

# Thirty years of Chinese Economic Reform: Reasons for Its Success and Future Directions

---

Lawrence J. Lau, Ph. D.

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

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

4th International Workshop on Internet and Network Economics (WINE 2008)  
Forum of Great Wisdom  
Fudan University  
Shanghai, December 19, 2008

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

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

# Introduction

---

- ◆ Thirty Years of Chinese Economic Reform
- ◆ The Reasons for Its Success
- ◆ Directions for Further Economic Reform
- ◆ Concluding Remarks

# Thirty years of Chinese Economic Reform

---

# Thirty years of Chinese Economic Reform

---

- ◆ China has made tremendous progress in its economic development since it began its economic reform and opened to the world in 1978. China is currently the fastest growing economy in the World—averaging approximately 10% per annum over the past 30 years.
- ◆ Between 1978 and 2007, Chinese real GDP grew fifteen-fold, from US\$228 billion to US\$3.42 trillion (2007 prices) (4th largest economy in the world) and real GDP per capita grew more than ten-fold from US\$236 to US\$2,571. By comparison, the U.S. GDP (approx. US\$13.84 trillion) and GDP per capita (approx. US\$45,671) were respectively 4 and 18 times the comparable Chinese figures in 2007.

# Thirty years of Chinese Economic Reform

---

- ◆ Despite its rapid growth, China is still a developing economy in terms of its real GDP per capita. An economy is generally considered to be developed if its GDP per capita exceeds US\$10,000 (if we take into account inflation, this threshold probably should be higher).
- ◆ It will probably take another 20-25 years before China joins the ranks of developed economies, achieving a per capita real GDP of US\$10,000, and a further 20-30 years before China reaches the same level of real GDP per capita as the United States, some time past the middle of the 21<sup>st</sup> Century (bear in mind that in the meantime, the U.S. economy will also continue to grow, albeit at rates significantly lower than those of China).

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

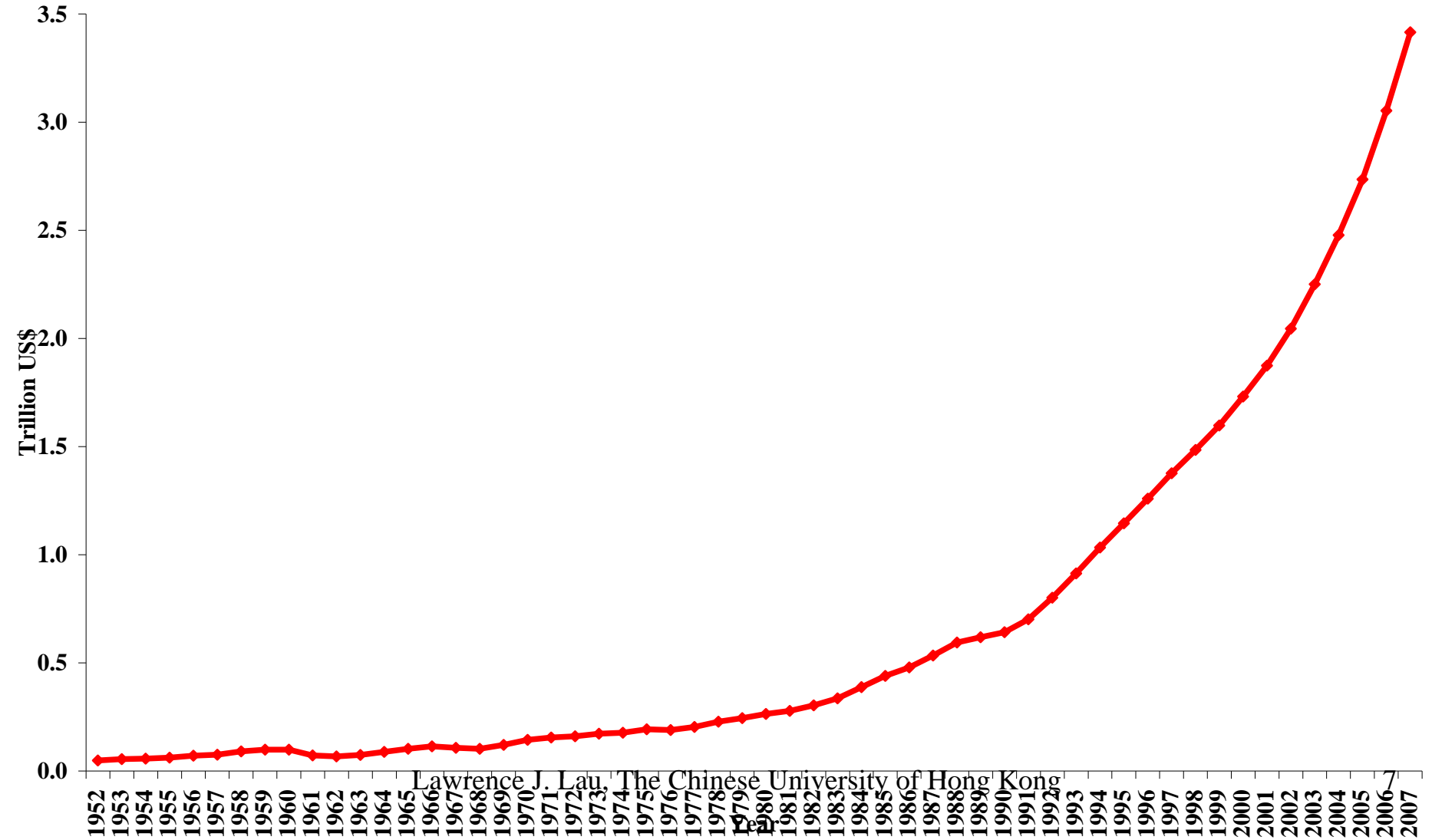
---

	1978	2007	2020
	US\$	(2007 prices)	
Real GDP (trill.)	0.228	3.42	8.00
Real GDP/capita	236	2,571	5,500

# Thirty years of Chinese Economic Reform

## Real GDP in US\$ (2007 Prices)

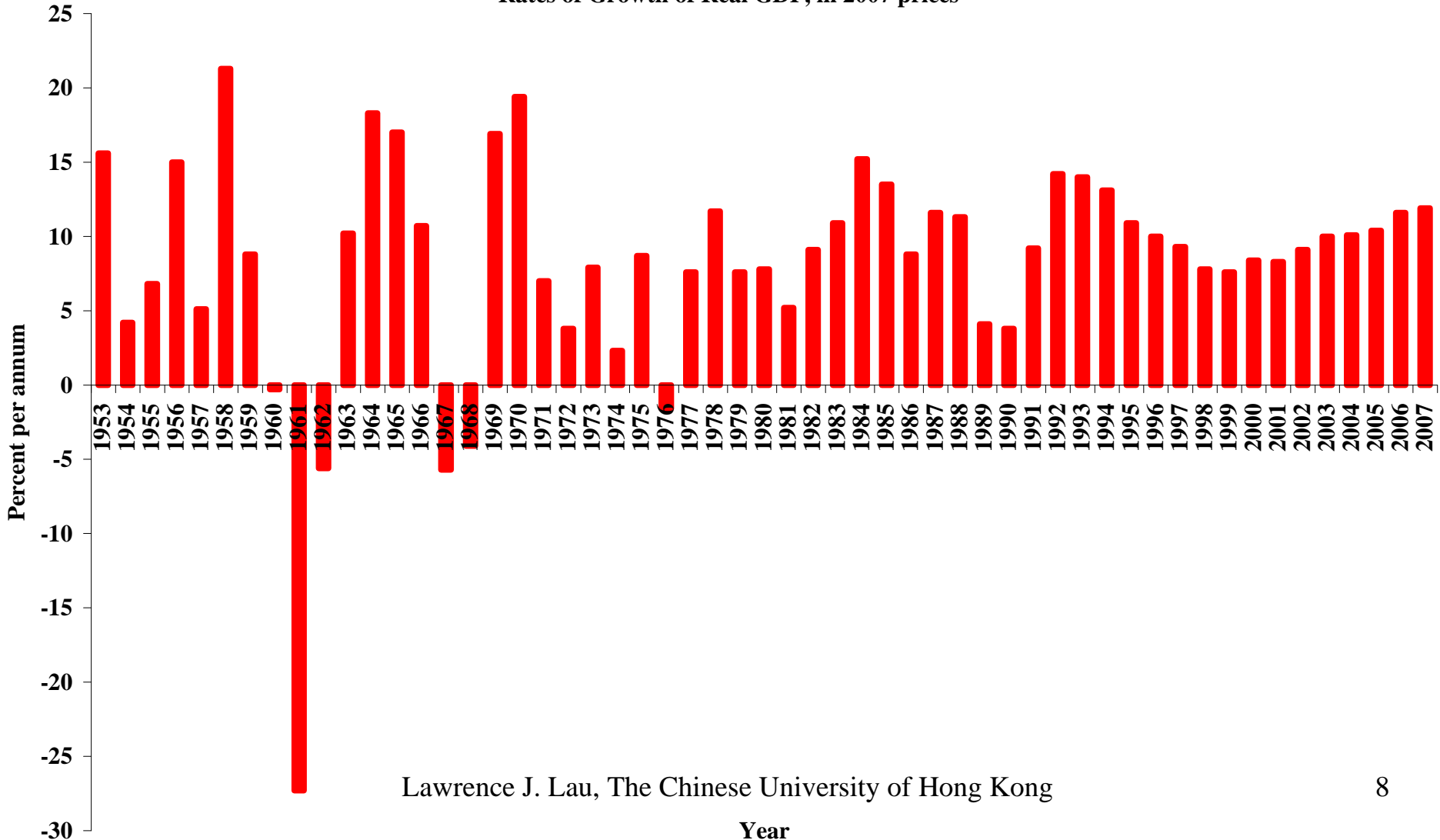
Chinese Real GDP, in 2007 prices



# Thirty years of Chinese Economic Reform

## Rates of Growth of Real GDP

Rates of Growth of Real GDP, in 2007 prices

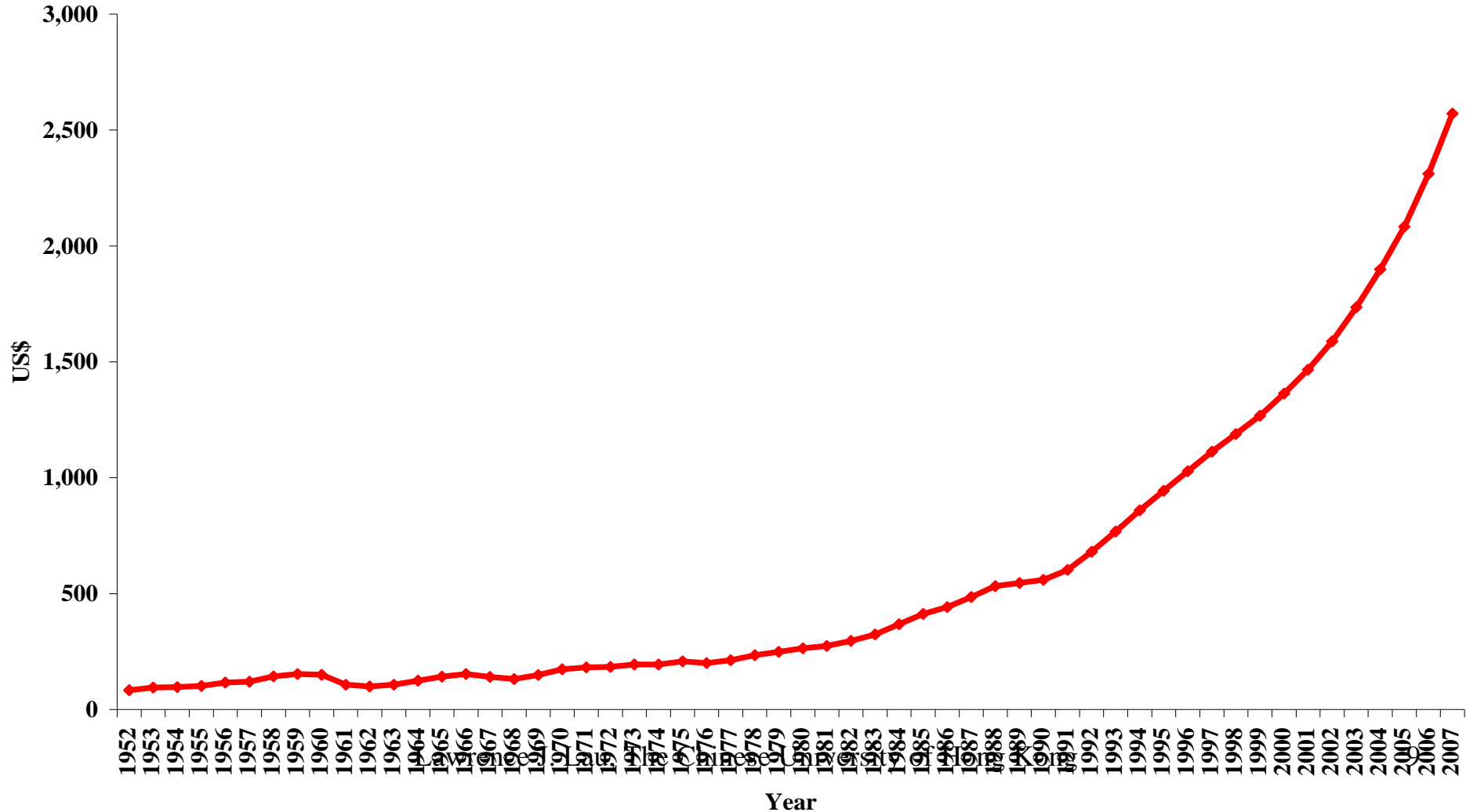


# Thirty years of Chinese Economic Reform

## Real GDP per Capita in US\$ (2007 Prices)

---

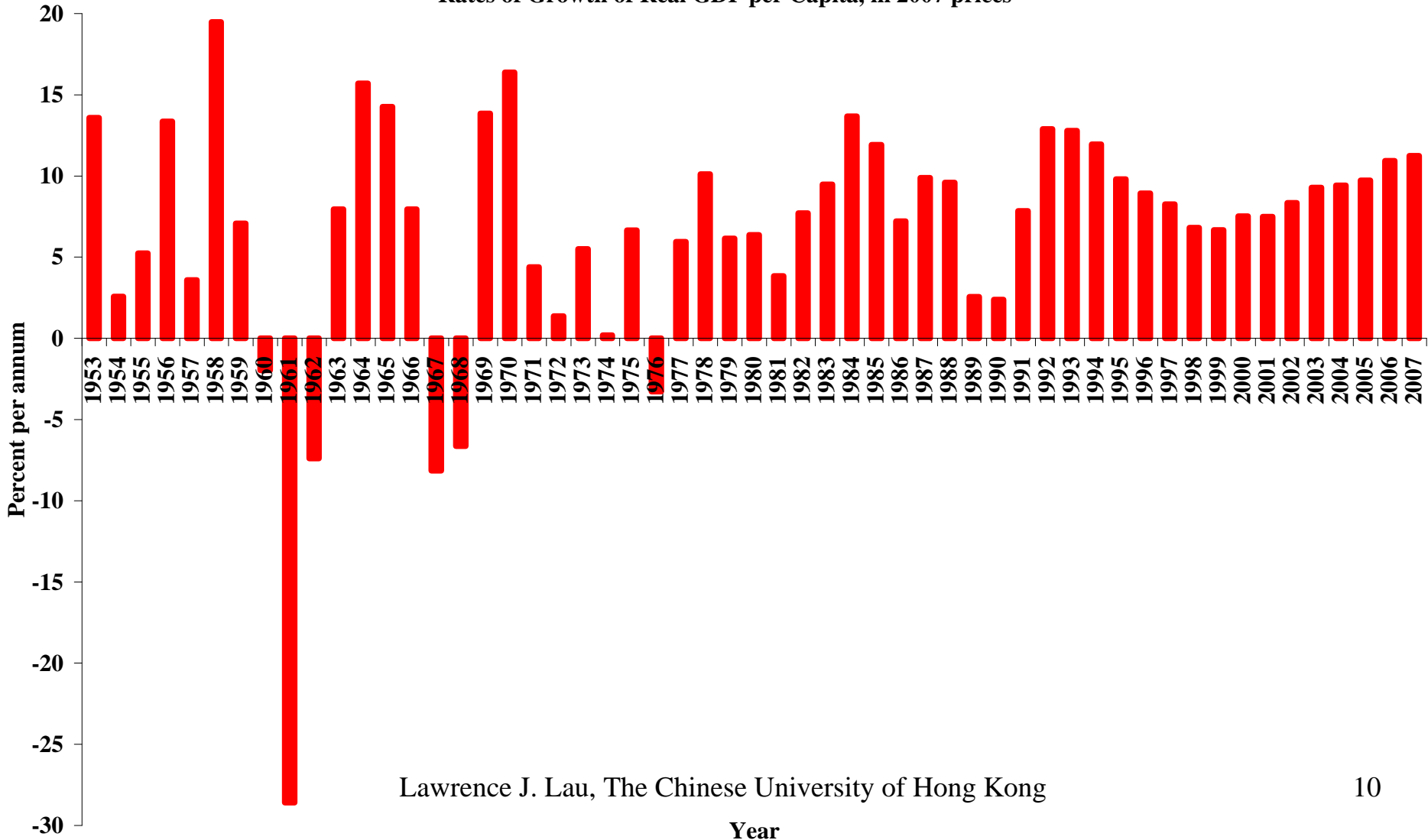
Chinese Real GDP per Capita, in 2007 prices



# Thirty years of Chinese Economic Reform

## Rates of Growth of Real GDP per Capita

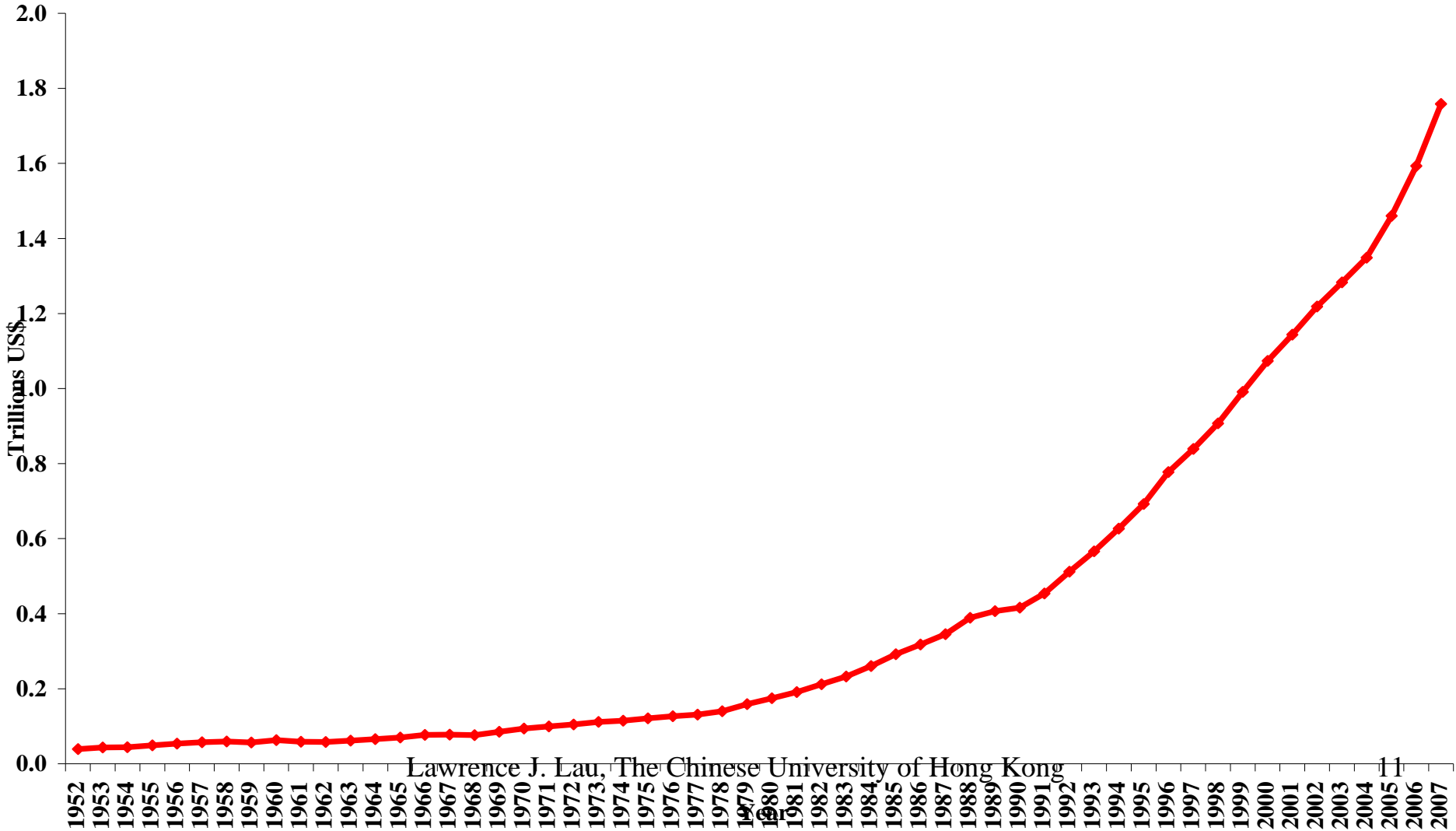
Rates of Growth of Real GDP per Capita, in 2007 prices



# Thirty years of Chinese Economic Reform

## Real Consumption in US\$

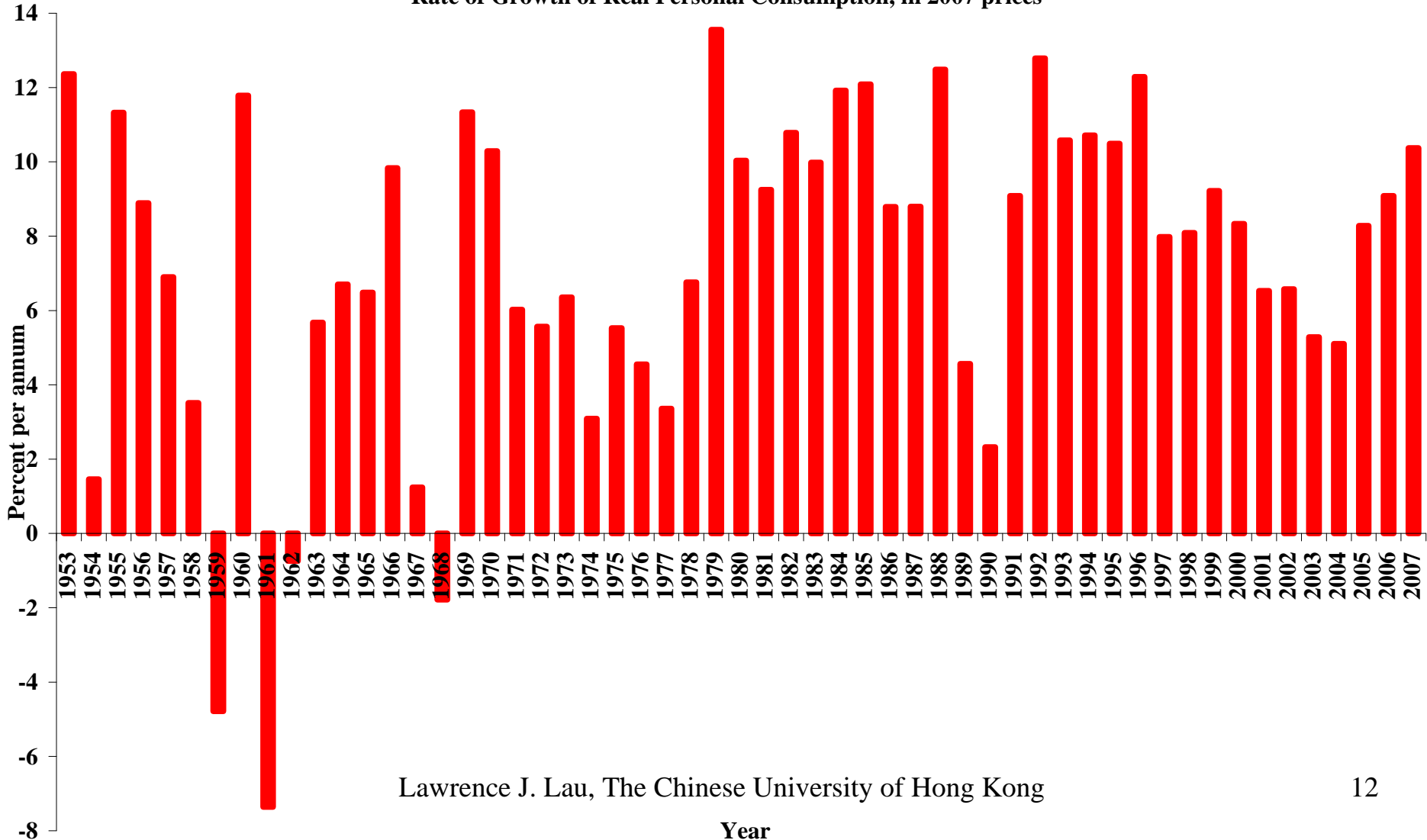
Real Personal Consumption, in 2007 prices



# Thirty years of Chinese Economic Reform

## Rate of Growth of Real Consumption

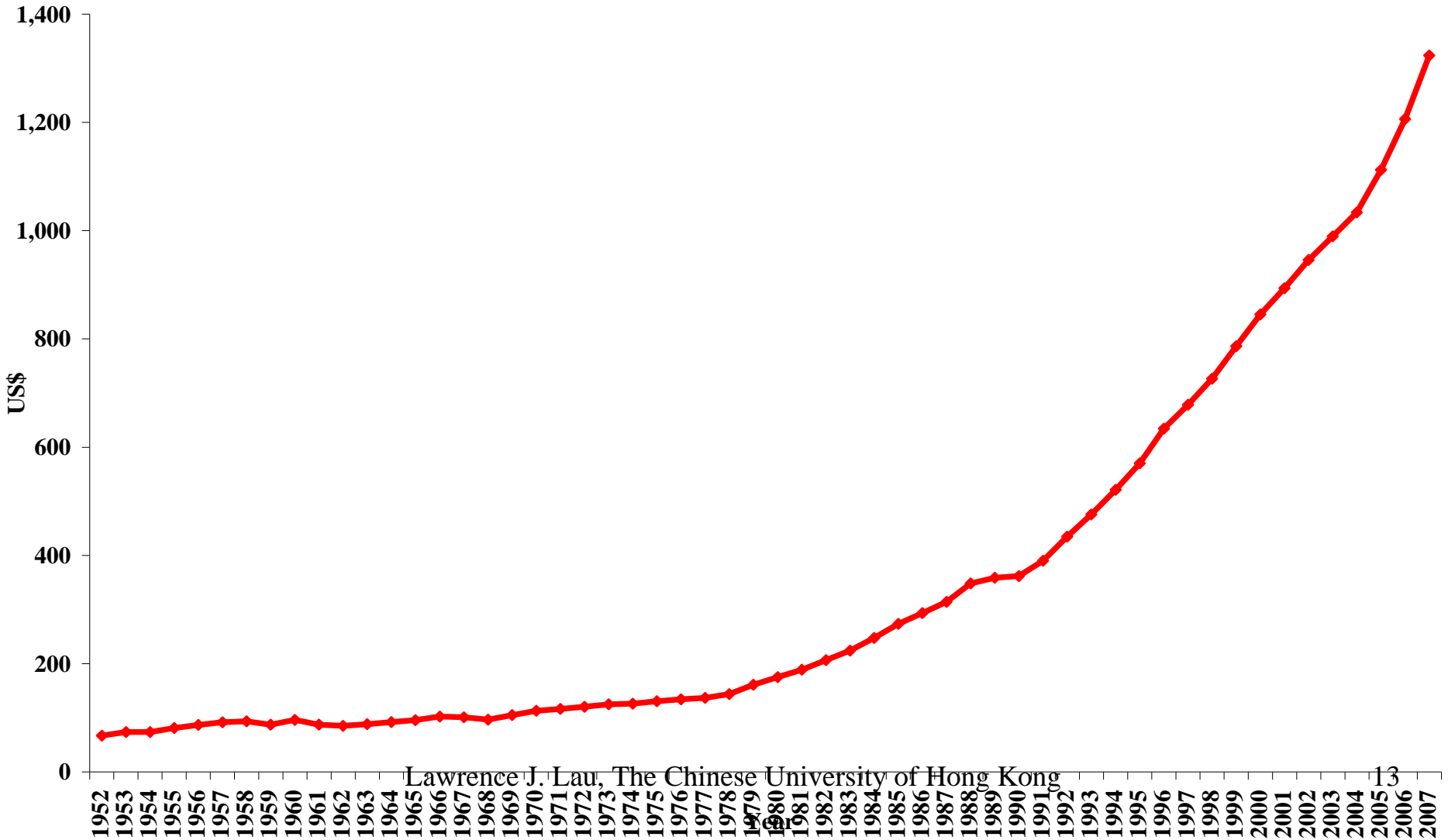
Rate of Growth of Real Personal Consumption, in 2007 prices



# Thirty years of Chinese Economic Reform

## Real Consumption per Capita in US\$

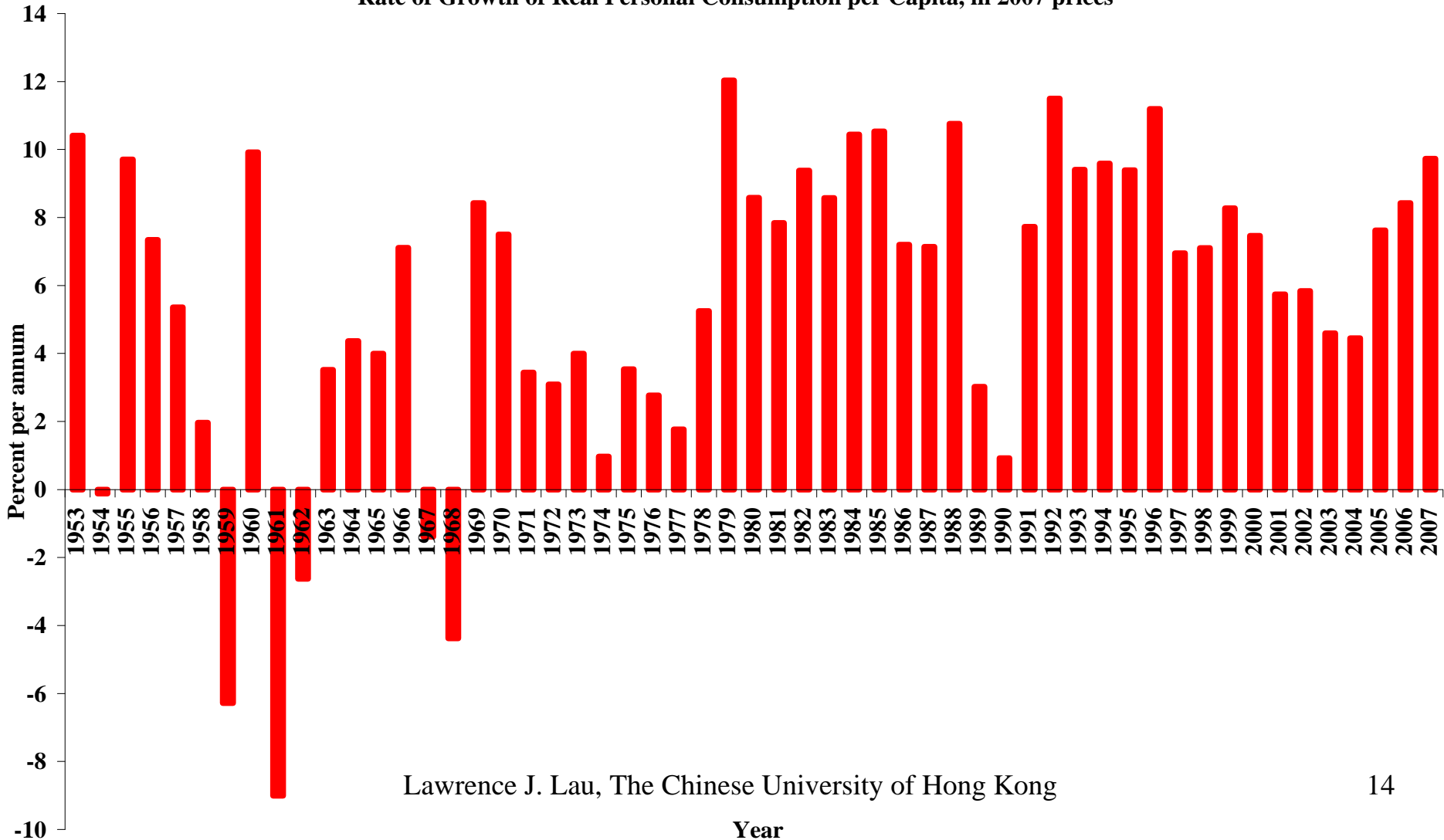
Real Personal Consumption per Capita, in 2007 prices



# Thirty years of Chinese Economic Reform

## Growth of Real Consumption per Capita

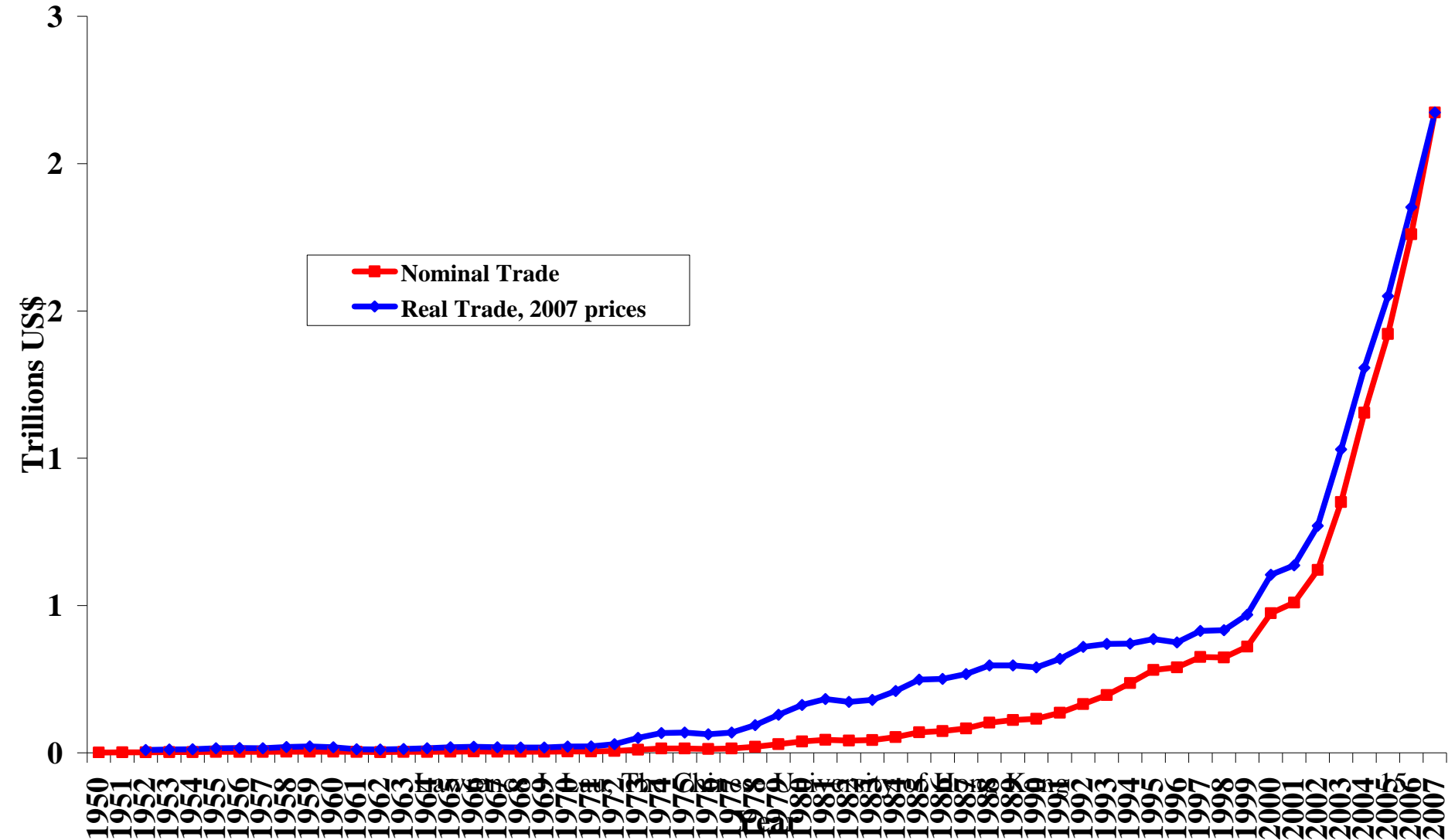
Rate of Growth of Real Personal Consumption per Capita, in 2007 prices



# Thirty years of Chinese Economic Reform

## Nominal and Real International Trade

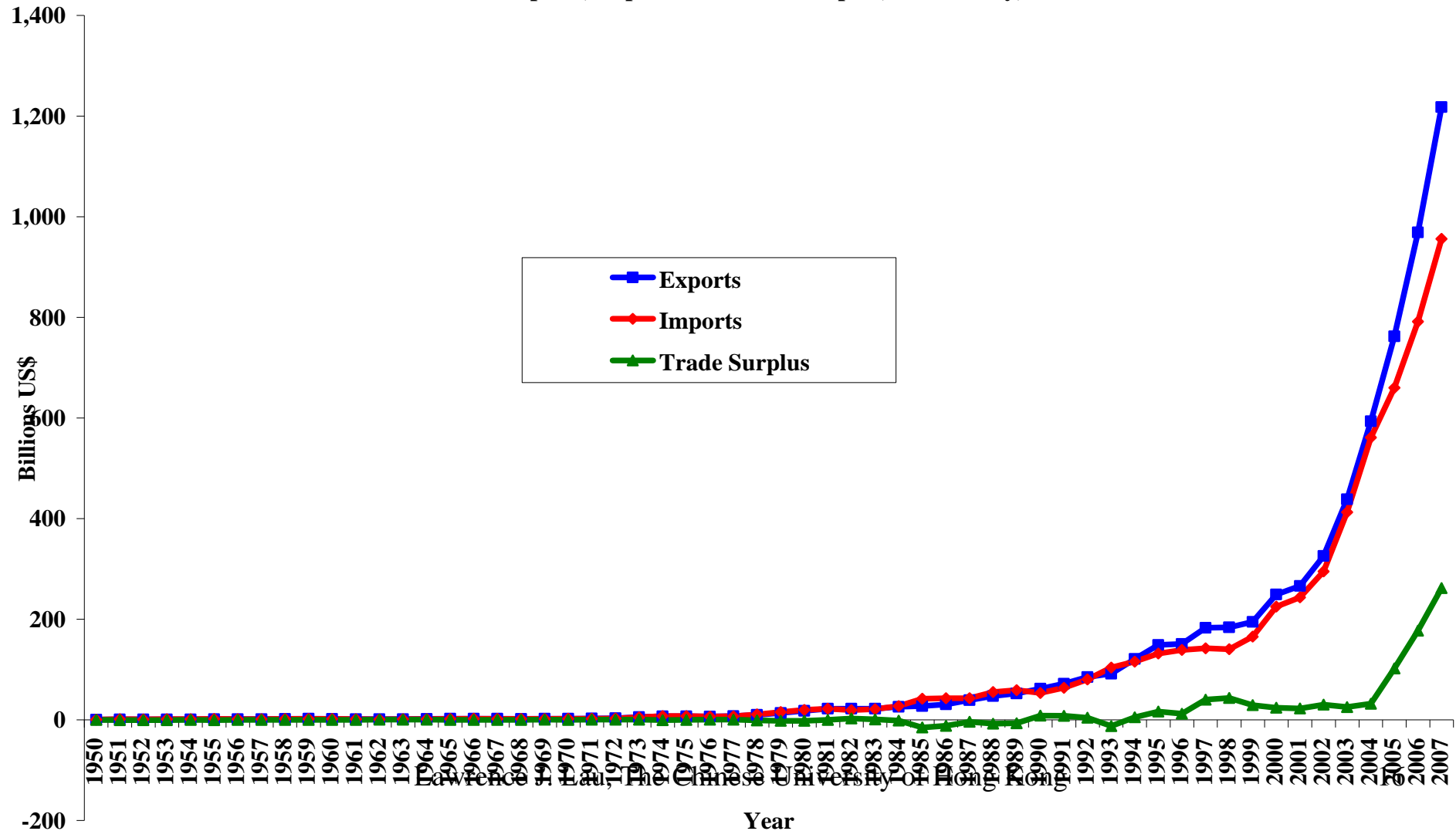
Total Nominal and Real International Trade



# Thirty years of Chinese Economic Reform

## Exports, Imports and Trade Surplus, US\$

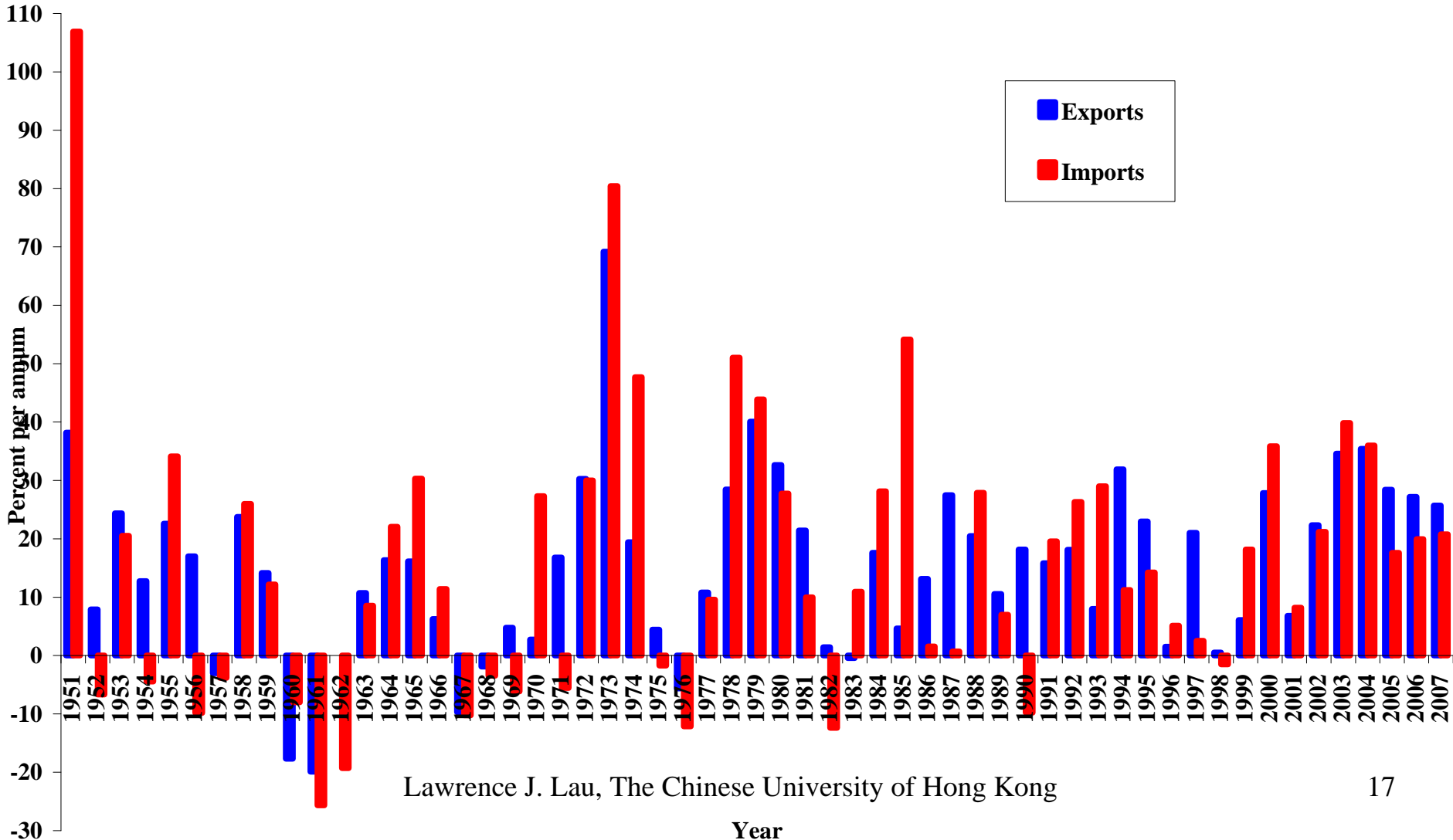
Chinese Exports, Imports and Trade Surplus, Goods Only, US\$



# Thirty years of Chinese Economic Reform

## Growth of Exports and Imports

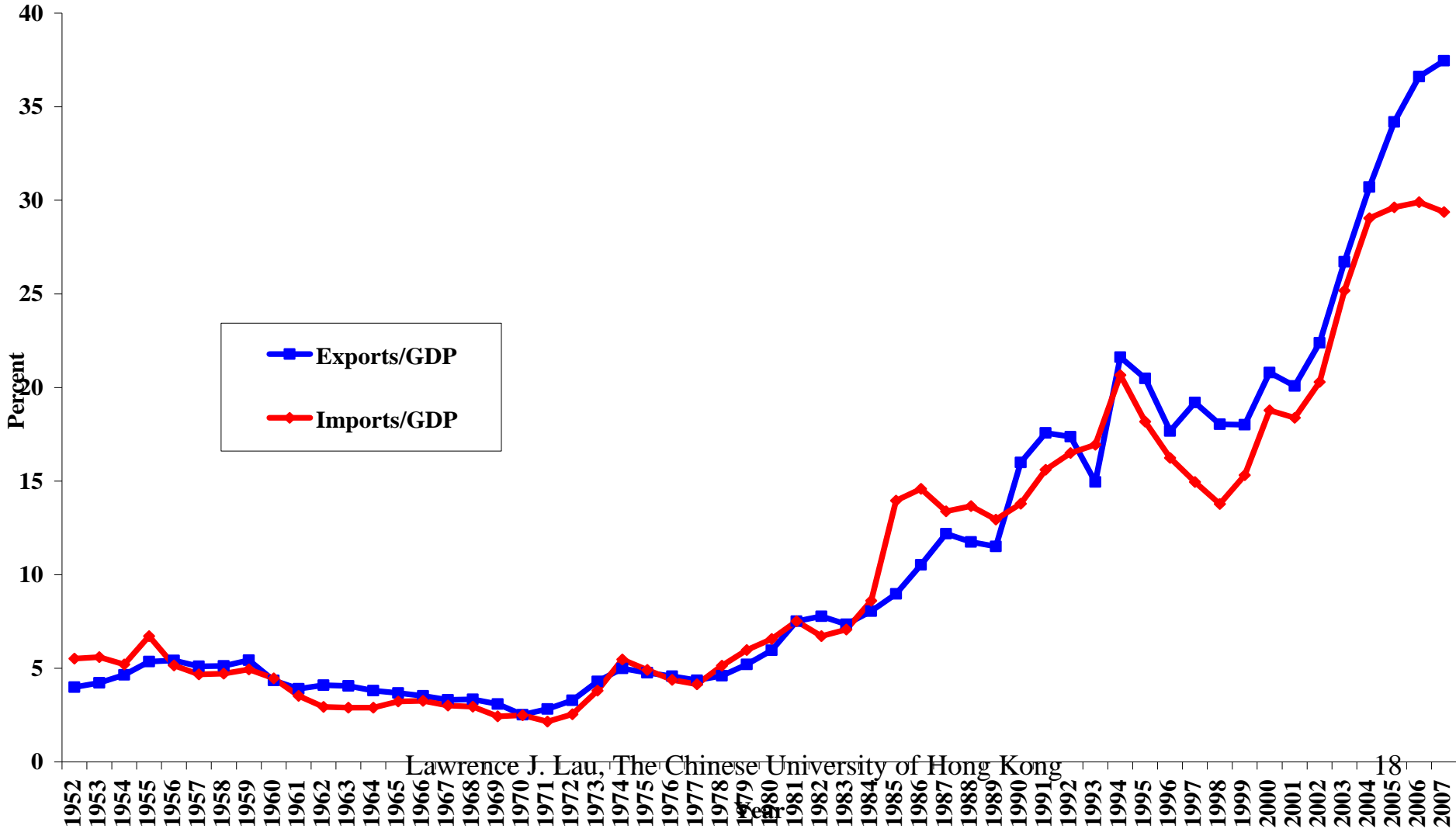
Rates of Growth of Exports and Imports of Goods, US\$



# Thirty years of Chinese Economic Reform

## Ratios of Exports and Imports to GDP

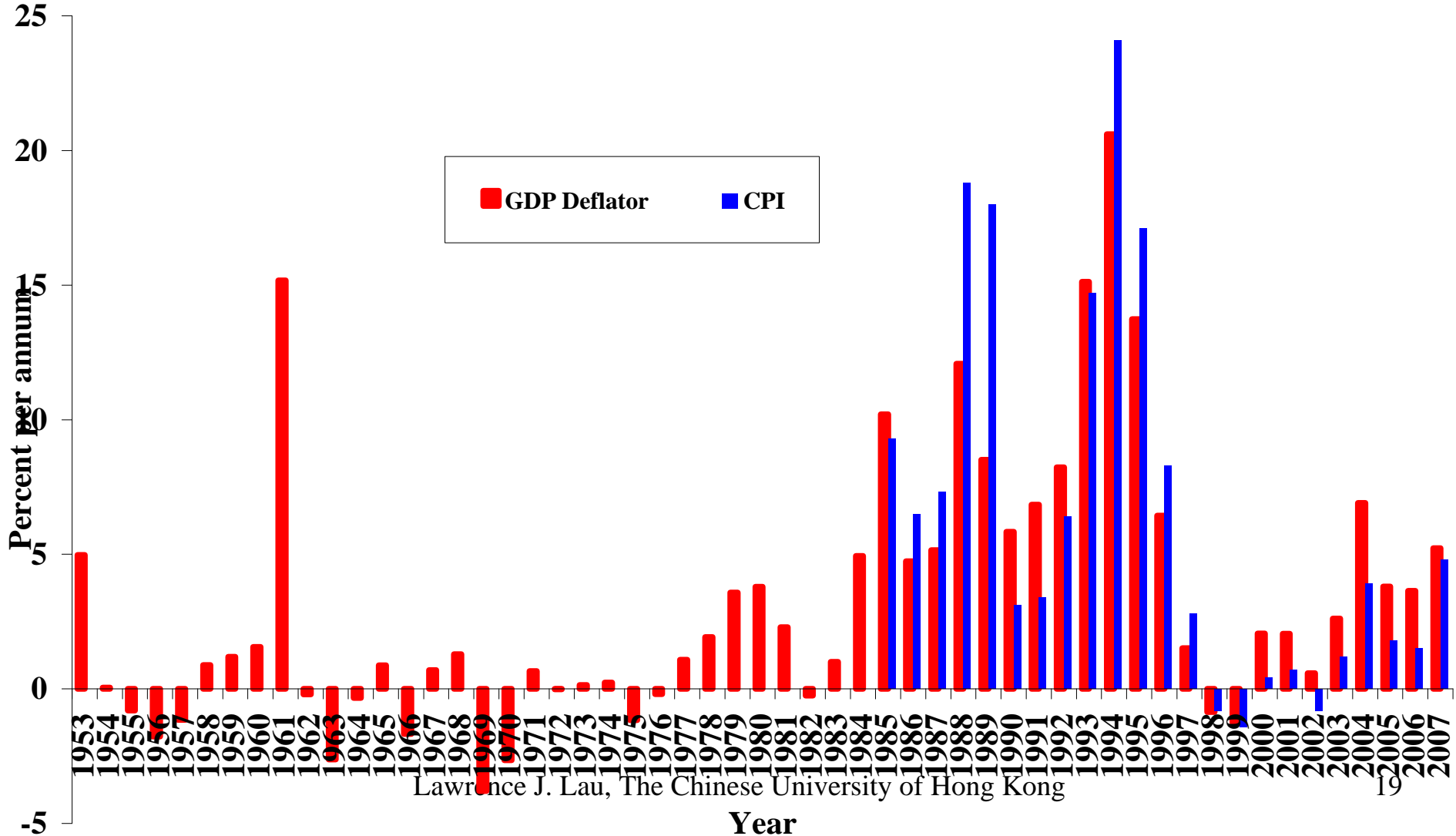
Ratios of Exports and Imports to GDP



# Thirty years of Chinese Economic Reform

## The Rates of Inflation

Rates of Changes of GDP Deflator and CPI



Lawrence J. Lau, The Chinese University of Hong Kong

# Thirty years of Chinese Economic Reform

---

	<b>Growth Rates</b>	
	<b>percent per annum</b>	
	<b>Pre-Reform</b>	<b>Reform</b>
	<b>1952-1978</b>	<b>1978-2007</b>
<b>Real GDP</b>	<b>6.15</b>	<b>9.79</b>
<b>Real GDP per Capita</b>	<b>4.06</b>	<b>8.61</b>
<b>Real Consumption</b>	<b>5.05</b>	<b>9.12</b>
<b>Real Consumption per Capita</b>	<b>2.99</b>	<b>7.95</b>
<b>Exports</b>	<b>9.99</b>	<b>18.11</b>
<b>Imports</b>	<b>9.14</b>	<b>16.68</b>
<b>Inflation (GDP Deflator)</b>	<b>0.50</b>	<b>5.38</b>

# Thirty years of Chinese Economic Reform

---

- ◆ Despite the many problems that have arisen within the past decade— income disparity, environmental degradation, inadequate infrastructure—it is fair to say that everyone has benefited from the economic reform, albeit to varying degrees, and few want to return to the central planning days.
- ◆ China is one of the very few socialist countries that have made a smooth transition from a centrally planned to a market economy. It is a model for other transition economies (e.g., Vietnam) and potential transition economies (e.g., North Korea).
- ◆ The rate of interest (the price of money) and the exchange rate are the only prices that are still administratively managed on the margin, in addition to the prices of different forms of energy, which are also regulated.
- ◆ The private (non-state) sector accounts for more than 75% of GDP and an even greater percentage of employment compared to essentially 0% in 1978. Increasingly, even public utilities, such as electric power and water, are managed by private enterprises.

# Thirty years of Chinese Economic Reform

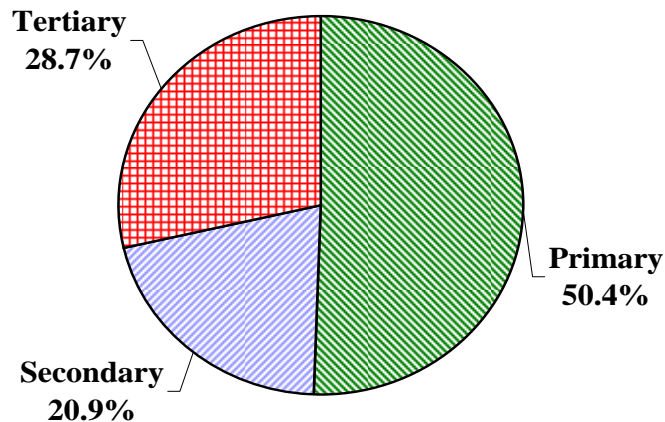
---

- ◆ The distribution of Chinese GDP by originating sector has become approximately: Primary, 11.3%; Secondary, 48.6%; and Tertiary, 40.1%. But the bulk of the labor force, more than 40%, is still in the primary sector, ensuring that there is no upward pressure on the real wage rate for unskilled entry-level labor for decades to come.

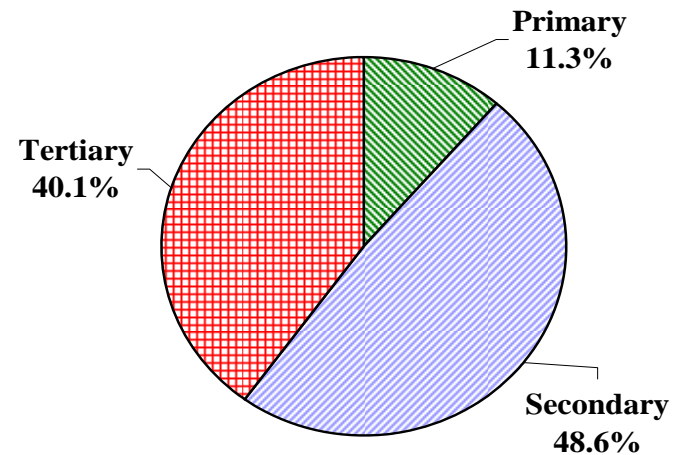
# Comparison of the Structure of GDP 1952 and 2007

---

**GDP in 1952**



**GDP in 2007**

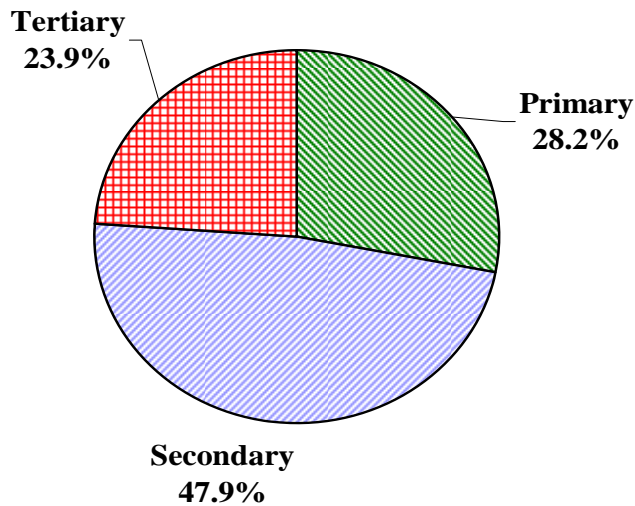


# Thirty years of Chinese Economic Reform

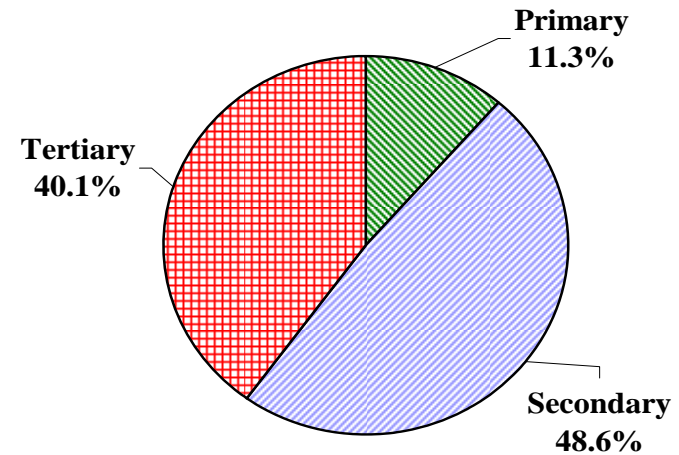
## GDP by Sector

---

**GDP in 1978**



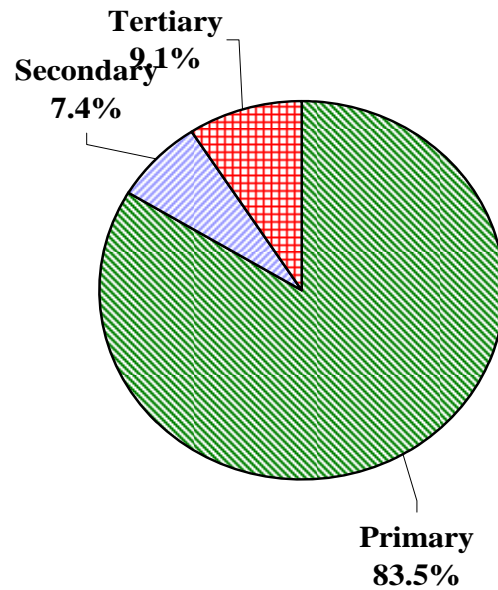
**GDP in 2007**



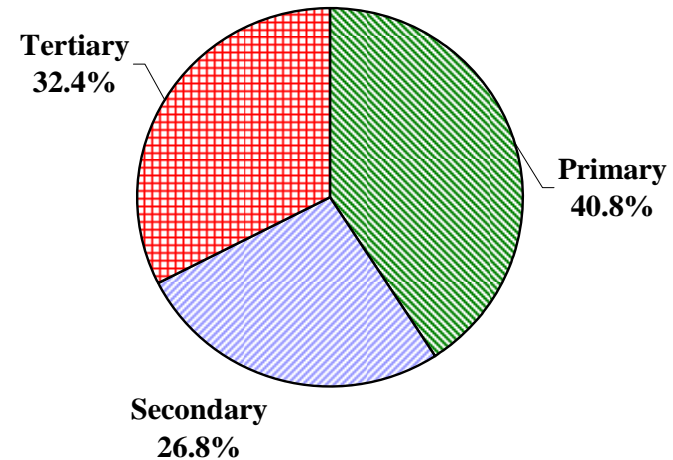
# Comparison of the Structure of Employment, 1952 and 2007

---

Employment in 1952



Employment in 2007

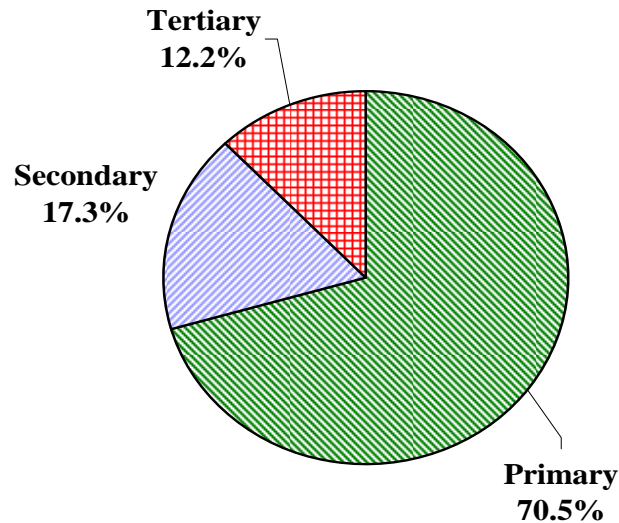


# Thirty years of Chinese Economic Reform

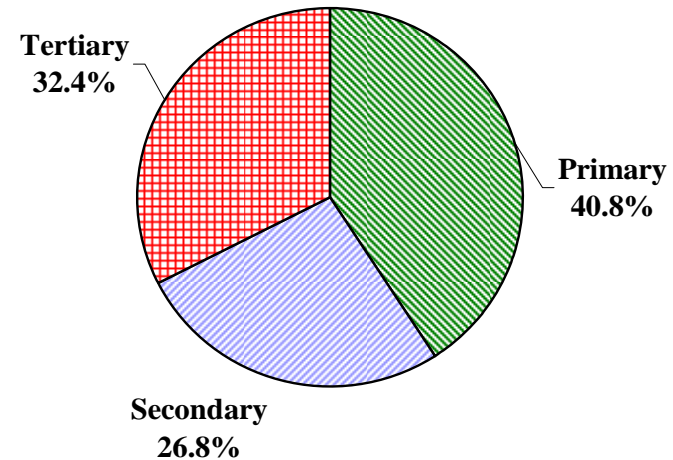
## Employment by Sector

---

**Employment in 1978**



**Employment in 2007**



# Thirty years of Chinese Economic Reform

---

- ◆ Moreover, Chinese economic growth has not been at the expense of the Rest of the World. It has not been a zero-sum game. Almost every country has benefitted from China's economic progress and its opening to the world. For example:
  - ◆ The consumers in the developed economies are able to enjoy low and stable prices for their everyday light-manufactured consumer goods.
  - ◆ China has become the most important export destination country for and runs a trade deficit with almost every other country and region in East Asia, including Japan.
  - ◆ China has become a major donor of development aid and assistance to developing countries, especially those in Africa.

# The Shifting Economic Center of Gravity

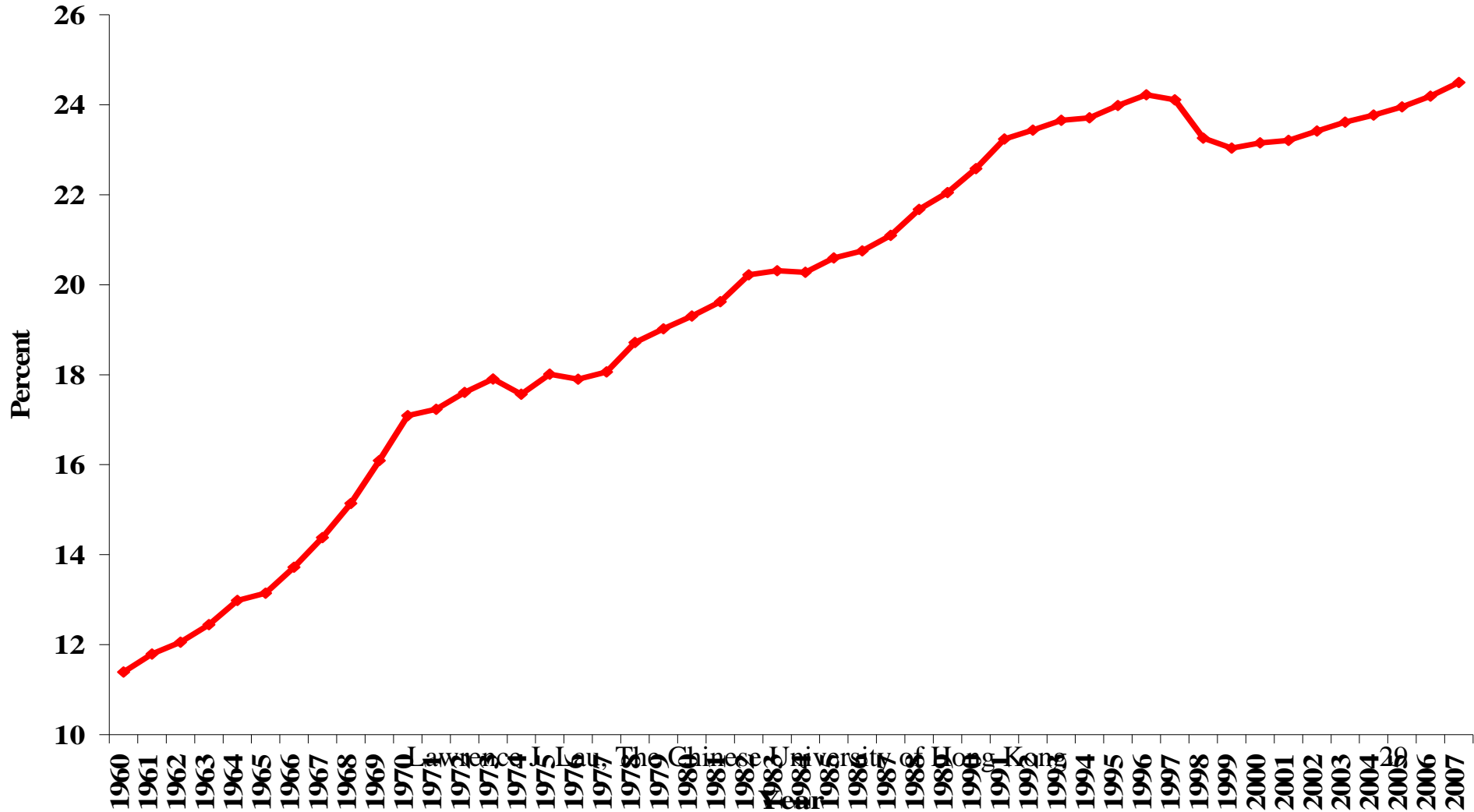
---

- ◆ The economic center of gravity of the world has been gradually shifting to East Asia from the United States and Western Europe and within East Asia from Japan to China.
- ◆ In 1960, East Asian GDP, comprising of the GDPs of ASEAN (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam) + 3 (China (Mainland only), Japan, and South Korea) was less than 12 percent of World GDP. Today, East Asian GDP accounts for approximately a quarter of World GDP.
- ◆ Chinese GDP will likely surpass Japanese GDP by the middle of the next decade.

# East Asian Share of World GDP, 1960-present

---

East Asian Share of World GDP, 1960-present



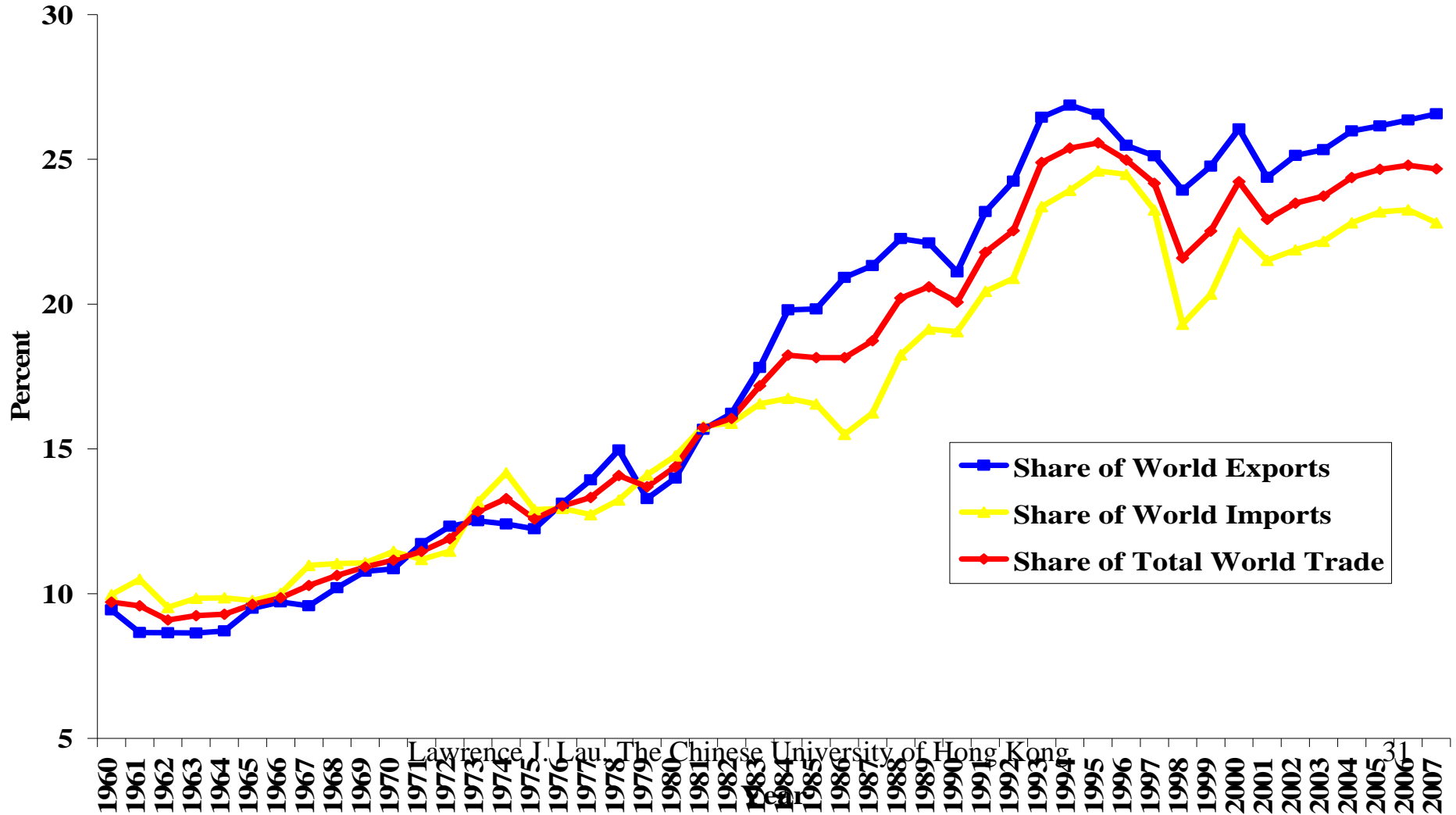
# The Shifting Economic Center of Gravity

---

- ◆ East Asian shares of world exports, imports, and international trade have also grown from approximately 10 percent in 1960 to a quarter in 2007, paralleling the growth of East Asian share of world GDP.
- ◆ Because of the rapid economic growth of China and the rest of East Asia outside of Japan, and the demand and supply that such economic growth has generated, the East Asian economies now trade more with one another than with economies outside of East Asia, including the United States. Approximately half of East Asian trade is among East Asian economies. This is a sea change compared to say thirty years ago when most of the East Asian trade was between East Asia and the United States and Western Europe.

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

East Asian Share of Total World Trade, 1960-present



# The De-Coupling Hypothesis

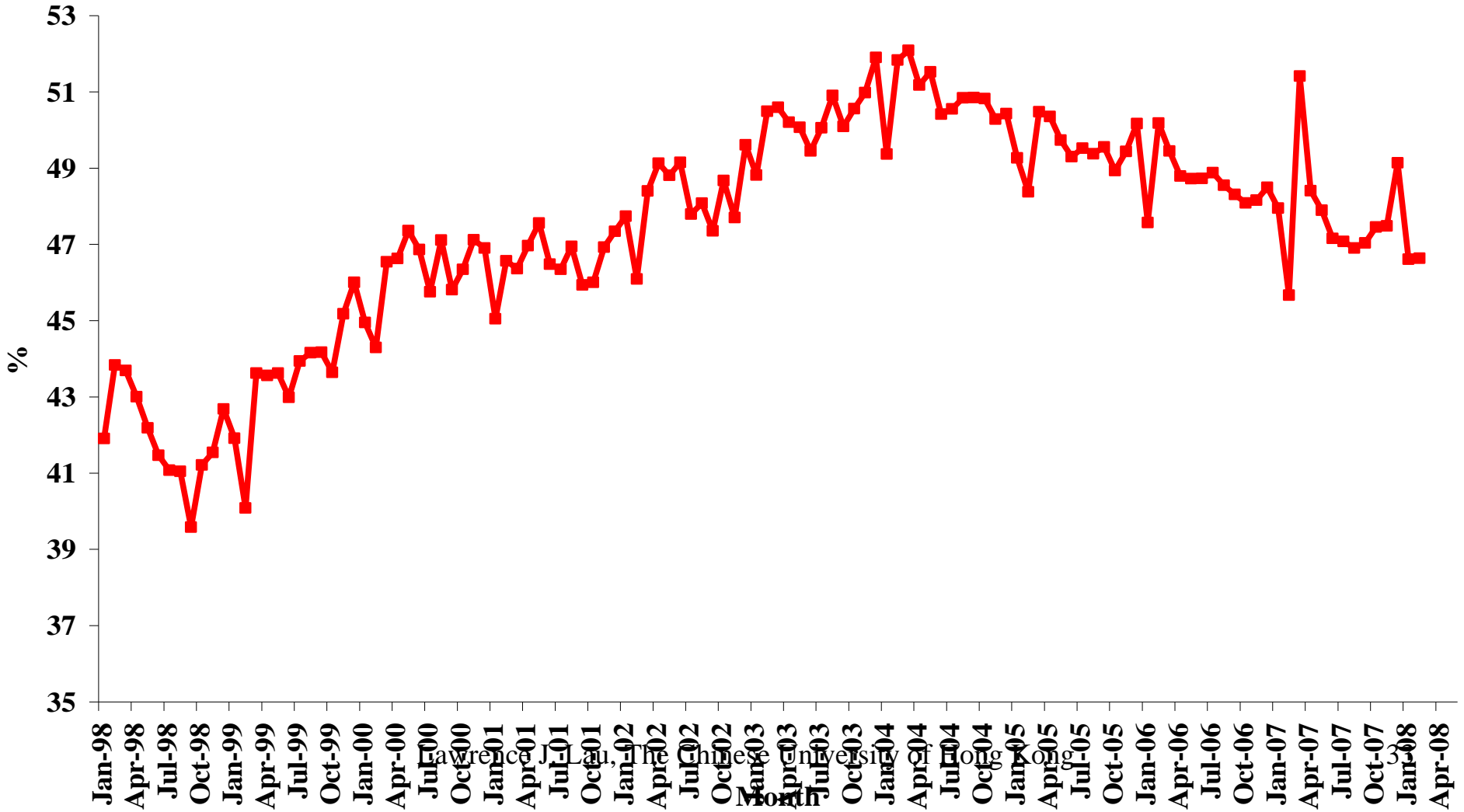
## The Changing Pattern of World Trade

---

- ◆ Interdependence of the East Asian economies has been rising sharply over the years and East Asian dependence on the United States and Western Europe has declined.
- ◆ The ASEAN Free Trade Area as well as its variations (+1 (China); + 3 (China, Japan and South Korea)) are rapidly becoming a reality.
- ◆ This is what gives credence to the idea of partial “de-coupling” of the world economies—that the Chinese and East Asian economies can continue to do reasonably well despite the current economic problems in the U.S. and elsewhere. However, China and East Asia are not large enough to turn around the whole world.

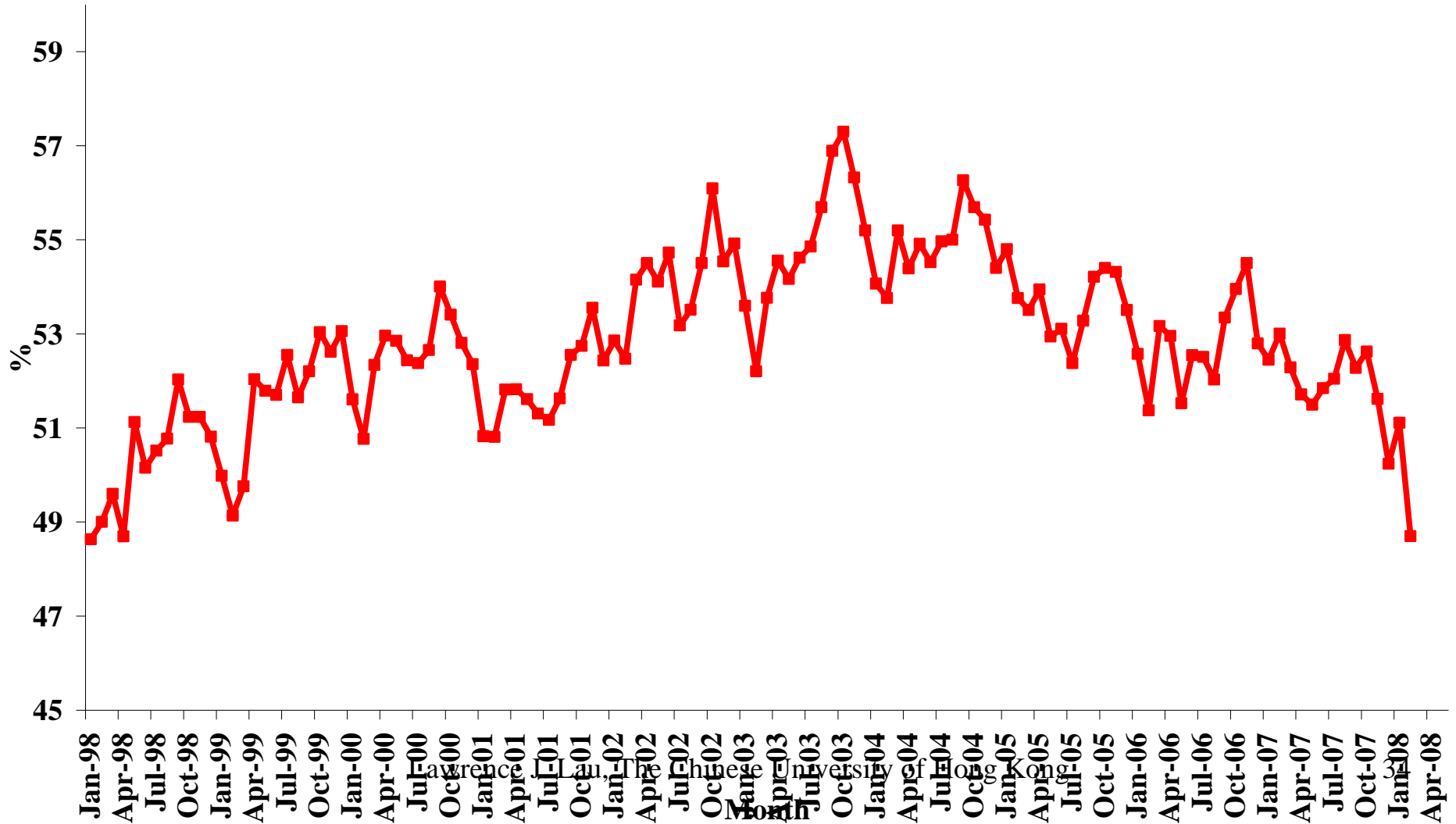
# The Share of East Asian Exports Destined for East Asia

The Share of East Asian Exports Destined for East Asia



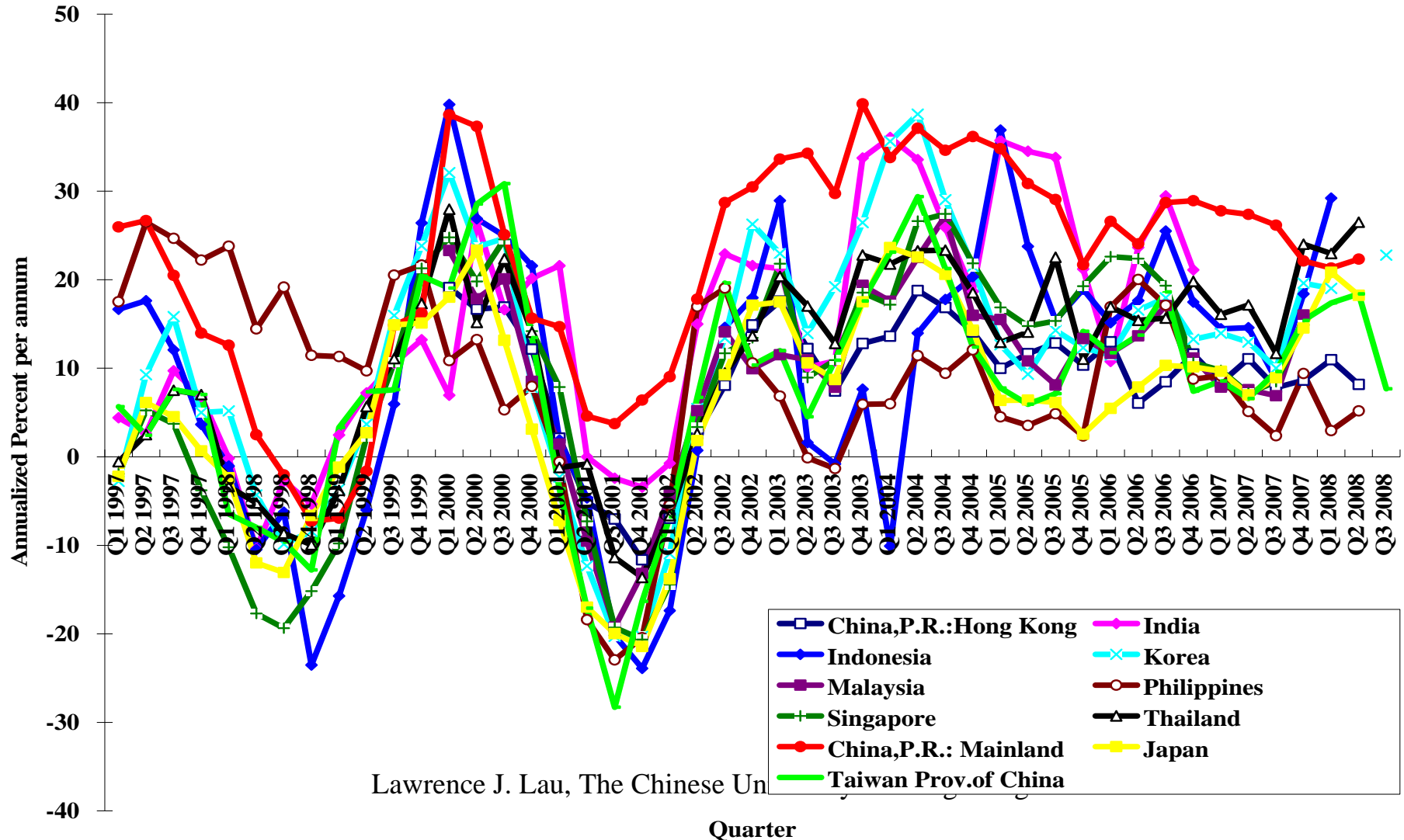
# The Share of East Asian Imports Originated from East Asia

The Share of East Asian Imports Originated from East Asia



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

Figure 3.2: Year-over-Year Quarterly Rates of Growth of Exports of Goods in US\$ (Percent)

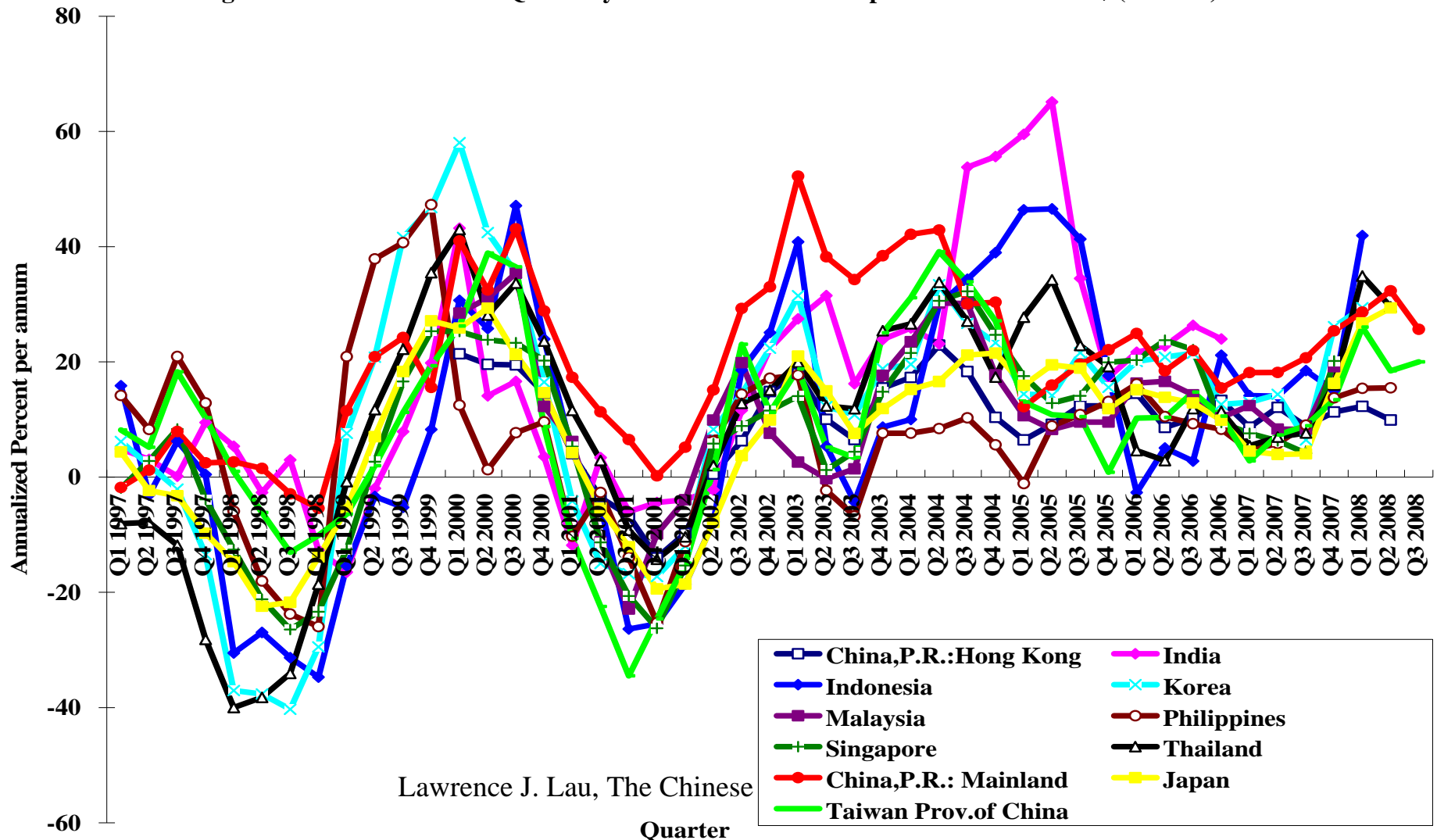


Lawrence J. Lau, The Chinese Un

Quarter

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

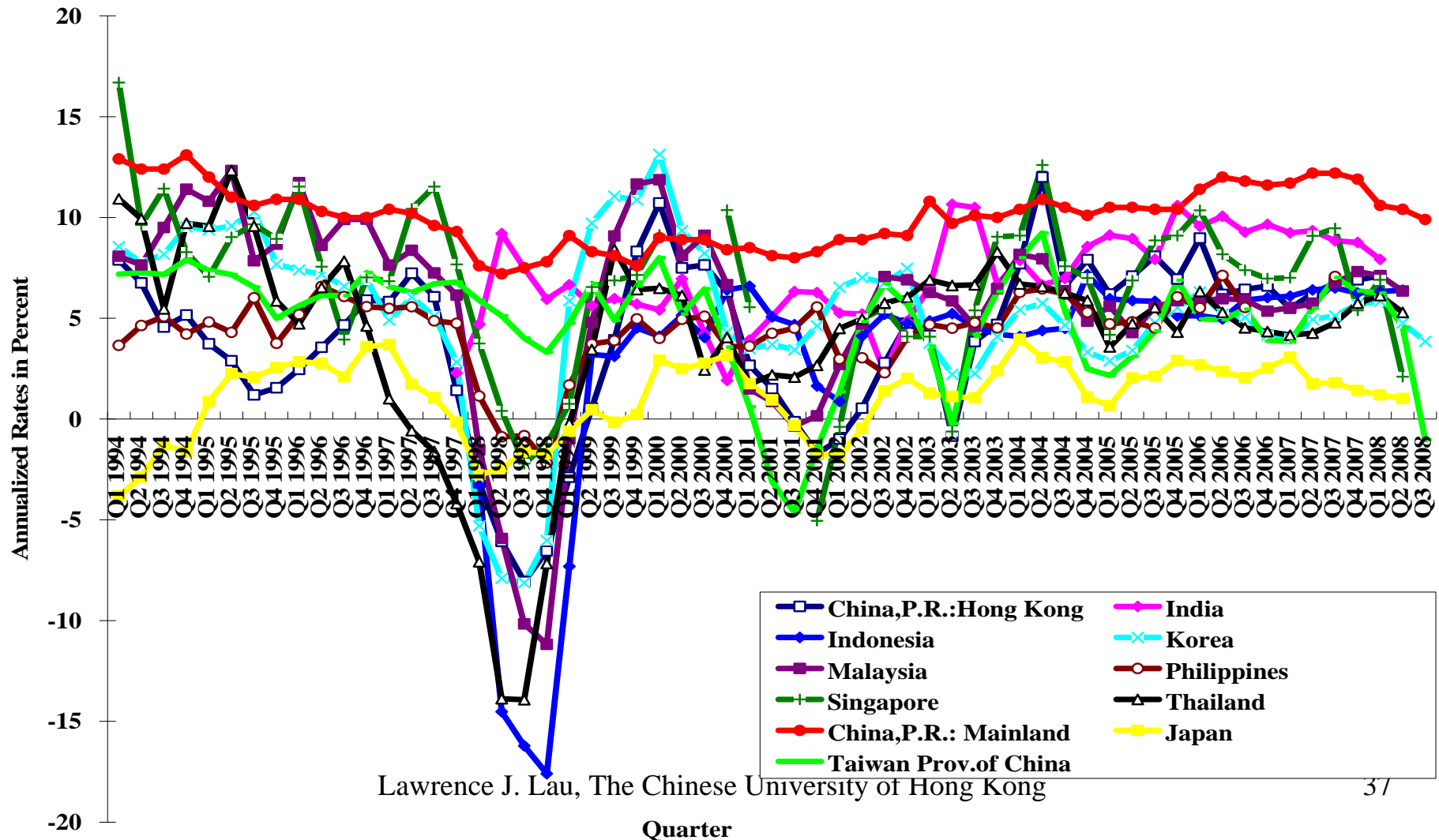
Figure 3.3: Year-over-Year Quarterly Rates of Growth of Imports of Goods in US\$ (Percent)



Lawrence J. Lau, The Chinese  
Quarter

# Quarterly Rates of Growth of Real GDP: Selected East Asian Economies

Figure 3.1: Quarterly Rates of Growth of Real GDP, Year-over-Year, Selected East Asian Economies



Lawrence J. Lau, The Chinese University of Hong Kong

# The Reasons for Its Success

---

# Reasons for the Success of Chinese Economic Reform

---

- ◆ What are the principal reasons for the highly successful Chinese economic reform that began in 1978?
- ◆ They are the strong Chinese economic fundamentals—surplus labor, abundant savings, huge domestic market, etc.

# Strong Economic Fundamentals

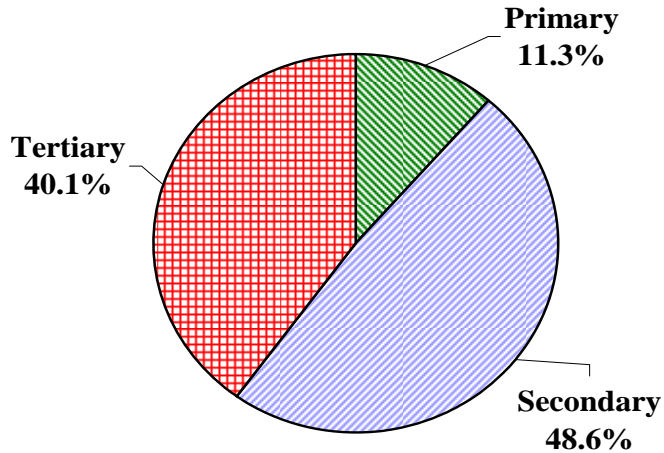
---

- ◆ Chinese economic growth during the past 30 years has been underpinned by three factors:
- ◆ (1) An unlimited supply of surplus labor—as long as the primary sector (agriculture and mining) produces approximately 10% of the GDP but employs approximately 40% of the labor force, there is no shortage of and no upward pressure on the real wage rate of entry-level unskilled labor;
- ◆ (2) A consistently high domestic savings rate greater than 30 percent on average and occasionally approaching 45 percent—this means, among other things, the Chinese economy can finance all of its domestic investment needs from its domestic savings alone, and does not have to depend on foreign capital or foreign loans;
- ◆ (3) A huge domestic market of 1.3 billion consumers with pent-up demand for housing and transportation and other consumer goods and services (education and health care), enabling the realization of significant economies of scale in production and in innovation based entirely on internal demand.

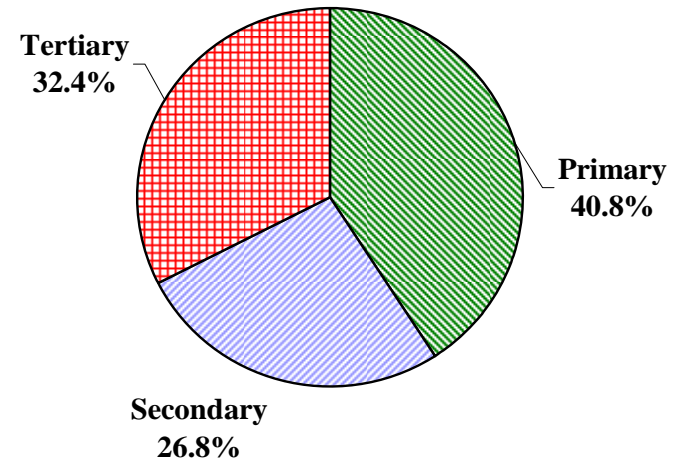
# The Reasons for Its Success: GDP and Employment by Sector

---

**GDP in 2007**



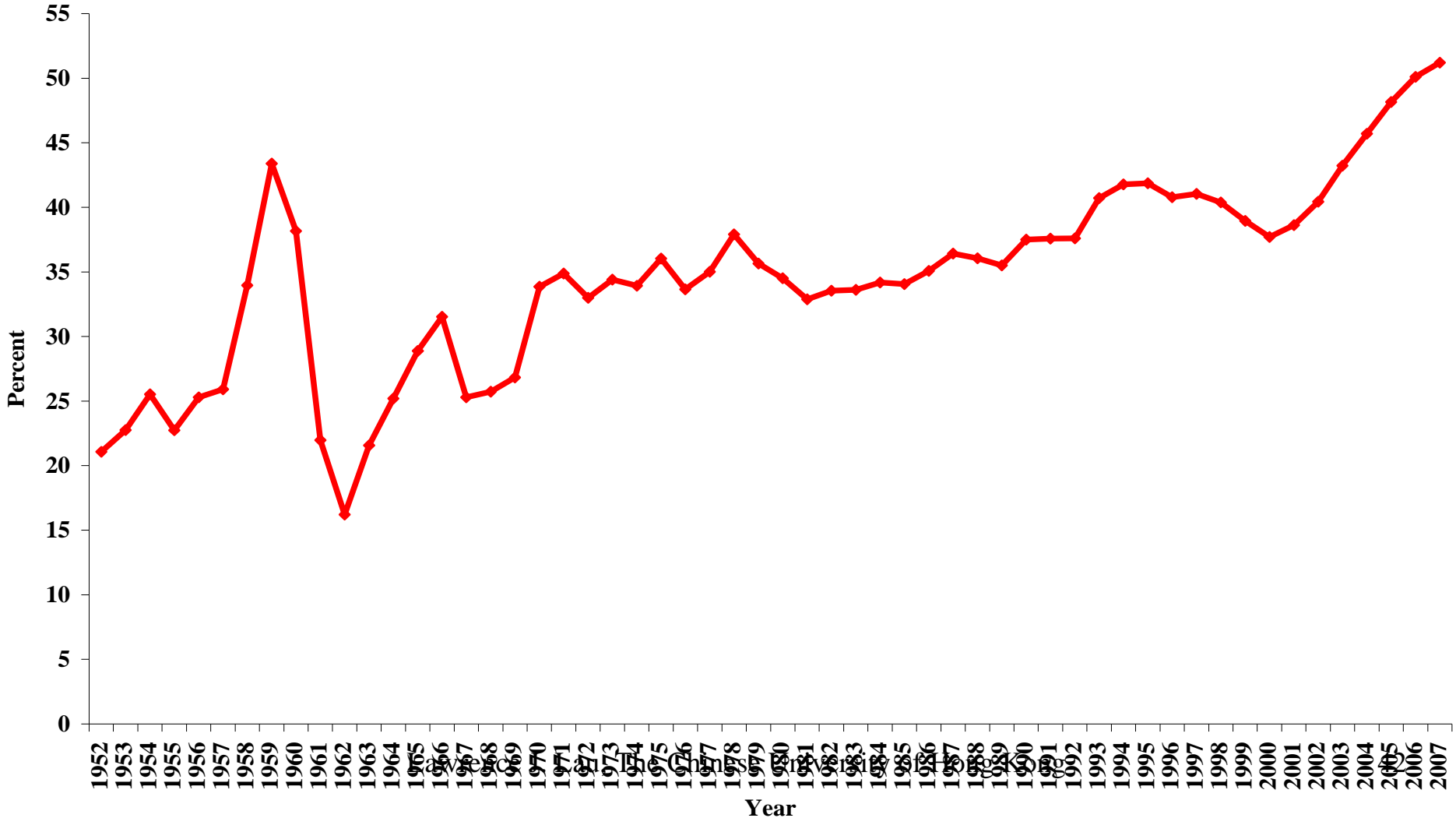
**Employment in 2007**



# The Reasons for Its Success: Savings as a Percent of GDP

---

Savings as a Percent of GDP



# The Advantages of a High Domestic Savings Rate

---

- ◆ A country with a high 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.
- ◆ With new resources being made available each year from new savings, enabling new investments to be made, the necessity of restructuring and redeploying existing investment is greatly diminished (thus making it more possible to avoid creating losers).
- ◆ Moreover, with a high domestic savings rate, the non-state sector (which is generally more efficient) can grow without significant large-scale privatization, which can themselves be socially disruptive.

# The Advantages of a High Domestic Savings Rate

---

- ◆ Latin American economies are the chronic sufferers of a low domestic savings rate. They are therefore forced to augment their domestic savings by borrowing abroad in foreign currency. But loans have to be repaid sooner or later. When that happens, domestic investment will have to fall below domestic savings, and economic growth may not be sustainable; and in the repayment process currency crises will often result.
- ◆ The low domestic savings rate in Russia made it necessary for Russia to privatize and restructure, a process which resulted in approximately a decade of declining real GDP and the creation of many losers. The Russian economy has resumed growing only because of the rise in the world price of oil.

# The Fundamental Importance of Domestic Savings

---

- ◆ The bulk of the gross domestic investment in China is financed by domestic savings.
- ◆ Foreign direct investment accounts for approximately 10 percent of gross domestic investment in China. While helpful, especially in the early years of economic reform, and important in terms of bringing technology, markets, new business models and methods, and know-how to China, foreign direct investment and foreign loans are today neither necessary nor sufficient to sustain the rapid economic growth of China.
- ◆ This underscores the fundamental importance of domestic savings in Chinese economic growth--without the domestic savings financing the investment, the rapid growth of the tangible capital input would not have been possible; and without the rapid growth of the tangible capital input, the rapid growth of real output would not have been possible.

# Fully Exploiting the Advantages of the Huge Domestic Market

---

- ◆ In order to realize the full benefits of a huge domestic market and a continental economy, China must take steps to ensure that there are no internal barriers to trade and capital flows.
- ◆ Availability of infrastructure (transportation and communication, including the internet) is essential.
- ◆ Maintenance of a domestically open economy (the equivalent of the “interstate commerce” clause of the U.S. constitution)—no inter-provincial tariff or non-tariff barriers is also essential.
- ◆ Maintenance of an internationally open economy--the role of the "open door" (WTO)—helps prevent the rise of domestic monopolies.
- ◆ Affirmation of tangible and intangible property rights and the rule of law in the economic sphere—China should establish a national commercial and tax court empowered to settle all commercial and tax disputes, including intellectual property rights, on a nationwide basis

# The Chinese Advantages in Innovation

---

- ◆ In addition, China has the advantage of relative backwardness:
  - ◆ The ability to learn from the experiences of successes and failures of other economies;
  - ◆ The ability to leap-frog stages of development (e.g., the telex machine, the VHS video players, the fixed landline phones); and
  - ◆ The possibility of creation without destruction (e.g., online virtual bookstores like Amazon.com do not have to destroy brick and mortar bookstores which do not exist in the first place).
- ◆ The large potential domestic market enables active Chinese participation in the setting of product and technology standards and sharing the benefits of such standard-setting.
- ◆ An abundance of scientific and technical manpower the cost of which is a fraction of the cost in developed economies. (According to the latest statistics, China has recently become the second largest producer of scientific articles indexed in the Science Citation Index (SCI) and the Social Science Citation Index (SSCI).)

# Reasons for the Success of Chinese Economic Reform

---

- ◆ But the strong fundamentals have always been there, in China, at least since the 1950s. They are necessary, but not sufficient, for the success of Chinese economic reform.
- ◆ Why did the Chinese economy not take off earlier?

# Reasons for the Success of Chinese Economic Reform

---

- ◆ The introduction of the market system, and autonomy of economic units, first in the rural area, and then in the urban area, must be regarded as the primary reason for the success of the economic reform.
- ◆ But the former Soviet Union and subsequently Russia also introduced the market system, with disastrous economic results for the entire first decade. Other developing market economies languish in the world.
- ◆ Why was China able to do it while others failed?

# Reasons for the Success of Chinese Economic Reform

---

- ◆ Chinese economic reform is characterized by openness—China welcomed international trade with and direct investment from all countries and regions, including Hong Kong, Taiwan, and the United States, and with trade and direct investment came technology, business models, and concepts and ideas that were new to China.
- ◆ The Chinese economic reformers are characterized by their pragmatism—they are willing to try almost anything—whatever works—but they will just as readily abandon whatever that proves not to work. They are not ideological when it concerns the economy.

# Reasons for the Success of Chinese Economic Reform

---

- ◆ Chinese economic reform has been implemented in such a way that it is mostly Pareto-improving, that is, almost everyone is made better off by the economic reform and no one is made worse off, which maximizes support, minimizes opposition and preserves social harmony.
- ◆ In the 1980s and early 1990s the central plan operated side by side with the market and complemented each other. The maintenance of the central plan prevented the occurrence of losers during the reform process.

# Directions for Further Economic Reform

---

# Perfecting the Market Mechanism

---

- ◆ China has reached a stage of development when it needs to make and keep the markets truly competitive, through anti-monopoly laws and other means—and this applies to the both the goods market and the factors (including capital) market. When markets are not competitive, they may result in outcomes that are worse than those under central planning.
- ◆ It must continue to maintain an open economy to both exports and imports of goods and services. It should resist the temptation of protectionism. The World Trade Organization commitments are beneficial to China. It must also maintain an internally open economy so that it can fully exploit the advantages of its huge domestic market.

# Perfecting the Market Mechanism

---

- ◆ The markets can also be made more competitive, and hence more efficient, if information asymmetry can be reduced or eliminated. Thus, the Chinese Government can set standards for goods and services and assure quality and safety through government-mandated and operated testing and certification agencies. In fact, setting standards and encouragement of grading can greatly facilitate the growth of trade and enhance the value of trade.
- ◆ Markets frequently fail when they are subject to moral hazard. The Chinese Government can reduce the incidence of moral hazard by limiting leverage, requiring bonding, and encouraging executive compensation arrangements that more closely align the interests of shareholders and management. (For example, stock options per se encourage moral hazard because they normally have only upside but no downside.)

# Perfecting the Market Mechanism

---

- ◆ The securities markets can be better regulated so as to assure transparency and disclosure, and to prevent market manipulation and fraud.
- ◆ Encouraging portfolio investors in the Chinese equities market to take a long-term view (and hence trade less and hold longer) so as to enhance stability of the stock market and improve enterprise governance. To this end, the market regulators must monitor the markets vigilantly and sanction market manipulators as soon as they are discovered. The market must be perceived as a level playing field. Encouraging enterprises to declare significant cash dividends also strengthens the incentives for investors to hold the shares of such enterprises long-term. Cash dividends are also a good indicator of whether an enterprise is really making money—it must have the cash to pay the shareholders. Finally, a steady level of dividends can provide support for the stock price of an enterprise in a market decline.

# Perfecting the Market Mechanism

---

- ◆ The Chinese Government can also make the market system more complete by establishing and maintaining socially desirable markets that do not arise naturally without government intervention, for example, a market for long-term, fixed-interest-rate mortgage loans, and a market for long-term bonds, which include bonds backed directly and indirectly by qualified long-term owner-occupied residential mortgages. If necessary, China should consider establishing policy banks such as Fannie Mae and Freddie Mac, notwithstanding their recent experience (their principal mistake is to privatize these policy banks but continue to allow them to have quasi-sovereign credit ratings).

# Perfecting the Market Mechanism

---

- ◆ The provision of retirement and pension, education, in particular basic education, as well as health care, especially for low-income households, cannot be left entirely to the market alone. The provision of these services also exhibits large economies of scale and in turn they generate substantial positive externalities.

# Perfecting the Market Mechanism

---

- ◆ Not all markets are socially productive or desirable. The futures market for cotton is socially productive and desirable. The futures market for oil is much less so because the period of production is far too long relative to the maturity of the futures.
- ◆ And even ostensibly socially productive markets can become socially harmful if they become dominated by a few participants who have the ability to manipulate the markets and affect their outcomes.
- ◆ Regulation and prohibition of markets that encourage moral hazard (e.g., Credit default swaps (CDSs) that are open to all and not just to bond or debt holders).

# Perfecting the Market Mechanism

---

- ◆ The Renminbi will most certainly become convertible within another decade, perhaps much sooner. The exchange rate of a country is far too important to be left to be determined by currency speculators and hedge funds.
- ◆ Long-term stability in relative exchange rates in real terms is desirable for international trade and direct investment. For China, the objective is to have trade in goods and services approximately balanced. Chinese economic growth does not and cannot depend solely on exports.
- ◆ Unlike international trade and international direct investment, there is very little either theory or evidence to show that short-term capital flows are beneficial to the recipient country.

# Addressing and Pricing Externalities

---

- ◆ The important priorities are environment protection, preservation and restoration, and the prevention/avoidance of global warming.
- ◆ The price system can be exploited to reduce energy consumption (for example, raising the price of gasoline to the same levels as Western Europe and Japan), while protecting the low-income households (e.g., subsidies on mass transit, subsidized lifeline rates of electricity for households up to a certain monthly threshold).
- ◆ The price (including tax and subsidy) system can also be used to deter pollution as well as to encourage water conservation.

# Redistribution

---

- ◆ The market system is not equipped to redistribute, but redistribution is often necessary on grounds of fairness and social harmony. The Chinese Government should design an equitable individual income tax system as well as undertake public investments in education, health care, environmental protection and mass transportation so that the benefits of the continuing economic reform can be shared by the majority of the people. The provision of such public goods is an effective and important channel for direct redistribution.
- ◆ Education is the proven most effective instrument for reducing income disparities over the intermediate and long terms because it enhances the earning power of the people, which is permanent. Transfer payments never solve the problem in a fundamental way because they need to be recurrent.

# Redistribution

---

- ◆ The Chinese Government has made great progress in providing a social safety net for its citizens. More can be done in the next decades, especially for the residents in the rural areas.
- ◆ The Internet can be an effective equalizing and redistributive instrument—it can greatly improve access by small and medium enterprises to their markets, and by students from the rural areas to information, knowledge and opportunities similar to their peers in the urban areas. The Chinese Government should work towards universal access to the internet from every place in China.

# Concluding Remarks

---

# Concluding Remarks

---

- ◆ Chinese economic growth during the next thirty years decades will depend mostly on internal factors and be largely unaffected by the policies of other countries or events outside of China (a disruption of the oil supply may be an exception). It can be expected to continue to grow at an average annual rate of approximately 8%.
- ◆ The source of this growth will come primarily from tangible capital accumulation, supported by a national savings rate of over 30%, human capital accumulation, and economies of scale, and to a lesser extent on the growth of intangible capital (for example, R&D capital) and improvements in efficiency.

# Concluding Remarks

---

- ◆ The share of Chinese GDP produced by the non-state-owned sector will rise to 80% in another decade.
- ◆ By 2020, aggregate Chinese GDP may be projected to be approximately US\$8 trillion (exceeding the then aggregate GDP of Japan and slightly less than one half of the then aggregate U.S. GDP).
- ◆ Surplus labor will begin to disappear in China by the end of the decade of 2030s.

# Concluding Remarks

---

- ◆ There are numerous serious internal problems confronting the Chinese economy—however, these problems are not intractable. China has the great advantage of having the surplus resources (tangible and intangible capital) available and hence the ability to solve these problems.
- ◆ On the margin, foreign involvement in the Chinese economy will make some, but not a critical, difference; but it can be mutually beneficial for both China and the foreign countries.

# Concluding Remarks

---

- ◆ Some time between 2030 and 2040, aggregate Chinese GDP may reach the same level as aggregate U.S. GDP.
- ◆ However, even by 2040, Chinese GDP per capita will remain low relative to the industrialized economies (G-7).
- ◆ It will probably take another two to three decades beyond 2040 for Chinese GDP per capita to reach the same level of GDP per capita as the United States.