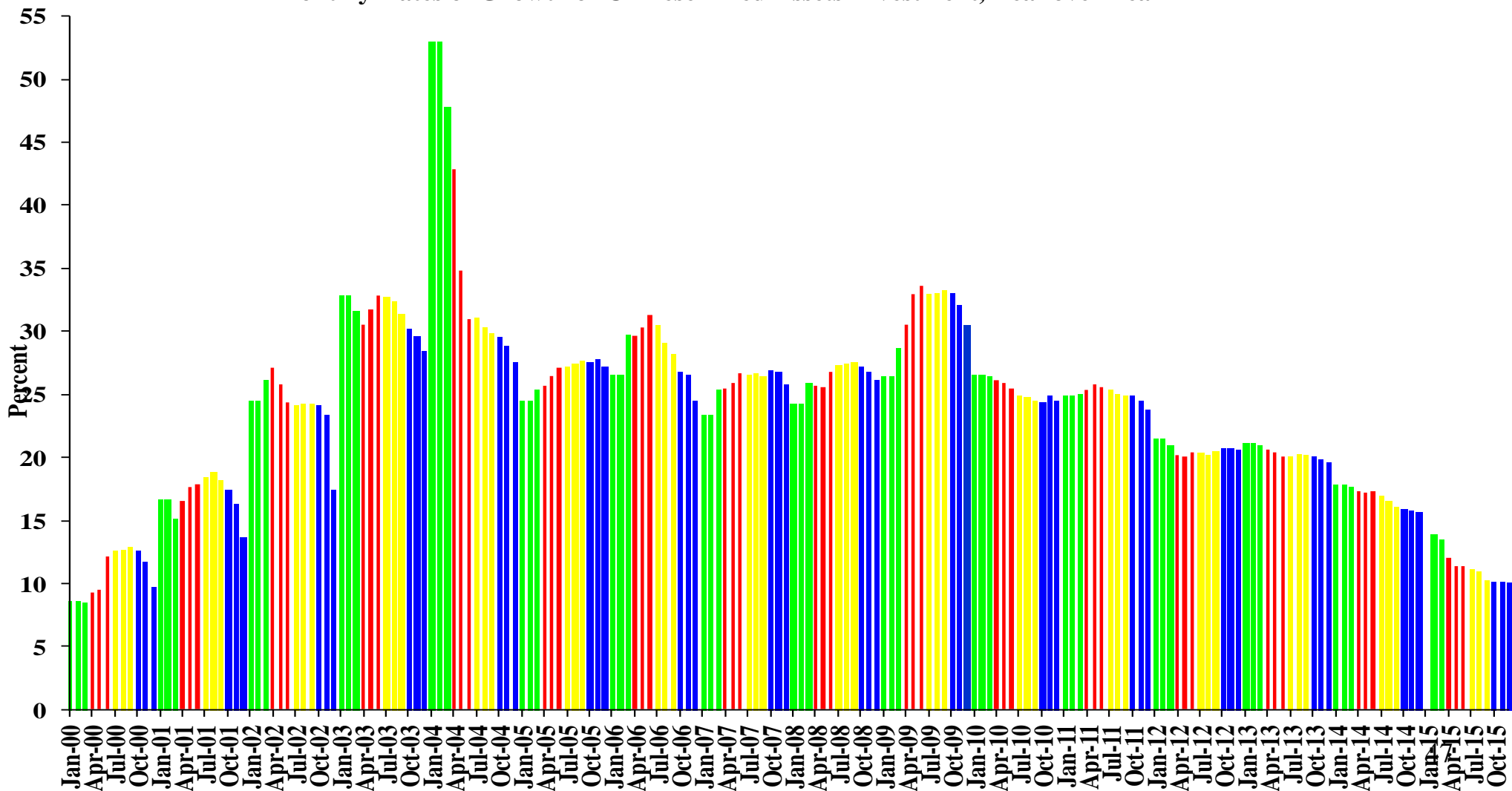


The Transition to a “New Normal” and the Thirteenth Five-Year (2016-2020) Plan

- ◆ The rate of growth of fixed asset investment has been declining, reflecting, in part, that the expectation that the rate of growth of real GDP will decline from almost 10% to around 6.5% going forward, and in part the changing composition of GDP with the service sector, which requires much less fixed asset investment per unit GDP, becoming the largest sector of the economy (50.5% in 2015).
- ◆ However, the expectations of the consumers appear to have remained positive. The rate of growth of real retail sales has continued to be approximately one and a half times the rate of growth of real GDP.
- ◆ The target average growth rate of the Chinese economy for the Thirteenth Five-Year (2016-2020) Plan period is around 6.5%.

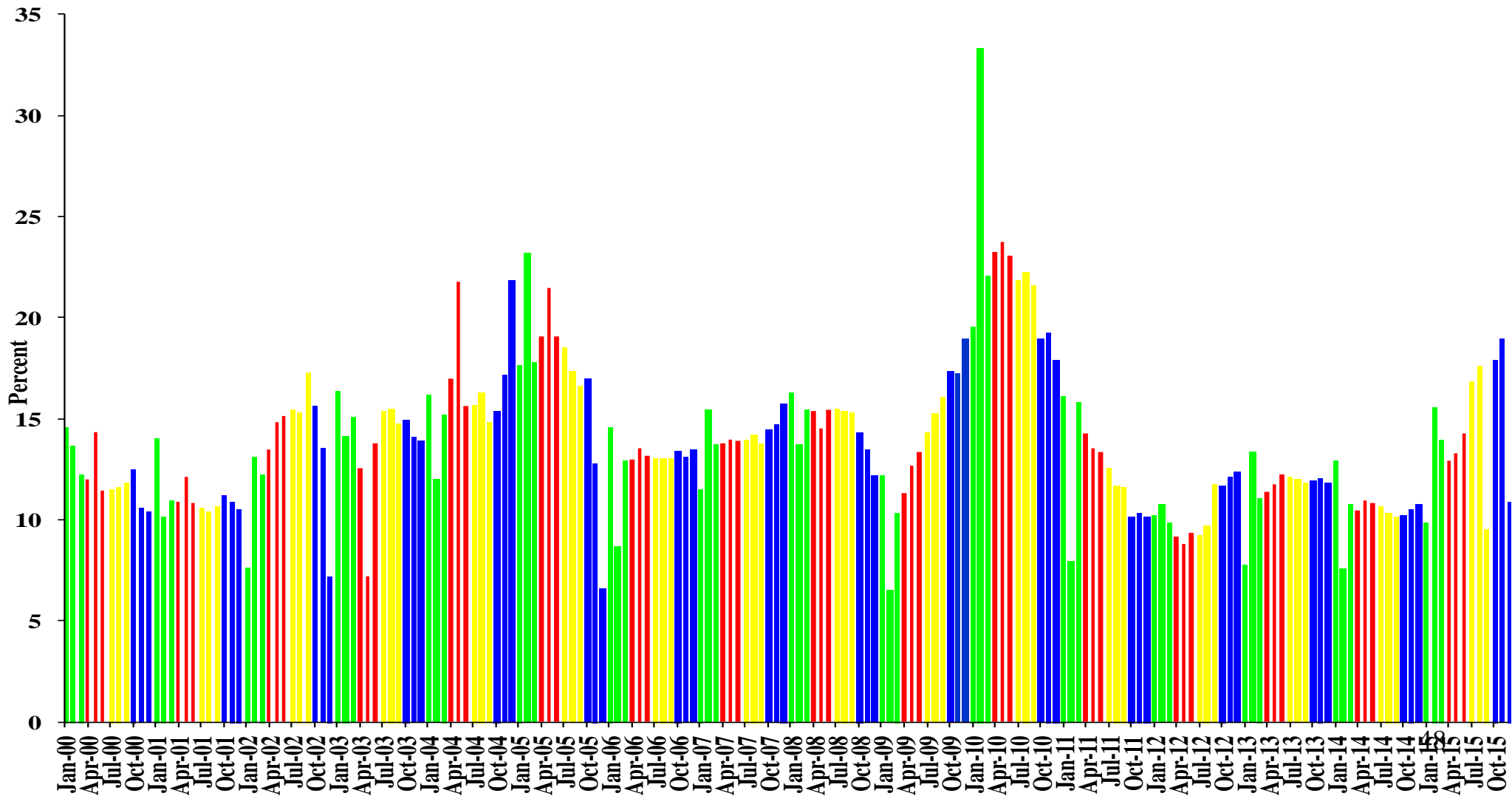
Monthly Rates of Growth of Chinese Fixed Assets Investment, Y-o-Y

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



The Transition to a “New Normal”: Trading Quantity for Quality

- ◆ What does the “New Normal” imply?
- ◆ First, there will be a reduction of the average annual rate of growth of the measured real GDP, from almost 10% to perhaps just around 6.5%, which is likely to be the target average annual rate of growth of the Thirteenth Five-Year Plan, which begins in 2016.
- ◆ There will be a greater emphasis on the “quality” of the economic growth, including the preservation, protection, restoration and enhancement of the environment and improvement of access to education, health care and elderly care, which are not necessarily reflected in the GDP as conventionally measured.
- ◆ Under the Thirteenth Five-Year Plan, economic development will be “innovative, coordinated, green, open and shared”. Elimination of poverty is one of the stated goals, implying that the 71 million or so of Chinese people still living under the poverty line will be lifted out of poverty by 2020.

The Transition to a “New Normal”: Trading Quantity for Quality

- ◆ The key performance indicators for the local government officials will be changed so that long-term economic viability and sustainability are also taken into account in addition to short-term growth in real GDP and employment.
- ◆ Moreover, other key performance indicators, such as those on the environment, both globally and locally, for example, air and water quality, should also be included. The improvement of energy efficiency and the reduction of carbon emission are also important areas of focus.
- ◆ It is believed that these key performance indicators which relate to the quality of growth will also be reflected in the targets of the Thirteenth Five-Year Plan, especially in the light of the recently successfully concluded COP 21 (a conference of the parties), which is the governing body for the United Nations Framework Convention on Climate Change, at Paris, with the joint support of both China and the United States.

The Transition to a “New Normal”: Transformation of Supply Composition

- ◆ Second, there will be a transformation in the composition of GDP by production sectors.
- ◆ The tertiary sector has already overtaken the secondary sector as the most important sector by GDP originating. It accounted for 50.5% of GDP in 2015. The GDP originating from the primary (agricultural) sector fell to 9% in 2015.
- ◆ The shift in the sectoral composition has led to changes in the demands for energy, including electricity, transportation, and fixed investment. Thus, while the so-called “Keqiang Index”, which consists of the weighted sum of rates of growth of electricity consumption, railroad freight volume and bank credit may have been a good indicator of the rate of growth of the industrial sector, it will be an increasingly downward-biased indicator of the rate of growth of real GDP because of the continuing shift in the sectoral composition of output towards the tertiary or service sector.

The Transition to a “New Normal”: Transformation of Supply Composition

- ◆ The principal challenge facing the Chinese economic policy makers is not so much the growth of real GDP but employment.
- ◆ The service sector (48.2% by GDP and 40.6% by employment in 2014) is now larger and growing faster than the industrial sector (42.6% by GDP and 29.9% by employment in 2014).
- ◆ In 2013, 2014 and 2015 respectively, 13 million, 10 million and 13 million new jobs were created. An expansion of the service-sector GDP creates 30% more employment than an expansion of industrial sector GDP of the same magnitude and requires much less fixed investment as well as energy. Thus, the shift in sectoral composition in favor of the service sector will raise the employment/GDP ratio and lower the energy/GDP ratio.
- ◆ It will also lead to reductions in the rates of growth of Chinese demands for imports of natural resources from around the World.
- ◆ The growth of the service sector has been and will continue to be driven by rising urbanization in China.

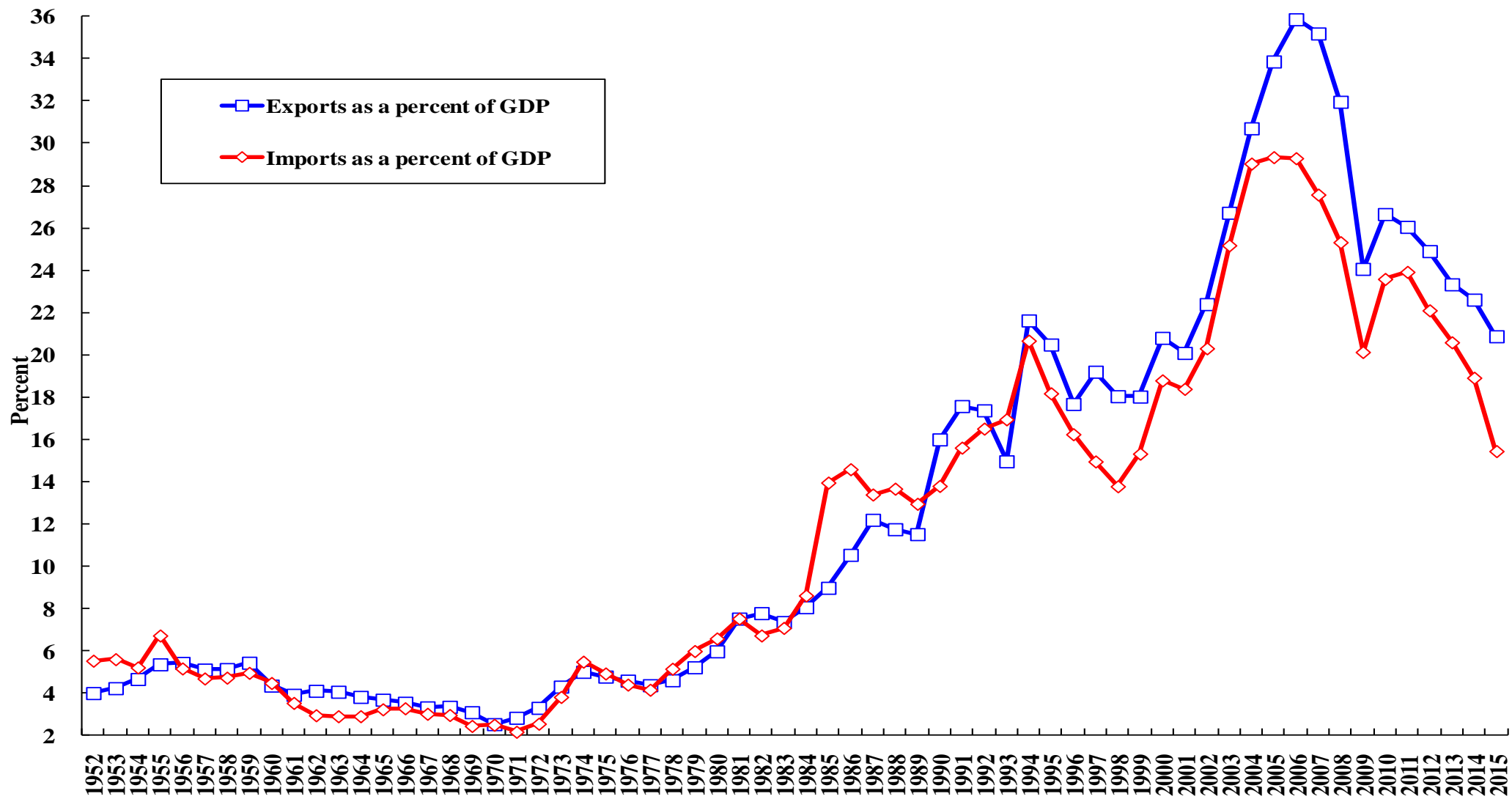
The Transition to a “New Normal”:

Transformation of Final Demand Composition

- ◆ Third, there will also be a transformation in the composition of final demand. On the demand side, Chinese economic growth will be principally driven by the growth of its own internal demand, consisting of public infrastructural investment (for example, high-speed railroads, urban mass transit systems and other urban public works, public wifi towers, affordable housing and clean energy), public goods consumption (education, health care, elderly care, and environmental protection, preservation and restoration—clean air, water and soil) as well as household consumption. It will no longer be driven by the growth of exports, or fixed investment in the manufacturing sector, or residential real estate.
- ◆ However, it should be noted that while the gross value of exports may not grow very fast any more, and will be a declining share of GDP, the value-added of exports may actually grow faster than the gross value itself. After all, it is the value-added that counts, not the gross value.⁵³

Exports and Imports as a Percent of Chinese GDP, 1952-present

Exports and Imports as a Percent of Chinese GDP, 1952-present



The Transition to a “New Normal”:

Transformation of Final Demand Composition

- ◆ Urbanization can not only increase the demand for public infrastructure and housing, but also promote the growth of the service sector, on both the supply and the demand sides.
- ◆ The growth in public goods consumption (including the necessary related investments) such as education, health care, elderly care, and environmental protection, preservation and restoration--securing cleaner air, water and soil can and should be an important component of the growth of aggregate demand going forward.
- ◆ Increasing public goods consumption is an effective method of redistribution of income 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 significantly the real income disparity.

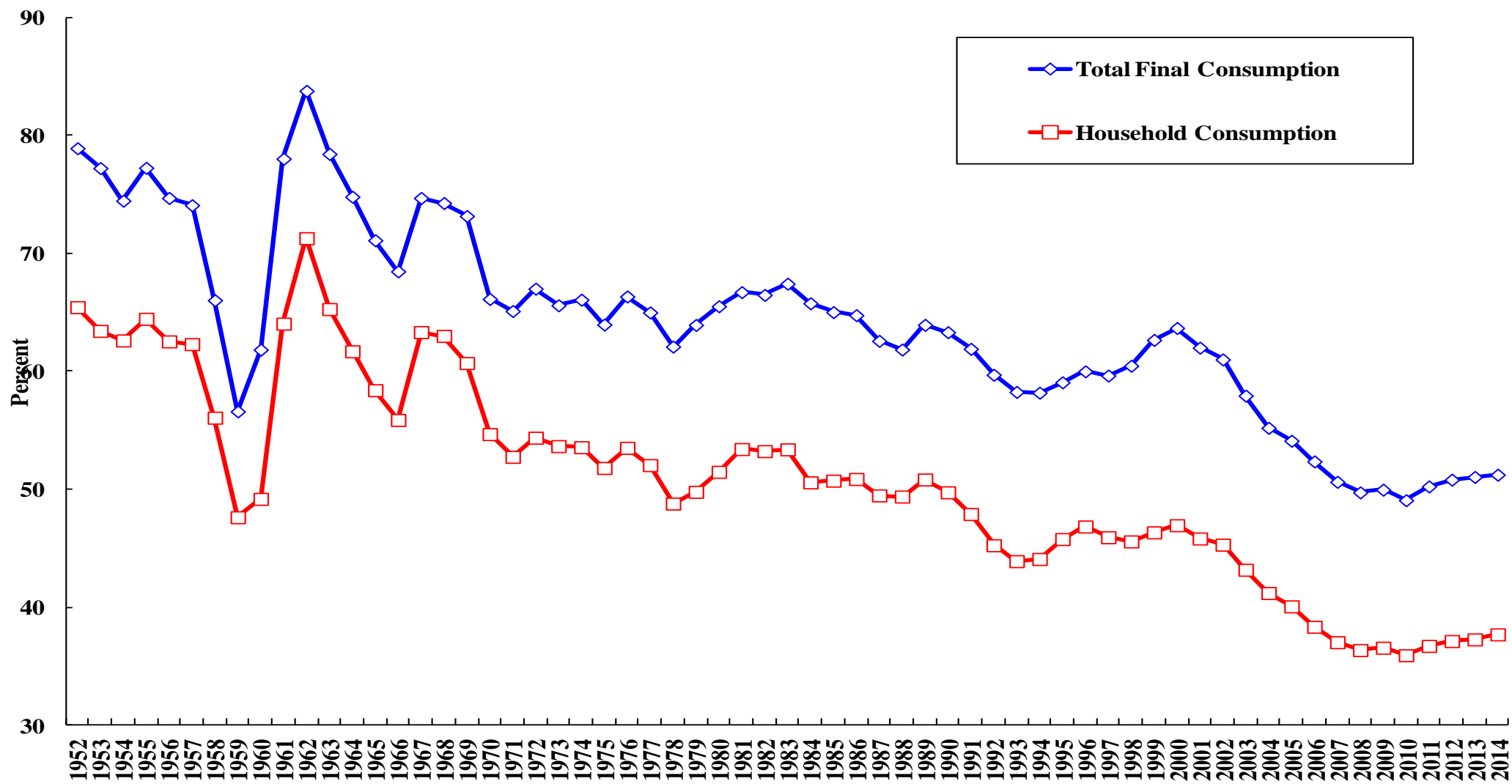
The Transition to a “New Normal”:

Transformation of Final Demand Composition

- ◆ The share of household consumption in Chinese GDP was approximately 38% in 2014. It will be a while before Chinese household consumption can become the major driver of Chinese economic growth. The share of disposable household income in Chinese GDP may be estimated to be no more than 50% in 2014. Even if the households consume its entire disposable income, household consumption cannot exceed 50% of GDP, compared to between 65% and 70% for developed economies.
- ◆ Delinking of the salaries between the government sector and the enterprise (including state-owned enterprises) sector as well as increasing cash dividend payments by publicly listed enterprises may be helpful in increasing household income and hence household consumption.
- ◆ Changing the wage-years of service profile so that the wage increases are more rapid in the early years of a worker’s career will also increase household consumption through its effect on household permanent income (or equivalently household wealth).

Total Chinese Final and Household Consumption as a Percent of Its GDP

Total Final Consumption and Household Consumption as a Percent of GDP



The Transition to a “New Normal”: Transformation of the Sources of Growth

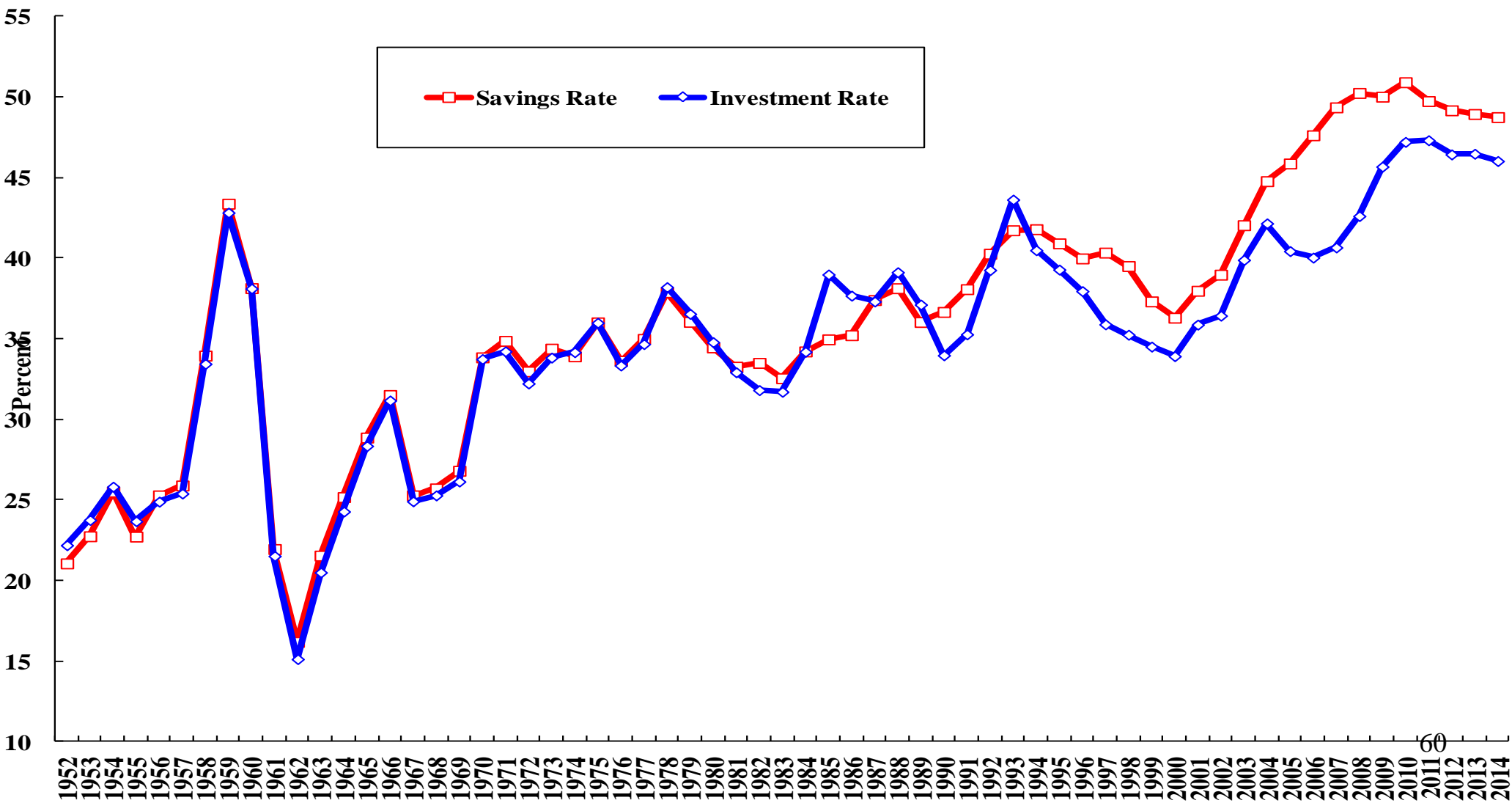
- ◆ Fourth, there will be a gradual transformation of the sources of growth, from the growth of tangible inputs such as tangible capital (structures, equipment and basic infrastructure) and labor to the growth of intangible inputs such as human capital and R&D capital.
- ◆ Past Chinese economic growth has been mostly driven by the growth of tangible capital. Technical progress or growth of total factor productivity accounts for less than 10 percent of Chinese economic growth since 1978.

The Transition to a “New Normal”: Transformation of the Sources of Growth

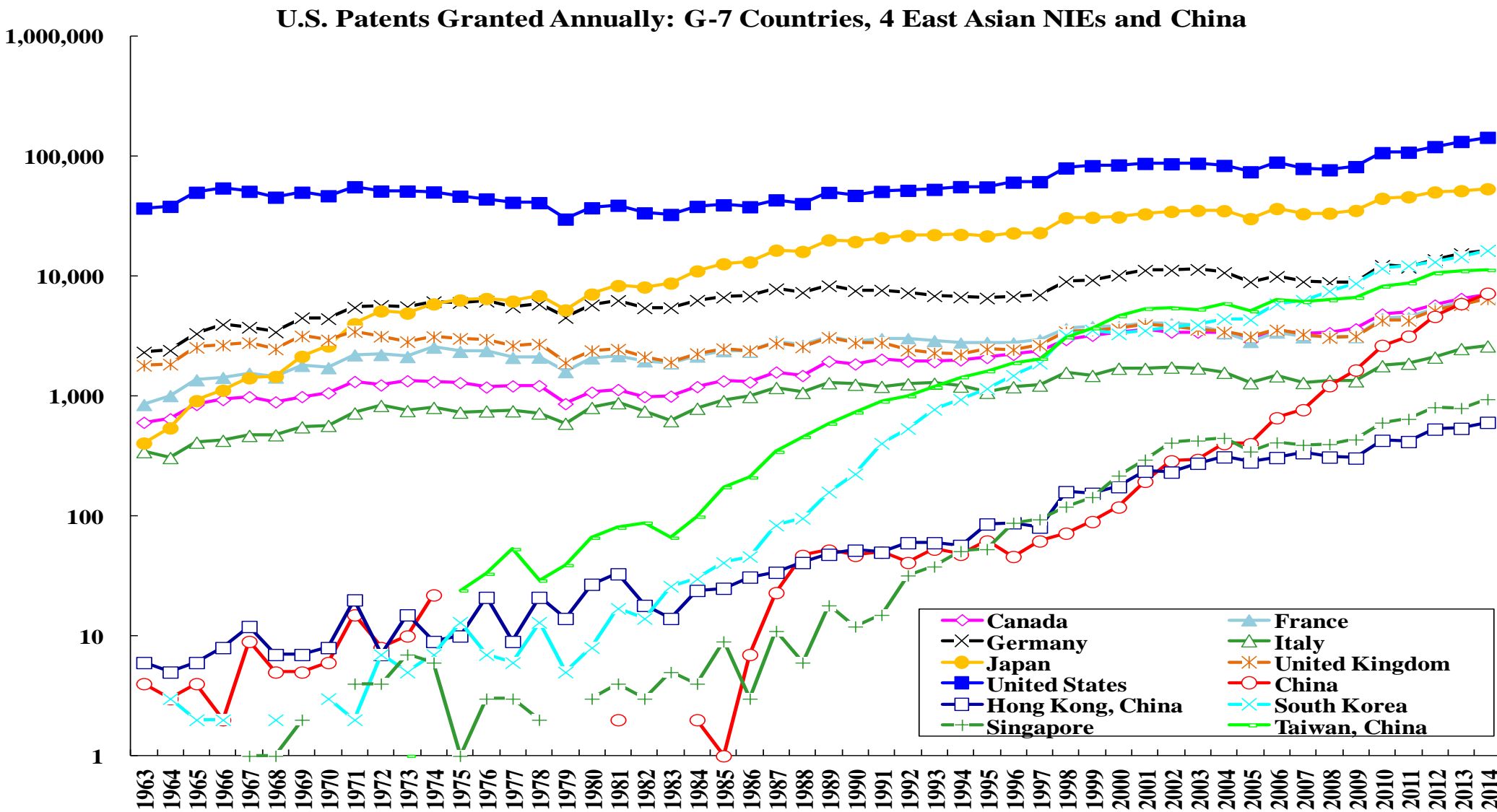
- ◆ The Chinese economy will still have strong economic fundamentals--a high domestic saving rate, abundant labor, and a huge domestic market that enables the realization of economies of scale—for a couple of decades. Moreover, advances in the information and communication technology have enhanced the positive effects of economies of scale even further.
- ◆ Investment in human capital and R&D has been increasing rapidly, even though the stocks of both human capital and R&D capital still lag significantly behind those of the U.S. and Japan, especially on a per capita basis.
- ◆ In time, Chinese economic growth will also be driven by innovation and technical progress in addition to the growth in tangible inputs.

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



Annual Number of U.S. Patents Granted: Selected Economies



The Transition to a “New Normal”: Transformation of the Sources of Growth

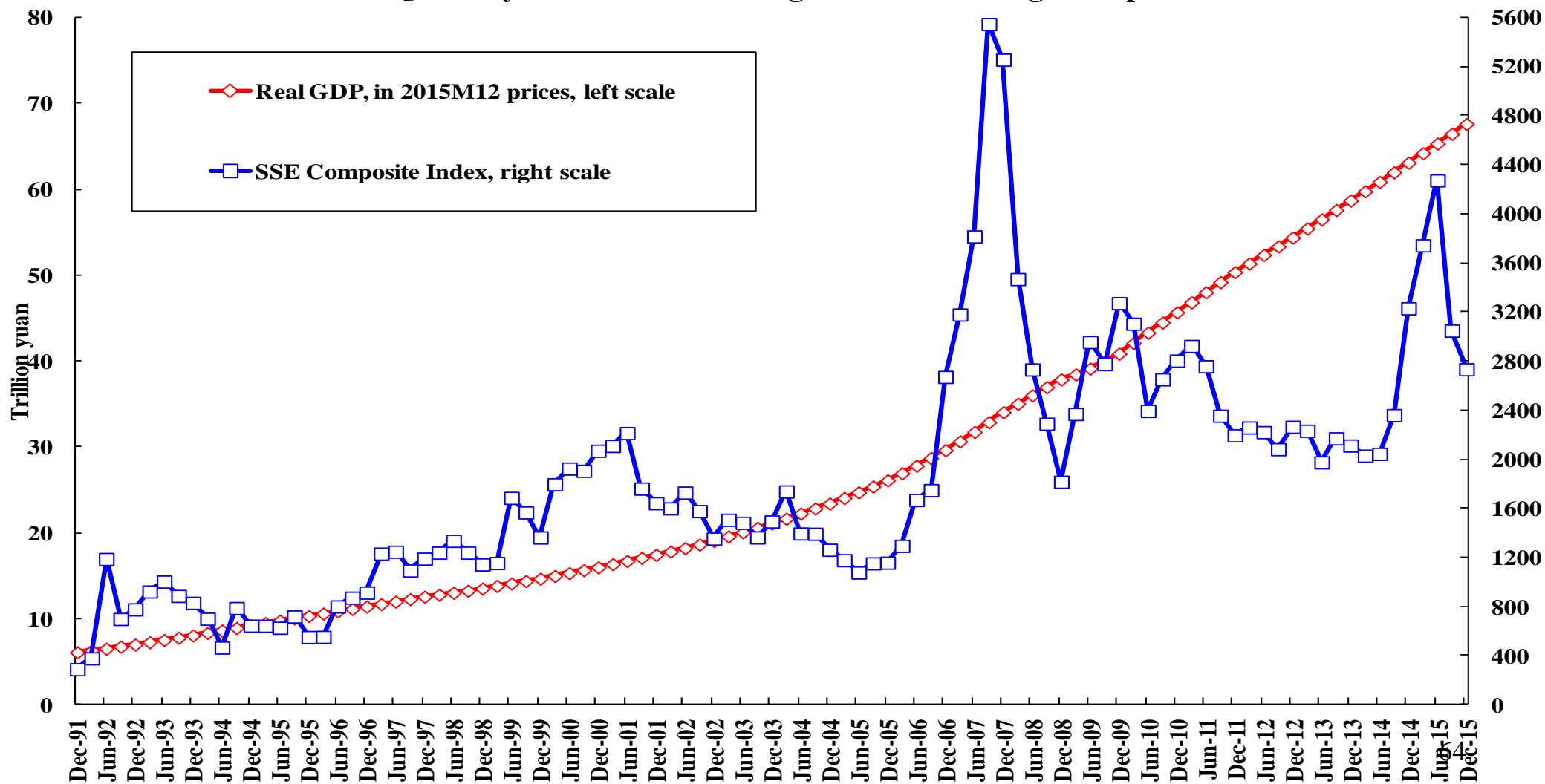
- ◆ The “Made in China 2025“ plan recently announced by the State Council is designed to transform China into a world manufacturing power comparable to Germany and Japan today.
- ◆ The 10 key sectors that are the foci of “Made in China 2025“ plan are new information technology, numerical control tools and robotics, aerospace equipment, ocean engineering equipment and high-tech ships, railway equipment, energy saving and new energy vehicles, power equipment, new materials, biological medicine and medical devices, and agricultural machinery.

The Unimportance of the Stock Market

- ◆ What is the impact of the bursting of the Chinese stock market bubble in June 2015 on the Chinese economy itself? It should be realized that this is not the first time that a Chinese stock market price bubble burst. It happened once before, in 2007, when the peak of the bubble was higher and the trough was lower than the current one (see the following chart). However, neither the run-up of the stock price bubble, or its subsequent burst, appeared to have had much effect on the Chinese real economy.
- ◆ Why is this the case? One reason is that approximately 90 percent of the Chinese stock investors are individual retail investors, who tend to hold their shares for only brief periods, and trade very often. It is probably more accurate to describe their behavior as “gambling” rather than “investing”. Moreover, for the longest time, “Initial Public Offerings (IPOs)” were suspended on Chinese stock markets. Thus, the developments in the real economy and the stock market are uncorrelated. The next two charts also show that the real rates of growth of the Chinese economy are basically uncorrelated with the rates of growth of the Shanghai Composite Stock Price Index.

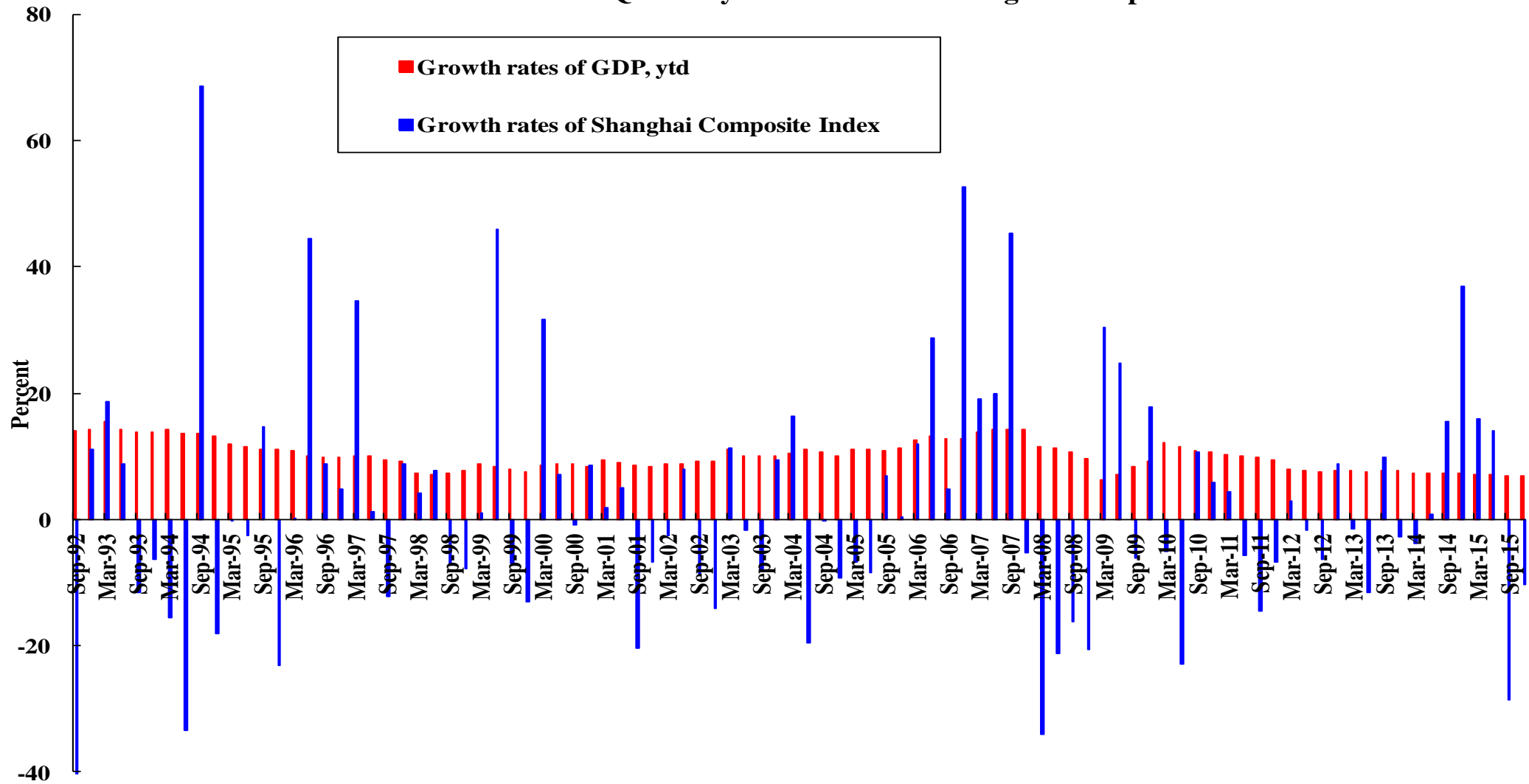
The Chinese Quarterly Real GDP and the Shanghai Stock Exchange Composite Index

Chinese Quarterly Real GDP and Shanghai Stock Exchange Composite Index



The Rates of Growth of Chinese Quarterly Real GDP and the Shanghai Stock Index (1993-)

Rates of Growth of Chinese Quarterly Real GDP and Shanghai Composite Index



The Unimportance of the Stock Market

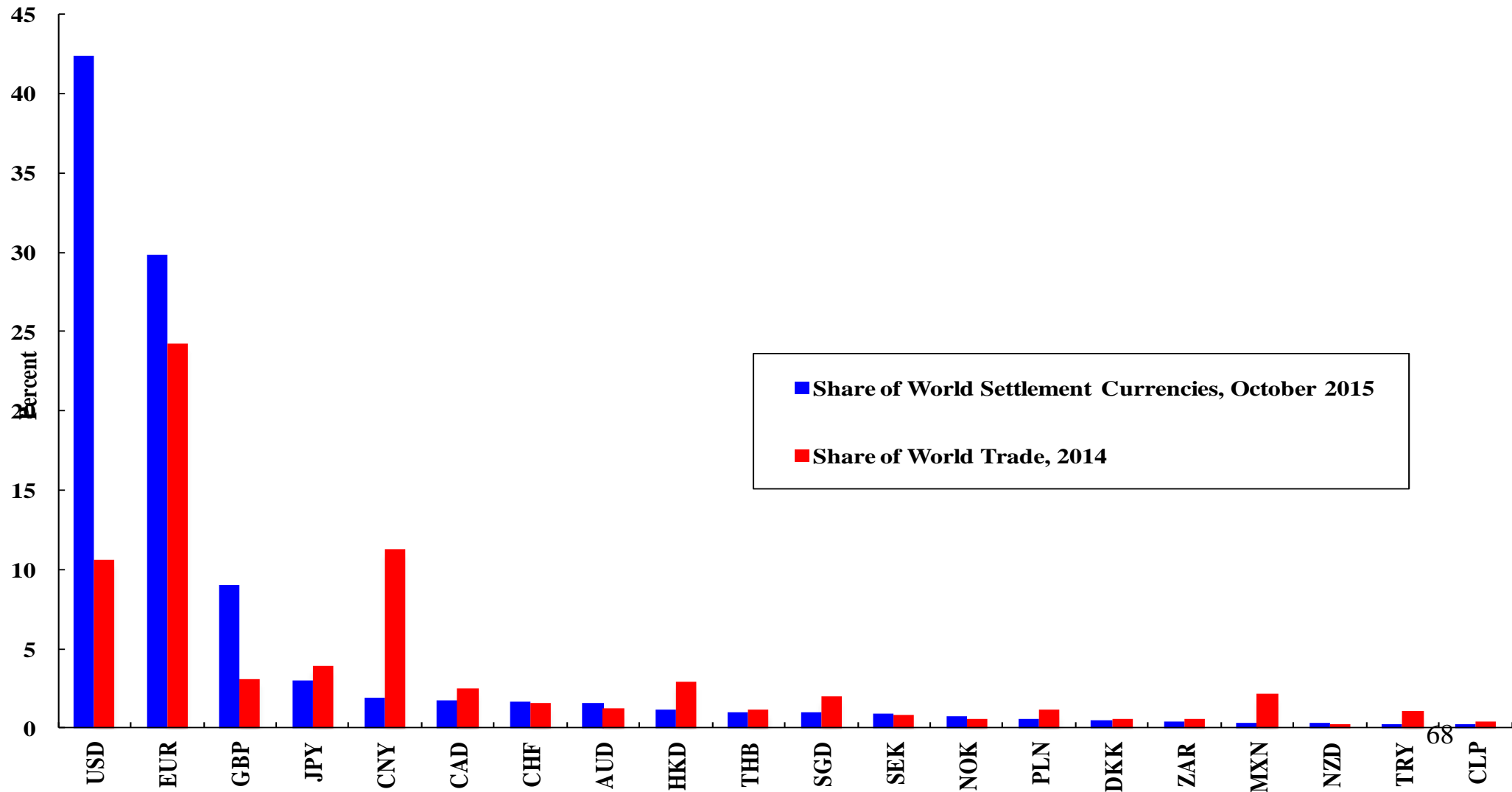
- ◆ In mid-November 2015, margin finance for stock purchase was tightened up in China. New margin loans must be fully backed by collateral, doubled the previous 50%. This should help to prevent another stock price bubble from developing.

The Internationalization of the Renminbi

- ◆ The Renminbi, the Chinese currency, is increasingly used as an invoicing, clearing and settlement currency for cross-border transactions, especially those involving Chinese enterprises as transacting parties.
- ◆ In the fourth quarter of 2015, Chinese cross-border trade settled in Renminbi amounted to an annualized rate of US\$1.1 trillion, or 26.4% of total Chinese cross-border trade, compared to virtually zero in the first quarter of 2010. (Actually, the proportion of Chinese trade settled in Renminbi already reached 32.4% in the third quarter of 2015 and would have grown higher were it not for the unexpected Renminbi devaluation of 4% last August.)
- ◆ If the same proportion of Chinese trade is settled in its own currency as Japan (75%), then more than US\$3 trillion of Chinese trade will be settled in Renminbi annually, greatly diminishing the necessity for China to have a large foreign exchange reserve.

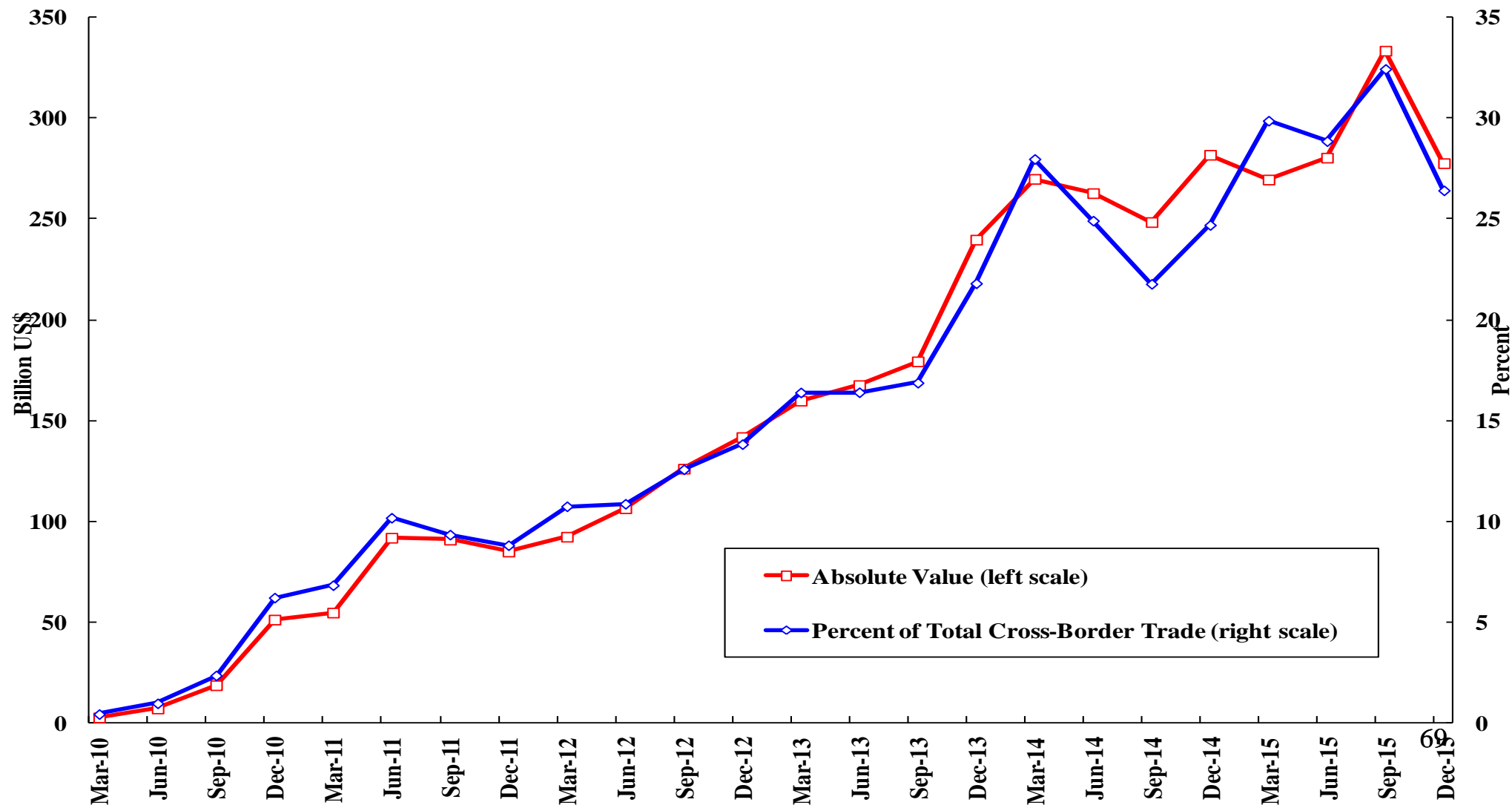
Distribution of World Trade Settlement Currencies versus World Trade, Sept. 2015

Share of World Settlement Currencies, October 2015



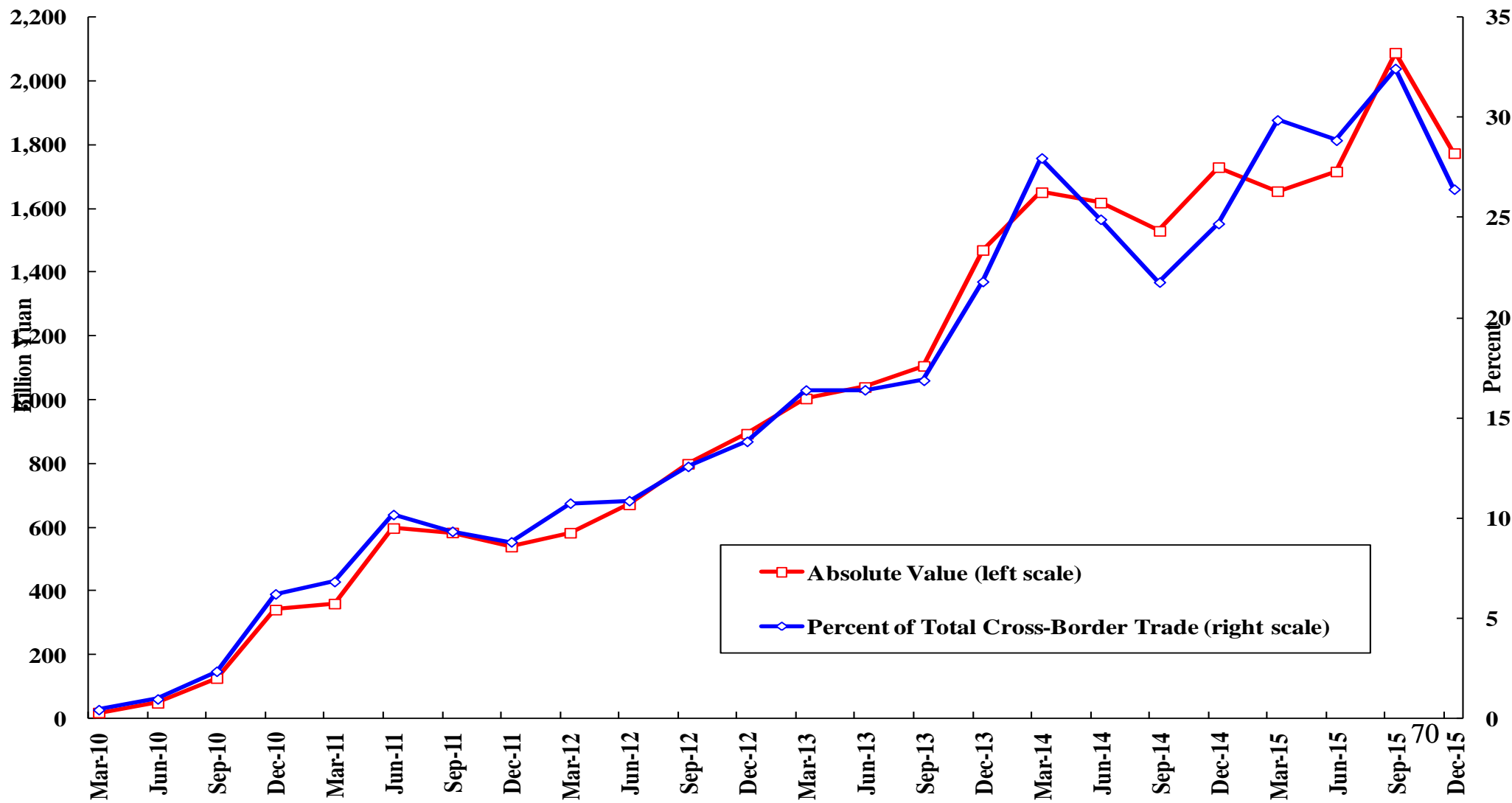
Renminbi Settlement of Chinese Cross-Border Trade, Billion US\$ and Percent

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



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

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



The Internationalization of the Renminbi

- ◆ The Renminbi exchange rate is likely to hold relatively steady vis-a-vis the US\$ going forward.
- ◆ It is in China's interests to promote the use of its own currency, the Renminbi, as a medium of international exchange, certainly in international transactions in which its national is one of the transacting parties. This requires a relatively stable exchange rate vis-a-vis the US\$.
- ◆ The Renminbi, being regarded as “freely usable”, has been included as part of the basket of major currencies (which includes the US\$, the Euro, the British pound and the Japanese Yen) constituting the “Special Drawing Rights (SDR)” basket, with a weight of 10.92%, which is higher than the British pound and the Japanese Yen. However, this will become effective on 1 October 2016.
- ◆ This should marginally increase the holdings of Renminbi as part of the foreign exchange reserves of foreign central banks and monetary authorities.

The Internationalization of the Renminbi

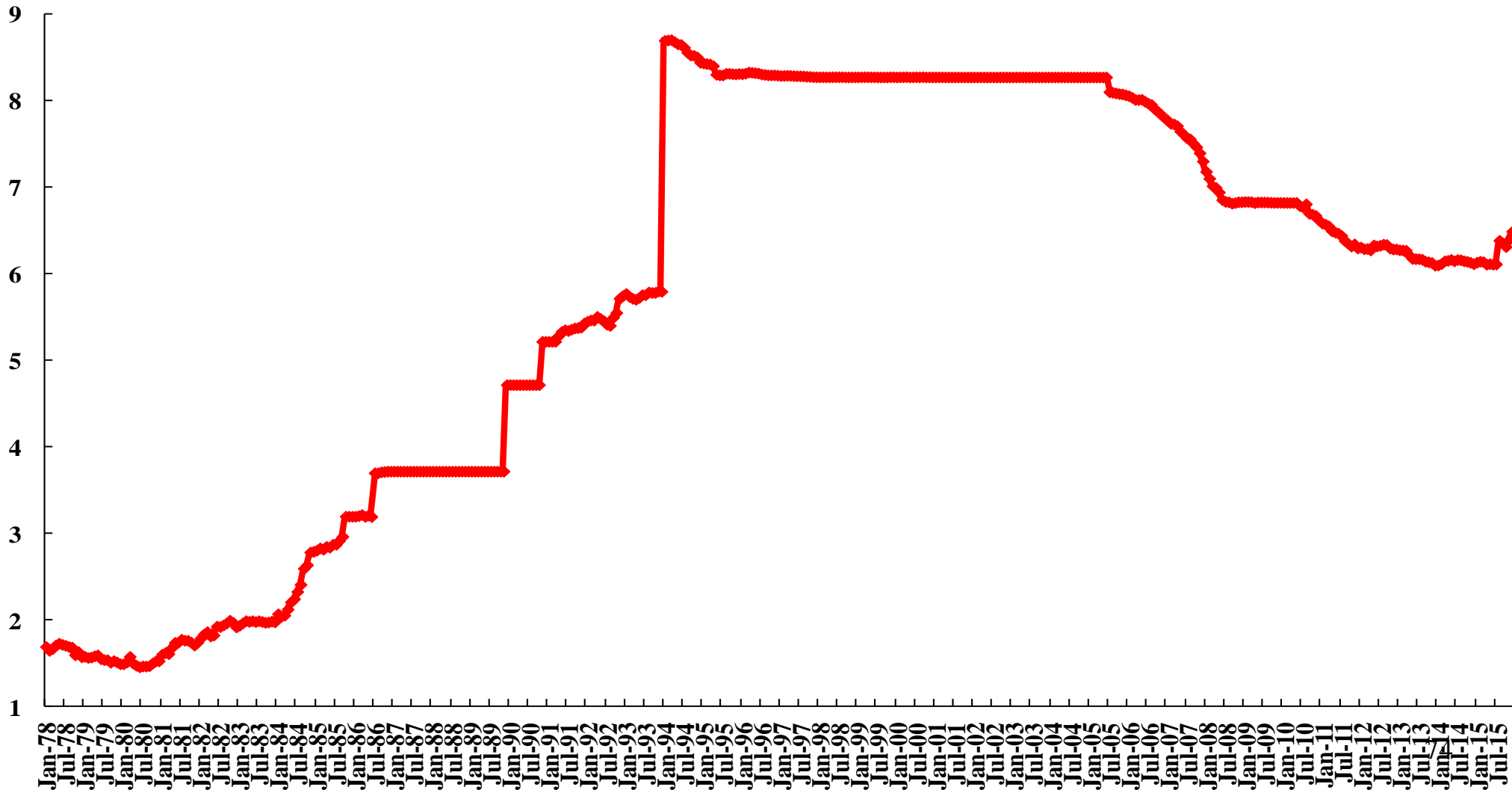
- ◆ China will continue to face a net capital outflow, which is natural and expected as its enterprises (and in time its households) diversify their investment to overseas.
- ◆ However, this does not diminish its ability to stabilize the Renminbi exchange rate. It has large foreign exchange reserves of US\$3.2 trillion as of the end of January 2016, which is more than one and a half years of worth of Chinese imports. It still runs a significant trade surplus in goods and services combined amounting to 3% of its GDP, or approximately US\$300 billion a year.
- ◆ China will over time become a large net capital exporter, especially as its enterprises and households attempt to re-balance their portfolios if and when capital controls are fully lifted. There will be a significant one-time stock adjustment when capital control is finally completely lifted.

The Internationalization of the Renminbi

- ◆ A devaluation is unlikely to be helpful to the Chinese economy. China does not want to return to making garments, shoes and stuffed toys with the lower standard of living that it implies. The Chinese economy has also become too large to be sustained by exports alone.
- ◆ It is also not in the best interests for China to compete with the other East Asian developing economies through competitive devaluation. China should be moving up the value chain, as Japan, Hong Kong, South Korea and Taiwan did before.
- ◆ The Renminbi has actually been appreciating relative to the U.S. Dollar in real terms, that is, taking into accounting that the rate of inflation has been higher in China than in the U.S., in the past few years.
- ◆ It has also been appreciating relative to all the other major reserve currencies—the Euro, the pound sterling, and the Japanese Yen—as the U.S. Dollar.

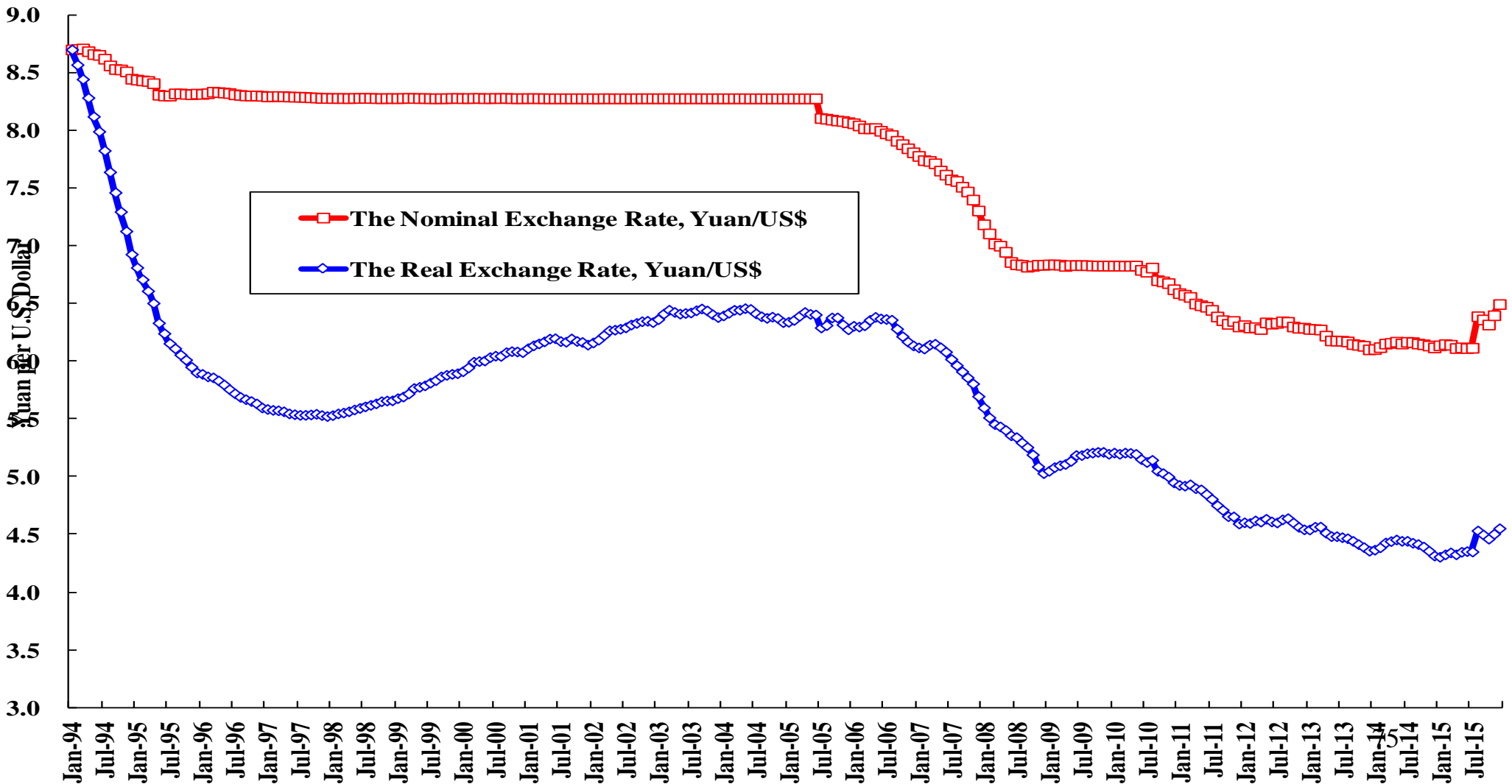
Nominal Exchange Rate of the Renminbi, Yuan/US\$, 1978-present

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)



The Internationalization of the Renminbi

- ◆ However, with the rising U.S. rate of interest, the U.S. Dollar may be expected to continue to appreciate relative to all the other major international reserve currencies within the next year or two.
- ◆ In order to maintain the long-term relative stability of the Renminbi exchange rate, it is not unreasonable for the Yuan to appreciate less relative to these other currencies going forward (and thus to devalue slightly relative to the U.S. Dollar) so as to avoid a sharp devaluation relative to the other currencies when the U.S. Dollar eventually weakens.

The “One Belt, One Road (OBOR)” Initiative

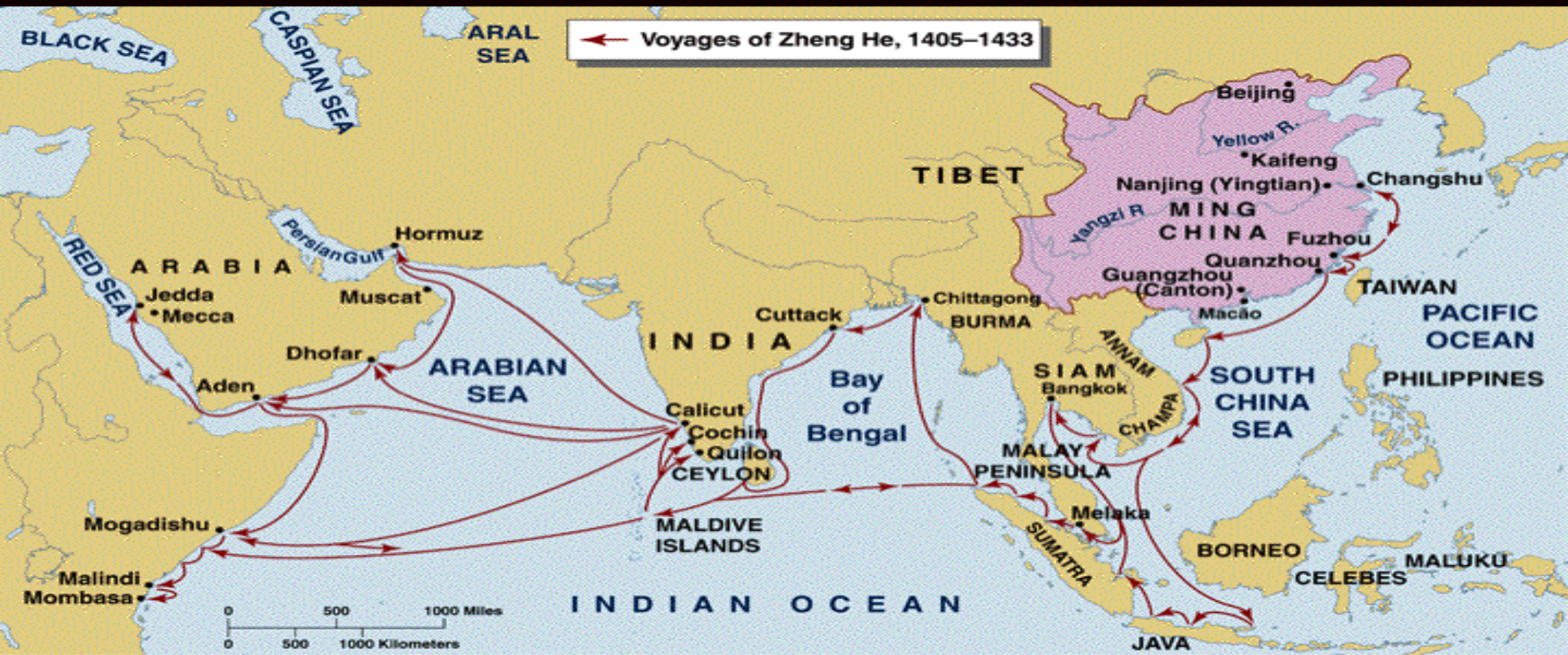
- ◆ The “One Belt, One Road” Initiative was launched by President XI Jinping in September 2013 in Kazakhstan and in October 2013 in Indonesia. It consists of the Silk Road Economic Belt and the 21st-Century Maritime Silk Road (One Belt, One Road).
- ◆ The Silk Road Economic Belt, as the Old Silk Road, links the continents of Asia, Europe and Africa together. It brings together China, Central Asia, West Asia, Middle East, North Africa, Russia and Europe. In particular, it will encompass new Eurasian Land Bridges.
- ◆ The 21st-Century Maritime Silk Road is designed to connect China’s coastal regions to Europe through the South China Sea and the Indian Ocean in one route, and through the South China Sea to the South Pacific and Oceania in the other. However, the “Northern Passage”, through the Bering Strait and down to Northern Europe, has also been proposed to be part of the 21st-Century Maritime Silk Road as global warming makes the route navigable year round.

The Old Silk Road (map created by OrexCA.com creative group)



Voyages of Admiral ZHENG He (1405-1433)

(map from www.history.ubc.ca)



MAP 2-6 VOYAGES OF ZHENG HE, 1405-1433

The “One Belt, One Road (OBOR)” Initiative

- ◆ The “One Belt, One Road (OBOR)” Initiative is a multi-country (66), multi-decade project that has the potential of transforming the economies of not only China, but the entire Asia (including Oceania)-Europe-Africa. It is an undertaking that will benefit the whole world.
- ◆ It will promote the development of infrastructure linking all three continents by land and by sea (the Eurasia land bridges, the maritime silk roads, and the northern passage), promoting economic development and international trade among all the countries involved.

The “One Belt, One Road (OBOR)” Initiative

- ◆ The “One Belt and One Road” initiative potentially involves 66 countries, with a combined population of 4.4 billion people (63% of the World) and a combined GDP of US\$21 trillion (29% of the World). It is China’s most ambitious, important and strategic external initiative to date. But as most of these countries are still developing economies, their potentials for further development and growth are much greater than the developed economies.
- ◆ Accelerating the building of the public infrastructure of the Belt and Road can help enhance the economic prosperity of the countries along the Belt and Road. Through such regional economic cooperation, cultural exchanges will be strengthened, mutual learning among different civilizations will occur, and world peace and development will be promoted.
- ◆ The New Silk Road also supports the same spirit as the Old Silk Road, with emphases on “peace and cooperation, openness and inclusiveness, and mutual learning and mutual benefit”* among all the countries and people on the Belt and Road.
- ◆ *Taken from Full text: Action plan on the Belt and Road Initiative, updated: Mar 30,2015 7:31 PM, english.gov.cn.

The “One Belt, One Road (OBOR)” Initiative: What is in it for China and the World?

- ◆ The projects under the OBOR initiative will be financed through both equity and debt. The Asian Infrastructural Investment Bank (AIIB), recently established by China together with 56 other founding members and initially capitalized at US\$100 billion, will provide some of the debt financing. And the Silk Road Fund, capitalized at US\$40 billion, also set up by China, will provide some of the equity financing.
- ◆ OBOR, AIIB and the Silk Road Fund all aim to create value and to result in a win-win outcome for all countries involved, and especially for developing economies in Asia and Africa. But developed economies will also benefit by being suppliers, contractors and consultants to these infrastructural projects.
- ◆ OBOR and AIIB will promote the growth of international trade and investment in both directions along the Belt and Road by creating the supporting basic infrastructure and thus facilitating new export and import opportunities.

The “One Belt, One Road (OBOR)” Initiative: What is in it for China and the World?

- ◆ These efforts will increase aggregate demand, and hence the growth of real GDP, employment and international trade not only in the individual project countries but also worldwide.
- ◆ The Belt and Road will help promote peace through shared prosperity and rising economic interdependence as well as cultural exchange. It will help lift even more people out of poverty.
- ◆ Even Japan and South Korea, which at first glance may not seem to be part of the Belt and Road Initiative, can benefit from the use of the Eurasian Land Bridges.

The “One Belt, One Road (OBOR)” Initiative: What is in it for China and the World?

- ◆ For China, it will be able to achieve six objectives.
- ◆ (1) the further reform and opening of the Chinese economy to accommodate and support the Belt and Road Initiative;
- ◆ (2) the productive investment of surplus savings for future use as its population ages;
- ◆ (3) the development of Western China, including Xinjiang, as direct, shorter and faster international trade routes over land are open;
- ◆ (4) the absorption of excess domestic manufacturing capacity and creation of new export markets for the design and construction of public infrastructure such as highways, railroads, power plants, ports and mass-transit systems;
- ◆ (5) the further expansion and diversification of its trade routes and trading partner countries and thus ensuring energy and food security; and
- ◆ (6) the creation of a peaceful and friendly environment for China to continue to develop and prosper, to fulfill the “Chinese Dream” of national renaissance.

Concluding Remarks

- ◆ Chinese economic growth since economic reform and opening to the World began in 1978 can be mostly attributed to the growth of tangible inputs—tangible capital and labor, and in particular, tangible capital—rather than the growth in intangible capital or technical progress, just as the past economic growth of other East Asian economies at a similar stage of economic development.
- ◆ The successful Chinese experience strongly reaffirms the fundamental importance of having and maintaining a high investment rate, enabled by a high national savings rate, and surplus labor.
- ◆ In addition, the size of the Chinese domestic economy is a favorable factor allowing the ready realization of economies of scale and reducing vulnerability to external disturbances.
- ◆ The Chinese experience also reaffirms the importance of basic infrastructure and the maintenance of economic openness to the successful development of an economy.

Concluding Remarks

- ◆ In the short to medium term, continuing Chinese economic growth going forward will depend mostly on the growth of internal demand (public infrastructural investment, public goods consumption (education, health care and environmental control, preservation and restoration) and household consumption) and not on exports and not on manufacturing capacity expansion in the existing industries.
- ◆ The growth in household consumption will do its part, especially in the demand for services. The expanding and rising middle class will play a crucial role.
- ◆ In the longer run, Chinese economic growth will make a transition from tangible-inputs-driven to intangible-inputs- or innovation-driven.
- ◆ The “New Normal” is thus neither a “boom” of close to double-digit rates of growth, nor a “bust” of negative or low single-digit real rates of growth. There will be both sufficient supply and demand in the Chinese economy to support an average annual real rate of growth of around 6.5%.

Concluding Remarks

- ◆ OBOR, AIIB and the Silk Road Fund are all efforts designed to accelerate the growth of the GDP, employment and international trade of developing economies in Asia, and hence indirectly the growth in the World economy as a whole as well. All countries are welcome to participate in these efforts.
- ◆ The success of these efforts will benefit everyone, either directly or indirectly, and not only China.
- ◆ Economic prosperity for all, especially if it is based on international economic interdependence, is an effective instrument for the promotion of sustainable peace as well as an effective antidote against terrorism.

A Comparison of the Weighted Average Provincial and National Rates of Growth

A Comparison of the Weighted Average Provincial and National Rates of Growth

