

# Outlook for the Chinese Economy

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CITIC Capital Limited Partners Meeting 2010

Wanda Sofitel Beijing  
Beijing, 1 November 2010

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# Outline

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- ◆ Introduction
- ◆ The Economic Fundamentals of the Chinese Economy
- ◆ The Sources of Sustainable Aggregate Demand
- ◆ The Shifting Centre of Gravity of the World Economy
- ◆ The Internationalisation of the Renminbi
- ◆ Concluding Remarks

# Introduction

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- ◆ China has made tremendous progress in its economic development since it began its economic reform and opened to the World in 1978. China is currently the fastest growing economy in the World—averaging approximately 10% per annum over the past 30 years.
- ◆ Between 1978 and 2009, Chinese real GDP grew 18 times, from US\$277 billion to US\$4.99 trillion (2009 prices) to become the third largest economy in the World, after the U.S. and Japan. (Chinese GDP has actually surpassed Japanese GDP in real terms in mid-2010.) During the same period, Chinese real GDP per capita grew more than 13 times, from US\$288 to US\$3,706.
- ◆ By comparison, the U.S. GDP (approx. US\$14.12 trillion) and GDP per capita (approx. US\$45,918) were respectively 2.8 and 12.4 times the comparable Chinese figures in 2009.

# Introduction

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- ◆ The Chinese economy grew 9.1% in 2009 and 11.1% year-over-year in the first half of 2010 even as the European and U.S. economies remained in recession. The year-over-year rate of growth of 2010Q3 is 9.6%, and for 2010Q1-3 is 10.6%, indicating a gradual slow-down, which is actually a positive development for the Chinese economy. The rate of growth for 2010 is likely to be no less than 9.5%.
- ◆ If current trends continue, Chinese real GDP will approach the level of U.S. real GDP in approximately 15 years' time--around 2025.

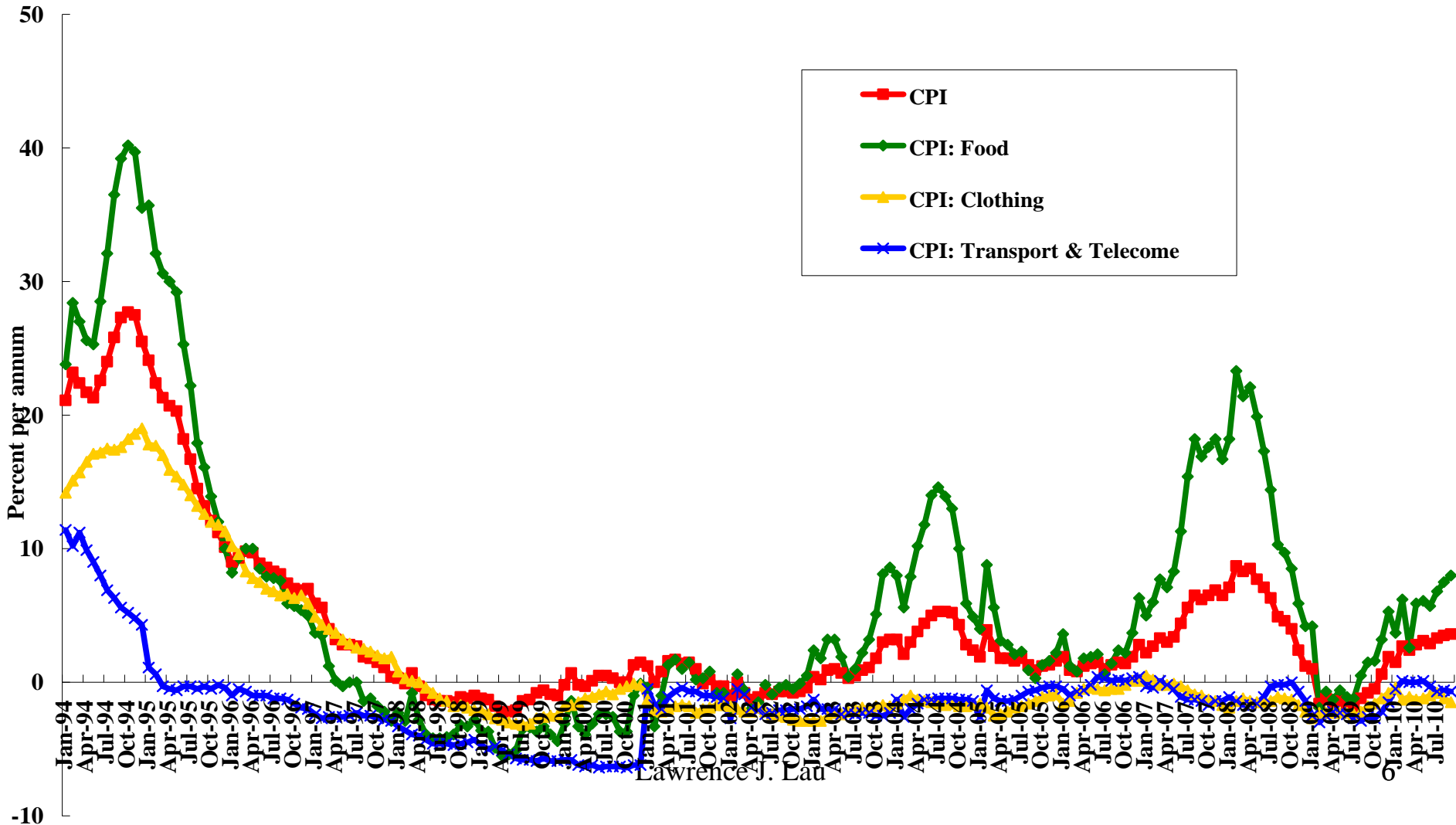
# Introduction

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- ◆ The rate of inflation of goods, as measured by the consumer price index, has remained relatively tame. The core rate of inflation, that is, the rate of inflation net of the changes in the prices of agricultural and energy goods, has remained in the -1% to 1% range during the past few years.
- ◆ The objective of the Chinese Government is to keep the rate of inflation in 2010 below 3%, which seems achievable at this time.
- ◆ However, there has been significant inflation in the prices of assets such as real estate in the last year or two due to the implementation of the economic stimulus package and the significant increases in the rates of growth of money supply and commercial bank credit. Measures have been taken recently to contain the asset price bubble.

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

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



# Introduction

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- ◆ Despite its rapid growth, China is still a developing economy in terms of its real GDP per capita (US\$3,706 in 2009).
- ◆ It will probably take perhaps 40 years, till around the middle of the 21st Century, before China reaches the same level of real GDP per capita as the United States (bear in mind that in the meantime, the U.S. economy will also continue to grow, albeit at rates significantly lower than those of the Chinese economy and that the Chinese population will reach a peak around 2035 and then begin to decline slowly).

# Introduction

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- ◆ While many problems have arisen in the Chinese economy within the past decade—for example, income disparity, environmental degradation, inadequate infrastructure and corruption—it is fair to say that everyone has benefited from the economic reform and opening since 1978, albeit to varying degrees, and few want to return to the central planning days.
- ◆ China is one of the very few socialist countries that have made a smooth transition from a centrally planned to a market economy. It is a model for other transition economies such as Vietnam and potential transition economies such as Cuba, Laos, and North Korea.



# Thirty years of Chinese Economic Reform

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	<b>Growth Rates</b>	
	<b>percent per annum</b>	
	<b>Period I</b>	<b>Period II</b>
	<b>1952-1978</b>	<b>1978-2009</b>
<b>Real GDP</b>	<b>6.15</b>	<b>9.77</b>
<b>Real GDP per Capita</b>	<b>4.06</b>	<b>8.59</b>
<b>Real Consumption</b>	<b>5.05</b>	<b>8.96</b>
<b>Real Consumption per Capita</b>	<b>2.99</b>	<b>7.79</b>
<b>Exports</b>	<b>9.99</b>	<b>16.80</b>
<b>Imports</b>	<b>9.14</b>	<b>15.72</b>
<b>Inflation Rates (GDP deflator)</b>	<b>0.50</b>	<b>5.45</b>

# The Economic Fundamentals

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

# The Economic Fundamentals

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- ◆ The most important source of Chinese economic growth over the past three decades has been the growth of inputs, principally tangible capital (structures, equipment, and physical infrastructure) and not technical progress. This experience is not unlike those of other East Asian economies such as South Korea and Taiwan and even Japan at a similarly early stage of economic development.
- ◆ The growth of tangible capital accounts for the bulk (more than 80%) of the measured economic growth in China. The tangible capital stock has been growing at approximately 15% per year.

# The Economic Fundamentals

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- ◆ Chinese economic growth during the past 30 years has been underpinned by three factors:
- ◆ (1) A consistently high national savings rate on the order of 30% and above. It has stayed around 40% since the early 1990s and has at times approached or even exceeded 50% in more recent years. This means that the domestic savings are sufficient to meet the domestic investment needs, thus assuring a high rate of growth of the tangible capital stock without having to rely on inbound foreign direct or portfolio investment or foreign loans.

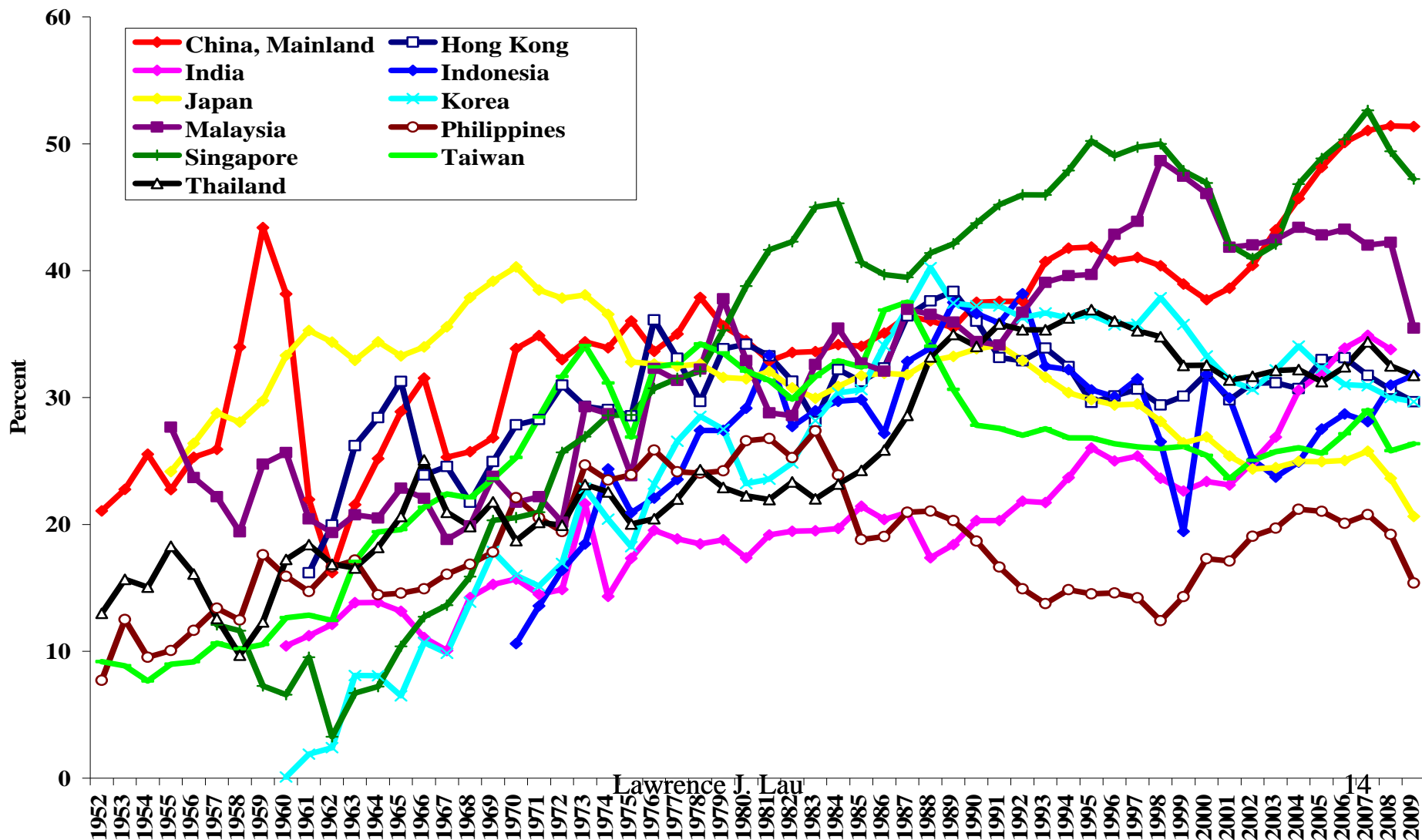
# The Economic Fundamentals

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- ◆ (2) An unlimited supply of surplus labour—there is no shortage of and no upward pressure on the real wage rate of unskilled, entry-level labour. And
- ◆ (3) A huge domestic market of 1.3 billion consumers with pent-up demand for housing and transportation and other consumer goods and services (e.g., education and health care), enabling the realisation of significant economies of scale in production and in investment in intangible capital, including innovation and goodwill (e.g., brand building), based entirely on domestic demand.

# Savings Rates of Selected Asian Economies (1952-present)

Savings Rates of Selected East Asian Economies



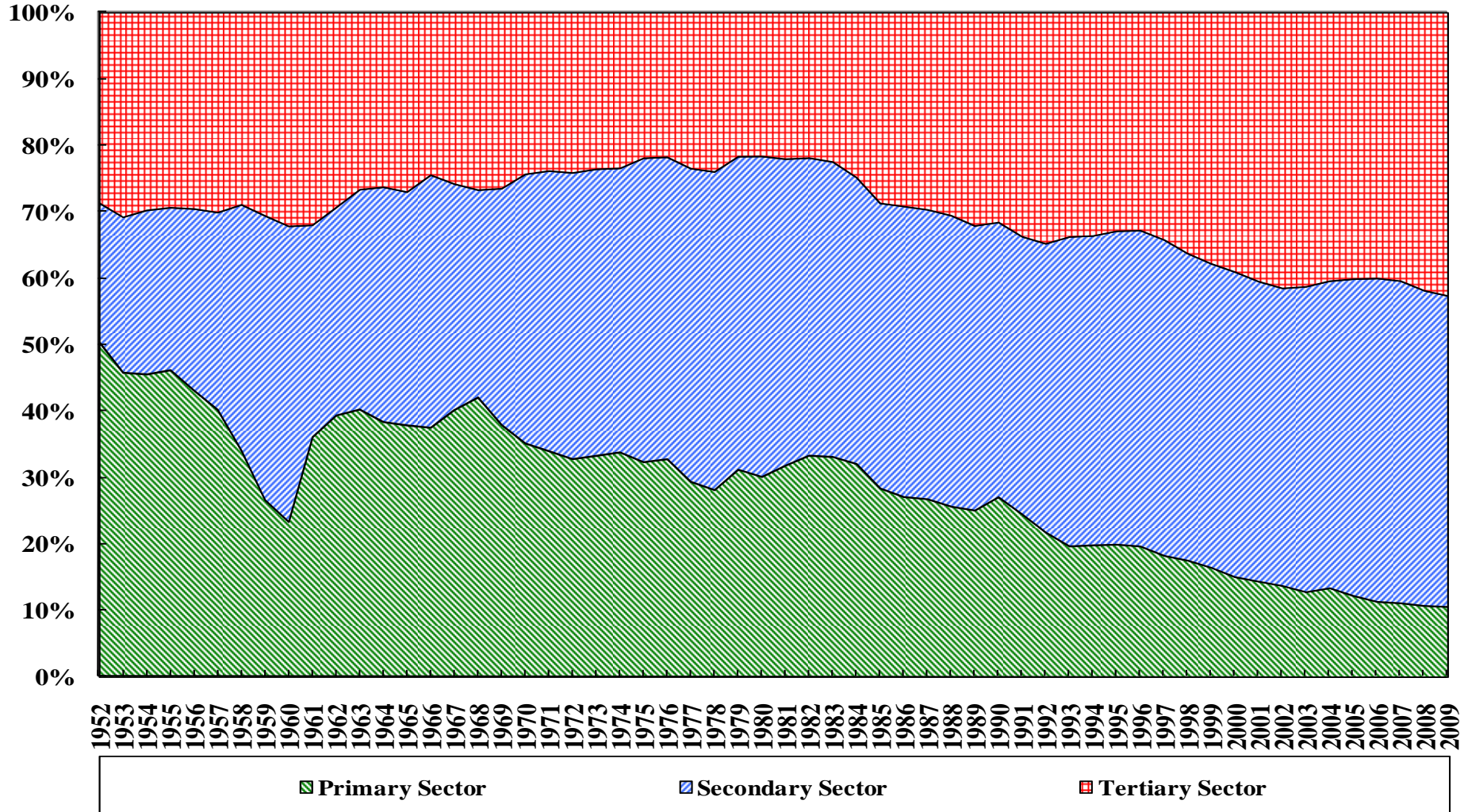
# The Economic Fundamentals

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- ◆ The distribution of Chinese GDP by originating sectors in 2009 was approximately: Primary (agriculture and mining), 10.6%; Secondary (manufacturing and construction), 46.8%; and Tertiary (services), 42.6%.
- ◆ But the bulk of the labour force, more than 40%, is still employed in the primary sector, waiting to be transferred to the other two sectors with higher productivity.
- ◆ As long as the percentage of labour force employed in the primary sector exceeds the percentage of GDP originating from the primary sector, there is little or no upward pressure on the real wage rate of unskilled, entry-level labour in the secondary and tertiary sectors.

# The Distribution of Chinese GDP by Sector Since 1952

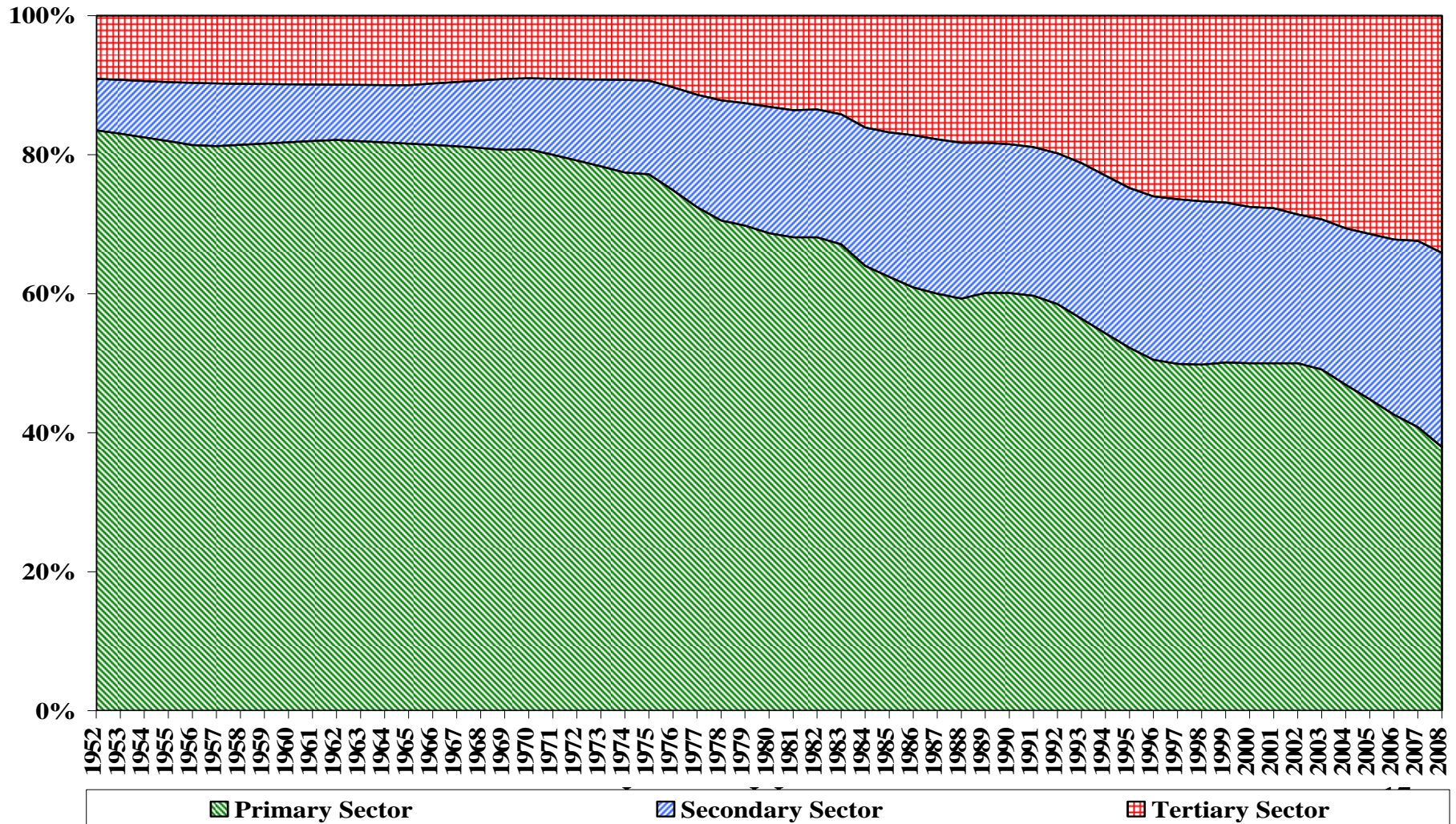
The Distribution of GDP by Sector





# The Distribution of Chinese Employment by Sector Since 1952

The Distribution of Employment by Sector



# The Economic Fundamentals

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- ◆ It took thirty years for the percentage of labour force employed in the Chinese primary sector to decline from 70% in 1978 to its current 40%, at the rate of approximately 1% per year.
- ◆ It will take approximately another 30 years for the percentage of labour force employed in the Chinese primary sector to decline from its current 40% to below 10%, which is approximately the same as the percentage of Chinese GDP produced by the primary sector today. By that time (2040), it is expected that the primary sector will account for only approximately 5% of Chinese GDP.
- ◆ China will therefore continue to have surplus labour for another three decades or even longer. There will not be any shortage of unskilled, entry-level labour for a long time to come, even though there may be shortages of skilled or experienced labour in the secondary and tertiary sectors.

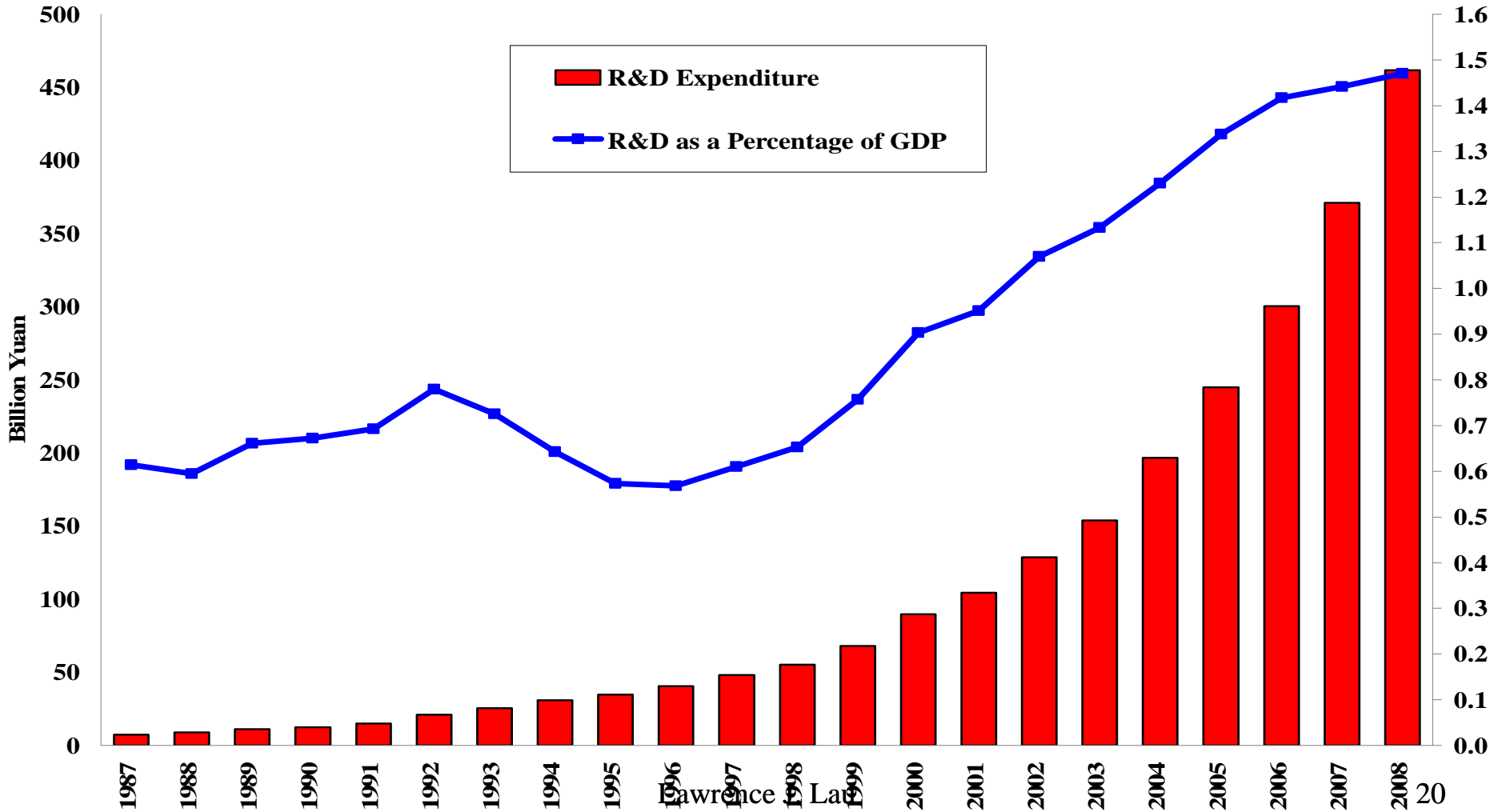
# The Economic Fundamentals

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- ◆ Sustained investment in R&D is essential for technical progress in an economy. China has also begun to invest heavily in R&D in recent years. Chinese R&D expenditure has been rising rapidly, both in absolute value, and as a percentage of GDP, but still lags behind the developed economies as well as the newly industrialised economies of East Asia. (The Chinese R&D Expenditure/GDP ratio is targeted to reach 2.5% in 2015, still lower than the historical average for the U.S.)
- ◆ By comparison, Japan and South Korea invest more than 3% of their GDPs in R&D annually. The United States has on average invested almost 3% of its GDP in R&D since the late 1950s.

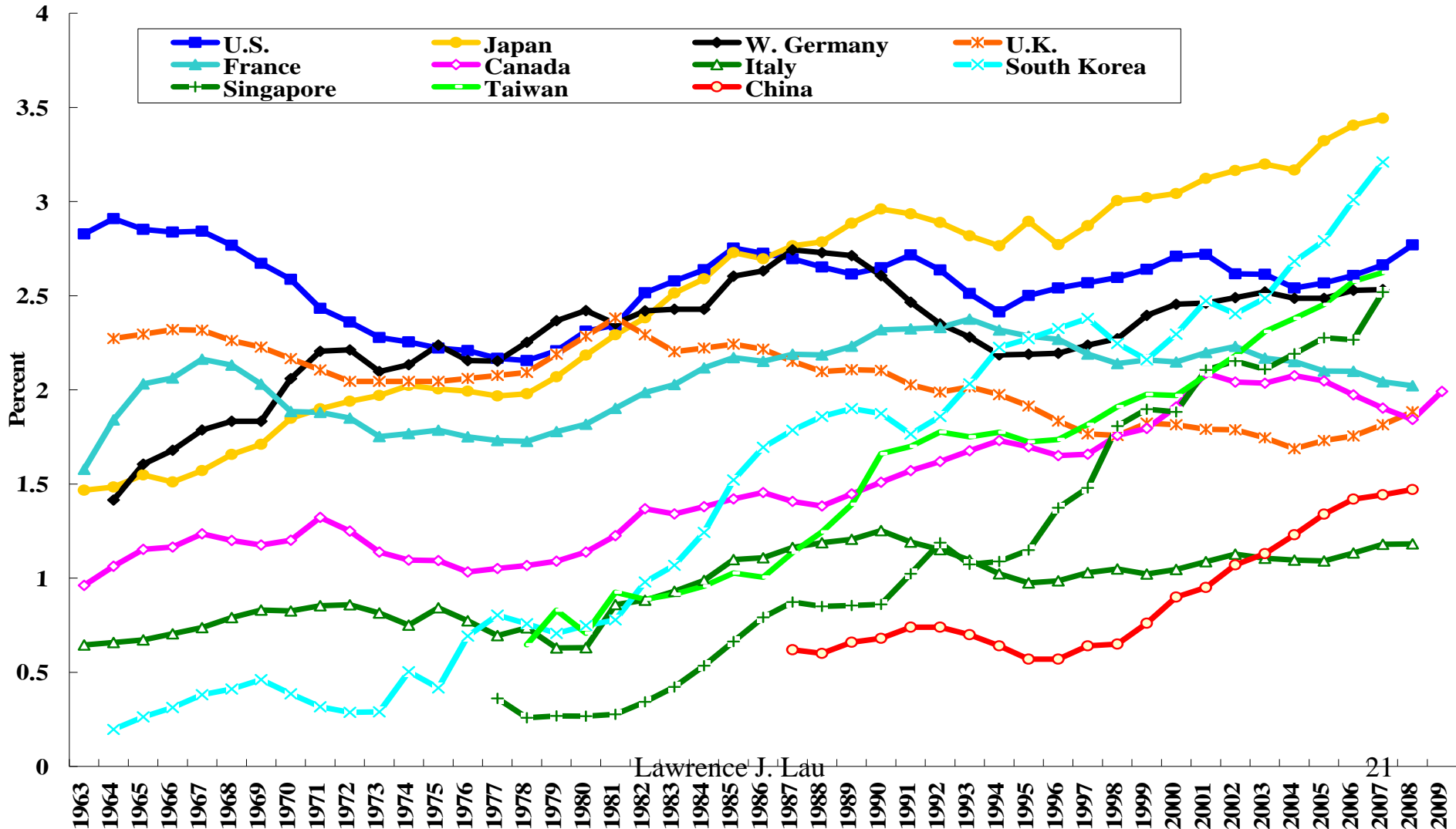
# China's R&D Expenditure and Its Share of Chinese GDP

China's R&D Expenditure and Its Share of GDP



# R&D Expenditures as a Ratio of GDP: G-7 Countries, 3 East Asian NIEs & China

Figure 8.1: R&D Expenditures as a Percentage of GDP: G-7 Countries, 3 East Asian NIEs and China



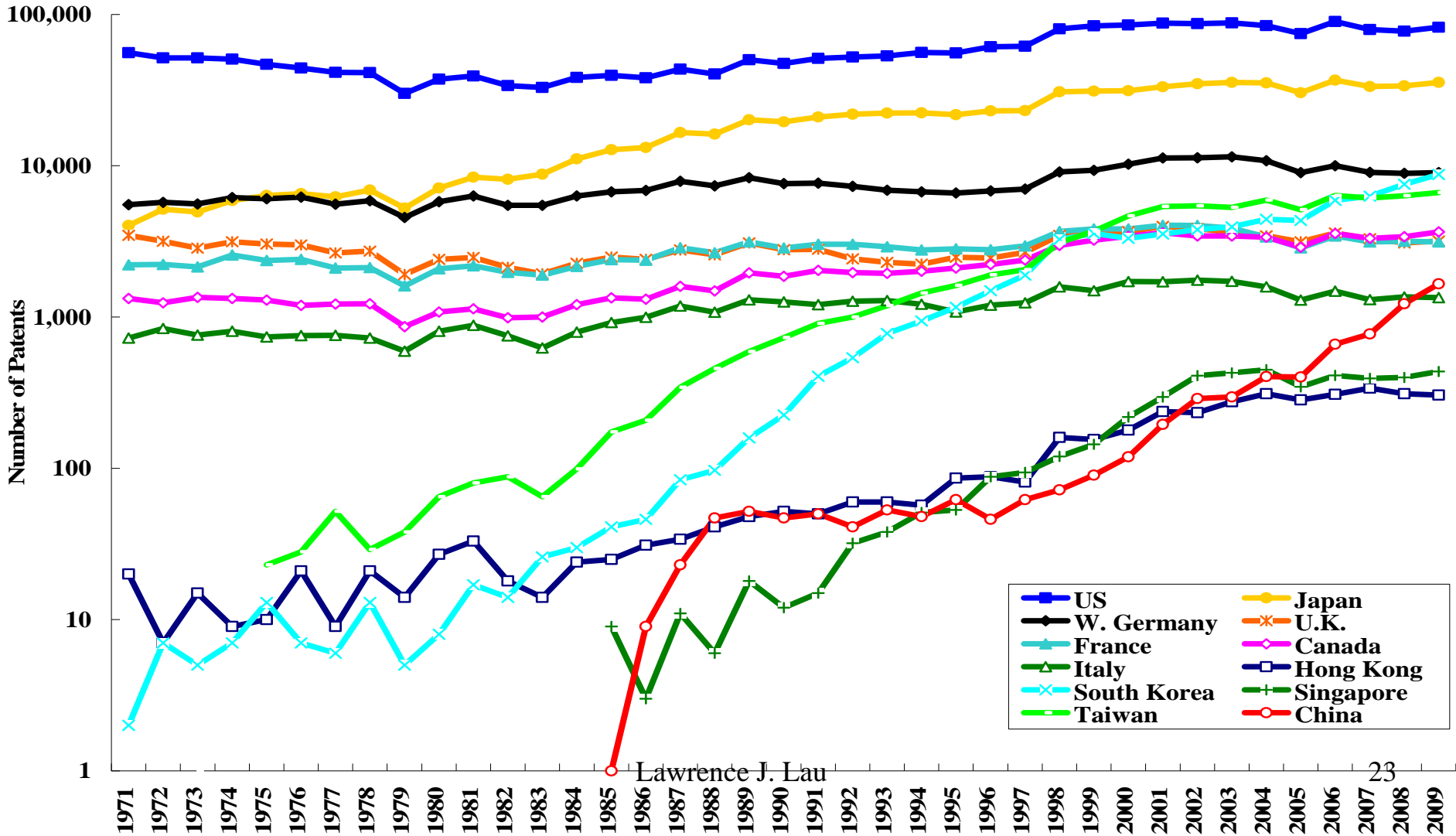
# The Economic Fundamentals

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- ◆ 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., over time is presented. The U.S. is the undisputed champion over the past forty years, with close to 100,000 patents granted each year, followed by Japan. (Since there are patents granted in the U.S., the U.S. may have a home advantage; however, for all the other countries, the comparison across them is fair.)
- ◆ The number of patents granted to Chinese applicants each year has increased from 1 in 1985 to approximately 1,000 patents in 2009.
- ◆ South Korea and Taiwan are still ahead of China in terms of the number of patents granted in the U.S., averaging approximately 8,000 patents a year each.

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

Figure 8.3: Patents Granted Annually in the United States: G7 Countries, 4 East Asian NIEs and China



# The Economic Fundamentals

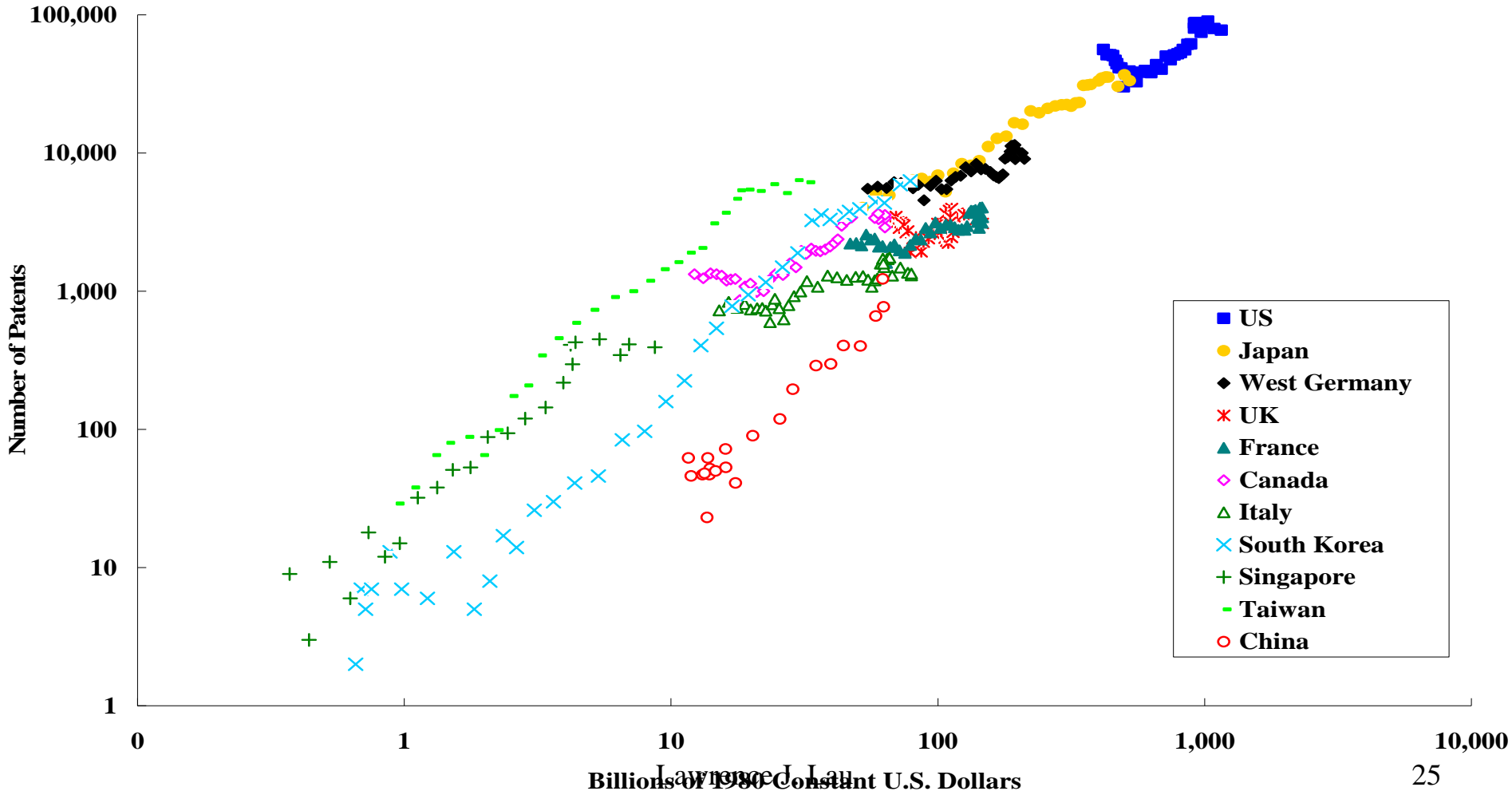
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- ◆ The stock of R&D capital, defined as the cumulative past real investment in R&D less depreciation of 10% per year, can be shown to have a direct causal relationship to the number of patents granted (see the following chart, in which the number of patents granted is plotted against the R&D capital stock for each country and each year).
- ◆ Because China has had both a much lower R&D investment to GDP ratio and a much lower GDP than the United States and other developed economies in the past, it will take more than a couple of decades before Chinese R&D capital can catch up to the level of U.S. R&D capital (and hence to the number of patents granted each year).
- ◆ Chinese efficiency in the generation of patents in the U.S., also lags behind the other East Asian newly industrialised economies in terms of the number of patents granted for given levels of R&D capital.



# Patents Granted in the United States and R&D Capital Stocks, Selected Economies

Figure 8.4: The Number of U.S. Patents Granted Annually vs. R&D Capital Stocks



# The Metaphor of the “Wild Geese Flying Pattern”

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

# The Metaphor of the “Wild Geese Flying Pattern”

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- ◆ This metaphor applies not only to East Asia but also to China itself. Within China, industrialisation will begin first in the coastal provinces, regions and municipalities and then migrate and spread to other provinces, regions and municipalities in the interior. As the coastal provinces, regions and municipalities slow down in their economic growth, the central and western provinces, regions and municipalities will take their turn as the fastest growing areas in China. China as a whole will be able to maintain its high rate of growth for many years to come.

# Sources of Sustainable Growth of Aggregate Demand

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- ◆ Chinese household consumption has been viewed as a potential sustainable source of growth of Chinese domestic aggregate demand.
- ◆ Chinese household consumption has actually been growing quite rapidly, as indicated by the accelerating double-digit monthly year-over-year rates of growth of real retail sales since the first quarter of 2009. The rates of growth of real retail sales have far exceeded the rates of growth of real GDP or real household income during the same period, reflecting in part the lagged adjustment process of household consumption to increases in household income. Such high rates of growth may persist for a while if real household income continues to grow rapidly but are not likely to be sustainable in the long run.



# Sources of Sustainable Growth of Aggregate Demand

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

# Sources of Sustainable Growth of Aggregate Demand

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- ◆ Chinese household consumption can be expected to increase significantly faster than GDP only if Chinese household (disposable) income as a share of GDP rises significantly. There are structural reasons why this is unlikely to occur in the near term even though in the long term the income share of labour, which currently stands at less than 50%, is likely to rise in China.
- ◆ Continuing Chinese economic growth beyond 2010 will therefore have to depend mostly on internal demand and not on exports, and, as analysed above, not on household consumption per se in the absence of a significant sustained increase in the share of household income in GDP.

# Sources of Sustainable Growth of Aggregate Demand

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



# The Owner-Occupied Residential Housing Sector

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

# The Owner-Occupied Residential Housing Sector

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- ◆ The demand for residential housing also generates with it the derivative demands for furniture, electric home appliances such as refrigerators, washing machines, and television sets, curtains, carpets, household goods and services and with them a great deal of employment and activities for not only large enterprises but also small and medium enterprises.

# The Education and Health Care Sectors

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- ◆ This is the time to increase support for the education sector across the board—primary, secondary and tertiary and for the health care sector, expanding the accessibility, availability and affordability in the rural areas.
- ◆ Both the physical structures as well as the human resources of primary and secondary schools and of hospitals need to be upgraded, especially in the rural and low-income areas.
- ◆ In addition, China should adopt a policy of assuring low-cost or no-cost access to the internet by all students in China everywhere, all the way down to the primary school level. Promoting and making universal the laptop is one way to achieve this goal. Many Chinese households are able to afford laptop computers—the difficulty is having inexpensive and ready access to the internet.
- ◆ Public health and preventive medicine should be widely promoted. Food and drug safety should be a top priority and high technology can be applied to testing and certification of food and drugs.

# The Education and Health Care Sectors

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- ◆ Making the internet accessible, available and affordable everywhere in China will greatly narrow the inequality of education (and information) between the urban and rural areas and reduce the so-called digital divide between the rich and the poor. It will be a great equaliser, because, for examples: a student in Qinghai, one of the poorest provinces in China, will have more or less the same access to information as a student in Shanghai; large and small enterprises will compete more or less equally on the internet.
- ◆ This will also create a great deal of domestic demand for the high-technology sector which faces a sharp and possibly long-term decline in their export markets.

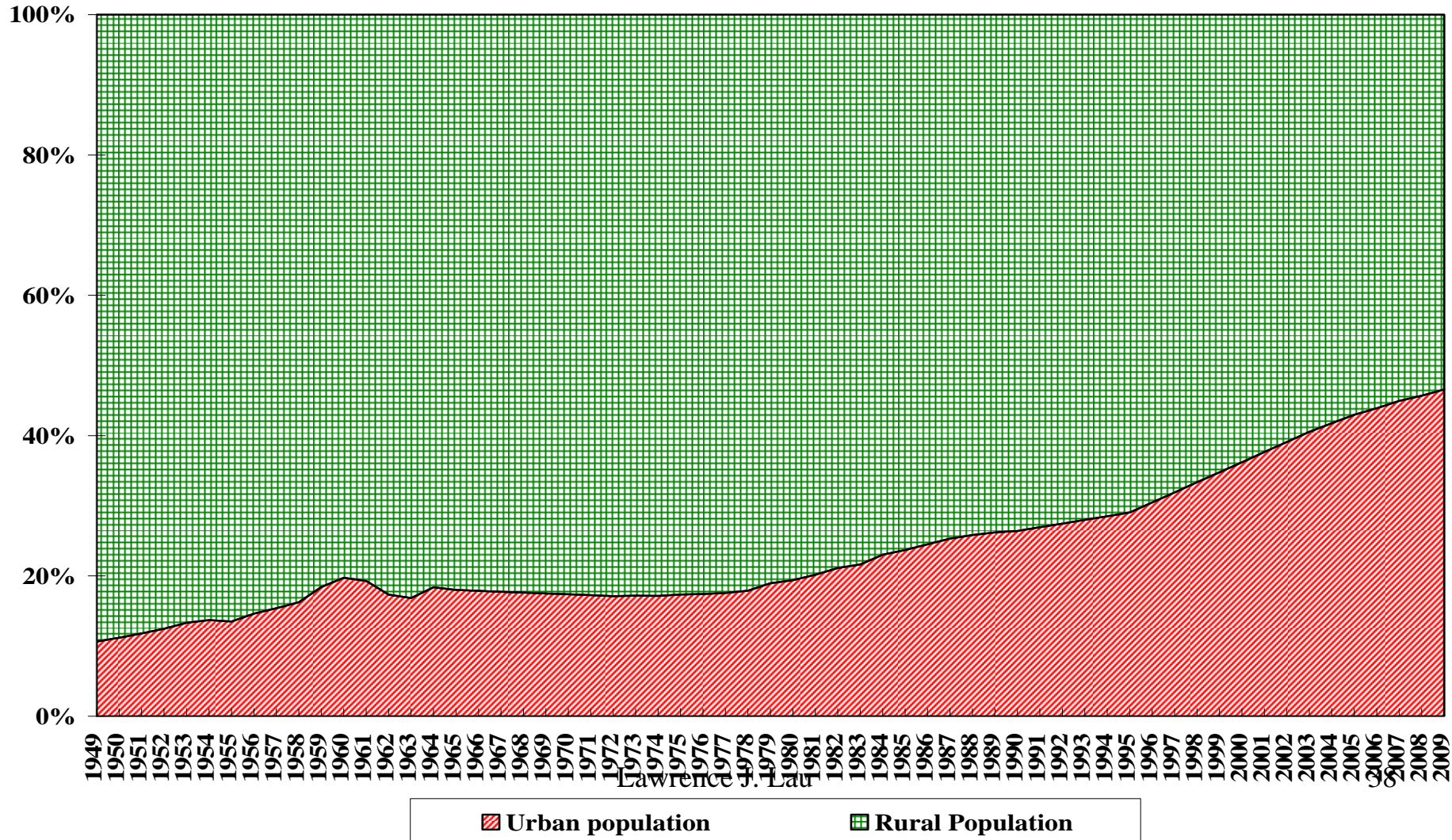
# Urbanisation and Mass-Transit Systems

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- ◆ The share of rural population in China was just under 90% in 1949. By 1978, the beginning of the Chinese economic reform and opening to the World, the share of rural population was 82%.
- ◆ By 2009, the share of rural population has fallen to 53%. Still over half of Chinese population lives in rural areas.
- ◆ The rate of decline of the share of rural population has been approximately 1 percentage point per year, about the same rate of decline as the share of employment of the primary (agriculture and mining) sector.
- ◆ It is expected that the share of rural population will continue to decline by 1 percentage point a year until 2040, when the share of rural population will have fallen to below 25%.

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

The Shares of Rural and Urban Populations in China



# Urbanisation and Mass-Transit Systems

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- ◆ Instead of making the existing cities larger and more crowded, urbanisation should proceed by building new cities in the rural areas, taking advantage of the traditional market towns and bringing capital and technology to labor rather than the other way around.
- ◆ Urbanisation in the rural areas is greatly facilitated if the rural households currently living on and working with their land can have their property rights recognised and made transferable.
- ◆ The inter-urban communication and transportation infrastructure needs to be further planned and improved, especially with the building of new cities. Super-high-speed trains are promoted as the preferred mode of transportation between major cities, resulting in significant savings of time as well as energy consumption.
- ◆ Central planning of new cities, with regard to their locations, layouts, land use, densities, and intra-urban communication and transportation infrastructure, is necessary—left entirely to itself, the market system will result in urban sprawls and slums and a heavy reliance on the private automobile.

# Urbanisation and Mass-Transit Systems

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



# Environmental Protection and Green Technologies

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

# Environmental Protection and Green Technologies

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

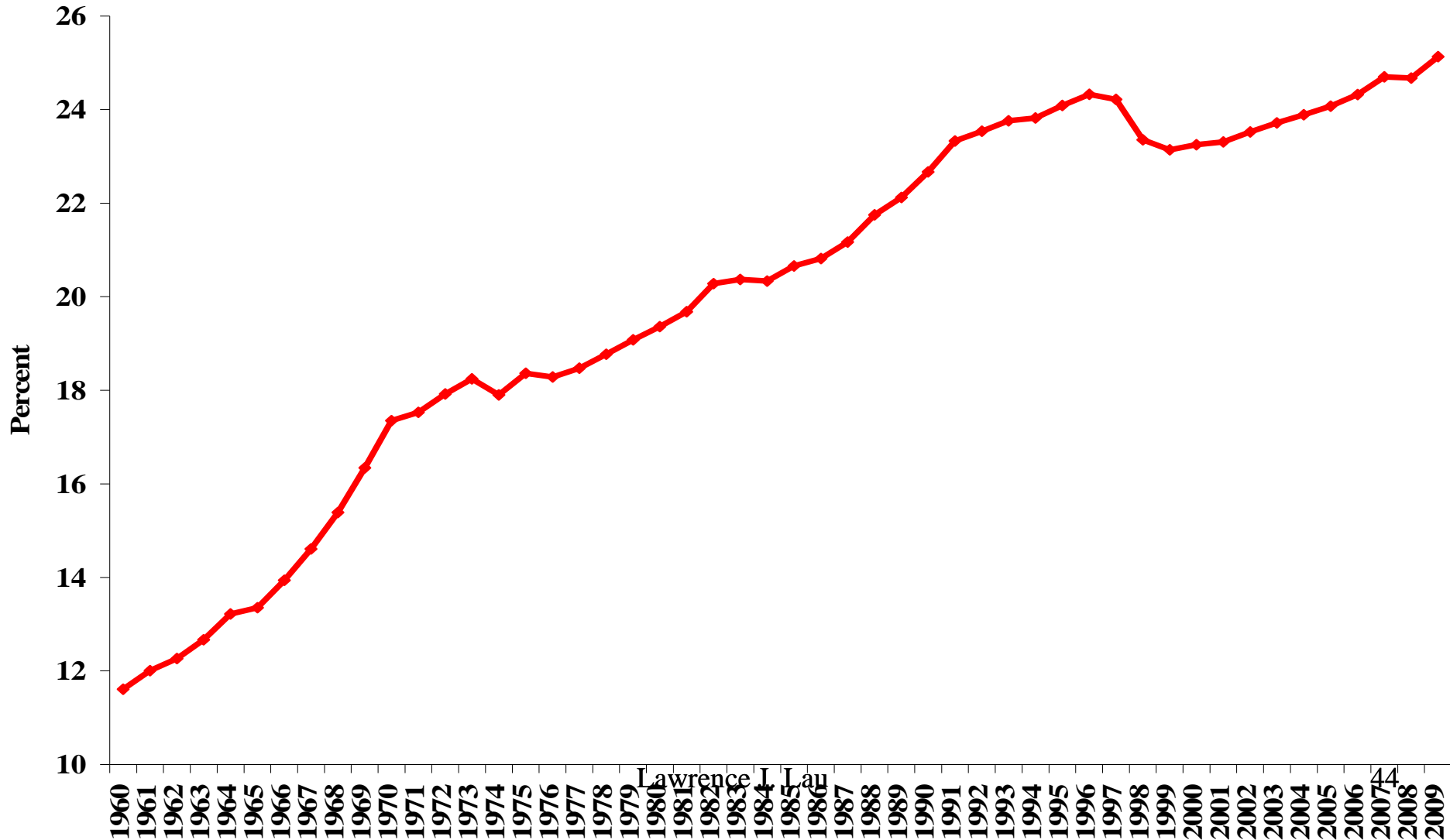
# The Shifting Centre of Gravity of the World Economy

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- ◆ East Asia is taken to mean the 10 ASEAN countries (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam) + 3 (China (including Hong Kong, Macao and Taiwan), Japan, and South Korea), that is, approximately, all the territories east of Bangladesh and west of the Pacific Ocean.
- ◆ In 1960, East Asian GDP, comprising of the GDPs of the 10 ASEAN countries + 3 (China (Mainland only), Japan, and South Korea) was just over 10% of World GDP and Chinese GDP was less than 1%.
- ◆ Today, East Asian economies account for approximately a quarter of World GDP, comparable to the size of the U.S. economy and that of the Euro Zone, and China (Mainland only) accounts for approximately 7%.

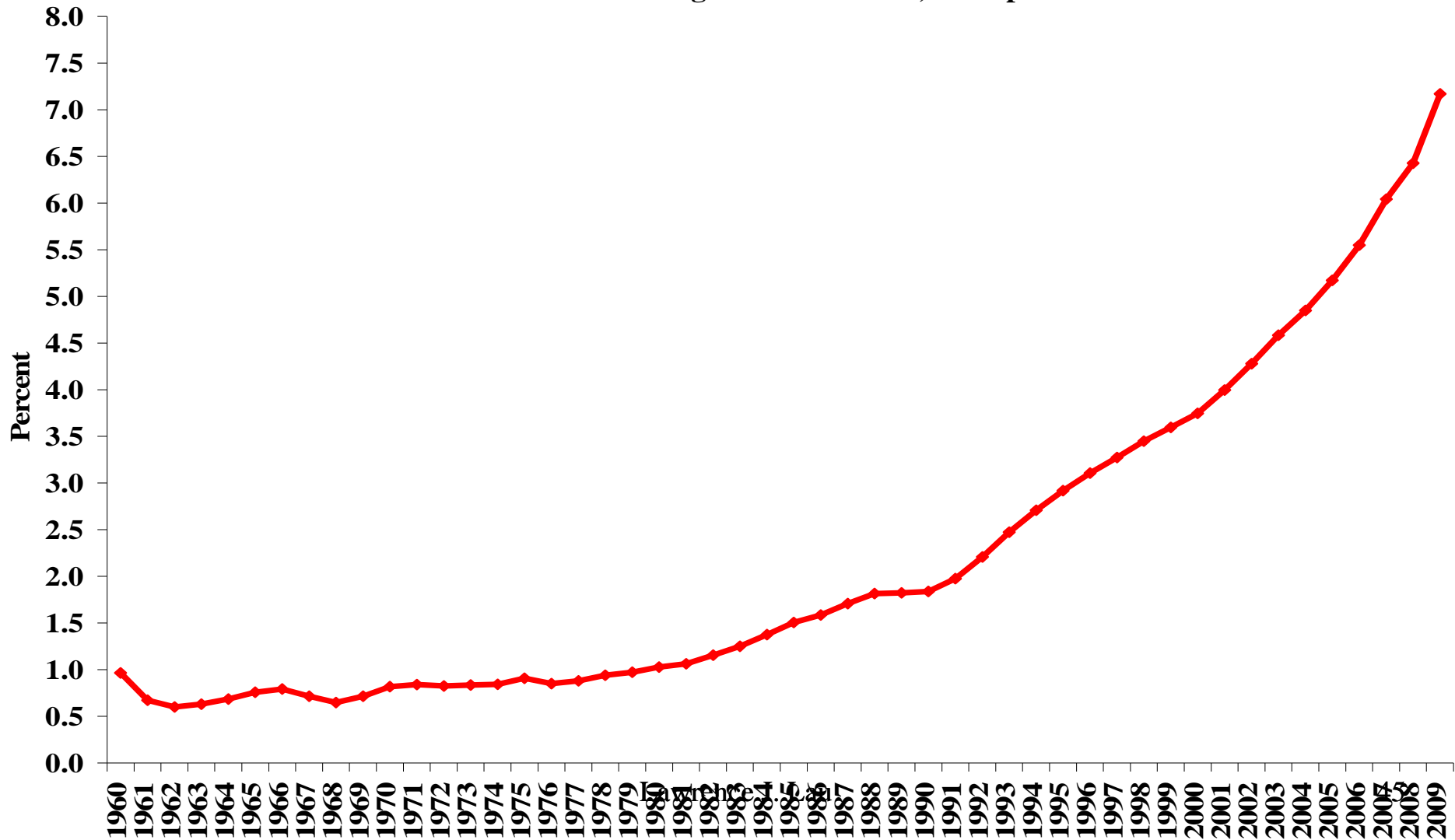
# East Asian Share of World GDP, 1960-present

East Asian Share of World GDP, 1960-present



# China's Share of World GDP, 1960-present

China's GDP as a Percentage of World GDP, 1960-present



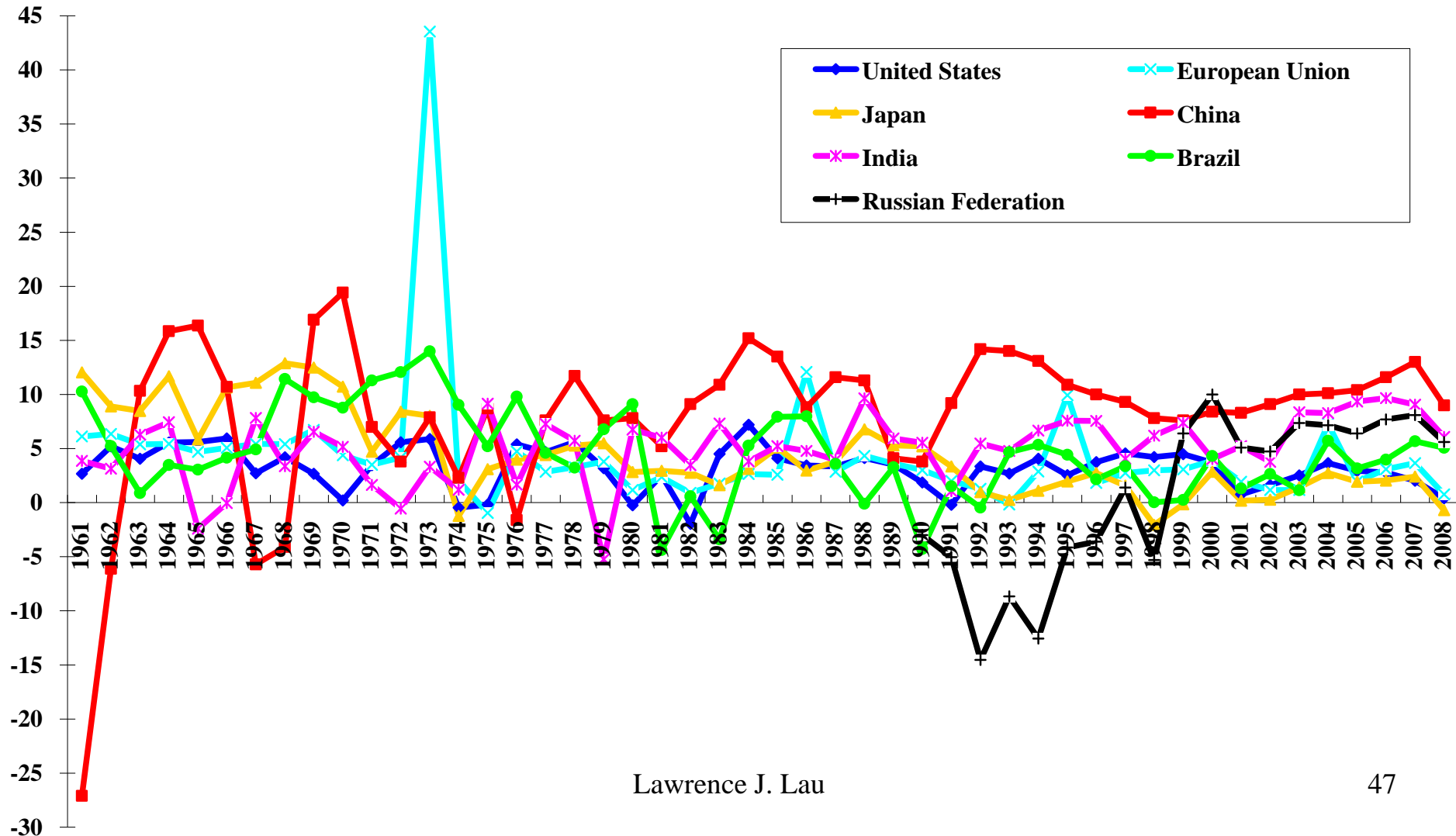
# The Shifting Centre of Gravity of the World Economy

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- ◆ In 1960, the United States accounted for 35% of World GDP; today, it accounts for approximately a quarter of World GDP.
- ◆ In 1960, the European Union accounted for less than 20% of World GDP; today, after having expanded to include more than twenty European countries, it accounts for approximately a quarter of World GDP.
- ◆ In 1960, Japan accounted for less than 10% of World GDP; by 1990, Japanese share of World GDP had risen to just below 18%. However, today, Japan accounts for less than 8% of World GDP, the same as China.
- ◆ Today, Brazil, Russia and India (the other three BRIC countries in addition to China) together account for a little over 5% of World GDP.
- ◆ The BRIC economies (Brazil, Russia, India and China) have all been growing significantly faster than the developed economies of European Union, Japan and the United States over the past decade.

# Real Rates of Growth of Selected Economies

Real Rates of Growth of Selected Economies



# The Partial De-Coupling Hypothesis

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- ◆ The “Partial De-Coupling Hypothesis” says that while China and East Asia are not immune from the effects of the economic recession in North America and Europe, they can nevertheless continue growing, albeit at somewhat lower rates, even with economic contraction in North America and Europe.
- ◆ Partial de-coupling is a consequence of the economic centre of gravity of the World gradually shifting to East Asia from the United States and Western Europe and within East Asia from Japan to China (but the shifts are still continuing).



# The Partial De-Coupling Hypothesis

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- ◆ East Asian shares of World exports, imports, and international trade have also grown from approximately 10% in 1960 to a quarter in 2009, paralleling the growth of East Asian share of World GDP (see the following chart).
- ◆ Chinese shares of World exports, imports and international trade have also grown rapidly. Chinese exports and imports have risen from approximately 1% of World exports and imports in 1960 to approximately 10% of World exports and imports in 2009.
- ◆ China has become the second largest trading country in the World, after the United States. China accounts for one-third of East Asian international trade today. China has also replaced Japan to become the largest importing country in East Asia and the most important export market for almost all East Asian economies and runs trade deficits vis-à-vis almost every one.

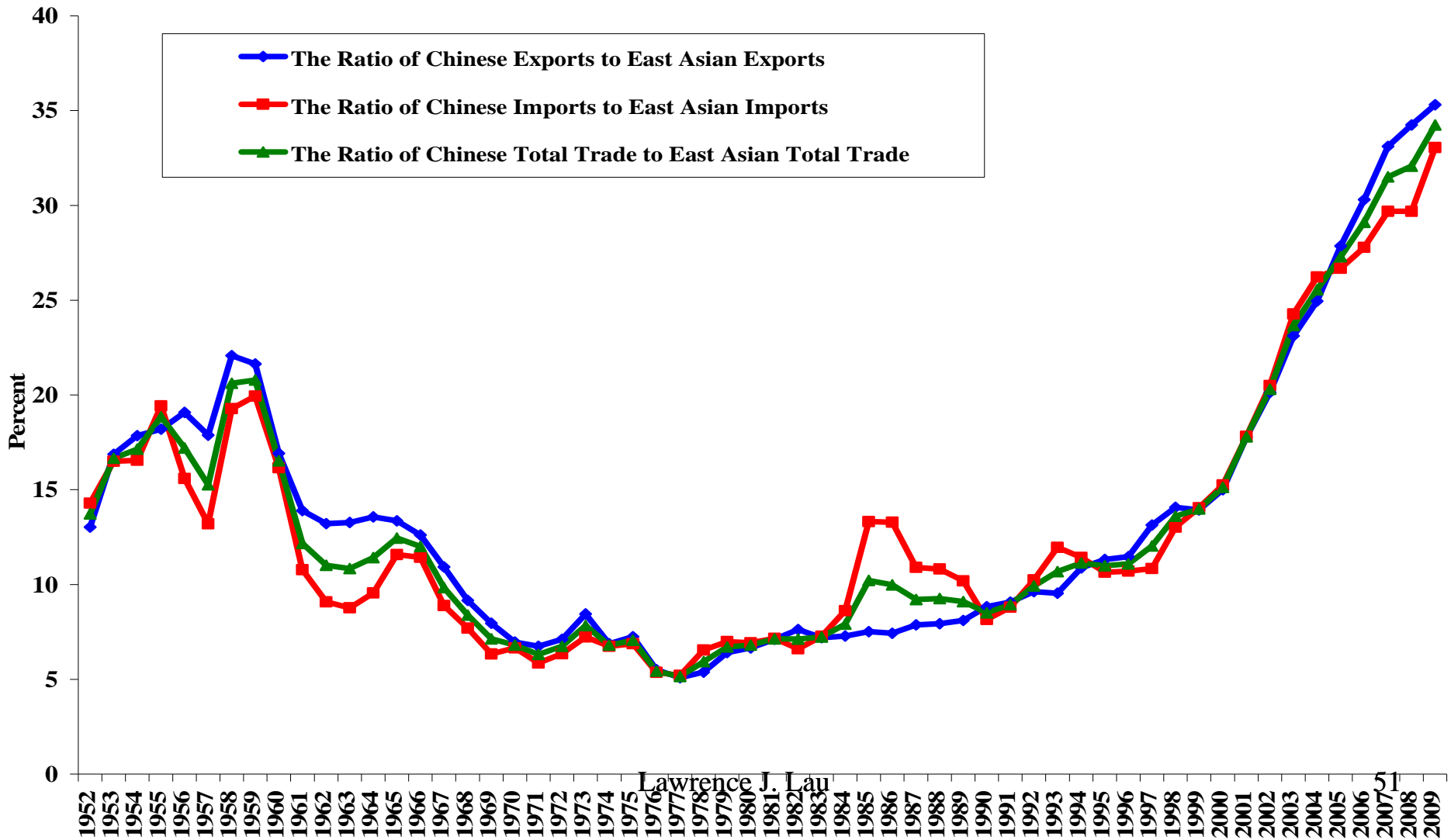
# The Share of Chinese Trade in Total World Trade, 1950-present

The Ratio of Chinese Trade to World Trade



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

The Ratio of Chinese Trade to East Asian Trade



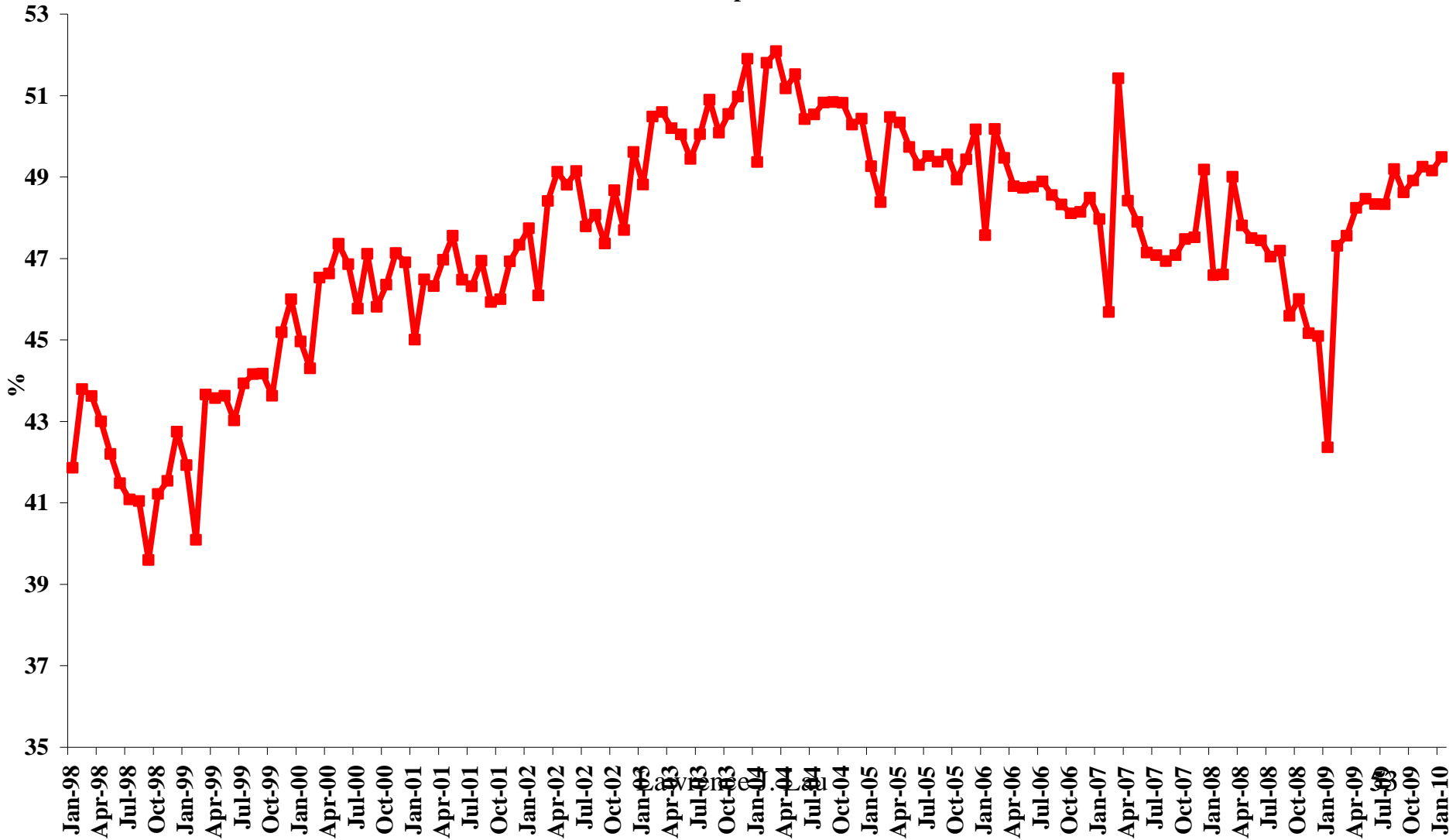
# The Partial De-Coupling Hypothesis

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- ◆ Because of the rapid economic growth of China and the rest of East Asia outside of Japan, and the demand and supply that such economic growth has generated, the East Asian economies now trade more with one another than with economies outside of East Asia, including the United States. By the late 1990s, approximately half of East Asian trade is among East Asian economies (see the following charts).
- ◆ And while much of the trade consists of raw materials, components, and semi-finished goods which are further processed for exports to developed economies ultimately, much of it has also found itself into the final demands of the domestic markets.
- ◆ This is a sea change compared to say thirty years ago when most of the East Asian trade was between East Asia and the United States and Western Europe and not within East Asia itself.

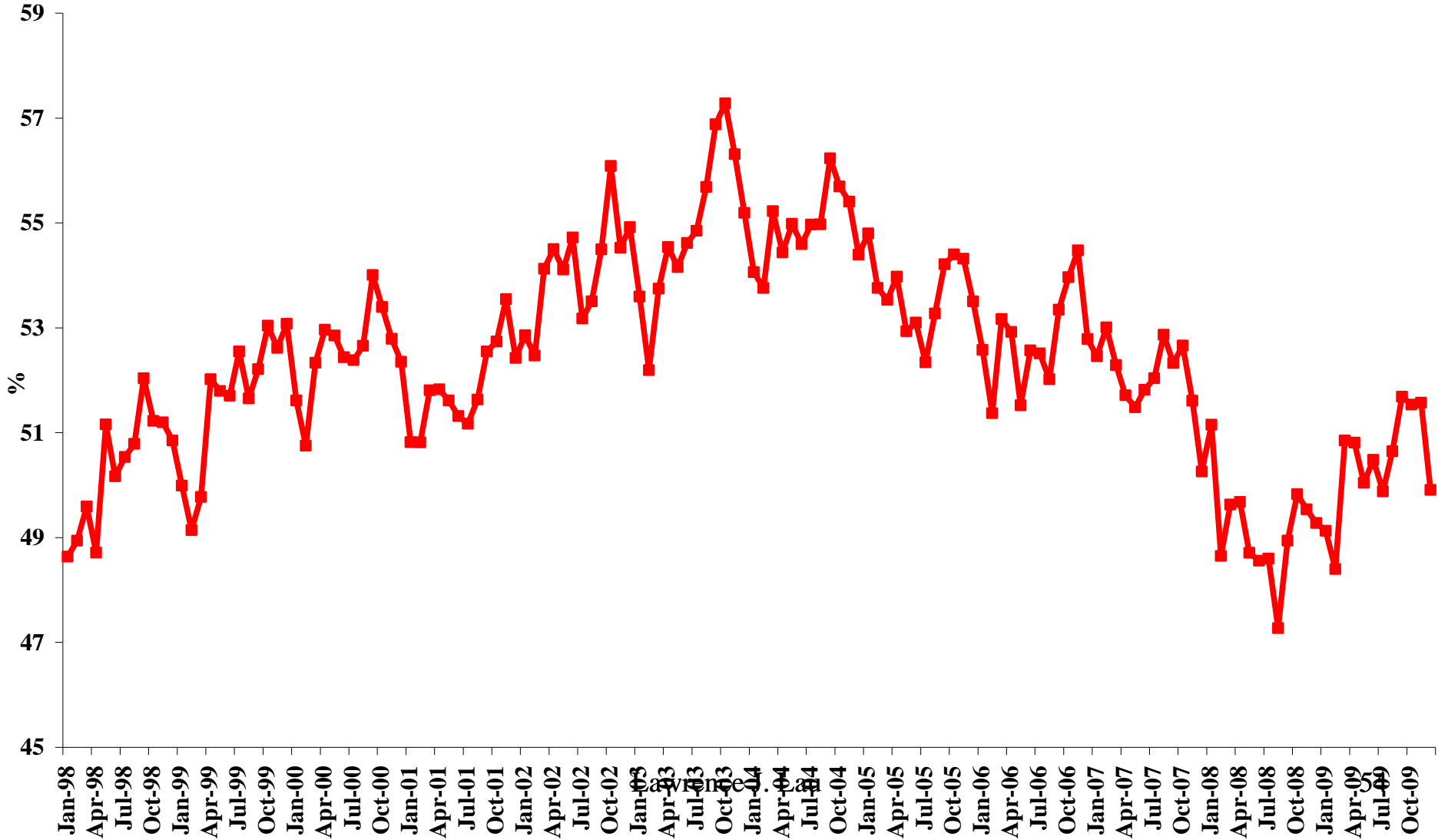
# The Share of East Asian Exports Destined for East Asia

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 Imports Originated from East Asia



# The Partial De-Coupling Hypothesis

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- ◆ As a result, interdependence of the East Asian economies has been rising sharply over the years and East Asian dependence on the United States and Western Europe has declined.
- ◆ Interdependence of the East Asian economies will rise even further within the next five to ten years as East Asia becomes the only region with a high rate of economic growth and as the ASEAN Free Trade Area as well as its variations (+1 (China); + 3 (China, Japan and South Korea)) become increasingly realities.

# The Partial De-Coupling Hypothesis

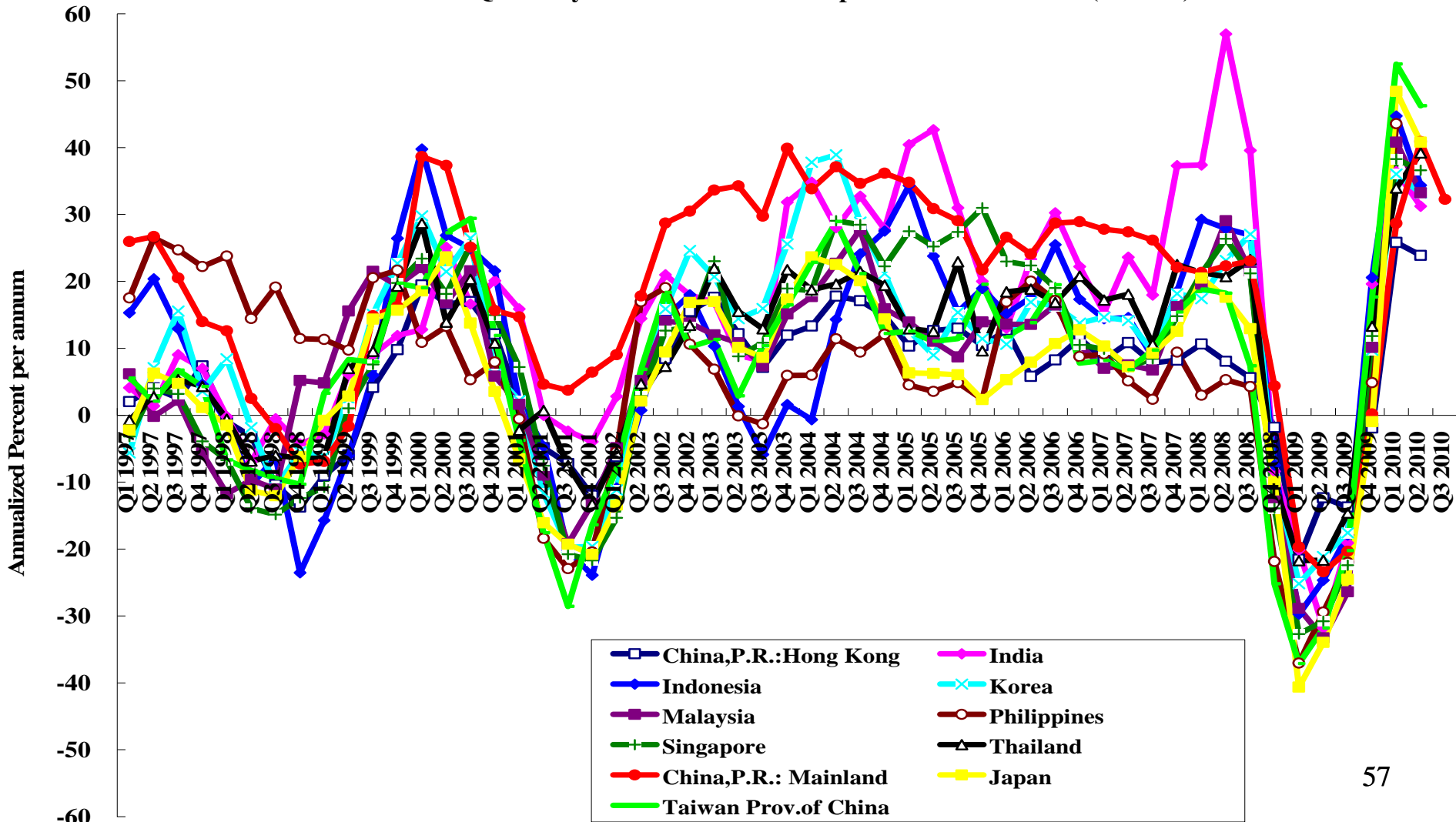
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- ◆ The fact that the Chinese economy has continued to grow at an average rate of approximately 10% per annum since the beginning of the global financial crisis in 2007 is ample proof that the Chinese economy has been at least partially de-coupled from the rest of the World, and in particular, from the United States and Europe, both of which are still mired in recession.
- ◆ While Chinese exports and imports fluctuate as widely as the exports and imports of other East Asian economies, the rate of growth of Chinese GDP has been relatively stable, unlike the other East Asian economies, because the true export dependence of the Chinese economy is low due to the low value-added content of its exports. In addition, China is a large, continental economy that is relatively self-sufficient and is therefore relatively insulated from the rest of the World. (See the following charts on the rates of growth of the exports, imports and real GDP of East Asian economies).



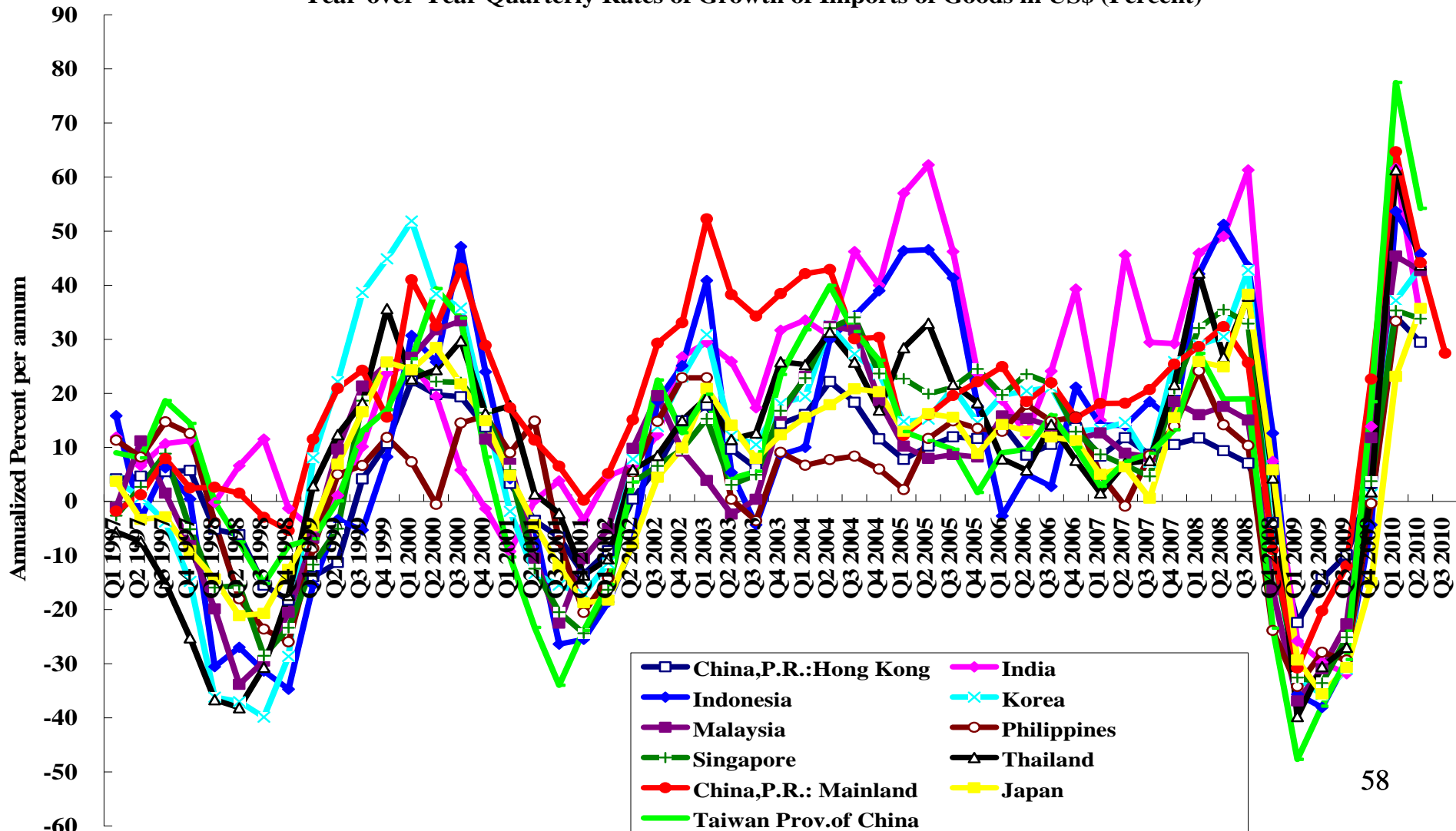
# Quarterly Rates of Growth of Exports of Goods: Selected East Asian Economies

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



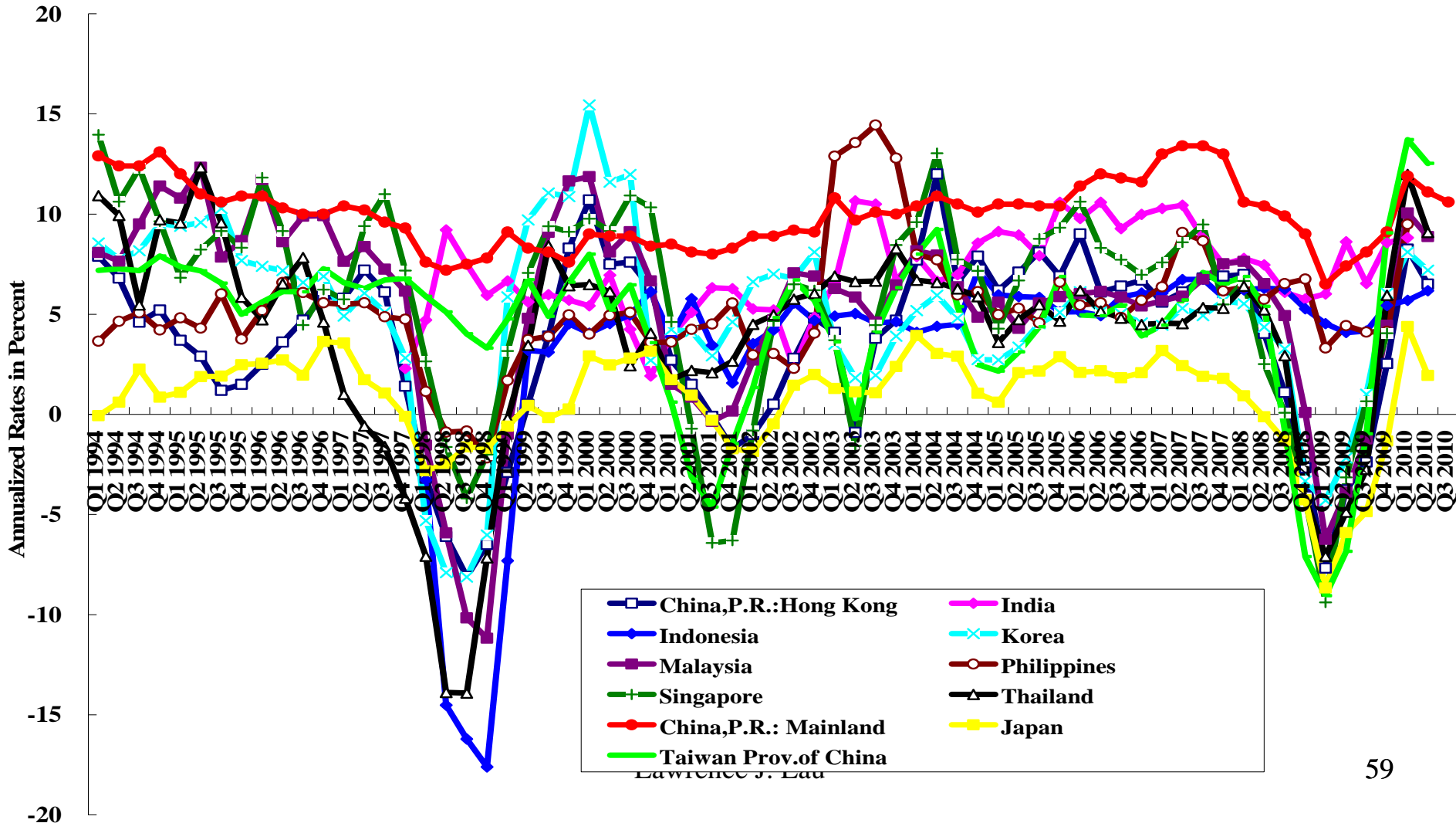
# Quarterly Rates of Growth of Imports of Goods: Selected East Asian Economies

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



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

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



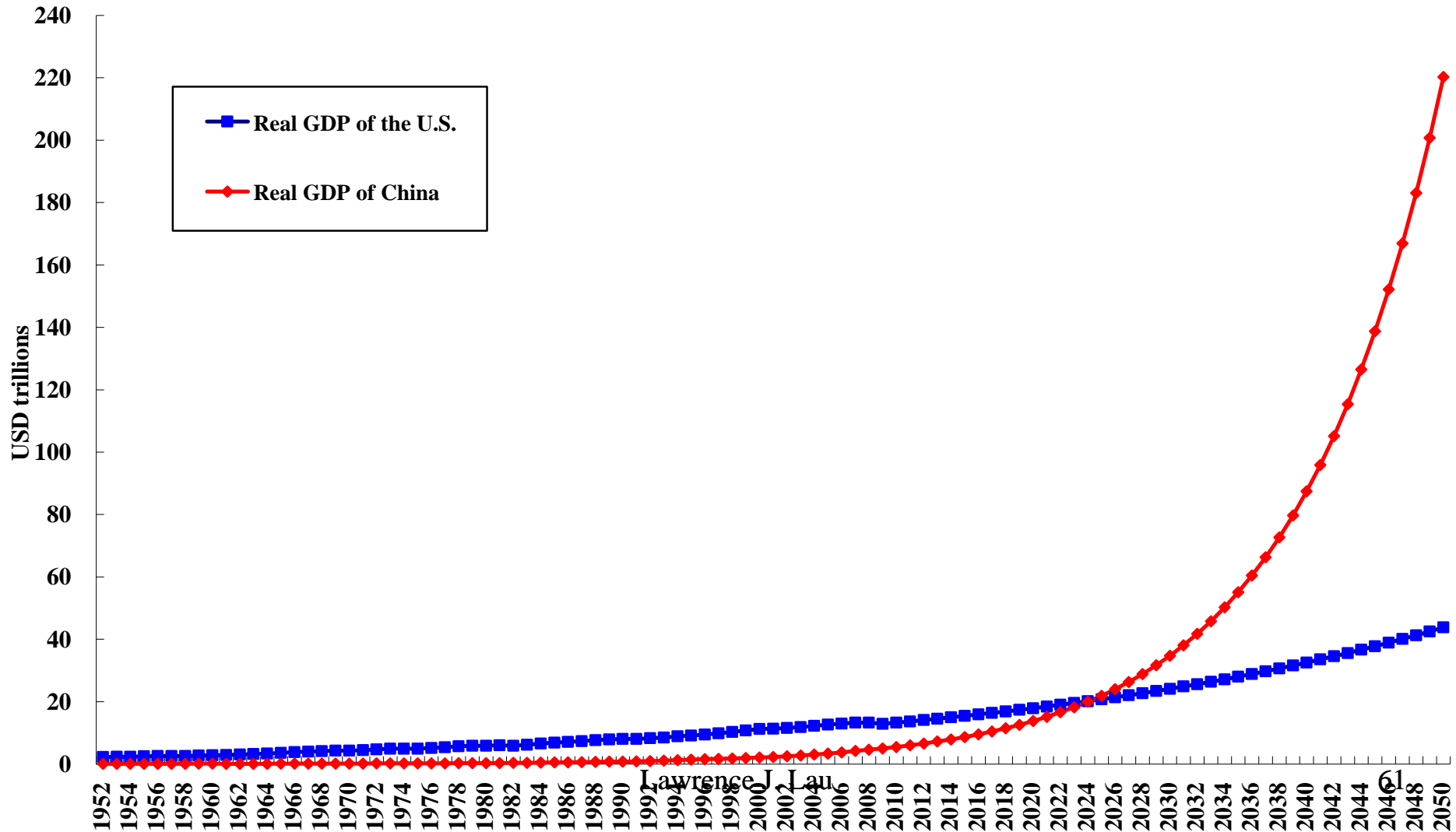
# The Projected Distribution of World GDP

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- ◆ Given the current trends in rates of economic growth, East Asia as a whole will surpass the United States in terms of aggregate GDP with China perhaps contributing the highest proportion of the total by 2015.
- ◆ Chinese GDP will catch up with U.S. GDP by 2025, when China and the U.S. will each account for approximately 15% of World GDP.
- ◆ It is projected that Chinese GDP per capita will catch up with U.S. GDP per capita by 2050, at which time Chinese GDP will be approximately five times that of the U.S. and will account for between a third and a half of World GDP (depending on the growth rates of other economies, especially the developing economies of today).

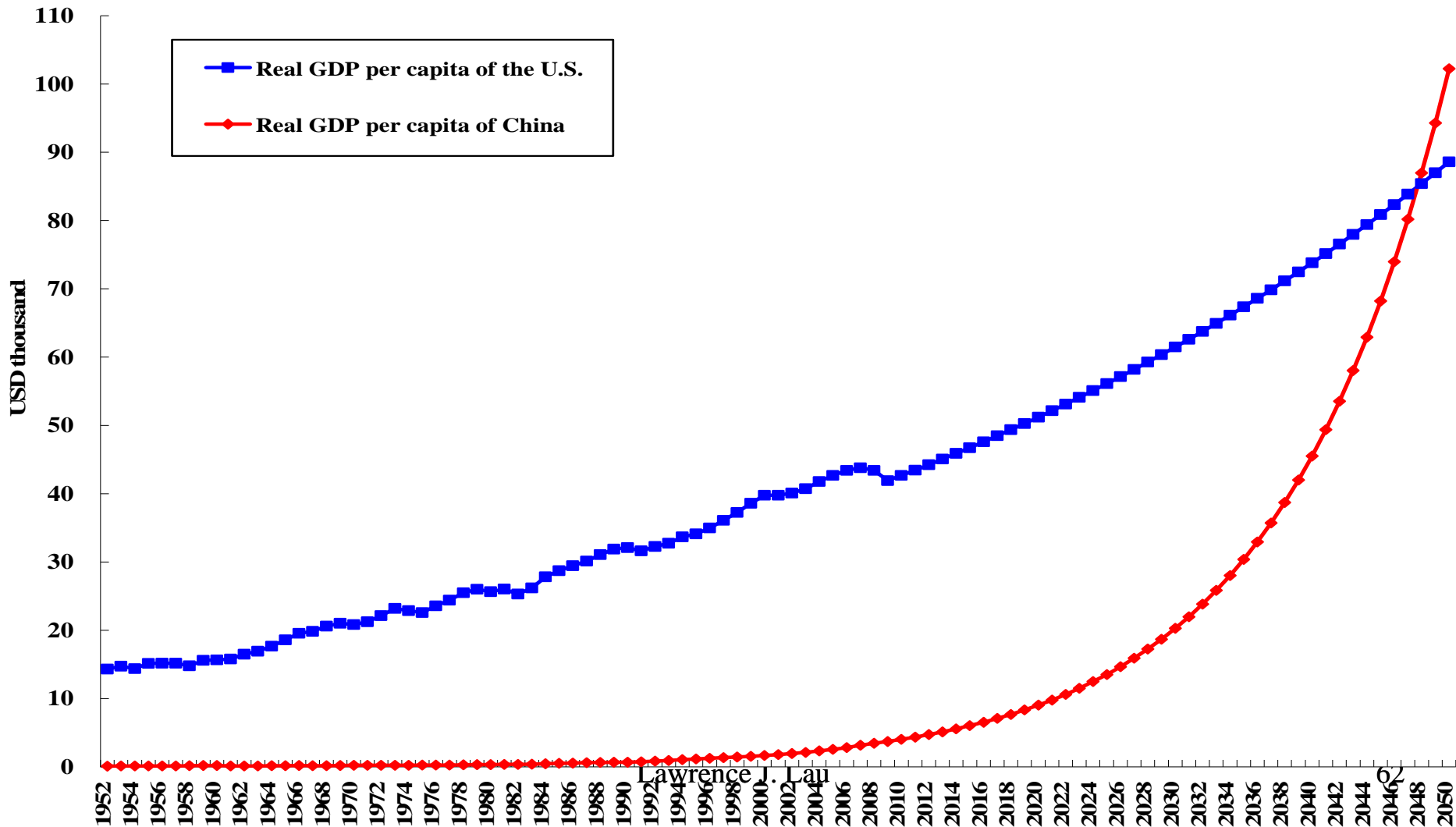
# Actual and Projected Chinese and U.S. Real GDPs

Actual and Projected Real GDP of China and the U.S., in 2009 prices



# Actual and Projected Chinese and U.S. Real GDP per Capita's

Actual and Projected Real GDP per capita of China and the U.S., in 2009 prices



# The Internationalisation of the Renminbi

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- ◆ What do we mean by the “Internationalisation of the Renminbi”? It can mean many different things:
- ◆ The Renminbi is used as a “unit of account” in international transactions, e.g., trade between Mainland China and Hong Kong, which may be denominated in Yuan.
- ◆ The Renminbi is used as a “settlement” currency in international transactions. (Just because a transaction is denominated in a certain currency does not necessarily imply that the transaction must be settled in that same currency.)

# The Internationalisation of the Renminbi

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- ◆ The Renminbi is used as a medium of exchange outside of Mainland China, sometimes as an alternative to the local currency of legal tender (e.g., Hong Kong, Macau, Laos).
- ◆ The Renminbi is used as a store of value outside of Mainland China (e.g., Hong Kong).
- ◆ The Renminbi is fully convertible, that is, both “current accounts” convertible and “capital accounts” convertible—both inbound and outbound capital controls are lifted.
- ◆ The Renminbi and Renminbi assets are held by foreign central banks as a reserve currency.



# The Internationalisation of the Renminbi

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- ◆ The Renminbi has been current accounts convertible since 1994. However, it has not become fully capital accounts convertible. There still exist both inbound and outbound capital controls in China. Some categories of capital movements require prior government approval. But individual Chinese citizens can remit up to US\$50,000 per person overseas each year, with few questions asked.

# The Internationalisation of the Renminbi

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- ◆ Chinese trade with East Asia is approximately 35% of its total international trade. It is expected that the use of the Renminbi for the denomination and settlement of international trade and capital transactions in East Asia will gradually become very common, to the point that it may cover almost all of Chinese international trade within East Asia with the possible exception of Japan. This trade alone amounts to more than US\$1 trillion each year, with most of it currently denominated in U.S. Dollars.

# The Internationalisation of the Renminbi

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- ◆ Approximately 20% of Japanese imports and 35% of Japanese exports are denominated in Japanese Yen. Applying a similar ratio, say 30%, to Chinese international trade with East Asia, this would amount to a shift of approximately US\$300 billion from U.S.\$-denominated trade to Yuan-denominated trade each year.
- ◆ The U.S.\$ balances that will be needed as working capital by East Asian exporters and importers will be significantly decreased and the Renminbi balances correspondingly increased.
- ◆ If the same ratio is applied to all Chinese international trade, the amount of Yuan-denominated Chinese trade can potentially be as high as US\$750 billion.

# Is the Renminbi (Yuan) Under-Valued?

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- ◆ A country's currency is considered under-valued if it runs persistent surpluses in trade in goods and services combined vis-à-vis the entire World. It is considered over-valued if it runs persistent trade deficits vis-a-vis the World.
- ◆ A bilateral trade surplus, even a persistent one, says nothing about whether a country's currency is under-valued because it may still have a near zero or even negative trade balance vis-à-vis the entire world. Most non-oil producing countries have persistent bilateral trade deficits with oil-exporting countries. And that does not necessarily mean the currencies of the oil-exporting countries are under-valued.

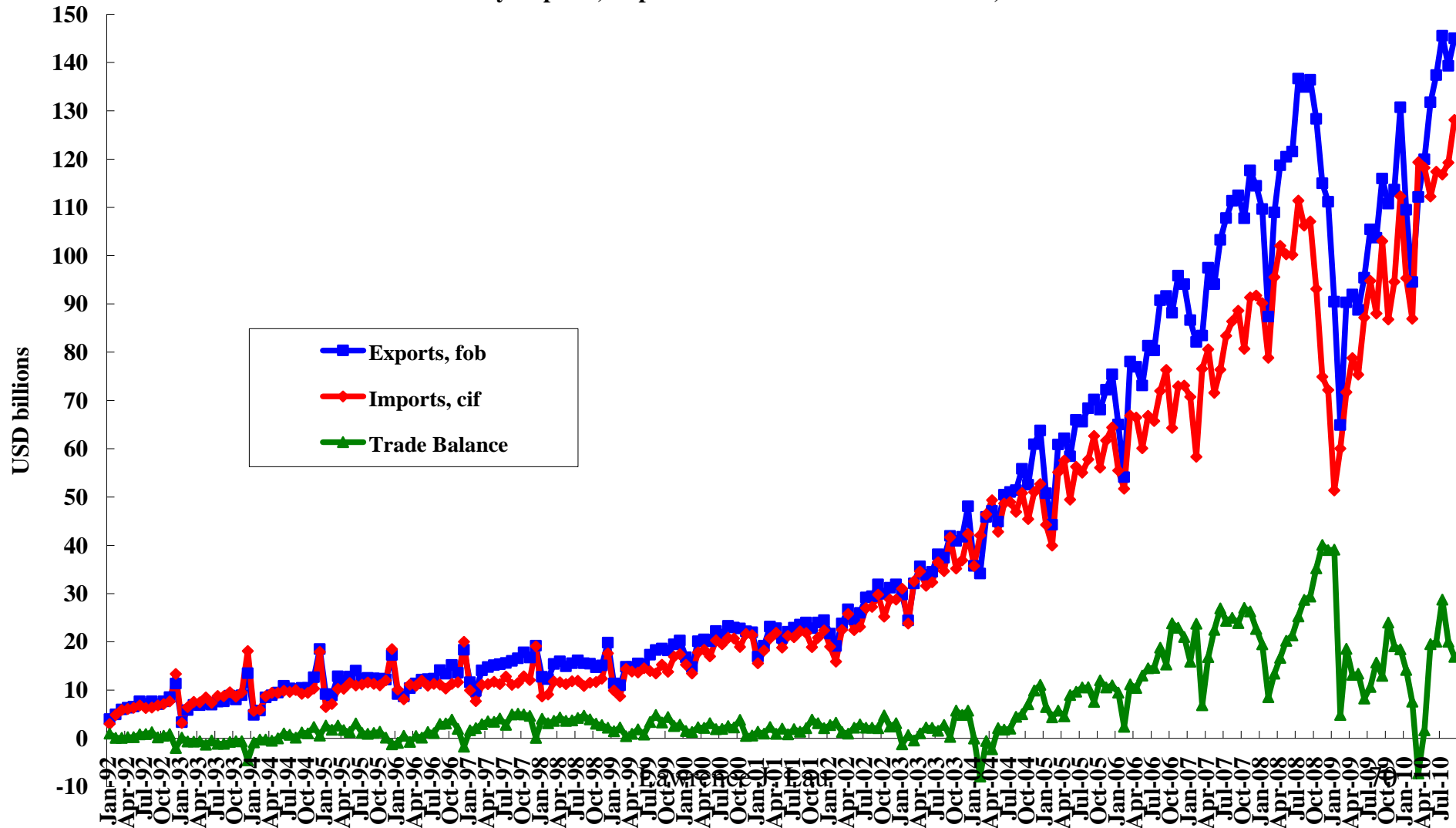
# Is the Renminbi (Yuan) Under-Valued?

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- ◆ The statistics on Chinese trade balances over the past three decades indicate that China has had essentially balanced trade in goods and services combined with the World until 2005 and that its trade surplus has once again become insignificant beginning in early 2010.
- ◆ In contrast, the large U.S. trade deficit with the world existed since at least 1998, long before 2005.

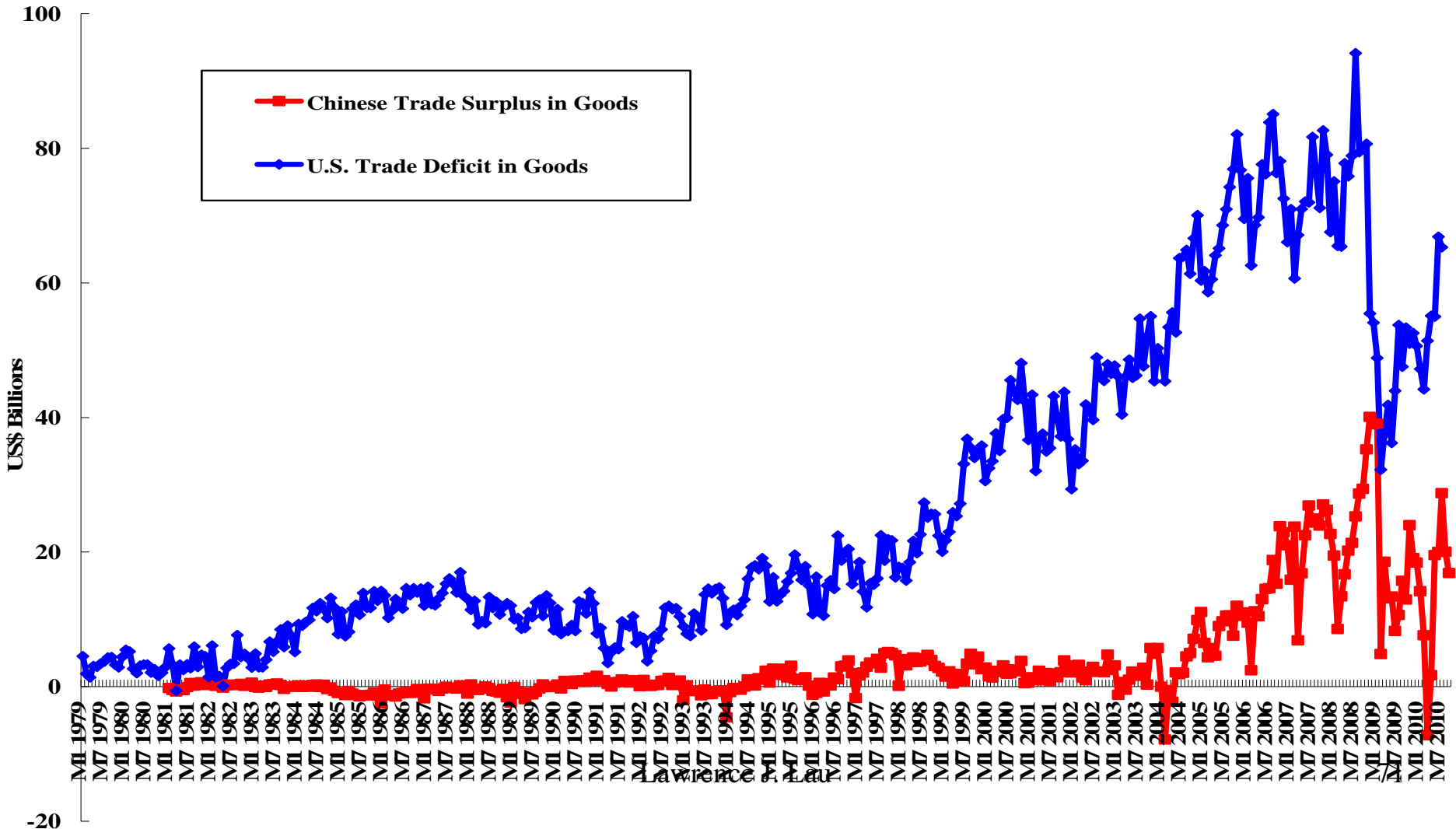
# Chinese Monthly Exports, Imports and Trade Balance, US\$

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



# Monthly Chinese Surplus and U.S. Deficit with the World, Trade in Goods, Bill. US\$

Monthly Chinese Surplus and U.S. Deficit with the World, Trade in Goods, Billion US\$



# Is the Renminbi (Yuan) Under-Valued?

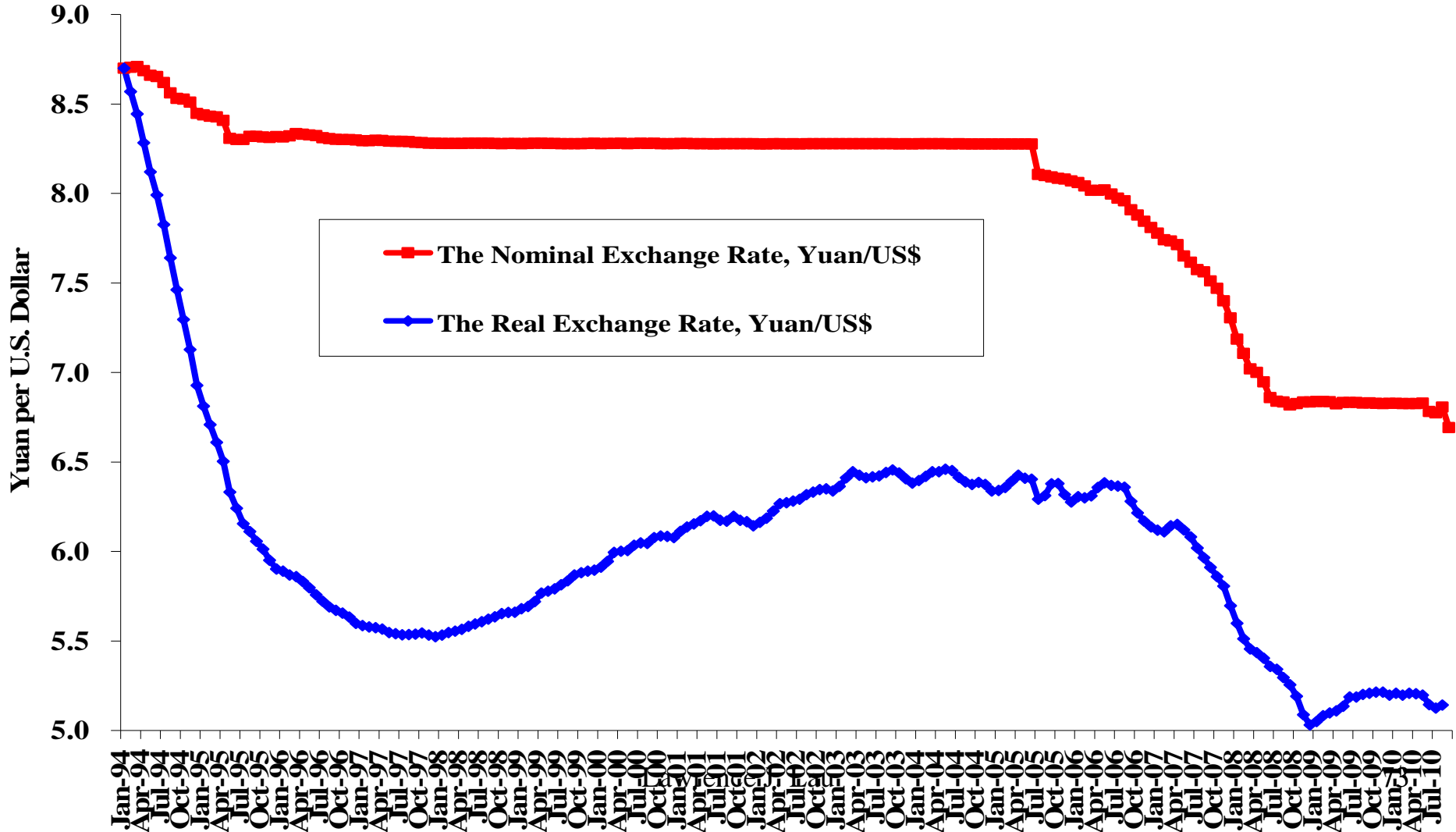
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- ◆ What this means is that while there is evidence that the U.S. Dollar might have been over-valued, there is no evidence that the Renminbi was under-valued prior to 2005.
- ◆ In July 2005, the Renminbi began to appreciate and rose 20% in nominal terms and 25% in real terms by the end of 2008.
- ◆ The Chinese trade surplus vis-à-vis the world, which began rising in 2005, reached a peak in 2008 when it began to decline rather precipitously. For 2009, it declined more than 30%. It has continued to fall and turned negative in March 2010 and continued to remain relatively low, especially when considered as a percentage of Chinese GDP.
- ◆ The long-term goal of the Chinese Government is to reduce the Chinese trade surplus vis-à-vis the World to zero. If the current trend continues, the goal of approximately zero annual trade balance can probably be achieved by 2011, without necessarily any large adjustment in the nominal Yuan/U.S. Dollar exchange rate.



# The Nominal and Real Yuan/US\$ Exchange Rates

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



# Is the Renminbi (Yuan) Under-Valued?

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- ◆ In the near term, the Renminbi is not expected to appreciate significantly, since China does not have a large trade surplus vis-à-vis the World.
- ◆ In the longer term, the currencies of economies with chronic trade surpluses vis-à-vis the World will need to appreciate relative to those of economies without significant trade surpluses or deficits and the currencies of economies with chronic trade deficits vis-à-vis the World will need to devalue relatively.
- ◆ Thus, it appears that unless the U.S. can reduce its trade deficit vis-à-vis the World significantly, the U.S. Dollar is likely to devalue relative to the Renminbi in the longer term.

# Concluding Remarks

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- ◆ Chinese GDP will probably catch up with U.S. GDP in approximately 15 years, some time around 2025, with U.S. and China each accounting for approximately 15% of World GDP.
- ◆ It will probably take another 20 to 25 years, perhaps even longer, before the middle of this Century, for Chinese per capita GDP to reach a level comparable to that of the then U.S. per capita GDP. If and when that happens, Chinese GDP will be approximately five times that of U.S. GDP.

# Concluding Remarks

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- ◆ The long-term sustainable sources of Chinese aggregate demand will be internal: investment in infrastructure, owner-occupied residential housing, investment in education and health care, urbanisation (building new cities), urban mass-transit systems and high-speed inter-urban trains, environmental protection and preservation, energy conservation and renewable energy, and the green economy.
- ◆ International trade will continue to be somewhat important, but not critical, to the growth of the Chinese economy. Exports as a share of Chinese GDP will probably continue to decline over time, as befitting a large, continental economy. Chinese economic growth will be marginally, but not critically, affected by a large decline in its exports, as demonstrated by its experience in the past couple of years as well as during the 1997-1998 East Asian currency crisis. Thus, it will be able to survive even prolonged economic recessions in the European and U.S. economies.

# Concluding Remarks

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- ◆ China will be internationalising the Renminbi gradually and in a planned and orderly manner. It has already made a beginning by allowing the Renminbi to be used on a voluntary basis as an accounting and settlement currency in its international trade with selected countries and regions.
- ◆ Paradoxically, the global financial crisis of 2007-9 has accelerated the pace of internationalisation of the Renminbi.
- ◆ In time, perhaps within the next five years, the Renminbi will become fully convertible, in the sense that both inbound and outbound capital controls will be effectively lifted. However, it is possible that short-term capital flows, which are of little economic benefit to the recipient economies, may continue to be under some form of control.

# Concluding Remarks

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- ◆ There is little empirical evidence that the Renminbi (Yuan) is significantly under-valued today. If China is able to maintain an approximate balance of trade in goods and services combined under conditions of free trade (WTO conditions), then there is no reason for a substantial adjustment in its exchange rate.
- ◆ China must maintain the flexibility to manage its exchange rate—it is too important a price to be left completely to a market full of potential speculators. China should therefore maintain a “managed floating exchange rate.” Just recall what happened to the “market-determined” exchange rates of East Asian economies during the East Asian currency crisis of 1997-1998.