The Development of the Chinese Economy

Lawrence J. Lau, Ph. D.
Ralph and Claire Landau Professor of Economics, The Chinese Univ. of Hong Kong
and
Kwoh-Ting Li Professor in Economic Development, Emeritus, Stanford University

Institute of Global Economics and Finance
The Chinese University of Hong Kong
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Tel: (852)3710-6888; Fax: (852)2104-6938
Email: lawrence@lawrencejlau.com; WebPages: www.igef.cuhk.edu.hk/ljl

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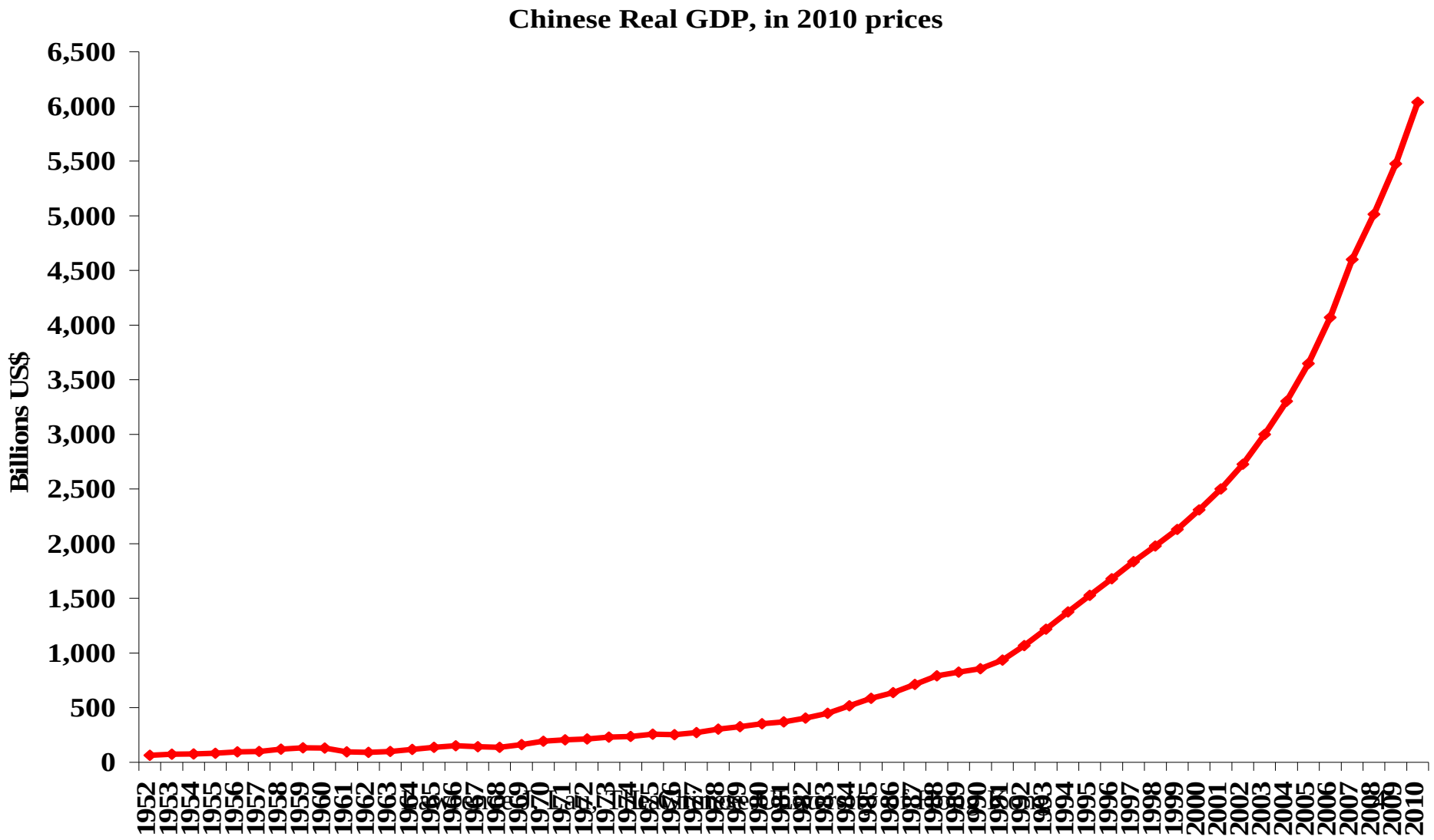
Introduction

- China has made tremendous progress in its economic development since it began its economic reform and opened to the World in 1978. China is currently the fastest growing economy in the World—averaging 9.8% per annum over the past 33 years. It is historically unprecedented for an economy to grow at such a high rate over such a long period of time.
- Between 1978 and 2010, Chinese real GDP grew more than 20 times, from US$304 billion to more than US$6.04 trillion (2010 prices) to become the second largest economy in the World, after the U.S.
- By comparison, the U.S. GDP (approx. US$14.66 trillion in 2010 prices) was 2.4 times Chinese GDP in 2010.

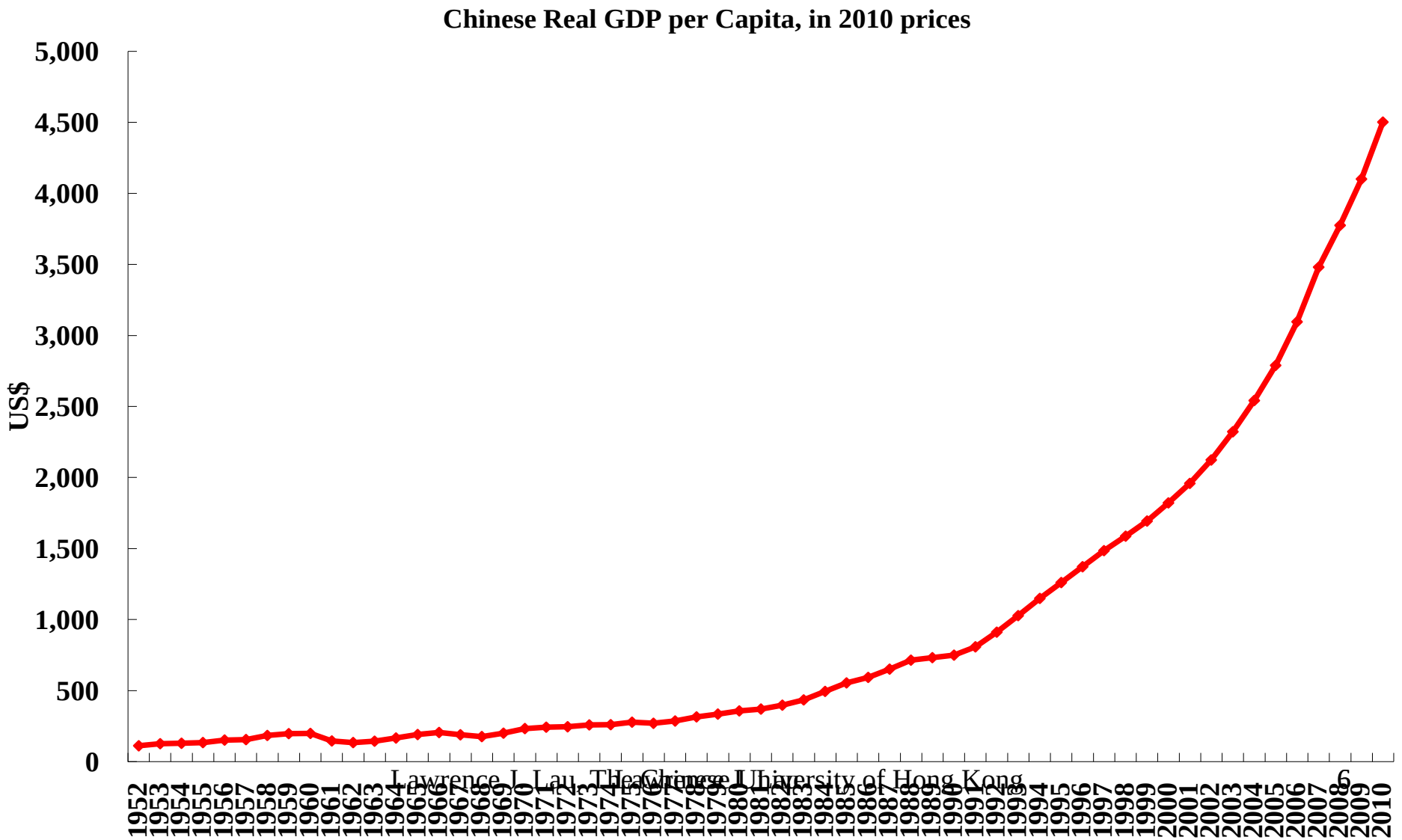
Chinese Real GDP in US$ Since 1952 (2010 Prices)



Introduction

- Despite its rapid growth, in terms of its real GDP per capita, China is still a developing economy.
- Between 1978 and 2010, Chinese real GDP per capita grew almost 15 times, from US$316 to US$4,503 (in 2010 prices). By comparison, the U.S. GDP per capita (approx. US$47,274 in 2010 prices) was 10.5 times Chinese GDP per capita in 2010.

Real Chinese GDP per Capita in US$ Since 1952 (2010 Prices)



Introduction

- While many problems have arisen in the Chinese economy within the past decade—for example, increasing income disparity--both inter-regional and intra-regional--uneven access to basic education and health care, environmental degradation, inadequate infrastructure and corruption—it is fair to say that every Chinese citizen has benefited from the economic reform and opening since 1978, albeit to varying degrees, and few want to return to the central planning days.
- The Chinese Government leaders have also demonstrated their ability to confront important challenges and solve difficult problems.
- 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

	Growth Rates percent per annum	
	Period I	Period II
	1952-1978	1978-2010
Real GDP	6.15	9.79
Real GDP per Capita	4.06	8.66
Exports	9.99	17.23
Imports	9.14	16.37
Inflation Rates (GDP deflator)	0.50	5.47
	1952-1978	1978-2009
Real Consumption	5.05	8.96
Real Consumption per Capita	2.99	7.79

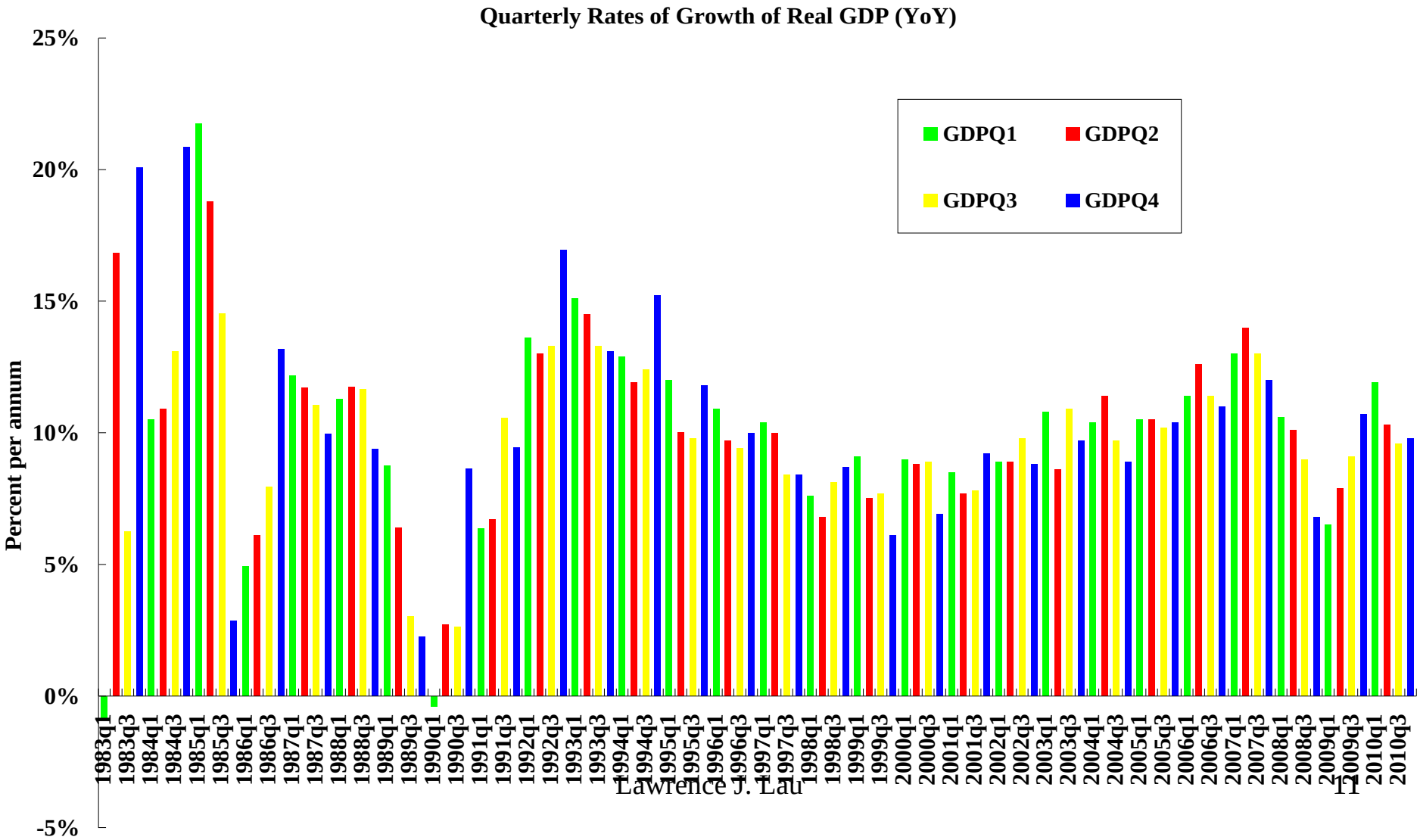
The Macroeconomic Outlook

- 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 by the Chinese Government in November 2008, barely six weeks after the bankruptcy of Lehman Brothers, has been quite effective in sustaining the confidence and positive expectations of the future of Chinese enterprises and households and thereby maintaining Chinese economic growth despite the economic turmoil in the United States and Europe.

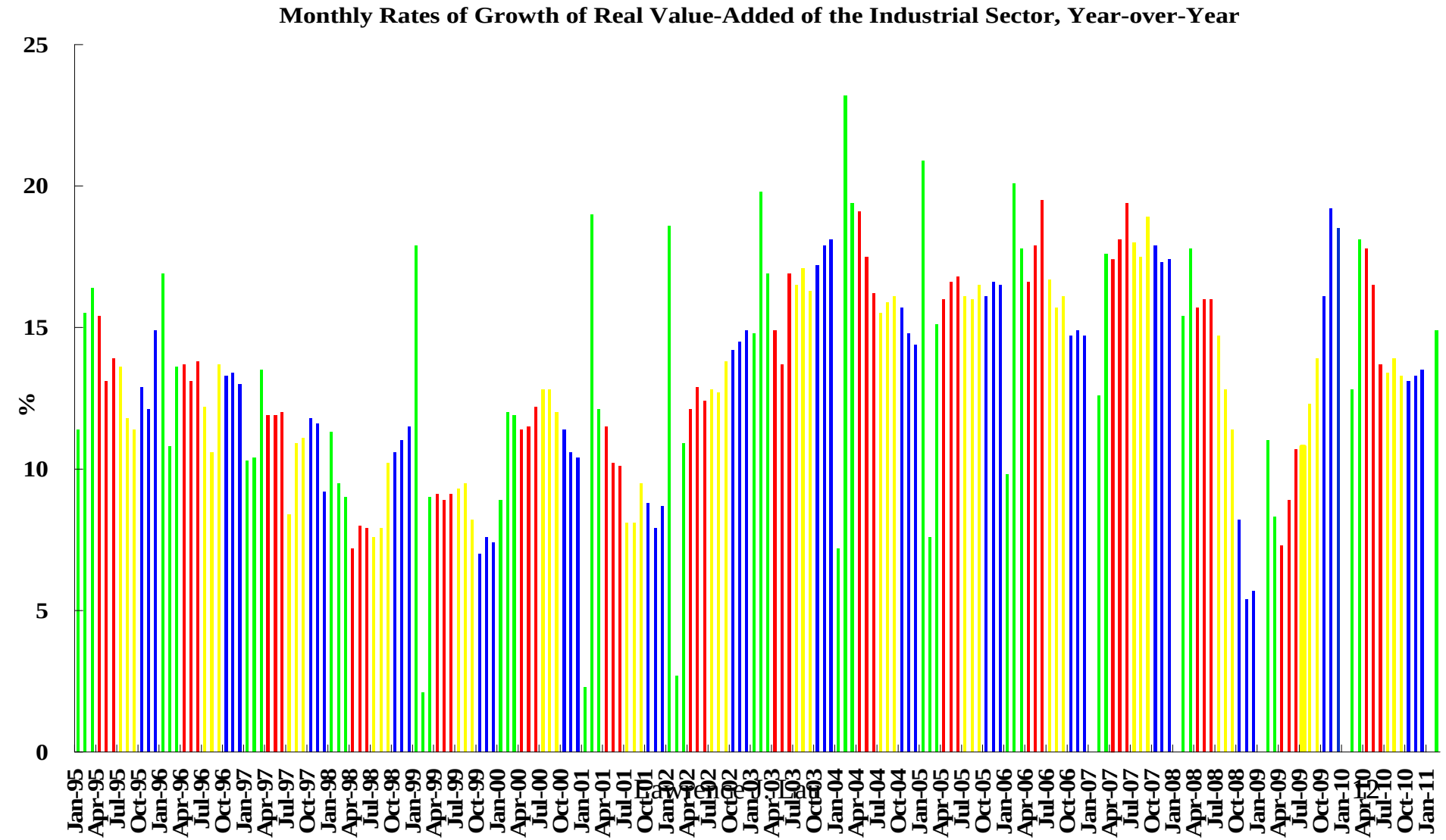
The Macroeconomic Outlook

- The Chinese economy grew 9.1% in 2009 and 10.3% in 2010 even as the European and U.S. economies remained in recession.
- The outlook is that there will be a gradual slowdown in the real rate of growth of the economy in 2011, to perhaps around 8%, which is actually a positive development for the Chinese economy.
- While 8% may seem like a significant reduction from 10.3%, there are reasons to believe that the impact of the economic slowdown on Chinese employment is not that severe.

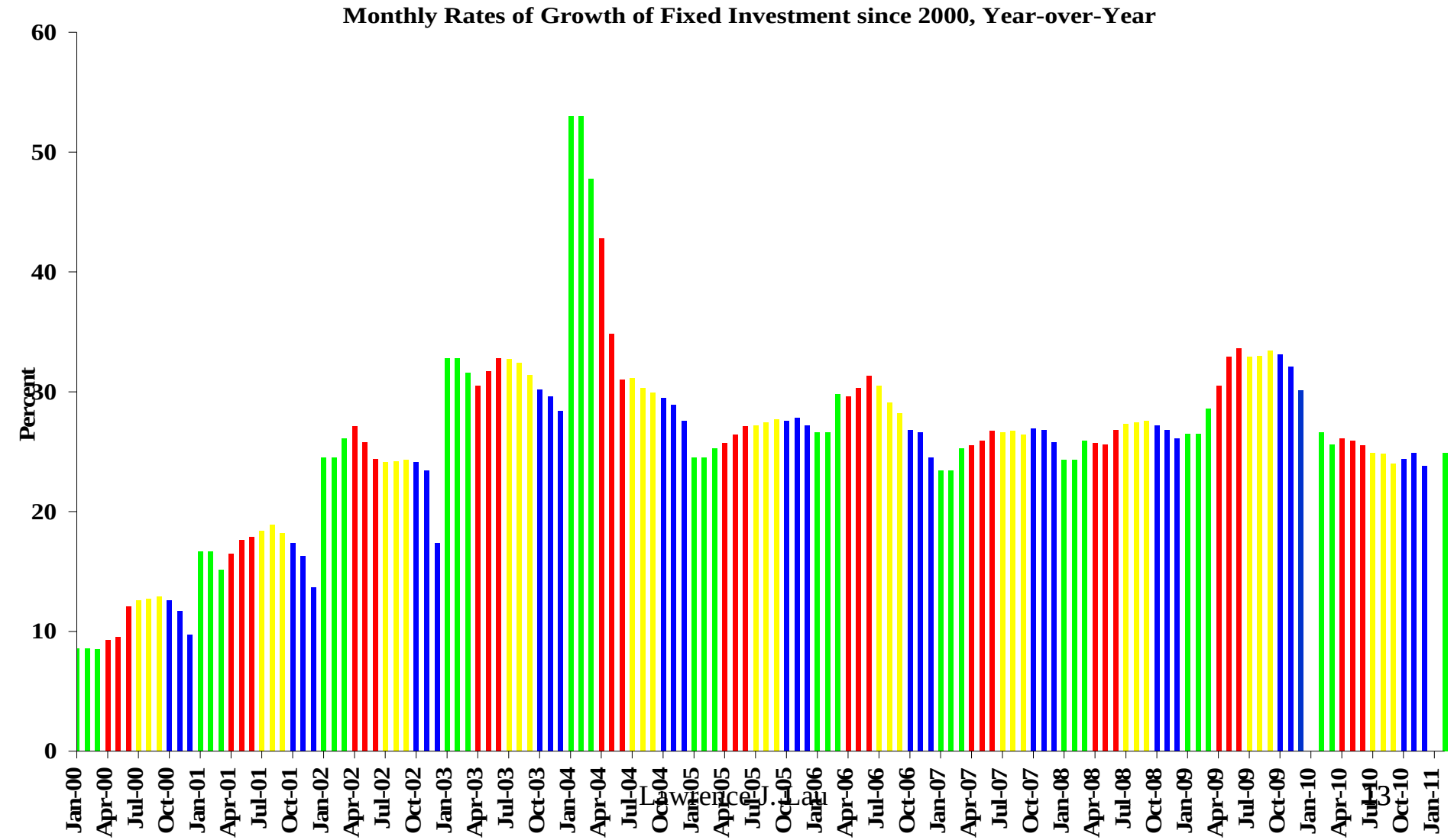
Quarterly Rates of Growth of Chinese Real GDP, Y-o-Y



Monthly Rates of Growth of Real Value-added of the Industrial Sector, Y-o-Y



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



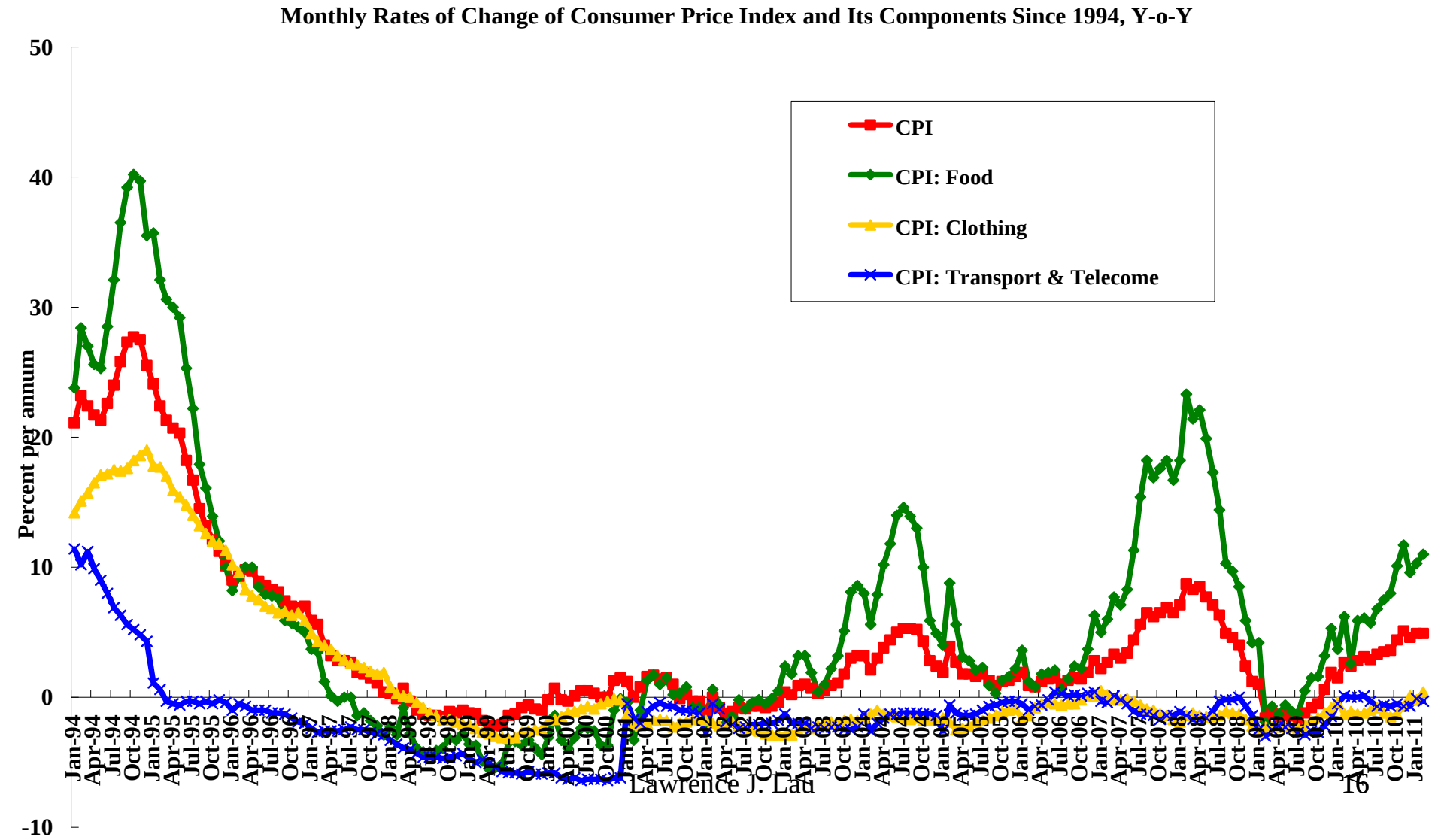
The Macroeconomic Outlook

- The rate of inflation of goods and services, as measured by the consumer price index, rose during the last months of 2010, reaching a peak of 5.1% year-over-year in November.
- For 2010 as a whole, the rate of inflation exceeded the objective of the Chinese Government of 3% slightly, at 3.3%.

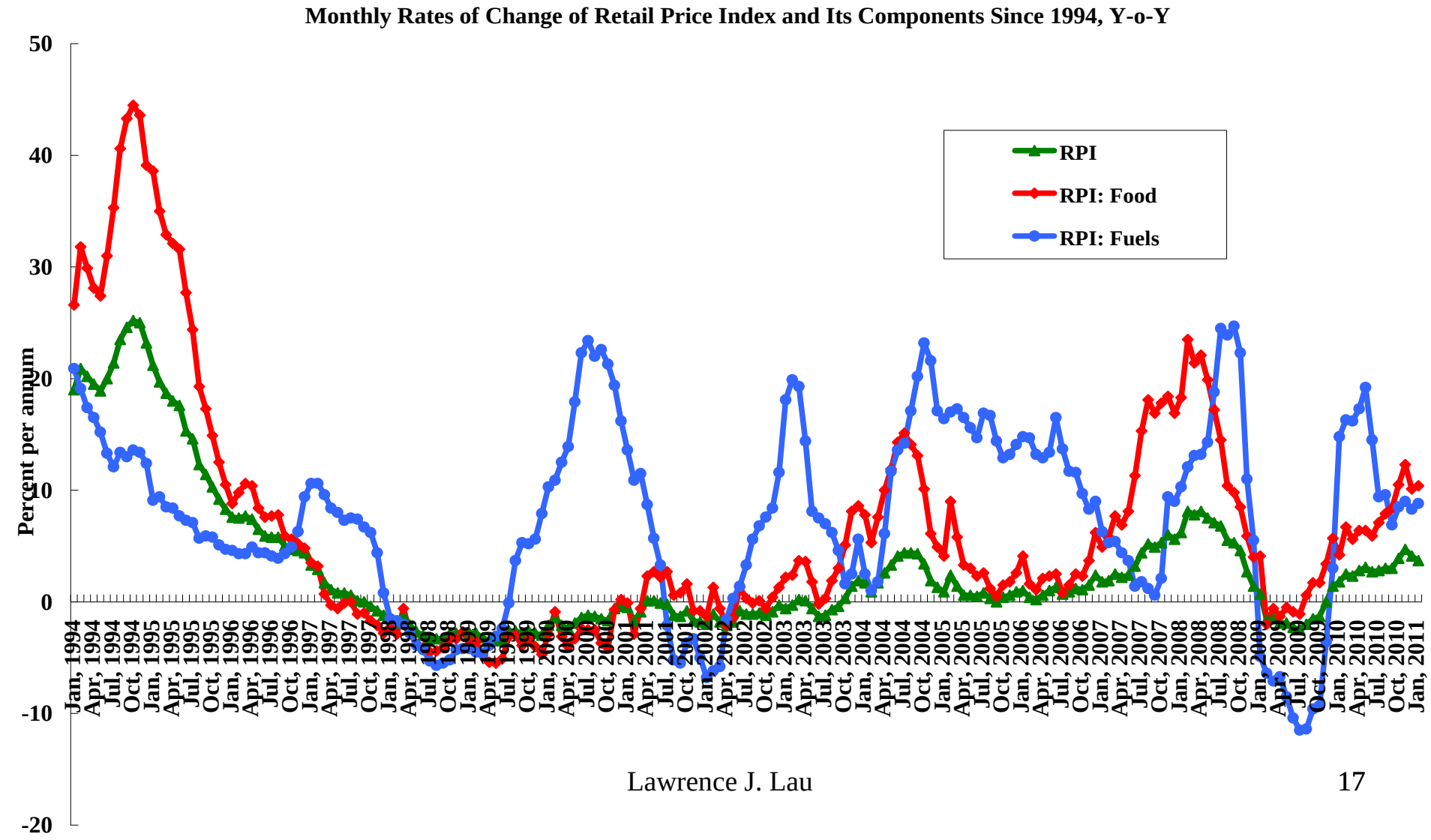
The Macroeconomic Outlook

- However, the bulk of the increase in the consumer price index (approximately 70%) was caused by the increase in food prices (principally vegetables), due mostly to weather and possibly hoarding and market manipulation and not to monetary factors. 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 relatively tame at the 1-1.5% per annum level, as has been the case in the past few years.
- Moreover, 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 non-agricultural goods in the next couple of years.

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



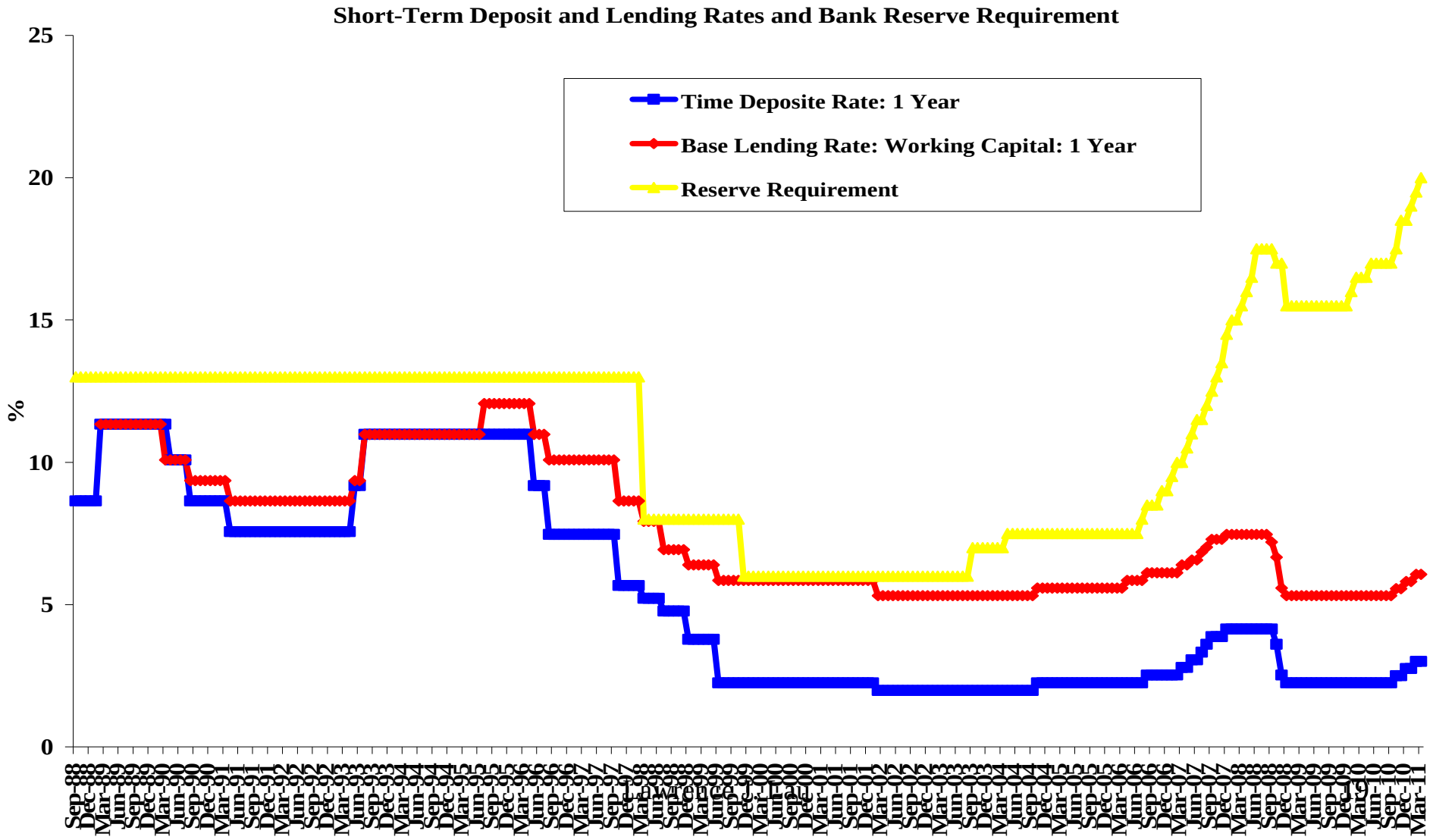
Monthly Rates of Change of the Retail Price Index, Y-o-Y



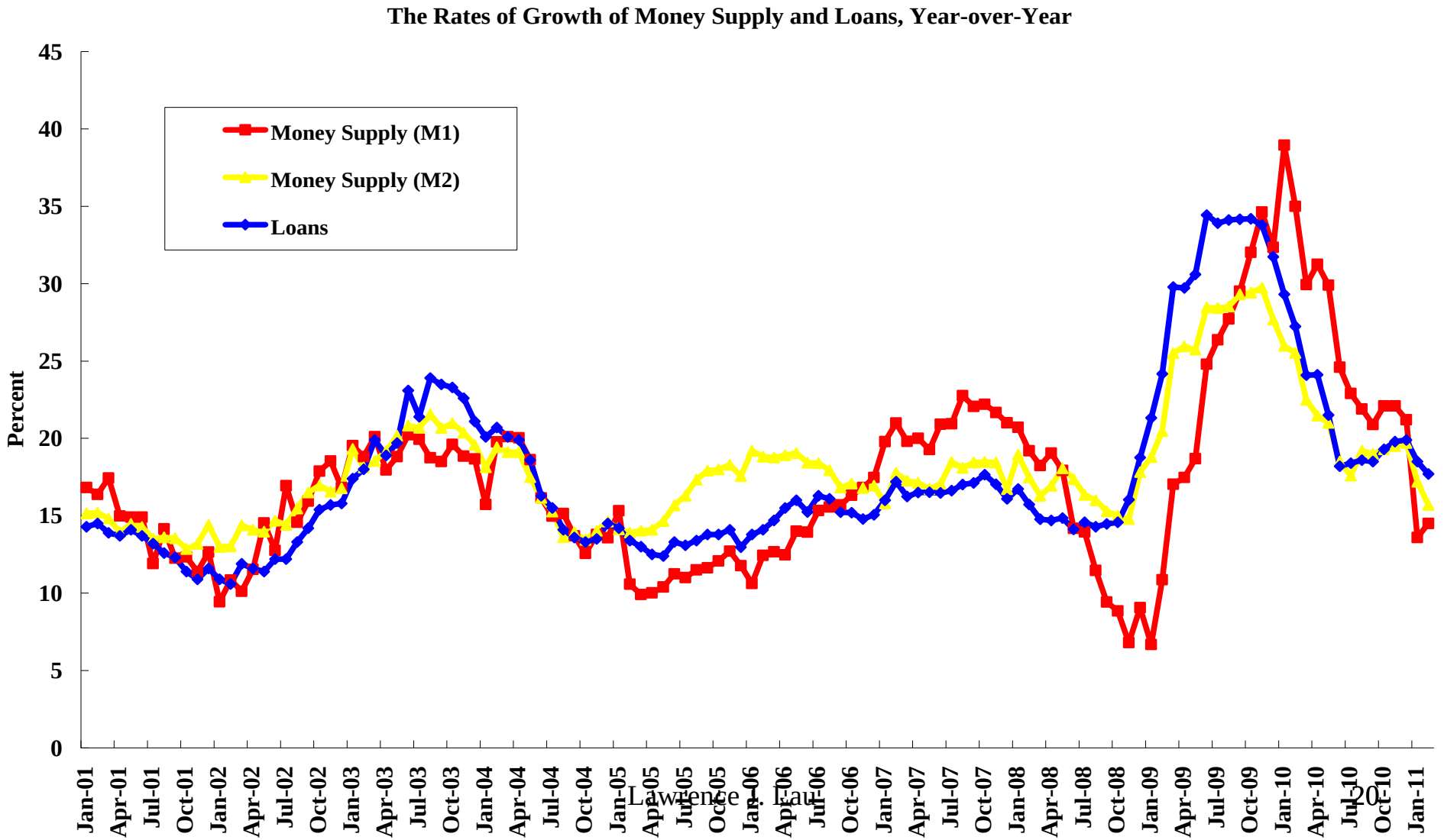
The Macroeconomic Outlook

- 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 the purchases of more than one residential unit by a single household. Recently, the People's Bank of China, the central bank, has increased the rates of interest (the minimum lending rate and the maximum deposit rate) and the reserve requirement ratio repeatedly.
- The rates of growth of money supply (both M1 and M2) and loans have also declined significantly.

Short-Term Deposit and Lending Rates and Bank Reserve Requirement



The Rates of Growth of Money Supply and Loans, Year-over-Year



The Macroeconomic Outlook

- There is not much any central bank can do about agricultural prices. No head of a central bank anywhere in the World has been able to control the weather.
- The key in reining in increases in asset prices, especially real estate prices, is to assure that there is a continuing dependable and steady supply of the assets going forward. Only the expectation of future supply availability can change price expectations. The Government must therefore try to create the expectation of regular increases of actual and potential supply through both its policy and its actual behaviour.

The Macroeconomic Outlook

- If the public expects that residential housing units will be just as available or even more available next year compared to this year, there will be no reason for anyone to rush out to buy something now. Thus, the real estate price bubble can be more readily contained.
- Other instruments in addition to the rate of interest include the strict control, perhaps even prohibition, of financing of any non-owner-occupied residential unit, and increasing the equity (down payment) ratio. The introduction of a property tax as a source of revenue for local governments will also help to discourage speculation as well as reduce the dependence of local governments on revenue from the sale of land leases and hence on maintaining high and rising expectations of land prices.

The Macroeconomic Outlook

- Even with increases in the levels of minimum wage rates in the different provinces, regions and municipalities, the real wage rate of unskilled, entry-level labour has basically remained stable and is expected to be stable for a long time because of the continuing existence of significant surplus labour in the Chinese economy.
- However, 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 high-profile wage settlements made by Honda and Foxconn plants in China in 2010 provided for wage increases of 24 percent and 30 percent respectively.
- But given the trend of rapid expansion of Chinese tertiary education in recent years, with 6 million new graduates projected annually, the increase in the real wage rate of even skilled labour is likely to be relatively limited going forward.

The Economic Fundamentals

- 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 the 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 basic 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

- 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 basic 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.

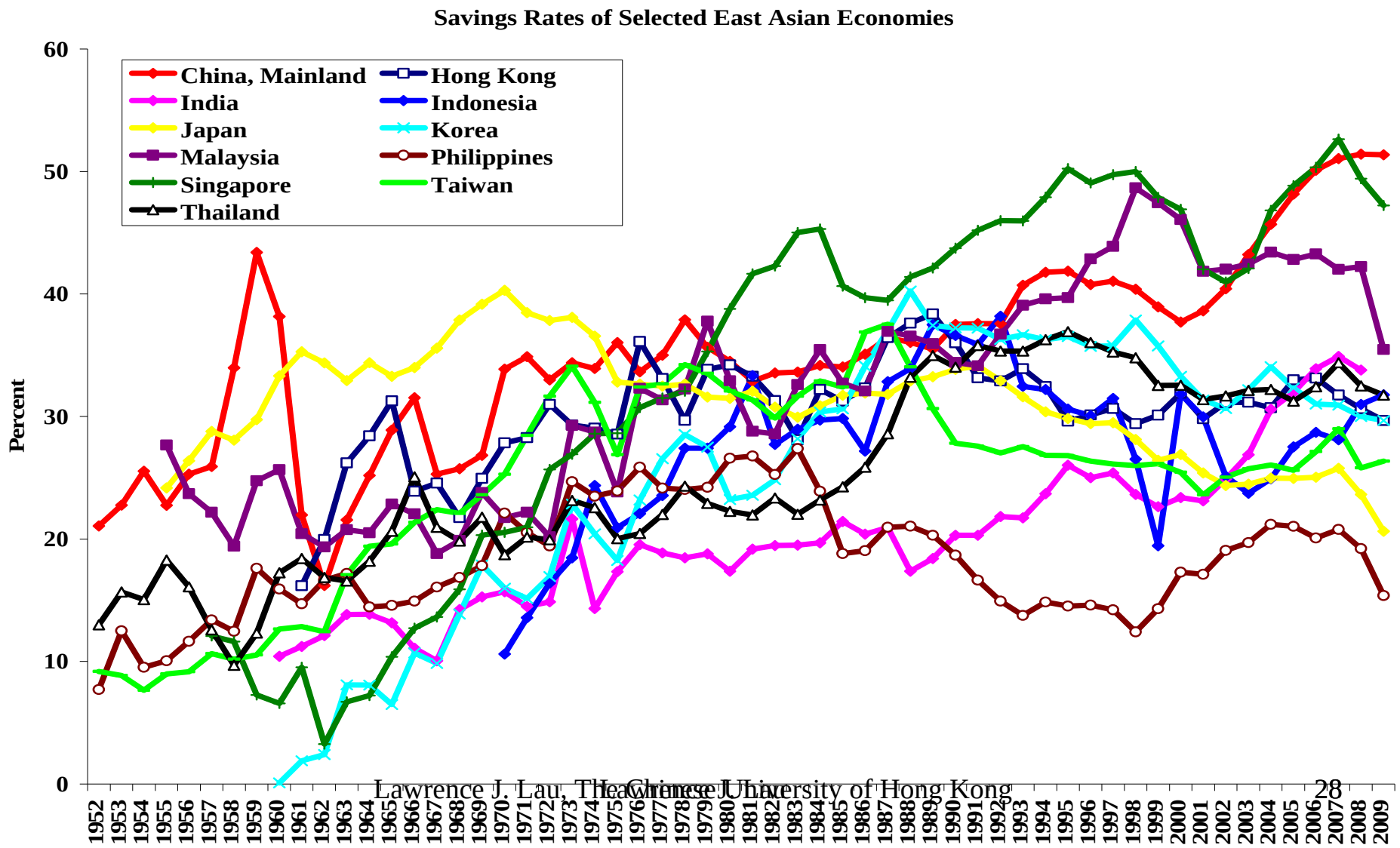
The Economic Fundamentals

- 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 except for a short start-up period. It has stayed around 40% since the early 1990s and has at times approached or even exceeded 50% in more recent years. This means, among other things, that the Chinese economy can finance all of its domestic investment needs from its own domestic savings alone, thus assuring a high rate of growth of the tangible capital stock without having to depend on the more fickle foreign capital inflows (foreign portfolio investment, foreign direct investment or foreign loans).

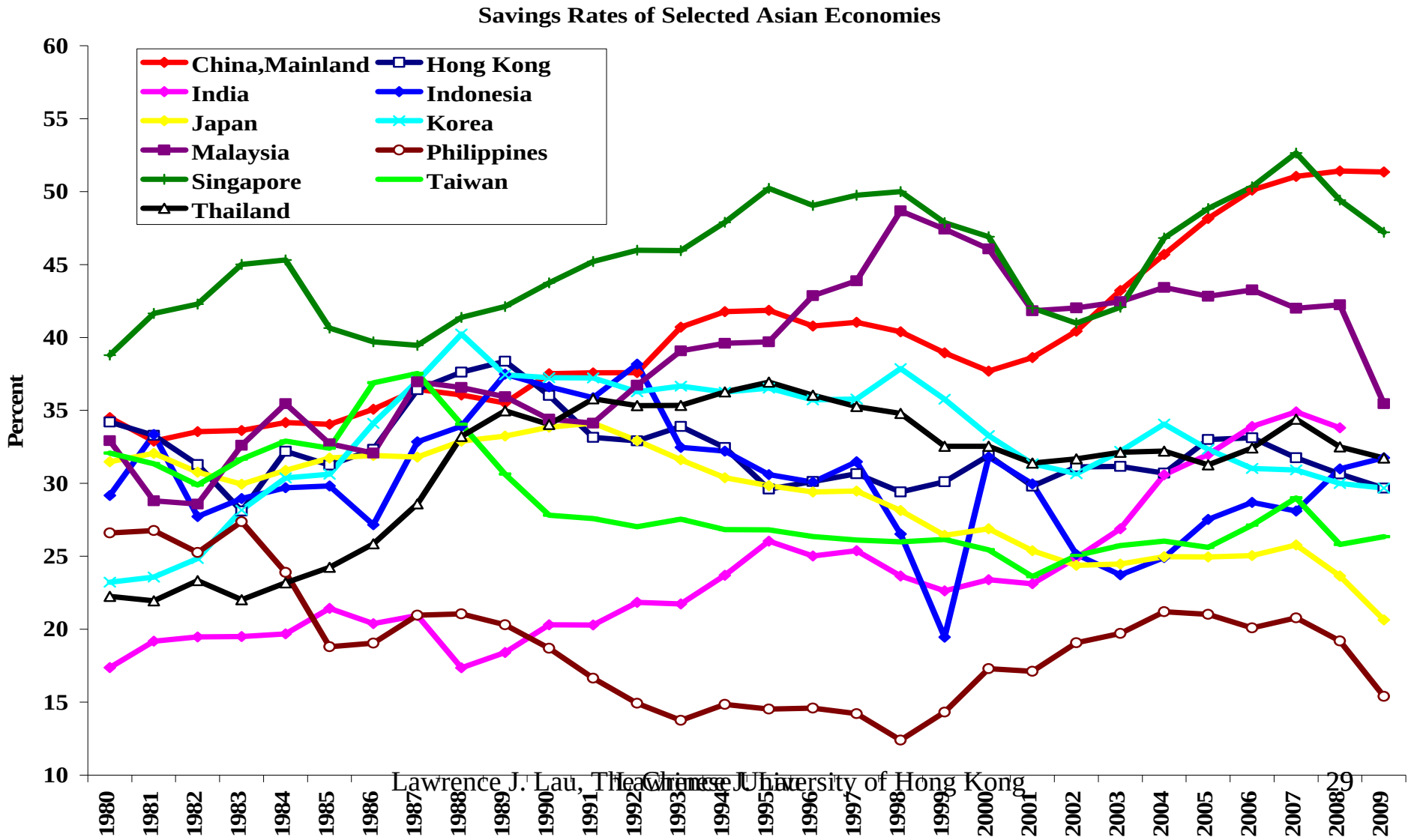
The Economic Fundamentals

- (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 1.34 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.

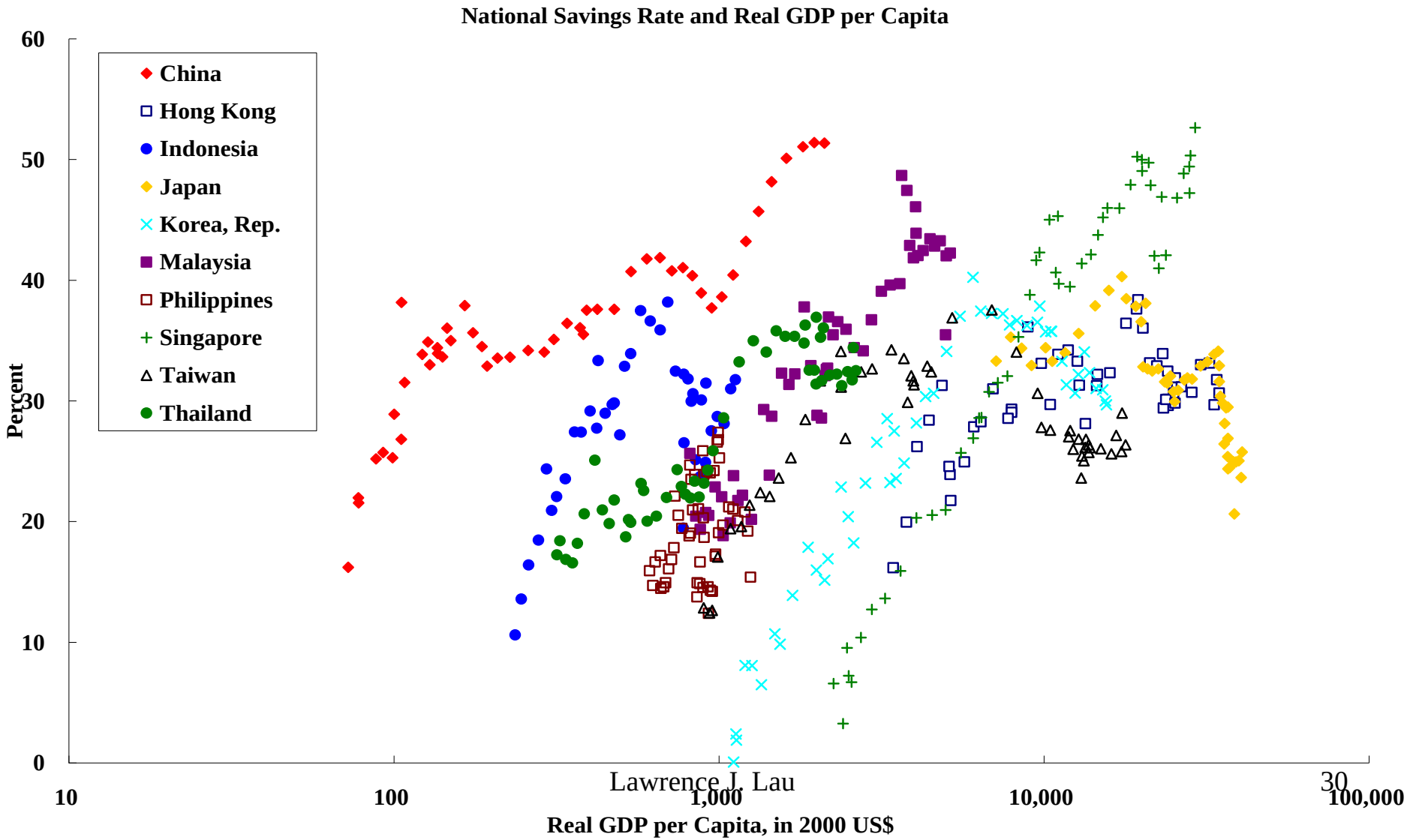
Savings Rates of Selected Asian Economies (1952-present)



Savings Rates of Selected Asian Economies (1980-present)



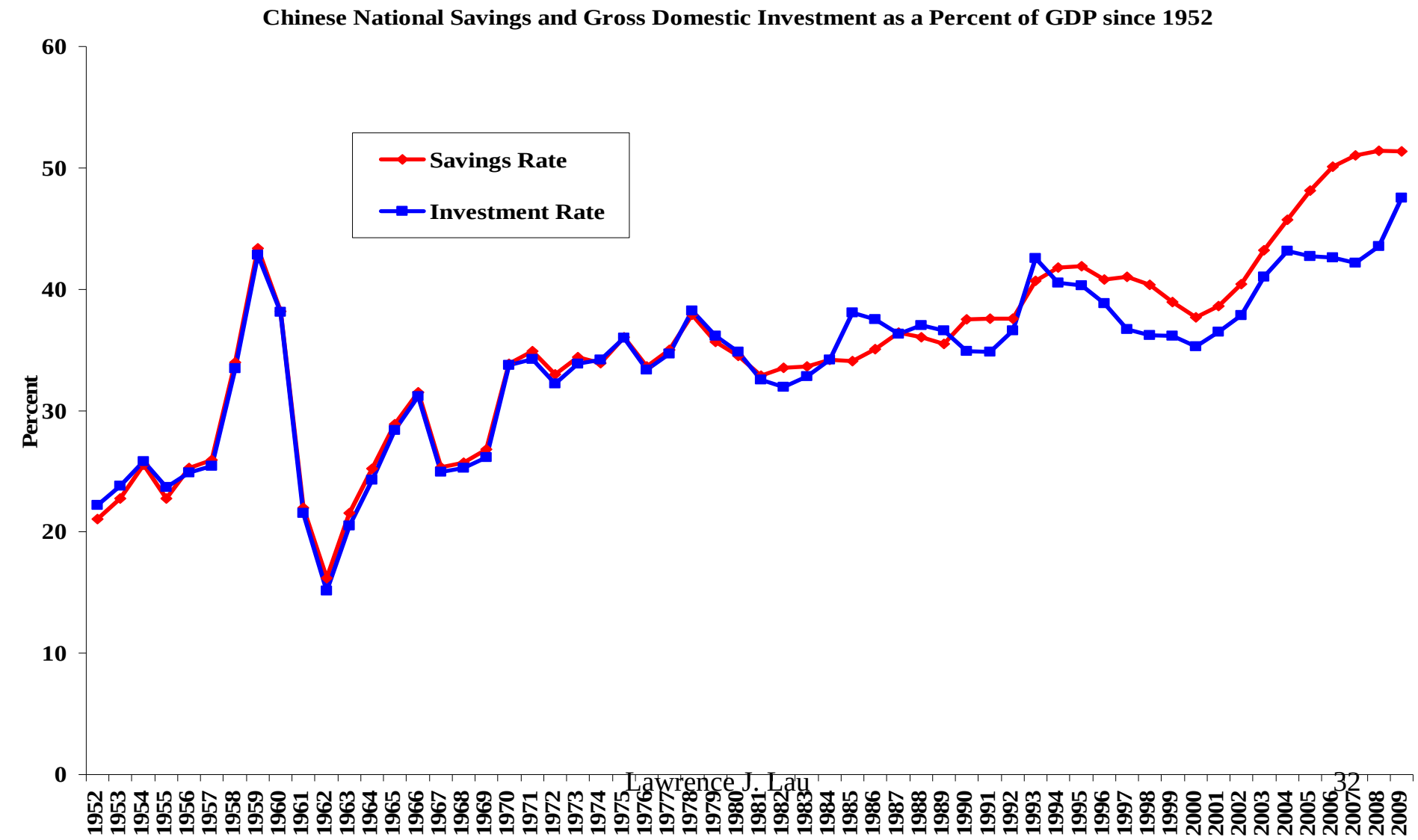
The Savings Rate and Real GDP per Capita: East Asian Economies



The Economic Fundamentals

- It is true that 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.
- Since 2008, the Chinese savings-investment gap has once again narrowed, resulting in a large reduction in the Chinese trade surplus relative to its GDP. The Chinese trade surplus is expected to decline to within 2% of its GDP by the end of 2012.

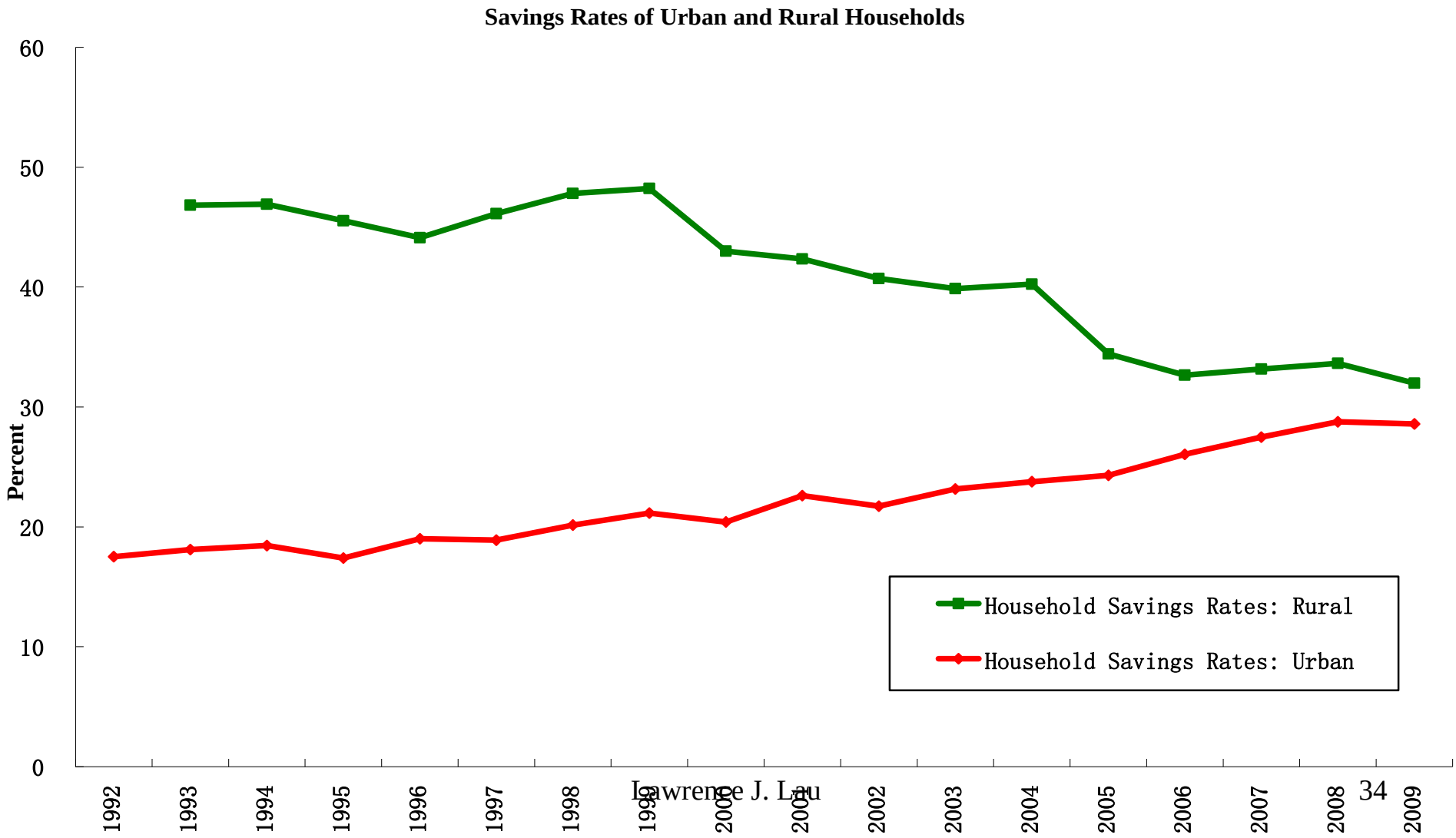
Chinese National Savings and Gross Domestic Investment as Percents of GDP



The Economic Fundamentals

- The high Chinese national savings rate is not due to an exceptionally high household savings rate. In fact, Chinese household savings rate is not significantly different from those of ethnically Chinese households in Hong Kong and Taiwan. The high Chinese national savings rate is due 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% of GDP, compared to approximately 70% in the developed economies of the West;
- (2) the much higher Chinese corporate savings rates—Chinese enterprises, state-owned as well as non-state-owned, typically reinvest their earnings and distribute little or no cash dividends to their shareholders; and
- (3) the lagged adjustment of household consumption to increases in household income because of the rapidity of the latter. It takes time for the growth of consumption to catch up to the growth of income.

Savings Rates of Urban and Rural Households



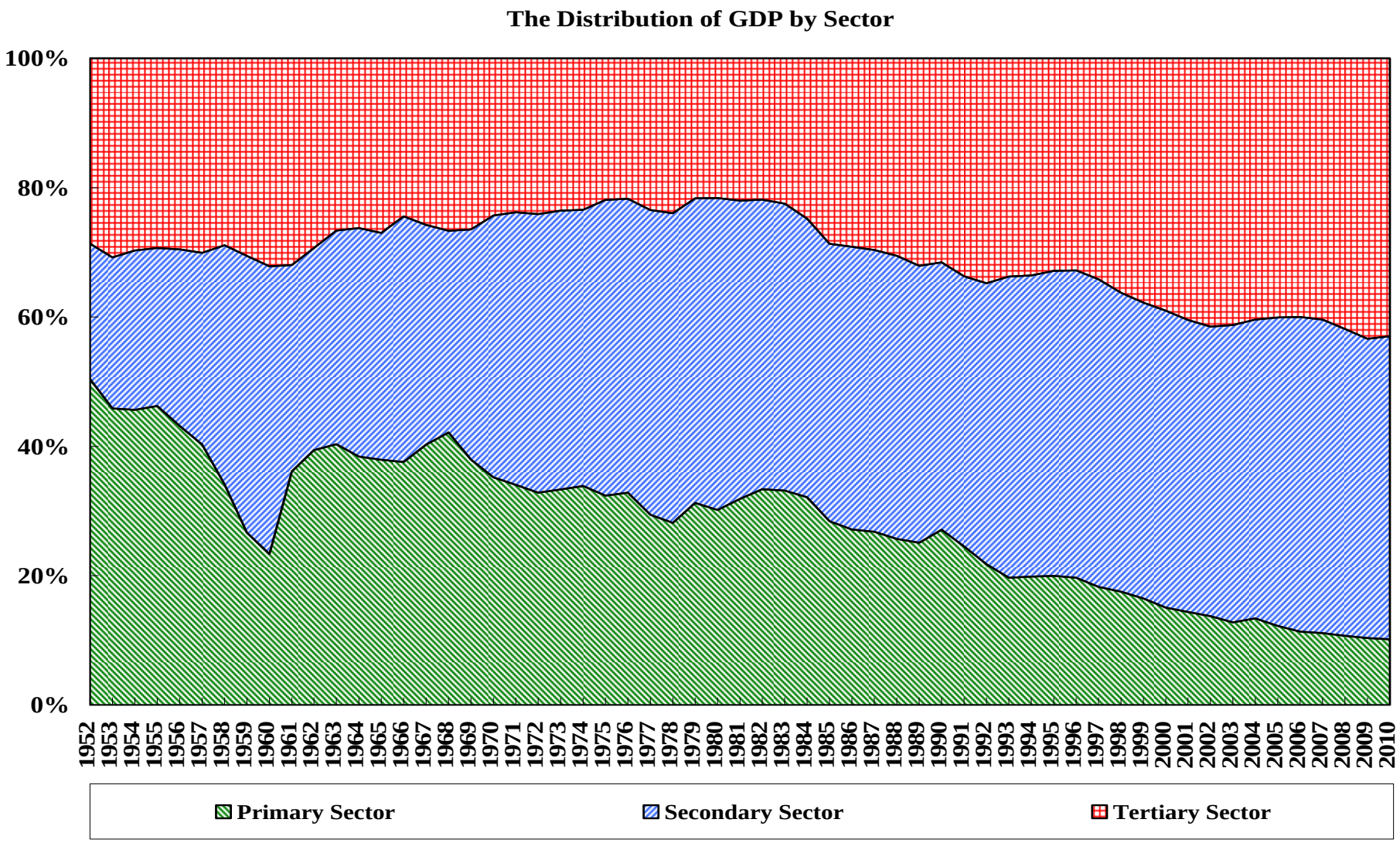
The Economic Fundamentals

- 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.
- Investment in 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 enable the output of 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 labour more than fifty years ago.

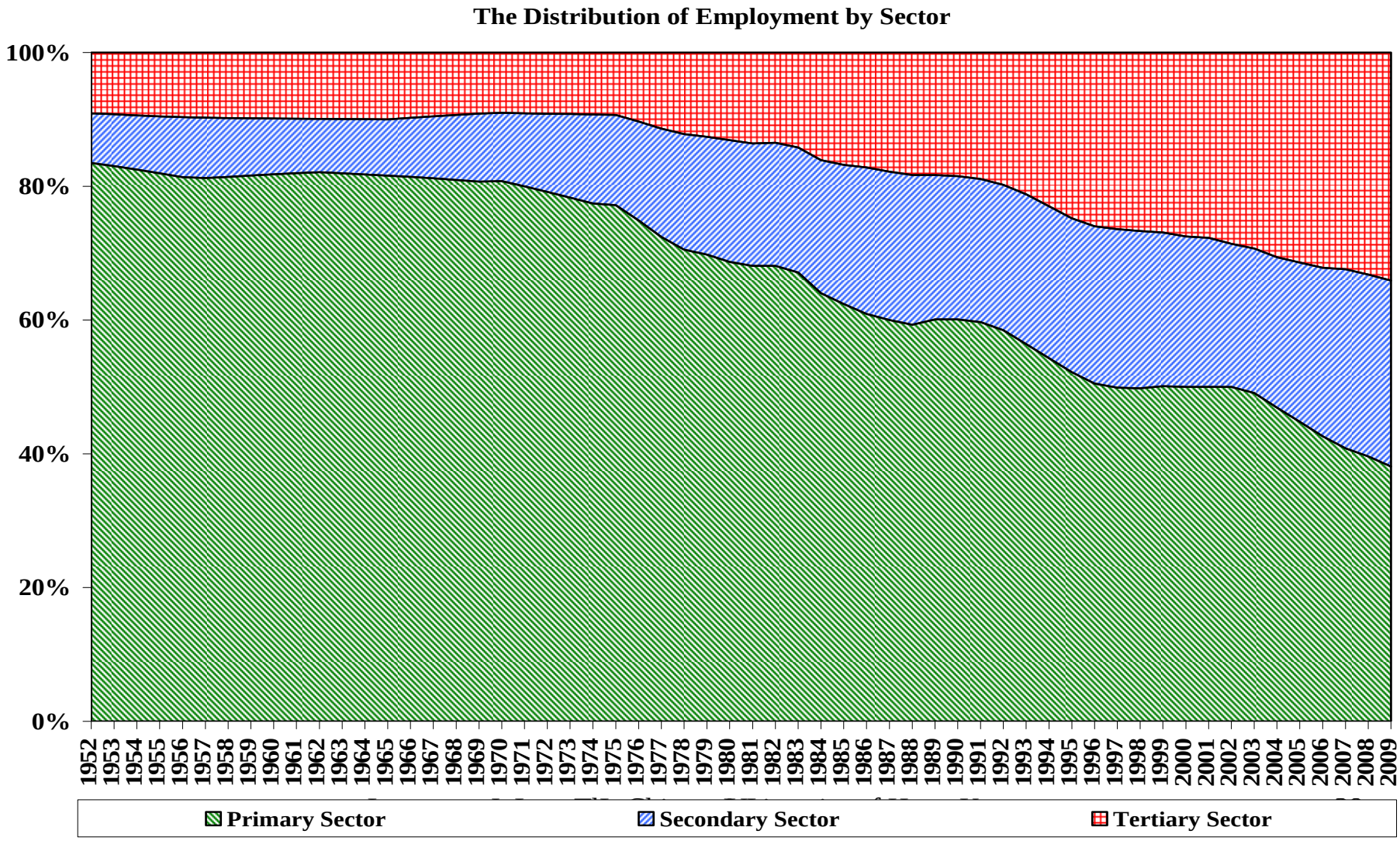
The Economic Fundamentals

- The distribution of Chinese GDP by originating sectors in 2009 was approximately: Primary (agriculture), 10.6%; Secondary (manufacturing, mining and construction), 46.8%; and Tertiary (services), 42.6%. (Note that mining is normally included in the primary sector in most other economies.)
- In 2010, the distribution has changed slightly to 10.2%, 46.9% and 43.0%.
- But the bulk of the labour force, more than 40%, is still employed in the primary sector, which in the case of China consists of only agriculture, waiting to be transferred to the other two sectors which have higher productivity.
- As long as the percentage of labour force employed in the primary sector significantly 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 Chinese Employment by Sector Since 1952



The Economic Fundamentals

- 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 percentage point 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 no more than 5% of Chinese GDP.
- China will therefore continue to have surplus labour for another two or 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.

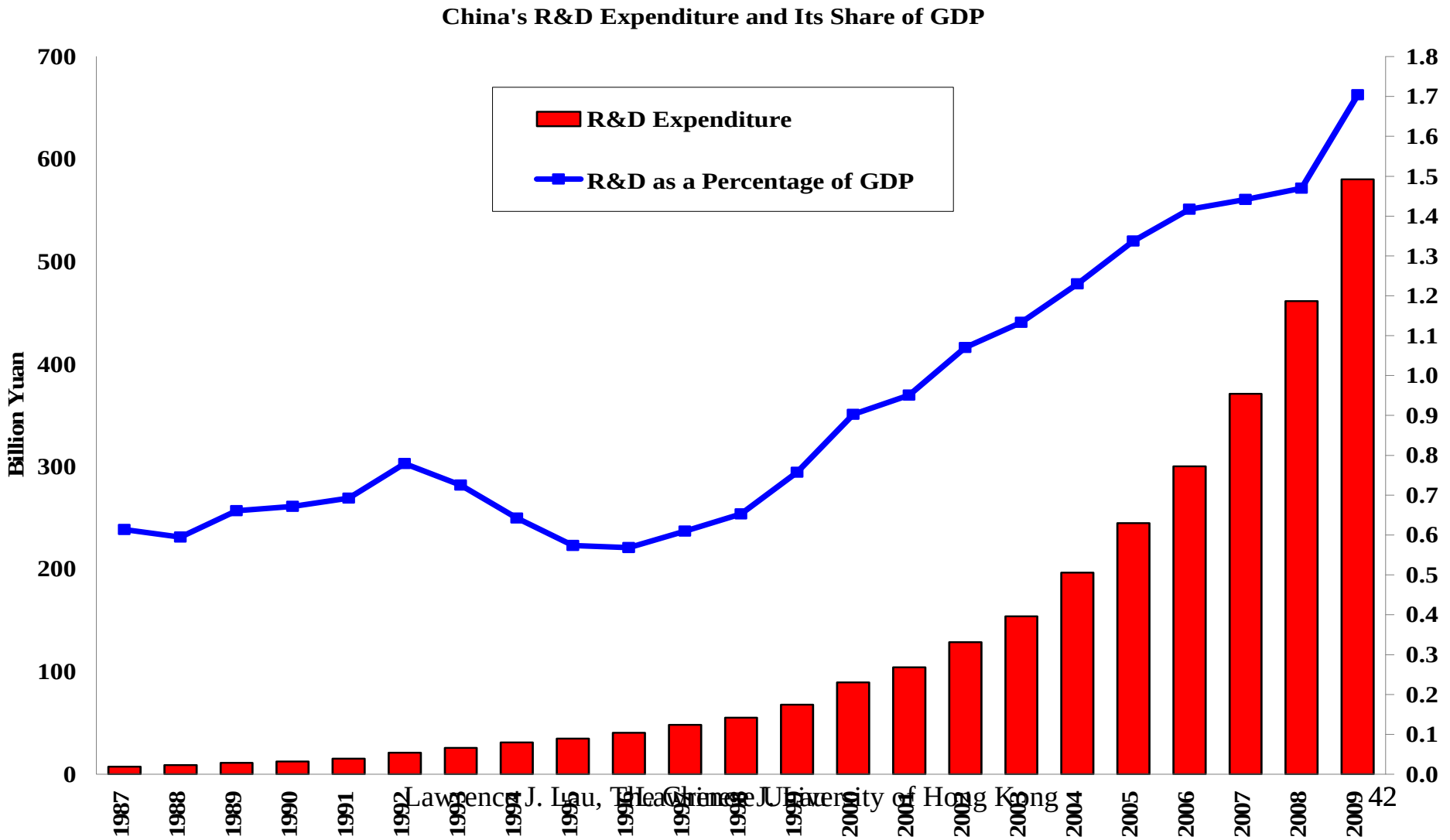
The Economic Fundamentals

- 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.

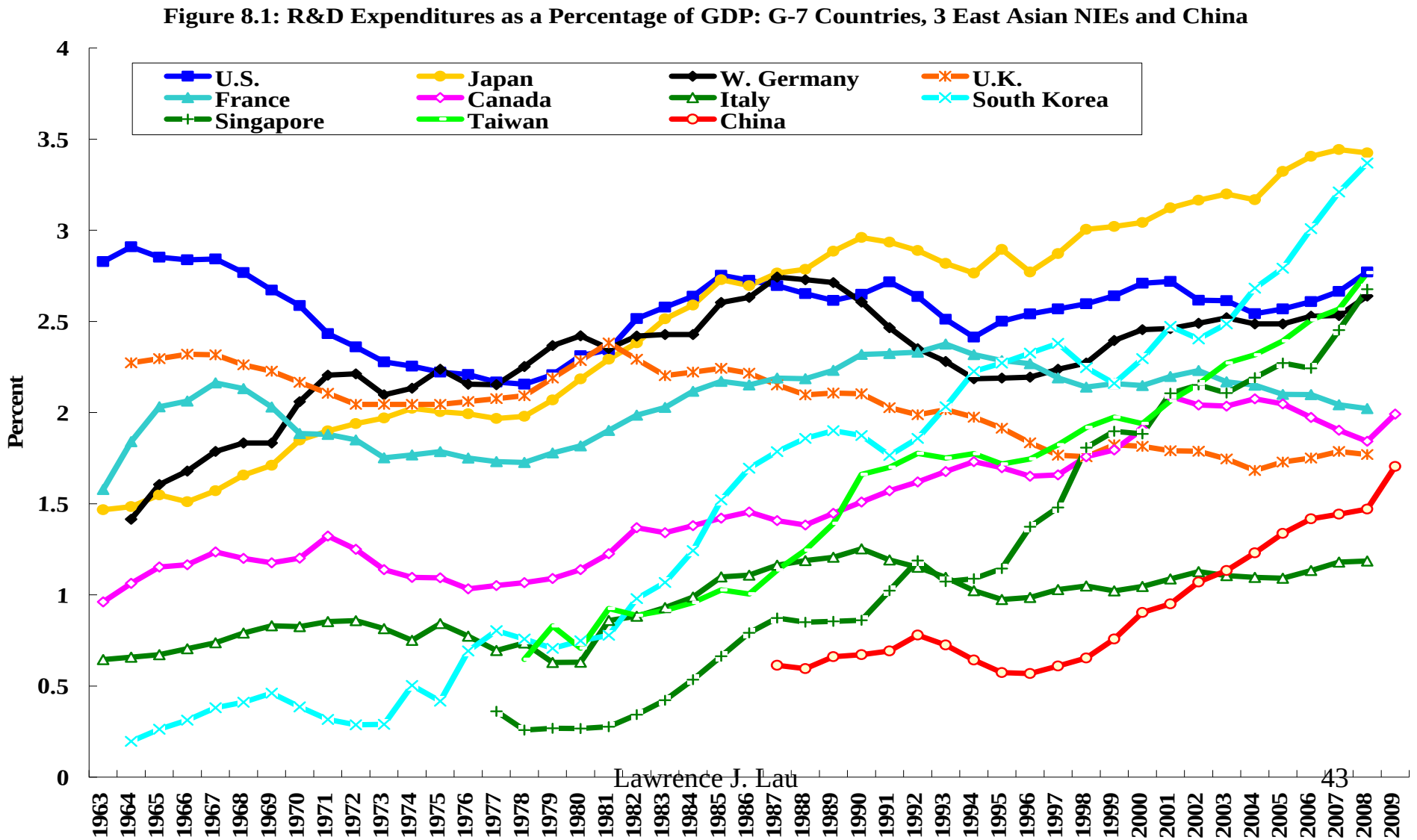
The Economic Fundamentals

- 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--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 below the historical average for the U.S.)
- By comparison, both 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



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

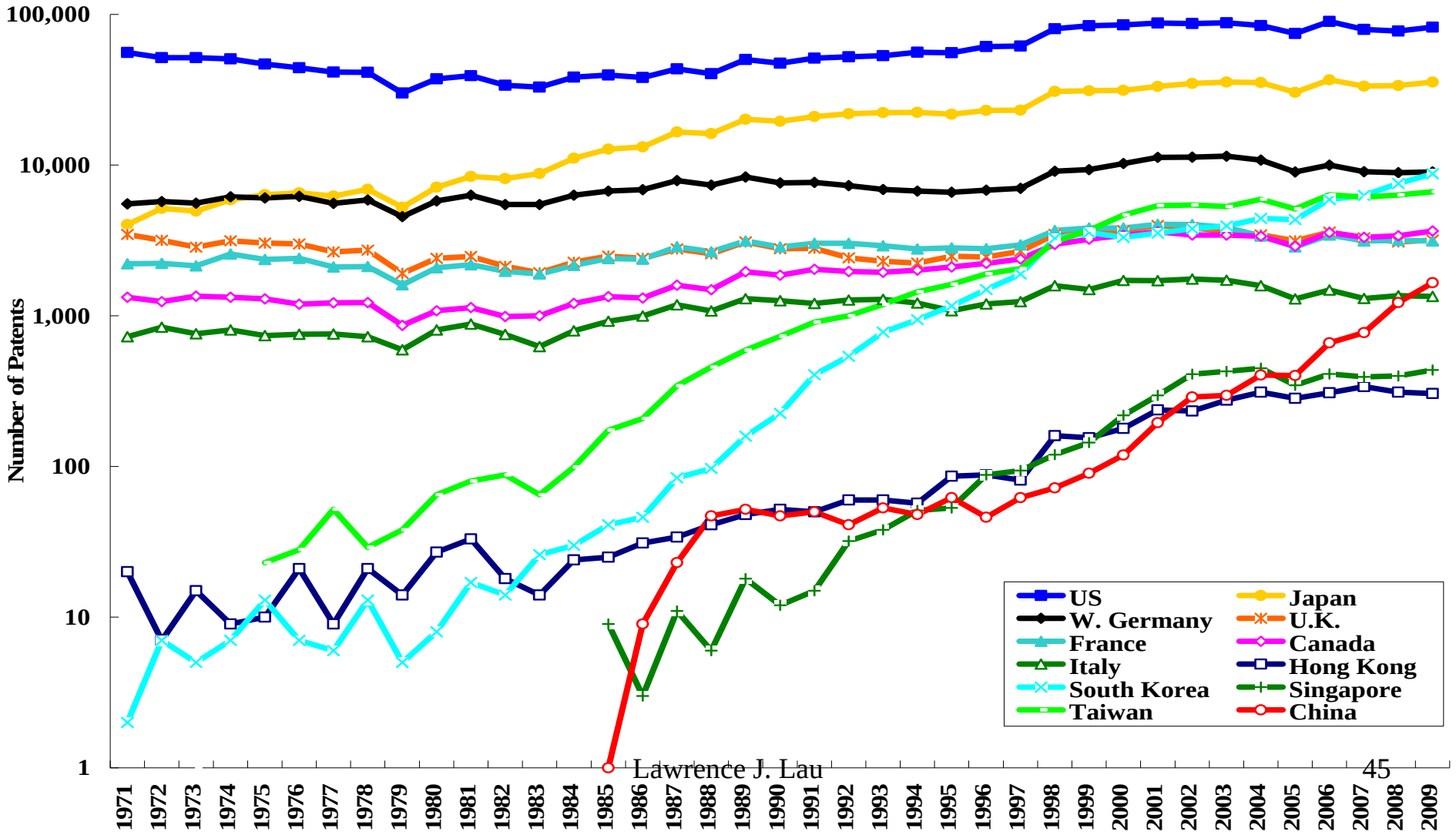


The Economic Fundamentals

- One indicator of the potential for technical progress (national innovative capacity) is the number of patents created each year. In the following chart, the number of patents granted in the United States each year to the nationals of different countries, including the U.S. itself, over time is presented. The U.S. is the undisputed champion over the past forty years, with close to 100,000 patents granted each year, followed by Japan. (Since these 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 should be 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 7,000 patents a year each.

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

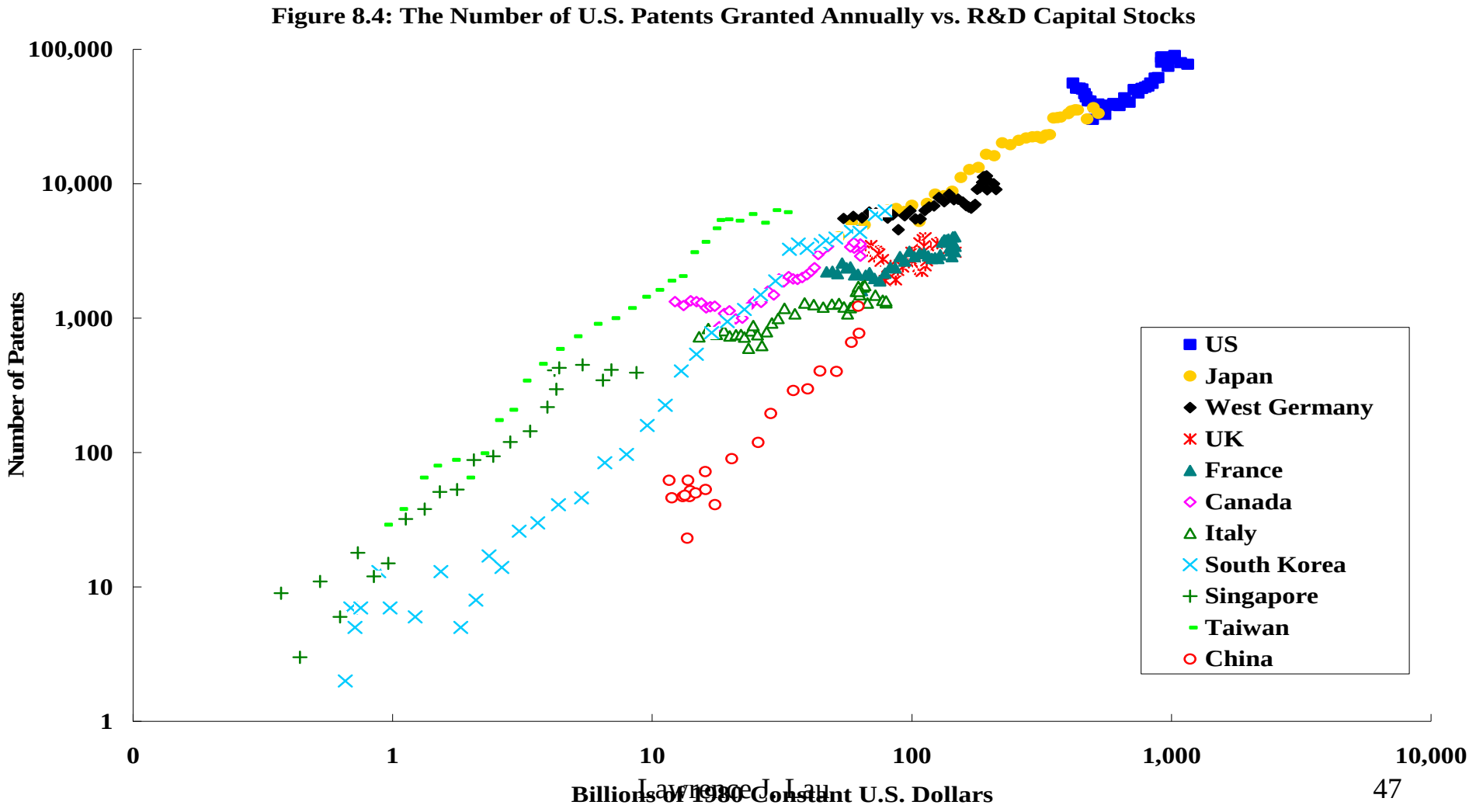
Figure 8.3: Patents Granted Annually in the United States: G7 Countries, 4 East Asian NIEs and China



The Economic Fundamentals

- The stock of R&D capital, defined as the cumulative past 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 the stock of R&D capital.

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



The Economic Fundamentals

- The huge potential domestic market of 1.34 billion consumers greatly enhances the productivity of intangible capital (e.g., R&D capital, goodwill). The fixed research and development costs of a new product or process can be easily amortised over a large market. The benefits of investment in goodwill, e.g., brand-building, are also much greater in a large market.
- The huge potential domestic market also enables active Chinese participation in the setting of product and technology standards and sharing the benefits of such standard-setting.
- Brand-building is a pre-requisite for Chinese enterprises to re-orient themselves to take advantage of the huge domestic market. It is true that brand-building requires resources, but it also enables the owners of brand names to have much more pricing power and higher profit margins than enterprises that do only OEM (original equipment manufacturing) business.

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).
- 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 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"

- 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.

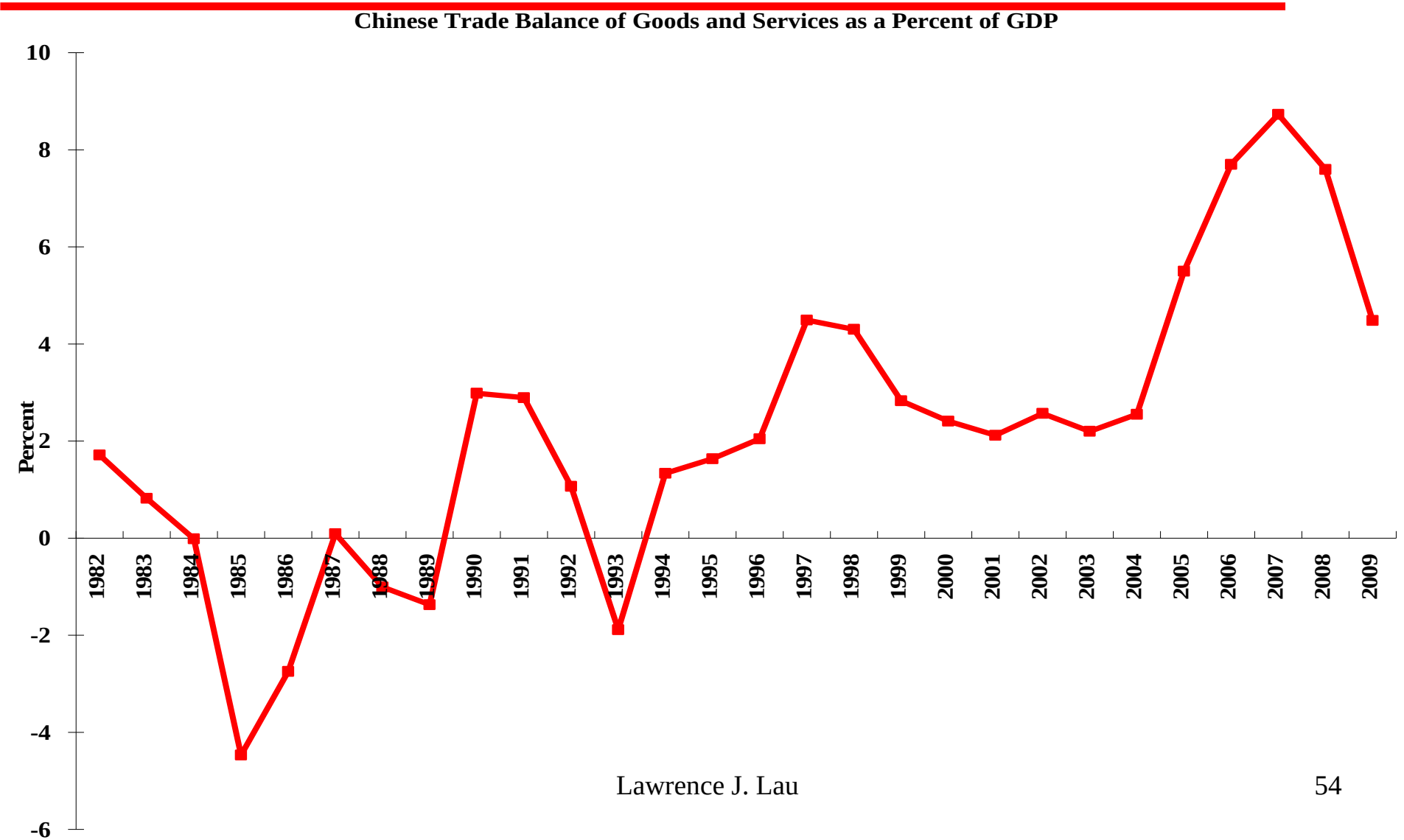
The Relative Unimportance of International Trade

- 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 almost 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.

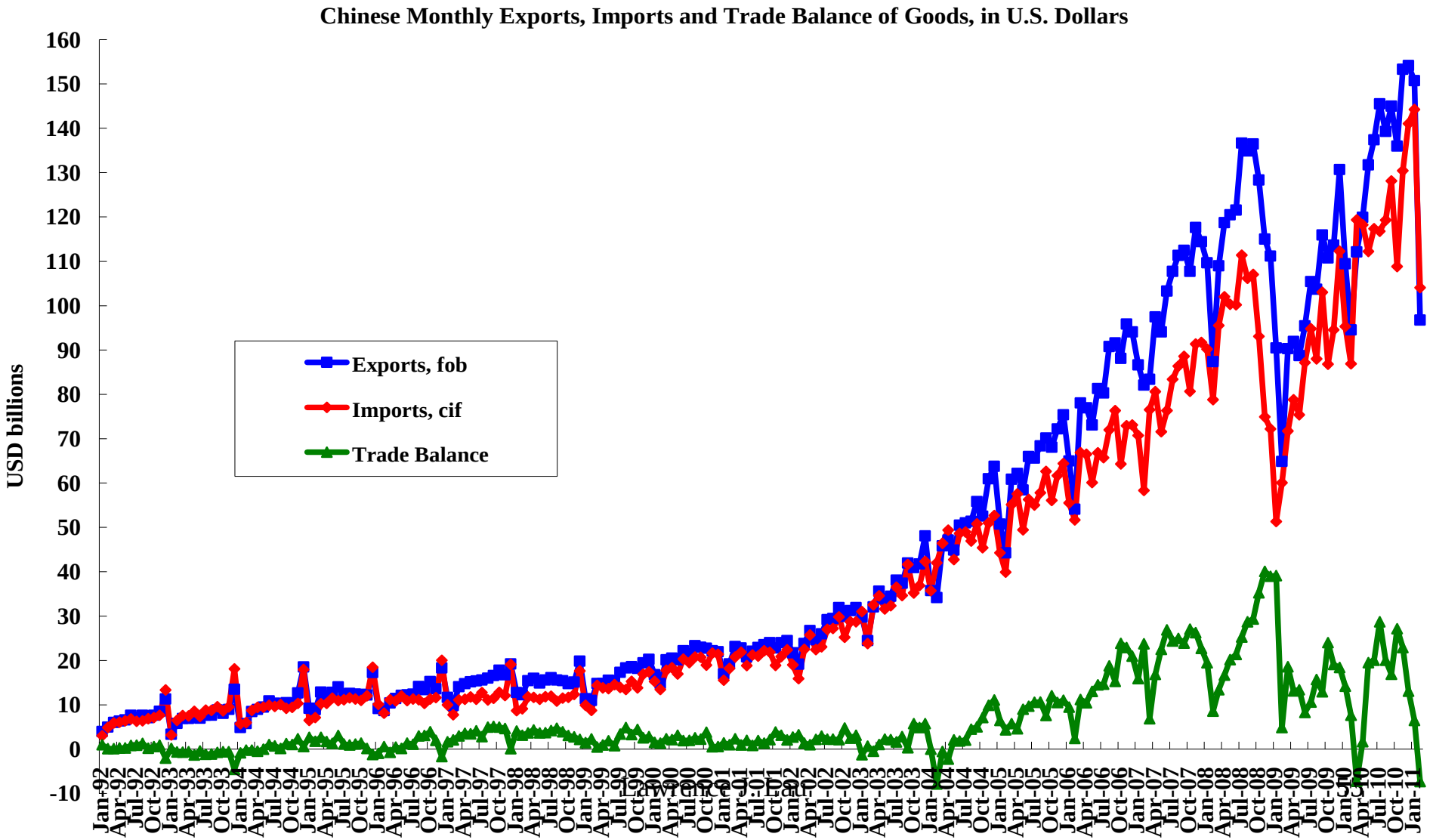
The Relative Unimportance of International Trade

- 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 around 3 percent. It is expected to continue to decline over the next few years.
- Chinese international trade vis-à-vis the whole world is expected to be essentially balanced in a couple of years, without necessarily any large adjustments in the Yuan/US$ exchange rate.
- One reason that this is possible is the gradual closing of the savings-investment gap in China, as well as the substantial real appreciation of the Yuan versus the U.S.$ that has occurred since mid-2005, to the tune of 25%.

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



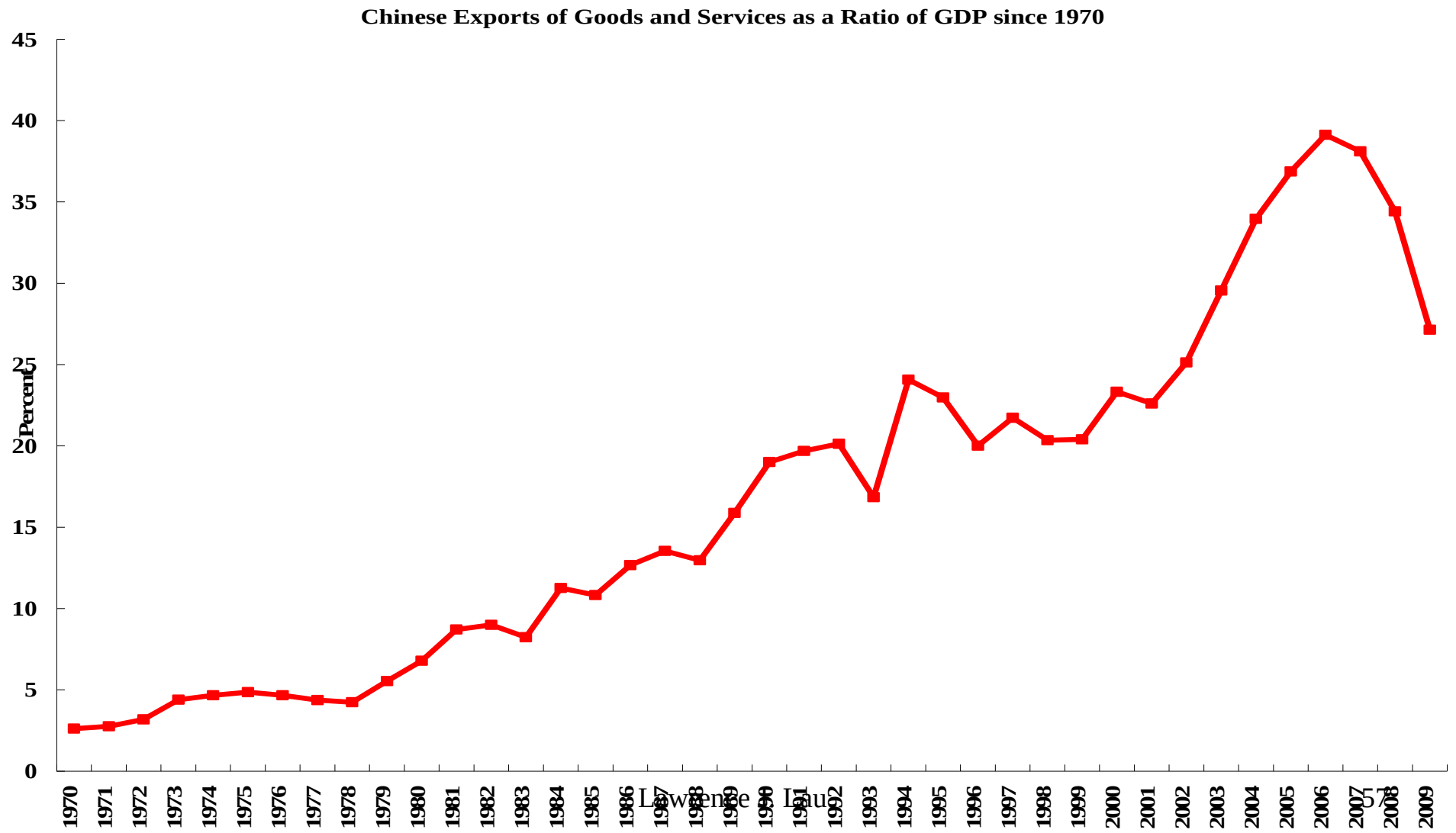
Chinese Monthly Exports, Imports and Trade Balance, US$



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 Percent of GDP, 1970-present



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, which account for more than half of total Chinese exports.

The Relative Unimportance of International Trade

- If we multiply the Exports/GDP ratio of say 25 percent to the domestic value-added content of 30 percent, we obtain 7.5 percent, which is the upper bound for the percentage of Chinese GDP (value-added) generated by exports.
- Now, 7.5 percent of GDP is a large number, and no economy can afford to lose 7.5 percent of its GDP overnight. However, if 7.5 percent of GDP does not grow, or even declines by 25 percent, as long as the other 92.5 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

- 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. Such a policy shift is apparent in the Twelfth Five-Year Plan.
- 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 Capital

- Except for the initial decade after China adopted the reform and opening strategy in 1978, China has not had to rely on foreign loans to any significant extent. Instead, China is today a very large net creditor to the rest-of-the-World.
- Foreign direct investment (FDI) was important in the 1980s and early 1990s. By now it is no longer important quantitatively, accounting for less than 10% of aggregate domestic Chinese investment. FDI is still helpful and welcomed to the extent that it brings in technology, markets, intangible capital (e.g., brand names), business models, but money alone is not enough for foreign direct investment to be successful in China today.

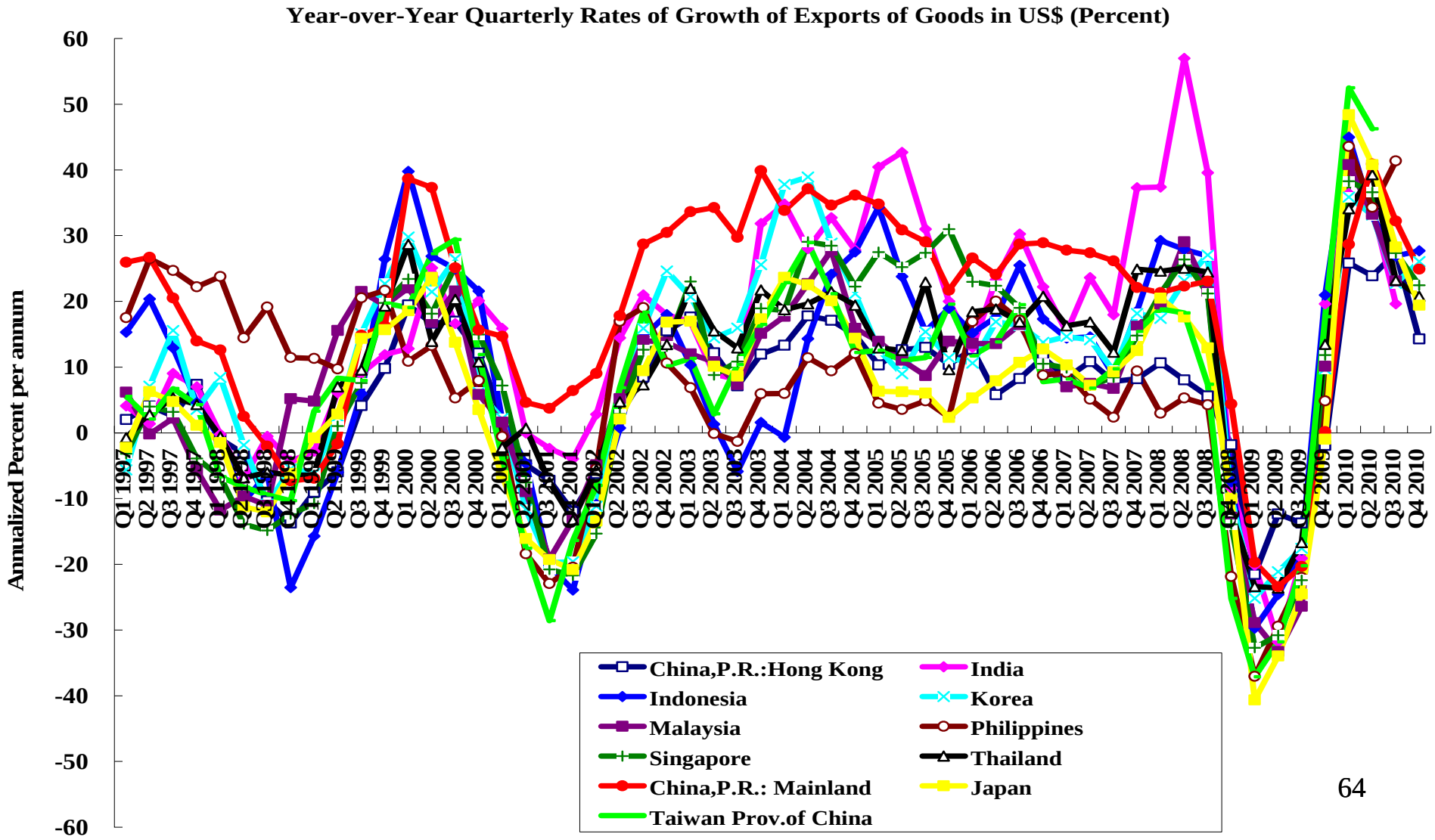
The Relative Unimportance of International Capital

- Foreign portfolio investment (FPI) has played a relatively minor role in the Chinese economy. China does not really need more net inflows of foreign capital at the present time. The investment by foreign institutions in the initial public offerings (IPOs) of Chinese state-owned enterprises is not so much for the money but for the "certification" effect.
- Thus, fluctuations in FDI and FPI have had only very marginal impacts on the real rates of growth of the Chinese economy.

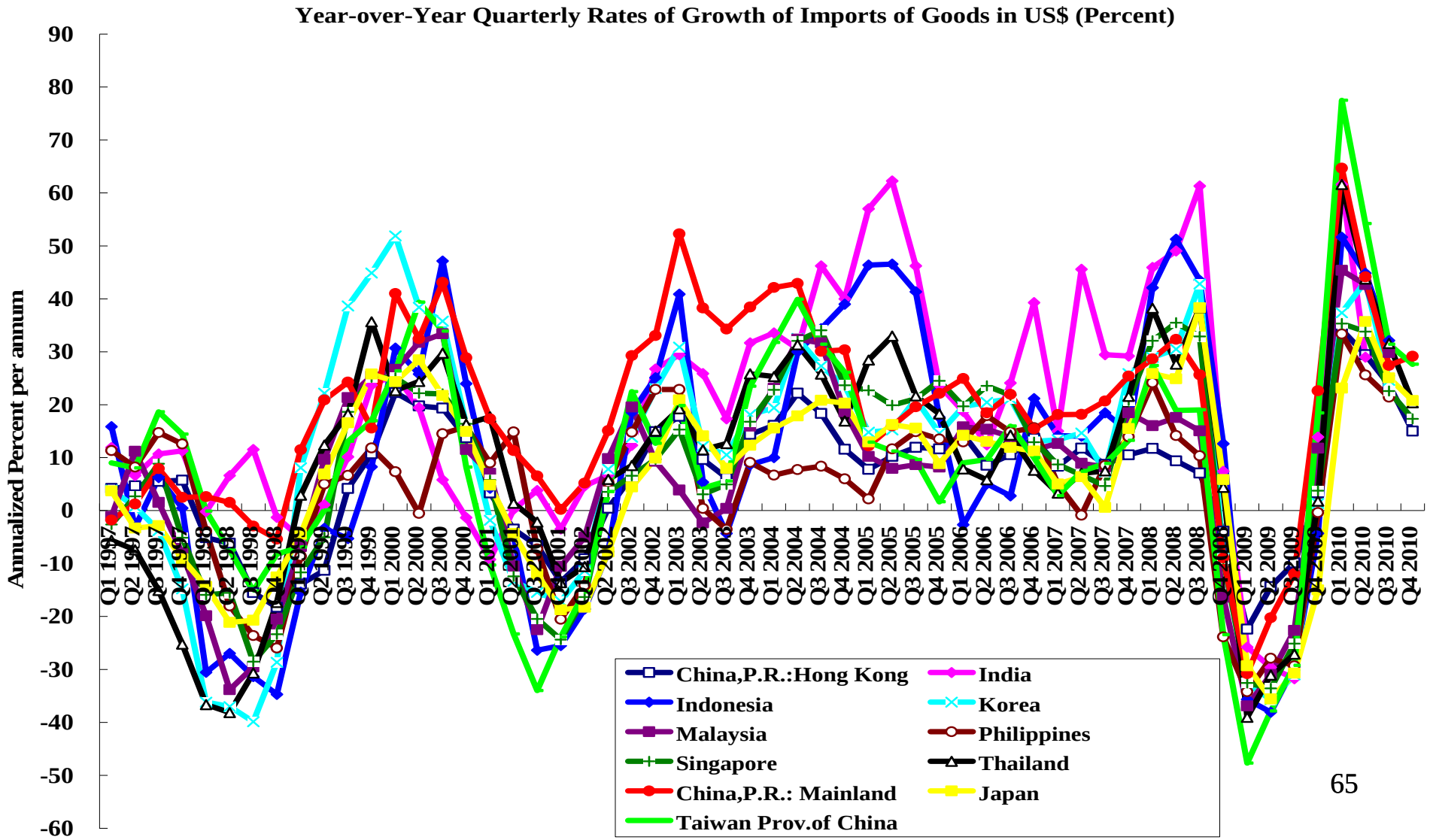
The Relative Unimportance of International Trade

- An important implication of the relatively low export dependence of Chinese GDP is that the rate of growth of Chinese real GDP is relatively stable, unlike the other East Asian economies, 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 exports, imports and real GDP of East Asian economies).
- In addition, China is a large, continental economy like the United States that is relatively self-sufficient and is therefore relatively insulated from disturbances in the rest of the World.

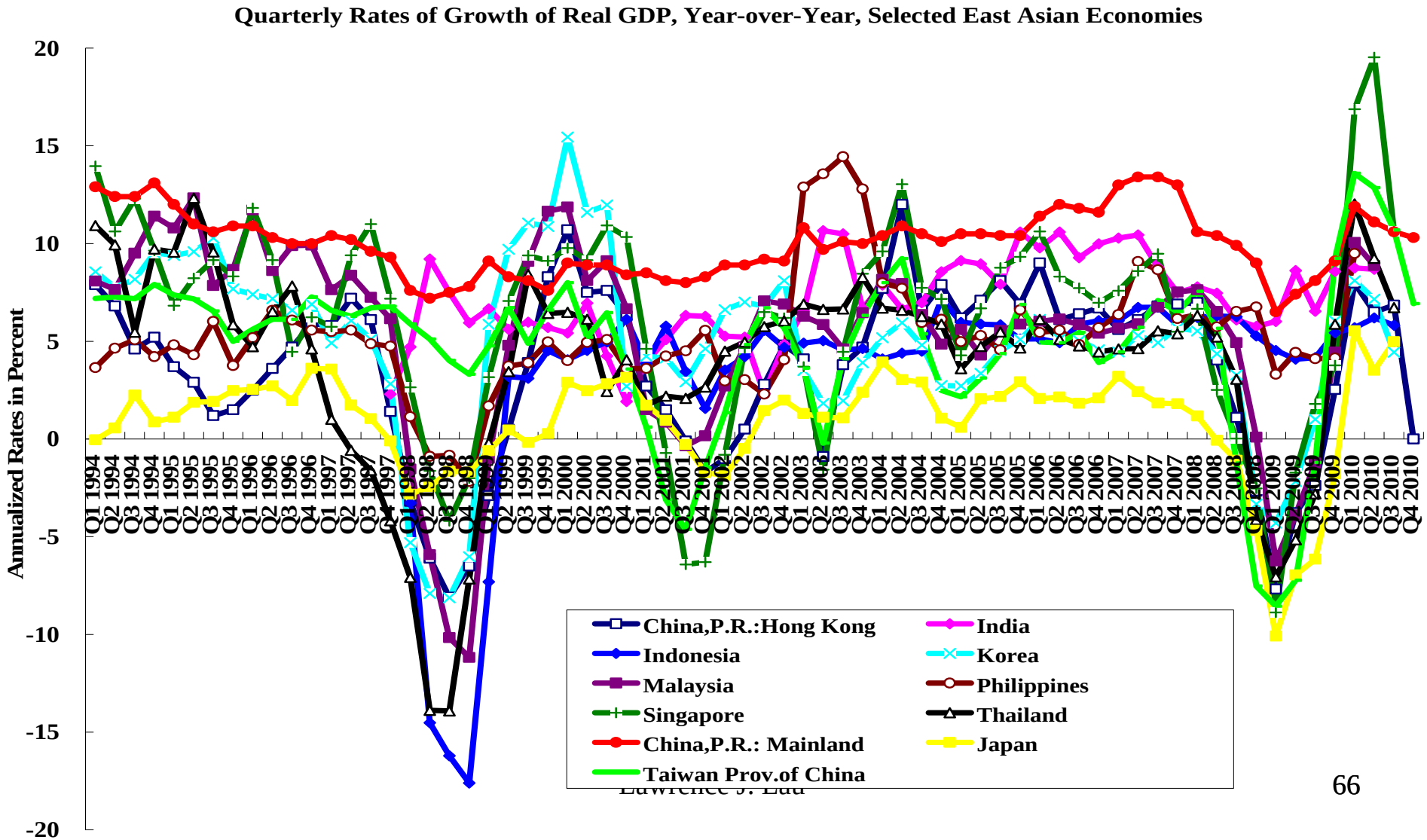
Quarterly Rates of Growth of Exports of Goods: Selected East Asian Economies



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



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



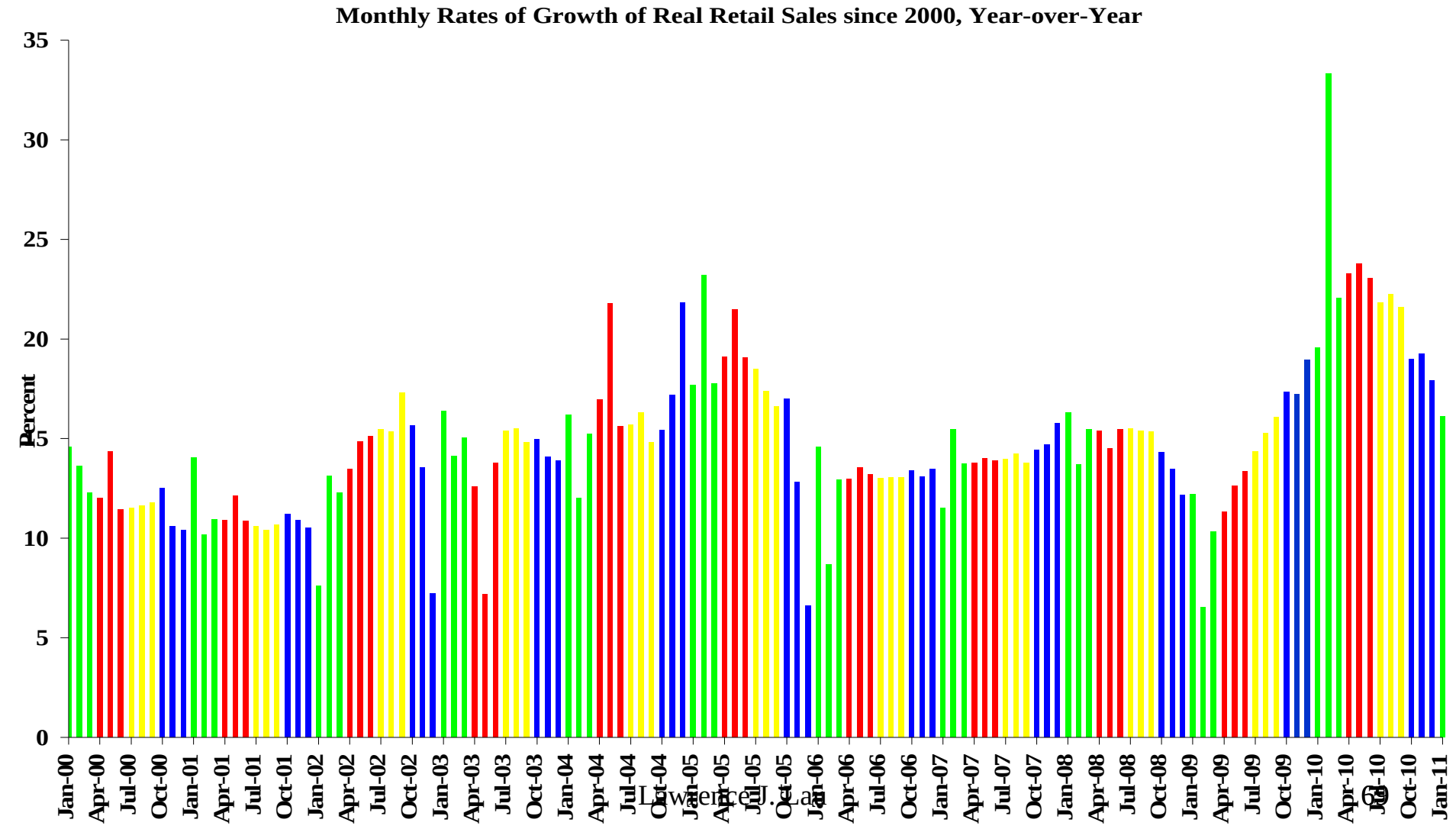
The Relative Unimportance of International Trade

- 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 have been and still are mired in economic recession.

Sources of Sustainable Growth of Aggregate Demand

- Chinese household consumption is sometimes 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.

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



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% (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 in the foreseeable future.

Sources of Sustainable Growth of Aggregate Demand

- 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 the growth of internal demand and not on exports, and, as analysed above, not on the growth of household consumption per se in the absence of a significant sustained increase in the share of household income in GDP.
- Household income can be increased through wage increases but also through increases in the cash dividend payouts from state-owned enterprises. Recently, the Chinese Government has called for an increased cash payouts from state-owned enterprises.

Sources of Sustainable Growth of Aggregate Demand

- Increased cash payouts have many advantages in addition to increasing household income and thereby household consumption.
- They increase government revenue, which can in turn be used to increase public consumption—the provision of public services such as education and health care.
- An increased cash payout reduces the excess retained earnings so that the state-owned enterprise cannot make investments at will—it will have to apply for loans and hence their investment projects will have to be justified to and evaluated by the lenders.
- Increased cash payouts may make long-term holding of shares more attractive and hence indirectly improve corporate governance (only long-term shareholders pay attention to corporate governance).
- An increased cash payout provides a support level for the price of the shares of a publicly listed enterprise.
- The ability to pay cash dividends provides a real verification of the true profitability of an enterprise.

Sources of Sustainable Growth of Aggregate Demand

- The possible areas that have the potential of generating sustainable increases in aggregate demand, in addition to household consumption and public infrastructural investment (e.g., high speed railroads, power plants, etc.), include:
- (1) Owner-occupied residential housing;
- (2) Education and health care and the application 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.
- In order to promote owner-occupied residential housing for all, one has to assure that there is both the supply and the demand. Supply can be promoted by making sure that land is available at an affordable cost and is used efficiently. Demand can be promoted by making available long-term (say 35 years), fixed interest-rate mortgages.

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, 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.

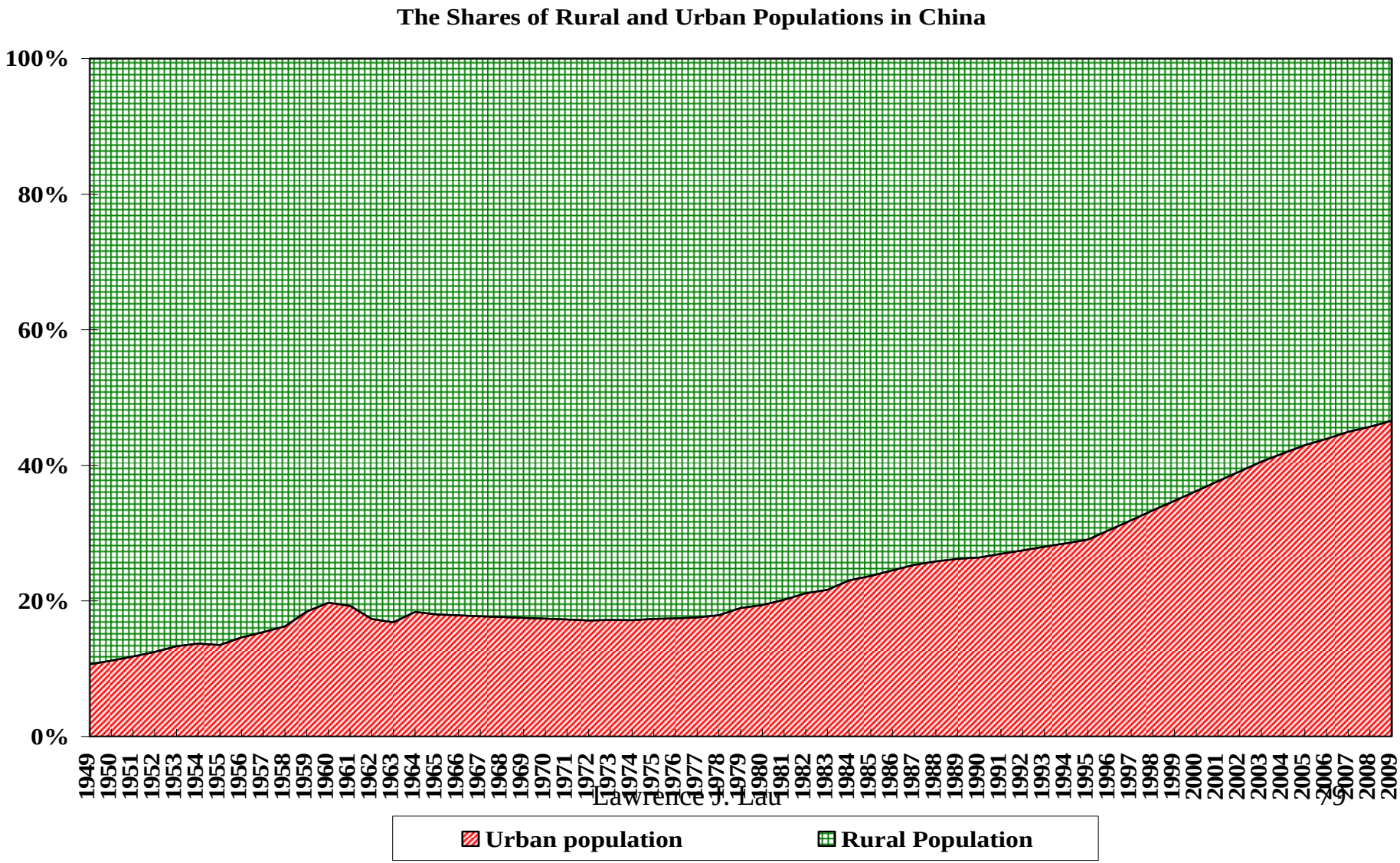
The Education and Health Care Sectors

- 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 on the internet, 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.
- This will also create a great deal of domestic demand for the high-technology sector which has faced a sharp and possibly long-term decline in its export markets.

Urbanisation and Mass-Transit Systems

- 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 2010, the share of rural population has fallen to 51%. Still almost half of Chinese population lives in rural areas. It is expected to continue to fall during the period of the Twelfth Five-Year Plan, 2011-2015, by 4 percentage points, to 47%.
- 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



Urbanisation and Mass-Transit Systems

- 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 labuor 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.

Urbanisation and Mass-Transit Systems

- 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 over air travel, 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, which neither China nor the World can afford from the point of view of energy consumption and carbon emission.

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. (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 Eleventh Five-Year Plan for National Economic and Social Development

- The 11th Five-Year Plan for National Economic and Social Development officially ended on 31 December 2010.
- Most of the targets were achieved or exceeded, including the reduction in energy consumption per unit GDP by 20 percent compared to year end 2005.
- The 11th Five-Year Plan provided for a target rate of growth of real GDP of 7.5% per annum between 2005 and 2010. The actual rate of growth achieved was 11.2% per annum.
- The only other major target not achieved was the percentage of GDP expended on R&D—the target was 2% and the actual achieved was 1.8%.

The Twelfth Five-Year Plan for National Economic and Social Development

- The Twelfth Five-Year Plan for National Economic and Social Development was approved by the National People's Congress in mid-March of this year. It is mostly an indicative plan rather than a mandatory plan.
- The most remarkable feature was the lowering of the target growth rate from 7.5% per annum in the 11th Five-Year Plan to 7% per annum. It is almost certain that this target will be exceeded, just as the target was exceeded in the last Five-Year Plan. However, what the reduction in the target growth rate signals is the determination of the Chinese Government to de-emphasise quantitative economic growth and to focus on the quality of the economic growth.

The Twelfth Five-Year Plan for National Economic and Social Development

- The Plan provides for increased expenditures for education and healthcare, especially in the rural regions, environmental preservation and protection, and air and water pollution control. It also has mandatory targets for improvement in energy efficiency and reduction in carbon emission.
- It also provides for improvements in the income distribution through taxation, transfer payments and targeted government expenditures on education and health care.

The Twelfth Five-Year Plan for National Economic and Social Development

- One principal theme of the Twelfth Five-Year Plan is the transformation in the mode of Chinese economic development—firstly, from export-oriented to domestic demand-oriented and secondly, from input-driven to technical progress-driven or innovation-driven.
- The Plan also aims at essentially balanced international trade, and I believe it is achievable.

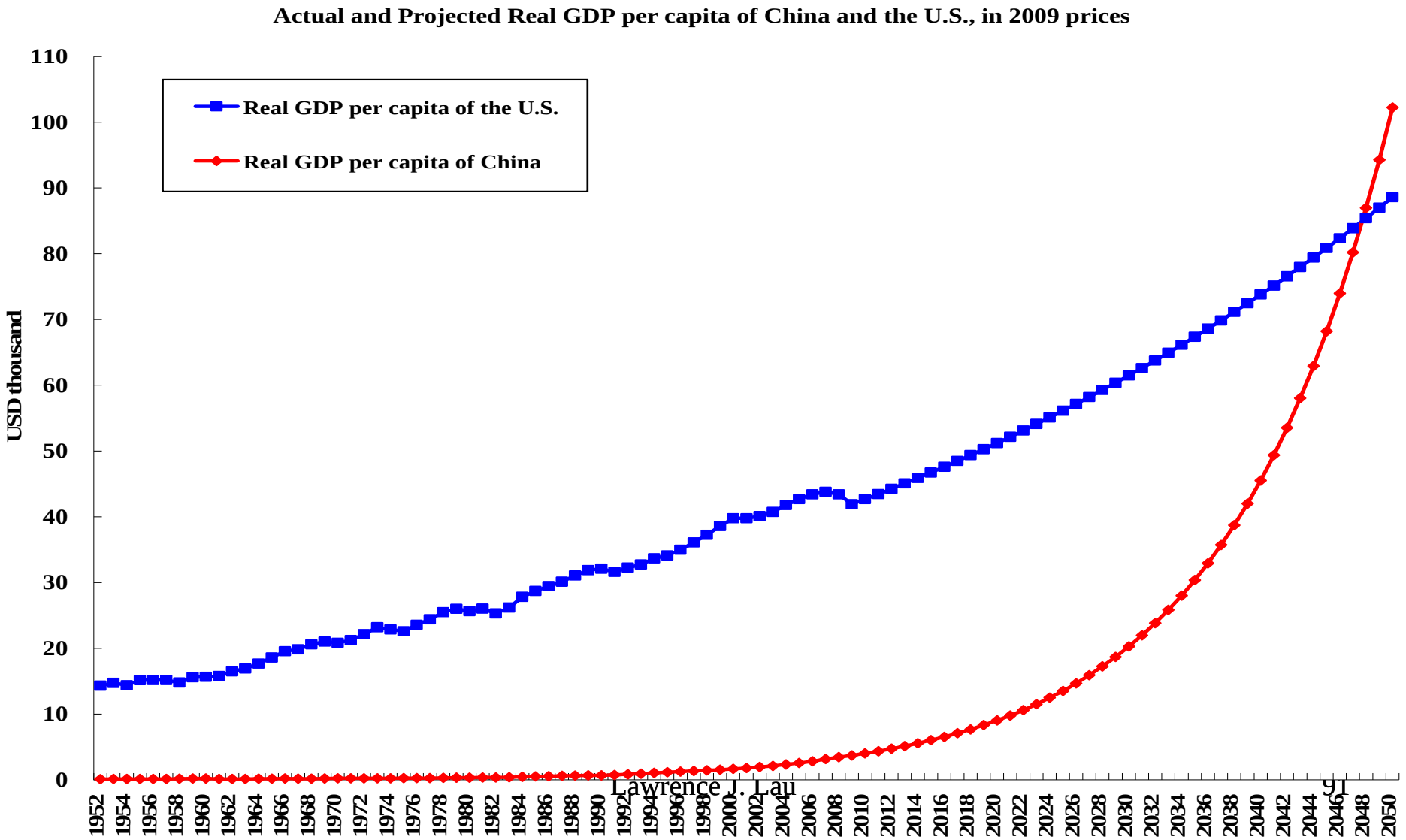
Projections of the Future

- If current trends continue, 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 real GDP will approach the level of U.S. real GDP in approximately 15 years' time--around 2025, at which time Chinese real GDP will exceed US$20 trillion (in 2010 prices) and Chinese real GDP per capita will exceed US$ 14,000.
- By 2025, China and the U.S. will each account for approximately 15% of World GDP.

Projections of the Future

- It will take another 20-25 years, between 2045 and 2050, before China reaches the same level of real GDP per capita as the United States, at US$90,000 in 2010 prices (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).
- By that time, Chinese GDP will be approximately 6 times the U.S. GDP, 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 GDP per Capita's



Concluding Remarks

- The long-term sustainable sources of Chinese aggregate demand will be internal: household and public consumption, investment in infrastructure, including high-speed inter-urban trains, owner-occupied residential housing, investment in education and health care, urbanisation (building new cities), urban mass-transit systems, environmental protection and preservation, energy conservation and renewable energy, and the green economy.
- Consumption will rise, as GDP per capita and wage rate rise and the social safety net is gradually perfected. But the national savings rate will remain high for a long time.

Concluding Remarks

- 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

- For 2011, the short-term economic targets of the Chinese Government are to achieve a real rate of growth of 8 percent and a rate of inflation of 4 percent. I am confident that both targets are achievable.