

The Chinese Economy: The Next Thirty Years

Lawrence J. Lau, Ph. D.

President and Ralph and Claire Landau Professor of Economics
The Chinese University of Hong Kong

and

Kwoh-Ting Li Professor in Economic Development, Emeritus, Stanford University

Nomura Asia Equity Forum
Singapore, 7 June 2010

Phone: (852) 2609-8600; Fax: (852) 2603-5230

Email: LAWRENCELAU@CUHK.EDU.HK; WebPages: [HTTP://WWW.CUHK.EDU.HK/VC](http://www.cuhk.edu.hk/vc)

Outline

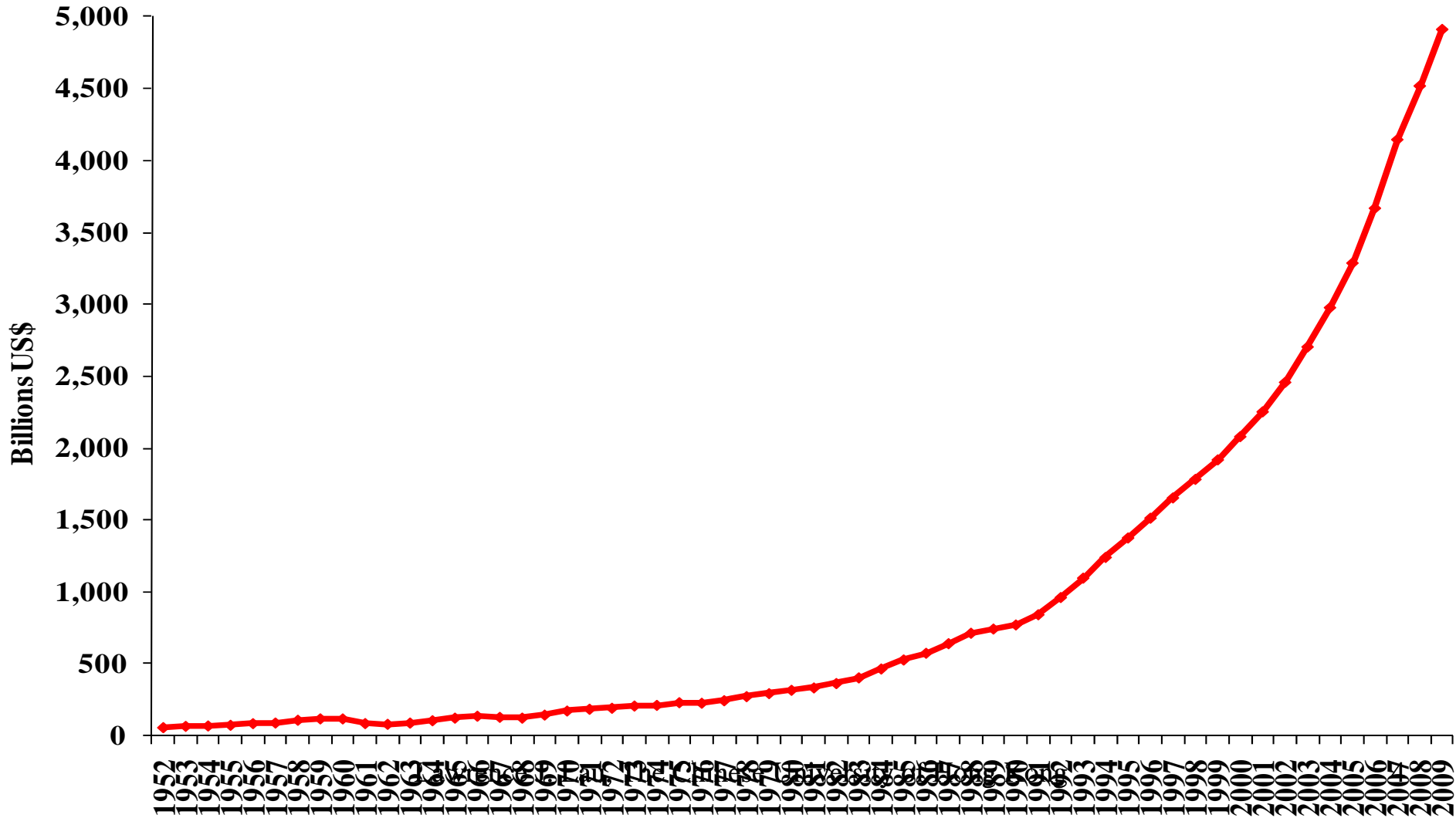
- ◆ Introduction
- ◆ The Economic Fundamentals
- ◆ Sources of Sustainable Growth of Aggregate Demand
- ◆ The Relative Unimportance of International Trade
- ◆ The Partial De-Coupling of China and East Asia from the United States and Europe
- ◆ The Internationalisation of the Renminbi
- ◆ Concluding Remarks

Introduction

- ◆ China has made tremendous progress in its economic development since it began its economic reform and opened to the World in 1978. China is currently the fastest growing economy in the World—averaging approximately 10 percent per annum over the past 30 years.
- ◆ Between 1978 and 2009, Chinese real GDP grew 18 times, from US\$274 billion to US\$4.91 trillion (2009 prices) to become the third largest economy in the World, after the U.S. and Japan. During the same period, Chinese real GDP per capita grew more than 13 times, from US\$284 to US\$3,681. By comparison, the U.S. GDP (approx. US\$14.26 trillion) and GDP per capita (approx. US\$46,100) were respectively 3 and 12.5 times the comparable Chinese figures in 2009.

Real Chinese GDP in US\$ Since 1952 (2009 Prices)

Chinese Real GDP, in 2009 prices

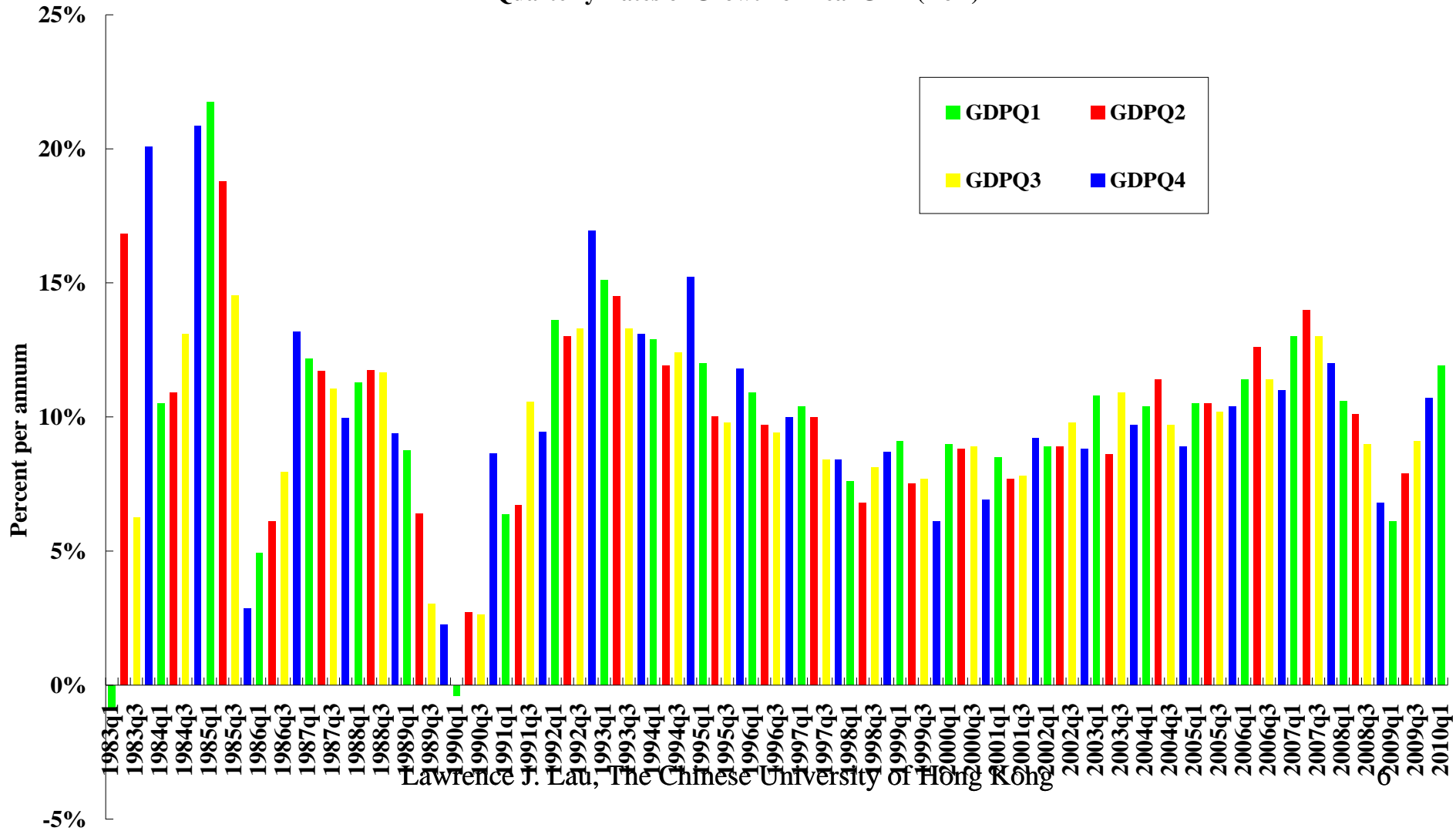


Introduction

- ◆ The Chinese economy has survived the East Asian currency crisis of 1997-8 as well as the global financial crisis of 2007-9 reasonably unscathed. The 4-trillion Yuan economic stimulus package launched in November 2008 has been quite effective in maintaining Chinese economic growth. The Chinese economy will not be seriously affected by the current financial crises developing in some of the member countries of the European Union.
- ◆ The Chinese economy grew 8.7% in 2009 and 11.9% year-over-year in the first quarter of 2010 even as the European and U.S. economies remained in recession. The rate of growth for 2010 is likely to be no less than 9%.
- ◆ If current trends continue, Chinese real GDP will approach the level of U.S. real GDP in less than 20 years' time--some time between 2025 and 2030.

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

Quarterly Rates of Growth of Real GDP (YoY)

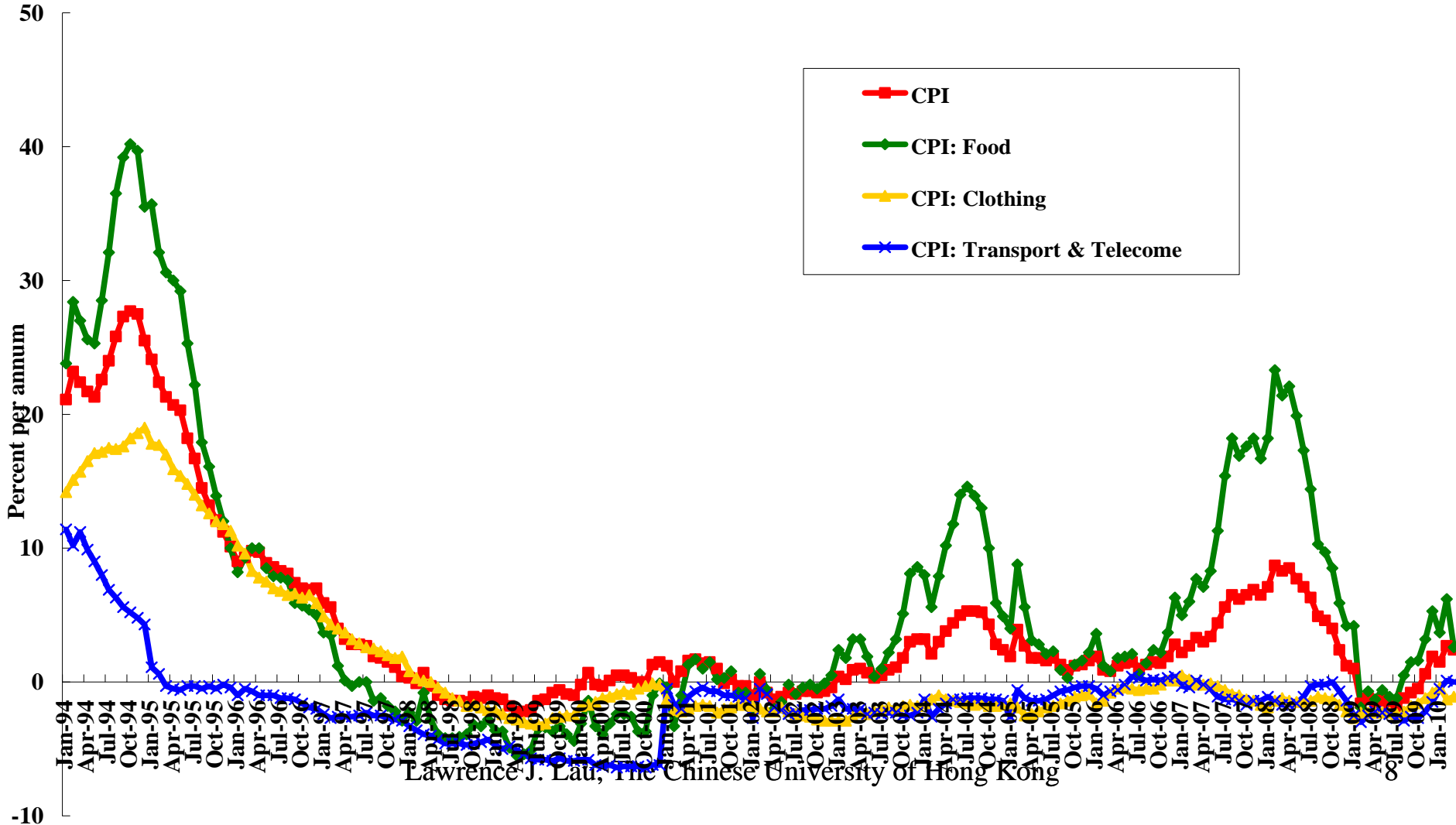


Introduction

- ◆ The rate of inflation of goods, as measured by the consumer price index, has remained relatively tame, making it possible to undertake fiscal expansion without fear of rekindling inflation.
- ◆ 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 inflation in 2007 and the first half of 2008 as well as the more recent spurt were mostly due to the increases in the prices of agricultural goods and energy, both of which have begun to decline. Fuel prices have also been lowered in May 2010, following the declines in the World prices for crude oil.
- ◆ The objective of the Chinese Government is to keep inflation rate for 2010 below 3%, which seems achievable at this time.

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

- ◆ Given the excess production capacity in many key industries, such as steel, cement, and glass, it is unlikely that there will be much inflation in the prices of goods in the next couple of years.
- ◆ 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. State-owned enterprises that have not been explicitly authorised are now forbidden to invest in real estate. Bank lending rules have also been tightened so as to discourage purchases of more than one residential unit by individual households.

Introduction

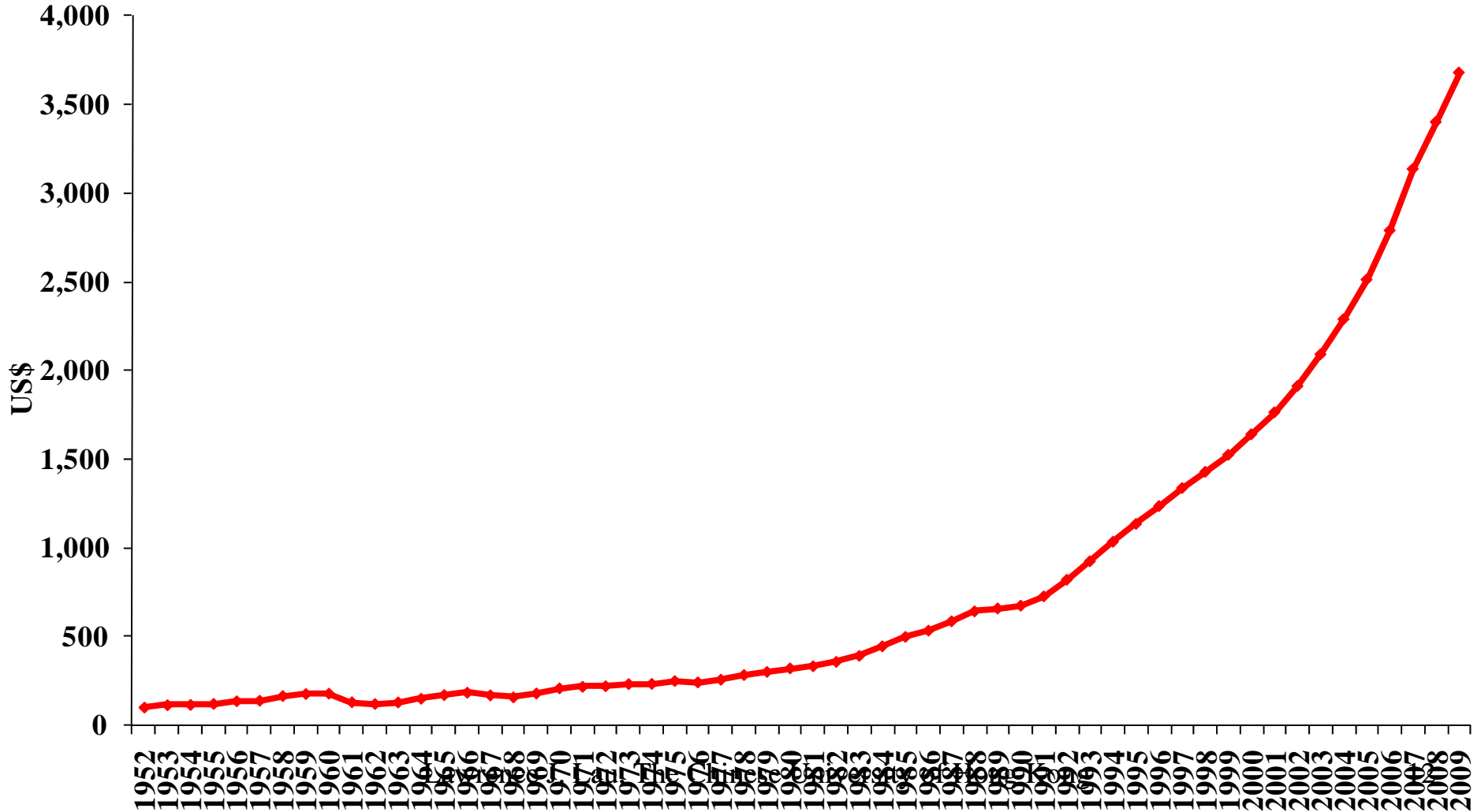
- ◆ While the real wage rate of unskilled entry-level labour remains stable and is expected to be stable for a long time, there is upward pressure on the real wage rates of skilled and experienced labour, which is actually in short supply, especially as Chinese enterprises move up the value-added chain. The recent high-profile wage settlements made by Honda and Foxconn plants in China provided for increases of 24 percent and 30 percent respectively.
- ◆ However, given the trend of rapid expansion of Chinese tertiary education in recent years, with 6 million graduates projected annually, the increases in the real wage rates of even skilled labour is likely to be relatively limited.

Introduction

- ◆ However, despite its rapid growth, China is still a developing economy in terms of its real GDP per capita (US\$3,681 in 2009). An economy is generally considered to be developed if its GDP per capita exceeds US\$10,000 (if we take into account inflation, this threshold should probably be much higher).
- ◆ It will probably take 20 years before China joins the ranks of developed economies, achieving a per capita real GDP of US\$10,000, and another 20 to 25 years before China reaches the same level of real GDP per capita as the United States, some time past the middle of the 21st Century (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).

Real Chinese GDP per Capita in US\$ Since 1952 (2009 Prices)

Chinese Real GDP per Capita, in 2009 prices



Introduction

- ◆ 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 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 (e.g., Vietnam) and potential transition economies (e.g., Cuba, Laos, North Korea).

The Economic Fundamentals

- ◆ Long-term economic growth of a country depends on its rates of growth of the primary inputs—(tangible or physical) capital and labor—and on technical progress (or equivalently 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 national savings rate.
- ◆ The rate of technical progress depends on investment in intangible capital (principally human capital and R&D capital).

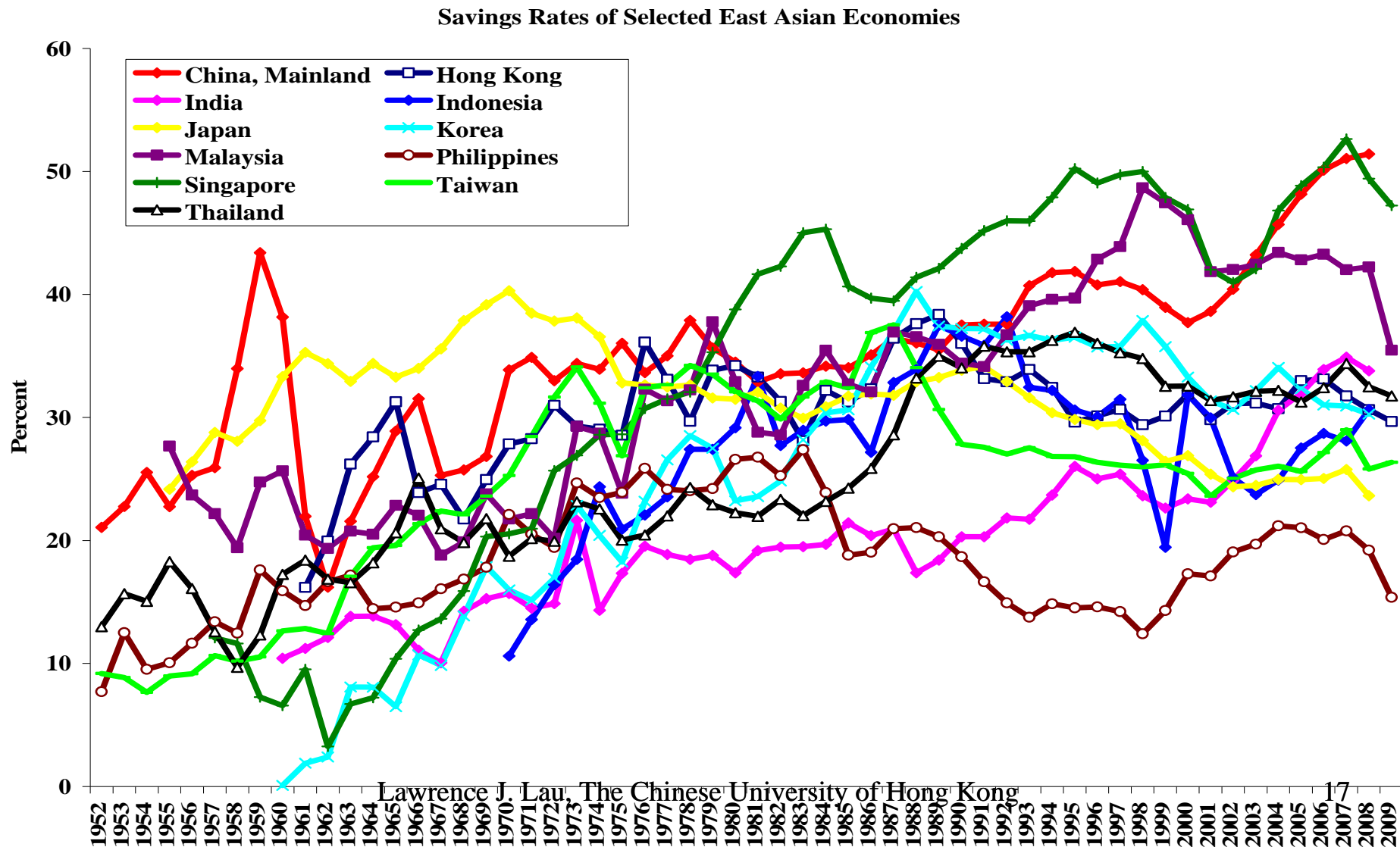
The Economic Fundamentals

- ◆ Chinese economic growth during the past 30 years has been underpinned by three factors:
- ◆ (1) A consistently high national savings rate--which means that the domestic savings are sufficient to meet the domestic investment needs without relying on foreign direct or portfolio investment flows or foreign loans;
- ◆ (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;
- ◆ (3) A huge domestic market of 1.3 billion consumers with pent-up demand for housing and transportation and other consumer goods and services (education and health care), enabling the realisation of significant economies of scale in production and in innovation based entirely on internal demand.

The Economic Fundamentals

- ◆ Except for short early start-up periods, the Chinese national savings rate has always been high, on the order of 30 percent and above. It has stayed around 40 percent since the early 1990s and has at times approached or even exceeded 50 percent in more recent years.
- ◆ A temporarily high national (and household) savings rate can be the result of the rapid growth of real GDP (and real household income)—it takes time for the growth of consumption to catch up to the growth of income.
- ◆ However, a consistently high national savings rate also means, among other things, that the Chinese economy can finance all of its domestic investment needs from its own domestic savings alone, and does not have to depend on the more fickle foreign capital inflows (foreign portfolio investment or foreign direct investment) or foreign loans.

Savings Rates of Selected Asian Economies (1952-present)



The Economic Fundamentals

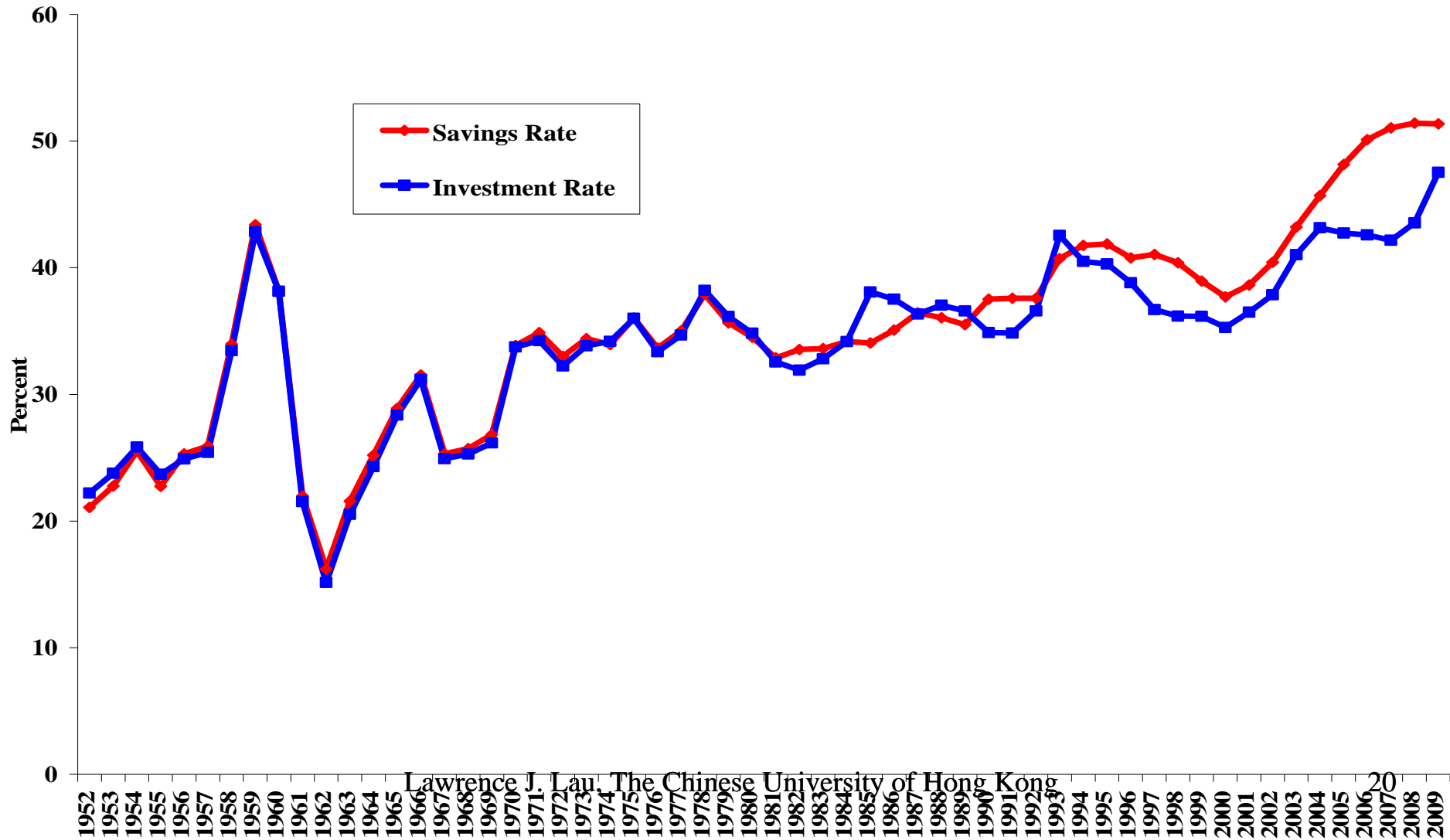
- ◆ The high Chinese national savings rate is not due to an exceptionally high household savings rate, but to
- ◆ (1) the much lower share of GDP received by households as income; in particular, the share of labor is low in China, less than 50 percent of GDP, compared to approximately 70 percent in the developed economies of the West; and
- ◆ (2) the much higher Chinese corporate savings rates—Chinese enterprises typically reinvest their earnings and distribute little or no cash dividends to their shareholders.
- ◆ (3) the lagged adjustment of household consumption to increases in household income because of the rapidity of the latter. Over time, the national savings rate should decline to a more reasonable and sustainable level.

The Economic Fundamentals

- ◆ While China is well known to have a high, and some would say excessive, national savings rate, what is not well known is the equally high and excessive investment rate. Chinese gross domestic investment as a percent of GDP has been above 35 percent since the early 1990s and has exceeded 40 percent for quite a few years and since 2003.
- ◆ Such a high investment rate is significantly beyond the normal absorptive capacity of any economy and has resulted in over-investment and excess capacity in many industries, for example, steel, cement, and glass.

National Savings and Investment Rates of Mainland China (1952-Present)

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



The Economic Fundamentals

- ◆ China both saves too much and invests too much. However, the excessive savings and excessive investment were in approximate balance and thus there was little or no excess savings to be exported, and hence no trade surplus vis-a-vis the World, until 2005, when China began to have a trade surplus.
- ◆ More recently, the Chinese trade surplus, which has been declining continuously and significantly since 2008, turned into a trade deficit in March 2010 and stayed low in April 2010, reflecting the decline in export demand and the increase in domestic demand as a result of its economic stimulus programme and signalled a significant narrowing of its savings-investment gap.

The Economic Fundamentals

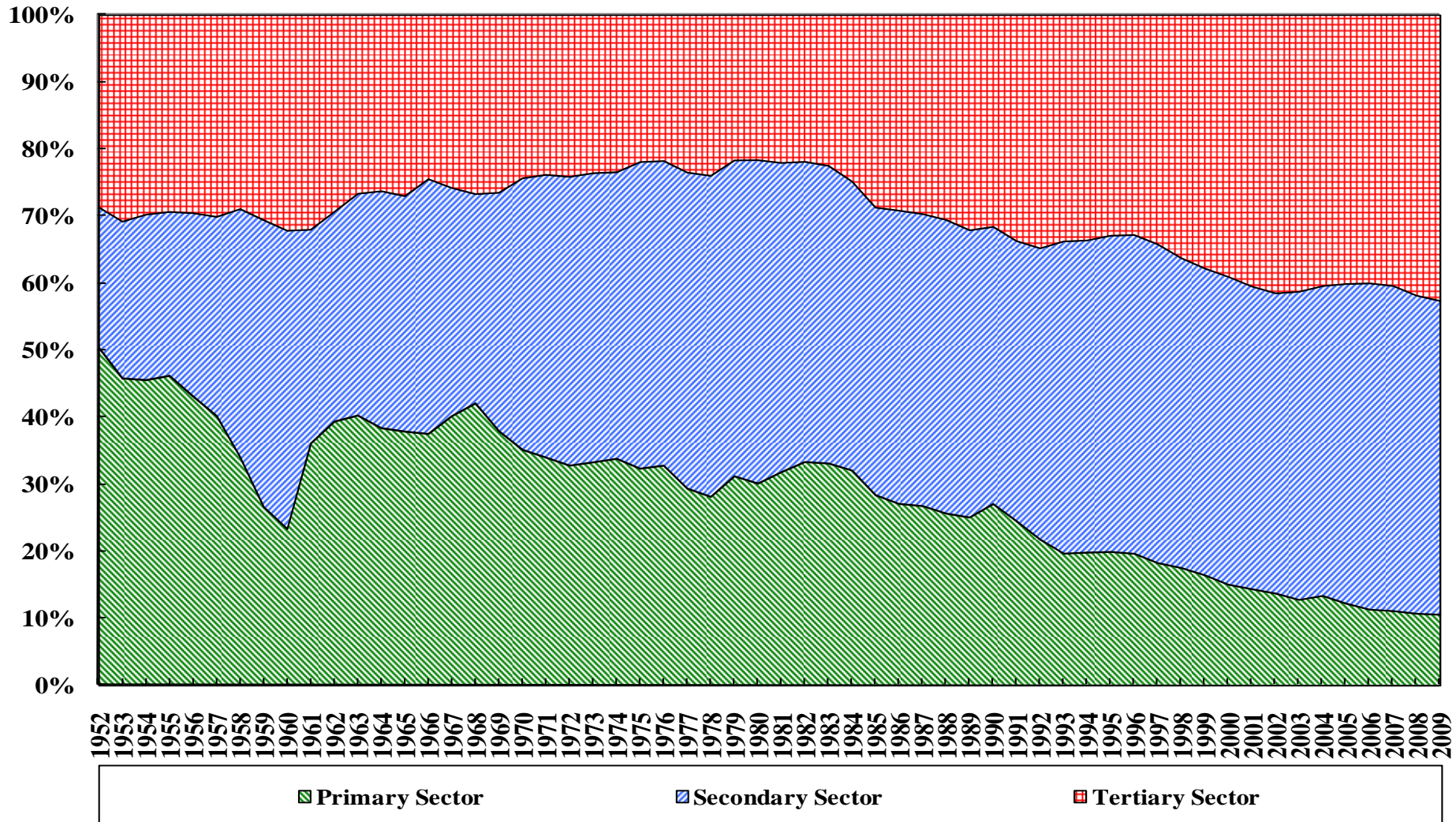
- ◆ China, like Japan, Taiwan, and South Korea in their early stages of economic development, has an abundant supply of surplus labour. This means China can grow without being constrained by the supply of labour or by rising real wage rates of unskilled, entry-level labour over an extended period of time.
- ◆ Physical capital is very productive under conditions of surplus labour and as long as there is sufficient complementary domestic physical capital, the surplus labour will allow the economy to grow rapidly.
- ◆ This is exactly what the late Prof. W. Arthur Lewis, Nobel Laureate in Economic Sciences, said in his famous paper on surplus labor more than fifty years ago.

The Economic Fundamentals

- ◆ The distribution of Chinese GDP by originating sectors has become in 2009 approximately: Primary (agriculture and mining), 10.6 percent; Secondary (manufacturing and construction), 46.8 percent; and Tertiary (services), 42.6 percent.
- ◆ But the bulk of the labour force, more than 40 percent, 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.

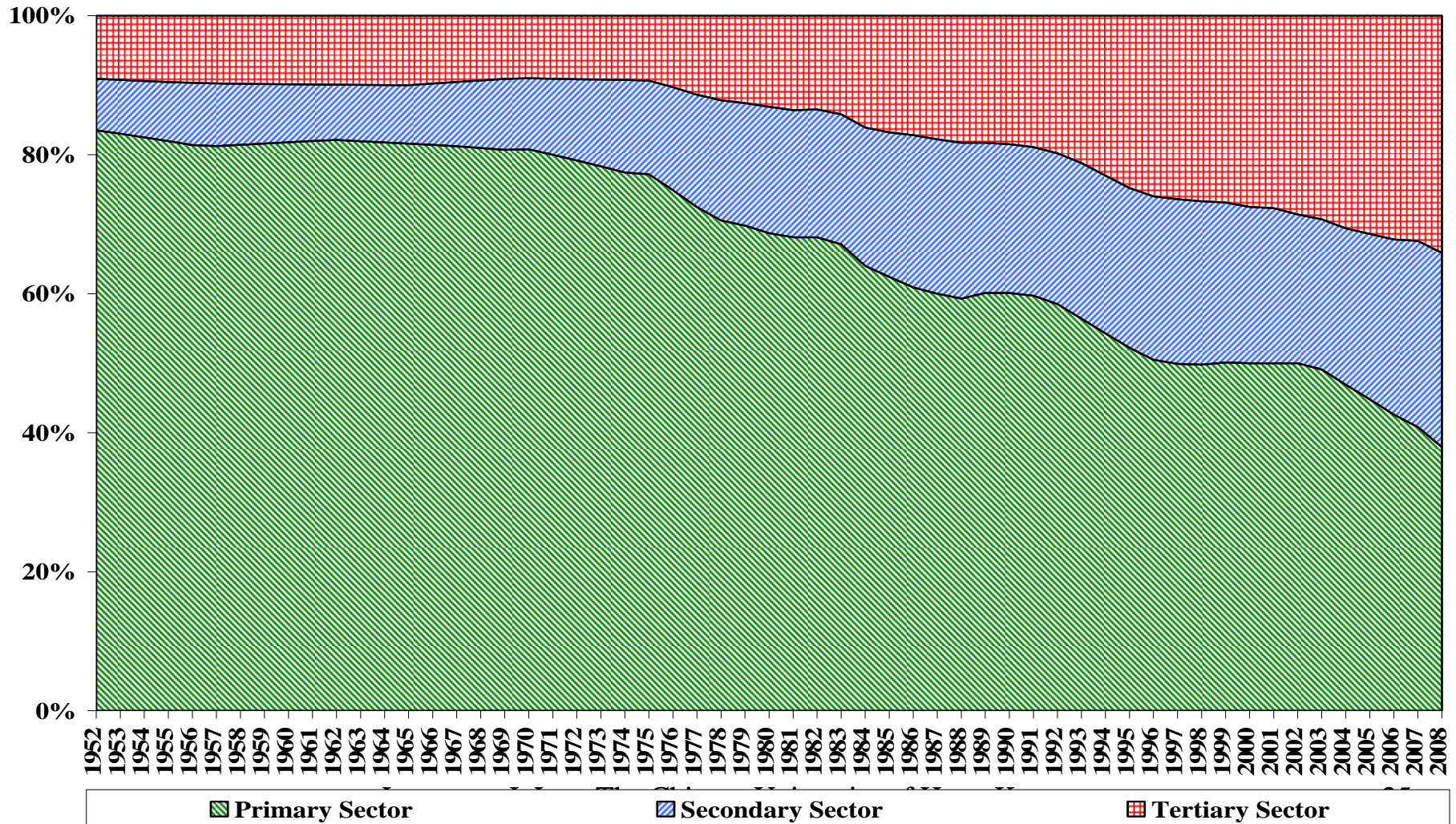
The Distribution of Chinese GDP by Sector Since 1952

The Distribution of GDP by Sector



The Distribution of Chinese Employment by Sector Since 1952

The Distribution of Employment by Sector



The Economic Fundamentals

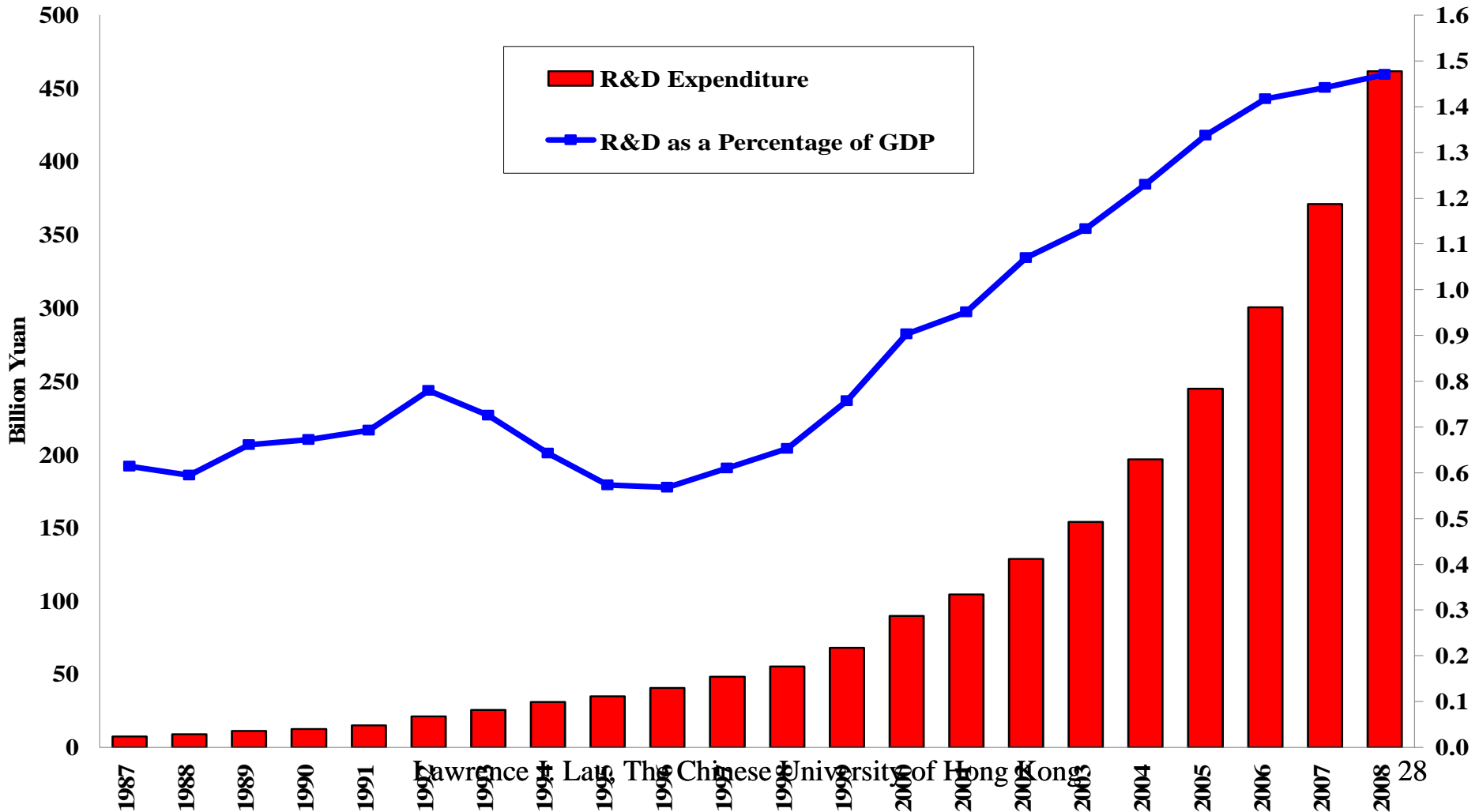
- ◆ It took thirty years for the percentage of labour force employed in the Chinese primary sector to decline from 70 percent in 1978 to its current 40 percent, at the rate of approximately 1 percent per year.
- ◆ It will take approximately another 30 years for the percentage of labour force employed in the Chinese primary sector to decline from its current 40 percent to below 10 percent, 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 percent 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

- ◆ China also has a long tradition of emphasis on education and learning (human capital) and will be increasing its investment in human capital. The enrollment rate of tertiary education has been rising rapidly and stands at 24 percent today. It is expected to rise further over the next three decades as private tertiary educational institutions become more numerous in response to demand and facilitated by government policy.
- ◆ 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 percent in 2015, comparable to the historical average for the U.S.)

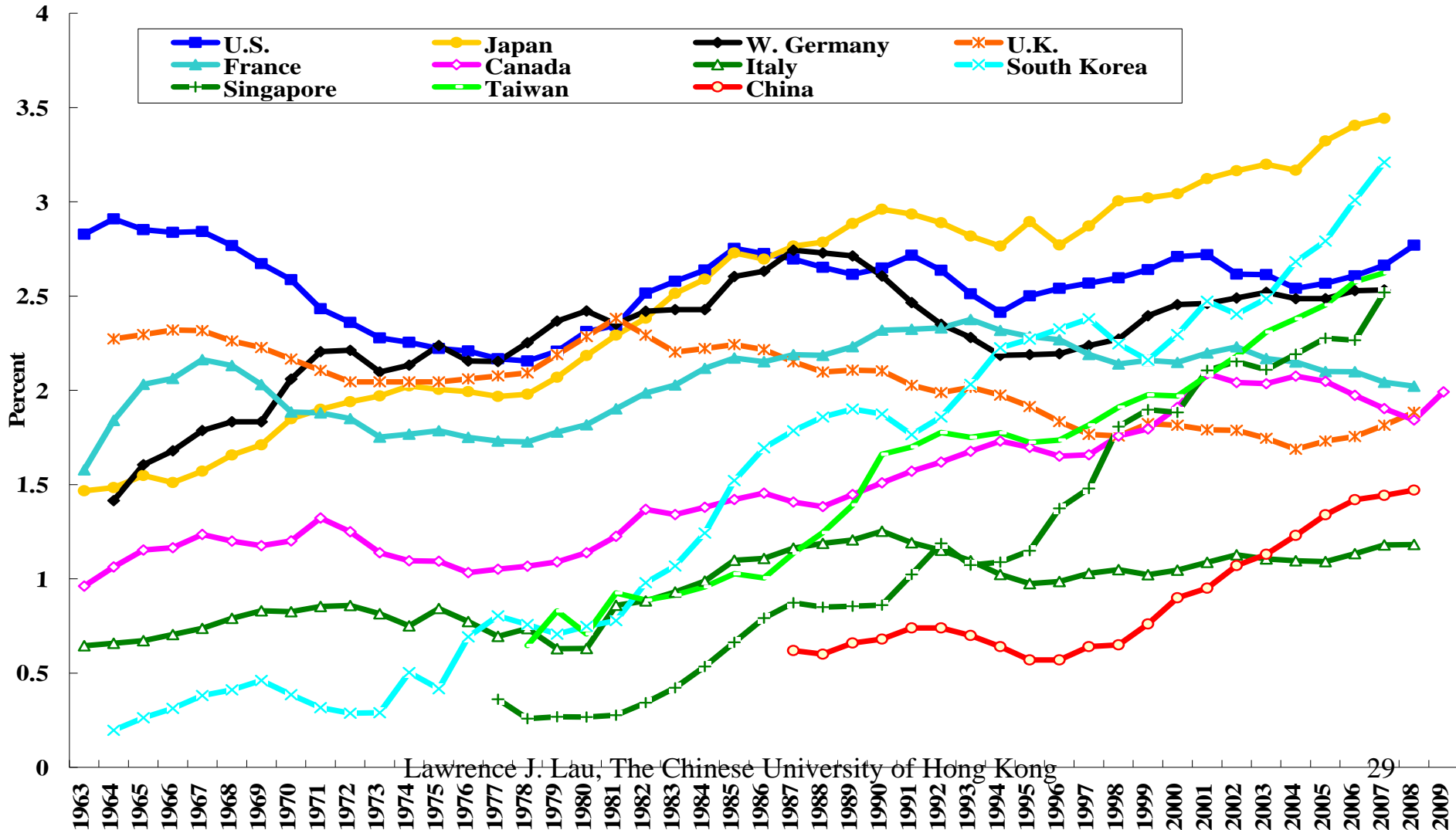
China's R&D Expenditure and Its Share of Chinese GDP

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

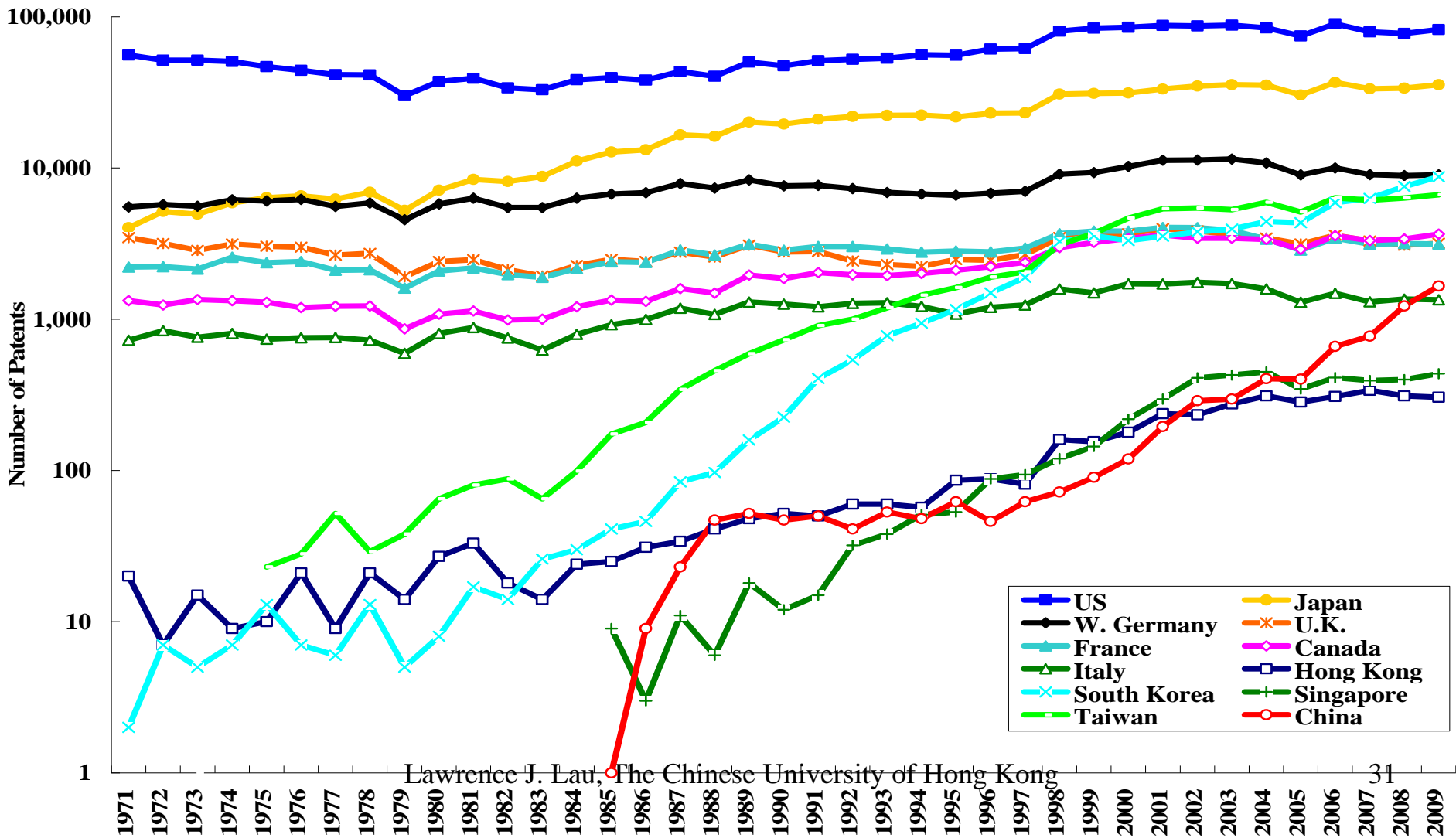


The Economic Fundamentals

- ◆ Sustained investment in R&D is essential to technical progress. 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.
- ◆ China has been catching up rapidly in investment in R&D but still lags far behind both in terms of absolute value and as a percent of GDP. 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

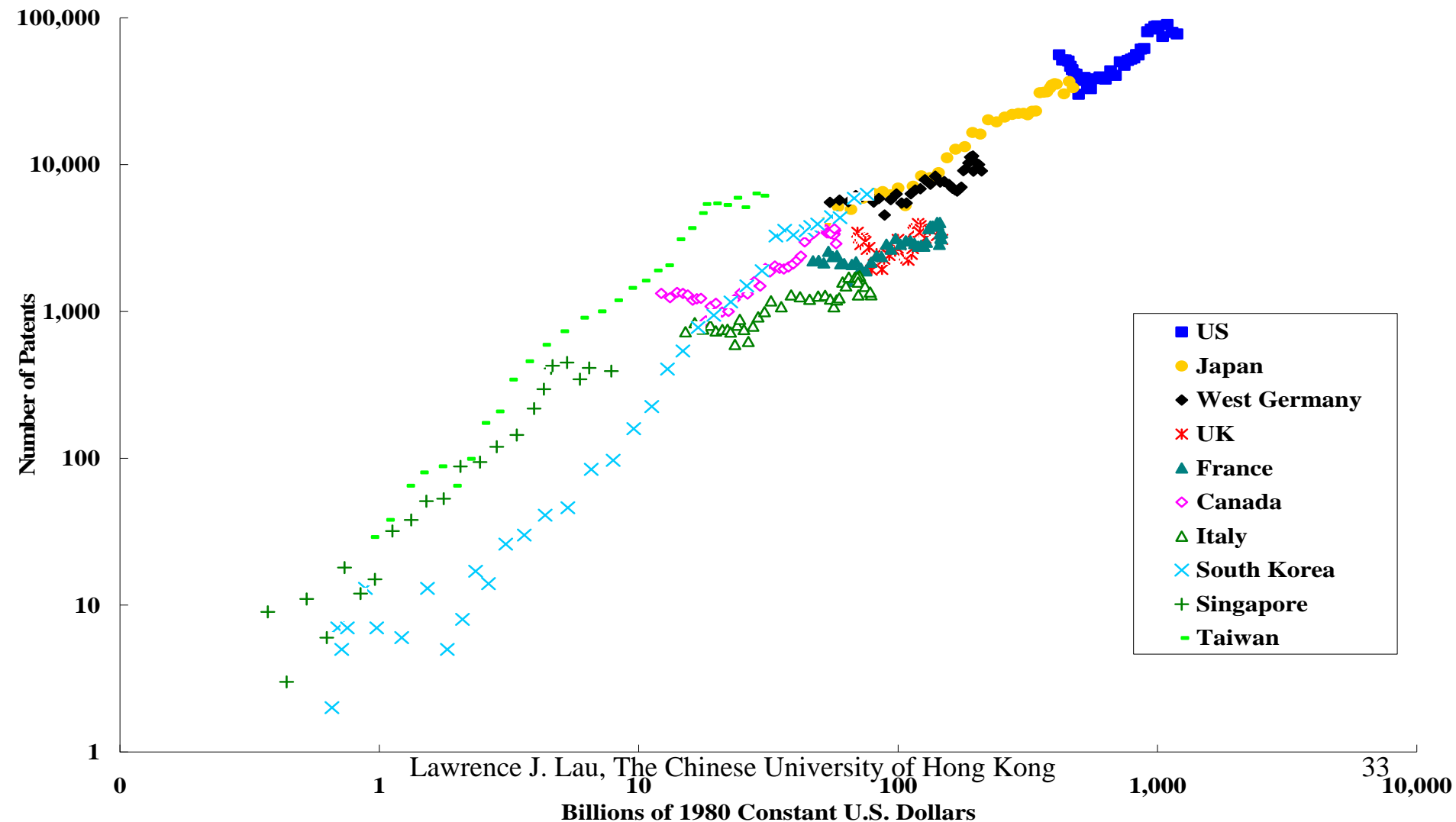


The Economic Fundamentals

- ◆ The stock of R&D capital, defined as the cumulative past investment in R&D less depreciation of 10 percent 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 expenditure 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).
- ◆ China also lags behind the U.S. in terms of human capital even though its tertiary enrolment has greatly expanded in recent years.

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 Economic Fundamentals

- ◆ In addition to a high national savings rate, a large pool of surplus labour, a huge domestic market, and rising investment in intangible capital (human capital and R&D capital), China also has the advantage of relative backwardness:
 - ◆ The ability to learn from the experiences of successes and failures of other economies;
 - ◆ The ability to leap-frog stages of development (e.g., the telex machine, the VHS video players, the fixed landline phones); and
 - ◆ The possibility of creation without destruction (e.g., online virtual bookstores like Amazon.com do not have to destroy brick and mortar bookstores which do not exist in the first place).
- ◆ The large potential domestic market enables active Chinese participation in the setting of product and technology standards and sharing the benefits of such standard-setting.
- ◆ An abundance of scientific and technical manpower the cost of which is a fraction of the cost in developed economies.

The Metaphor of the “Wild Geese Flying Pattern”

- ◆ 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 fast-growing economies, beginning with Japan, run out of surplus labour and face labour shortages, rising wage rates, and quota restrictions on their exports.
- ◆ Thus East Asian industrialisation spread from Japan to 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 Japanese trading firms such as Mitsubishi, Mitsui, Marubeni and Sumitomo played an important role.

The Metaphor of the “Wild Geese Flying Pattern”

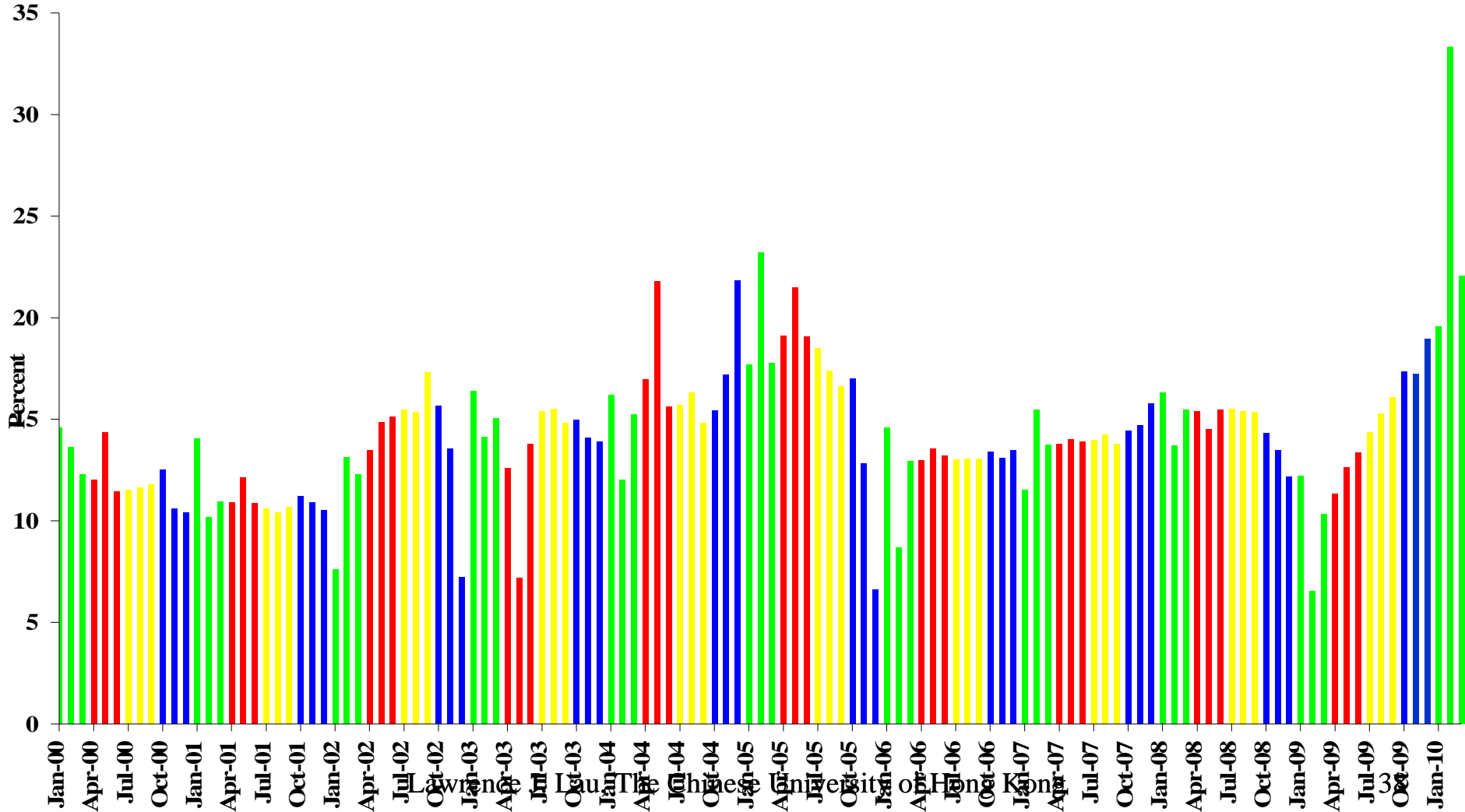
- ◆ This metaphor applies to East Asia as well as to Chinese provinces and regions, so that within China, industrialisation will also migrate and spread from the coastal provinces, regions and municipalities to other provinces, regions and municipalities in the interior. As the coastal provinces, regions 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.

Sources of Sustainable Growth of Aggregate Demand

- ◆ Chinese economic growth beyond 2010 will have to depend mostly on internal demand and not on exports.
- ◆ Chinese household consumption has been viewed as a potential source of sustainable 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 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.

Monthly Rates of Growth of Chinese Real Retail Sales, Y-o-Y, 2000-Present

Monthly Rates of Growth of Real Retail Sales since 2000, Year-over-Year

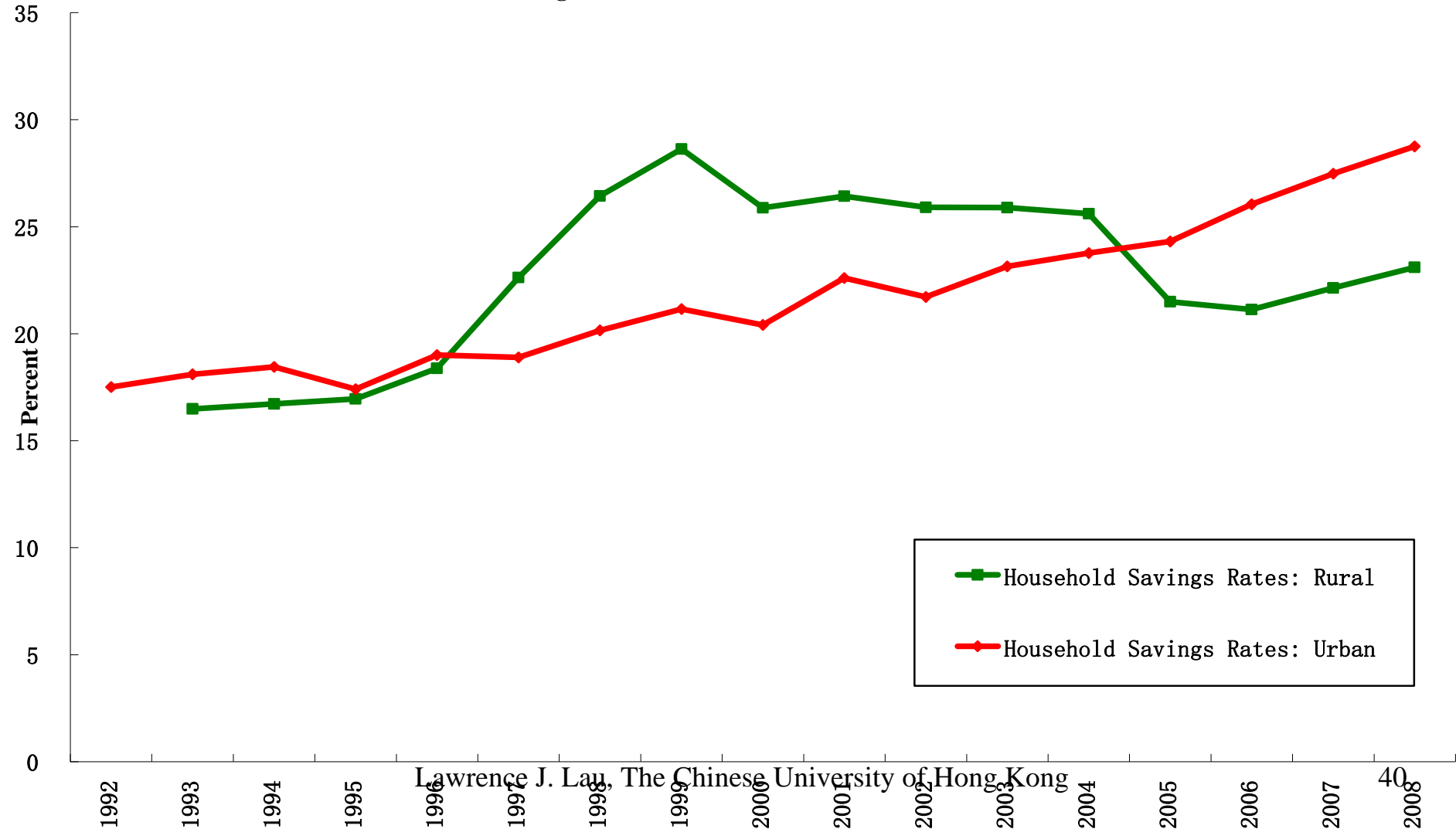


Sources of Sustainable Growth of Aggregate Demand

- ◆ The Chinese household savings rate, as distinct from the much higher national savings rate, currently stands at 30 percent (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 percent. Thus, the Chinese household savings rate is not likely to fall significantly and Chinese household consumption can be expected to increase significantly only if Chinese household income can be increased significantly.

Savings Rates of Urban and Rural Households

Savings Rates of Urban and Rural Households



Sources of Sustainable Growth of Aggregate Demand

- ◆ The share of Chinese national income received by the households can be increased if
- ◆ (1) the share of wages and salaries can be increased—this can only happen gradually as the general level of education is improved and human capital is accumulated through experience or training. Over the next thirty years, the real wage rate of unskilled, entry-level labour is unlikely to rise significantly because of the existence of surplus labour; or
- ◆ (2) the Chinese publicly listed enterprises can distribute more cash dividends to the households and to the Central Government (which owns almost 70% of each of these enterprises) which can in turn increase their consumption (the government can spend the money on education, health care, and R&D (which is actually investment)).

Sources of Sustainable Growth of Aggregate Demand

- ◆ However, there are limitations to (1) because of the existence of a vast reservoir of surplus labour, which prevents the real wage rate for unskilled, entry-level, labour from rising and human capital takes time to accumulate.
- ◆ Improving the social safety net as well as increasing public financing of services such as education and health care may also help to raise Chinese real household consumption for given household income and hence to lower the household savings rate. However, as noted previously, the consumption/savings behaviour of Chinese households on the Mainland is already quite similar to ethnic Chinese households in Hong Kong and Taiwan, both of which have social safety nets in place and substantial public financing of education and health care.
- ◆ Thus, in the short and medium term, the household savings rate is unlikely to decline significantly and increasing the payout of cash dividends of state-owned enterprises is the most effective way of increasing consumption, both household and government.

Sources of Sustainable Growth of Aggregate Demand

- ◆ Continued Chinese economic growth beyond 2010 will 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 household income.
- ◆ 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

- ◆ 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

- ◆ 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.
- ◆ It will generate demand for many products that face a sharply reduced export demand. It will help these enterprises to reorient themselves to serve the domestic market. In so doing it will help maintain and generate a great deal of employment.

The Owner-Occupied Residential Housing Sector

- ◆ Two measures will greatly increase the demand for owner-occupied residential housing.
- ◆ First, longer-term, say thirty-five years, owner-occupied residential mortgage loans meeting certain criteria such as caps on the cost and the size of the residential unit should be promoted.
- ◆ Second, fixed-interest-rate mortgage loans should be offered for the duration of the loan period.
- ◆ These two measures will make residential housing ownership affordable (through the large reductions in the required monthly payments) and safe (through the fixed-rate feature reducing the risks of a variable interest rate) to a large majority of the middle- and lower-income households.

The Owner-Occupied Residential Housing Sector

- ◆ China will do well not to follow the Hong Kong example on land prices. The Chinese Central Government is in the process of creating a new source of tax revenue, e.g., the property tax, for the local governments to finance the local activities such as education, health care, public transit and public safety, so that they do not have to rely on revenue from sales of land and land leases and hence an incentive for maintaining high land prices.
- ◆ The property tax can be based on the market value of the real estate, amounting say to 1 percent of the market value. There can be an exemption from the property tax for owner-occupied residential housing units below a certain size, say, 50 square metres.

The Education and Health Care Sectors

- ◆ 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.

The Education and Health Care Sectors

- ◆ 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

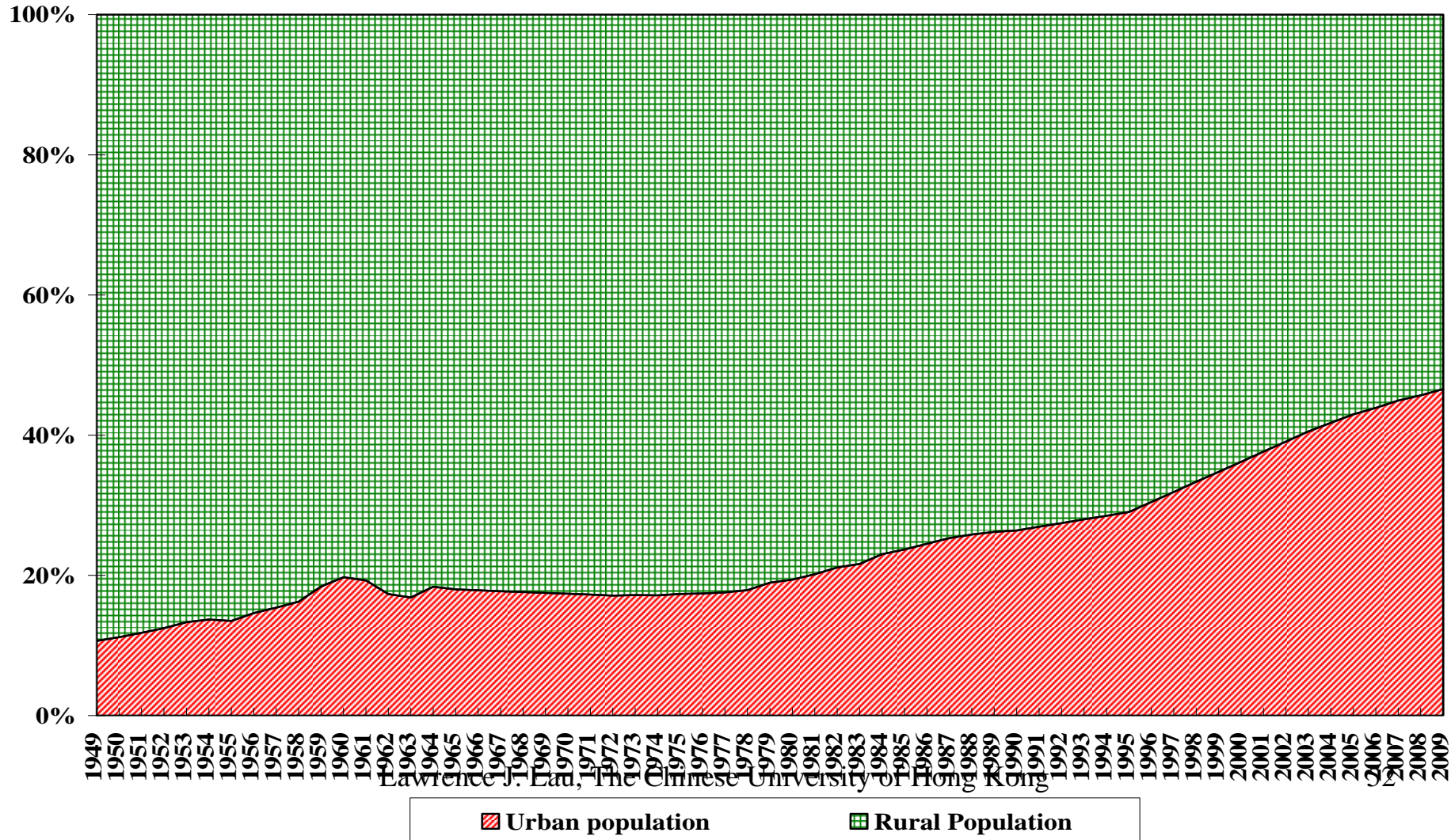
- ◆ Making the internet accessible, available and affordable everywhere in China will greatly narrow the inequality of education (and information) between the urban and rural areas and reduce the so-called digital divide between the rich and the poor. It will be a great equaliser, because, for examples: a student in Qinghai 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

- ◆ The share of rural population in China was just under 90 percent in 1949. By 1978, the beginning of the Chinese economic reform and opening to the World, the share of rural population was 82 percent.
- ◆ By 2009, the share of rural population has fallen to 53 percent. 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 percent.
- ◆ Of course the share of rural population will decline even faster if urbanisation is accelerated.

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

- ◆ Urbanisation will be accelerated, but instead of making the existing cities larger and more crowded, new cities should be built in the rural areas, bringing capital and technology to labor rather than the other way around.
- ◆ Urbanisation in the rural areas is possible only 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.

Urbanisation and Mass-Transit Systems

- ◆ 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

- ◆ 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

- ◆ China has an advantage in introducing technologies for green or greener vehicles because it has relatively little sunk costs. 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 Relative Unimportance of International Trade

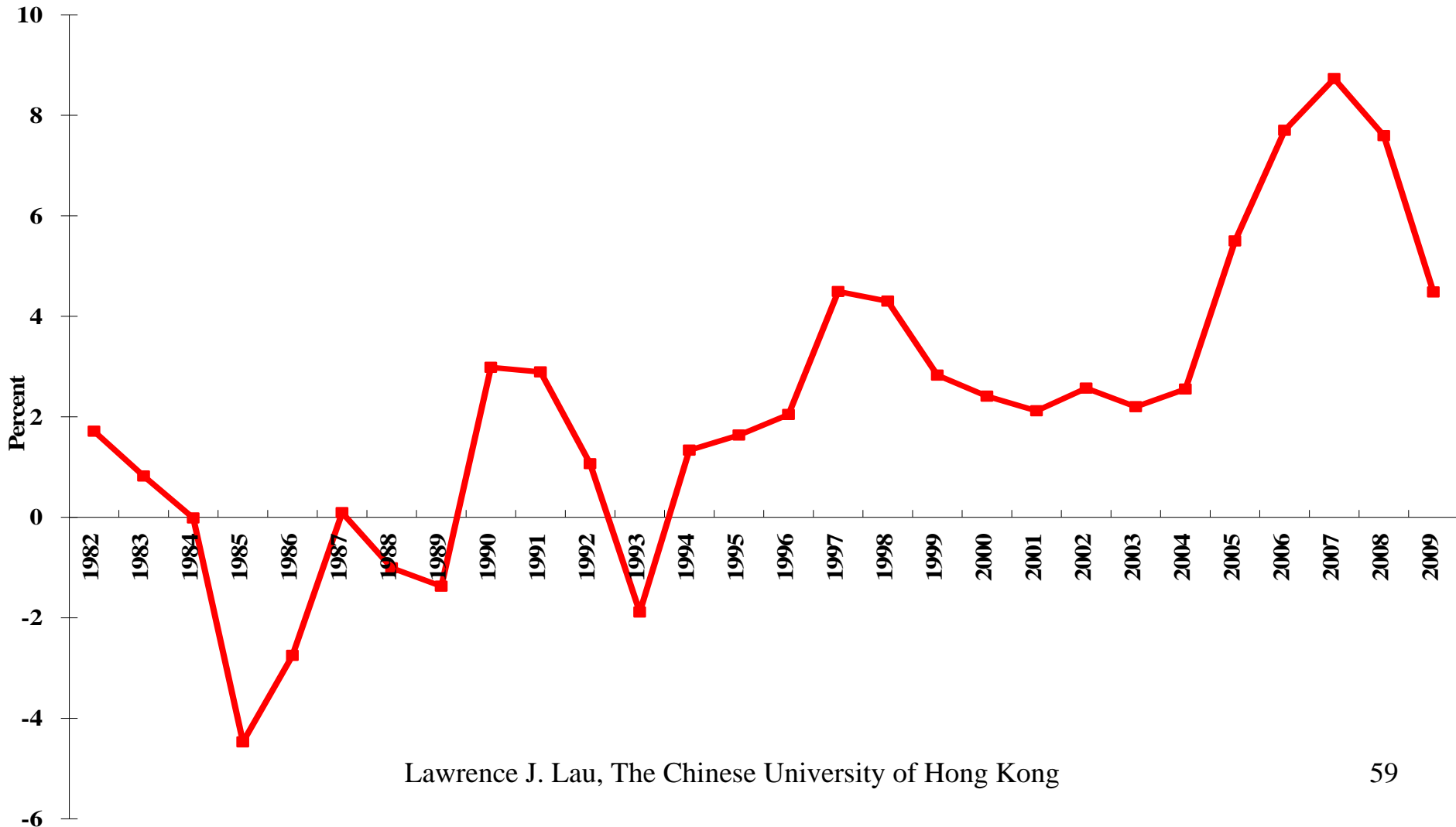
- ◆ There is a common mis-impression that the Chinese economy is highly dependent on exports, and in particular, on its export surpluses, as a source of growth.
- ◆ The facts are that China only began to have a significant trade surplus vis-a-vis the World in 2005, whereas the Chinese economy has been growing at an average real rate of approximately 10 percent per annum since 1978.
- ◆ It should therefore be clear that the trade surpluses could not have been an important source of growth for the Chinese economy during the past three decades. Chinese economic growth does not depend on Chinese trade surpluses.

The Relative Unimportance of International Trade

- ◆ Chinese trade surplus as a percent of Chinese GDP fluctuated between -4.5 percent and 4.5 percent between 1982 and 2004 with an average of less than 2 percent of GDP. It then rose to almost 9 percent in 2007. It has since declined significantly and is expected to fall below 2 percent once again in 2010.

Chinese Trade Balance of Goods and Services as a Percent of GDP, 1982-

Chinese Trade Balance of Goods and Services as a Percent of GDP

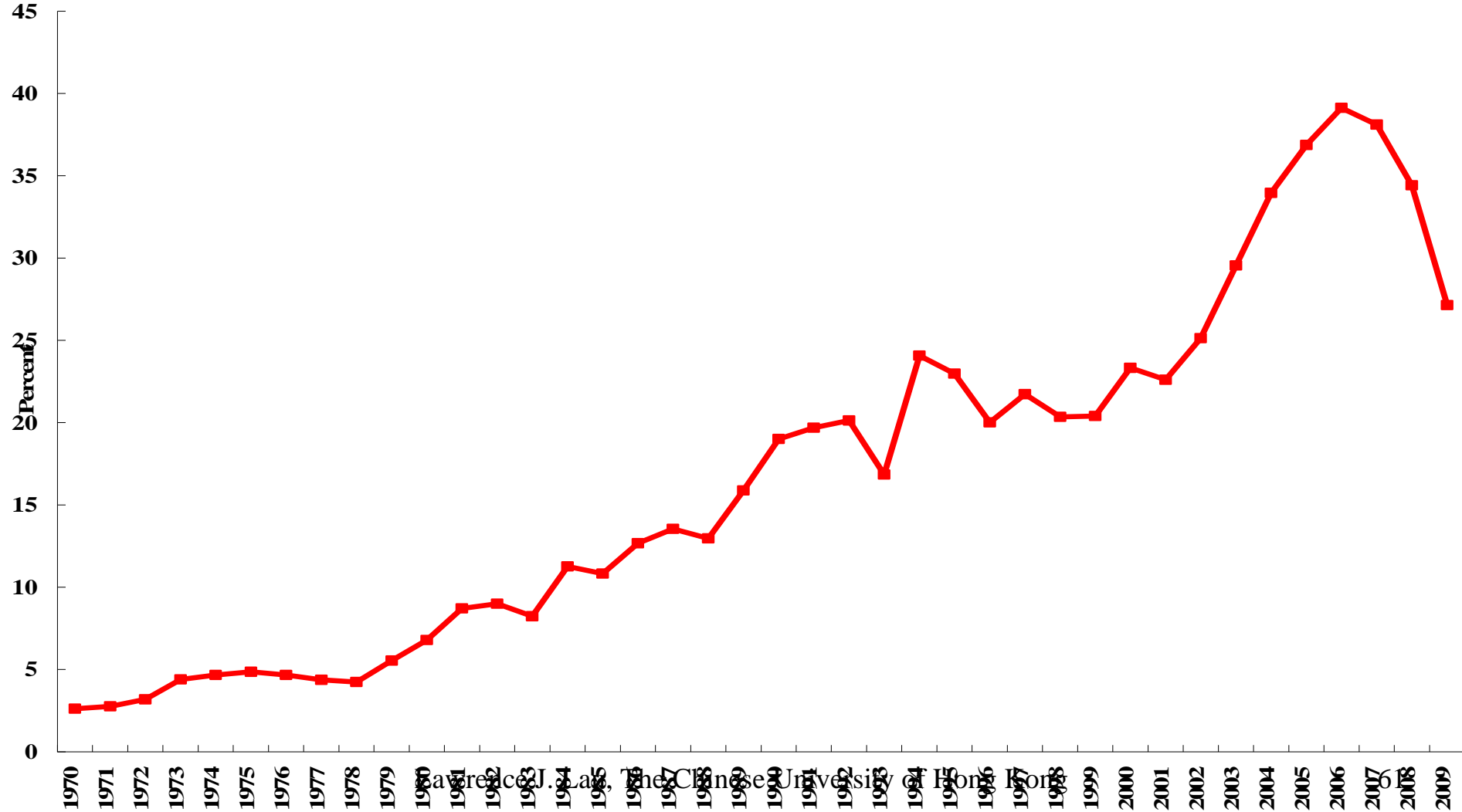


The Relative Unimportance of International Trade

- ◆ Chinese exports as a ratio of GDP rose steadily beginning in 1978 and reached a peak of almost 40 percent in 2006 and then began to decline to approximately 25 percent in 2009.
- ◆ While this ratio appears large, it is not when compared to Hong Kong, Singapore, South Korea and Taiwan, where exports are more than 100 percent of the respective GDPs.
- ◆ And the Chinese Exports/GDP ratio actually exaggerates the importance of exports in the Chinese economy because it fails to take into account the low domestic value-added content of Chinese exports.

Chinese Exports of Goods and Services as a Ratio of GDP, 1970-present

Chinese Exports of Goods and Services as a Ratio of GDP since 1970



The Relative Unimportance of International Trade

- ◆ The domestic value-added content of Chinese exports is no more than 30 percent, that is: for every dollar of goods exported, less than 30 cents, on average, consist of domestic value-added. The rest consists of imported raw materials, intermediate goods, components, parts, semi-finished goods, etc. The domestic value-added percentage is even less for the so-called “Processing and Assembly” exports.

The Relative Unimportance of International Trade

- ◆ If we multiply the Exports/GDP ratio of say 40 percent (it is currently much lower) to the domestic value-added content of 30 percent, we obtain 12 percent, which is the upper bound for the percentage of Chinese GDP (value-added) generated by exports.
- ◆ Now, 12 percent of GDP is a large number, and no economy can afford to lose 12 percent of its GDP overnight. However, if 12 percent of GDP does not grow, or even declines by 25 percent, as long as the other 88 percent of the economy continues to grow, the economy as a whole should do all right, especially if appropriate compensatory economic stimulus measures are taken by the government.

The Relative Unimportance of International Trade

- ◆ A 25-percent decline in Chinese exports should result in a 25 percent times 12 percent or 3 percent maximum decline in Chinese GDP, other things being equal. Thus, the reduction in exports caused by the global financial crisis should be expected to reduce the rate of real Chinese economic growth from 9 percent in 2008 by a maximum of 3 percentage points to no less than 6 percent in 2009, other things being equal.
- ◆ However, the 2-year, 4-trillion Yuan (equivalent to approximately 8 percent of GDP per year) economic stimulus programme launched by the Chinese Government in November 2008 should help make up the short-fall in aggregate demand caused by the decline in exports.
- ◆ Thus an 8-percent real rate of growth should be readily achievable for 2010 following the 8.7 percent growth in 2009.

The Relative Unimportance of International Trade

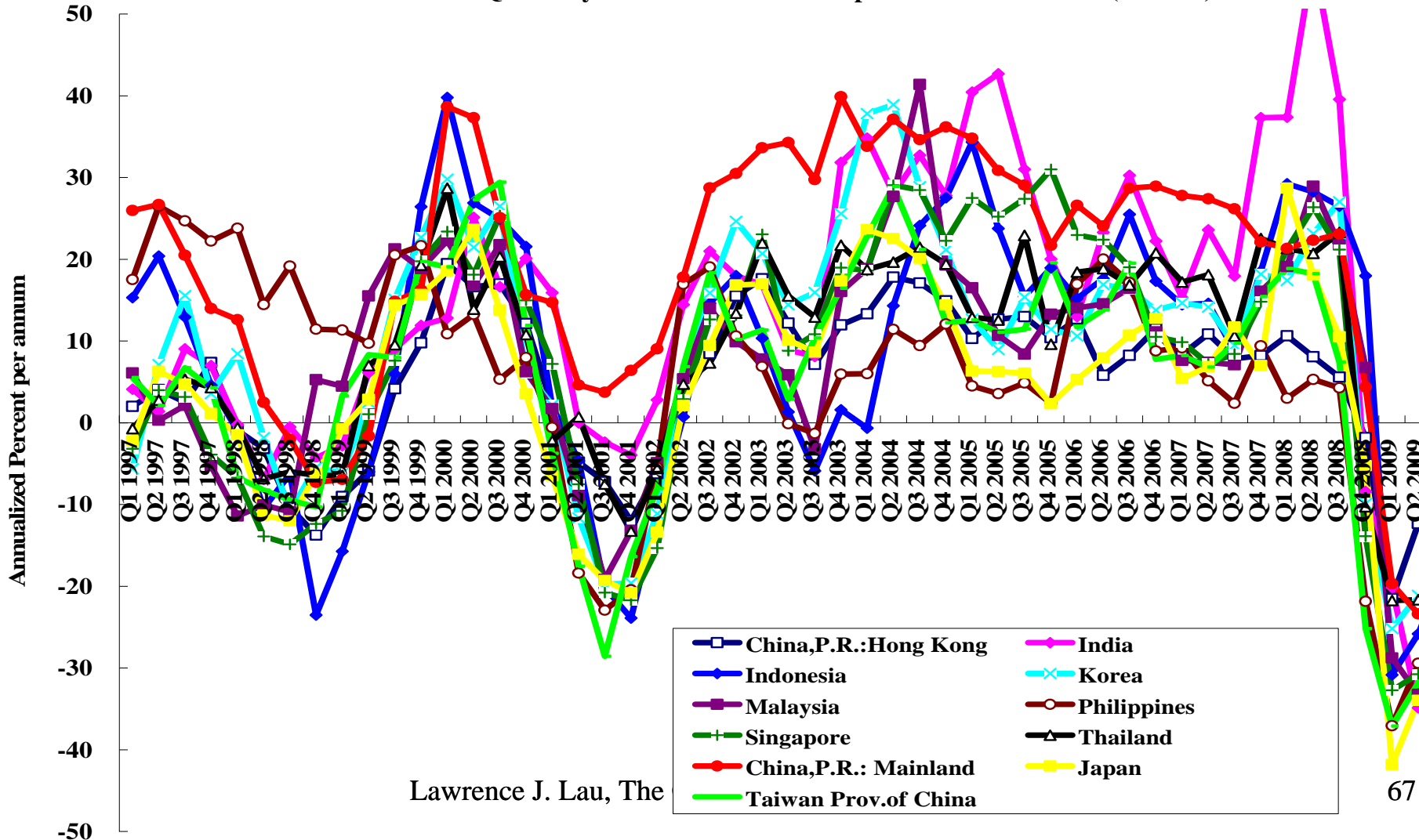
- ◆ In any case, it is unlikely that Chinese exports can resume its rapid growth any time soon with the U.S. and European economies in recession. Thus, we shall see a gradual shift in China from a policy of export promotion to a policy of promotion of internal demand, which is the only way to ensure sustained and sustainable economic growth in China.
- ◆ Chinese Premier WEN Jiabao has said publicly that China wants balanced trade with the rest of the World in the future.

The Relative Unimportance of International Trade

- ◆ An important implication of the relatively low external dependence of Chinese GDP is that the rate of growth of Chinese real GDP is relatively stable even as Chinese exports and imports fluctuate as widely as the exports and imports of other East Asian economies. (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

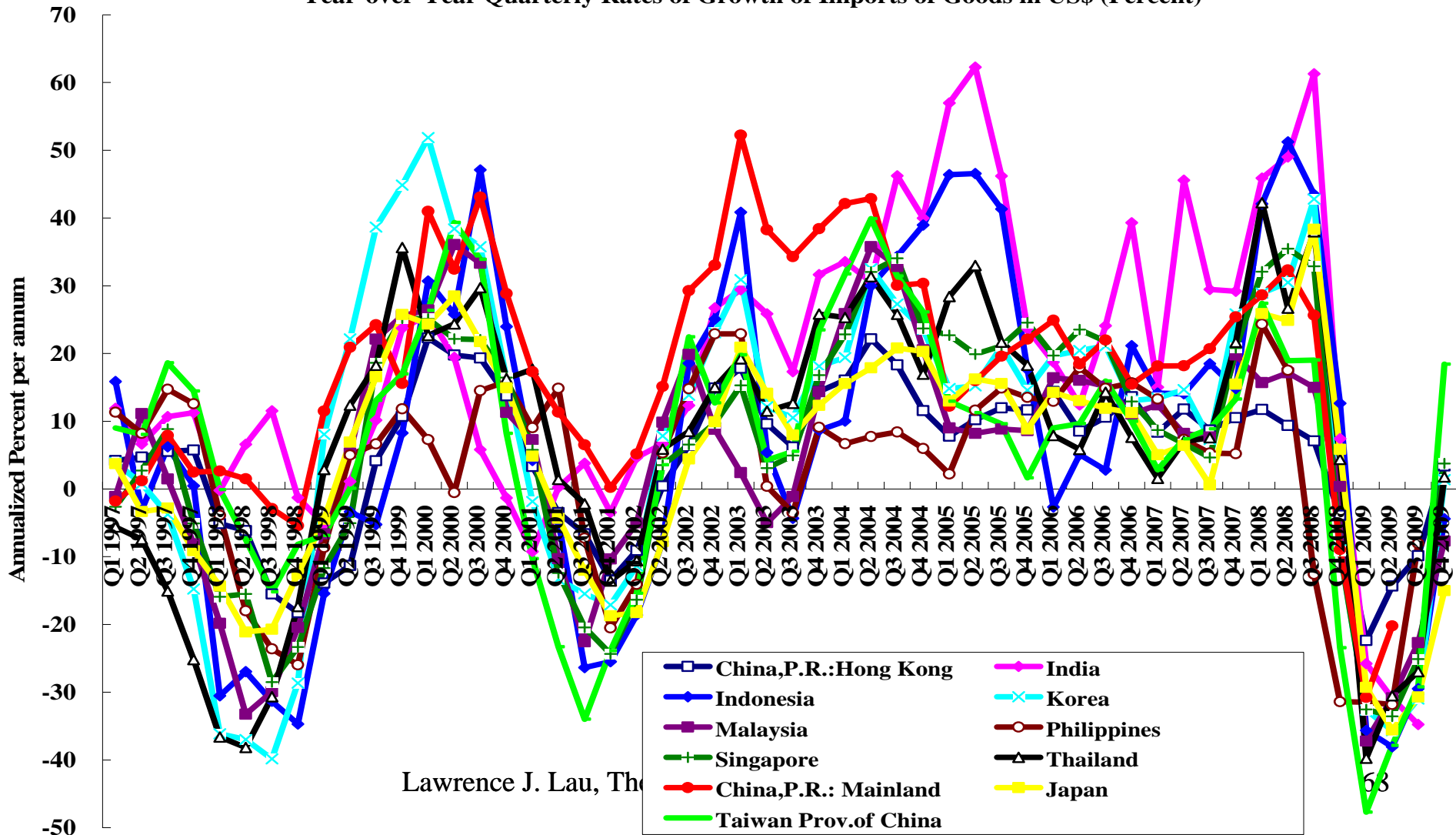
Year-over-Year Quarterly Rates of Growth of Exports of Goods in US\$ (Percent)



Lawrence J. Lau, The

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

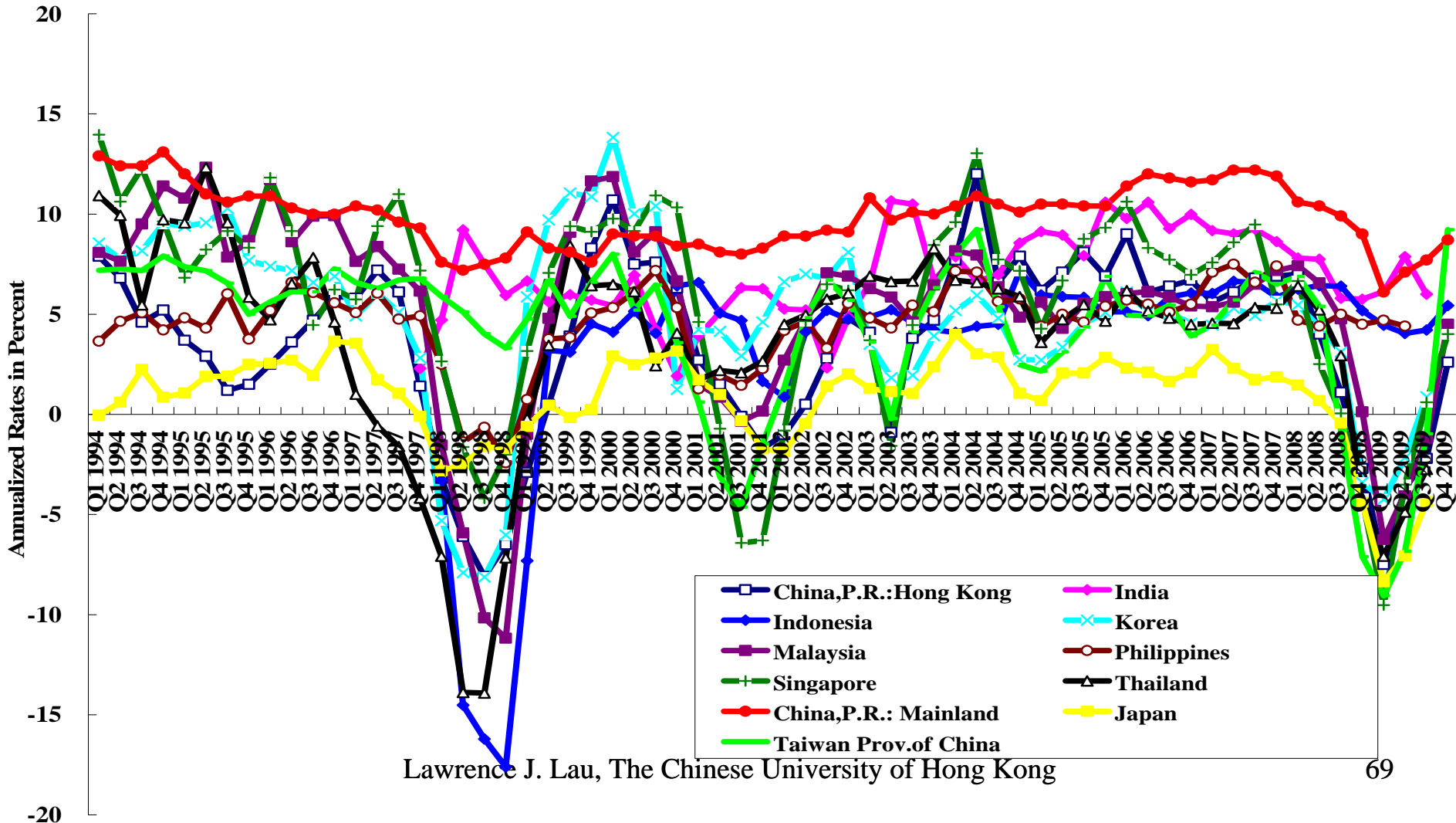
Year-over-Year Quarterly Rates of Growth of Imports of Goods in US\$ (Percent)



Lawrence J. Lau, The

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 Relative Unimportance of International Trade

- ◆ Large continental economies, such as the United States, are mostly driven by their internal demands, and not by trade. Exports have never been very important to the U.S. economy, and the U.S. economy has never been dependent on exports, except perhaps in the 19th Century.
- ◆ For the Chinese economy it is the same—Chinese economic growth in the future decades will mostly depend on internal demand rather than exports.
- ◆ Brazil and India also fall into this category of large continental economies.

The Partial De-Coupling of China/East Asia from the United States and Europe

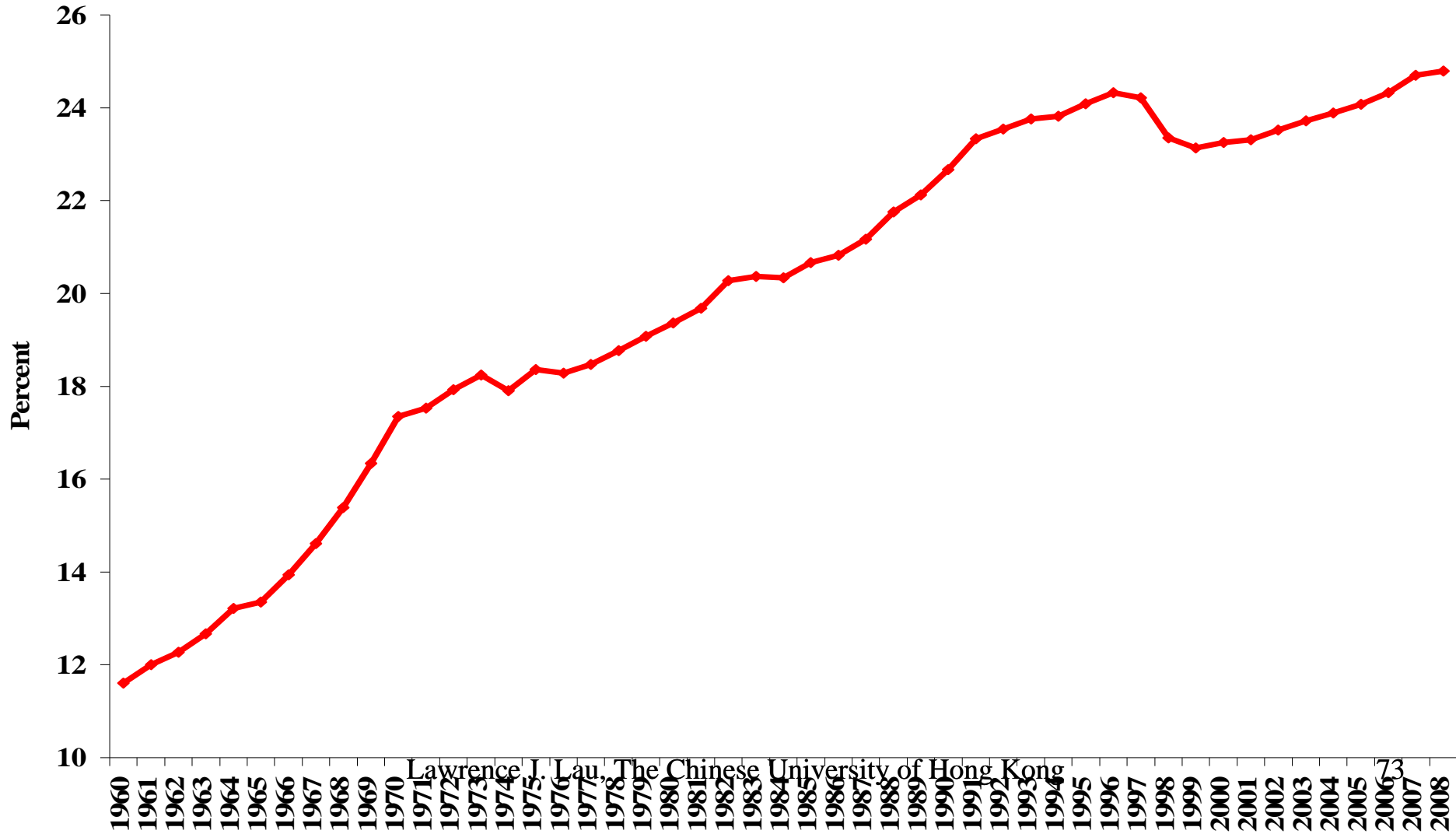
- ◆ East Asia is taken to mean the 10 ASEAN countries (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam) + 3 (China (including Hong Kong, Macao and Taiwan), Japan, and South Korea), that is, approximately, all the territories east of Bangladesh and west of the Pacific Ocean.
- ◆ The “Partial De-Coupling Hypothesis” says that while East Asia is not immune from the effects of the economic recession in North America and Europe, it 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 Shifting Economic Centre of Gravity

- ◆ In the following charts, East Asian and Chinese GDP as percentages of World GDP are respectively presented. Both show very strong trends of growth over the past half a century.
- ◆ In 1960, East Asian GDP, comprising of the GDPs of ASEAN (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam) + 3 (China (Mainland only), Japan, and South Korea) was just over 10 percent of World GDP.
- ◆ 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.

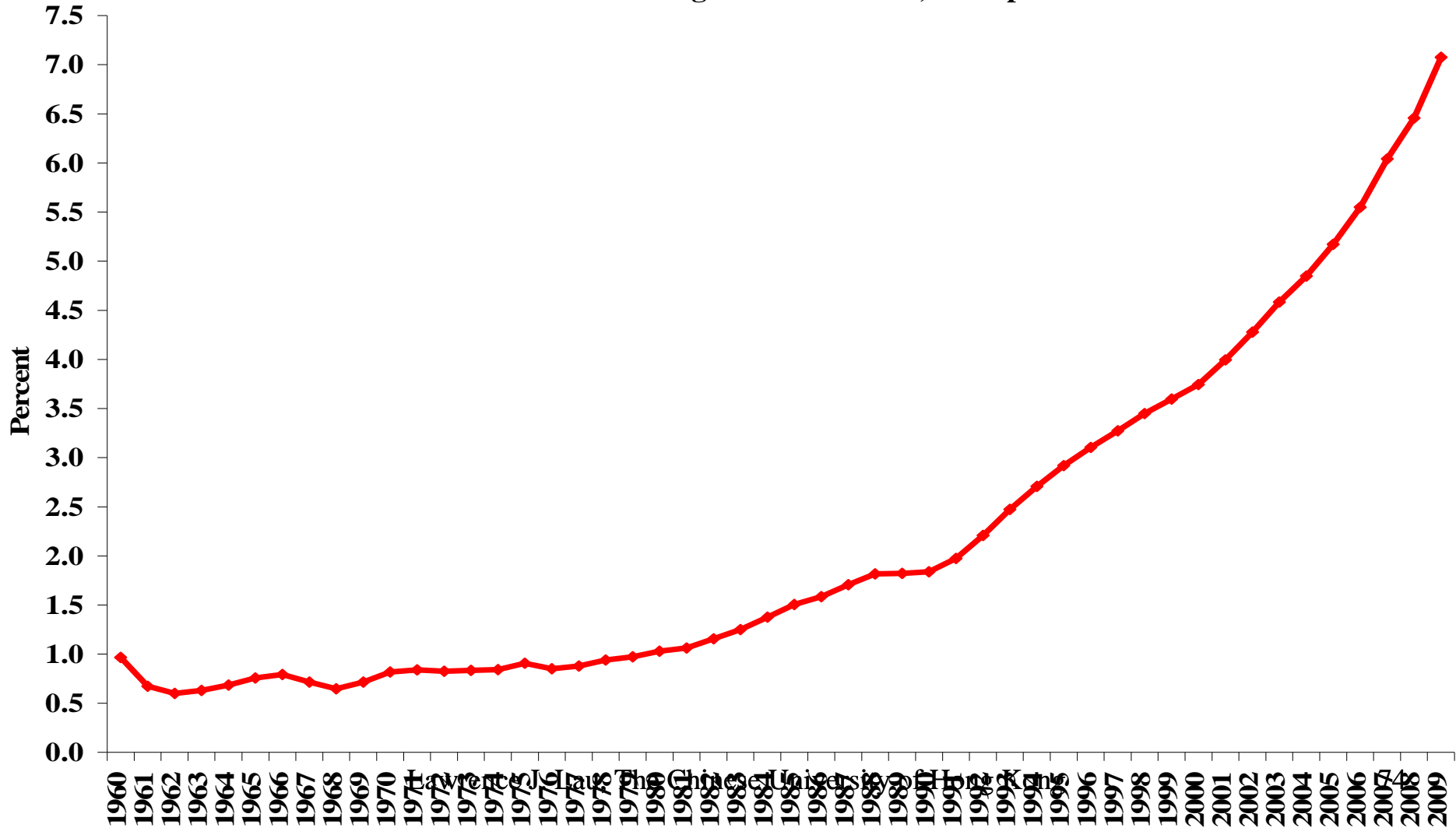
East Asian Share of World GDP, 1960-present

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 Partial De-Coupling of China/East Asia from the United States and Europe

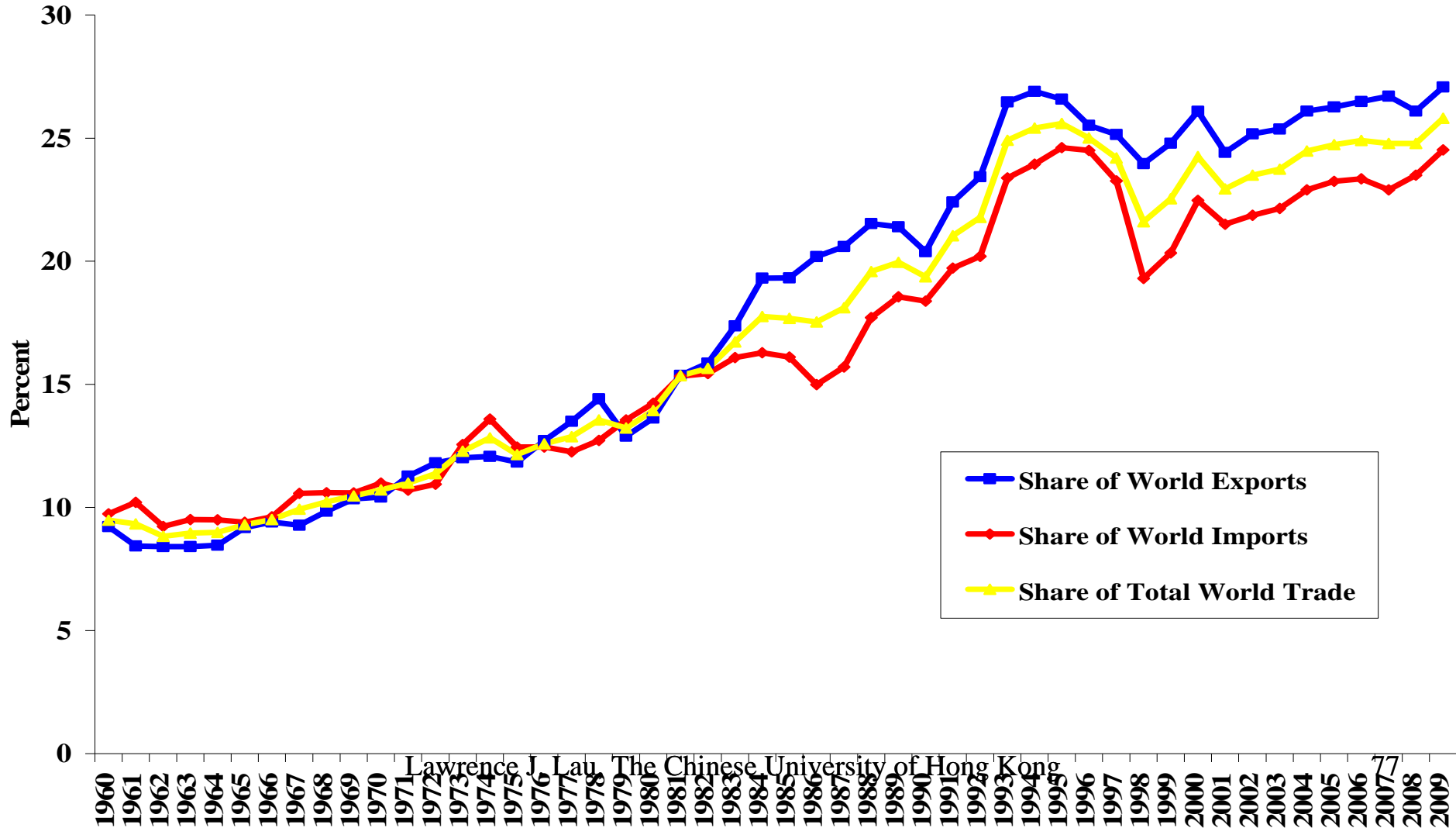
- ◆ Given the current trends in rates of economic growth, East Asia will surpass the United States in terms of aggregate GDP with China perhaps contributing the highest proportion of the total by 2015.
- ◆ This is what gives credence to the idea of partial “de-coupling” of the World economies—that the Chinese and East Asian economies can continue to do reasonably well despite the current economic problems in the U.S. and elsewhere.
- ◆ However, China, with its GDP accounting for only 7% of the World total, and East Asia are not large enough to turn around the whole World. The talk about G-2 is premature.

The Shifting Economic Centre of Gravity

- ◆ East Asian shares of World exports, imports, and international trade have also grown from approximately 10 percent in 1960 to a quarter in 2008, paralleling the growth of East Asian share of World GDP (see the following chart).
- ◆ The emergence of the Chinese economy on the global market was the one most important new development during the past three decades. Chinese shares of World exports, imports and international trade have also grown rapidly. Chinese exports and imports have risen from approximately 1 percent of World exports and imports in 1960 to approximately 10 percent of World exports and imports in 2008.
- ◆ China has become the third largest trading country in the World, after United States and Germany. 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 Rising Ratio of East Asian Trade in Total World Trade, 1960-present

East Asian Share of Total World Trade, 1960-present



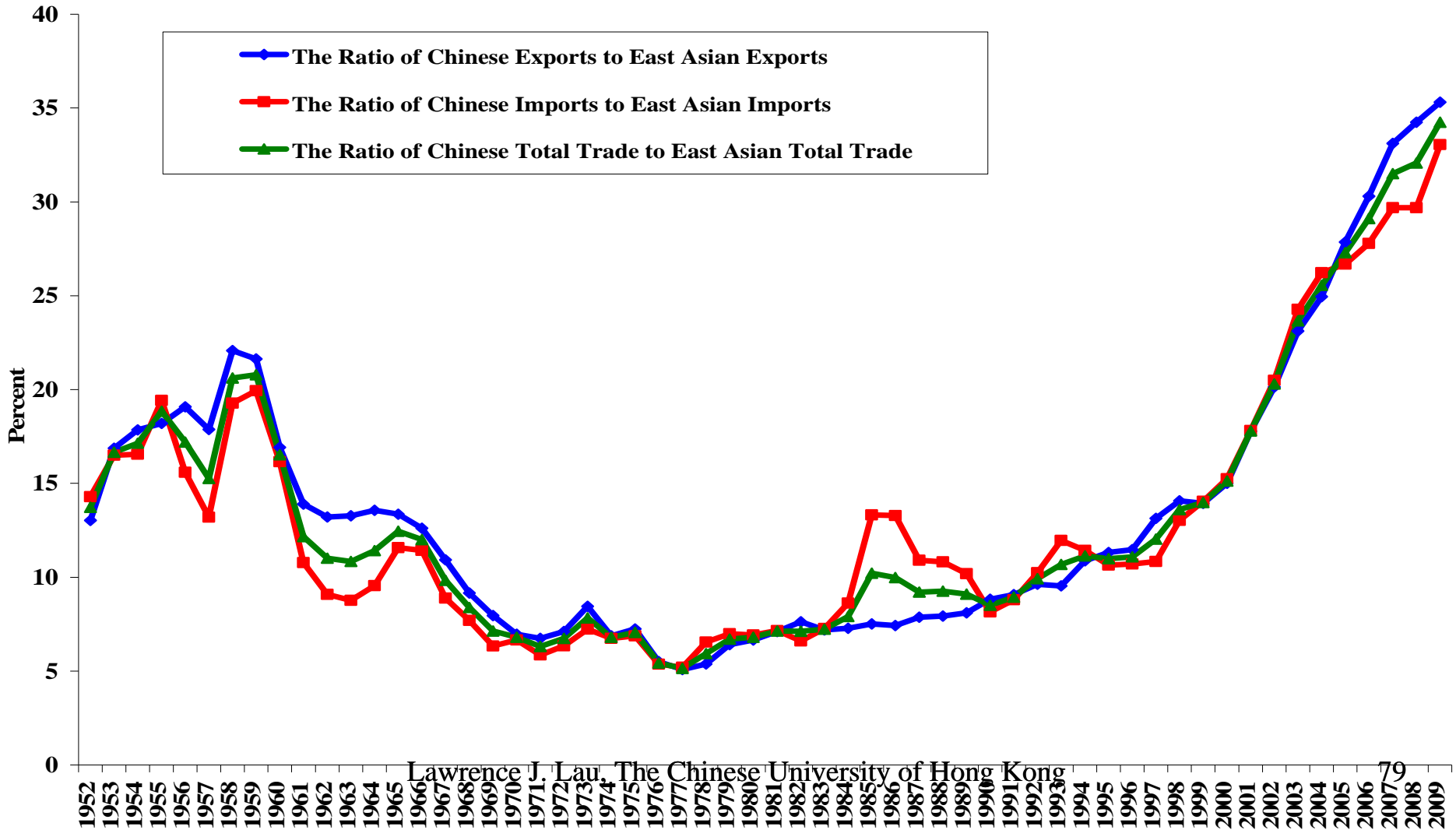
The Ratio of Chinese Trade in Total World Trade, 1950-present

The Ratio of Chinese Trade to World Trade



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

The Ratio of Chinese Trade to East Asian Trade

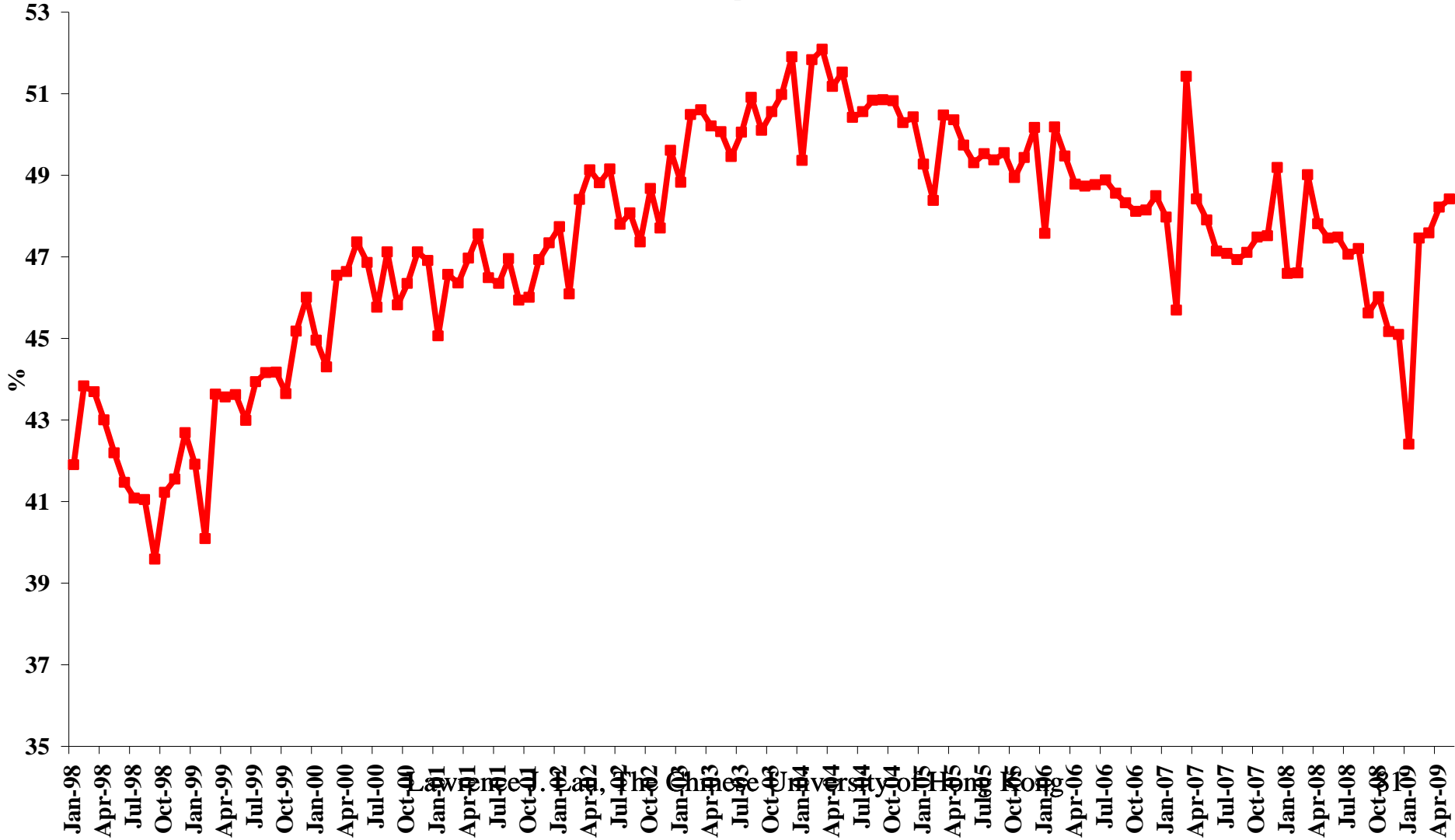


The Shifting Economic Centre of Gravity

- ◆ 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.

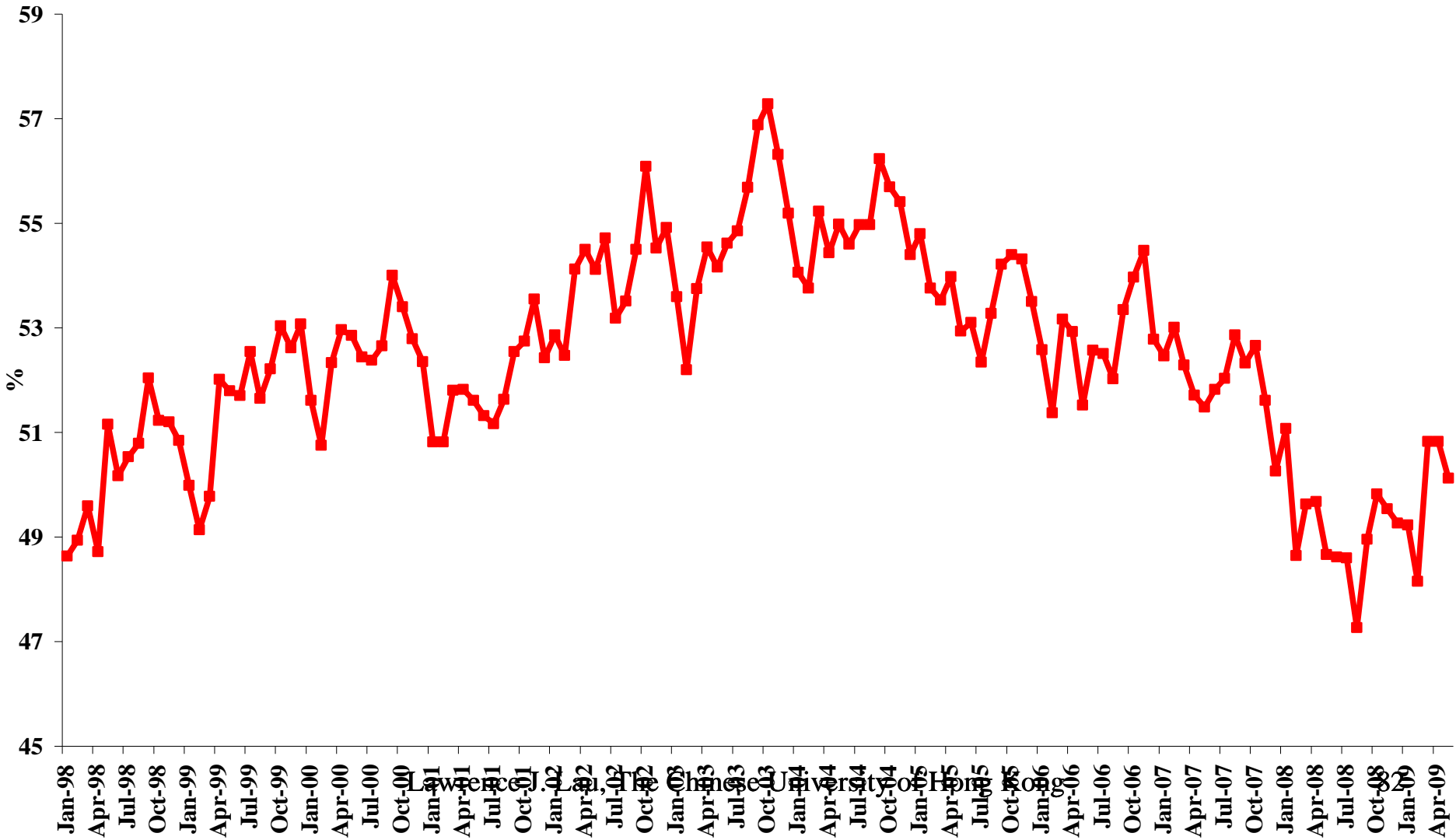
The Share of East Asian Exports Destined for East Asia

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 of China/East Asia from the United States and Europe

- ◆ 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 of China/East Asia from the United States and Europe

- ◆ The free trade area will have a population close to 2 billion consumers, providing a huge market for all the member countries that is sufficiently large to realise all the economies of scale in manufacturing, innovation and markets (brand building).
- ◆ Such a free trade area will allow comparative advantages to be fully exploited and the benefits of international trade to be fully realised.

The Partial De-Coupling of China/East Asia from the United States and Europe

- ◆ There is also the more recently concluded Indo-ASEAN Free Trade Agreement which testifies to the possibility of significant world trade growth outside of the United States and Europe.
- ◆ These free trade areas will also greatly increase domestic investment in each of the member economies as well as foreign direct investment, originating from both inside and outside East Asia, especially if the free trade area is accompanied by efforts for some degree of real exchange rate coordination.

The Partial De-Coupling of China/East Asia from the United States and Europe

- ◆ The fact that the Chinese as well as other East Asian economies appear to have weathered the global financial crisis reasonably well leads further credence to the partial de-coupling hypothesis. The Chinese economy grew at 8.7 percent in 2009; other economies such as South Korea, Brazil and India did well too.
- ◆ The partial de-coupling of China and East Asia from the United States and Europe means that the economic impacts of the United States and Europe on China and East Asia and vice versa can be expected to become much more marginal in the future.

The Internationalisation of the Renminbi?

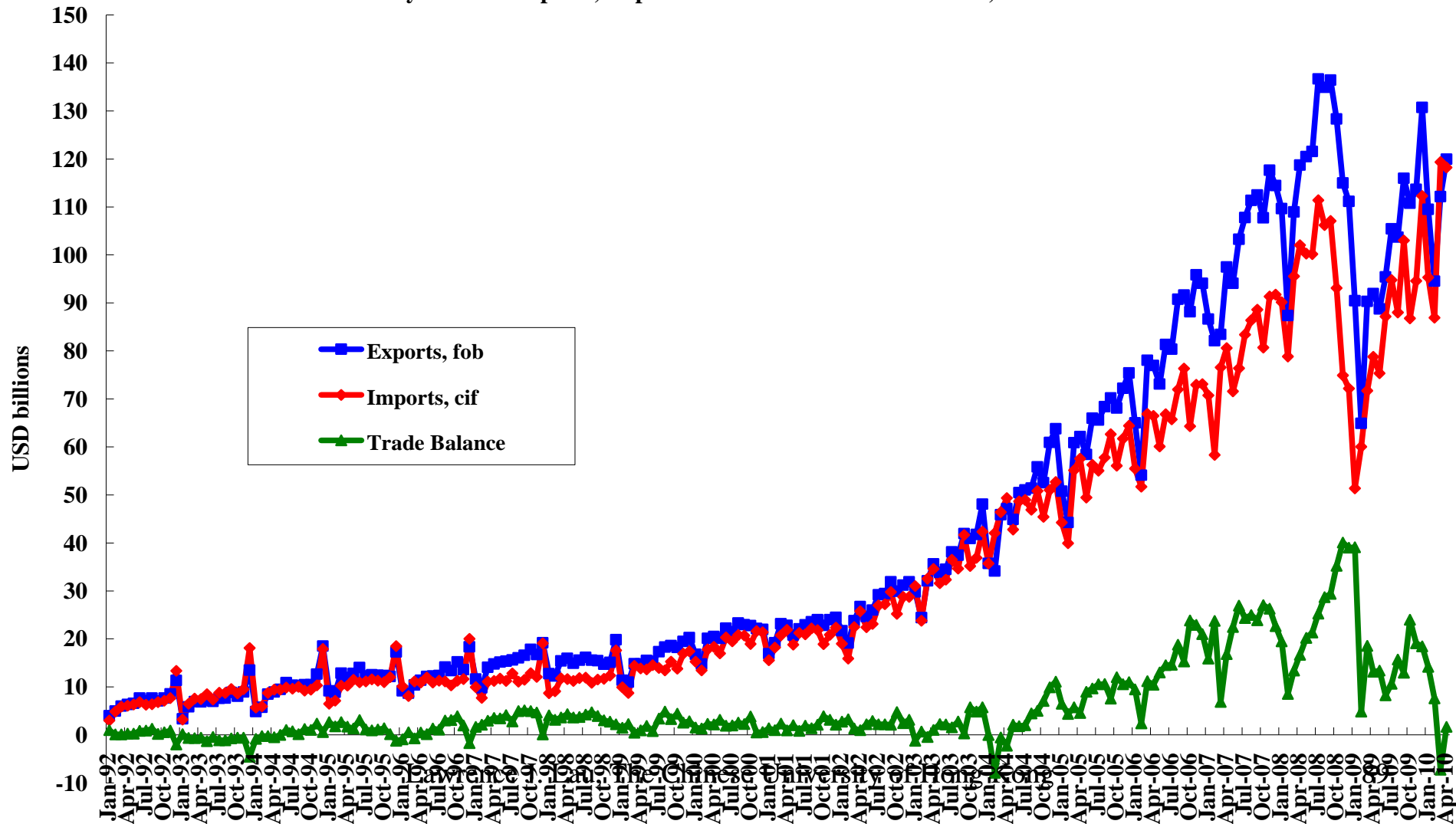
- ◆ A country's currency is considered under-valued if it runs persistent surpluses in trade in goods and services combined vis-à-vis the entire World. It is considered over-valued if it runs persistent trade deficits vis-a-vis the World.
- ◆ A bilateral trade surplus, even a persistent one, says nothing 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.

The Internationalisation of the Renminbi?

- ◆ 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, when a trade surplus began to emerge. The Chinese trade surplus vis-à-vis the World reached a peak in 2008 when it began to decline. For 2009, it declined more than 30 percent. It has continued to fall and turned negative in March 2010 and once again become low and insignificant (see the following chart).
- ◆ If current trends continue, China will once again return to the position of essentially balanced trade with the World at the end of 2011.
- ◆ In contrast, the large U.S. trade deficit with the World existed since at least 1998, long before China began to have a trade surplus with the World, in 2005. 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.

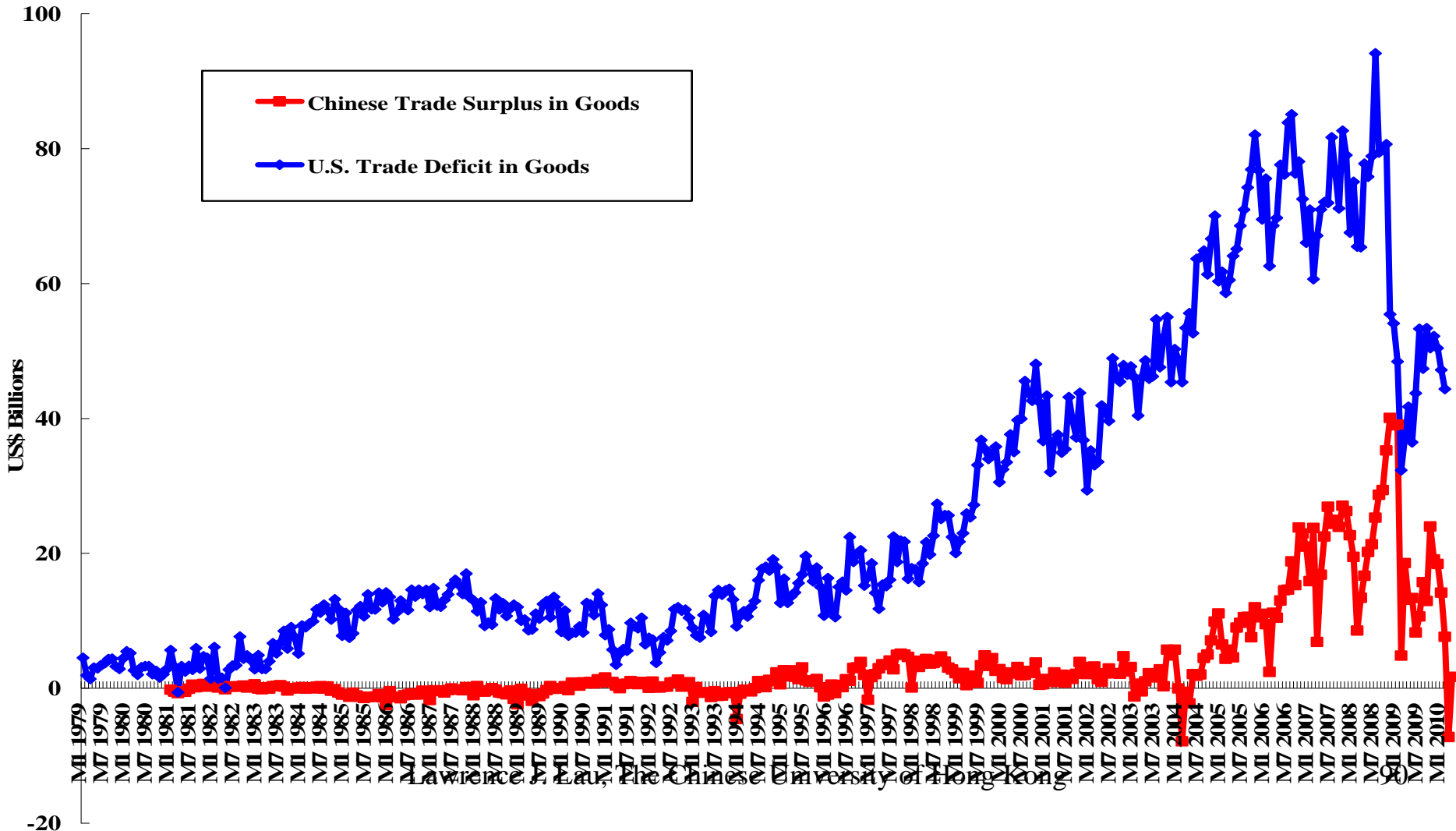
Chinese Monthly Exports, Imports and Trade Balance, US\$

Monthly Chinese 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\$

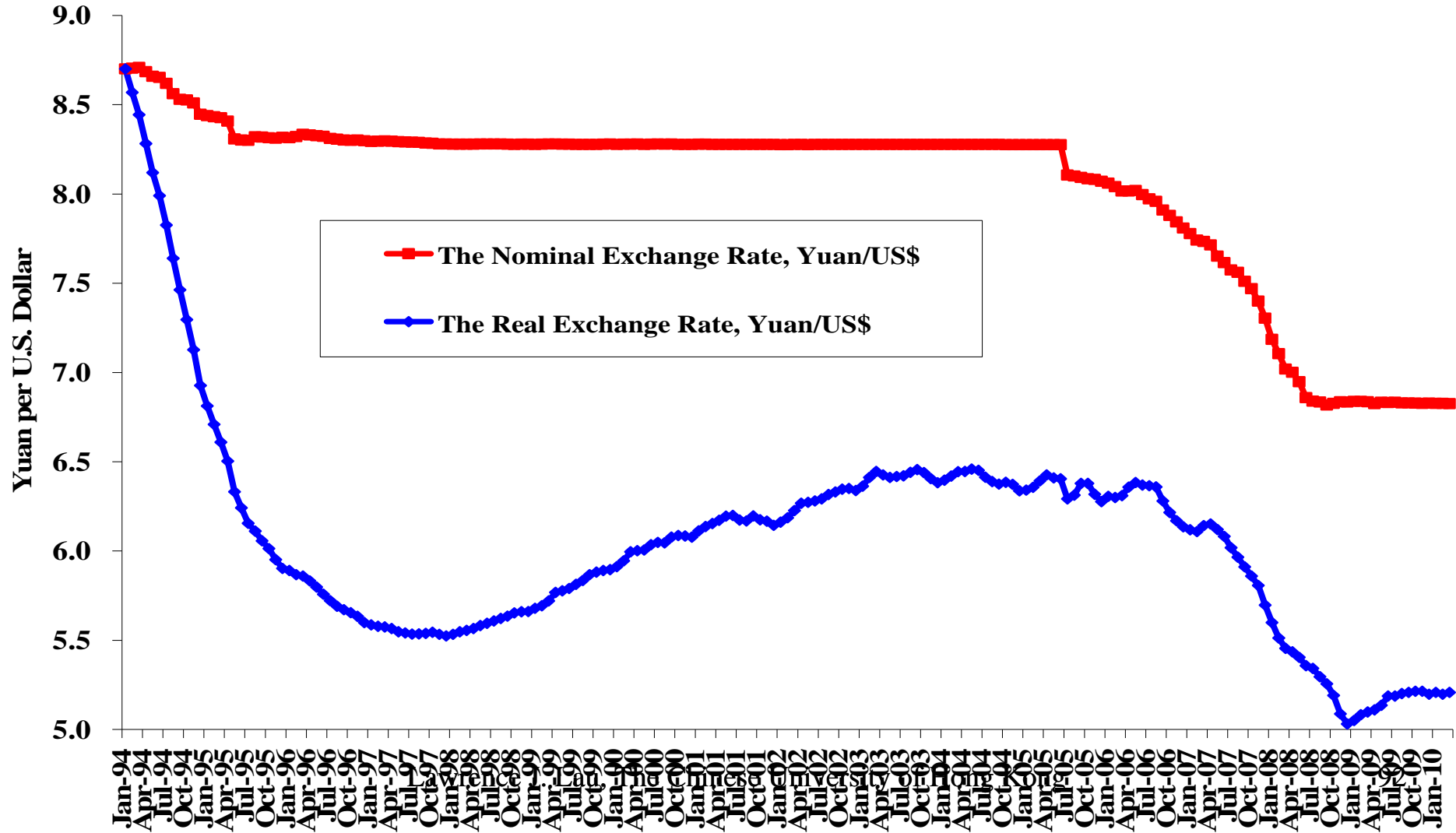


The Internationalisation of the Renminbi?

- ◆ Because of the trade surpluses vis-à-vis the World since 2005, the Renminbi was allowed to appreciate in July 2005, and actually rose 20 percent in nominal terms and 25 percent in real terms by the end of 2008.
- ◆ More recently, on a trade-weighted basis, the Renminbi exchange rate has actually gone up significantly with the large devaluation of the Euro vis-a-vis the U.S. Dollar.

The Nominal and Real Yuan/US\$ Exchange Rates

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



The Internationalisation of the Renminbi?

- ◆ 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 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 Internationalisation of the Renminbi?

- ◆ The future sustainability of the U.S. Dollar as the principal medium of international exchange is in doubt. It is not clear whether U.S. is either able or willing to continue to be the supplier of the principal reserve currency of the world by running large trade deficits.
- ◆ If the United States manages to reduce her trade deficit with the World to zero, or even better, to achieve a trade surplus in the future, there will be a reduction at least in the growth of the supply of U.S. Dollars outside of the U.S. for the settlement of international transactions and for official foreign exchange reserve purposes. Unless alternative mechanisms for the settlement of international transactions are developed, the growth of international trade and capital transactions will be constrained by the lack of adequate international liquidity.

The Internationalisation of the Renminbi?

- ◆ One alternative is for the world to return to the gold standard, so that countries settle differences in their transaction balances in gold.
- ◆ Another alternative is for one or more currencies to assume the role as principal reserve currencies (e.g., the Japanese Yen and the Renminbi). But then these countries must be willing to do so.
- ◆ What alternative mechanisms are possible without having one or more currencies becoming principal reserve currencies?
- ◆ What roles can China and the Renminbi play in terms of enhancement of the international liquidity (the international money supply) needed to support international transactions?

The Internationalisation of the Renminbi?

- ◆ Reserve currencies are characterised by wide, if not universal, general acceptance everywhere and by stability in terms of real purchasing power. Thus, the currency of a country with a high rate of inflation is unlikely to become a reserve currency. Reserve currencies are in general fully convertible.
- ◆ 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?

- ◆ The willingness to accept and to hold a non-local currency depends, but not exclusively, on whether the currency is fully convertible. A person may be quite willing to accept and to hold a non-local currency if he or she knows that the next person he or she comes across is also likely to accept and hold the currency. There can be wide general acceptance without full convertibility.
- ◆ Even though the Renminbi is not de jure fully convertible, it has gradually become de facto convertible in many economies in East Asia because of its wide general acceptance. For example, the Renminbi is widely accepted and used in Hong Kong, Macau, Laos, Myanmar, and other border areas even though it is not legal tender in these places.

The Internationalisation of the Renminbi?

- ◆ The Renminbi is ready to assume a greater role in international transactions, especially in Chinese international trade transactions within East Asia. This is also in part out of necessity, as one can no longer count on a steady growth of U.S. Dollar balances outside of the U.S. Thus the Chinese Government has begun to promote more settlement of Chinese international trade transactions, especially those within East Asia, in Renminbi, so as to reduce reliance on the U.S. Dollar, transactions costs and the risks associated with the U.S. Dollar exchange rates.
- ◆ However, increased internationalisation of the Renminbi does not necessarily imply that the Renminbi will become a major international reserve currency. It may not be in China's best interests to have the Renminbi become, over time, a principal reserve currency like the U.S. Dollar.

The Internationalisation of the Renminbi?

- ◆ The benefit to the issuing country of a reserve currency is in the seigneurage. The issuing country can pay for its imports by printing money (or what amounts to more or less the same thing, bonds). The country receiving the money and/or bonds puts them into its foreign exchange reserves and does not spend them. So the issuing country is able to acquire real goods of real value with essentially pieces of paper which it can print at will—a great bargain.
- ◆ Reserves are normally accumulated and held in the receiving country for a long time, to the benefit of the issuing country. It is only when the receiving country decides to spend the money to buy goods and services from the issuing country that the issuing country has to export real goods and services to the receiving country in exchange.

The Internationalisation of the Renminbi?

- ◆ The “cost” to the issuing country is that in order to benefit from seigneurage, it must in general run a trade deficit. (If it has a chronic trade surplus, it does not need to print money (or bonds) to pay for its imports and other countries will have a hard time acquiring its currency.) A country with mercantilist tendencies does not like to run trade deficits and hence may not want its currency to become a major reserve currency.

The Internationalisation of the Renminbi?

- ◆ A further “cost” is the possibility that the other receiving countries may decide at some point to stop holding this currency and sell the currency and the bonds they hold, potentially creating havoc to the exchange rate of the currency and the financial markets of the issuing country.
- ◆ Of course, if the issuing country is “too big to fail,” as in the case of the United States, it is another matter altogether.

The Internationalisation of the Renminbi?

- ◆ It may become necessary for China and the World to devise alternative mechanisms for the settlement of international transactions other than the use of reserve currencies.
- ◆ Chinese international trade accounts for one-third of East Asian international trade. Thus, if the settlement of Chinese trade with other East Asian economies can be done in Renminbi and the respective local currencies, the need for the use of other reserve currencies to finance these transactions will be significantly reduced. Recent bilateral swap agreements between the People's Bank of China and other East Asian central banks make invoicing and settlement of international trade transactions in local currencies instead of reserve currencies such as the U.S. Dollar and the Euro possible.

The Internationalisation of the Renminbi?

- ◆ One major disincentive for Chinese traders and their foreign counterparties to denominate and settle trade transactions in Renminbi is the one-sided nature of the current expectation of the Yuan/US\$ exchange rate. Rightly or wrongly, everyone expects the Renminbi to appreciate with respect to the U.S. Dollar. Thus, while a Chinese exporter would like to quote and invoice in Renminbi, the U.S. importer of the Chinese goods would not want to place an order in Renminbi for fear that it might cost much more in terms of U.S. Dollars by the time the goods arrive in the U.S. several months later.

The Internationalisation of the Renminbi?

- ◆ Thus, in order to encourage and promote trade settlement in Renminbi, the People's Bank of China may wish to consider creating a forward market in Renminbi but with participation limited to bona fide exporters and importers engaged in Chinese international trade with established track records and with amounts limited to no more than the full value of the merchandise. The purpose of the forward market is to provide “insurance” to those bona fide traders against fluctuations in the Renminbi exchange rate and not to provide an instrument for speculation.

The Internationalisation of the Renminbi?

- ◆ There are also other alternatives, for example, creating a mechanism and framework so that East Asian economies, both developed and developing, can settle their international transactions with one another with their local currencies.
- ◆ One model was provided by the European Payments Union (1950-1958). In the aftermath of World War II, when all the major economies in Western Europe were still recovering, West German exporters were reluctant to accept French Francs, French exporters were reluctant to accept the German Mark, and both German and French exporters were reluctant to accept the Italian Lire. They would all accept the U.S. Dollar (the only accepted reserve currency), which was then in short supply in Western Europe. The growth of international trade within Western Europe was thus quite constrained.

The Internationalisation of the Renminbi?

- ◆ With the assistance of the United States Marshall Plan, the European Payments Union (EPU) was established by the Organisation for European Economic Cooperation (OEEC) in July 1950, with the Bank for International Settlements acting as its agent, to solve the problem of insufficient international liquidity (U.S. Dollars).

The Internationalisation of the Renminbi?

- ◆ The East Asian central banks are now flush with foreign exchange reserves. Continuing accumulation of foreign exchange reserves is no longer necessary for East Asian economies—in fact, the continuing increases in the foreign exchange reserves in the East Asian economies are beginning to present a problem for macroeconomic control.
- ◆ For East Asian economies it is now possible to consider creating a similar institution, say, a “Bank for Intra-Asian Settlements,” to facilitate settlement of Intra-East Asian international transactions in their local currencies rather than the U.S. Dollar or the Euro. This makes it unnecessary to continue accumulating foreign exchange reserves in U.S. Dollars or in Euros, and in turn makes it much less important whether these economies have trade surpluses vis-à-vis the United States or the European Union or the rest of the World.

The Internationalisation of the Renminbi?

- ◆ Major East Asian central banks, such as the People's Bank of China, the Bank of Japan and the Bank of Korea, can also begin to diversify their portfolio holdings of official foreign exchange reserve assets. In addition to the traditional reserve currencies, they can also begin to buy and to hold the sovereign debt issued by the developing East Asian countries (e.g., Malaysia, Thailand, Vietnam), denominated in their respective local currencies. The debt can be held in the form of short-term bills as well as long-term (more than a year in maturity) bonds, with the interest rate on the long-term bonds indexed to local rates of inflation.
- ◆ The composition of reserve assets can be changed gradually to match the changed currency demands for transactions purposes as settlement in local currencies becomes possible.
- ◆ This enables the East Asian central banks to buy or hold less reserve assets denominated in the major international reserve currencies such as the U.S. Dollar and the Euro.

The Internationalisation of the Renminbi?

- ◆ It is expected that the use of the Renminbi for 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.
- ◆ Chinese international trade with the United States and Europe, with oil exporting countries in the Middle East, and with Brazil, India and Russia, may continue to be denominated in either the U.S. Dollar or the Euro.
- ◆ Chinese international trade with Africa and Latin America may well be denominated in Renminbi especially Africa if China becomes the major donor of development loans to Africa.

Concluding Remarks

- ◆ The Chinese economy, because of its high national savings rate, will have adequate national savings to finance its investment needs indefinitely.
- ◆ The Chinese economy will not have any labour shortages for at least three decades or more, until around 2040, when surplus labour will begin to disappear in the Chinese economy and real unskilled, entry-level wage rate will begin to rise.

Concluding Remarks

- ◆ Is Chinese economic growth sustainable?
- ◆ The Chinese economy still lags far behind developed economies in tangible capital per unit labor. There is therefore considerable room for the continuation of rapid tangible input-driven economic growth in the future before diminishing returns step in.
- ◆ Intangible capital per unit labor, e.g., R&D capital, lags even further behind, offering additional opportunities for investment. Investment in intangible capital has begun to increase in China, in human capital, R&D capital and in other forms of intangible capital (e.g., goodwill). It will, in time, become a major source of Chinese economic growth.

Concluding Remarks

- ◆ The Chinese economy should be able to continue growing at an average rate of 8 percent per annum for at least another couple of decades, driven by its strong economic fundamentals and based on its own domestic internal demand, more or less independently of whatever happens to the rest-of-the-World.
- ◆ 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, energy conservation, environmental protection and preservation, and renewable energy and the green economy.

Concluding Remarks

- ◆ Chinese GDP will probably catch up with U.S. GDP in approximately 20 years, some time between 2025 and 2030, with U.S. and China each accounting for approximately 15 percent of World GDP.
- ◆ It will probably take another twenty to twenty-five years, past 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.
- ◆ 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.

The Chinese Real GDP and Real GDP per Capita: Past, Present and Projected Future

Actual and Projected Chinese Real GDP and GDP per Capita, US\$ (2009 prices)

	1978	2009	2020	2030	2040	2050
GDP (trillion)	0.274	4.91	10	20	40	55
GDP per Capita	284	3,681	7,000	12,600	25,000	52,500

Concluding Remarks

- ◆ 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 a settlement currency in its international trade with selected countries and regions.
- ◆ It is in China's interests to maintain a stable exchange rate. However, it is not in China's long-term interests to have the Renminbi pegged rigidly to the U.S. Dollar. For the same reason, it is not in China's long-term best interests to have the Renminbi pegged rigidly to either a single foreign currency or a basket of foreign currencies. 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. Adjustment of the exchange rate should depend on many factors: the long-term trade balance, the rate of inflation relative to other major trading partners, public confidence, etc. China should therefore maintain a “managed floating exchange rate.”

Concluding Remarks

- ◆ It is possible that the Yuan will become fully or almost fully convertible within the next five years. The global financial crisis has paradoxically accelerated rather than retarded the progress of the Renminbi towards full convertibility.
- ◆ However, it is also in China's best interests to seek alternatives to the use of the US\$ as the principal medium of exchange for the conduct of international transactions. It will not necessarily be through making the Yuan an international reserve currency; it is possible to develop a clearing and settlement mechanism within East Asia based on local currencies.