

Chinese Economic Growth: A Miracle or a Bubble?

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Outline

- ◆ Introduction
- ◆ The Economic Fundamentals
- ◆ Inherent Economic Inefficiency under Central Planning
- ◆ The Significance of Economic Reform and Opening
- ◆ Reform without Losers
- ◆ Comparison between China and Other East Asian Economies
- ◆ Projections of the Future
- ◆ Concluding Remarks

Introduction

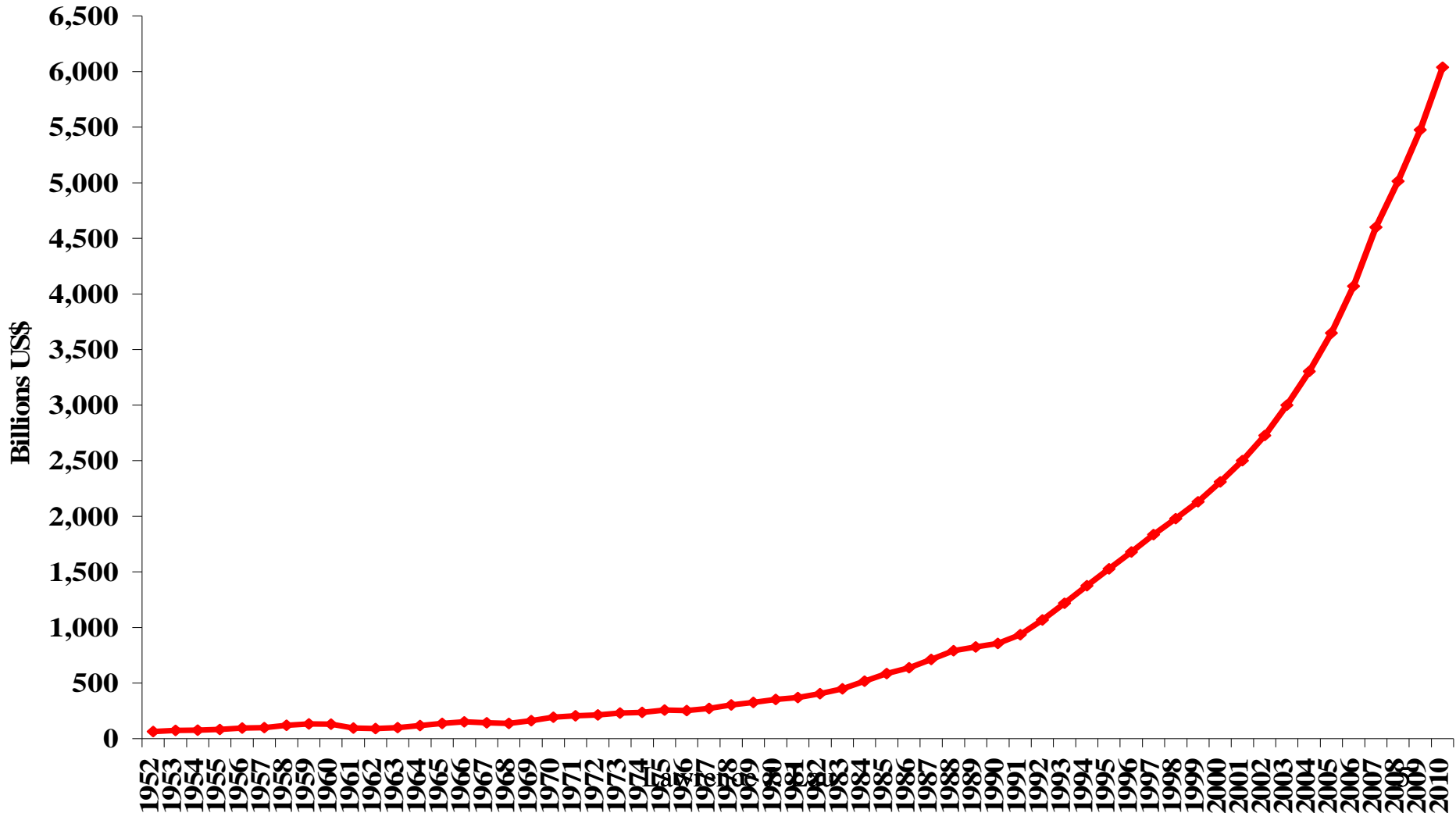
- ◆ China has made tremendous progress in its economic development since it began its economic reform and opened to the World in 1978.
- ◆ China is currently the fastest-growing economy in the World—averaging 9.8% per annum over the past 33 years. It is historically unprecedented for an economy to grow at such a high real rate over such a long period of time. Is this a miracle? Or is it a bubble?
- ◆ China is one of the very few socialist economies that have made a smooth transition from a centrally planned to a market system. It is a model for other transition economies such as Vietnam and potential transition economies such as Cuba, Laos, and North Korea.

Introduction

- ◆ Between 1978 and 2010, Chinese annual 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 United States.
- ◆ By comparison, the U.S. GDP (approximately US\$14.66 trillion in 2010 prices) was 2.4 times the Chinese GDP in 2010.

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

Chinese Real GDP, in 2010 prices

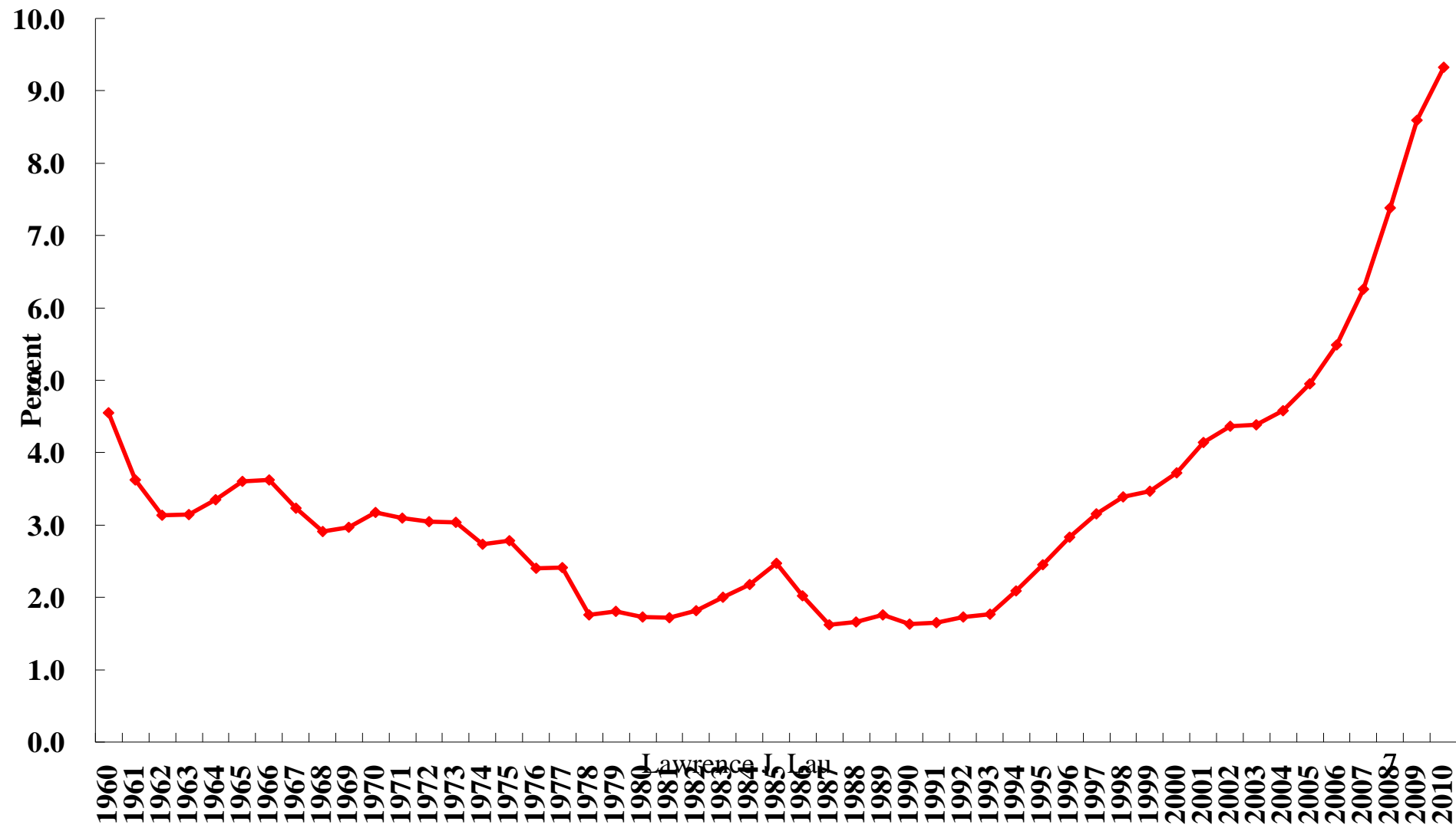


Introduction

- ◆ During this period, China also had to face many challenges and several financial crises, such as the East Asian currency crisis of 1997-1998, the bursting of the internet bubble in 2000, the global financial crisis of 2007-2009 as well as the currently ongoing European sovereign debt crisis. But China was able to survive them all relatively unscathed and maintain a healthy real rate of economic growth.
- ◆ Chinese GDP as a share of World GDP, in current U.S. Dollars, rose from less than 2% in 1978 to 9.3% in 2010.

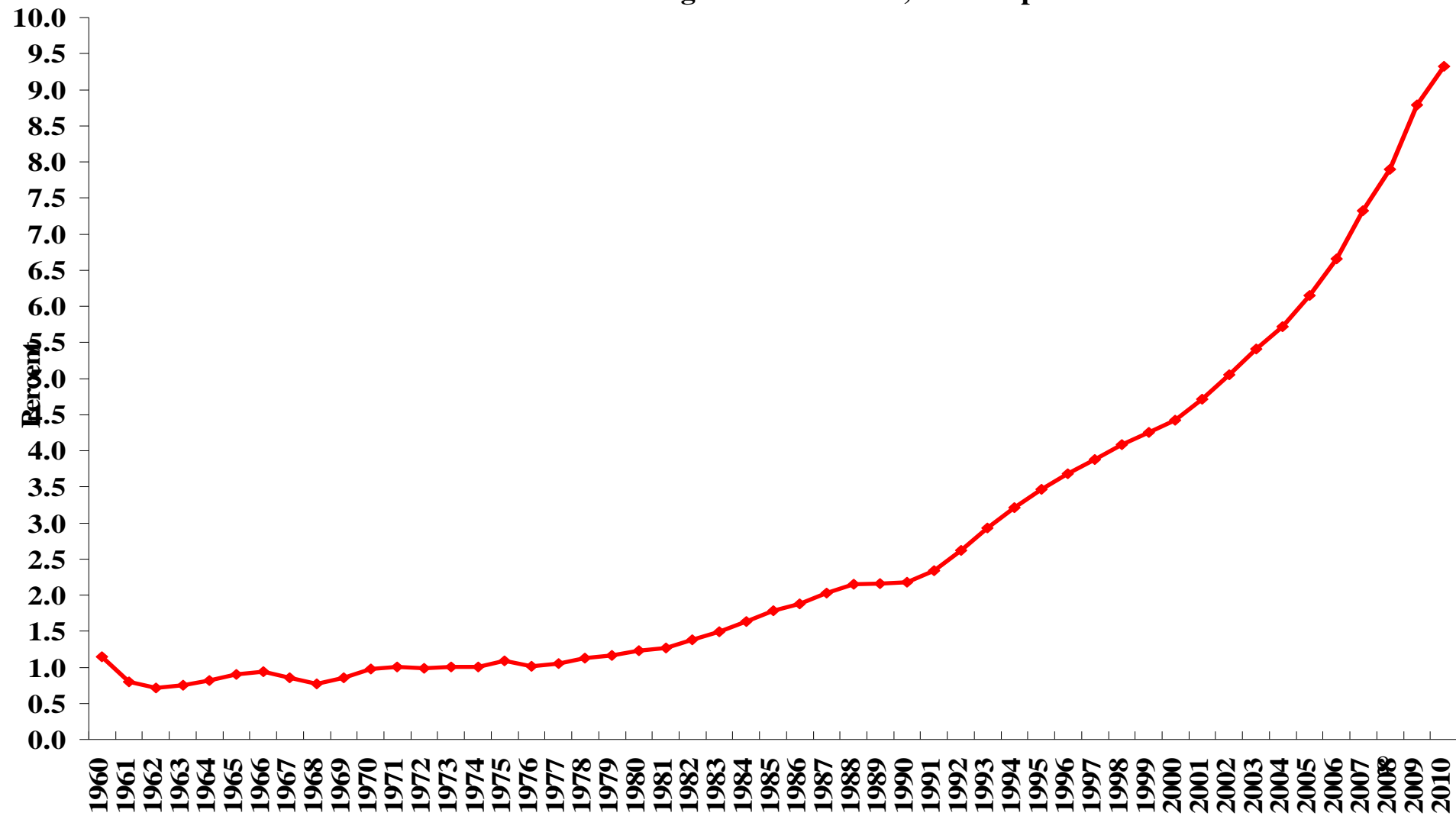
China's GDP as a Percentage of World GDP, 1960-Present, in current US\$

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



China's GDP as a Percentage of World GDP, 1960-Present, in 2010 US\$

China's GDP as a Percentage of World GDP, in 2010 prices



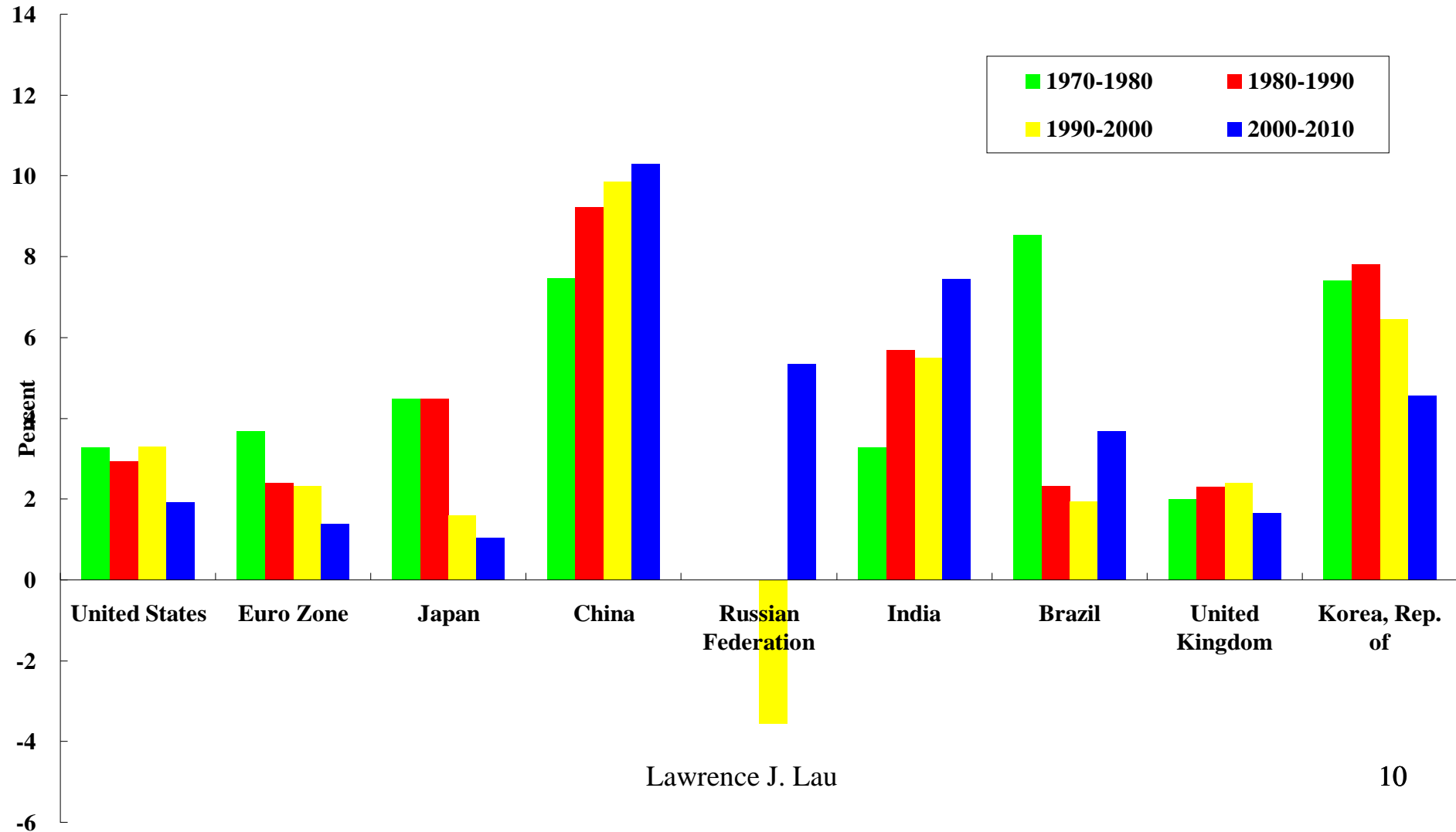
Introduction:

The Differentials in Real Growth Rates

- ◆ On the whole, the BRICS economies as well as the East Asian economies (except Japan) have been growing much faster than the developed economies (U.S., Europe and Japan).
- ◆ Moreover, the rates of growth of the developed economies have been falling significantly over time.
- ◆ China, as well as other East Asian economies except Japan, have been able to continue to grow during the 2007-2009 global financial crisis, lending empirical support to the “Partial De-Coupling Hypothesis,” which says that while East Asia is not immune from the effects of the economic recessions in the United States and Europe, it can nevertheless continue growing, albeit at somewhat lower rates, even with economic contraction in the U.S. and Europe.

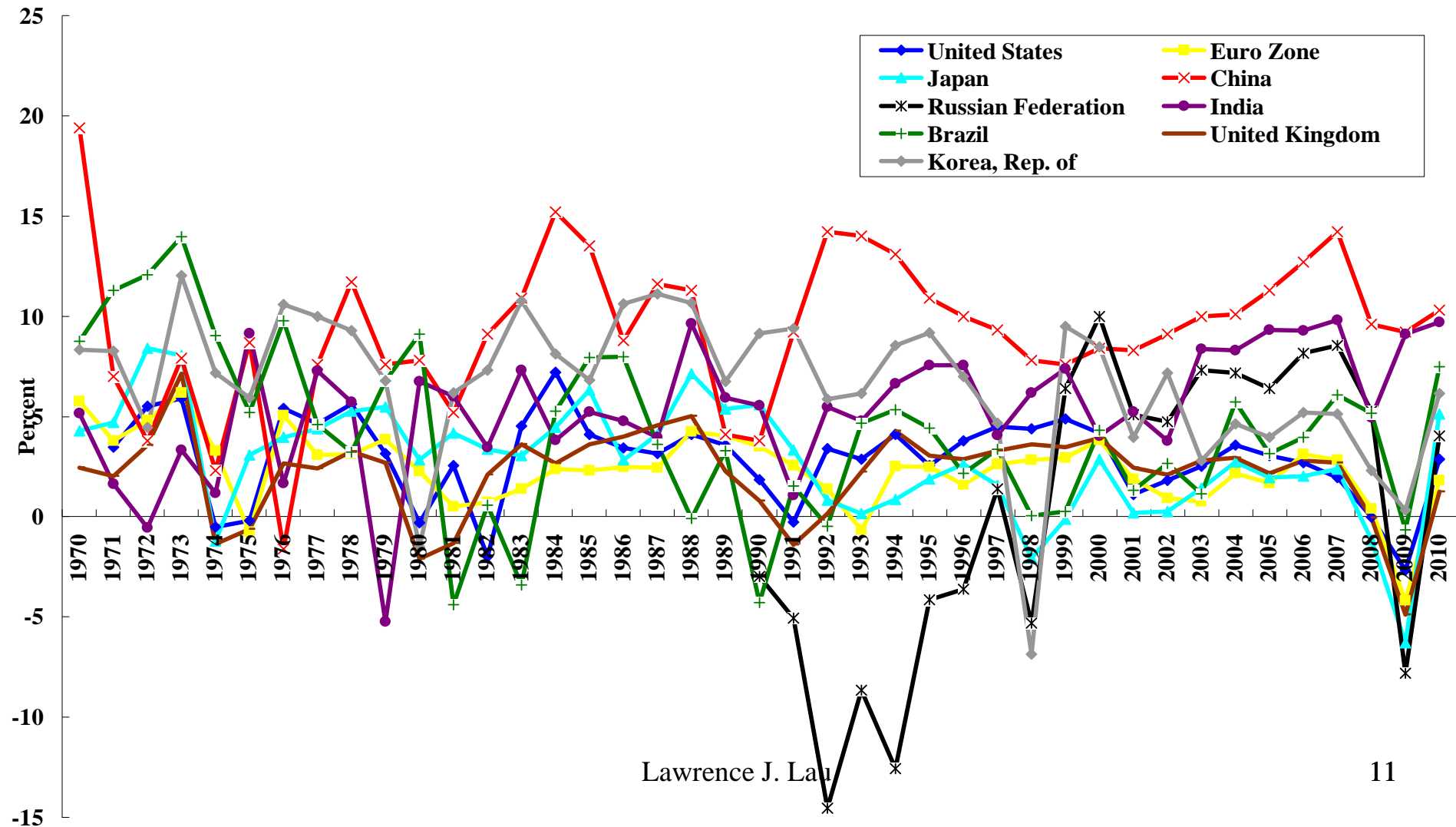
Average Annual Rates of Growth of Real GDP of Selected Economies

Average Annual Rates of Growth of Real GDP of Selected Economies



Annual Rates of Growth of Real GDP of Selected Economies

Annual Rates of Growth of Real GDP of Selected Economies

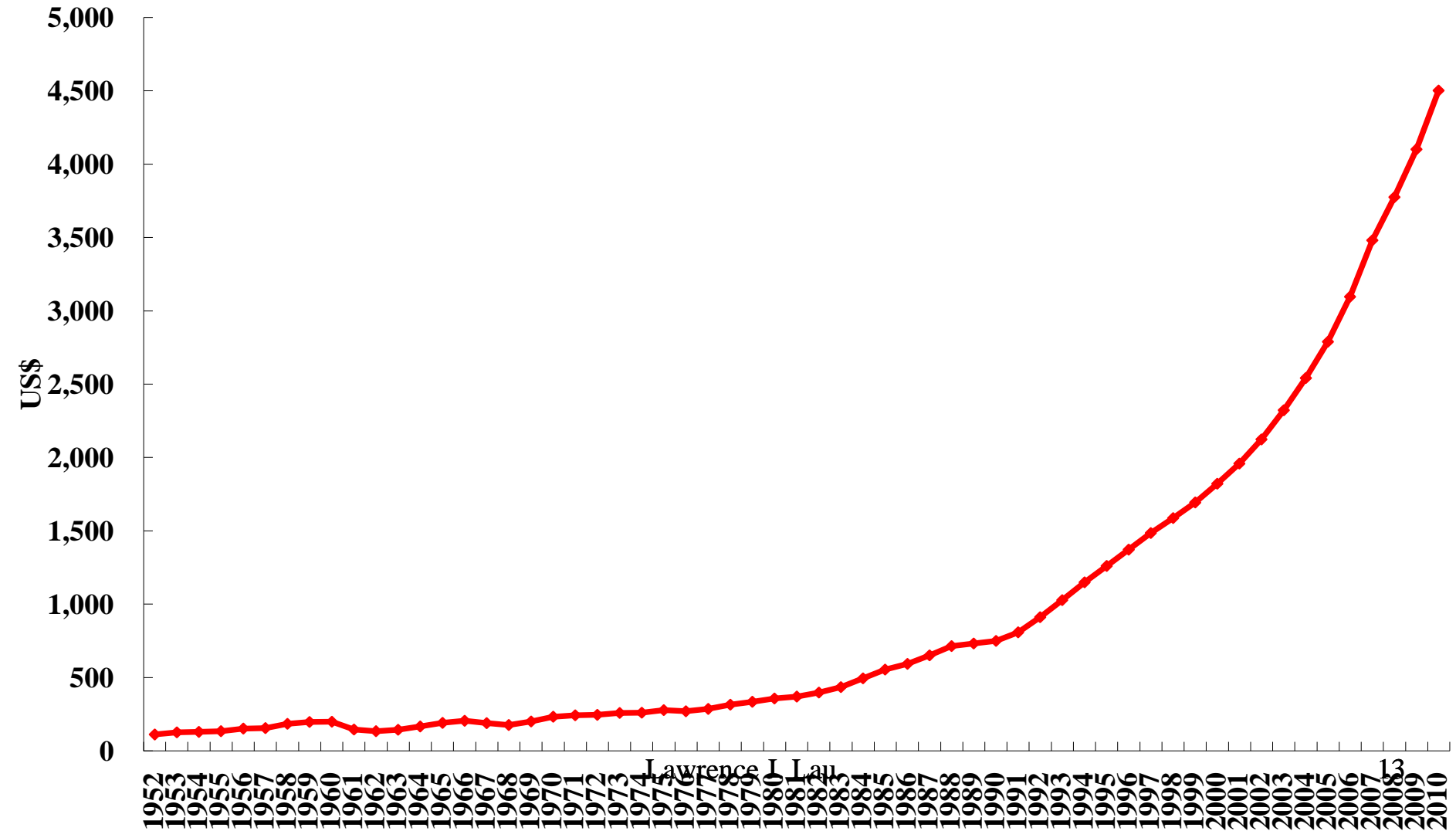


Introduction

- ◆ However, despite the rapid economic growth of China, in terms of real GDP per capita, it 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 (approximately US\$47,274 in 2010 prices) was 10.5 times Chinese GDP per capita in 2010.
- ◆ Chinese GDP per capita ranks below 90th among all economies in the World.

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

Chinese Real GDP per Capita, in 2010 prices



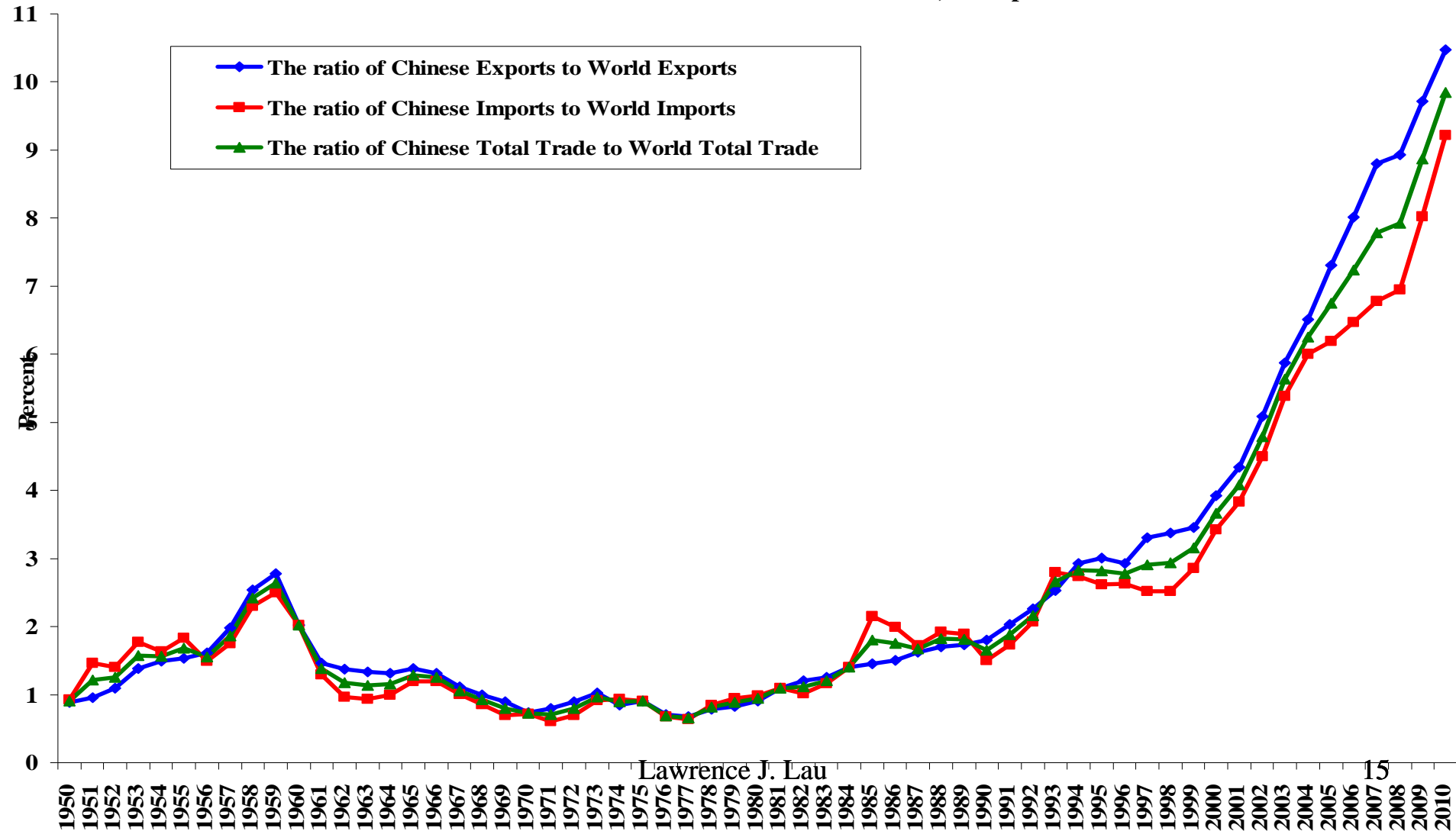
Introduction:

The International Trade of China

- ◆ The emergence of the Chinese economy on the global market was the single most significant new development during the past three decades. Chinese exports and imports have grown rapidly since its implementation of the policy of economic reform and opening in 1978, from less than 1% of World exports and imports in 1978 (and 1960) to approximately 10% of World exports and imports in 2010, amounting to US\$2.9745 trillion.
- ◆ This growth may be attributed in part to the reform of the Chinese exchange rate system in the early 1990s, accompanied by a significant devaluation, and to Chinese accession to the World Trade Organisation in the late 1990s.
- ◆ China has become the second largest trading country in the World, after the United States. China accounts for 35% 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 everyone.

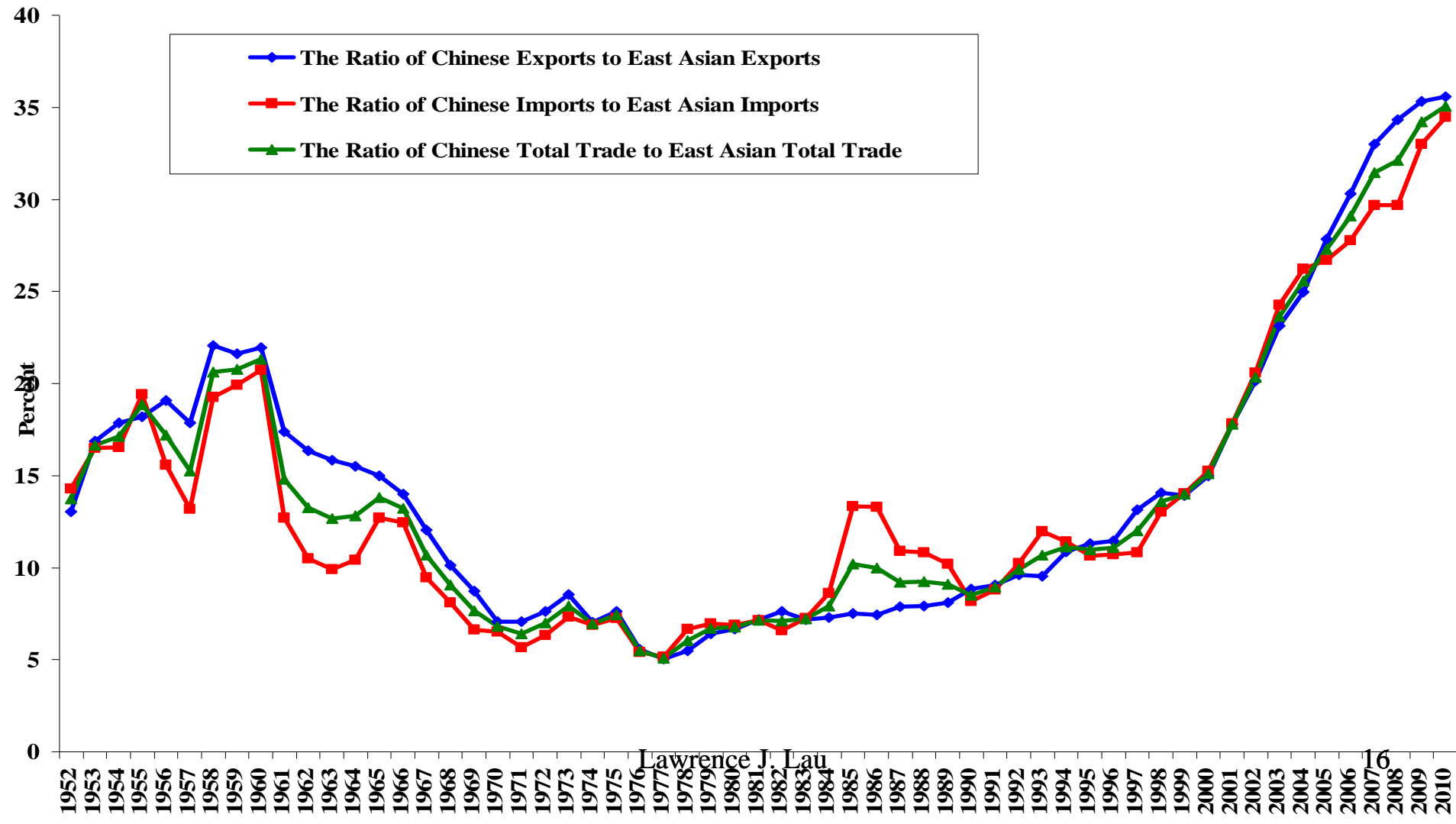
The Share of Chinese Trade in Total World Trade, 1950-Present

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



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

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



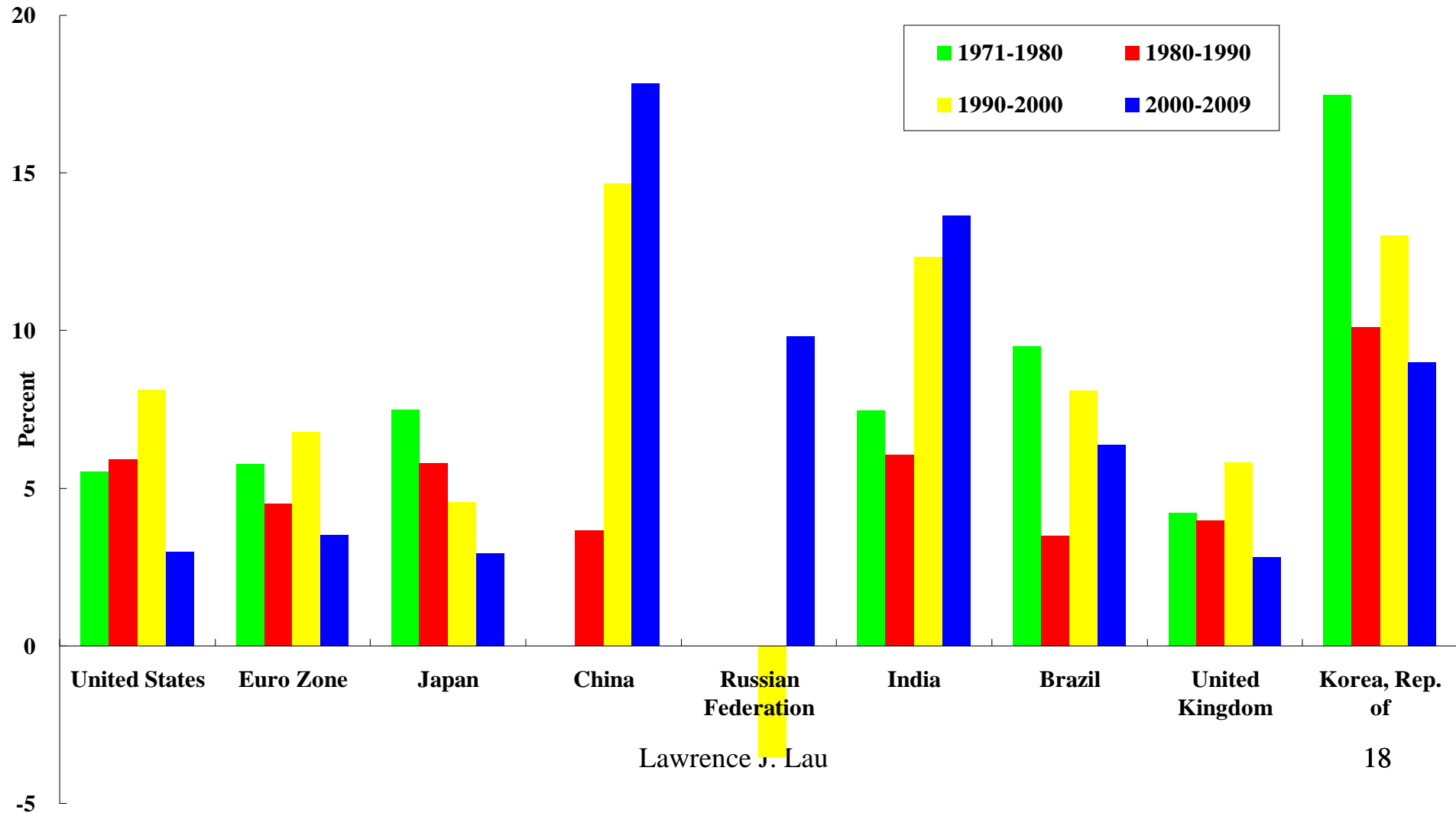
Introduction:

The Growth in World Trade

- ◆ The rates of growth of international trade in the other BRICS and East Asian economies (except Japan) have also far outstripped the rates of growth of the international trade of the developed economies of United States, Europe and Japan.

Average Annual Rates of Growth of Trade in Goods and Services, Selected Economies

Average Annual Rates of Growth of Total Trade in Goods and Services



Key Performance Indicators Before and After 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
Real Consumption	5.05	8.88
Real Consumption per Capita	2.99	7.75
Exports	9.99	17.23
Imports	9.14	16.37
	Lawrence J. Lau	19
Inflation Rates (GDP deflator)	0.50	5.47

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 benefitted 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, as for example, in maintaining Chinese economic growth during the 1997-1998 East Asian currency crisis and the 2007-2009 global financial crisis.

Introduction

- ◆ Why was the Chinese economic reform and opening so hugely successful? Of course, the leadership of the Chinese Communist Party and the implementation by the Chinese Government of the correct policies and measures are pivotal reasons.
- ◆ We shall attempt to look at the Chinese economic fundamentals as well as the initial conditions to analyse why the adopted policies and measures were so effective.

The Economic Fundamentals

- ◆ Long-term economic growth of a country depends on the rates of growth of its primary inputs—capital (tangible or physical) 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 or physical capital depends on the rate of investment on structure, equipment and basic infrastructure, which in turn depends on the availability of national savings.
- ◆ The rate of technical progress depends on investment in intangible capital (including human capital and Research and Development (R&D) capital).

The Economic Fundamentals

- ◆ The most important source of Chinese economic growth over the past 33 years has been the growth of inputs, principally the growth of tangible capital (structures, equipment, and basic infrastructure), and not technical progress or growth of total factor productivity. Thus, past Chinese economic growth was mainly due to “working harder, not working smarter”. The growth of tangible capital accounts for the bulk, approximately 75%, of the measured economic growth in China.
- ◆ This experience is not unlike those of other East Asian economies such as South Korea and Taiwan and even Japan as well as that of the United States at a similarly early stage of economic development. The growth of inputs, principally tangible capital, has always been the most important source of economic growth.

The Economic Fundamentals

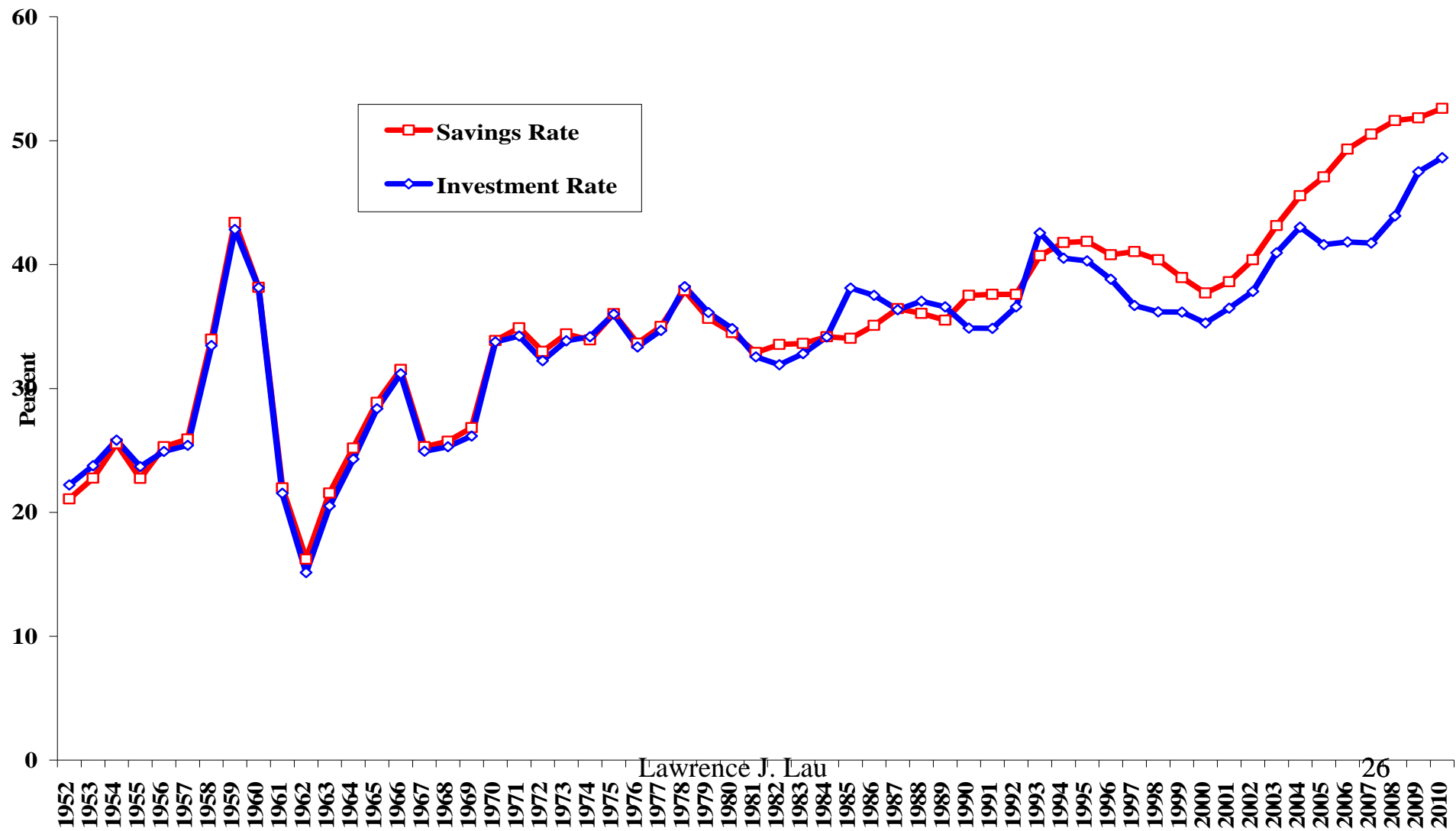
- ◆ However, tangible capital input-driven economic growth has its limitations, because as the stock of tangible capital relative to labour increases, the marginal productivity of tangible capital will begin to decline and will eventually reach a point when additional tangible capital is no longer productive. This is a point made by Prof. Paul Krugman.

The Economic Fundamentals: Capital

- ◆ The Chinese national savings rate has been consistently high--it has been hovering around 40 percent since the early 1990s and has approached or even exceeded 50 percent in recent years, which is more than adequate to finance all of its domestic investment needs. (If anything, China invests too much, not too little.) China does not need to depend on foreign direct investment, foreign portfolio investment, or foreign loans. This will continue to be the case.

Chinese National Savings and Gross Domestic Investment as Percents of GDP

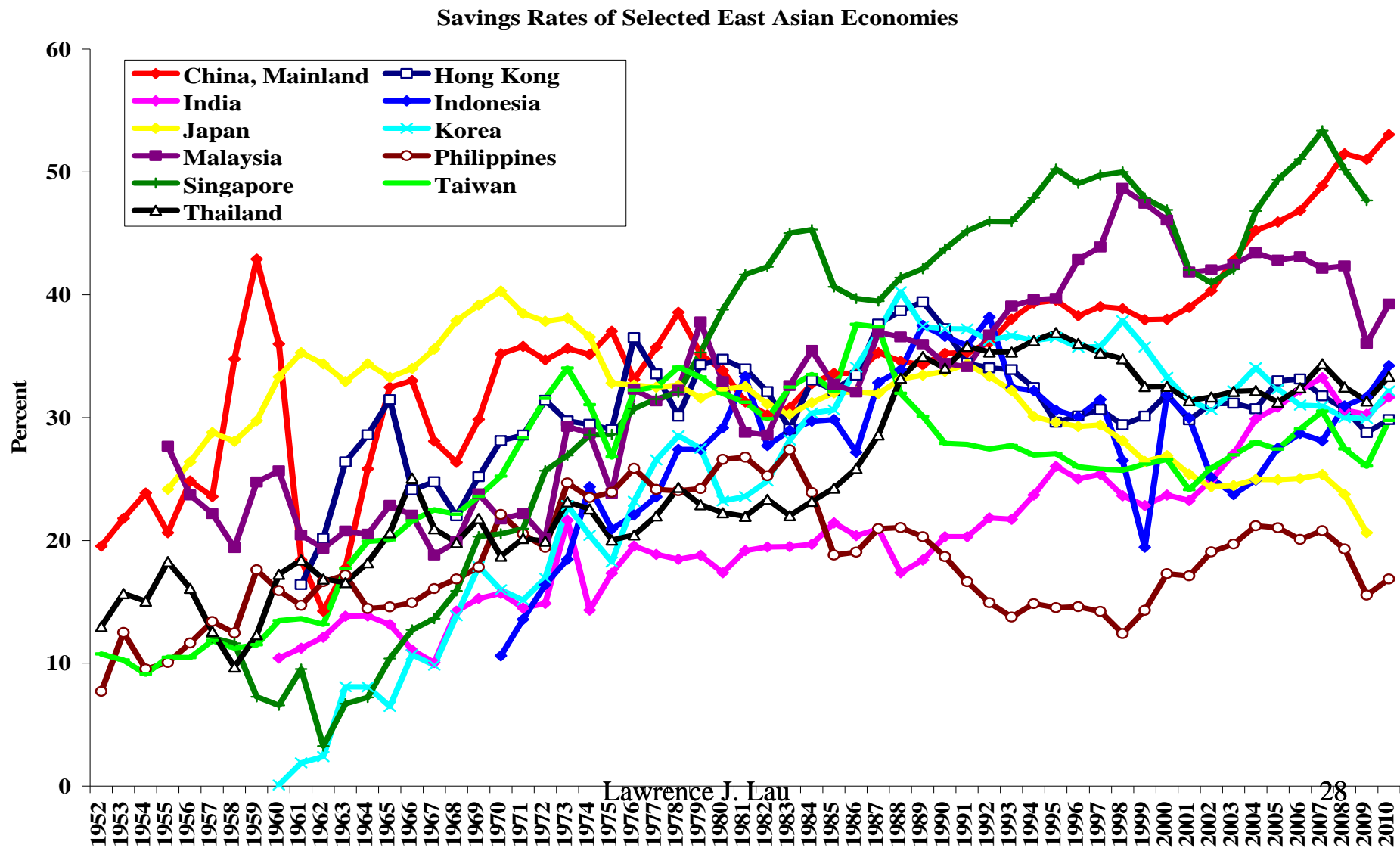
Chinese National Savings and Gross Domestic Investment as a Percent of GDP since 1952



The Economic Fundamentals: Capital

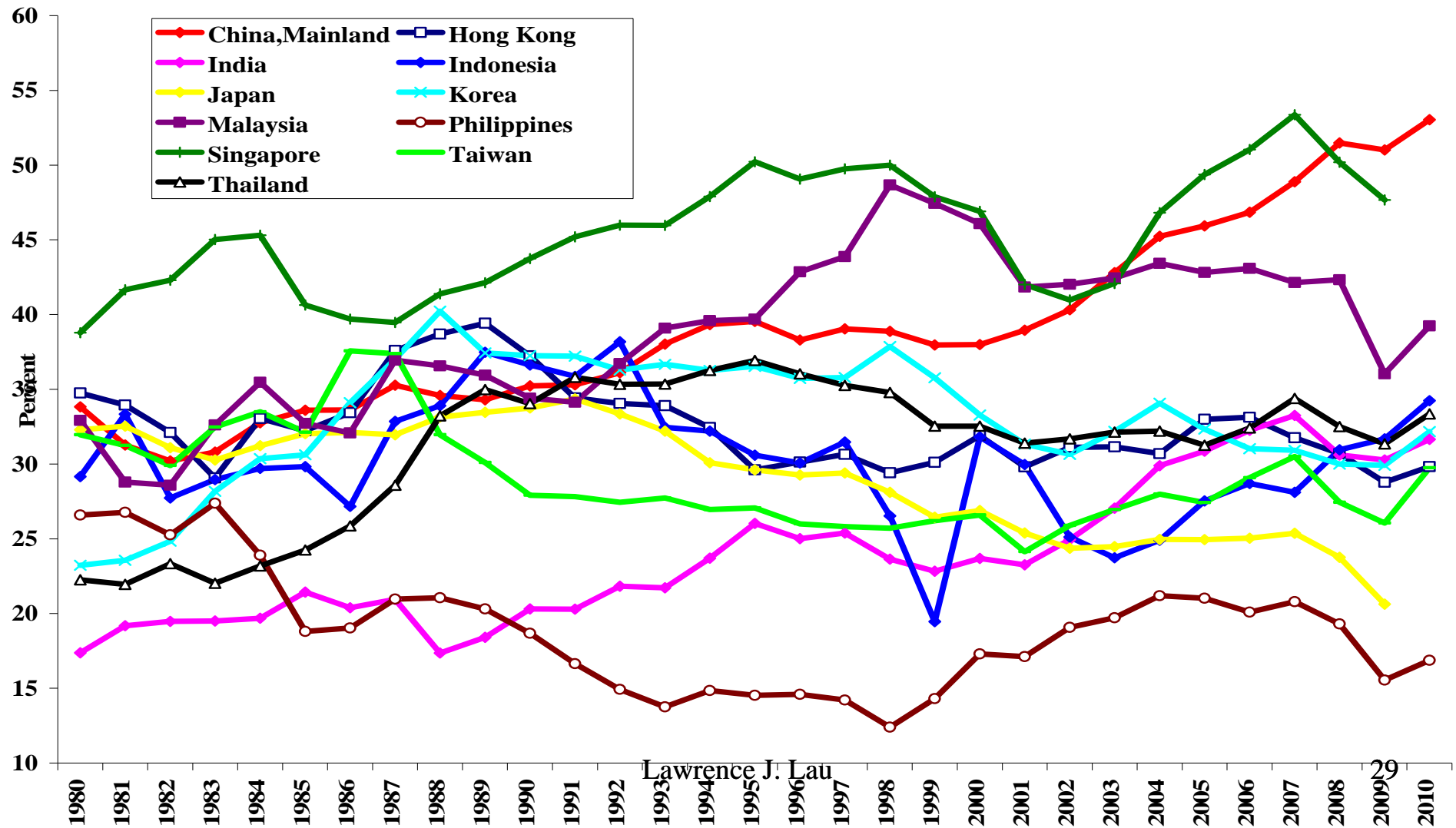
- ◆ In fact, almost all East Asian economies, with the possible exception of Philippines, have high national savings rates. What this means is that the domestic savings in each economy are sufficient to meet the domestic investment needs for sustained economic growth without relying on inbound foreign direct or portfolio investment or foreign loans.

Savings Rates of Selected Asian Economies (1952-Present)



Savings Rates of Selected Asian Economies (1980-Present)

Savings Rates of Selected Asian Economies



The Economic Fundamentals:

Capital

- ◆ A country with a high national savings rate does not need to rely on foreign savings—does not need to borrow abroad and bear the potential risks of a large, and often interruptible, foreign-currency denominated debt.
- ◆ In addition, with new resources being made available each year from new savings, enabling new investments to be made, the necessity of restructuring, redeploying or privatising existing fixed assets is greatly diminished (thus making it more possible to avoid potentially politically divisive issues and the creation of “losers”). There was, for example, little privatisation of state-owned enterprises in Taiwan and South Korea in the initial periods of their industrialisation.
- ◆ A high national savings rate also allows the normally more efficient non-state sector greater room and greater scope for development and expansion (there is less “crowding out”). The Chinese non-state sector accounts for approximately 75% of Chinese GDP in 2010, compared to essentially 0% in 1978.

The Economic Fundamentals:

Labour

- ◆ China, like Japan, Taiwan, and South Korea in their respective 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.

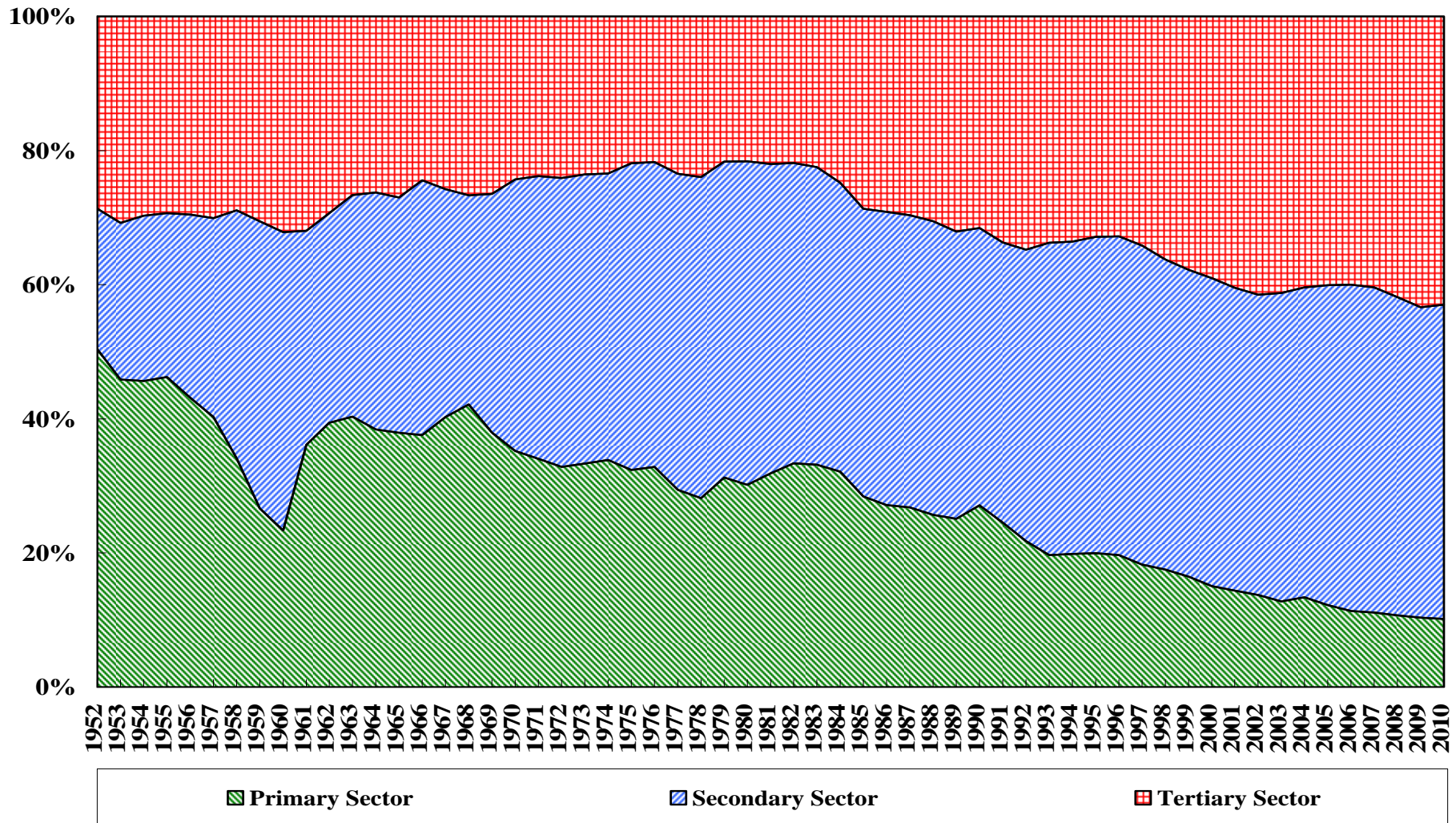
The Economic Fundamentals:

Labour

- ◆ The distribution of Chinese GDP by originating sectors in 2010 was approximately: Primary (agriculture), 10.2%; Secondary (manufacturing, mining and construction), 46.9%; and Tertiary (services), 43.0%. (Note that mining is normally included in the primary sector in most other economies.)

The Distribution of Chinese GDP by Sector Since 1952

The Distribution of GDP by Sector



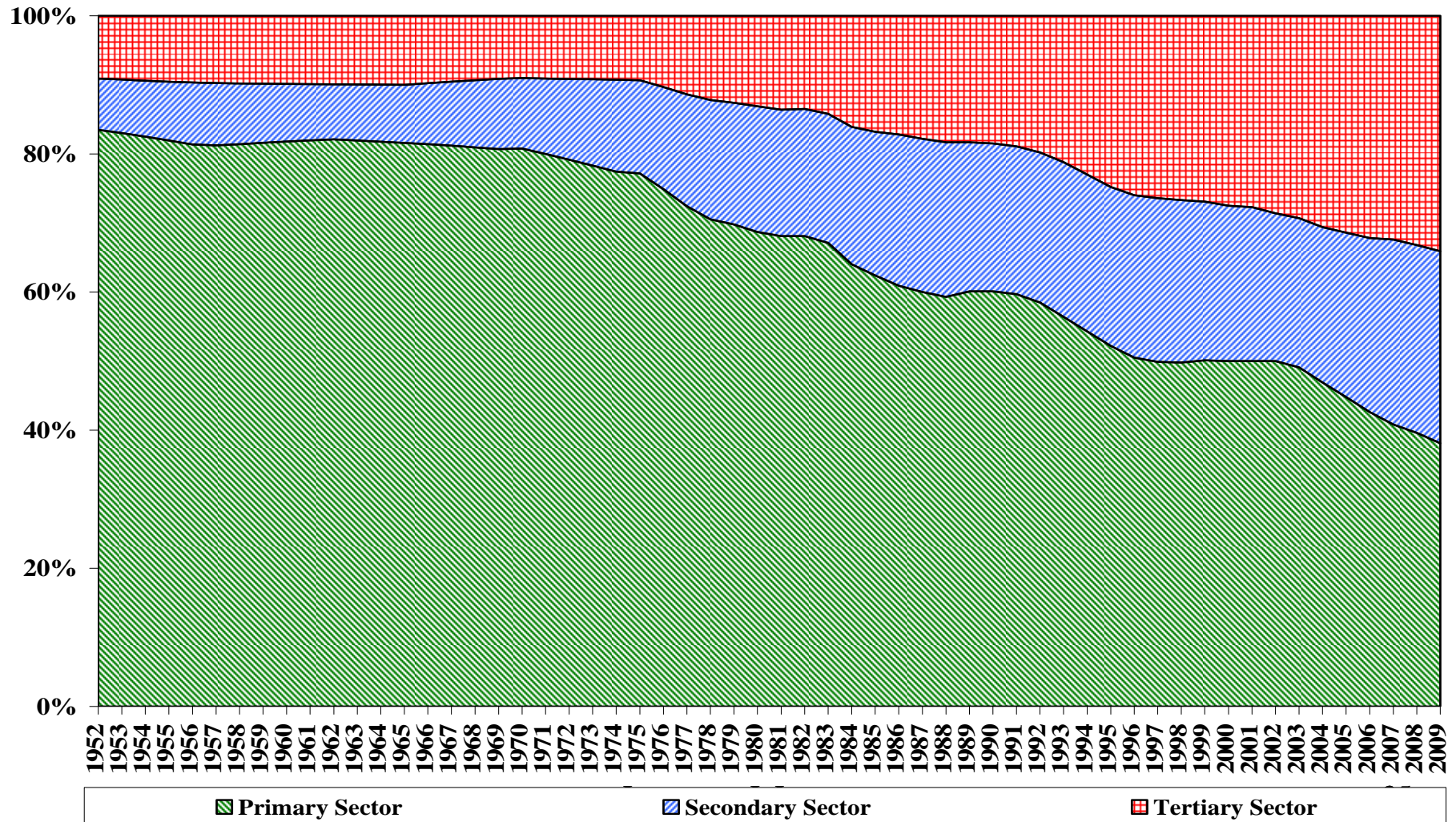
The Economic Fundamentals:

Labour

- ◆ But the bulk of the labour force, more than 40%, is still employed in the primary sector, waiting to be transferred to the other two sectors with higher productivities of labour.
- ◆ 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 will be 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 Employment by Sector Since 1952

The Distribution of Employment by Sector



The Economic Fundamentals:

Labour

- ◆ It took more than 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. There will not be any shortage of unskilled, entry-level labour for the country as a whole for a long time to come, even though there may be shortages of skilled or experienced labour in the secondary and tertiary sectors as well as regional shortages..

The Economic Fundamentals:

Labour

- ◆ 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 for the country as a whole 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: Intangible Capital

- ◆ On intangible capital, China 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 approximately 25 percent today. It is expected to rise further over the next decades as private tertiary educational institutions become more numerous in response to demand and facilitated by government policy.
- ◆ China has also begun to increase its expenditure in Research and Development (R&D), with the goal of increasing it from the current 1.8 percent to 2.2 percent of GDP by 2015.

The Economic Fundamentals:

The Size of the Domestic Economy

- ◆ Large continental economies, such as China, Russia and the United States, are likely to be self-sufficient in many of the resources because of their large size and geographically diversified location.
- ◆ These economies are also mostly driven by their internal demands, and not by international trade. For example, exports have never been very important to the U.S. economy, and the U.S. economy has never been dependent on international trade, except perhaps in the 19th Century.
- ◆ The Chinese economy is similar—China has adequate supplies of most natural resources domestically (with the possible exception of oil). Chinese economic growth in the future decades will mostly depend on internal demand rather than exports.

The Economic Fundamentals:

The Size of the Domestic Economy

- ◆ The huge domestic market of 1.34 billion consumers allows economies of scale in production to be easily realised in China. The strong domestic demand in for example, housing, transportation, other consumer goods and services (education and health care) alone is large enough to support efficient-scale plants in many industries.
- ◆ The huge domestic market of 1.34 billion consumers also greatly enhances the productivity of intangible capital (e.g., R&D capital and 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 Economic Fundamentals:

The Size of the Domestic Economy

- ◆ The huge domestic market also enables active Chinese participation in the setting of product and technology standards, for example, fourth-generation (4-G) standards for telecommunication, 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.

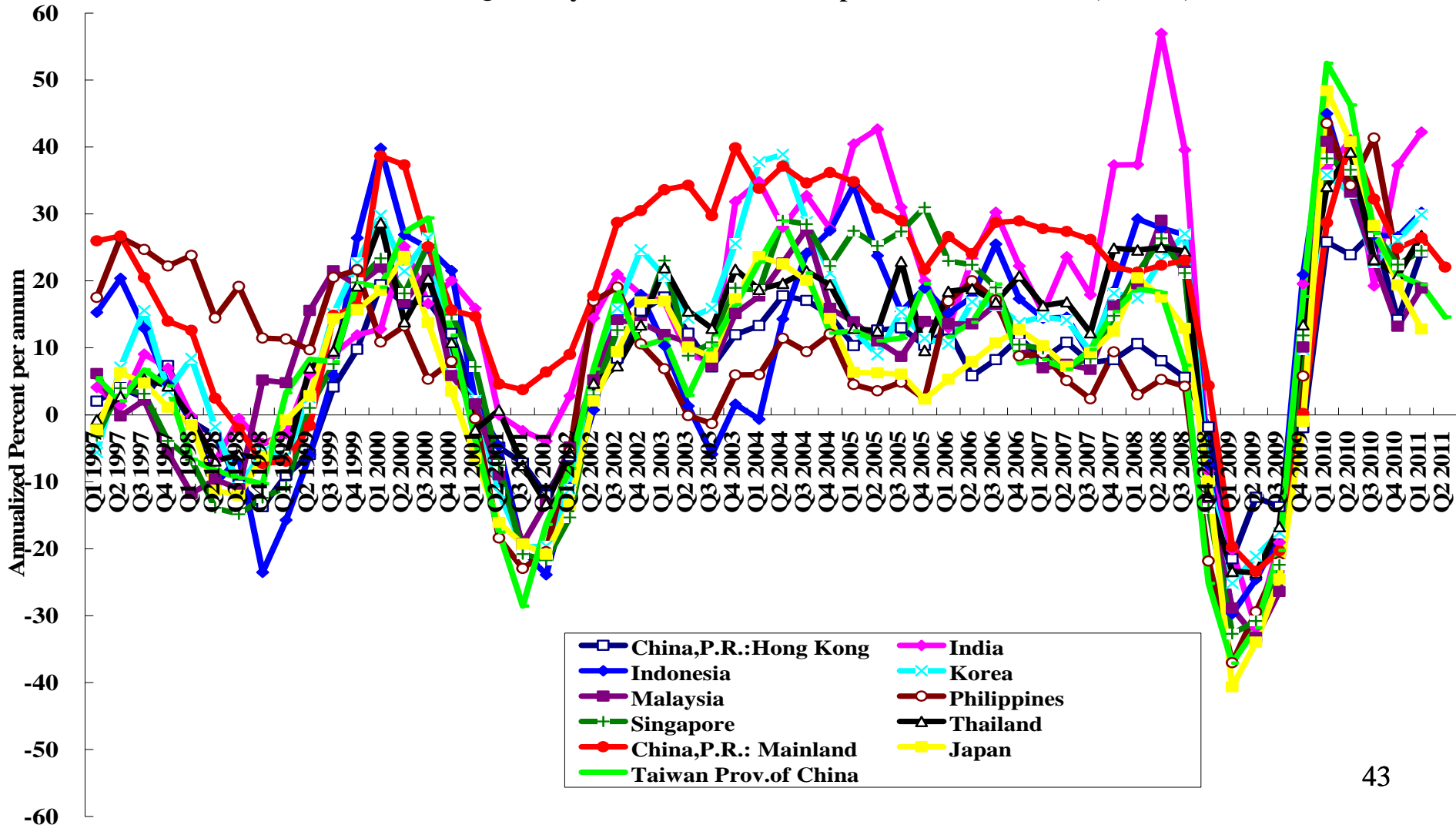
The Economic Fundamentals:

The Size of the Domestic Economy

- ◆ Another important implication of the size of the domestic economy is the relatively low external dependence of the Chinese economy. As a large, continental economy like the United States, China is relatively self-sufficient and is therefore relatively insulated from disturbances in the rest of the World.
- ◆ Thus, the rate of growth of Chinese real GDP is relatively stable, unlike those of other East Asian economies, even as the rates of growth of 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).

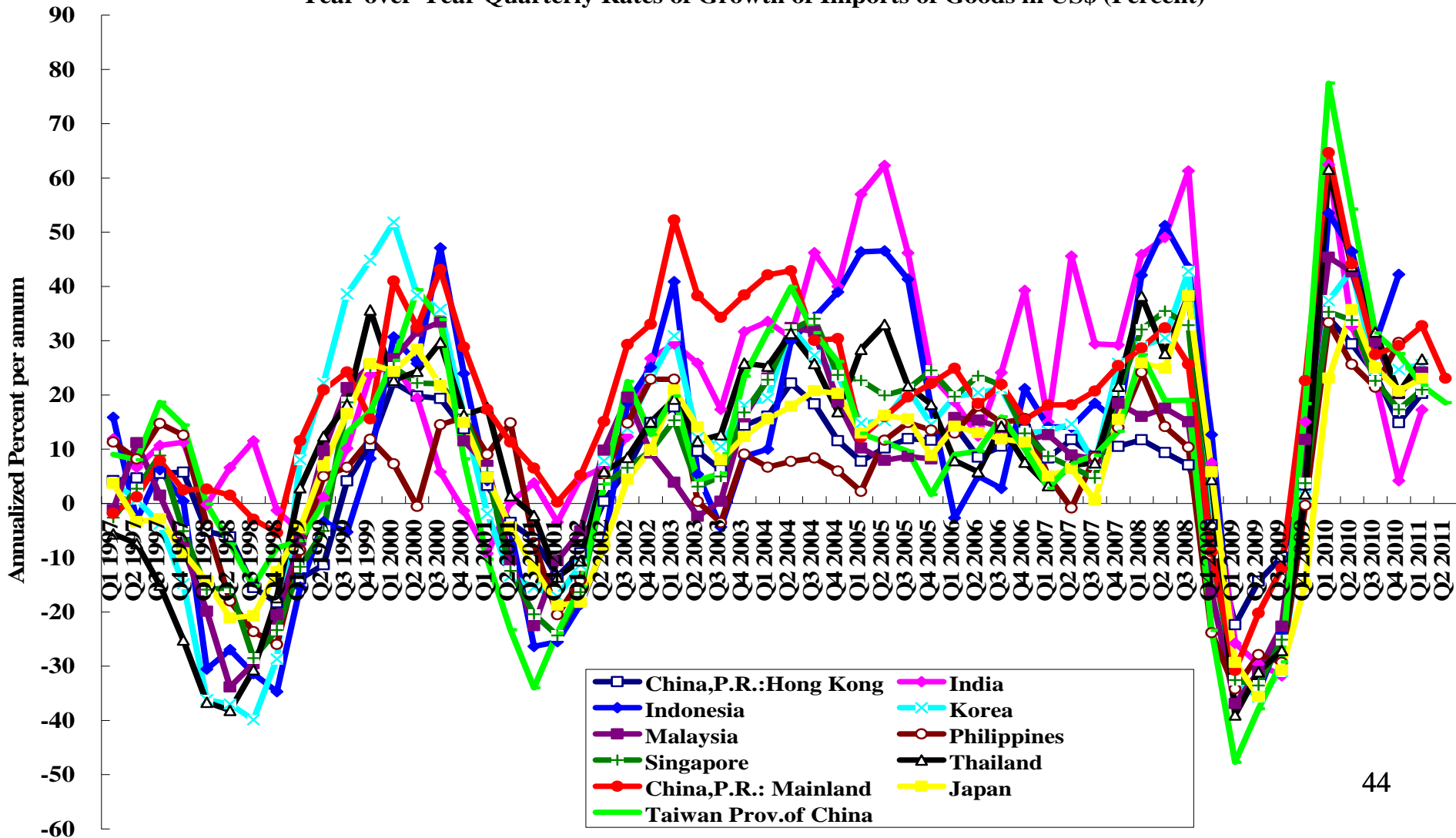
Quarterly Rates of Growth of Exports of Goods: Selected East Asian Economies

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



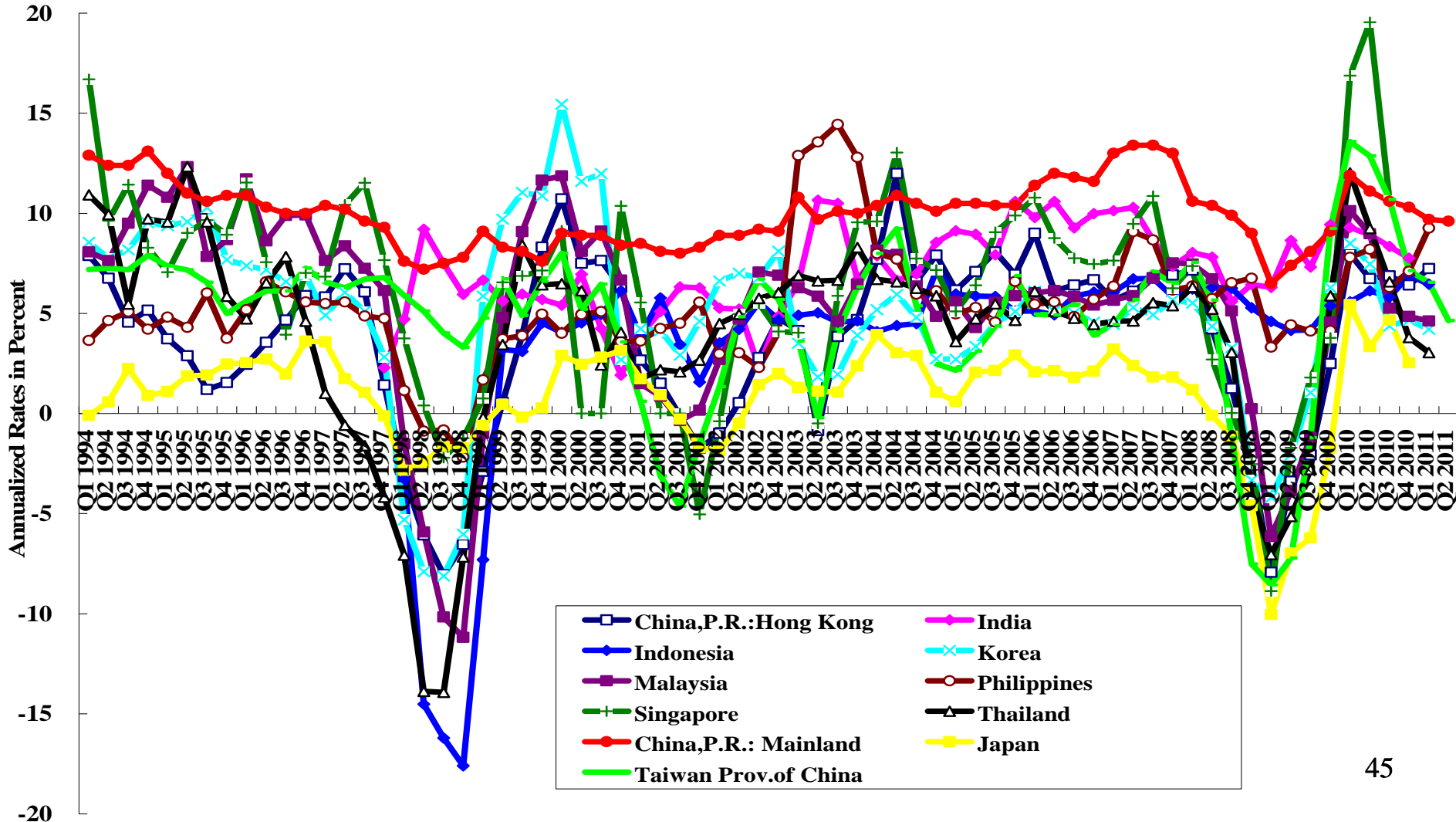
Quarterly Rates of Growth of Imports of Goods: Selected East Asian Economies

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



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

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



The Economic Fundamentals:

The Size of the Domestic Economy

- ◆ 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 further proof that the Chinese economy has been at least partially de-coupled from the rest of the World economy, and in particular, from the United States and Europe, both of which have been mired in economic recession and recovering very slowly.

The Metaphor of the “Wild Geese Flying Pattern”

- ◆ The metaphor of the "wild-geese-flying pattern" of East Asian economic development over time, due to Prof. Kaname Akamatsu (1962) of Japan, suggests that industrialisation will spread from economy to economy as the initially fastest-growing economy, beginning with Japan, runs out of surplus labour and faces labour shortages, rising real wage rates, appreciating exchange rate of its currency and quota restrictions on its exports and needs to relocate some of its industries in a lower-cost economy. The fastest-growing economy will thus slow down and the lower-cost economy will take over as the fastest-growing economy.

The Metaphor of the “Wild Geese Flying Pattern”

- ◆ Thus, East Asian industrialisation spread from Japan to first Hong Kong in the mid-1950s, and then Taiwan in the late 1950s, and then South Korea and Singapore in the mid-1960s, and then Southeast Asia (Thailand, Malaysia, Indonesia) in the 1970s, and then to Guangdong, Shanghai, Jiangsu and Zhejiang in China as China undertook economic reform and opened to the World beginning in 1978.
- ◆ 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”

- ◆ The industrial migration has continued with Vietnam, Khmer Republic, Laos and Bangladesh, and also with the provinces, autonomous regions and municipalities in the central and western regions of China as the real wage rate begins to rise in the coastal regions of China and the Renminbi appreciates in value.
- ◆ It is clear that this metaphor applies not only to East Asian economies but also to within the Chinese economy itself because of its large size. Within China, industrialisation began first in the coastal provinces, autonomous regions and municipalities and then would migrate and spread to other provinces, regions and municipalities in the interior as real wage rates rose on the coast. As the coastal provinces, regions and municipalities began to slow down in their economic growth, the provinces, autonomous regions and municipalities in the central and western regions of China would take their turns as the fastest-growing areas in China. China as a whole will therefore be able to maintain its high rate of growth for a long time to come.

The Economic Fundamentals

- ◆ In addition to a high national savings rate, a large pool of surplus labour, rising investment in intangible capital (human capital and R&D capital), and a large economy, China also has the advantage of relative backwardness. The Chinese economy has:
 - ◆ The ability to learn from the experiences of successes and failures of other economies;
 - ◆ The ability to leap-frog and by-pass stages of development (e.g., the telex machine, the VHS video players, the fixed landline phones); and
 - ◆ The 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 Economic Fundamentals

- ◆ However, while good economic fundamentals are necessary for a sustained high rate of growth of an economy, they are by no means sufficient.
- ◆ In the thirty years between 1949, the year of the founding of the People's Republic of China, and 1978, the first year of the Chinese economic reform and opening, China also had (1) a high domestic savings rate; (2) an unlimited supply of labour; and (3) a large domestic economy. But the Chinese economy did not experience a sustained high rate of growth during that period.
- ◆ Similarly, the former Soviet Union also had a high rate of tangible capital accumulation as well as a large domestic economy, but did not experience a high rate of economic growth either.

Inherent Economic Inefficiency under Central Planning

- ◆ We now turn to look at the initial conditions faced by the Chinese economy at the beginning of its economic reform in 1978.
- ◆ From 1953, when China adopted its First Five-Year Plan, to the end of the last Century, the Chinese economy operated under a series of mandatory central plans. On the eve of Chinese economic reform in 1978, China was still a centrally planned economy.

Inherent Economic Inefficiency under Central Planning

- ◆ A principal characteristic of a centrally planned economy is the administrative allocation of resources. What goods and services to produce? How much to produce? Where to produce them? What raw materials and parts should be used to produce them? From which enterprises should the raw materials and parts be bought? To which enterprises should the output be sold? All of these decisions are made by the central planners and embodied in the mandatory central plan. Enterprises do not have any autonomy in these decisions.
- ◆ The prices of goods and services are also completely determined in the central plan. They do not necessarily reflect relative scarcities in the economy, and do not play any role in the equilibration of market supply and demand. The prices are only used for accounting purposes.

Inherent Economic Inefficiency under Central Planning

- ◆ Why does inefficiency always exist in a centrally planned economy? We begin by defining what economists mean by efficiency.
- ◆ A production allocation (or plan) for an economy is said to be efficient if for given aggregate quantities of inputs (the tangible capital stock and labour), no output of any good or service can be increased without decreasing the output of another good or service. In other words, the economy is operating on the frontier of its set of production possibilities.

Inherent Economic Inefficiency under Central Planning

- ◆ A centrally planned economy always operates in the interior of its set of production possibilities. Thus, output can be increased by simply moving to the frontier of the set of production possibilities. The existence of inefficiency therefore also implies the existence of surplus potential output.
- ◆ In order to understand why there always exists inefficiency and hence surplus potential output in a centrally planned economy, we consider the following simple example drawn from agriculture.

Inherent Economic Inefficiency under Central Planning

- ◆ There are two farm households, A and B. Each has a hectare of land. Both cotton and rice are needed. The central planner's problem is to decide—who should grow cotton and who should grow rice, as well as how much of each crop to grow.
- ◆ First of all, there is a problem of insufficient or incorrect information. The central planner may not know which plot is more suitable for growing cotton and which plot is more suitable for growing rice. Moreover, the central planner may not know whether Farmer A can grow cotton better than Farmer B or vice versa. If the central planner makes any mistake in the assignment of production responsibilities, a simple exchange can increase total output without having to increase any input.

Inherent Economic Inefficiency under Central Planning

- ◆ Second, there is the problem of a lack of incentive on the part of the farmers to exceed the assigned production targets even if they can in principle do so. To the farmer, if he or she manages to produce an output that exceeds the assigned production target, not only would his or her income not increase, so that the extra efforts would have been in vain, but also the assigned production target for the following year might be raised, making it more difficult for the farmer to fulfill his or her obligation. (This is sometimes referred to as the “ratchet” effect.) Thus, under a centrally planned system, the optimal strategy for the farmer is to try to produce the assigned target output, and not try to exceed it.

Inherent Economic Inefficiency under Central Planning

- ◆ However, if there is a way to provide the necessary incentives to the farmers, then without increasing the aggregate inputs assigned under the central plan, aggregate output can also be increased. For example, the farmers can be given the autonomy to grow anything on their plots once they have fulfilled their obligations under the central plan, and to retain the resulting profits and to bear the resulting losses, if any.
- ◆ We therefore conclude that under central planning, there always exists inefficiency and hence surplus potential output.

Inherent Economic Inefficiency under Central Planning

- ◆ On the eve of the beginning of economic reform and opening in 1978, the Chinese economy still operated under a mandatory central plan, and therefore had significant surplus potential output.
- ◆ The countries of the former Soviet Union and Eastern Europe were all centrally planned economies and thus also had similarly significant surplus potential output.
- ◆ If the surplus potential output can be fully exploited and realised, the real rates of growth of these economies can be very high, even without any significant growth in the aggregate inputs, at least in the near term.

The Significance of Economic Reform and Opening

- ◆ As mentioned above, the Chinese economy had abundant but under-utilised productive capacity on the eve of its economic reform and opening in 1978. Beginning in 1978, the Chinese Government implemented a series of measures to allow the productive potential to be fully realised, such as the “responsibility system,” in the rural areas, the introduction of “conditional” enterprise autonomy (conditional on the prior fulfillment of the obligations under the central plan), and free markets.

The Significance of Economic Reform and Opening

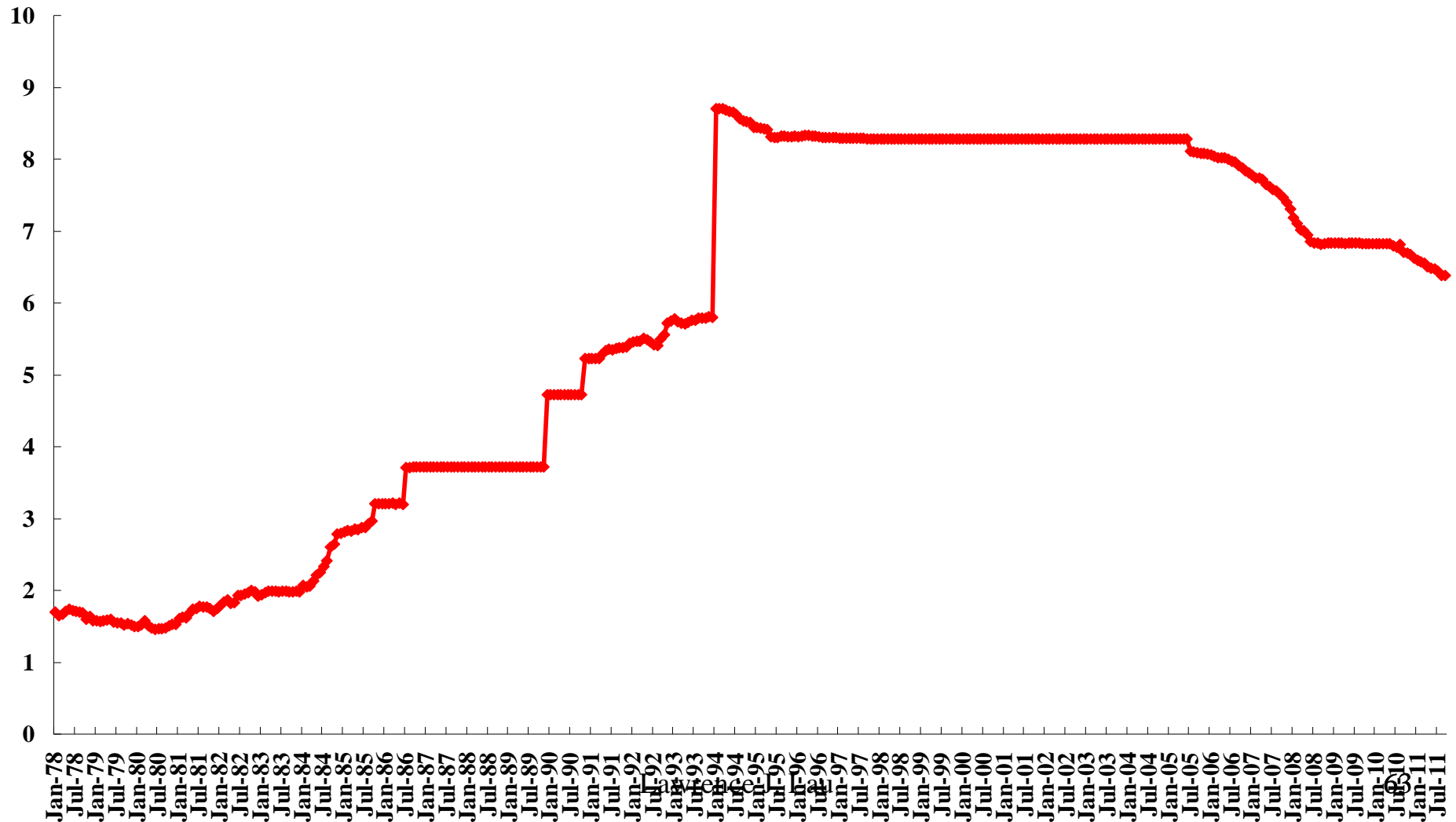
- ◆ Through the open-door policy, China imported capital goods as well as advanced technology and further enhanced its domestic production capacity. It also introduced the concept of “Processing and Assembly” trade to create employment opportunities for the surplus labour in China, under the conditions that such activities would not disrupt the implementation of the central plan whatsoever.
- ◆ For example, the initial manufacturing enterprises set up by foreign investors are restricted to the four Special Economic Zones of Hainan, Shantou, Shenzhen and Zhuhai. Moreover, these foreign-invested enterprises must import all of its inputs, including equipment, and export all of its outputs. They will only be allowed to employ labour in China, which is in surplus supply. Thus, these foreign-invested enterprises would not affect the existing central plan at all because they would not create any demand for domestic goods and services nor would they create any additional supply for the domestic market.

The Significance of Economic Reform and Opening

- ◆ In order to maximise the benefits of the policy of economic reform and opening, the Chinese Government devalued the Renminbi significantly, to a more reasonable and sustainable level and also implemented full current accounts convertibility in 1994.
- ◆ The opening of the Chinese economy to the rest of the World also enhanced the ability and willingness of Chinese enterprises to compete with foreign enterprises in the World market.

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

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



The Significance of Economic Reform and Opening

- ◆ The Chinese policy of economic reform and opening provided enterprises and households not only the opportunity but also the desire and incentive to increase production, to invest and to innovate.

Reform without Losers

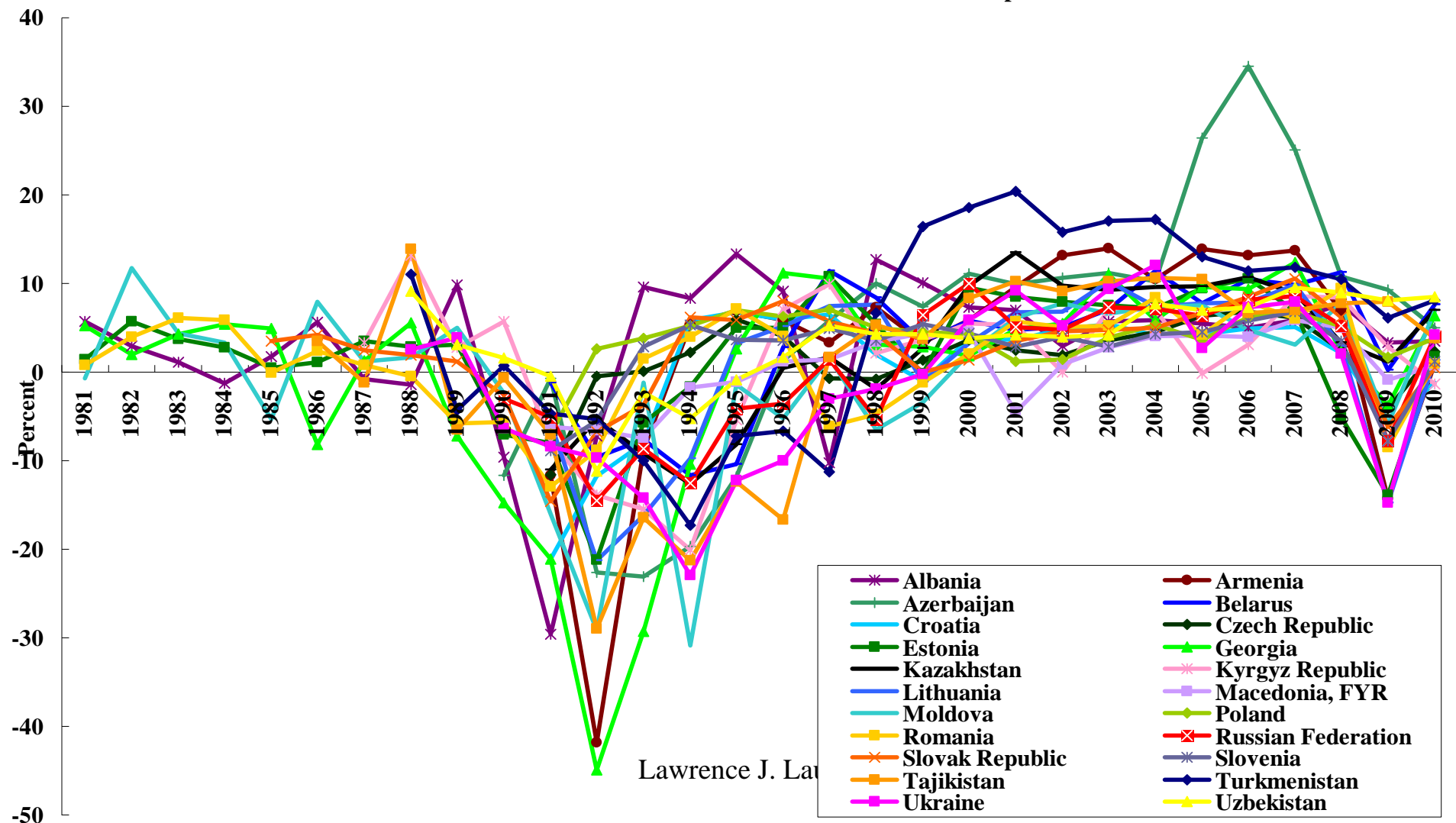
- ◆ We next consider why the transition of the China from a centrally planned economy transition to a market economy succeeded where as the transition of the former Soviet Union and European countries failed miserably. So that even though both China prior to its economic reform and the former Soviet Union and European countries had surplus potential output, the latter were unable to exploit this advantage.
- ◆ In the former Soviet Union and the Eastern European countries, the method used for the transition was “shock therapy” or “big bang”—that is, the immediate and full abolition of the mandatory central plan, relying only on the operations of the markets (which were still new and primitive).
- ◆ The resulting outcomes are far from satisfactory. Most of these countries experienced negative real rates of growth for approximately a full decade and suffered from extremely high rates of domestic inflation.

Reform without Losers

- ◆ Real GDPs per capita in these formerly centrally planned economies took even longer to recover to the 1989 levels. For example, real GDP per capita of Russia did not recover to its 1989 level until 2007.
- ◆ Thus, even though there might have been economic inefficiency and hence surplus potential output, it alone could not assure rapid economic growth and successful economic reform.

Rates of Growth of Real GDP of Former Soviet Union and East European Countries

Rates of Growth of Real GDP of Former Soviet Union and East European Countries



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Reform without Losers

- ◆ So far, we have identified two factors that contributed to Chinese economic success, but these are factors that were also common to other developing and transition economies. There is, however, one factor that is unique to the Chinese experience, and it is the explicit avoidance of the creation of losers in the process of economic reform.
- ◆ Most economic reforms create both winners and losers. While it is true that in the aggregate, the gains from economic reform should outweigh the losses. The question is whether it is possible to redistribute the gains so that no one is worse off. In economic parlance, we ask whether there is a path of reform that is Pareto-optimal, or better still, Pareto-improving, that is, with everyone being made better off.

Reform without Losers

- ◆ The idea that existing people and new people should be treated differently (Xinren Xinbanfa, Jiuren Jiubanfa) is the unique Chinese contribution to the strategy of economic reform. It embodies the idea of “grandfathering”—whatever rights and privileges (and obligations) a person had before the economic reform, he or she would have the option of retaining the same.
- ◆ The two-tiered wage structure used in some enterprises in Western market economies also represents an attempt to implement a similar philosophy.
- ◆ It is obvious that such a strategy helps to minimize opposition and preserve social stability.

Reform without Losers

- ◆ Moreover, such a strategy can often not only achieve Pareto improvement (that is, with everyone better off than before) but also full economic efficiency.
- ◆ “Reform without Losers” means win-win for all. A win-win strategy for economic reform has the best chance of success. Efforts must therefore be made to identify feasible win-win economic reform strategies.
- ◆ The Chinese Government did not adopt the “shock therapy” or the “big bang” approach to implement its economic reform. Instead, it opted for the “dual track” approach—in introducing enterprise autonomy and free markets, it also continued to enforce the existing central plan.

The Dual-Track Approach

Adopted in the Chinese Transition

- ◆ The “Plan Track”--the pre-existing central plan remains and its rights and obligations continue to be enforced by the government.
- ◆ The “Market Track”--all markets are instantaneously open, with prices determined by supply and demand.
- ◆ As long as their obligations under the plan have been fulfilled, producers (communes, townships, enterprises, households and individuals) are given the autonomy and incentive to plan their production on the margin and participate in the free markets, which are open to them, and are responsible for any profits and losses resulting from their market activities outside the central plan.
- ◆ Individuals are also completely free to plan their consumption and participate in the markets, given their allocated consumption goods and fulfillment of their labor obligations.

The Dual-Track Approach

Adopted in the Chinese Transition

- ◆ Profits and losses (taxes and subsidies) of enterprises under the central plan remain the same before and after the initiation of the “dual-track” approach.
- ◆ Differences between plan and market prices of plan-assigned inputs constitute feasible lumpsum transfers among enterprises.
- ◆ Continued planned consumer goods deliveries enable the maintenance of the pre-reform standard of living as a floor.

The Political Economy of the Dual-Track Approach

- ◆ No one is worse off, because everyone—a commune, a township, an enterprise, a household and an individual-- has the option of staying with the pre-reform arrangements, with identical rights and obligations. Thus, there are no losers.
- ◆ The “Vested Interests” are “Grandfathered.”
- ◆ The enterprises are granted autonomy and provided incentives on the margin through the free markets.

Reform without Losers

- ◆ The Chinese economic reform did not lead to economic chaos or contraction as in the former Soviet Union and Eastern European countries. The Chinese economy was able to continue to grow rapidly in the midst of its transition from a centrally planned to a market economy.
- ◆ Ultimately, in the late 1990s, the centrally planned part of the Chinese economy, which had been contracting relative to the market part of the economy, became sufficiently insignificant so that the mandatory features of the central plan could be gradually phased out.

Reform without Losers

- ◆ The feasibility of the dual-track approach depended critically on the continued enforcement of the rights and obligations under the existing central plan, which in turn depended on whether the central government had sufficient authority, credibility and power to do so.
- ◆ Credibility of state enforcement, and expectations thereof, affect the behaviour of enterprises and households, and hence their degree of compliance with the central plan (post reform).

Reform without Losers

- ◆ The governments of the former Soviet Union and the East European countries all became relatively weak governments around 1989, and did not really possess the ability to enforce the pre-existing central plan. And after the former Soviet Union evolved into the Commonwealth of Independent States, what used to be domestic trade became international trade overnight, which was even more difficult for the successor government(s) to control. It was therefore very difficult for these countries to avoid the creation of losers.

Reform without Losers

- ◆ The Chinese Government, in the implementation of its economic reform, tried to minimise as much as possible the creation of losers, and the impact of the economic reform on the existing economic system and vested interests. At the same time, it also tried to create new value, create new winners.
- ◆ Examples of measures include the introduction of the “responsibility system,” the township and village enterprises, the special economic zones, the processing and assembly activities, the reforms of the foreign exchange system and the national taxation system.

Comparison between China and Other East Asian Economies

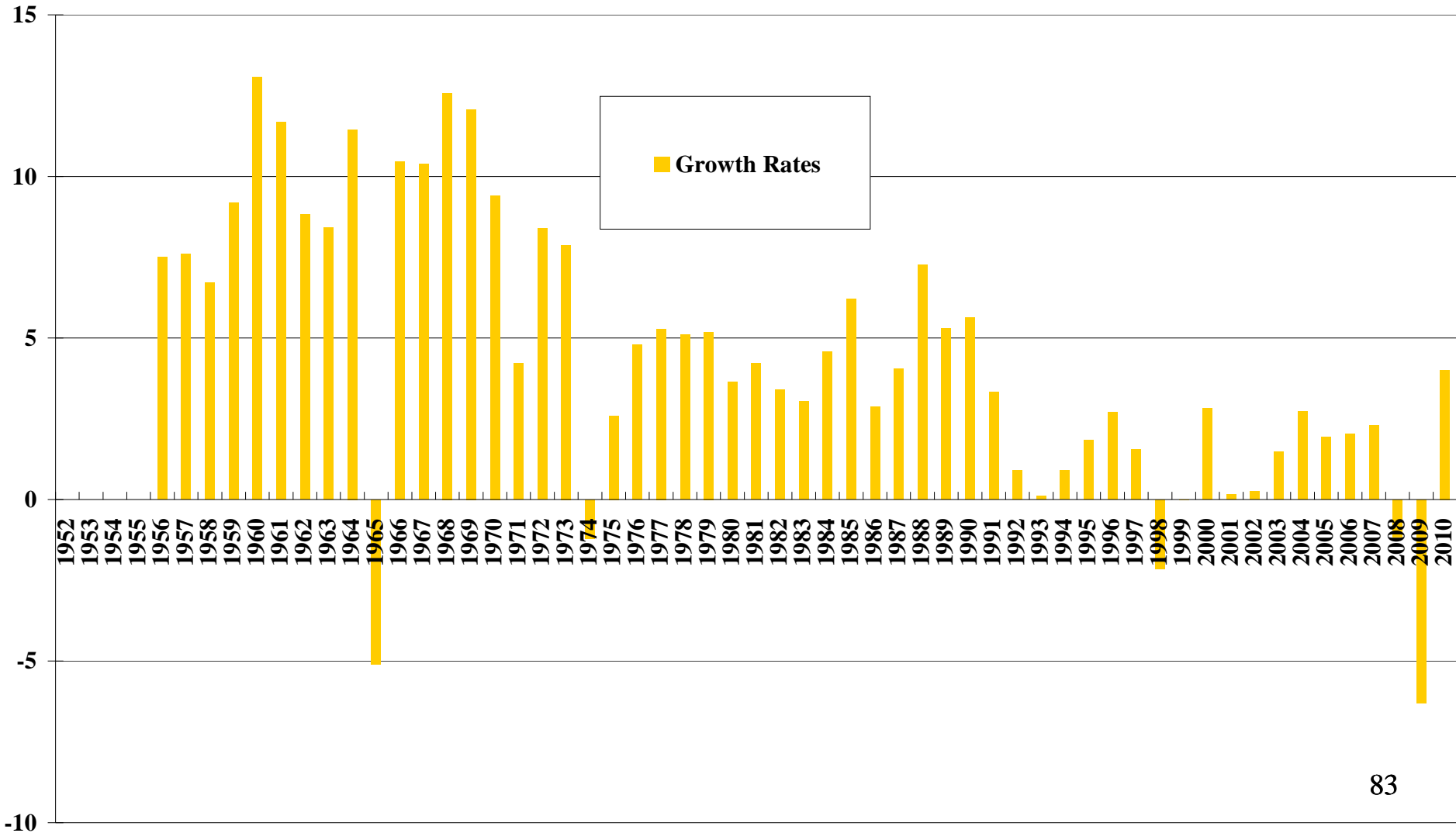
- ◆ The East Asian economies of Japan, Hong Kong, Taiwan, Singapore and South Korea all began successively at different times to enter a period of rapid growth after World War II.
- ◆ They had their economic take-off and attained sustained growth at different times, approximately: Japan in 1950, Hong Kong in 1955, Taiwan in 1957, South Korea in 1963 and Singapore in 1965. The economic take-off of China can be dated at 1978, the beginning of its reform and opening.
- ◆ Prof. Yingyi QIAN, Dean of the School of Economics and Management at Tsinghua University, has identified somewhat different take-off dates from here, but the differences are slight.

Comparison between China and Other East Asian Economies

- ◆ Two common characteristics of the development experience of these East Asian economies, which are by now considered industrialised, may be identified.
- ◆ (1) During the initial period of between 2 and 3 decades after the economic take-off, the principal sources of growth are the growth of tangible inputs such as tangible capital and labour, and not technical progress;
- ◆ (2) After this initial period of growth, the rates of growth began to slow down gradually, for example, Japan after 1973, Hong Kong and Taiwan after 1989, and South Korea and Singapore after 1996.

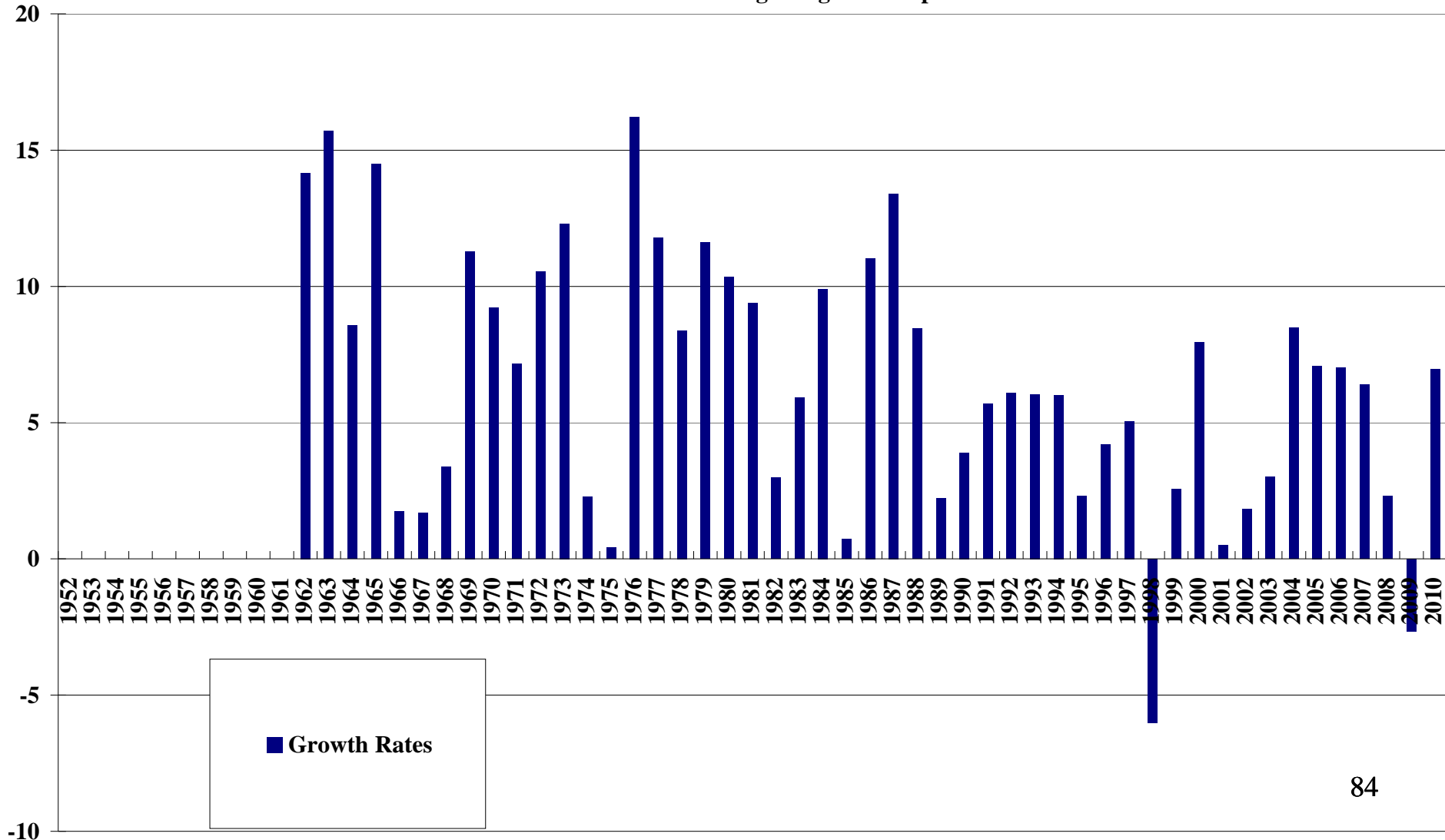
Annual Rates of Growth of Real GDP: Japan

Growth Rates of GDP of Japan, Percent per annum



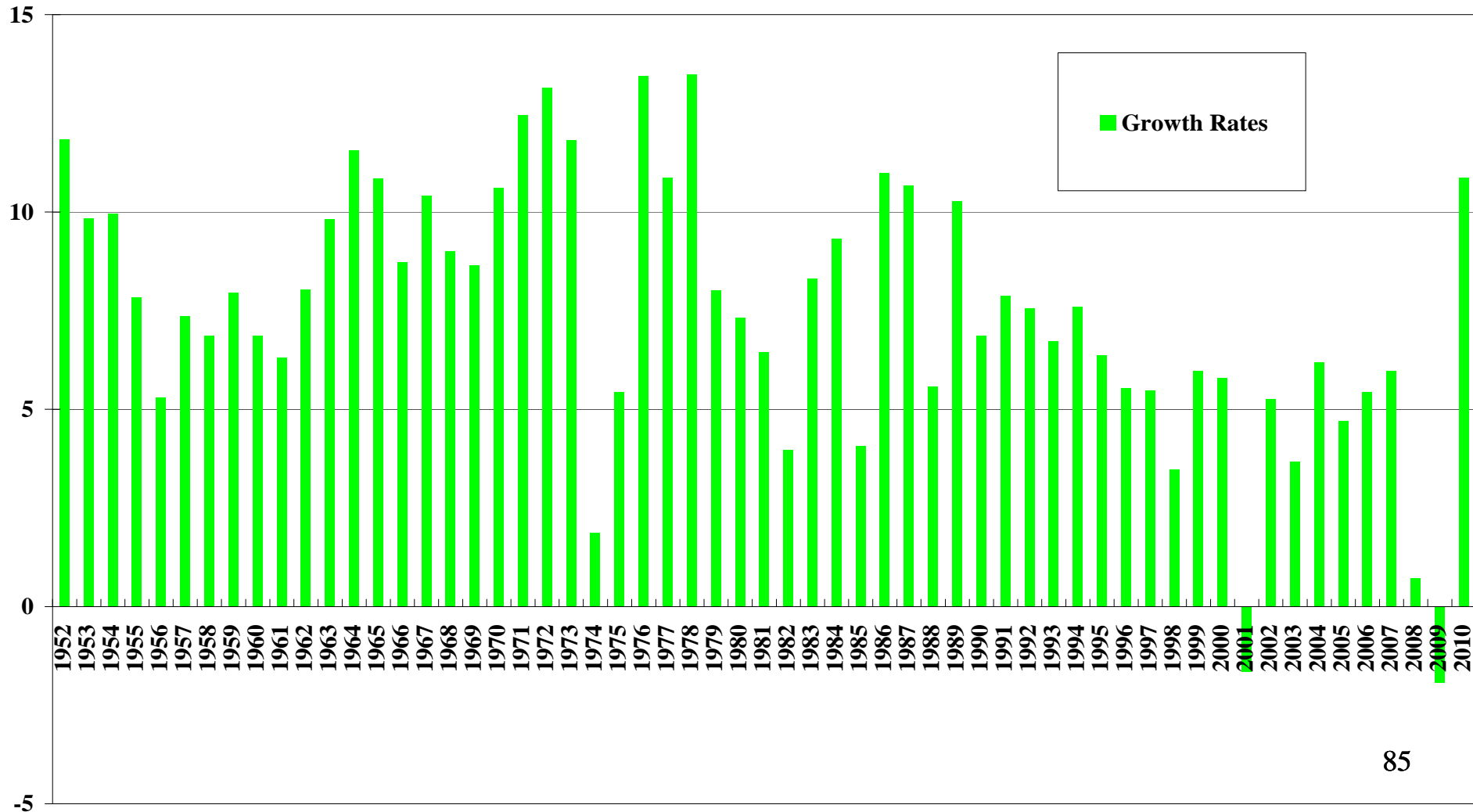
Annual Rates of Growth of Real GDP: Hong Kong

Growth Rates of Real GDP of Hong Kong Percent per annum



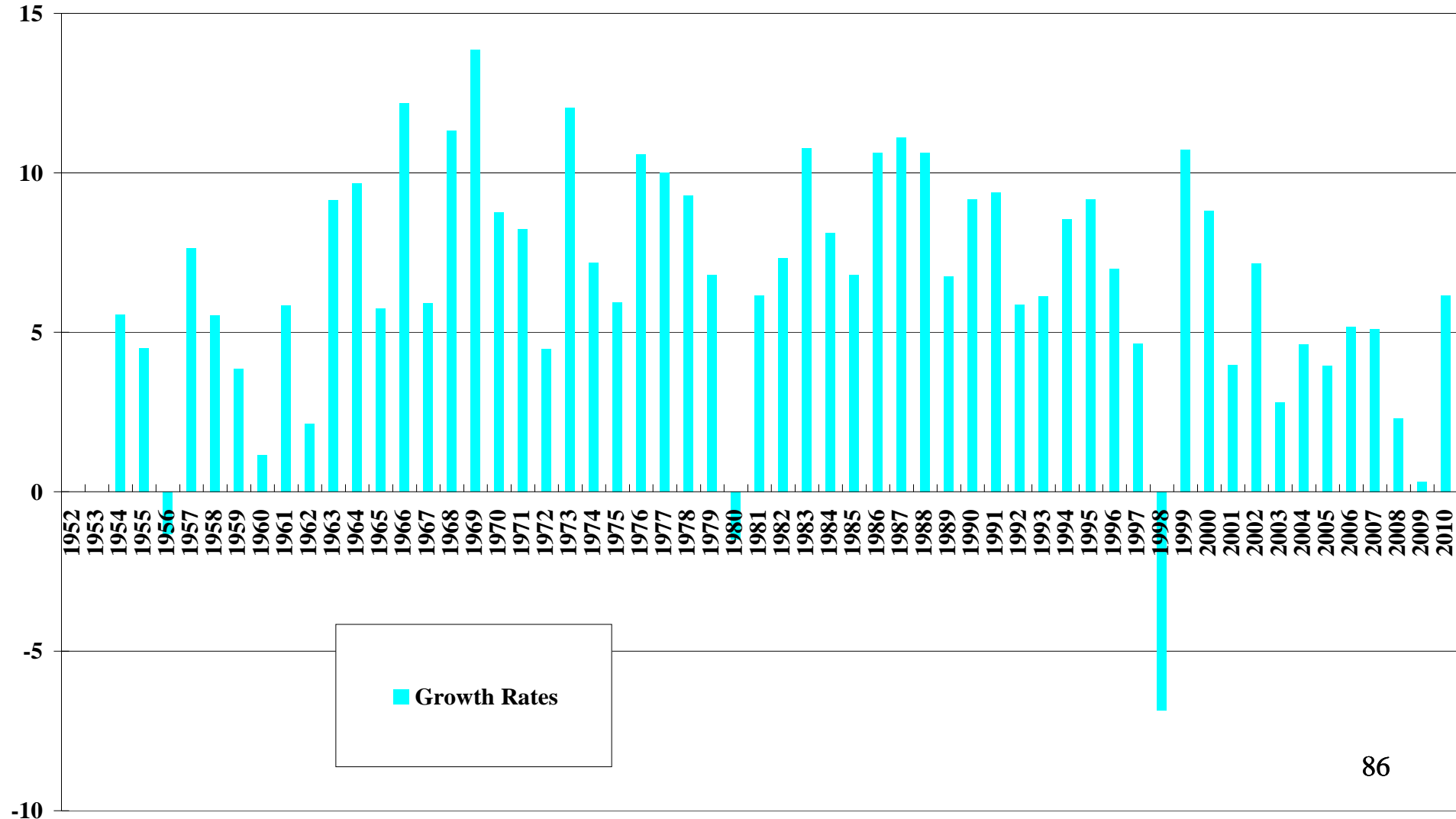
Annual Rates of Growth of Real GDP: Taiwan

Growth Rates of Real GDP of Taiwan, Percent per annum



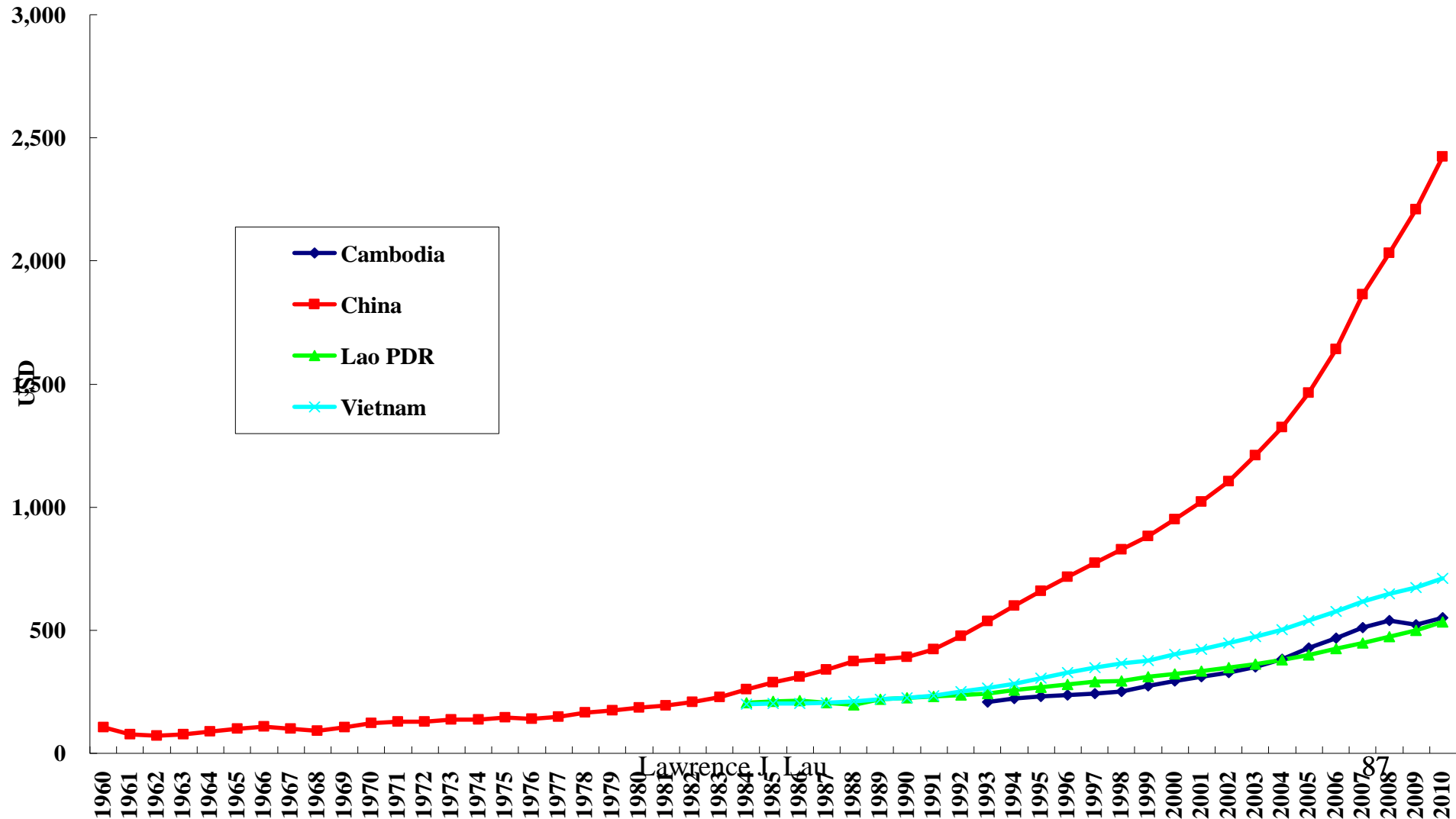
Annual Rates of Growth of Real GDP: South Korea

Growth Rates of Real GDP of Korea, Percent per annum



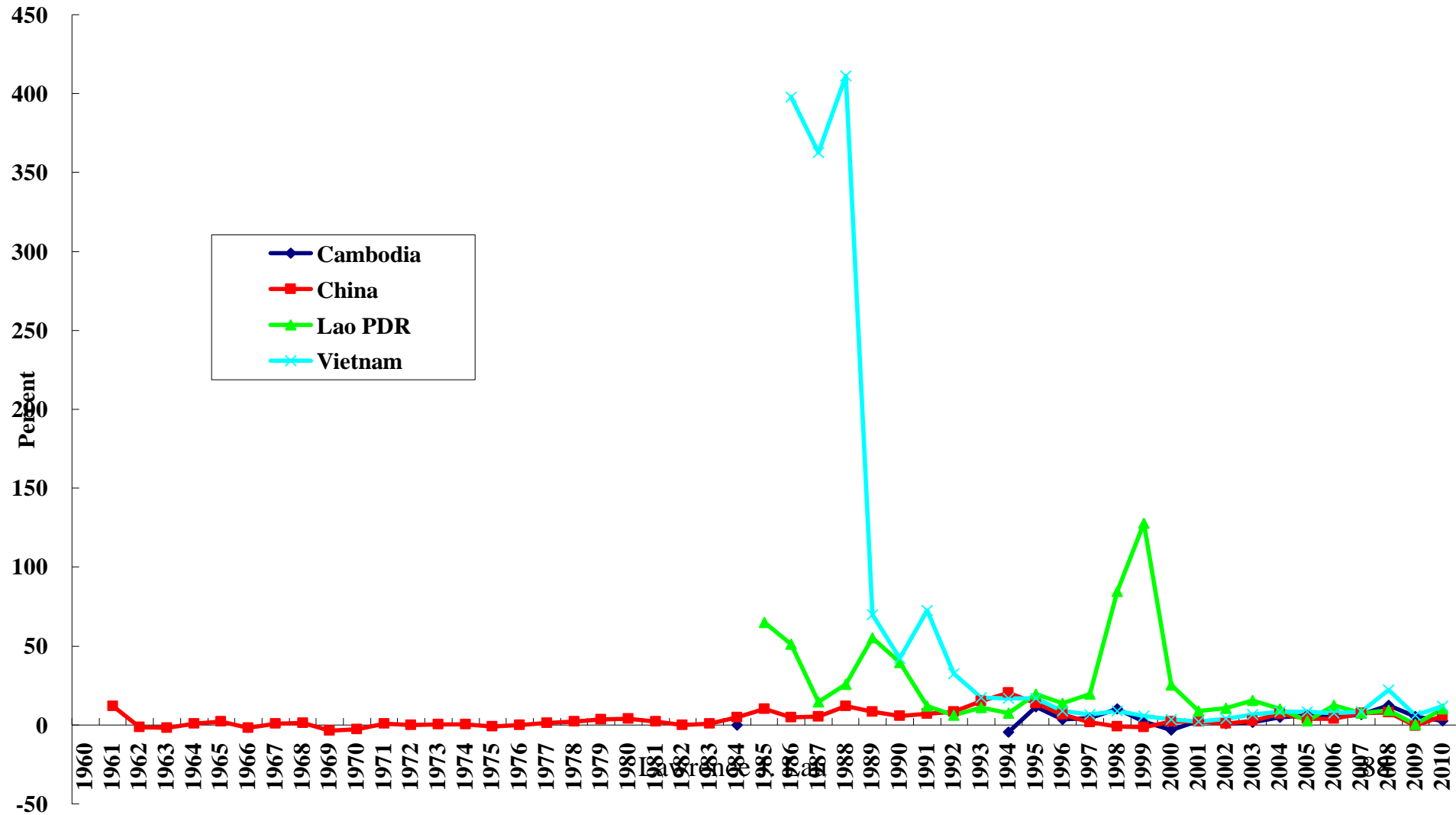
GDP per capita of Centrally Planned Economies in Asia, in 2000 US dollars

GDP per capita of Central Planning Countries in Asia, in 2000 US dollars



Rates of Changes of GDP Deflator of Centrally Planned Economies in Asia

Rates of Changes of GDP Deflator of Central Planning Countries in Asia



Comparison between China and Other East Asian Economies

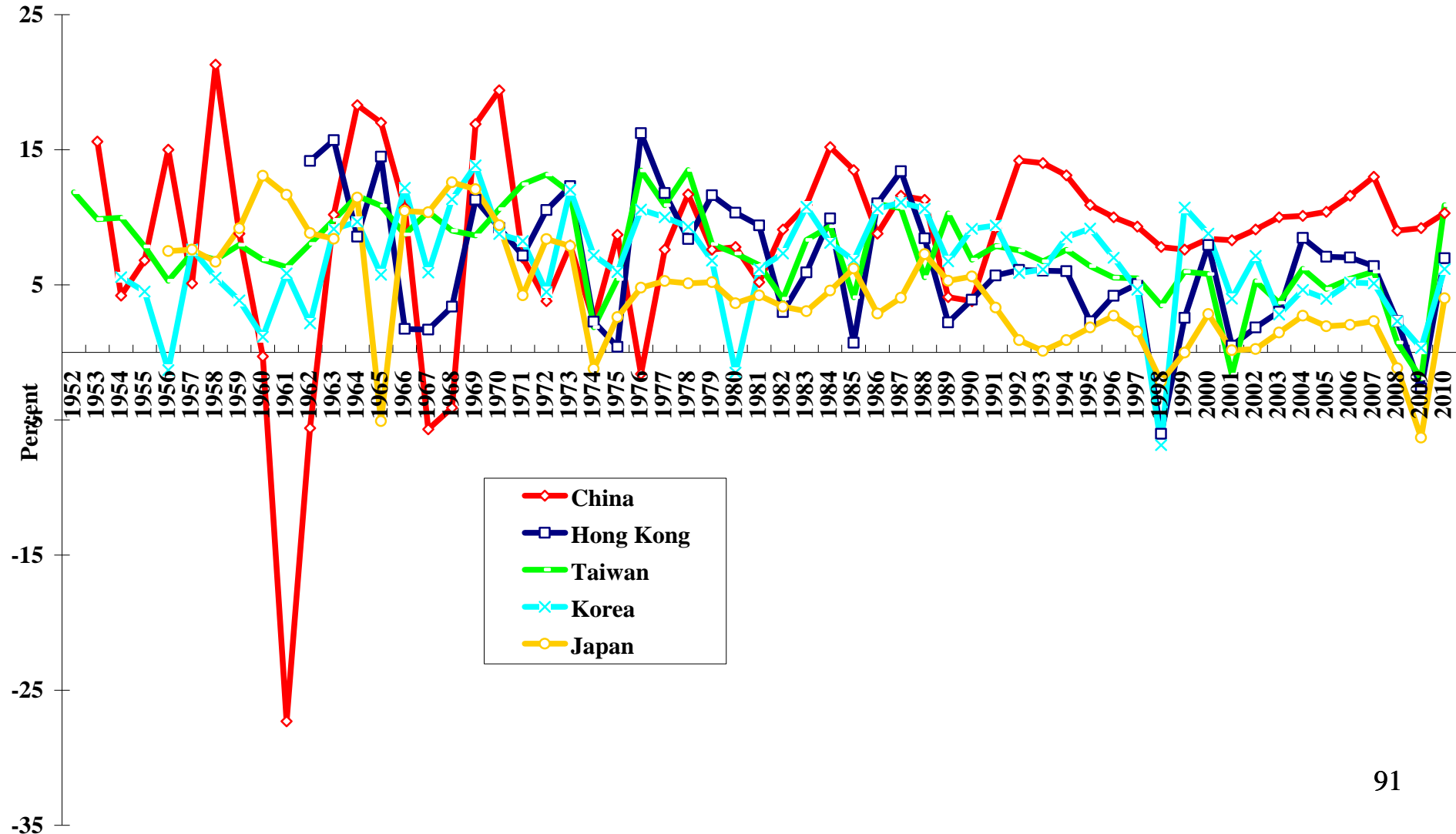
- ◆ Chinese economic growth during the past 33 years may basically be attributed to the growth of tangible inputs, principally tangible capital. There was very little technical progress or growth of total factor productivity.
- ◆ Will Chinese economic growth slow down gradually, just like the other East Asian economies? That Chinese economic growth will slow down eventually is probably inevitable. The question is when will it begin to slow down to a rate of growth below 7%?
- ◆ The Chinese economic fundamentals are very favourable—a high domestic savings rate, abundant surplus labour that will persist for another two to three decades, and a huge domestic economy with 1.34 billion consumers.

Comparison between China and Other East Asian Economies

- ◆ Chinese capital intensity, that is, tangible capital per unit labour, has remained low for the country as a whole. There is therefore still a great deal of room for tangible input-driven growth. At the same time, Chinese investments in intangible capital such as human capital and R&D capital, have been increasing rapidly.
- ◆ And China is a continental economy and the “flying geese” process of economic growth and industrialisation will take place within China itself from province to province just as it did in East Asia from economy to economy in an earlier period.
- ◆ My own estimation is that because of all these considerations, the Chinese economy has the potential to grow at an average annual rate of growth of 7-8 percent for at least another 2-3 decades.

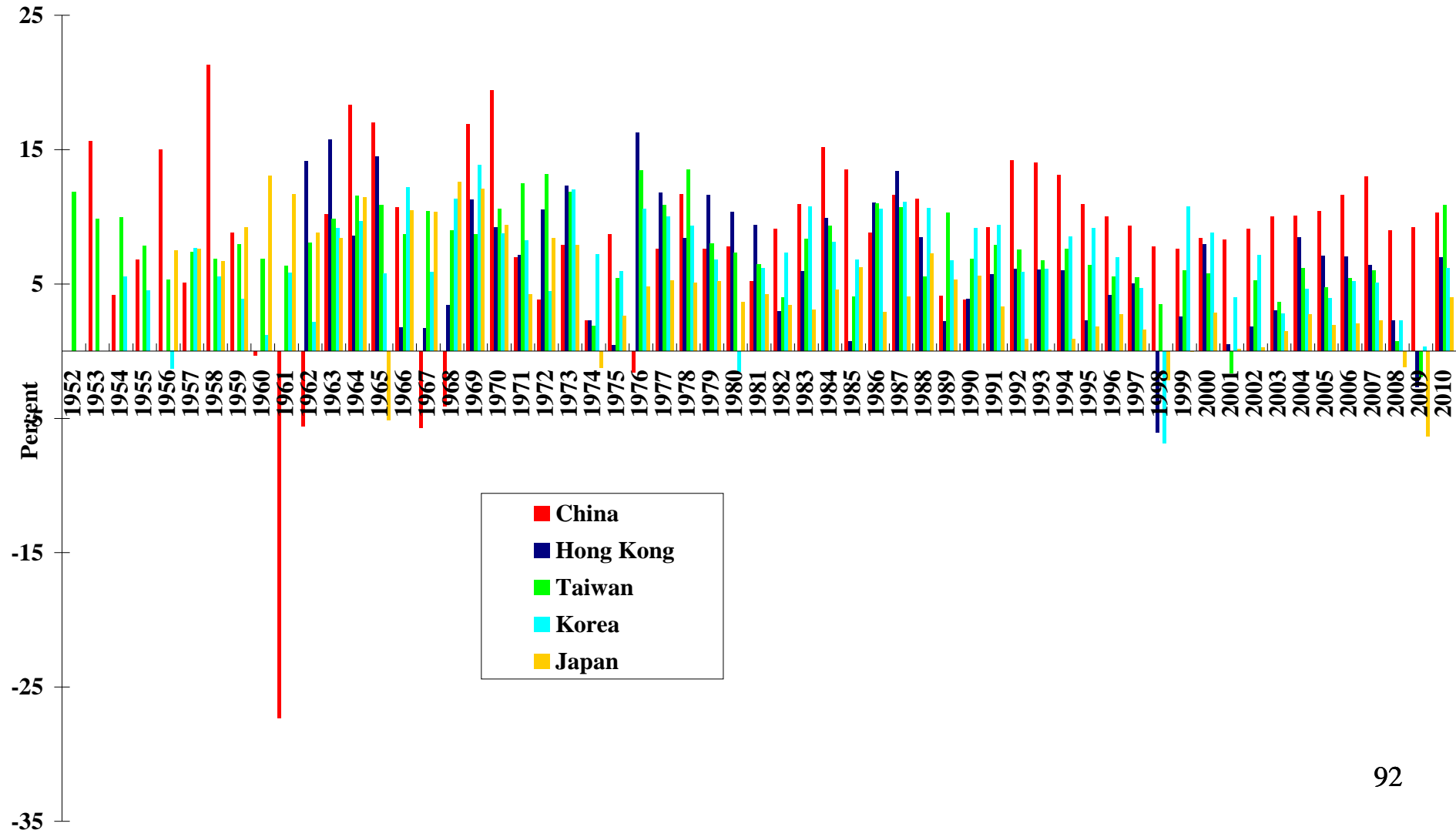
Annual Rates of Growth of Real GDP: Selected East Asian Economies

Rates of Growth of Real GDP of Selected Economies



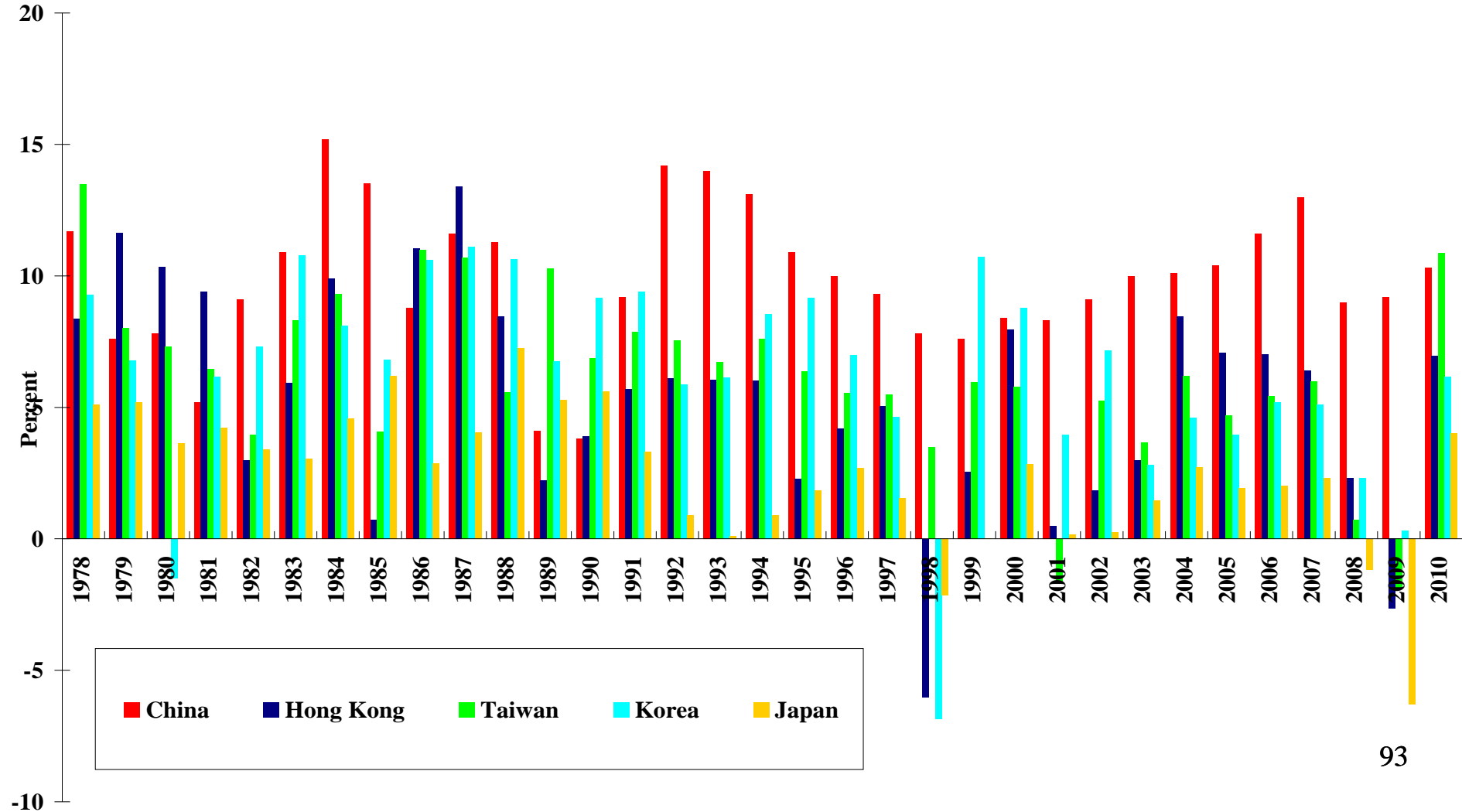
Annual Rates of Growth of Real GDP: Selected East Asian Economies

Rates of Growth of Real GDP of Selected Economies



Annual Rates of Growth of Real GDP: Selected East Asian Economies

Rates of Growth of Real GDP of Selected Economies



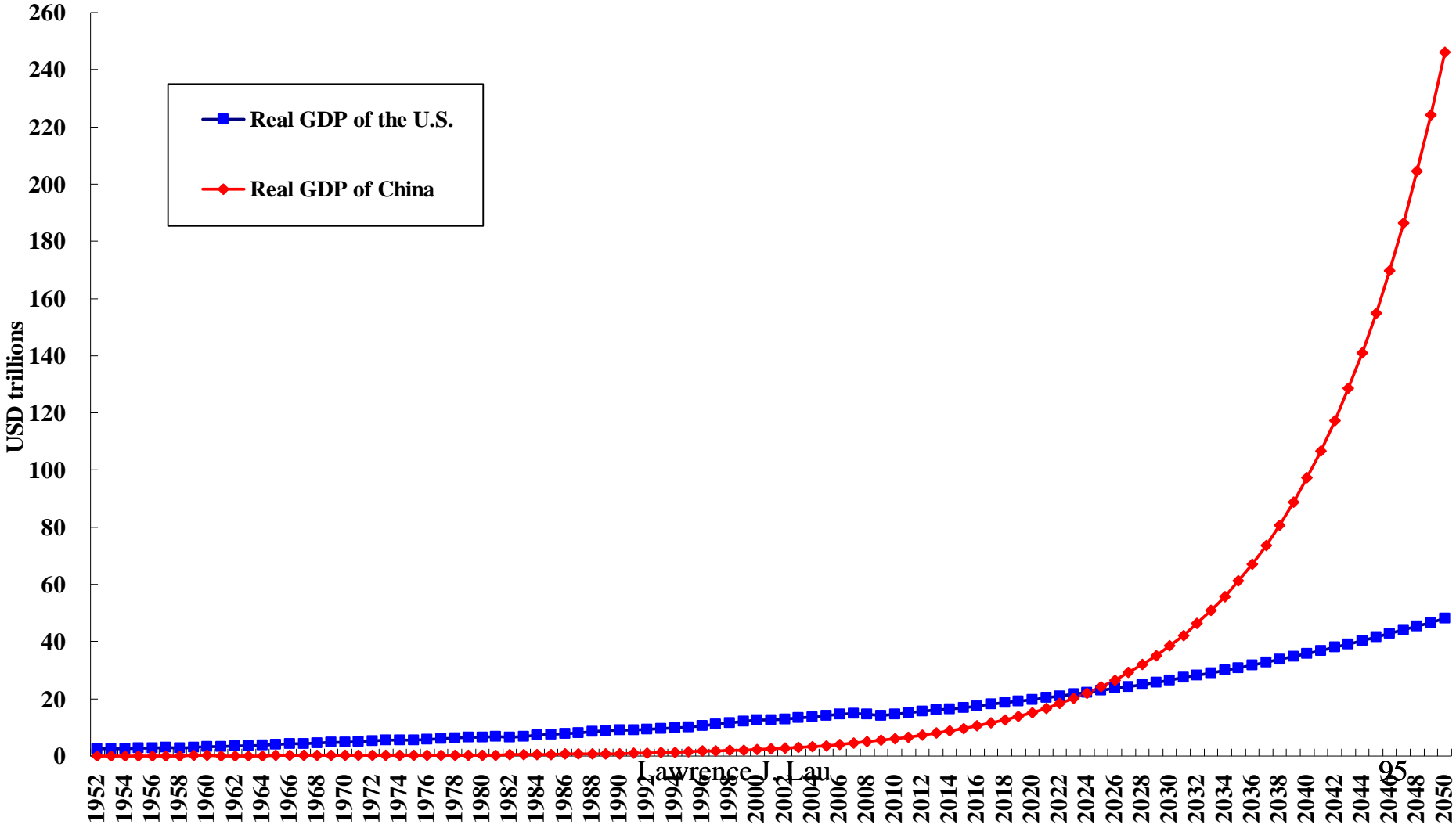
Projections of the Future

When will China Catch Up with the U.S.?

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

Actual and Projected Real GDP of China and the U.S., in 2010 prices

Actual and Projected Real GDP of China and the U.S., in 2010 prices



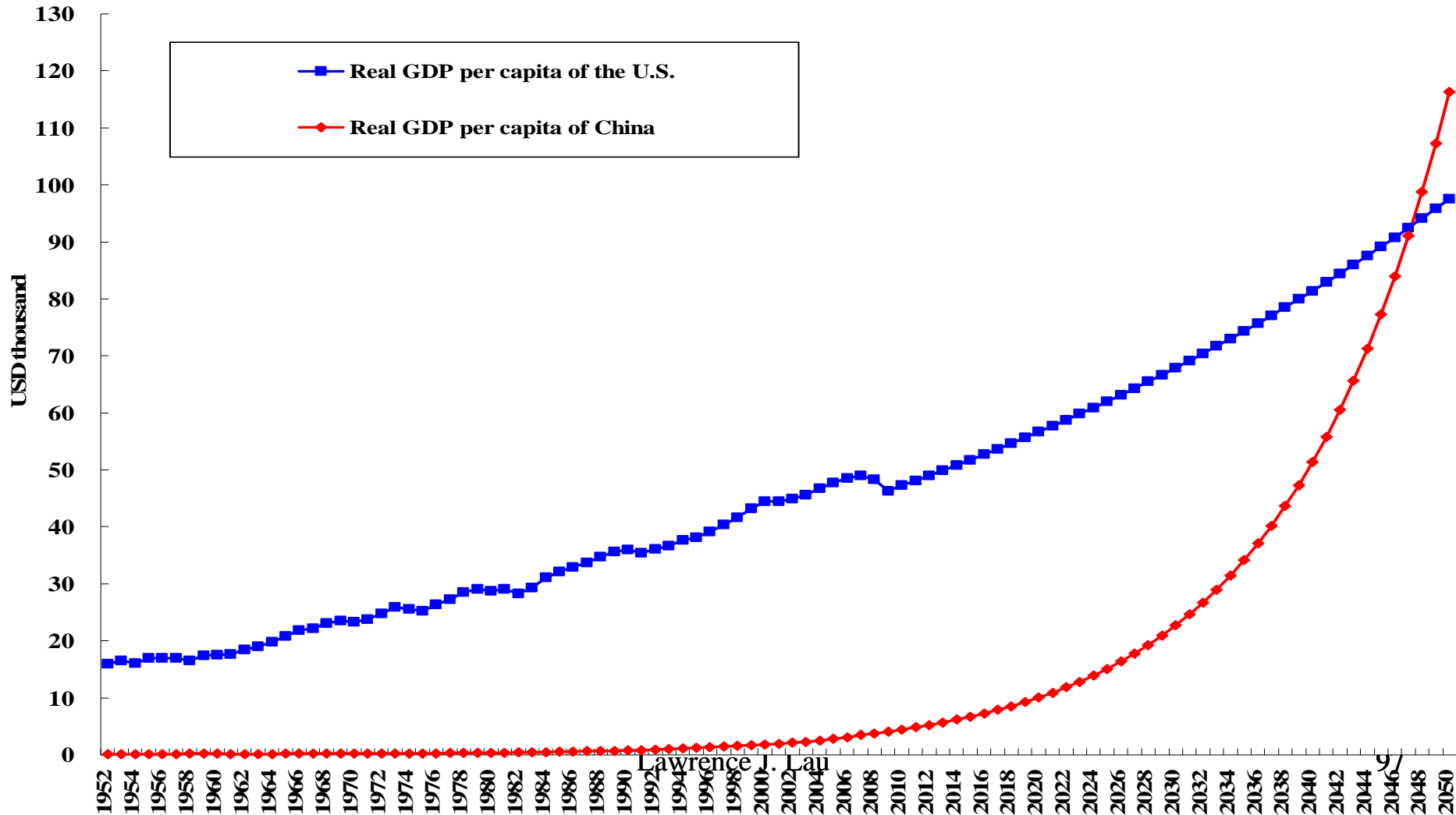
Projections of the Future

When will China Catch Up with the U.S.?

- ◆ 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 Chinese population will reach a peak around 2035 and then begin to decline slowly).
- ◆ By that time, Chinese GDP will be approximately five times 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 Real GDP per Capita of China and the U.S., in 2010 prices

Actual and Projected Real GDP per capita of China and the U.S., in 2010 prices



Concluding Remarks

- ◆ The highly successful experience of Chinese economic growth over the past 33 years (as well as those of other East Asian economies) strongly reaffirm the fundamental importance of having and maintaining a high national savings rate and surplus labour.
- ◆ In addition, the size of the domestic economy is a favourable factor not only for Chinese economic growth but also for its long-term sustainability.
- ◆ However, these favourable factors alone were not sufficient, as the Chinese economy did not experience sustained economic growth between 1949 and 1978.

Concluding Remarks

- ◆ Economic reform and opening allowed the realisation of the huge surplus potential output, helped to enhance and assure the efficiency of the Chinese economy and facilitated technology transfer from abroad.
- ◆ It is the unique achievement of China that in its transition from a centrally planned economy to a market economy, it was able to use a strategy of reform without losers--making sure that no one would be worse off. Such a strategy of reform without losers maximised support, minimised opposition and promoted social stability. It led to win-win for all. As a result, the transition was smooth, stable and successful.

Concluding Remarks

- ◆ Given its economic fundamentals, and the fact that Chinese investment in intangible capital will be increasing rapidly in the future, the Chinese economy will be able to continue to grow rapidly over the next two to three decades, at an average rate of between 7% and 8% per annum, more or less independently of the rest of the world.
- ◆ Technical progress should gradually become an important source of growth for the Chinese economy, as it did for some of the other East Asian economies.

Concluding Remarks:

Chinese Economic Growth is not a Bubble

- ◆ A bubble is a transitory, unsustainable phenomenon. But the Chinese economy has been growing at a sustained high real rate of almost 10% per annum for the past 33 years, and is expected to continue to grow between 7% and 8% per annum for another 20 to 30 years. It therefore cannot possibly be a bubble.

Concluding Remarks:

Chinese Economic Growth is not a Miracle

- ◆ Chinese economic growth during the past 33 years can be explained by the growth of tangible inputs—tangible capital and labour, and in particular, tangible capital—rather than the growth in intangible capital or technical progress, just as the past economic growth of other East Asian economies at a similar stage of economic development (with the exception of initial conditions). This experience is also replicable and being replicated in other economies today.
- ◆ Chinese economic growth can be sustained longer than in other East Asian economies principally because of the size of the Chinese economy and its surplus labour.

Concluding Remarks:

Chinese Economic Growth is not a Miracle

- ◆ The model of Chinese economic development has also been adopted and emulated, at least in part, by Vietnam, another economy in the process of transitioning from a centrally planned to a market economic system, with some degree of success. It is also a model for other potential transition economies such as Cuba, Laos and North Korea.
- ◆ As the Chinese economic development experience can be replicated and reproduced elsewhere, it cannot be considered a miracle.