The Global Economy

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- Introduction
- Global Economic Trends
- The Future of Economic Globalization
- Seigneurage and the Role of the Renminbi
- Projections of the Future
- Concluding Remarks

Introduction

- There are three important developments in the global economy during the past four decades. They are:
- (1) The reform and opening of the Chinese economy and its participation in the world since 1978, enhancing both global supply of and demand for goods and services;
- (2) The fragmentation of production, made possible by advances in information and communication technology, giving rise to international supply chains; and
- (3) The rise of the internet economy as a marketplace for both sellers and buyers.

Introduction

- These developments have resulted in:
- The center 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 South Asia, and within East Asia from Japan to China. The shift is still on-going, with both China and India being currently the fastest-growing economies in the world.
- More than 600 million people worldwide have been lifted out of poverty because of this economic globalization.
- The internet economy augments the variety of choices, increases competition and reduces transaction costs, including search costs.
- Each and every economy has benefitted in the aggregate.

Introduction

- However, while each and every economy has benefitted in the aggregate, this economic globalization has created both winners and losers within each economy. But these losers have not shared in the benefits and have not been adequately compensated. This is the source of the anger and frustration in many developed economies around the world.
- Can economic globalization continue in the future? Without continuing globalization, can the currently developing economies become developed?

Global Economic Trends

- The Shifting Center of Gravity of the Global Economy
- The Slowdown in the Growth of GDP, International Trade and Foreign Direct Investment
- The Limits of Monetary Policy
- The Price of Oil
- The Importance of Innovation
- The Internet Economy
- Demographic Developments
- The Belt and Road Initiative
- The Geo-Political Uncertainties

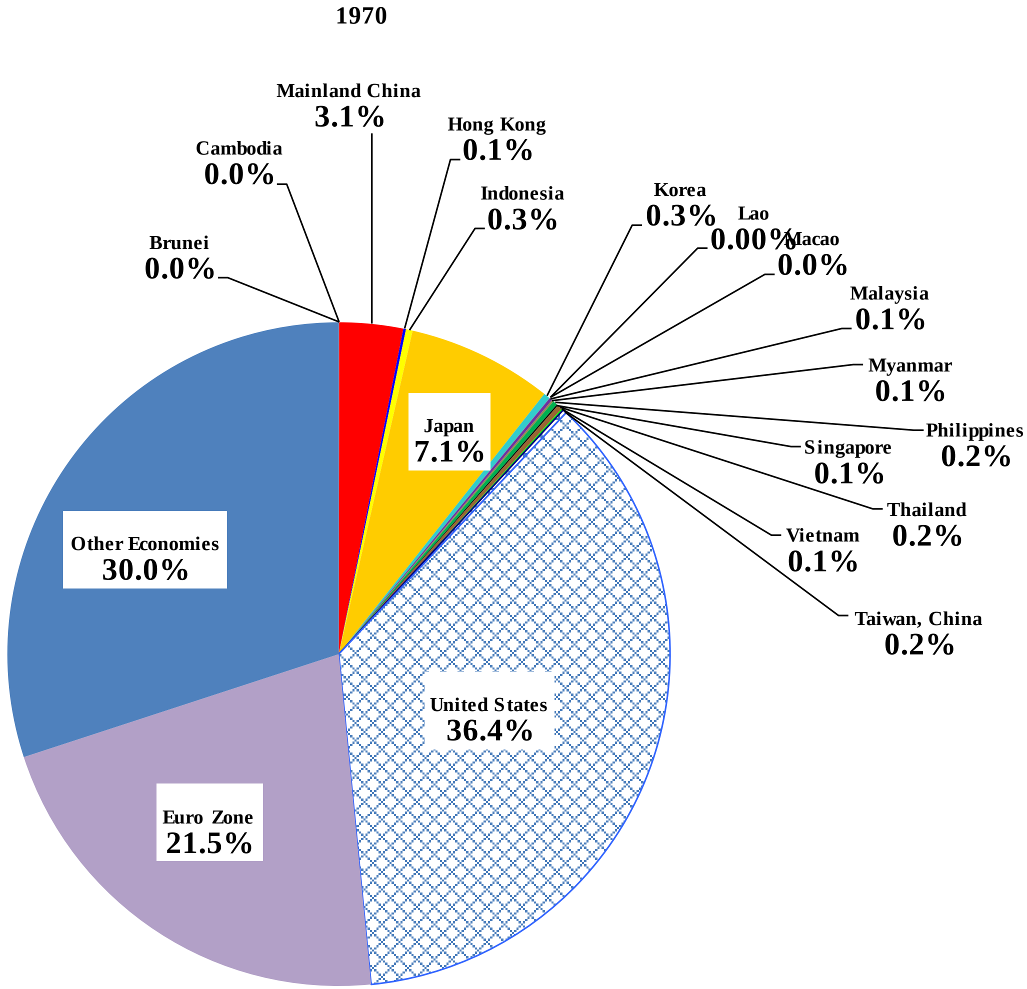
Global Economic Trends: The Shifting Center of Gravity of the Global Economy

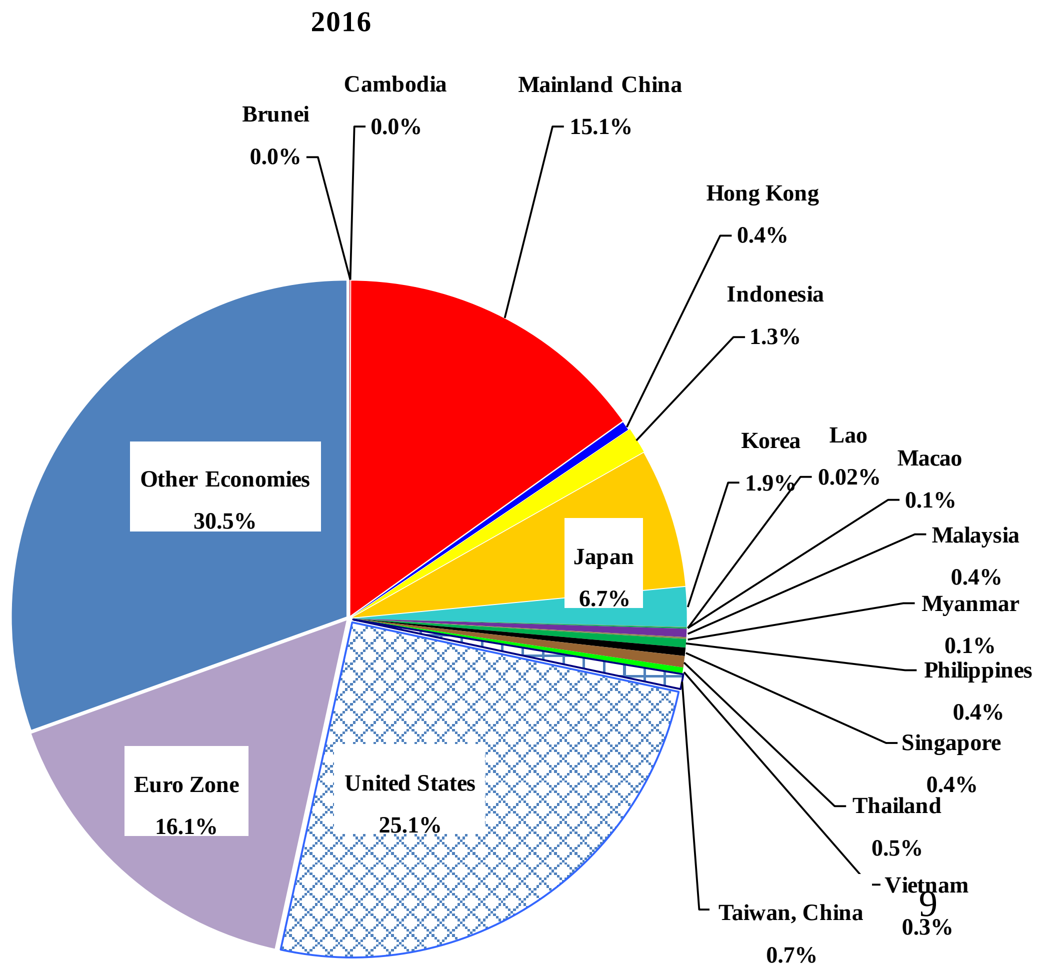
- In 1970, the United States and Western Europe together accounted for almost 60% of world GDP. By comparison, East Asia (defined as the 10 Association of Southeast Asian Nations (ASEAN)--Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam--+ 3 (China including Hong Kong, Macau and Taiwan, Japan and the Republic of Korea)) accounted for only 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)".

Global Economic Trends: The Shifting Center of Gravity of the Global Economy

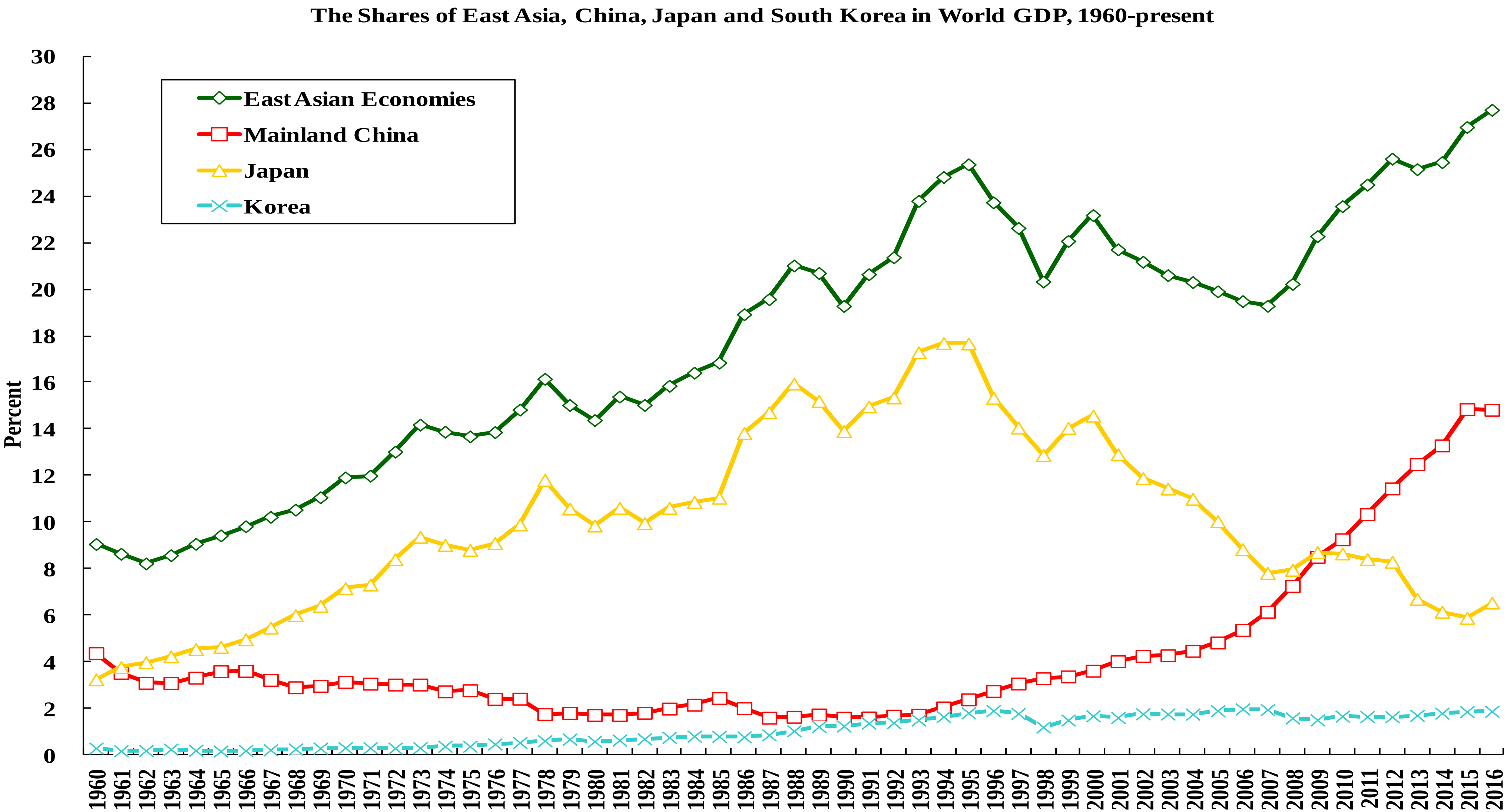
- By 2016, the share of United States and Western Europe combined in world GDP has declined to approximately 41% whereas the share of East Asia has risen to around 28%.
- The Japanese share of world GDP declined from a peak of almost 18% in the mid-1990s to 6.7% in 2016 while the Mainland Chinese share of world GDP rose from 3.1% in 1970 and less than 4% in 2000 to over 15.1% in 2016.

The Distribution of World GDP, 1970 and 2016, US$





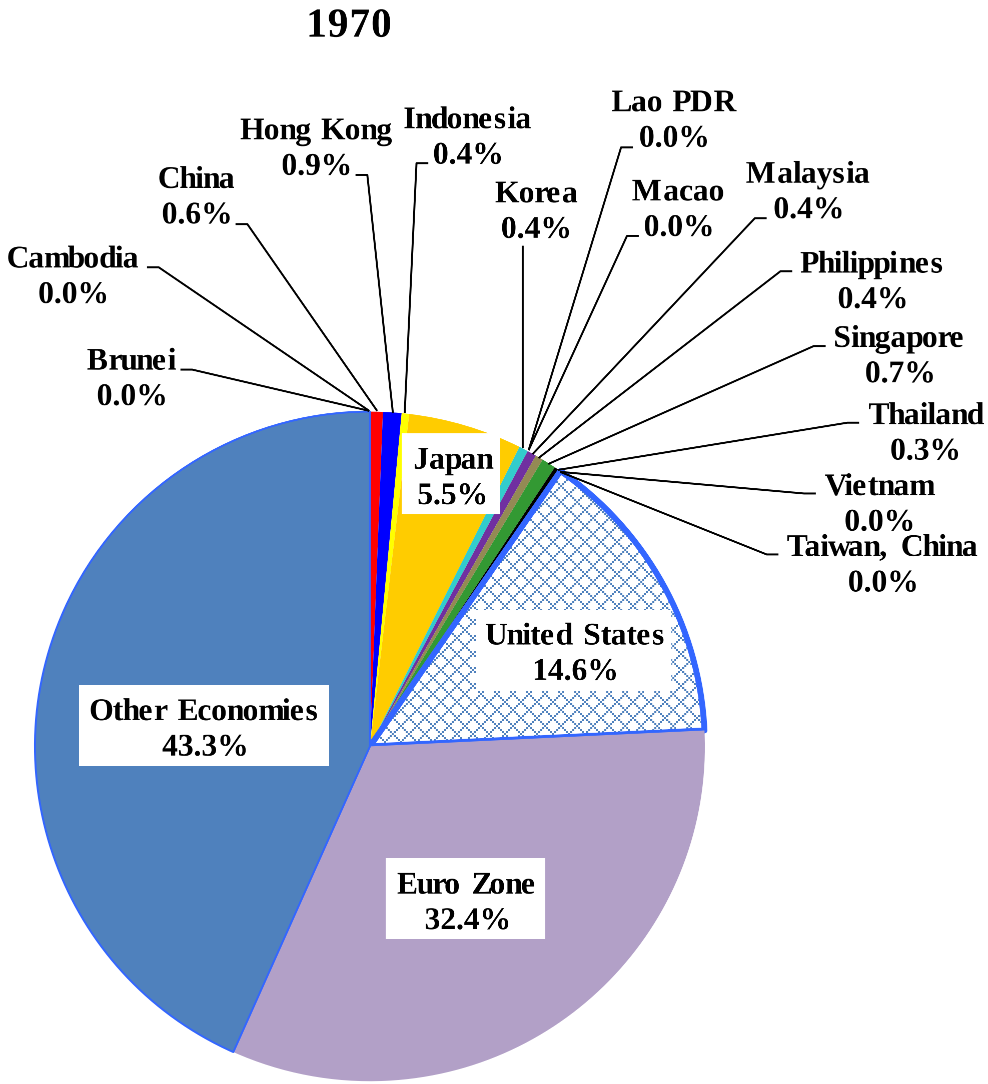
The Shares of East Asia, China, Japan and South Korea in World GDP, 1960-present

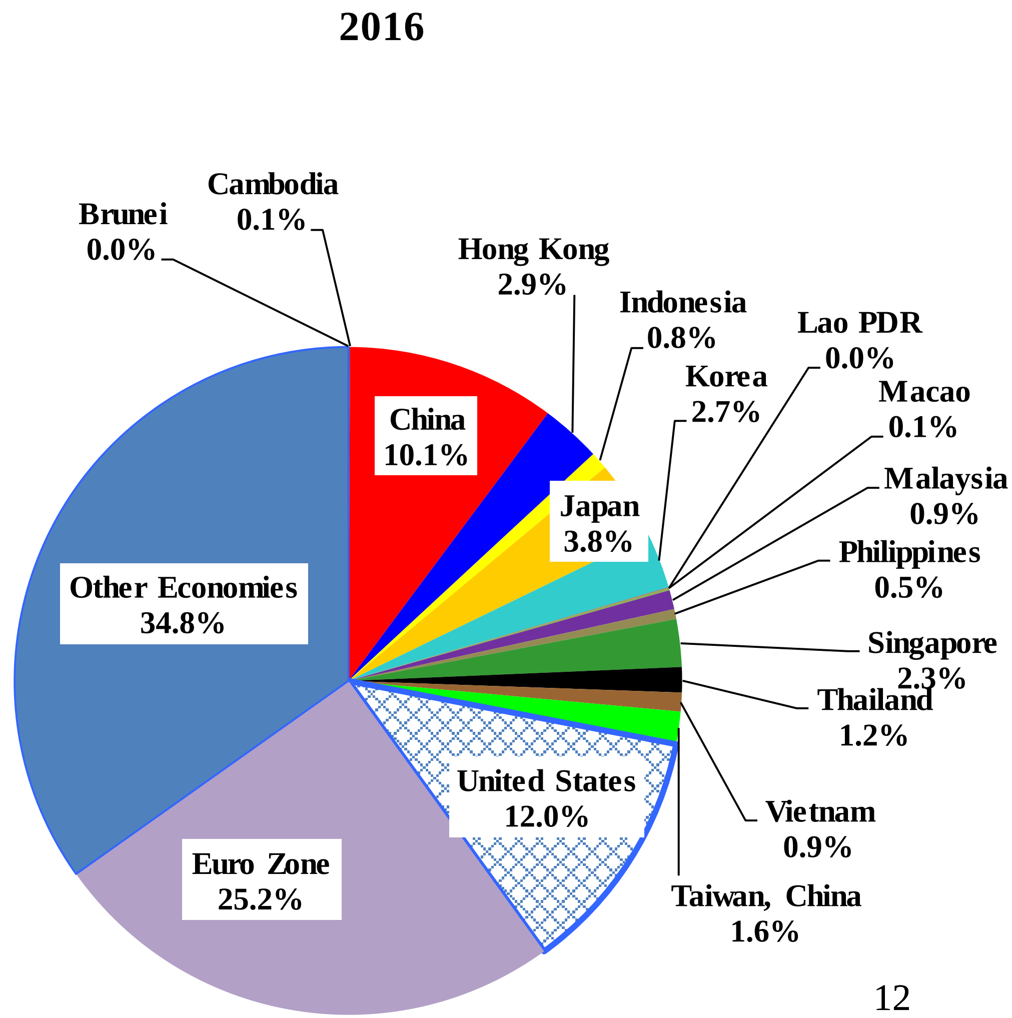


Global Economic Trends: The Shifting Center of Gravity of the Global Economy

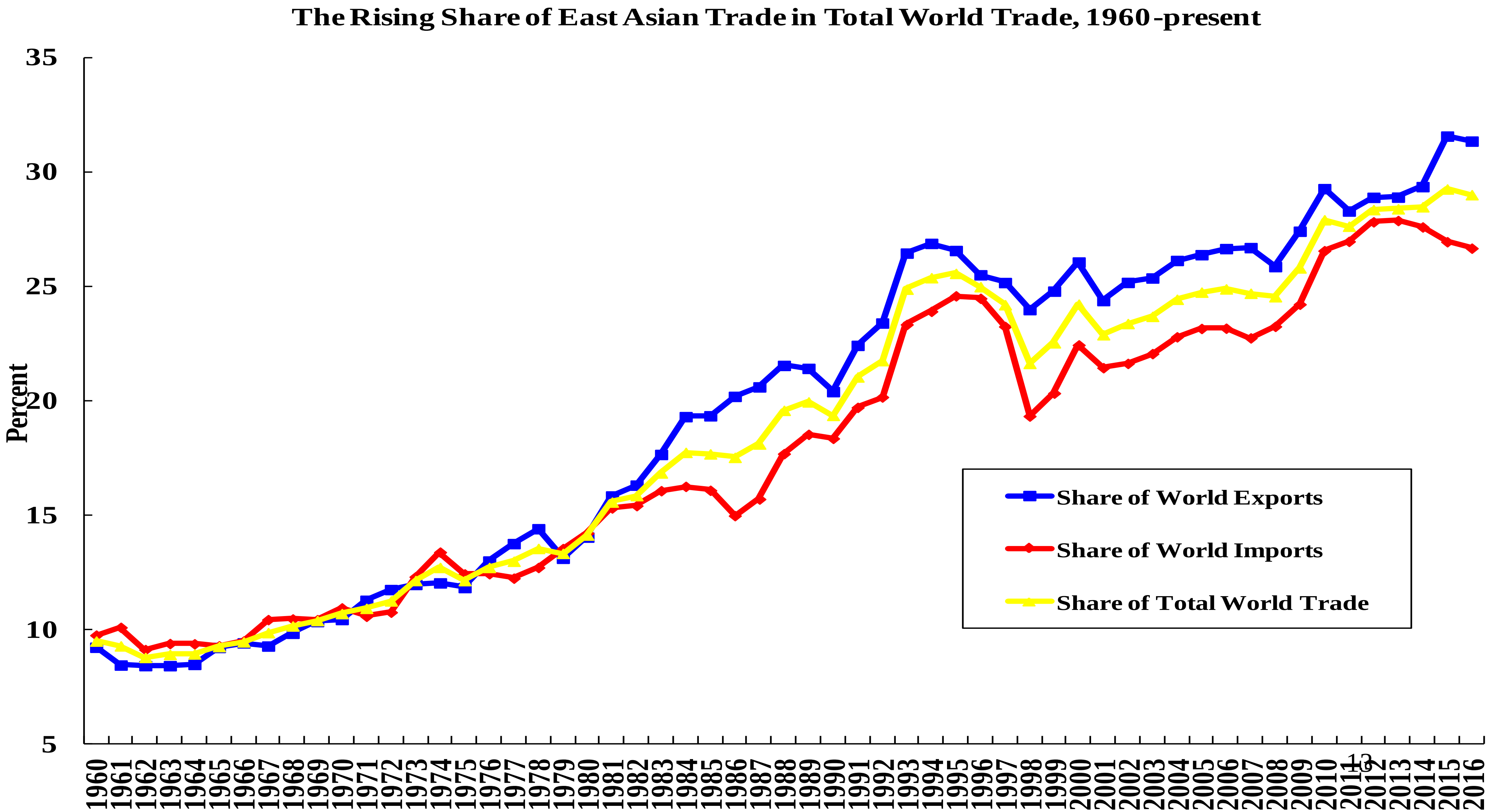
- In 1970, the United States and Western Europe together accounted for almost 47% of world trade in goods and services. By comparison, East Asia accounted for 9.6% of world trade.
- By 2016, the share of United States and Western Europe combined in world trade has declined to 37.1% whereas the share of East Asia has risen to almost 28.1%.
- The Mainland Chinese share of world trade rose from 0.6% in 1970 to 10.1% in 2016. The growth in Chinese international trade may be attributed in part to adoption of current-account convertibility of the Renminbi by China in 1994, accompanied by a significant devaluation of the Renminbi, and to Chinese accession to the World Trade Organisation in 2001.
- Since 2015, Mainland China has also been the largest trading-partner country of the U.S., surpassing Canada.

The Distribution of International Trade in Goods and Services, 1970 and 2016

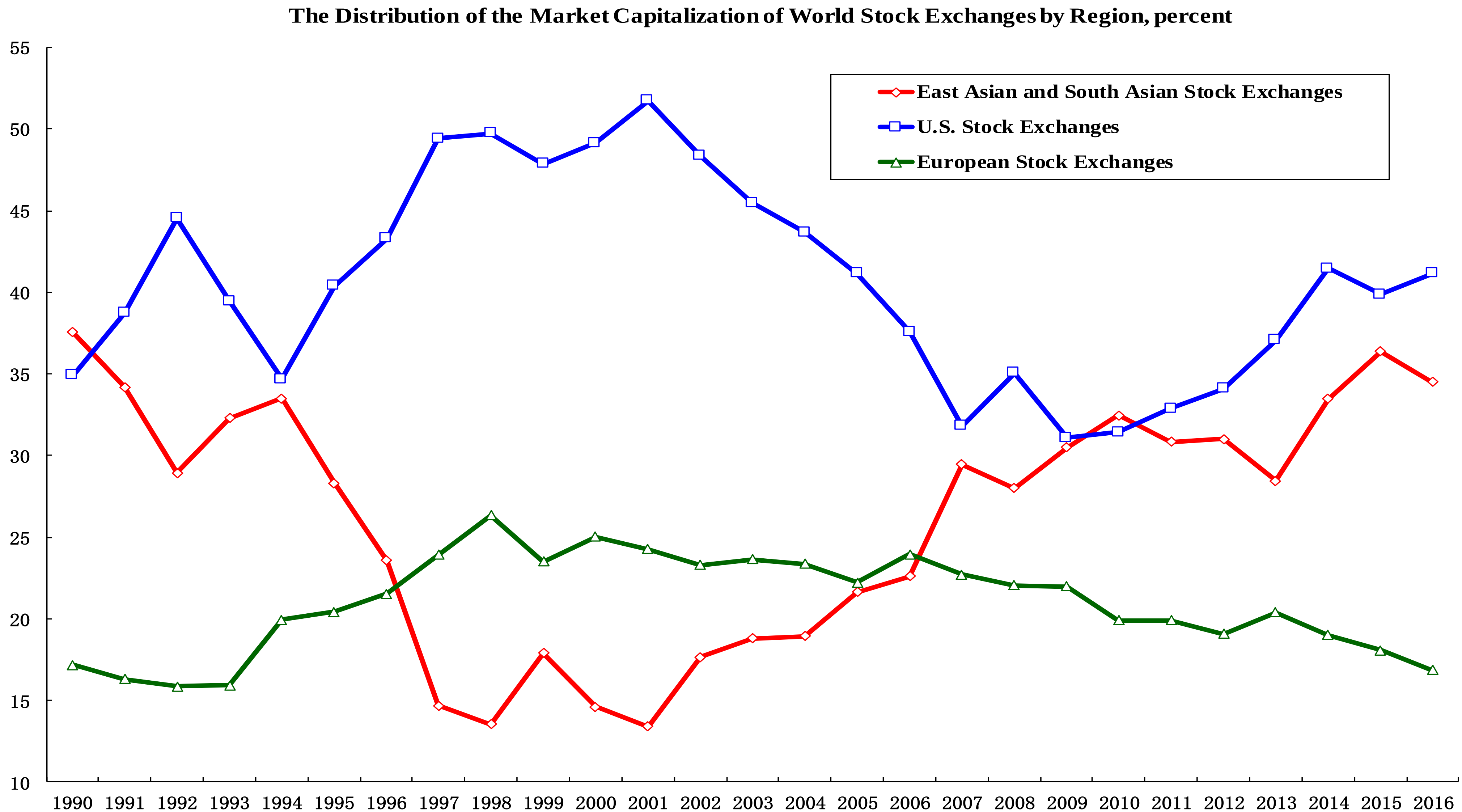




The Rising Share of East Asian Trade in Total World Trade, 1960-present



The Distribution of the Market Capitalization of World Stock Exchanges by Region, percent



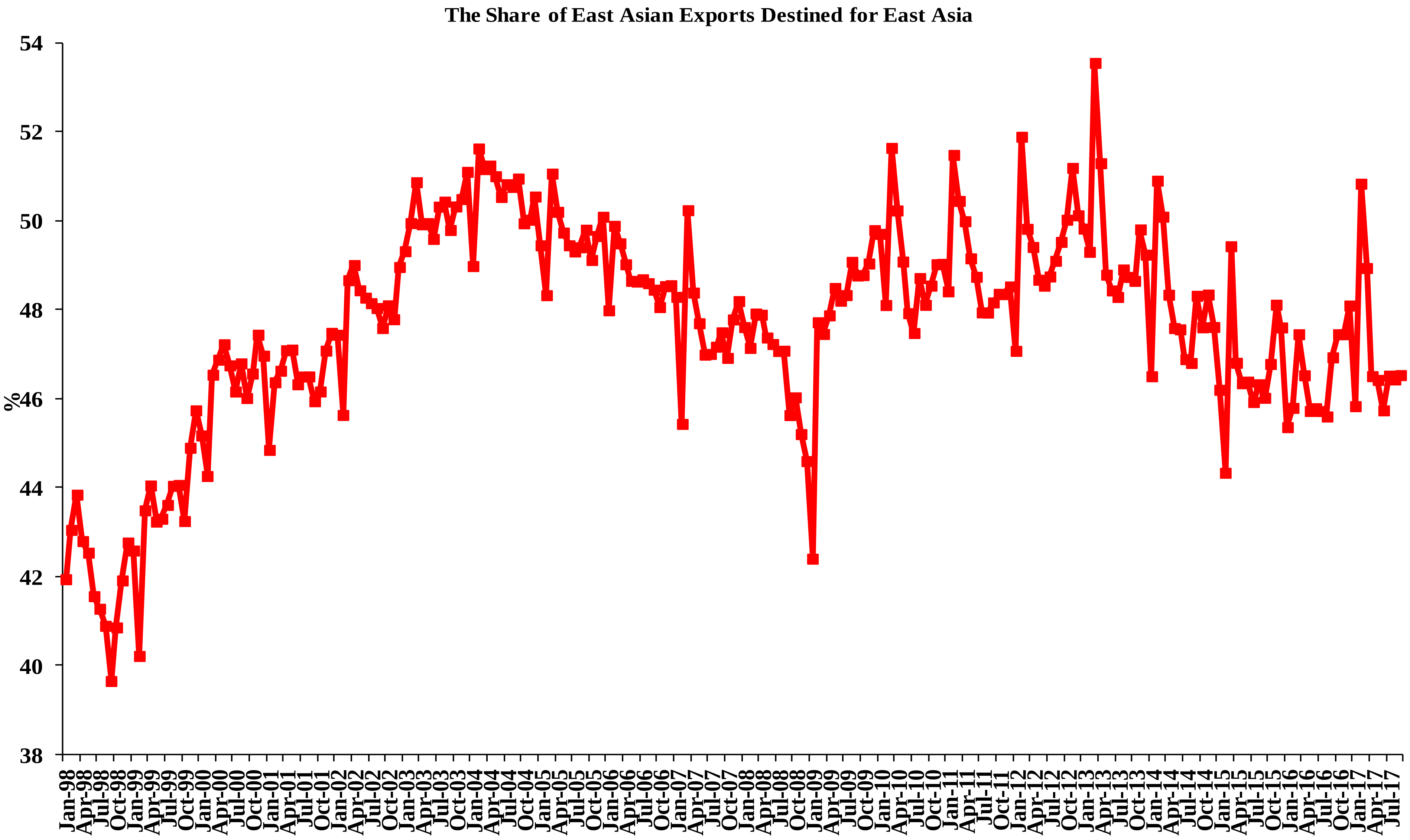
The Shifting Center of Gravity of the Global Economy: The Partial De-Coupling Hypothesis

- Throughout the 2007-2009 global financial crisis, as well as the subsequent European sovereign debt crisis, the East Asian economies continued to do reasonably well. Mainland China, in particular, has been able to maintain its real rate of growth above 6.5% since 2007, lending credence to the "Partial De-Coupling Hypothesis", that is, the East Asian economies can continue to grow, albeit at lower rates, even as the U.S. and European economies go into economic recession.
- This partial de-coupling can occur because of the shift of the economic center of gravity of the world from the United States and Western Europe to Asia (including both East Asia and South Asia) over the past four decades.

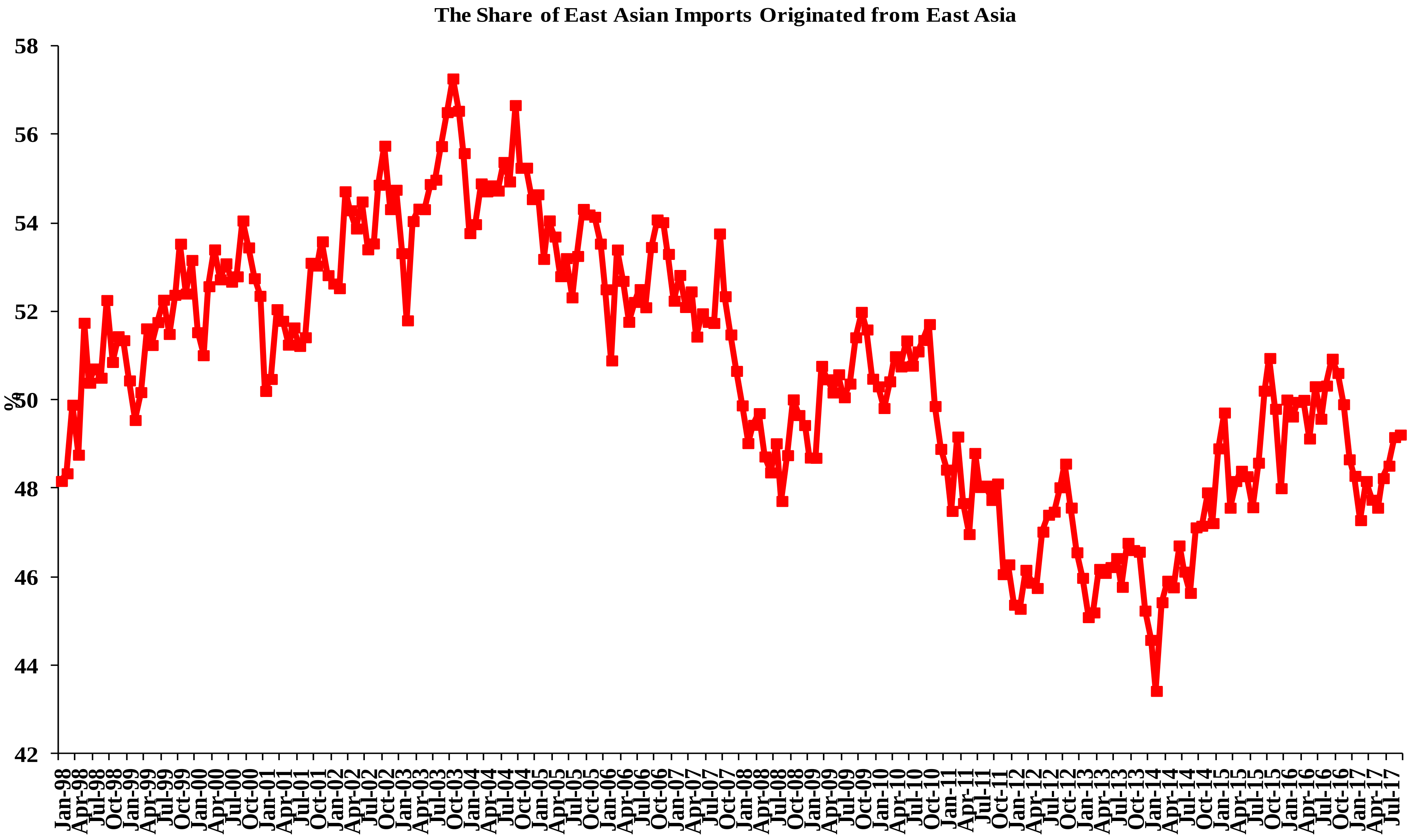
The Shifting Center of Gravity of the Global Economy: The Partial De-Coupling Hypothesis

- A particularly interesting development is the rise in intra-East Asian international trade. The share of East Asian exports destined for East Asia accounts for 50 percent of total East Asian exports at the present time. This is a sea-change compared to 30 years ago when most of the East Asian exports were destined for either the United States or Western Europe.
- Similarly, the share of East Asian imports originated from East Asia has also stayed around 50 percent.

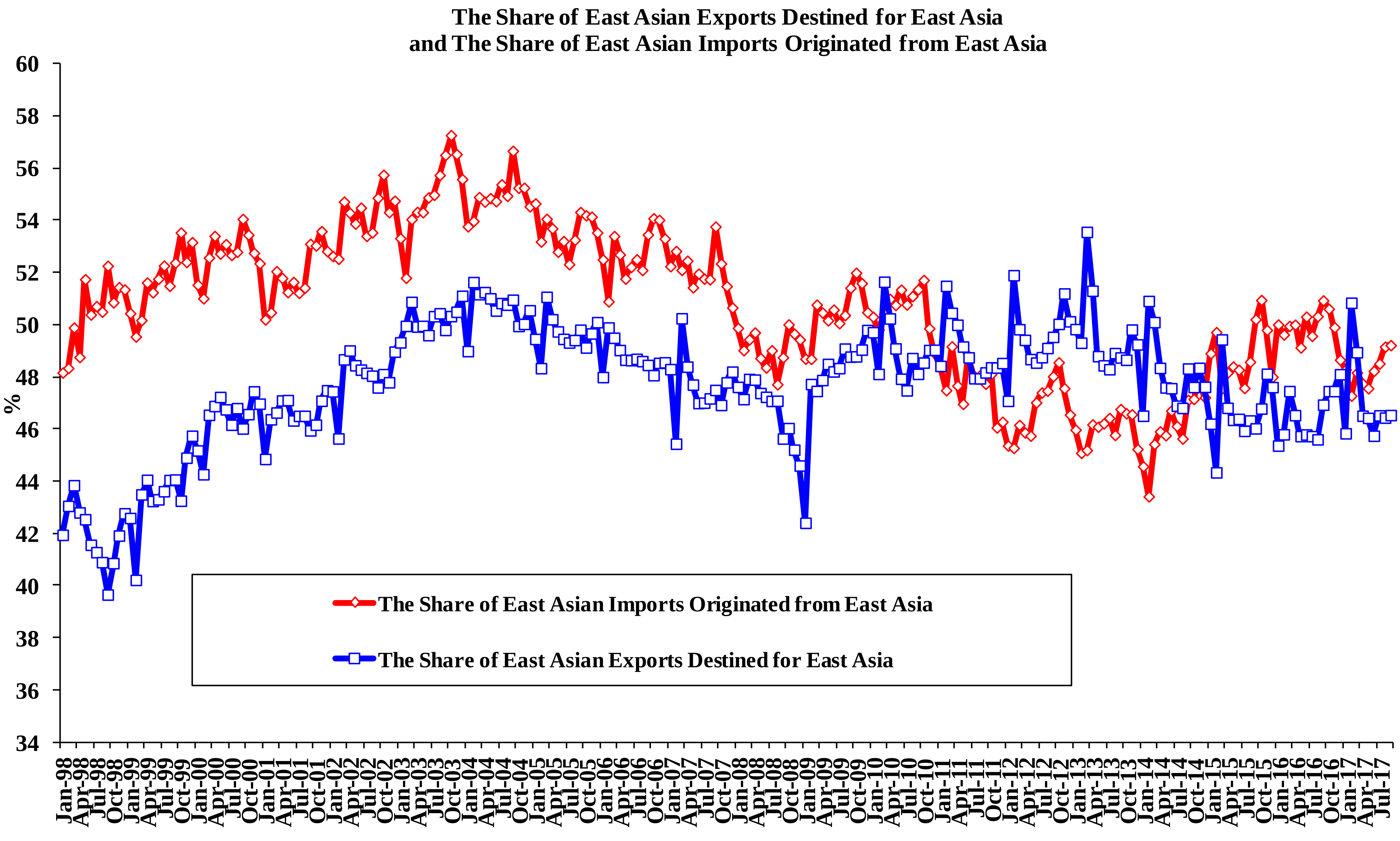
The Share of East Asian Exports Destined for East Asia



The Share of East Asian Imports Originated from East Asia



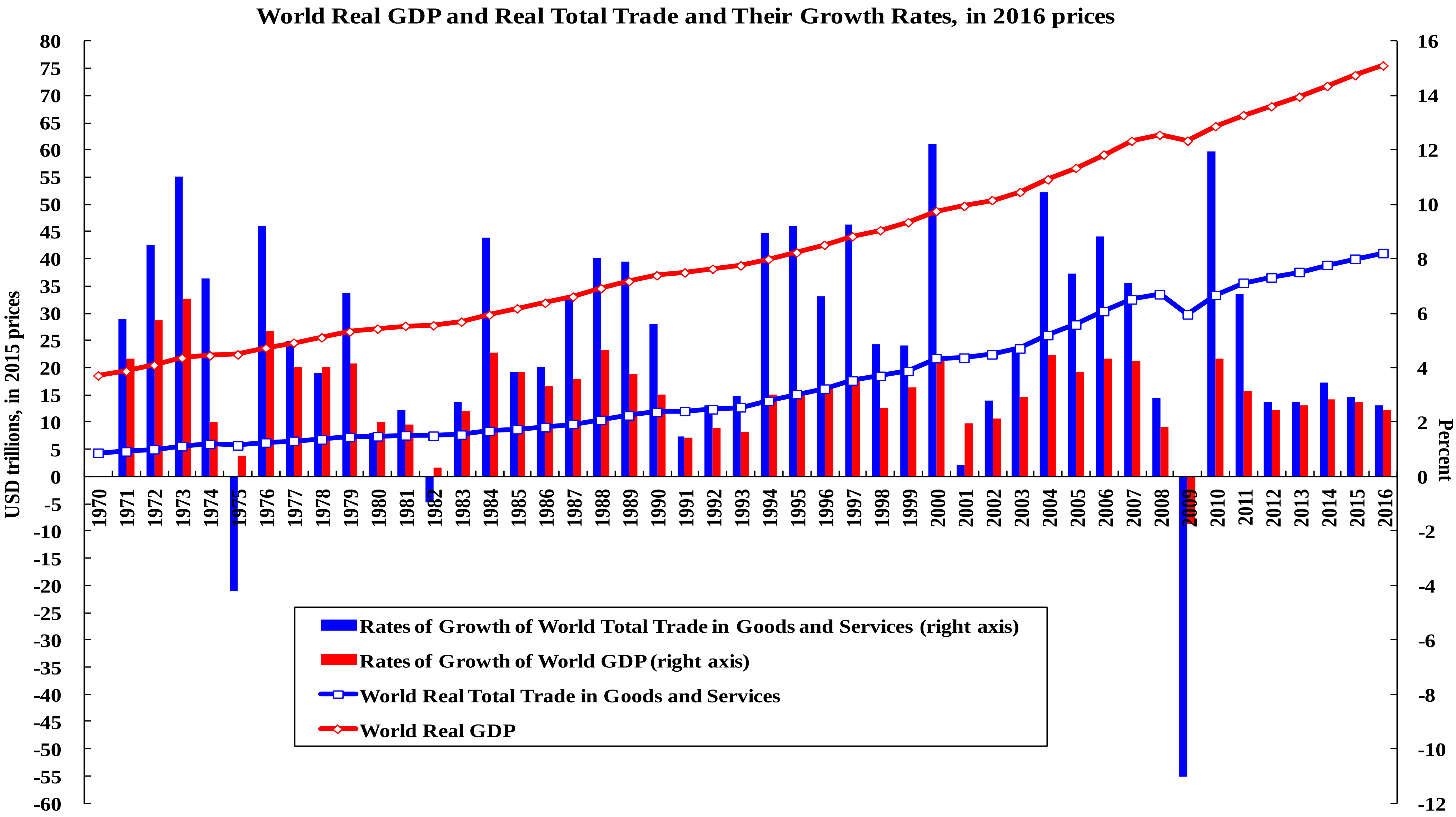
The Share of East Asian Exports Destined for E. Asia & the Share of E. Asian Imports Originated from E. Asia



Global Economic Trends: The Slowdown in the Growth of GDP,Trade & Direct Investment

- Both total real world trade and total world foreign direct investment have grown much faster than total real world GDP since 1970. Between 1970 and 2008, the beginning of the most recent global financial crisis, total real world GDP grew at an average annual rate of 3.3% while total real world trade grew at an average annual rate of 5.5%.
- However, since the global financial crisis that began with the U.S. sub-prime loan crisis in 2007, the average annual rates of growth of real world GDP and real world trade have declined to 2.2% and 2.5% respectively. The recent fall in the nominal value of total world trade is due in part to the fall in the world price of oil.
- 2017 turned out to be the best year for the developed economies—the U.S., the European Union and Japan—in a decade.

Real World GDP and Trade in Goods and Services and Their Growth Rates (2016 prices)



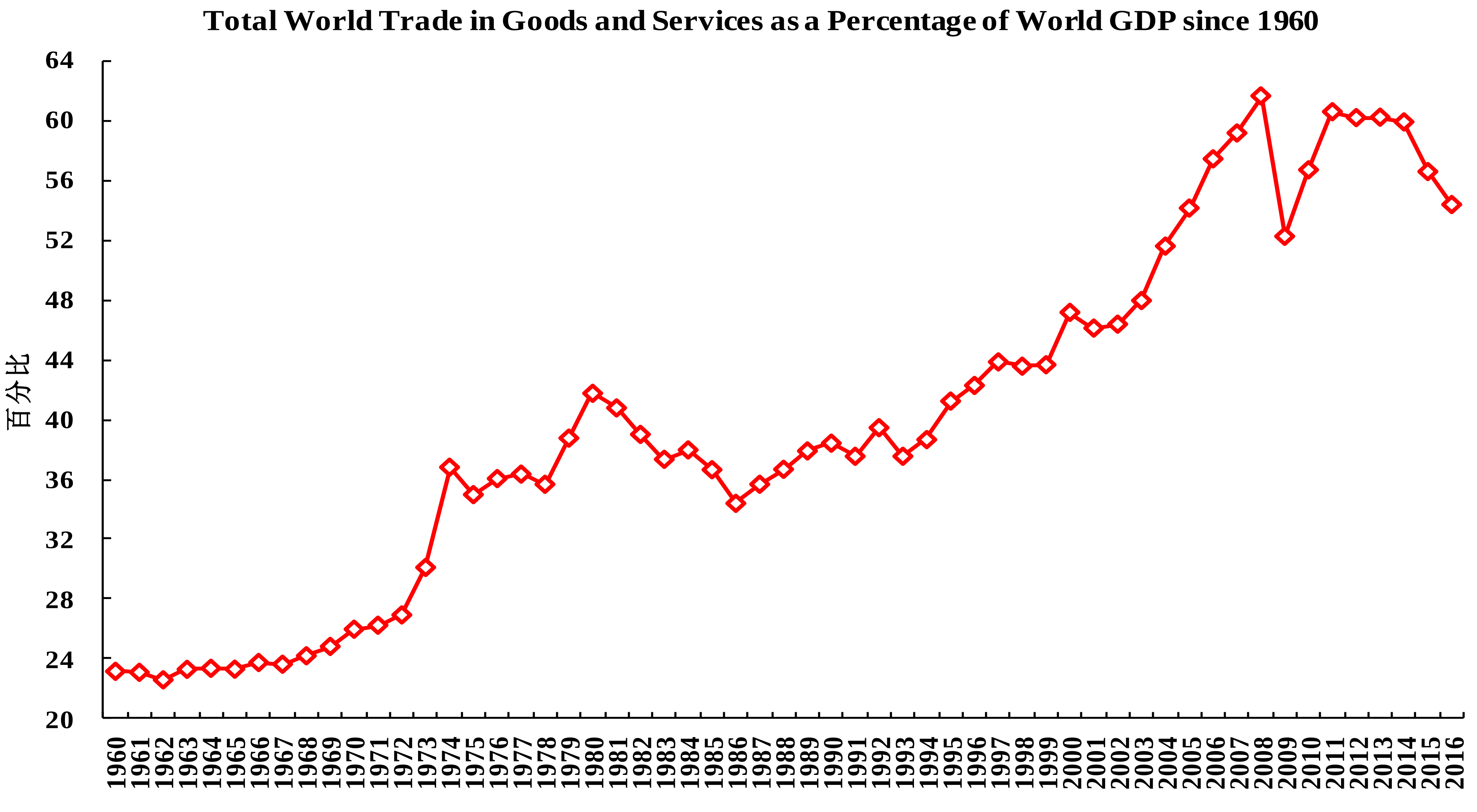
Global Economic Trends: The Slowdown in the Growth of GDP,Trade & Direct Investment

- Even though the International Monetary Fund recently raised its projected rates of global economic growth to 3.9% in 2018 and 2019, it is unlikely that the world economy as a whole would resume its heady rates of growth in GDP and trade that it achieved prior to the global financial crisis of 2008 in a sustained manner.
- Cross-border trade and direct investment are no longer the major drivers of world economic growth.
- Protectionism, isolationism and populism are rearing their heads and the entire world faces the risks of trade wars and economic de-globalization.

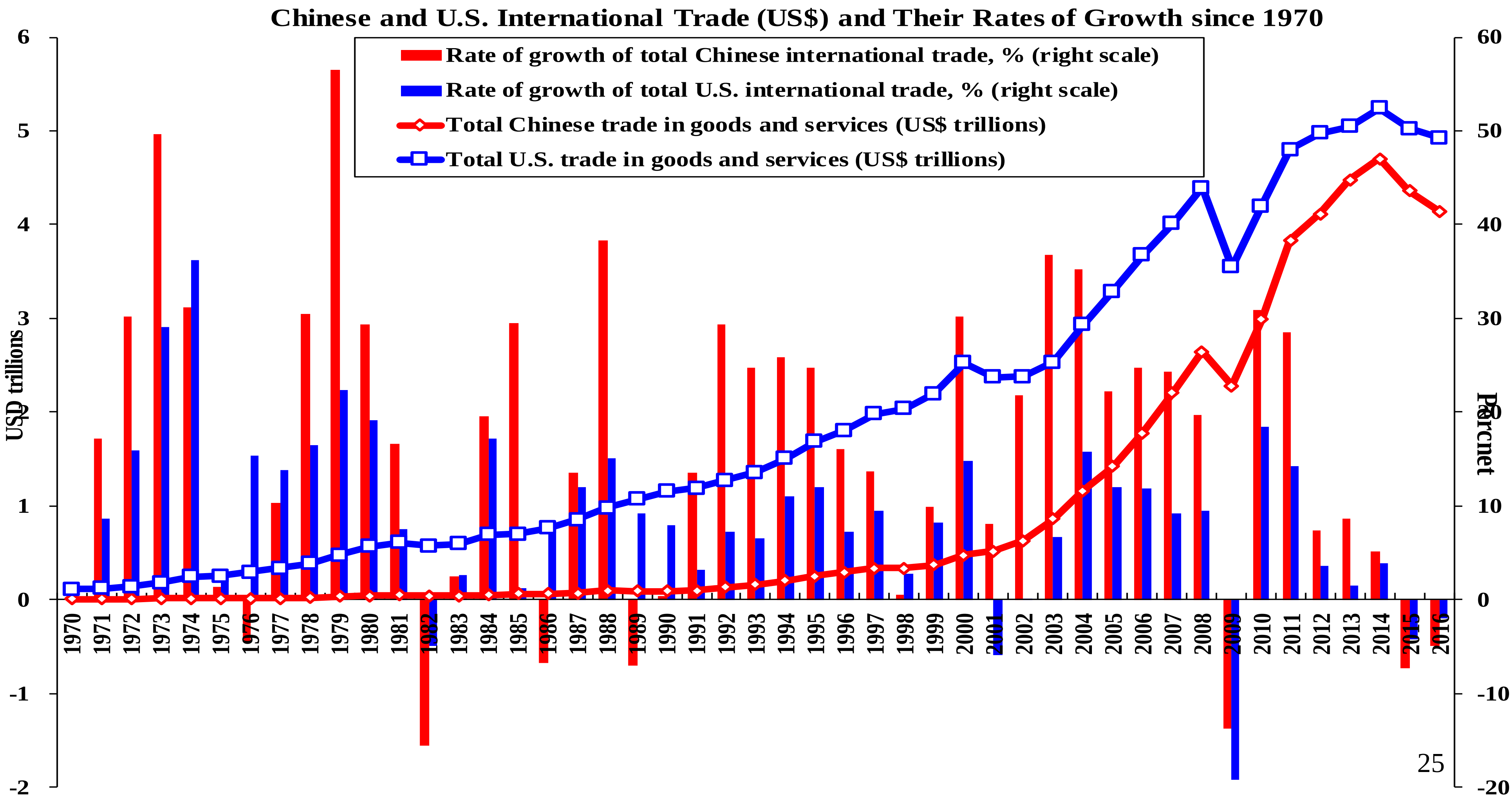
Global Economic Trends: The Slowdown in the Growth of GDP,Trade & Direct Investment

- Total world trade as a percent of total world GDP increased from 26% in 1970 to 62% in 2008, but it has since stalled and has begun a gradual decline.
- The total values of international trade of the United States and China, the two largest economies and also the two largest trading economies in the world, have declined in both 2015 and 2016.
- However, 2017 saw a rebound in the growth of world trade, but it was probably due, in part, to the recovery from a low base.
- Economic globalization has reached a turning point. Is it likely to be reversed in the future?

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



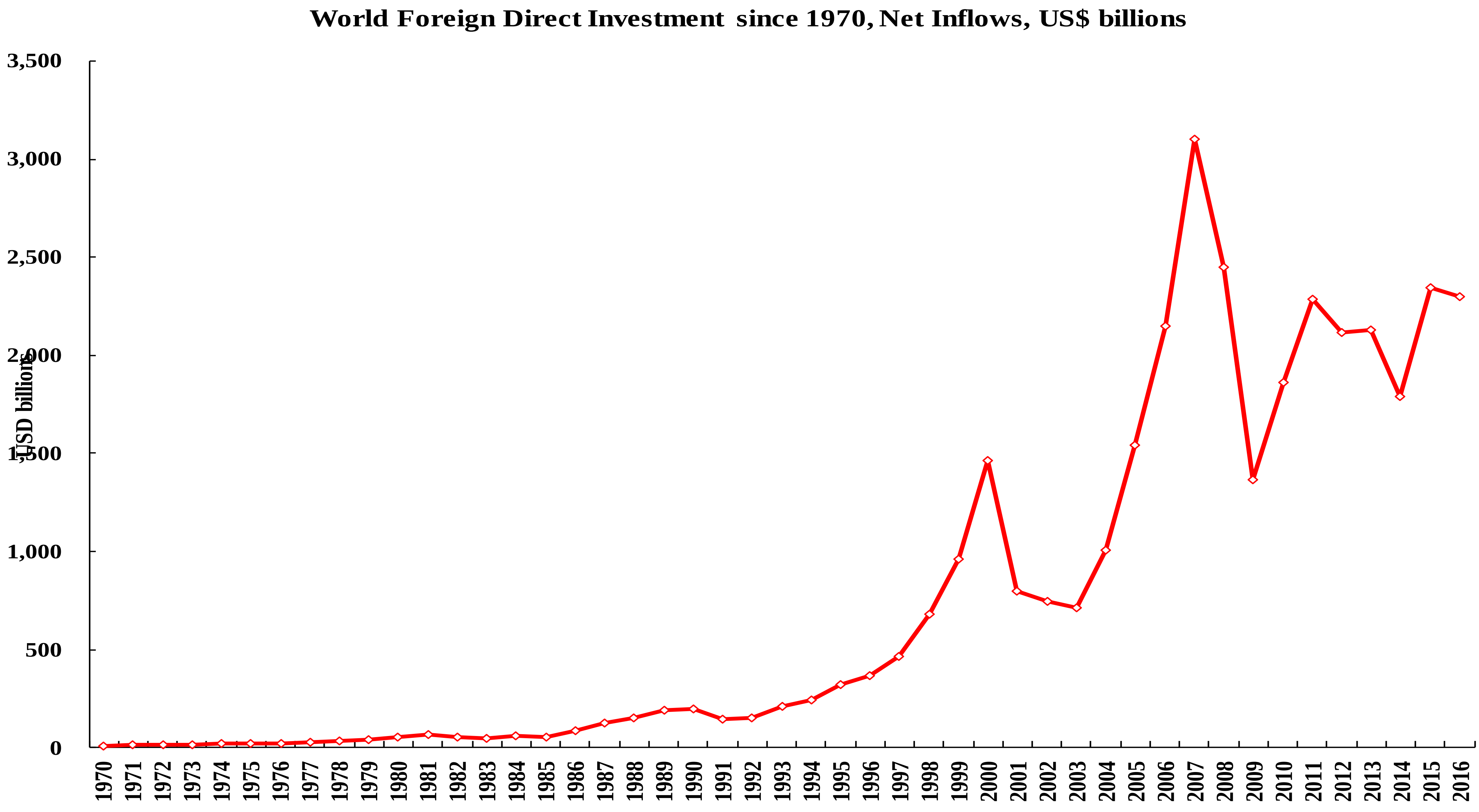
Chinese and U.S. International Trade and Their Respective Rates of Growth since 1970 (US$)



Global Economic Trends: Foreign Direct Investment (FDI)

- Falling barriers to as well as incentives for foreign direct investment (FDI) provided by investee countries have also greatly increased cross-border direct investment. National treatment for foreign direct investment is becoming increasingly standard under the World Trade Organisation (WTO) and similar agreements.
- Data from the United Nations Commission for Trade and Development (UNCTAD) show that total world FDI increased at the average annual rate of 14% between 1970 and 2007, the beginning of the global financial crisis. Annual total world FDI may be estimated at approximately US$1.9 trillion in 2007. Since 2007 total world FDI has been declining by 1% per year.
- The U.S. and Mainland China are the world's top two leading recipients of foreign direct investment (FDI) with an annual average of approximately US$100 billion currently. They are also the top two outbound direct investors.
- Foreign direct investments (FDI) often follow trade—e.g., to secure long-term supply of raw materials and natural resources; and trade often follows foreign direct investments—e.g., production by captive subsidiaries in foreign markets. A large proportion of world trade consists of intra-industry and intra-firm trade.
- International capital flows also include portfolio investment, foreign aid, foreign loans and short-term capital flows such as "hot money".

Total World Foreign Direct Investment (FDI), US$ since 1970



Global Economic Trends: The Limits of Monetary Policy

- The experiences of the quantitative easing policies undertaken by the U.S. Federal Reserve Board, the Bank of Japan, the European Central Bank (ECB) and other central banks since late 2008 confirm what should have been well known all along—that monetary policy alone cannot turn a depressed economy around. Low interest rates cannot overcome the effects of negative expectations about the future. If expectations about the future of the economy are poor, firms will not make new investments and households will reduce their consumption no matter how low the interest rate becomes, even if it turns negative. Moreover, such expectations can be self-fulfilling.
- The U.S., Japan and many of the European countries have been stuck in a classic "liquidity trap". As the saying goes: "One can pull on a string, but not push on a string". Monetary policy or quantitative easing is powerless when faced with a low level of confidence about the future of the economy.

Global Economic Trends: The Limits of Monetary Policy

- In addition, zero or negative interest rates create asset price bubbles, which will eventually burst, with damaging consequences. They also have serious negative effects on the income and wealth distribution and impose hardships on the net savers of the economy--the middle- and lower-income households, and especially the retired elderly.
- The truth is that easy monetary policy has not worked to revive the economies, and should have never been expected to work by itself alone.
- Interest rates worldwide are expected to be normalized in this year and the next, led by the U.S. Federal Reserve Board. There are likely to be four interest rate increases in the U.S.

U.S. Federal Funds Rate, the 10-year U.S. Treasury Rate, and the Rate of Inflation

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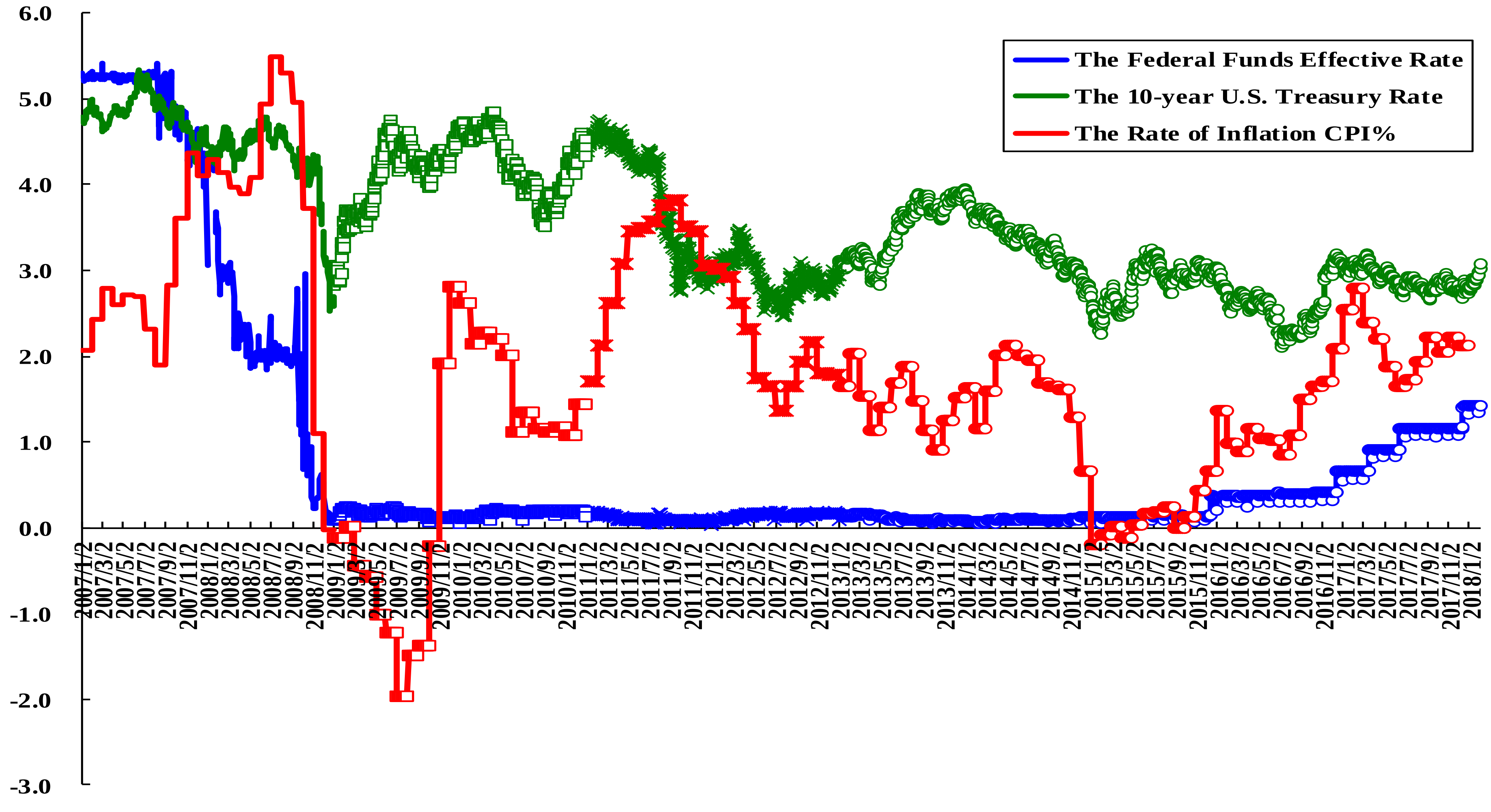
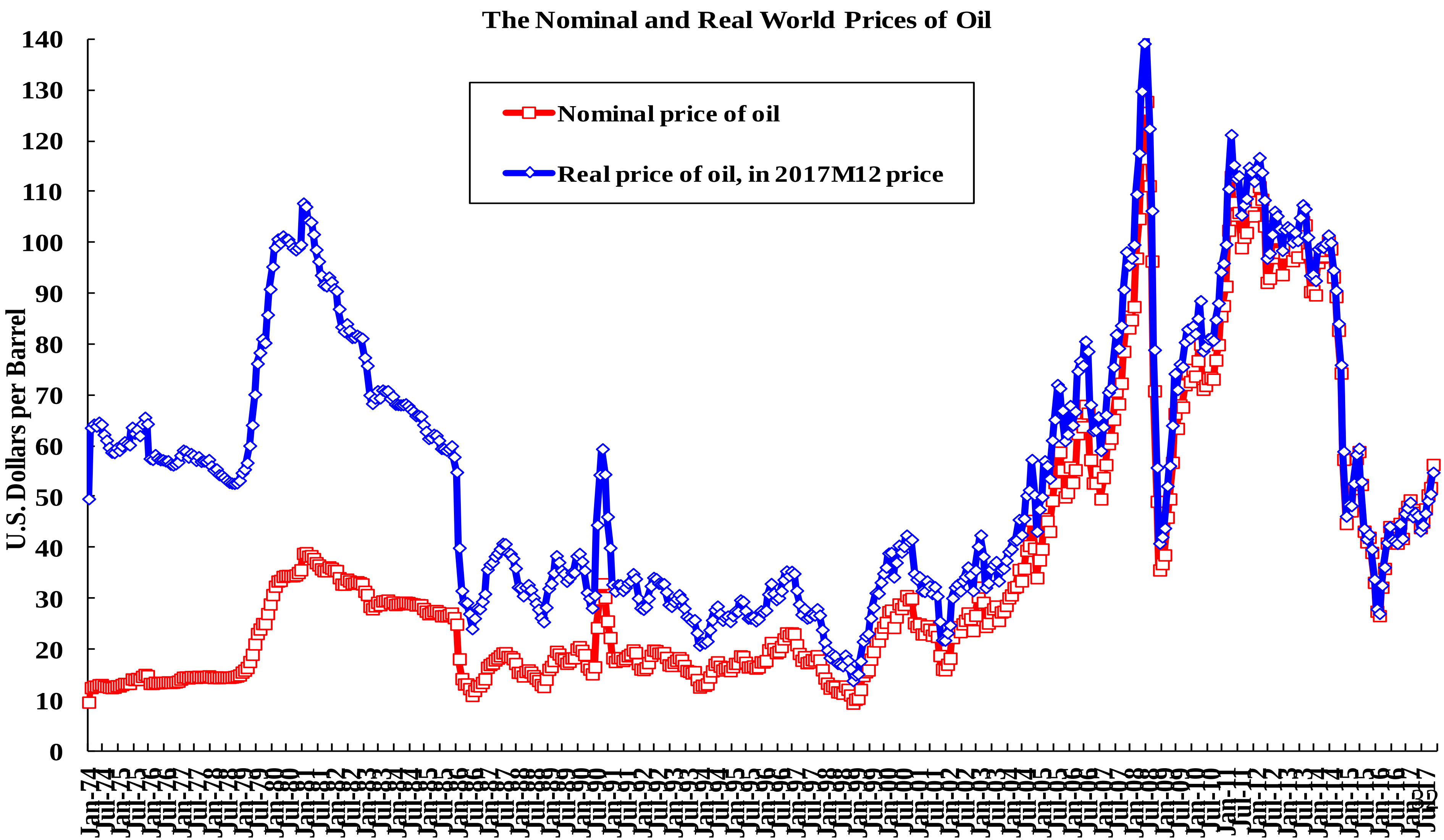


Global Economic Trends: The World Price of Oil

- The world price of oil fell between 2014 and 2016. It has rebounded somewhat since. In real terms it is slightly higher then where it was before its spectacular rise in 2004.
- Overall, the fall in the world price of oil has to be regarded as a net positive factor for the world economy as a whole.
- The world price of oil is not really determined by world supply and demand alone. The world oil market is an oligopolistic market. The largest producer in the world, Saudi Arabia, has the capacity of producing at least 25 percent more if it chooses to do so.
- However, given the advances in shale oil technology (“fracking”) and the abundant potential supply in the U.S., already the second largest producer in the world, which can be tapped in a matter of months, it is unlikely that the world price of oil will stay above US$60 a barrel for a long time.

The Nominal and Real World Prices of Oil (2017 prices)



Global Economic Trends: The Importance of Innovation

- Innovation is the most important driving force of economic growth today, especially for mature developed economies with their already-high capital-labor ratios and little, no, or even negative growth in labor-hours.
- Sustained investment in intangible capital such as human capital and research and development (R&D) is essential for the occurrence of economic innovation, reflected in measured technical progress or growth in total factor productivity in an economy.
- Economic globalization can create new competitors. Economies must adapt and adjust. Intangible capital enables the creation of new comparative advantages.
- The East Asian economic development experience provides an example of created as opposed to natural comparative advantage (human capital and R&D capital can substitute for natural resources).

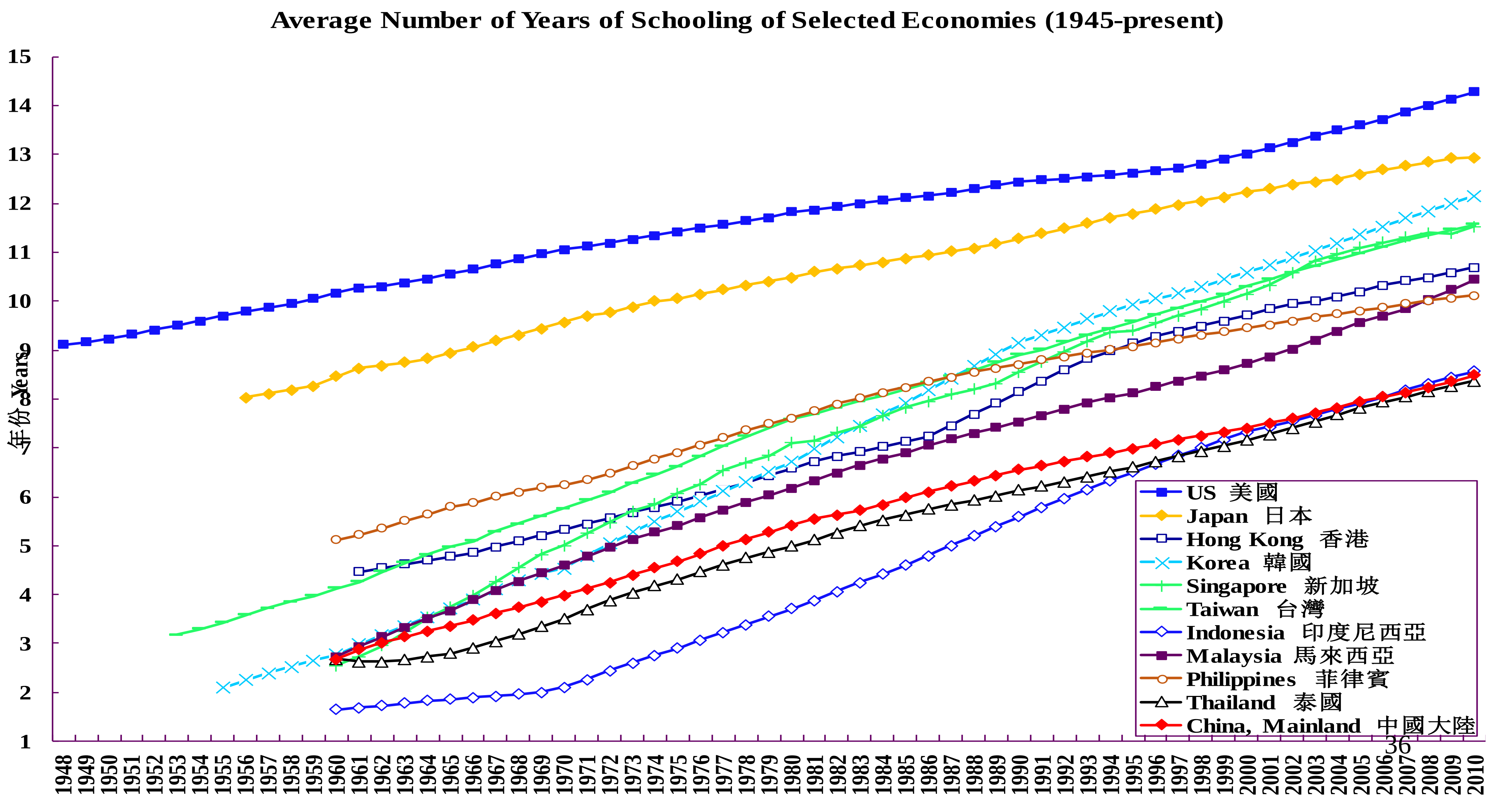
Global Economic Trends: The Importance of Innovation

- Technological obsolescence, whether domestic or imported, can also cause similar disruptions in employment and economic growth (e.g., Amazon.com wipes out mom-and-pop bookstores in the U.S. and elsewhere).
- In order to survive these disruptions and disturbances, the comparative advantages of an economy have to be continually created, maintained, preserved and renewed in addition to enhancement of the social safety net.

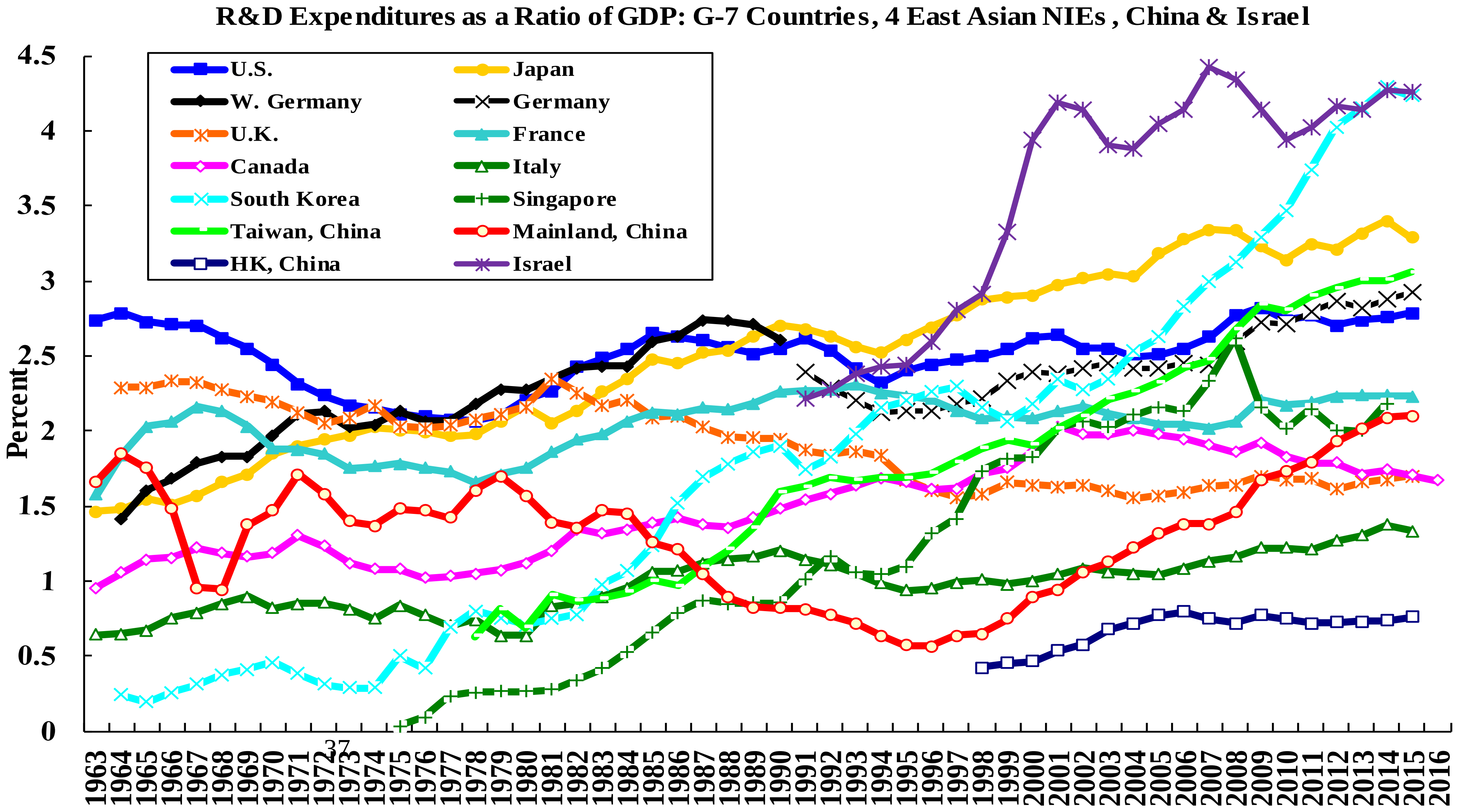
Global Economic Trends: The Importance of Innovation

- 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 and Taiwan have 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.
- R&D expenditure as a percent of GDP also shows similar trends.

Average No. of Years of Schooling per Person in the Working Age Pop., Selected Economies



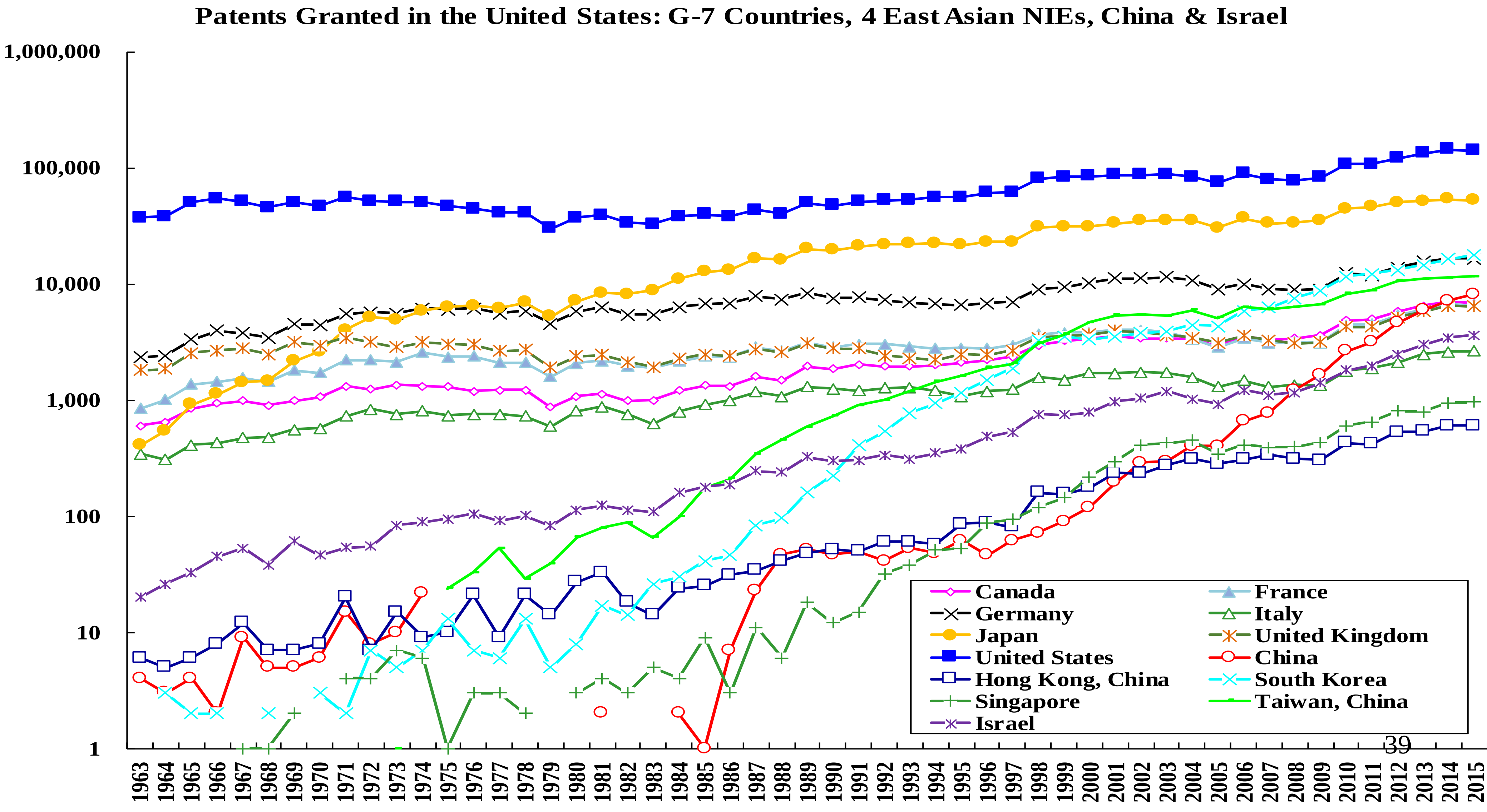
R&D Expenditure as a Percent of GDP: G-7 Countries, 4 East Asian NIES, China & Israel



Global Economic Trends: The Importance of Innovation

- One indicator of the potential for technical progress (national innovative capacity) is the number of patents created each year. In the following chart, the number of patents granted in the United States each year to the nationals of different countries, including the U.S. itself, over time is presented.
- The U.S. is the undisputed champion over the past forty years, with 140,969 patents granted in 2015, followed by Japan, with 52,409. (Since these are patents granted in the U.S., the U.S. may have a home advantage; however, for all the other countries and regions, the comparison across them should be fair.)
- The number of patents granted to Mainland Chinese applicants each year has increased from the single-digit levels prior to the mid-1980s to 8,166 in 2015.
- The economies of South Korea and Taiwan, granted 17,924 and 11,690 U.S. patents respectively in 2015, are still far ahead of Mainland China. In contrast, the number of U.S. patents granted to Hong Kong nationals was only 601 in 2015.

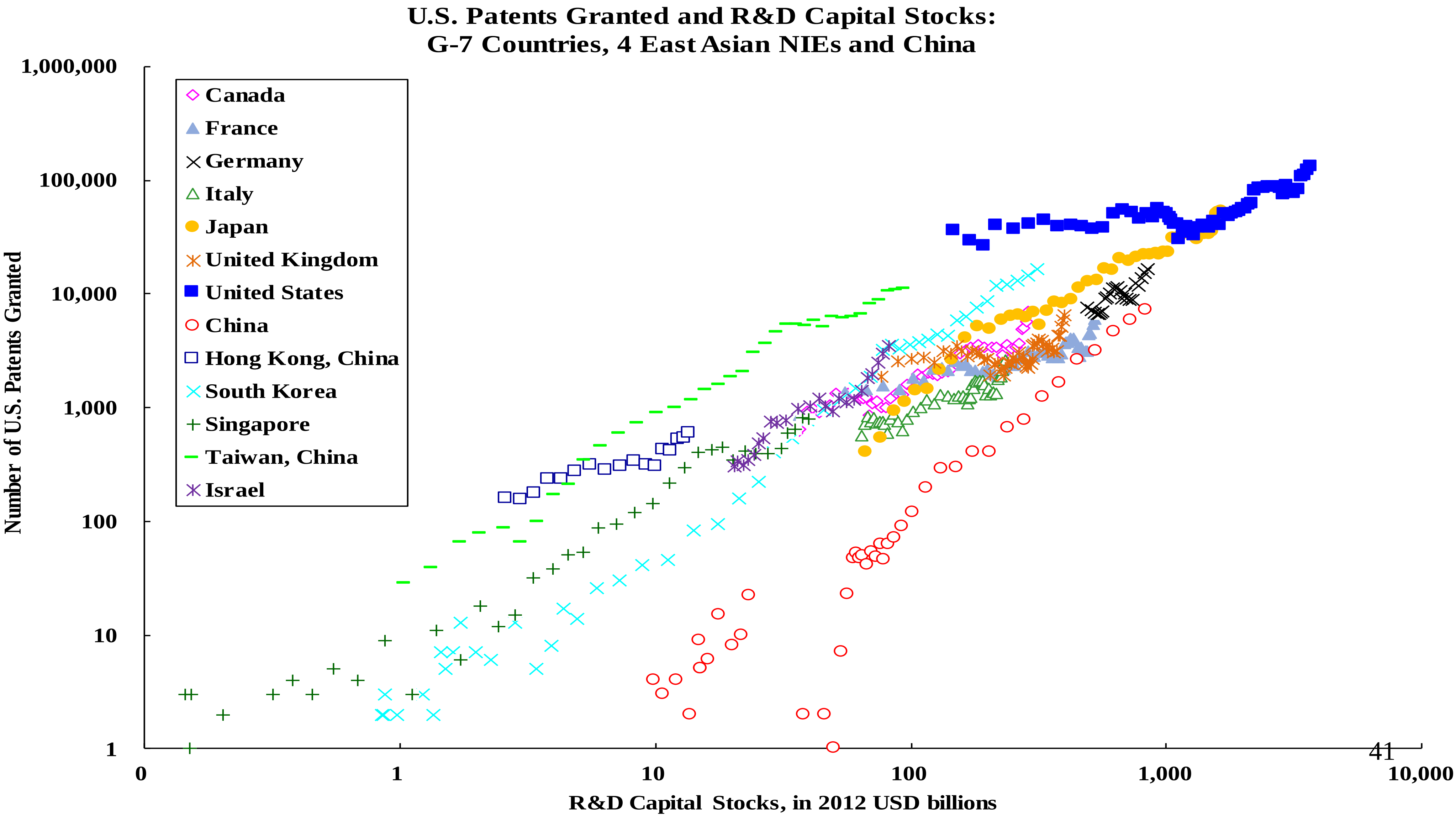
Patents Granted in the United States: G-7 Countries, 4 East Asian NIEs, China & Israel



The Importance of Innovation: Investment in Intangible Capital

- The R&D capital stock, defined as the cumulative past real expenditure on R&D less 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.
- It can be shown to have a direct causal relationship to the number of patents granted (see the following chart, in which the annual number of U.S. patents granted is plotted against the R&D capital stock of that year for each economy).
- The chart shows clearly that the higher the stock of R&D capital of an economy, the higher is the number of patents granted to it by the U.S.

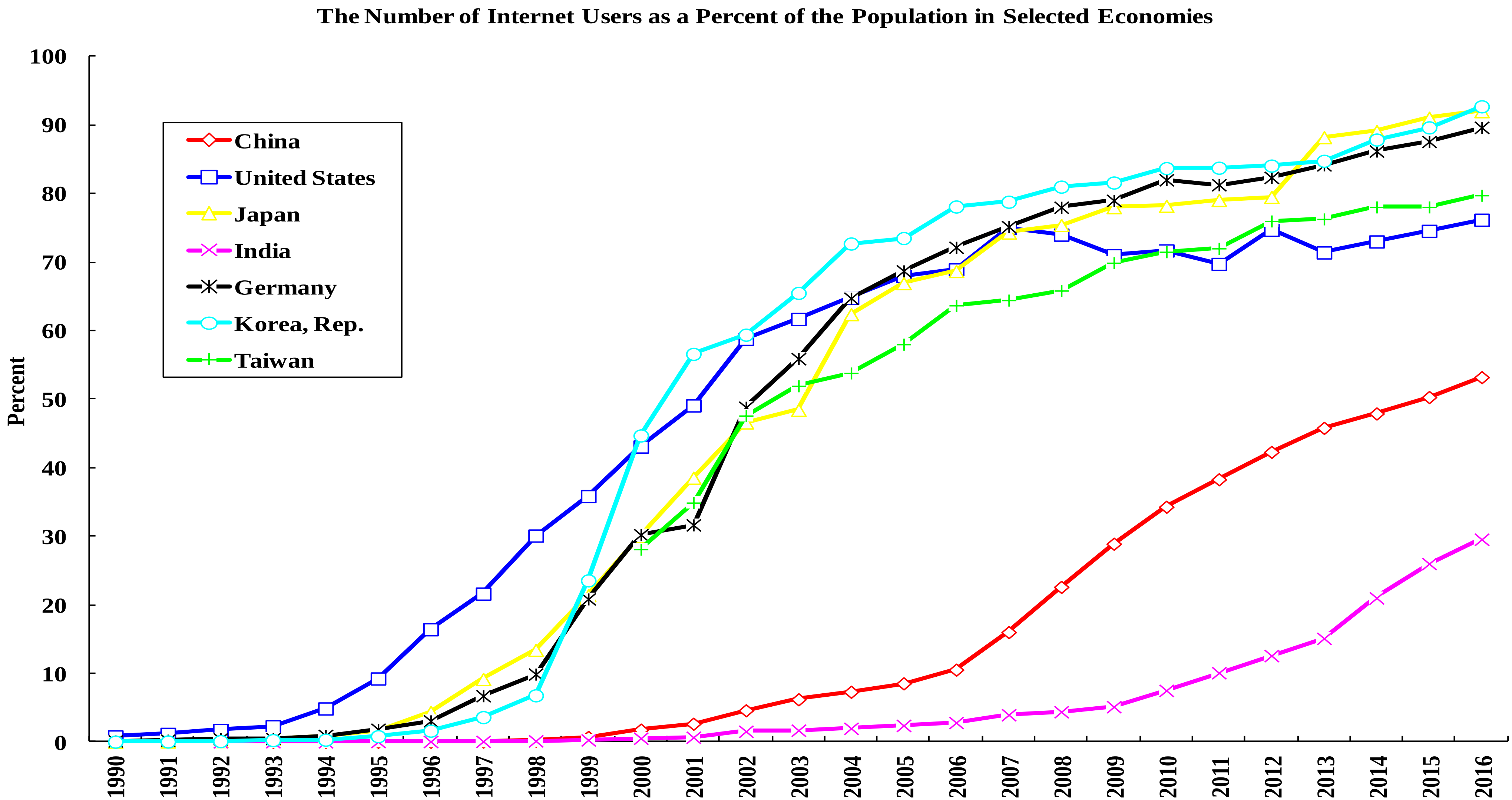
U.S. Patents Granted and R&D Capital Stocks: G-7 Countries, 4 EANIEs, China & Israel



Global Economic Trends: The Internet Economy

- Internet commerce has been growing by leaps and bounds. Amazon and Alibaba have become the largest corporations in the world.
- However, internet commerce has also been causing disruptions in both developed and developing economies.
- It has been affecting the financial sector and the retail sector. It has been making the most progress in economies in which the financial sector is relatively under-developed, such as China.

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



Global Economic Trends: Demographic Developments

- The lengthening of life-expectancy worldwide
- The effects of ageing on societies everywhere
- The “one-child” policy in China
- The rise of India as the most populous country

Global Economic Trends: The Belt and Road (B&R) Initiative

- The "Belt and Road" (B&R) Initiative, consisting of the Silk Road Economic Belt and the 21st Century Maritime Silk Road, was launched by President XI Jinping in September 2013. It is a grand, multi-country (72 by last count), multi-decade development plan with the objective of linking and transforming the economies of Asia, Europe, Africa and Oceania.
- 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.

Global Economic Trends: The Belt and Road (B&R) Initiative

- The Belt and Road (B&R) Initiative is a serious long-term commitment of China that has been written into the Charter of the Communist Party of China.
- It aims to create a peaceful and secure environment for joint development by building a trade, investment and infrastructure network connecting all B&R nations.
- It emphasizes the nurturing of mutual understanding and trust and the formation of durable relationships through cultural and educational exchanges as well as industrial cooperation.
- It promotes open, inclusive, balanced and green economic globalization through enhanced regional interconnectivity.
- But above all, it seeks to stimulate and create sustainable trade and investment exchanges where none exist before, thus benefitting every Belt and Road country and accelerating economic development for all.

Global Economic Trends: The Geo-Political Uncertainties

- There are currently many major geo-political uncertainties. What are the real effects of Brexit on the U.K., on the European Union and on the rest of the world? What policies will a new German Government pursue?
- The possibility of trade wars with the United States—across the Pacific (China and Japan) and the Atlantic (Germany) and within North America (Canada and Mexico).
- The risks of isolationism, protectionism and populism.
- And then there is the continuing North Korean crisis.
- Other potential hot spots include the South China Sea, the East China Sea, the Middle East, Africa and possibly the Taiwan Straits.

The Geo-Political Uncertainties: Trumponomics

- If we go by the rhetoric of President Donald Trump and his administration, there may well be a global trade war with the three principal "villains"--China, Germany and Japan. The collapse of NAFTA is going to be bad not only for Canada and Mexico but also the U.S.
- Even a more limited trade war between China and the U.S. will have significant consequences not only for China and the U.S. but also for the rest of the world.
- Fortunately, the so-called destination tax (a variant of the border-adjustment tax) originally proposed by the U.S., which will cause great disruptions in world trade and global supply chains is no longer being pursued.

The Future of Economic Globalization: The Meaning of Economic Globalization

- Economic globalization means the growth of international trade, cross-border direct investment and portfolio investment, cross-border flows of financial capital, human capital and labor around the world and finally the cross-border flows of information and knowledge.
- Economic globalization is not new—The Silk Road between China and the West in the Han Dynasty, the seven voyages of the Admiral ZHENG He in the Ming Dynasty, the Spanish conquests of Latin America and the Philippines, The Portuguese ventures to India, China, Taiwan and Japan, the Dutch and English East India Companies, and the China Clippers of the U.S.
- However, the speed of globalization has greatly increased within the last several decades because of many reasons.
- According to Thomas Friedman's best-selling book, The World is Flat, economic globalization now reaches virtually every corner of the Earth.

The Future of Economic Globalization: The Effects of Globalization

- Economic globalization has resulted in the massive growth of world trade and through world trade world GDP.
- The growth of international trade led and propelled successively the growth of the GDPs of Japan, the four Newly Industrialized Economies (Hong Kong, Singapore, South Korea and Taiwan), and Mainland China. They all adopted export-led economic growth policies in the early stages of their economic development.
- This has resulted in the center of gravity of the world economy shifting to East Asia from North America and Europe and within East Asia from Japan to Mainland China.
- Economic globalization has also partially de-coupled the East Asian economies from the U.S. and Western European economics, meaning that they can continue to grow even as the U.S. and Western European economies go into recession, albeit at slower rates.
- However, economic globalization has accelerated factor-price equalization around the world. Jobs for unskilled labor continue to move to lower-wage economies, except for tourism-related jobs. Any job that can be moved away will be moved way.
- Economic globalization has resulted in a more equal distribution of income across countries and regions (but a less equal distribution of income within each country and region).

The Future of Economic Globalization: The Benefits of Economic Globalization

- The creation of winners on a global basis—voluntary international trade is always win-win for both trading-partner countries.
- The more efficient allocation of capital--Investors everywhere are moving their capital around the world to seek the highest rates of return.
- The enlargement of markets--The entire world is the potential market and the entire world population have become potential customers.
- The huge potential of both technological and market economies of scale can be realized through expansions, mergers, acquisitions, consolidations, and formation of strategic alliances and partnerships.
- Economic globalization enhances the returns to intangible capital.

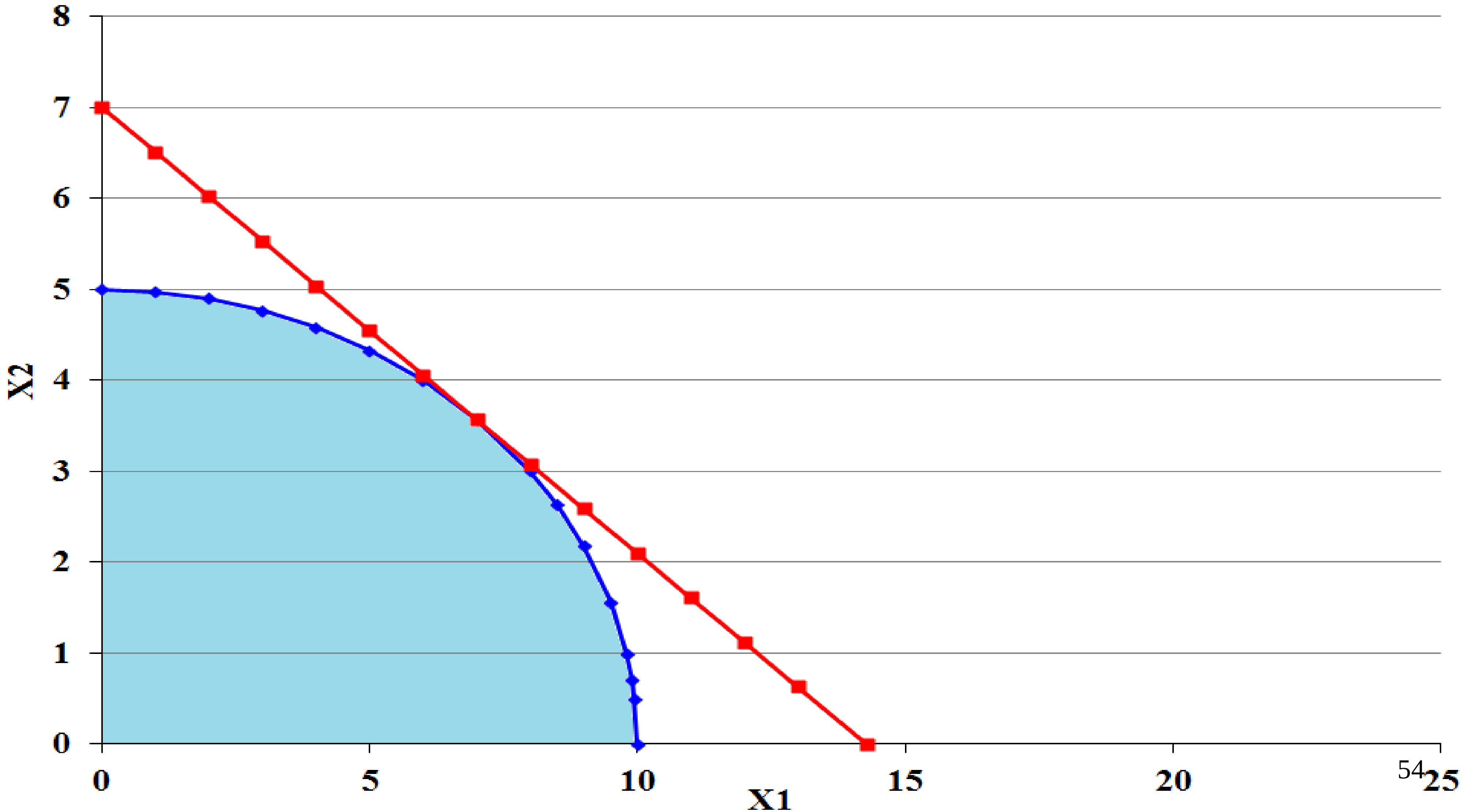
The Benefits of Economic Globalization: International Trade

- Economic theory tells us that whenever a new economy joins the world economy, aggregate economic welfare of the world should increase. Moreover, the aggregate economic welfare of each country that participates in the world economy should also increase.
- The basic idea is a simple one: With voluntary international trade, if there is no gain for any of the trading partner countries, no trade will take place. In any such trade, both partner countries must gain. And the gains are sufficient to compensate the potential losers within each trading partner country.
- When a previously autarkic economy begins to participate in the world, international trade can only increase, and cannot decrease.
- However, the introduction of new international trade transactions will necessitate domestic adjustments in each of the trading partner countries, as some domestic industries will expand while other domestic industries will contract.

The Set of Consumption Possibilities without International Trade

- The set of production possibilities of an economy is the set of all possible combinations of goods and services that it can produce. In the chart we show the set of production possibilities of an economy with two goods, X1 and X2, shaded in blue.
- The solid blue line is the frontier of the set of production possibilities. An efficient economy always operates on the frontier of its set of production possibilities. We note that in order to produce more of X1, the economy will have to produce less of X2 and vice versa. Moreover, the more X1 that the economy has already been producing, the more X2 it has to give up on the margin in order to produce even more of X1. (This is the diminishing marginal rate of substitution (or convexity) assumption.)
- In the absence of international trade, the set of consumption possibilities of an economy is precisely the same as its set of production possibilities. It can only consume what it can produce.

The Sets of Consumption Possibilities with and without International Trade



The Expansion of the Sets of Consumption Possibilities with International Trade

- With international trade, the set of consumption possibilities can be expanded even with the set of production possibilities remaining the same.
- The red straight line represents the international price line. Its slope is the ratio at which a unit of X2 can be exchanged for a unit of X1 in the world market. It is drawn at its point of tangency to the set of production possibilities. (It is assumed that the economy is small, so that it is a price-taker in the world market, and thus the price line is a straight line.)
- With international trade, the set of consumption possibilities becomes the triangle bounded by the red line and the two axes.
- To see this, suppose the economy operates at the point of tangency of the set of production possibilities and the international price line, then by trading X1 and X2 internationally, it can achieve every other point on the red line, which are not attainable in the absence of international trade.
- Clearly the set of consumption possibilities with international trade is significantly expanded—it now properly contains the set of consumption possibilities under autarky. Thus, the economy must be better off because not only does it have all the previously available consumption possibilities to choose from but it also has choices previously unavailable to it.

The Distribution of Gains from Voluntary International Trade is Indeterminate

- However, while voluntary international trade <u>always</u> brings gains to all trading-partner countries, the distribution of gains from trade, or the terms of trade, are not uniquely determined by the principles of comparative advantage alone but depends on the relative bargaining power of the trading partner countries.
- Thus, some economies will benefit more and some economies will benefit less, even though all economies will benefit.

The Future of Economic Globalization: Both Winners and Losers are Created Domestically

- However, while every participating country has had a net gain, albeit to varying degrees, domestic winners as well as losers are created within every participating country at the same time.
- The benefits to an economy from international trade can be manifested in two principal ways. First, its exporters can produce more goods and export them, and thereby create more GDP, profits and employment for the economy. Second, its importers also benefit as the demands for imports augment their revenues and profits as well as generate additional employment; and its consumers can enjoy more, cheaper imported consumer goods and services of greater variety, and its producers can enjoy more and cheaper imported inputs, including equipment, energy, material and service inputs.

The Future of Economic Globalization: Both Winners and Losers are Created Domestically

- However, imports can potentially disrupt domestic industries through its competition with domestically produced goods, changing the relative prices between different goods in the economy, and displacing workers employed in these domestic industries. Increased exports can also create losers by bidding away resources needed by other industries. Losers will be created in the domestic economy unless appropriate compensation and redistribution policies are adopted by the government. The market on its own cannot compensate the losers from international trade.

The Future of Economic Globalization: Both Winners and Losers are Created Domestically

- Economic globalization has begun to be questioned by the common people who have not benefitted from it. The “Brexit” vote, the election of President Donald Trump in the U.S., and the rise of isolationists and protectionists in Austria, France, Germany and the Netherlands and Germany, are all testimony that many people in these countries consider themselves to be “losers” from economic globalization and are venting their anger and frustration by voting against the establishment or the so-called “elite”.
- The losers should and must be compensated if globalization were to continue in a sustainable manner. No one should have to lose as a result of globalization--everyone can be made better off, because in principle, the gains should more than offset the losses.

The Future of Economic Globalization: The Costs of Economic Globalization

- The Creation of Domestic Losers in Each Economy
- The Intensification of Global Competition
- Factor-Price Equalization
- Increased Domestic Income Inequality
- The Potential of Monopolization
- Increased Vulnerability to External Economic Disturbances
- The Risks of Short-Term Cross-Border Capital Flows

The Costs of Economic Globalization: The Creation of Domestic Losers in Each Economy

- However, even though the economy of every trading country is better off as a whole with than without international trade, winners and losers will be created in every economy as a result of trade. The losers will not be automatically compensated by the winners through the markets. Government intervention is necessary to make sure that there are no net losers, and in particular, no permanent losers.
- The failure of the government to redistribute the gains from trade will likely make the losers permanent. Permanent losers will oppose globalization and those who support it.
- The social costs of disruptions of industries and job displacements can be high.
- They can lead to the rise of protectionism and isolationism as a reaction to the costs of globalization if not appropriately mitigated.
- However, there is sufficient net gain in the economy as a whole for all the losers to be potentially compensated by the winners.

The Costs of Economic Globalization: The Intensification of Global Competition

- There will be intensification of competition in the world markets from both domestic and foreign firms for goods (including natural resources), services, and factors (capital and human resources).
- There will be increased uncertainty and unpredictability (footlooseness of suppliers, customers and investors and the possibility of external shocks).
- Comparative advantages are dynamic. The entry of a new player may cause major re-alignment of comparative advantages. For example, a lower-cost producer of shoes may emerge, forcing the existing producers to cut costs or to relocate. Adjustments, for example, cost-cutting, relocation, entry into a new industry, etc., will be necessary.

The Costs of Economic Globalization: Factor-Price Equalization

- The “Factor-Price Equalization Theorem” of the late Prof. Paul A. Samuelson (Nobel Laureate in Economic Sciences) states that the prices of identical factors of production, such as the wage rate of unskilled labour, or the user cost of capital, will be equalized across countries as a result of free international trade in goods (in the absence of transport costs).
- The theorem suggests that the wage rate of unskilled labour in a developed economy will fall whereas the wage rate of similar labour will rise in the developing economies. Eventually, they will equalize at a common low level in the world under free international trade (in the absence of transport costs). With transport costs, the wage rates will not be equalized, but the tendency is the same. This has actually occurred in many economies, including the U.S. and Hong Kong. **Any job that can be moved away will be moved away.**
- Samuelson, P. A. (1948). "International Trade and the Equalization of Factor Prices", <u>Economic Journal</u>, June, pp. 163-184.

The Costs of Economic Globalization: Increased Domestic Income Inequality

- Economic globalization increases the degree of inequality of income within an economy, other things being equal. This is obvious since both winners and losers are created. The winners are better off than before and the losers worse off than before. The degree of domestic income inequality can be expected to increase, absent any government intervention. This can lead to political polarization if not properly mitigated.
- However, the increase in domestic income inequality can be accompanied simultaneously by increased international income equality, that is, increased equality among countries. In fact, this is also what has happened in the world.

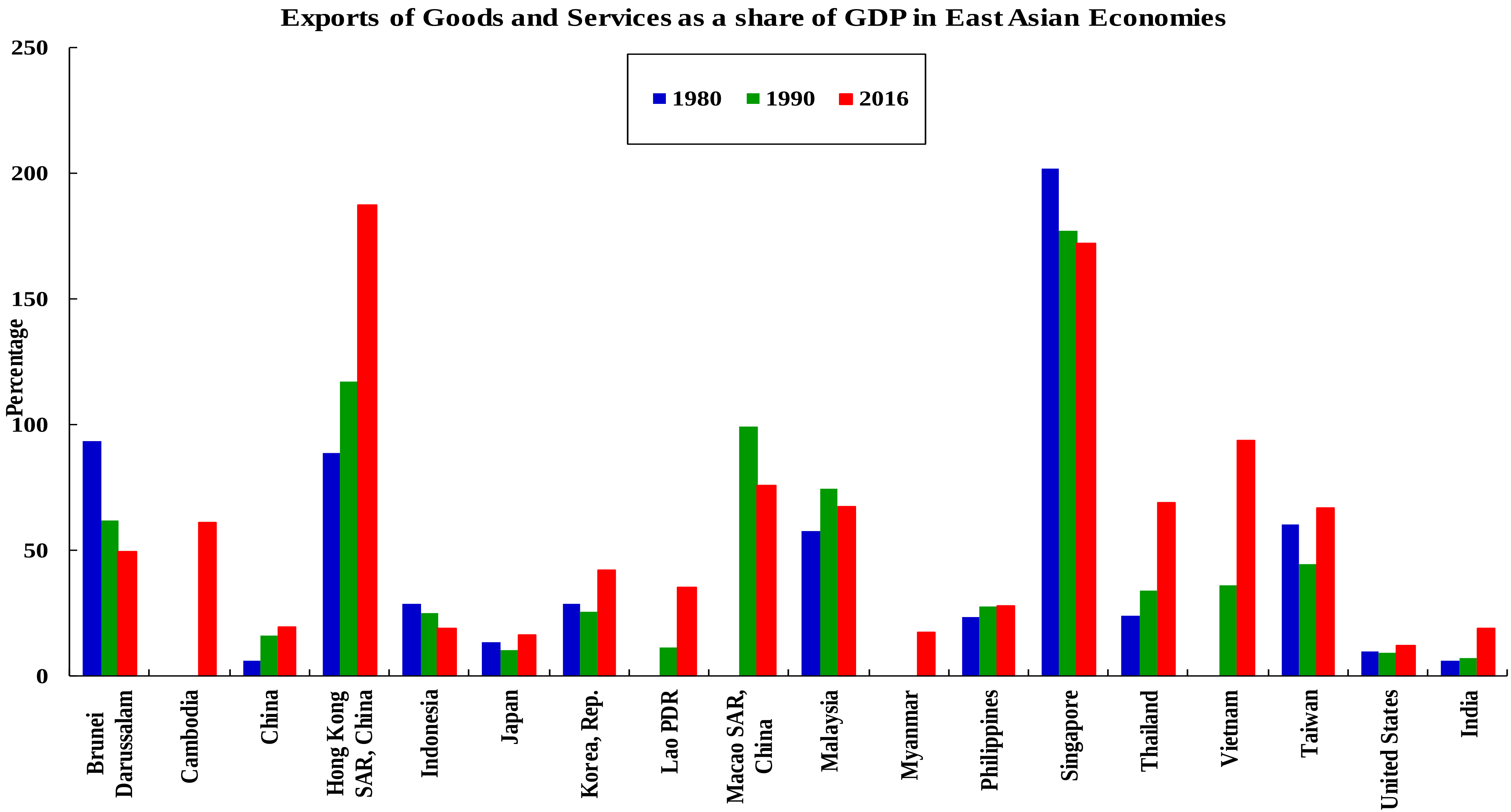
The Costs of Economic Globalization: The Potential of Monopolization

- Monopolization and cartelization are the natural outcomes of a completely free and unregulated (global) market economy. They tend to result in higher prices and poorer qualities for goods and services and less innovation.)
- Economies of scale (the network effect) and globalization together also enable the rise of global monopolies or quasi-monopolies such as Alphabet (Google), Apple and Microsoft.
- It is fair to say that without the IBM consent degree in the U.S. there might not have been a Microsoft, and that without the legal restrictions on Microsoft there might not have been an Apple or a Google.
- Governments around the world must remain vigilant on anti-competitive behavior of the part of large firms.

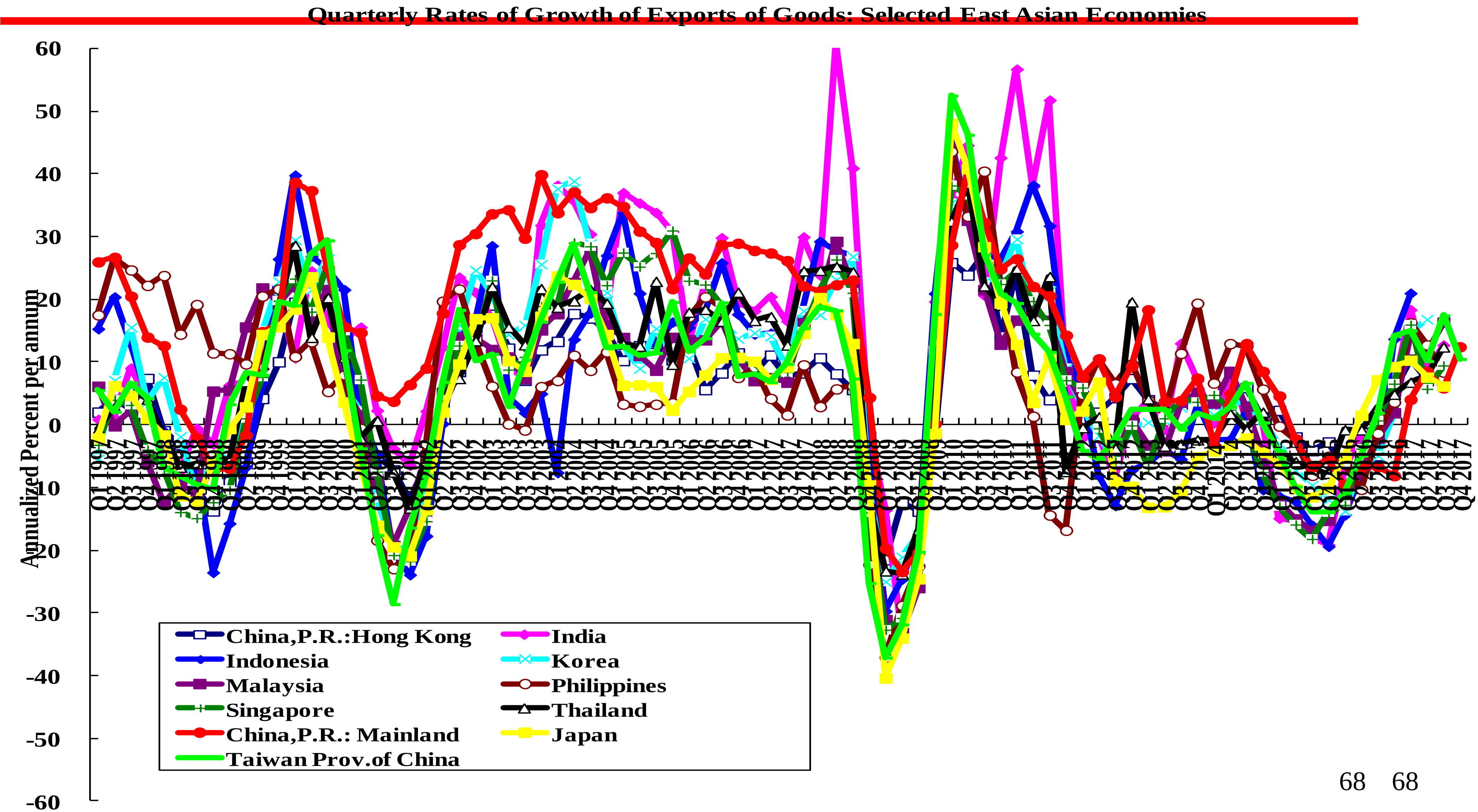
The Costs of Economic Globalization: Increased Vulnerability to External Disturbances

- Increased globalization of the markets for goods, services and factors (capital and labor) also implies that the world economies will tend to move up and down more or less simultaneously. There is therefore increasing synchronization of business cycles, resulting in higher correlation of real rates of growth, rates of interest, rates of inflation, and rates of increase in the prices of assets among economies.
- It is no longer possible for small economies to rely solely on diversification to reduce the impact of external disturbances and shocks. Large economies, which are not so dependent on exports, are more immune from external economic disturbances (for example, the U.S., China, Japan and India).
- However, it also implies that economic recovery is also likely to be more simultaneous, and hence more rapid and robust, with the aggregate demands of each of the economies feeding into one another (as was experienced during the 1997-1998 East Asian currency crisis).
- There is, however, also evidence of partial de-coupling of East Asian economies from the rest of the world.

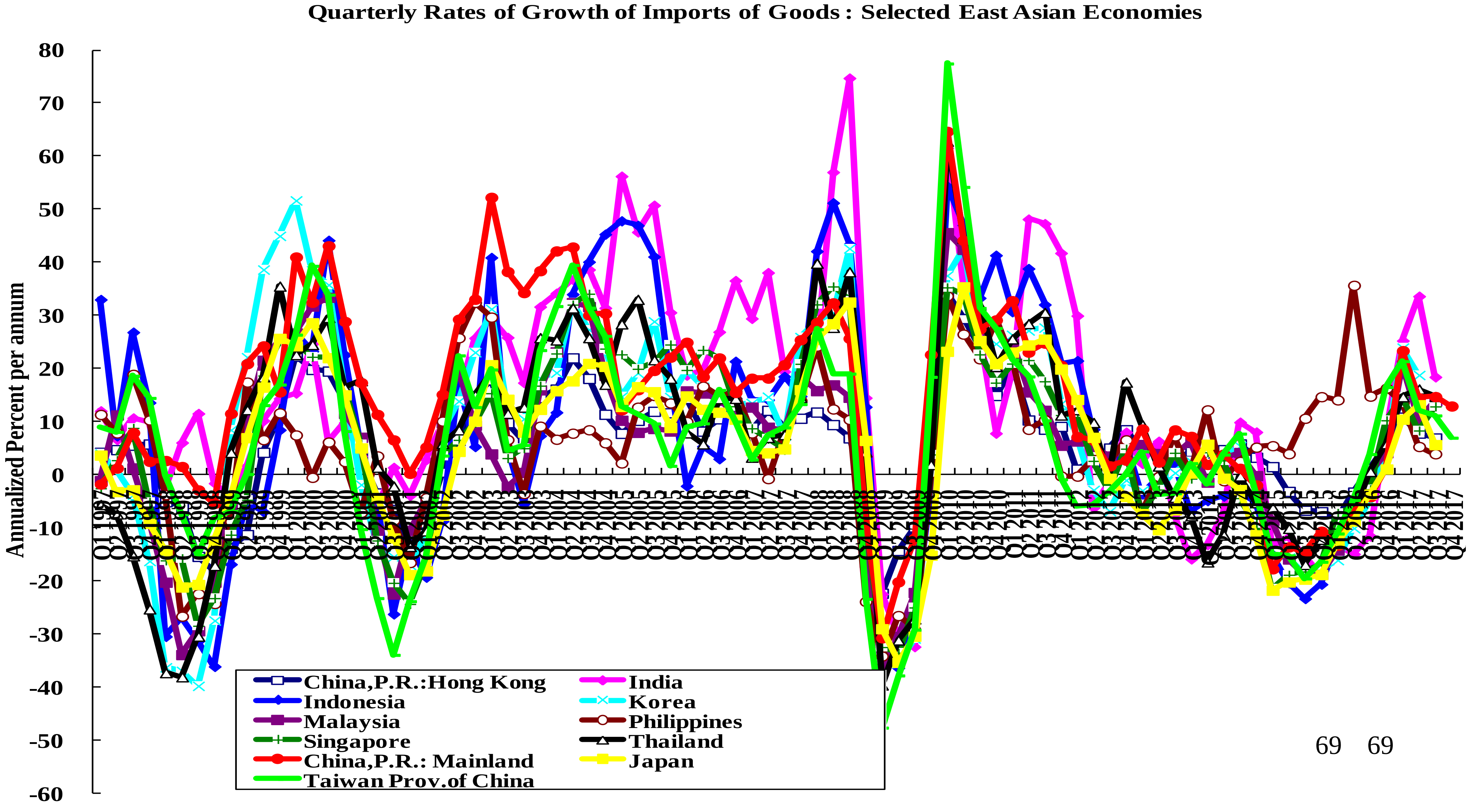
Exports of Goods and Services as a Share of GDP in East Asian Economies, India & U.S.



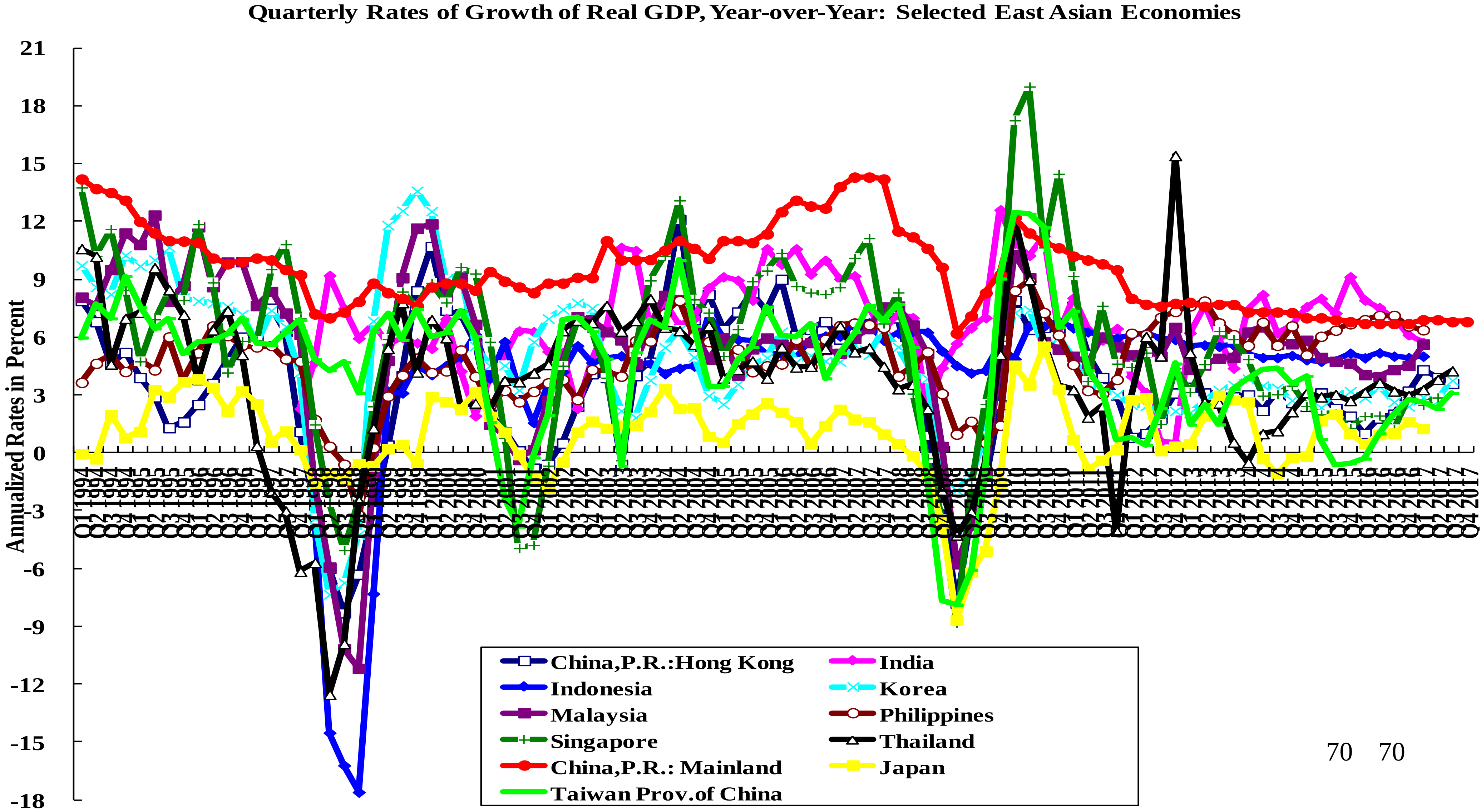
Quarterly Rates of Growth of Exports of Goods: Selected Asian Economies



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



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



The Costs of Economic Globalization: The Risks of Short-Term Capital Flows

- While economic theory tells us that voluntary international trade benefits both trading-partner countries and voluntary foreign direct investment benefits both the investor- and the investee-countries, there is no theory which says that short-term capital flows are necessarily good for either the origin or the destination country.
- Exporters, importers and long-term cross-country direct and portfolio investors all prefer relative stability of the exchange rate. Short-term capital flows can cause significant volatility of the exchange rate and asset price bubbles and disrupt international trade.
- Moreover, when short-term foreign capital is utilized in an economy, it invariably leads to problems down the road because of maturity mis-match and currency mis-match.

The Costs of Economic Globalization: The Risks of Short-Term Capital Flows

- Foreign exchange transactions nowadays total approximately US$5 trillion a day. The total value of international trade, including trade that does not require currency conversions such as trade within the Euro Zone or other common currency areas, is approximately US$40 trillion a year.
- The net payments from the importers to the exporters may therefore be estimated at approximately US$20 trillion a year, an amount that can be covered with just four days of foreign exchange trading!
- Are all these foreign exchange transactions necessary for the world economy to function? While these foreign exchange transactions are clearly beneficial to and profitable for the commercial banks, are they helpful or harmful to the world economy as a whole?

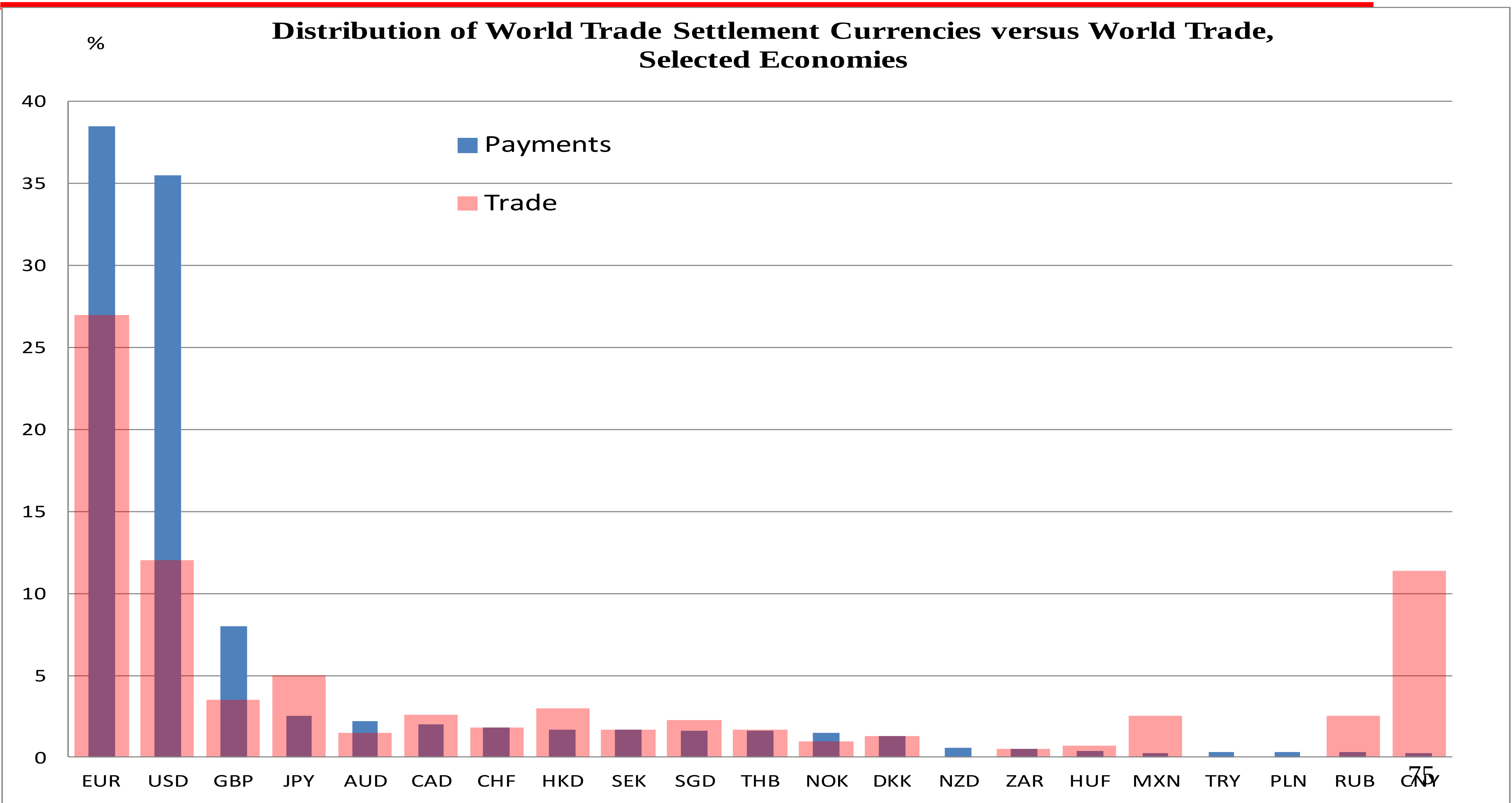
Seigneurage and the Role of the Renminbi

- Seigneurage is the benefit to the provider of money. A government can just print money at close to zero marginal cost and use it to purchase real goods. Seigneurage also accrues to a provider of international money.
- Since the collapse of the Bretton Woods system in 1971, when the U.S. unilaterally severed the link between the dollar and gold, the U.S. Dollar has become the most favored international medium of exchange as well as safe-haven currency. This is because most trading-partner countries do not trust each other's currency, and hence rely on a third currency, typically the U.S. Dollar, to denominate, settle and clear their trade transactions.
- As a result, the U.S. Dollar has become the most commonly used currency for clearing and settling international transactions.

Seigneurage and the Role of the Renminbi

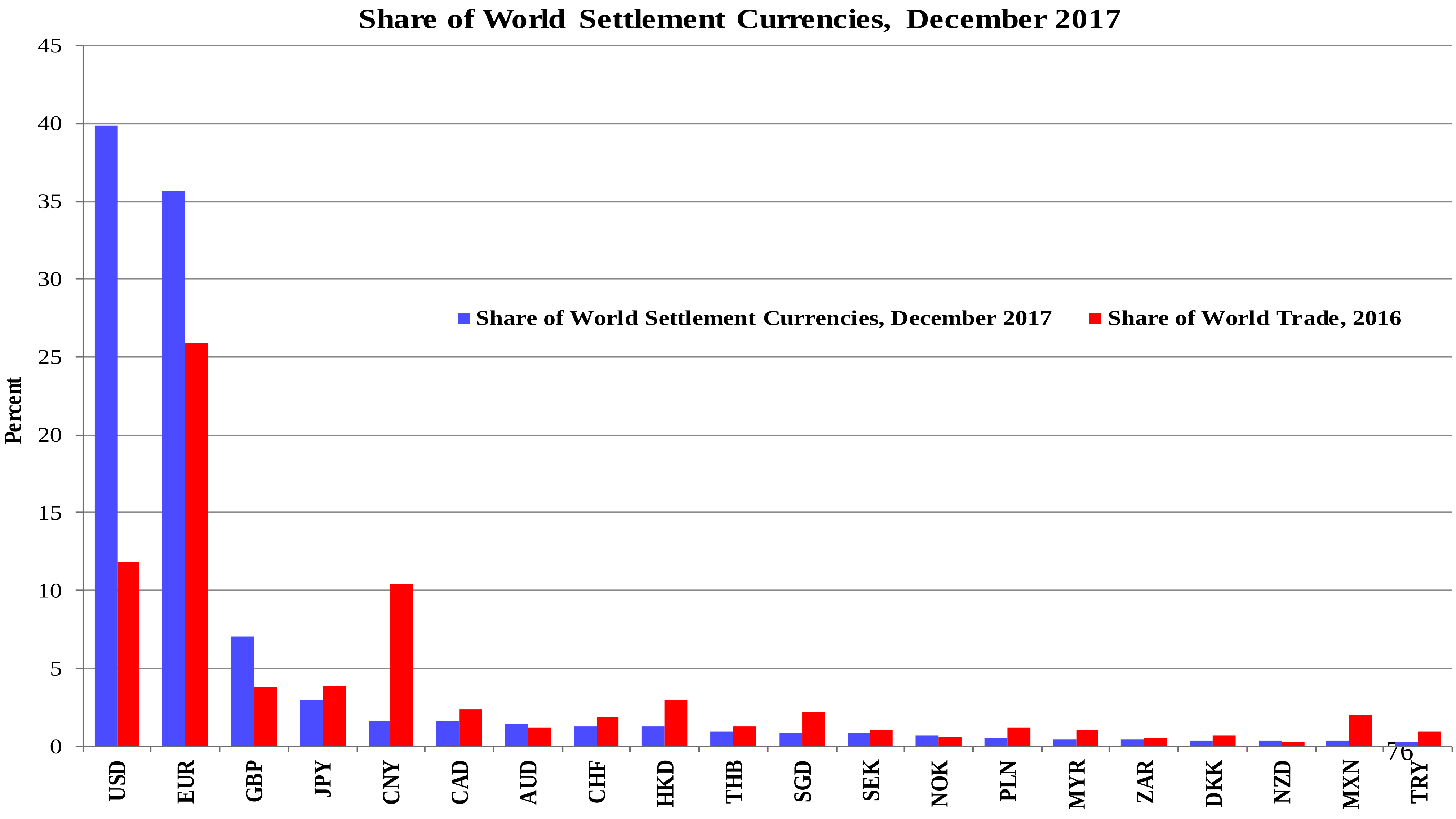
- The U.S. Dollar now accounts for more than 40 percent of the world payments even though the U.S. itself accounts for only slightly more than 10 percent of world trade, followed by the Euro, which accounts for 30 percent of world payments, while the Euro Area accounts for 25 percent of world trade. The Renminbi accounts for only 2 percent of world payments even though China also accounts for more than 10 percent of world trade.
- The benefit to the U.S. as the provider of international "money" is that it can pay for its imports by simply printing U.S. Dollars or U.S. bonds and can therefore run a persistent trade deficit (US$500 billion in 2016; cumulatively US$10 trillion since 1980). The current value of the seigneurage may be estimated at approximately US$300 billion a year based on the assumption of a 3% spread between short-term U.S. Treasury securities and the rate of return earned by U.S. assets abroad.

Distribution of World Trade Settlement Currencies versus World Trade, 2010



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

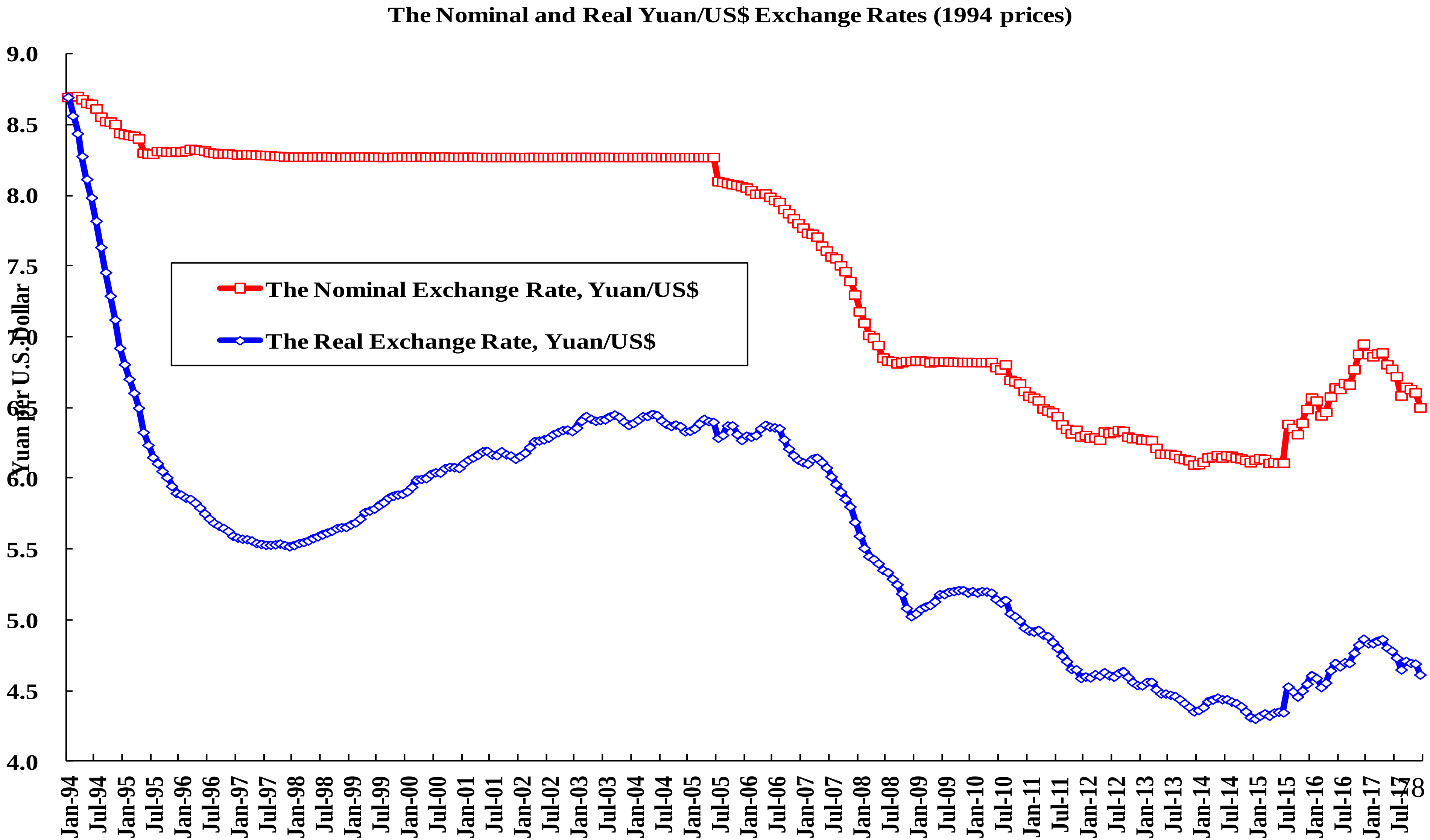
Distribution of World Trade Settlement Currencies versus World Trade, Dec 2017



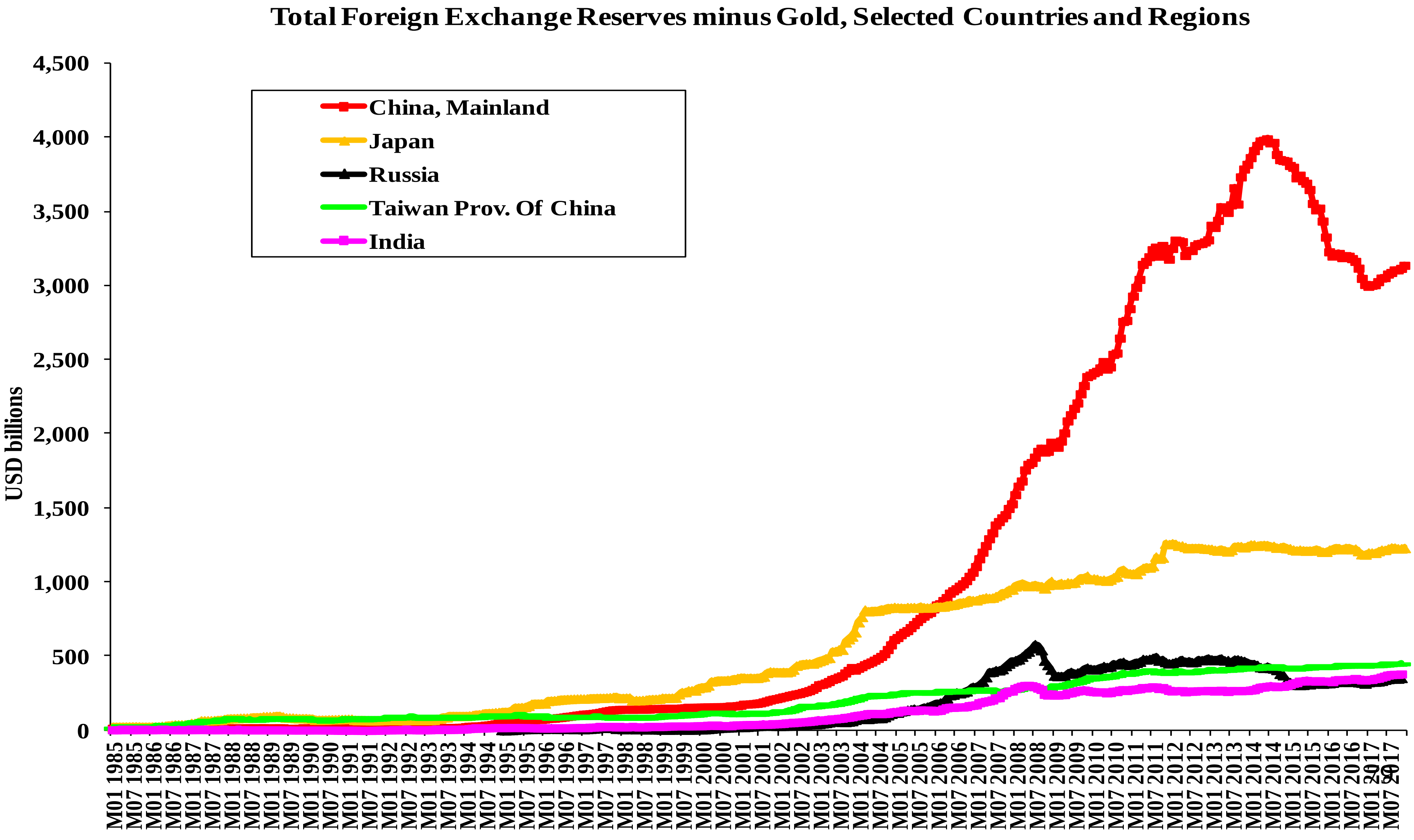
The Stabilization of the Renminbi Exchange Rate

- The stabilization of the Renminbi exchange rate
- The stabilization of the Chinese official foreign exchange reserves
- The China Foreign Exchange Trade System (CFETS) trade-weighted currency basket index

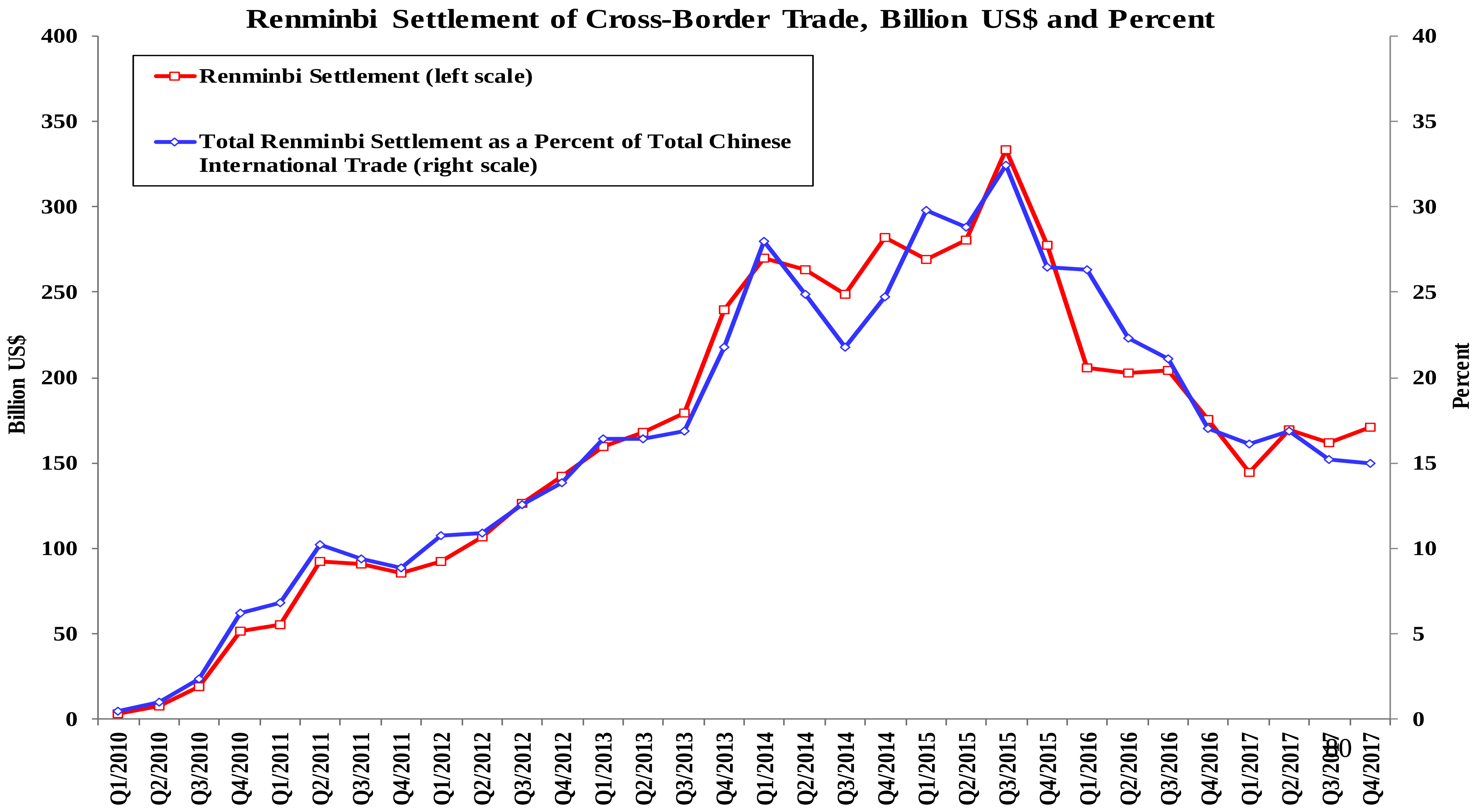
The Nominal and Real Yuan/US$ Exchange Rates



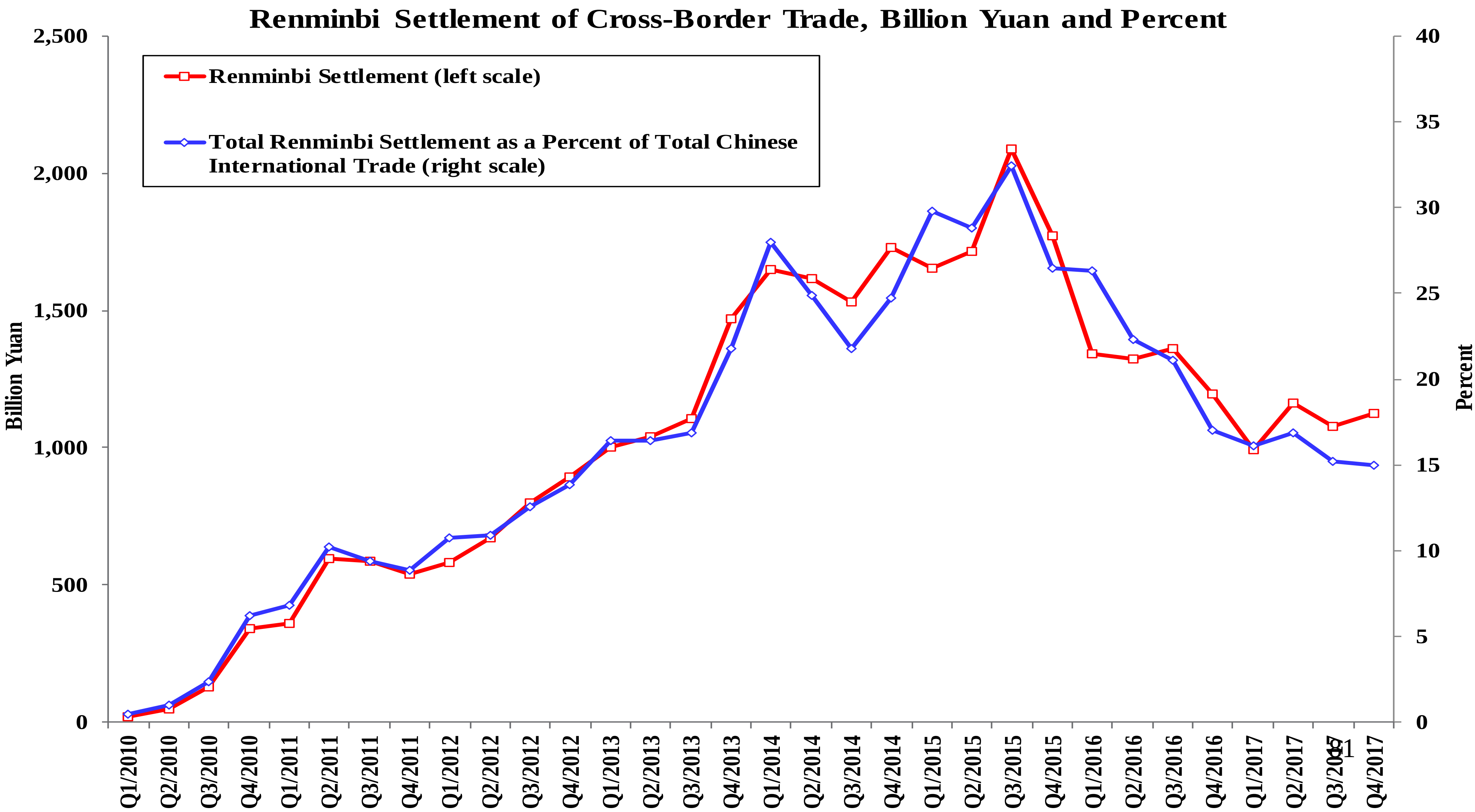
Total Foreign Exchange Reserves minus Gold, Selected Countries and Regions



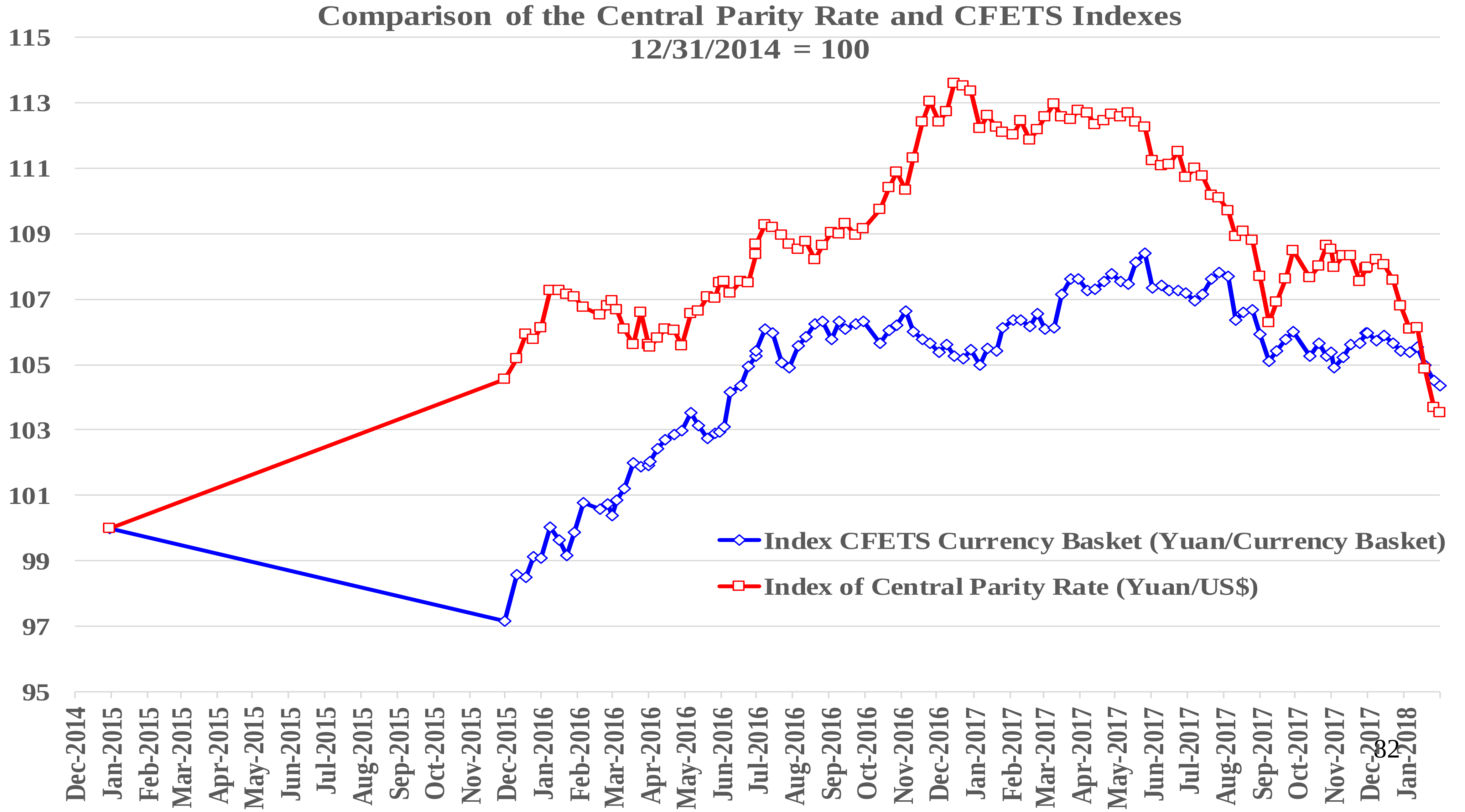
Renminbi Settlement of Chinese Cross-Border Trade, Billion US$ and Percent



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



Comparison of the Central Parity Rate and CFETS Indexes (31 Dec. 2014 = 100)



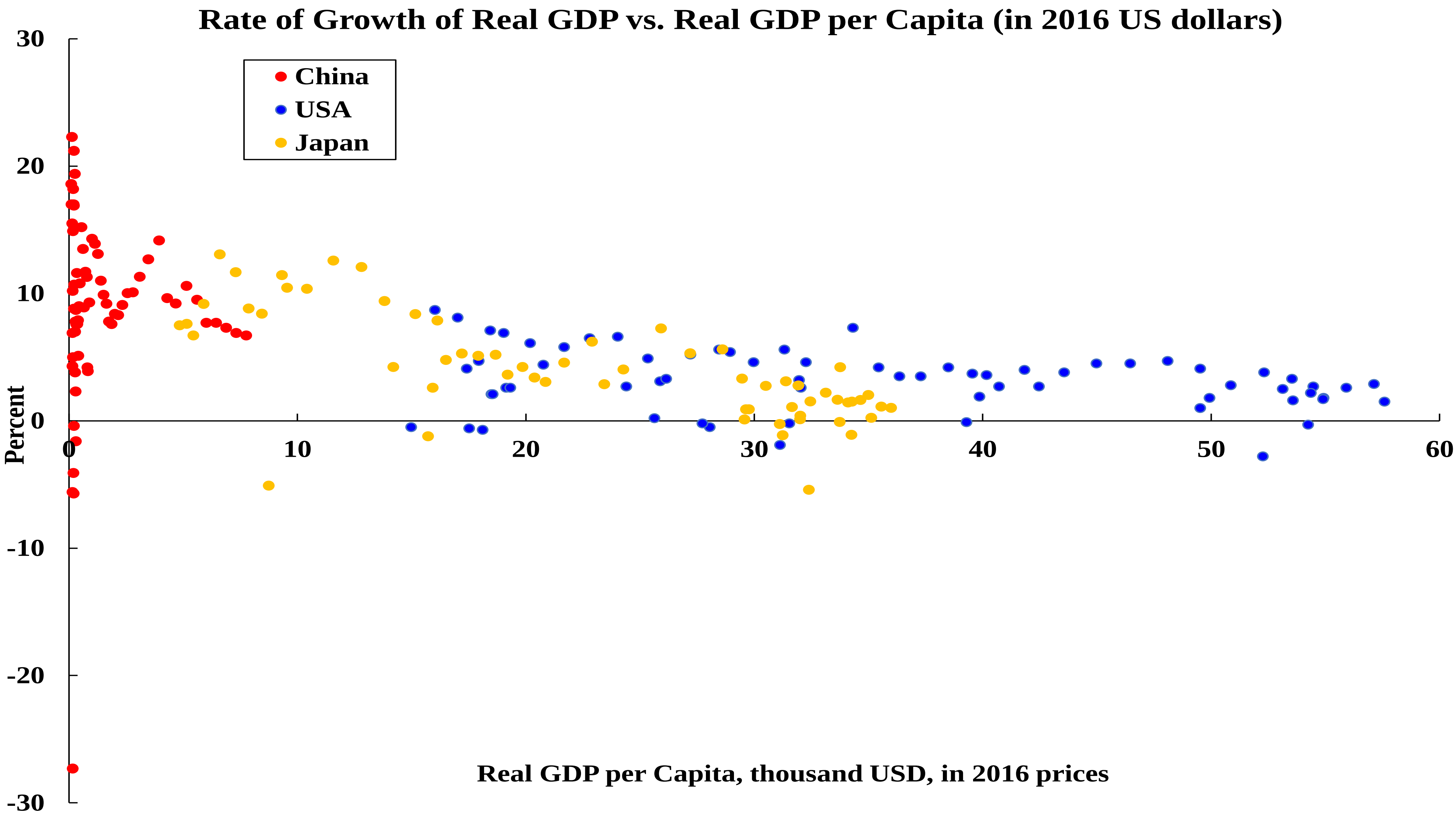
Projections of the Future: Near-Term Forecasts by International Organizations

	The World Bank			The IMF	
	Real GDP Growth Forecasts			Real GDP Growth Projections	
	2018	2019	2020	2018	2019
World	3.1	3	2.9	3.9	3.9
China	6.4	6.3	6.2	6.6	6.4
The U.S.	2.5	2.2	2	2.7	2.5
EU	2.1	1.7	1.5	2.2	2
Japan	1.3	0.8	0.5	1.2	0.9
India	7.3	7.5	7.5	7.4	7.8

Projections of the Future: Long-Term Forecasts of the Chinese and the U.S. Economies

- It is assumed that the Chinese economy will continue to grow above 6% per annum for a few years, declining gradually to between 5% and 6%, and that the U.S. economy will grow at an average rate of 3% per annum between now and 2050.
- It may be thought that the Chinese economy will be unable to sustain an approximately 6% average annual rate of growth for such a long time. But given the still relatively low level of real GDP per capita in China, such a rate of growth should be possible for at least several decades (see the following chart in which the experiences of China, Japan and the U.S. are compared.)
- The projections of Chinses and U.S. real GDP and real GDP per capita between now and 2050 are presented in the following charts.

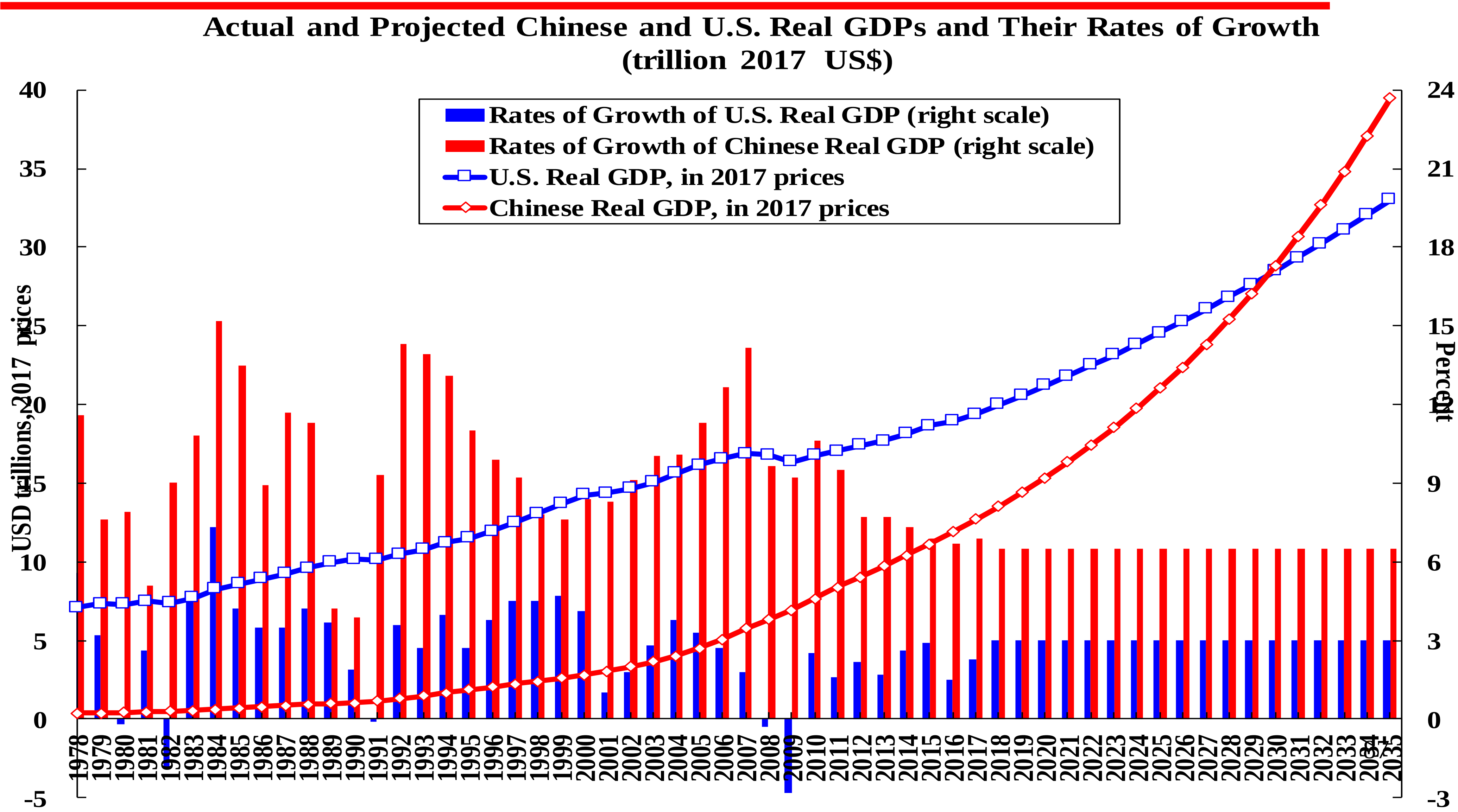
Growth Rates vs. Levels of Chinese, U.S. and Japanese Real GDP (2016 tril. US$)



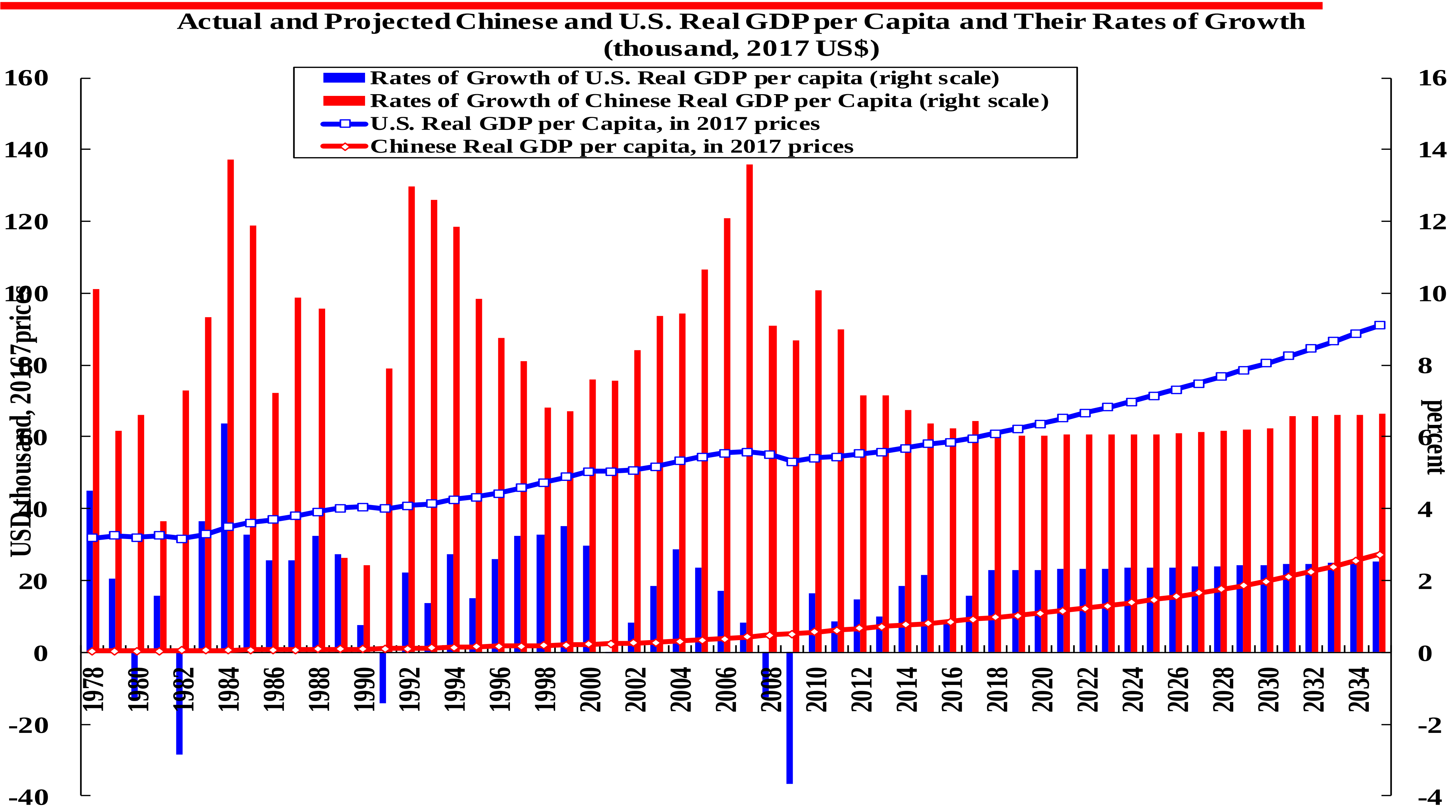
Projections of the Chinese and the U.S. Economies

- In his work report to the Nineteenth National Congress of the Communist Party of China, President XI Jinping identified several milestones in his speech at the Nineteenth Party Congress at 2020, 2035 and 2050.
- The first milestone is to become a moderately well-off society by 2020. Our projections show that by 2020, Chinese real GDP per capita (in 2016 prices) will exceed US$9,800 (compared to US$62,600 for the U.S.).
- Our projections also show that by 2033, Chinese real GDP will surpass U.S. real GDP (US$31.3 trillion versus US$30.6 trillion), making China the largest economy in the world. However, in terms of real GDP per capita, China will still lag behind significantly, with US$21,000 compared to US$84,000 for the U.S.
- By 2050, Chinese real GDP will reach US$86 trillion compared to US$50 trillion for the U.S. In terms of real GDP per capita, China will reach US$54,000, approximately the current level of U.S real GDP per capita, compared to US$123,500 for the U.S.

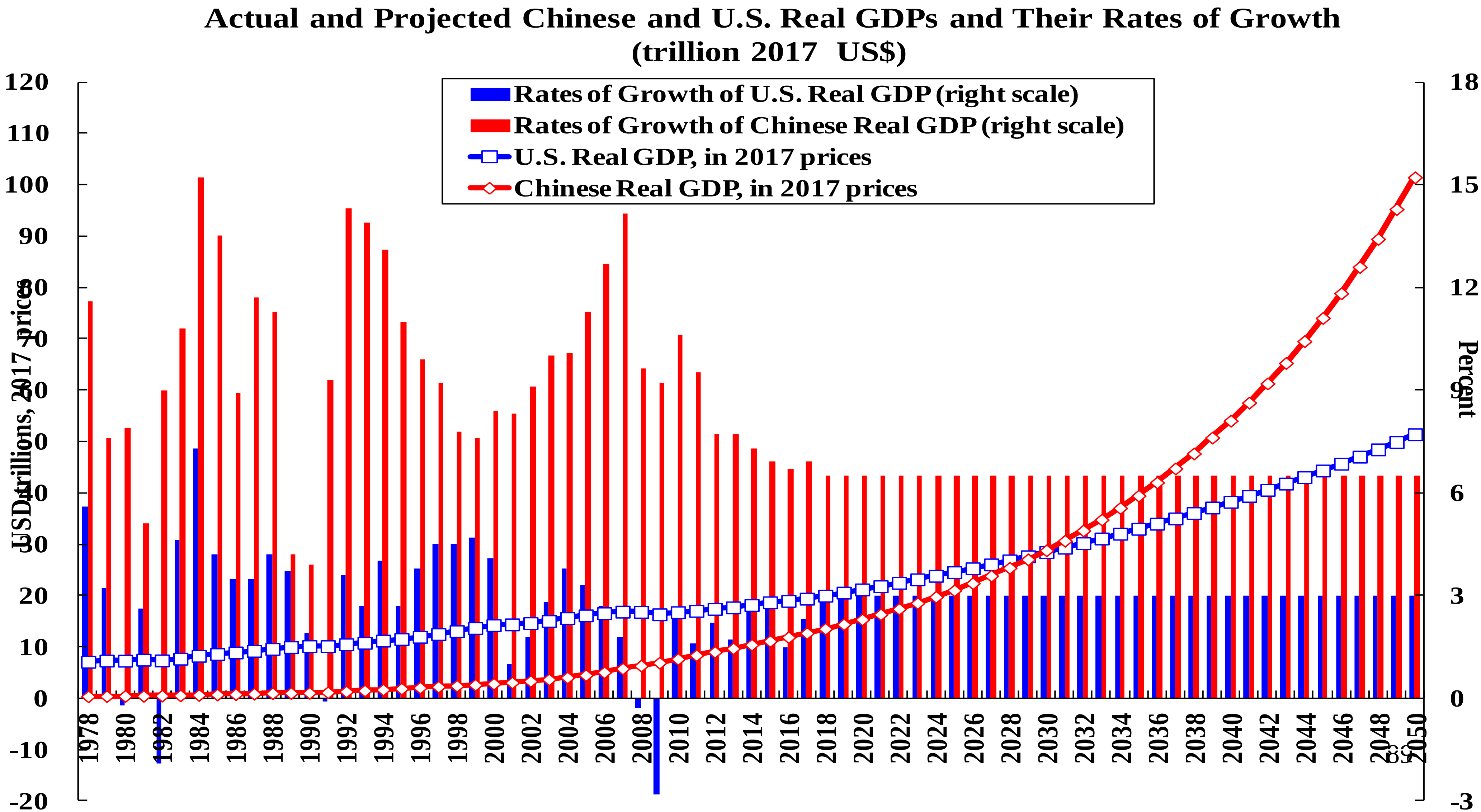
Actual and Projected Levels and Growth Rates of Chinese and U.S. Real GDP (2017 tril. US$)



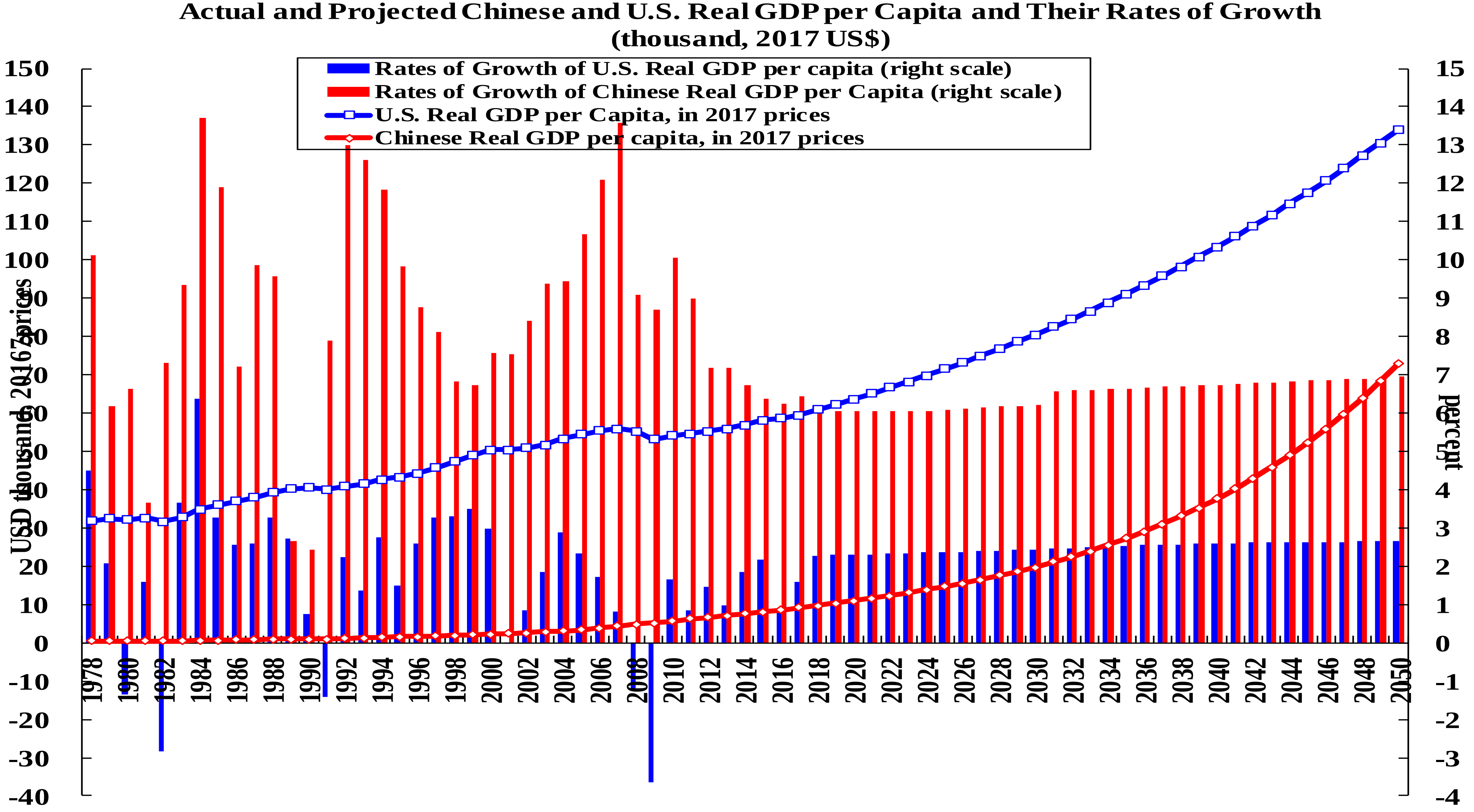
Actual and Projected Chinese and U.S. Real GDP/ Capita and Their Rates of Growth (1,000 2017 US$)



Actual and Projected Levels and Growth Rates of Chinese and U.S. Real GDP (2017 tril. US$)



Actual and Projected Chinese and U.S. Real GDP/ Capita and Their Rates of Growth (1,000 2017 US$)



Concluding Remarks

- The global economy is at a stage of synchronized expansion, for the first time in ten years. However, the asset markets seem over-priced and bubbles may be in the making because of the prolonged period of low or even negative interest rtes. Moreover, there are other dark clouds over the horizon such as the rise of protectionism, isolationism and populism as well as geo-political uncertainties.
- Economic globalization brings benefits to all economies, even to those that are already active participants in the world economy. In particular, it has the potential of bringing benefits to the poorest people in the world and has actually done so (e.g., in Mainland China since 1978). It is fair to say that without economic globalization, China could not possibly have lifted 600 million people out of poverty during the past four decades. ASEAN countries, India and in time Africa are potential beneficiaries of a continuing robust globalization.
- The potential aggregate benefits to the world and to each of the individual economies as a whole are always positive, provided that the markets are competitive, that is, not monopolized by one seller or monopsonized by one buyer, and the transactions are voluntary.

Concluding Remarks

- The principal problem of economic globalization is one of the domestic distribution of the gains within each country and region. (Of course there is also the issue of the distribution of gains among the trading-partner countries, but that is a different problem altogether.) It is the responsibility of each of the domestic governments to try to redistribute part of the gains from the winners to the losers, so that everyone benefits. There should be enough overall net gain to make this possible. However, the free market on its own will not be able to do it. Government intervention is necessary.
- This will include the provision of transitional and if necessary long-term income support to the displaced workers and of re-training and re-employment assistance.

Concluding Remarks

- Can economic globalization continue in the future? Without continuing globalization, can the currently developing economies become developed?
- If the individual governments can ensure that that every one of their respective citizens wins under economic globalization, that no net losers are created under continuing globalization, then there will be popular support for continuing globalization.
- President XI Jinping has said on numerous occasions that China is committed to supporting economic globalization. China's Belt and Road Initiative does support continuing economic globalization.