

# The Impact of the U.S. Economic Slowdown on China and the World

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# The Slowdown in the U.S. Economy

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- ◆ The bursting of the internet “bubble”
- ◆ A decline in corporate profits
- ◆ A reduction in fixed investment by corporations
- ◆ A rise in the unemployment rate
- ◆ A decline in consumer confidence

# Measures Undertaken to Arrest the Decline in the Rate of Growth

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- ◆ Reductions in the short-term rate of interest
- ◆ A tax cut with immediate cash refunds
- ◆ Will these reductions work?
  - ◆ It depends on the confidence of businesses and consumers
  - ◆ A new source of investment growth is needed to replace the internet-driven investments in the high-technology sector

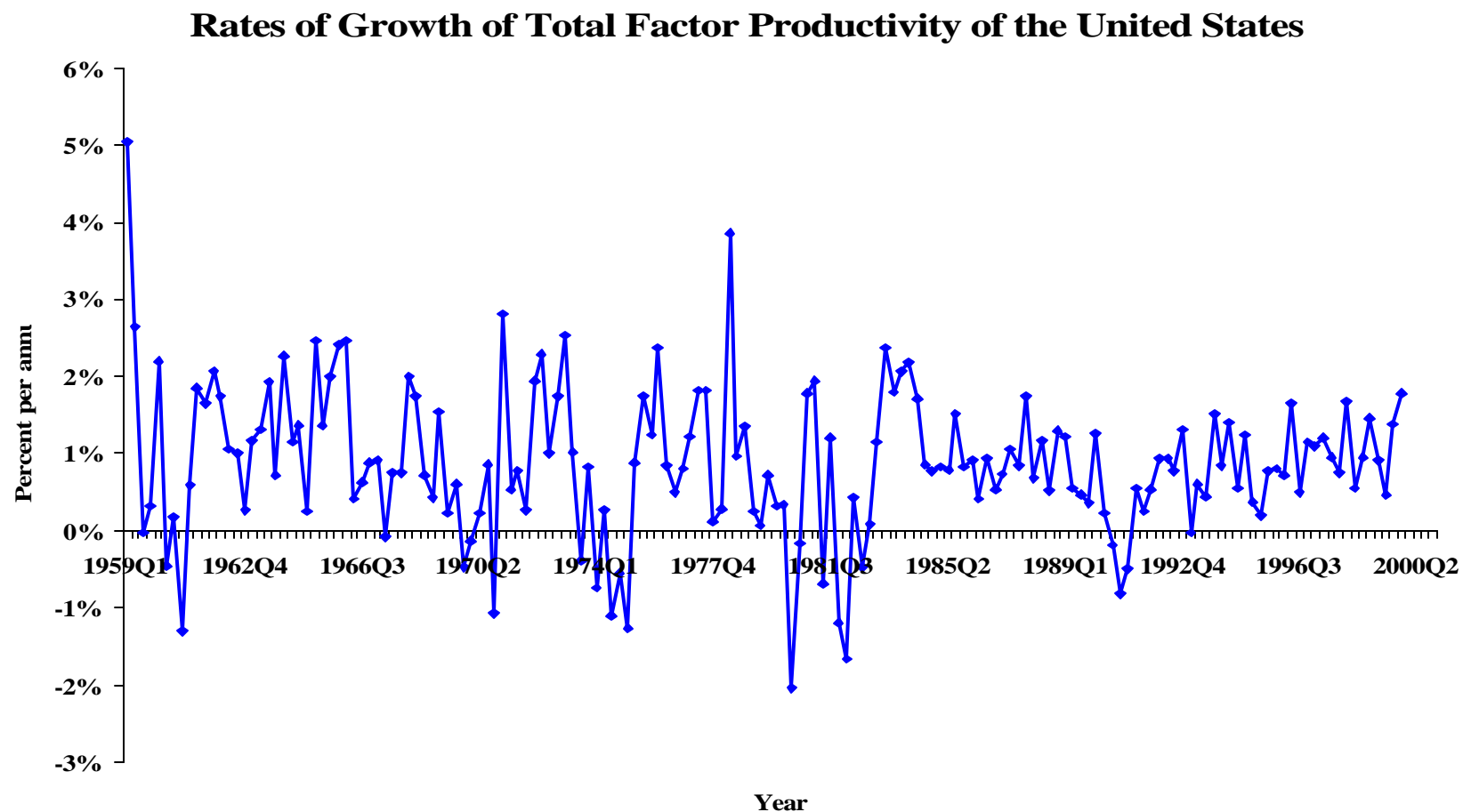
# How Has the "New" Economy Been Manifested in the United States?

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- ◆ An increase in the rate of technical progress, or growth of total factor productivity—that is, the ability of producing output from a given quantity of inputs—over the decade of the 1990s
- ◆ A decline in the average level of changes in inventory (stocks) relative to GDP as well as in its volatility. Changes in inventory used to be a major source of business cycle fluctuations in the United States. The improvement may be attributed in part to better inventory management due to more, faster, better and cheaper information available.
- ◆ New housing starts, which also used to be a major source of business cycle fluctuations in the United States, have also been reduced in volatility in recent years, reflecting better information and faster adjustments, and institutional changes such as the introduction of adjustable-rate mortgages and securitization of mortgages.

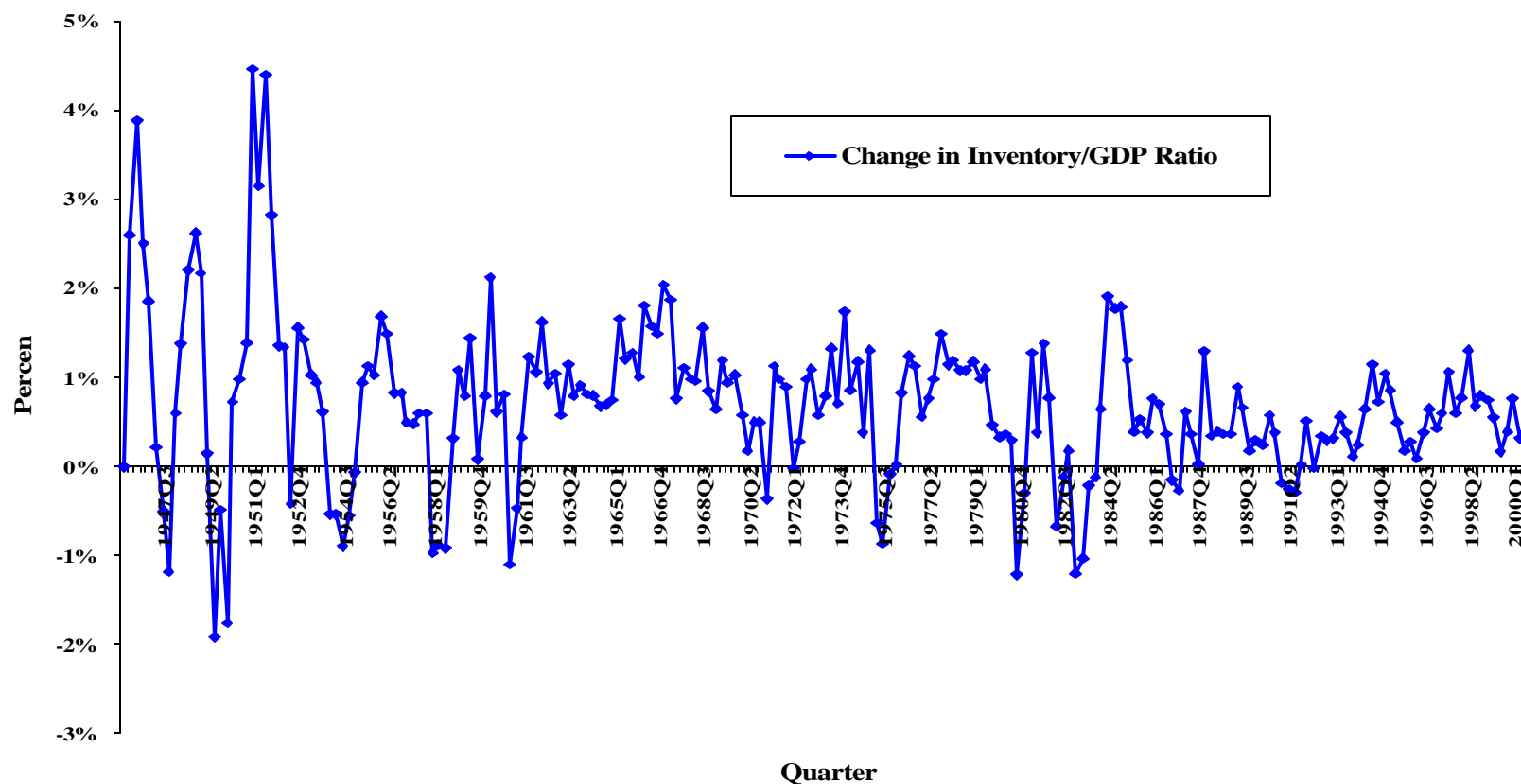
# Rates of Growth of Total Factor Productivity in the United States--Quarterly Data

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# The Change in Inventory/GDP Ratio in the United States--Quarterly Data

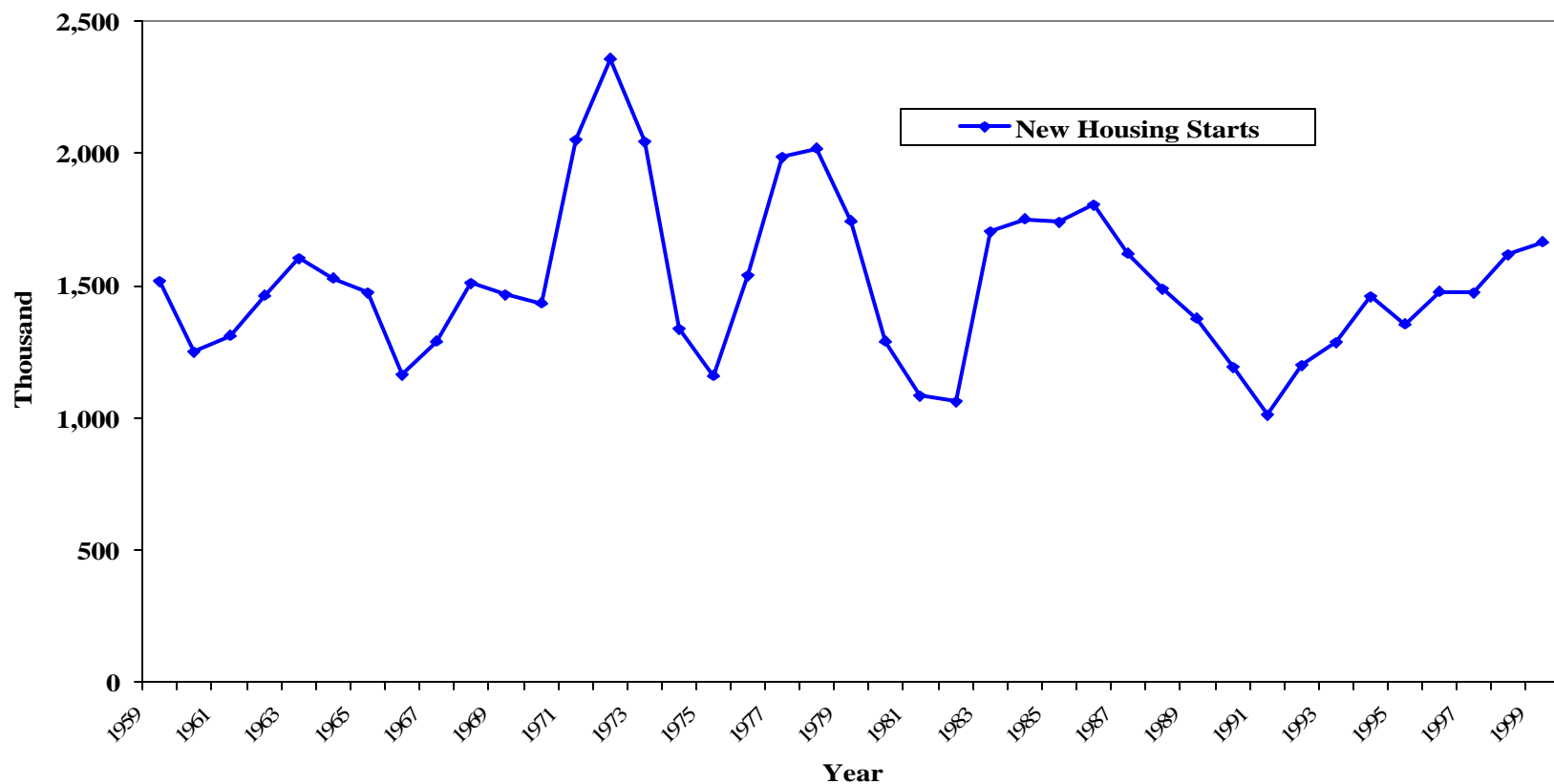
Change in Inventory/GDP Ratio



# New Housing Starts in the United States

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**New Housing Starts (thousand units)**



# The Effects of the "New" Economy

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	Average Rate of Growth of TFP	Average Inventory Change-GDP Ratio	Average Absolute Inventory Change-GDP Ratio
1951-60		0.75%	1.09%
1961-70	1.05%	0.95%	1.00%
1971-80	0.82%	0.68%	0.84%
1981-90	0.76%	0.43%	0.63%
1991-2000	0.85%	0.48%	0.51%

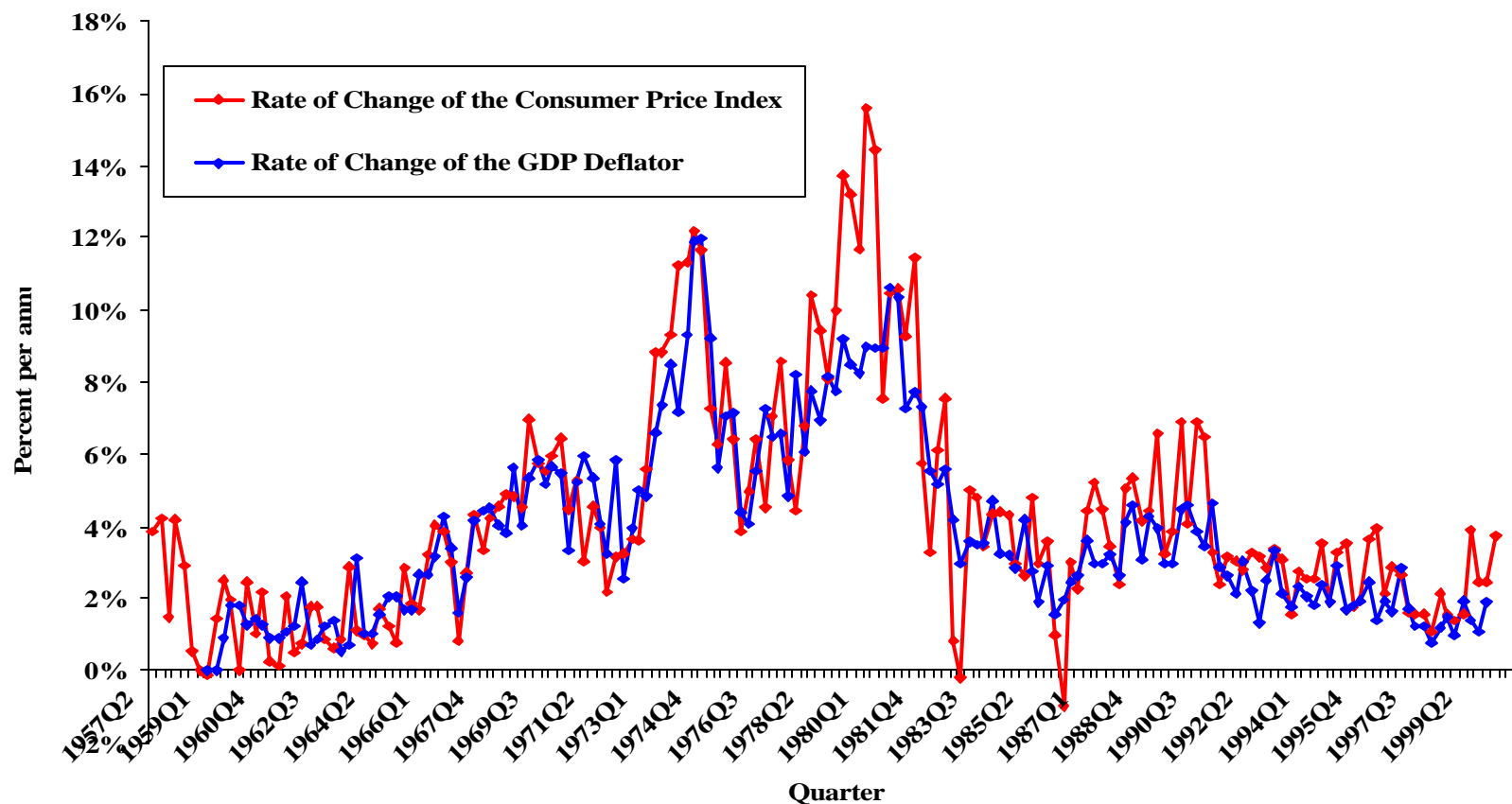


# How Has the “New” Economy Been Manifested in the United States?

- ◆ The rate of inflation in the United States has remained low during the past decade while the rate of unemployment has declined to levels unseen since the late 1960s, even below the so-called “natural” rate of unemployment
  - ◆ This has been made possible, in part, through the productivity gains due to the information and communication revolution
  - ◆ This has also been made possible, in part, because of better management of the monetary policy (by Dr. Alan Greenspan of the Federal Reserve Board) based on better and more timely information and better and faster analysis and response
  - ◆ Low unemployment has been achieved without kindling high inflation
  - ◆ The U.S. has been the beneficiary of the East Asian currency crisis
    - ◆ The price of imports remained low, helping to keep inflation down
    - ◆ Its status as a safe haven for capital allowed the rate of interest to remain low
    - ◆ The foreign central banks have to re-build their foreign exchange reserves by purchasing and holding U.S. dollars

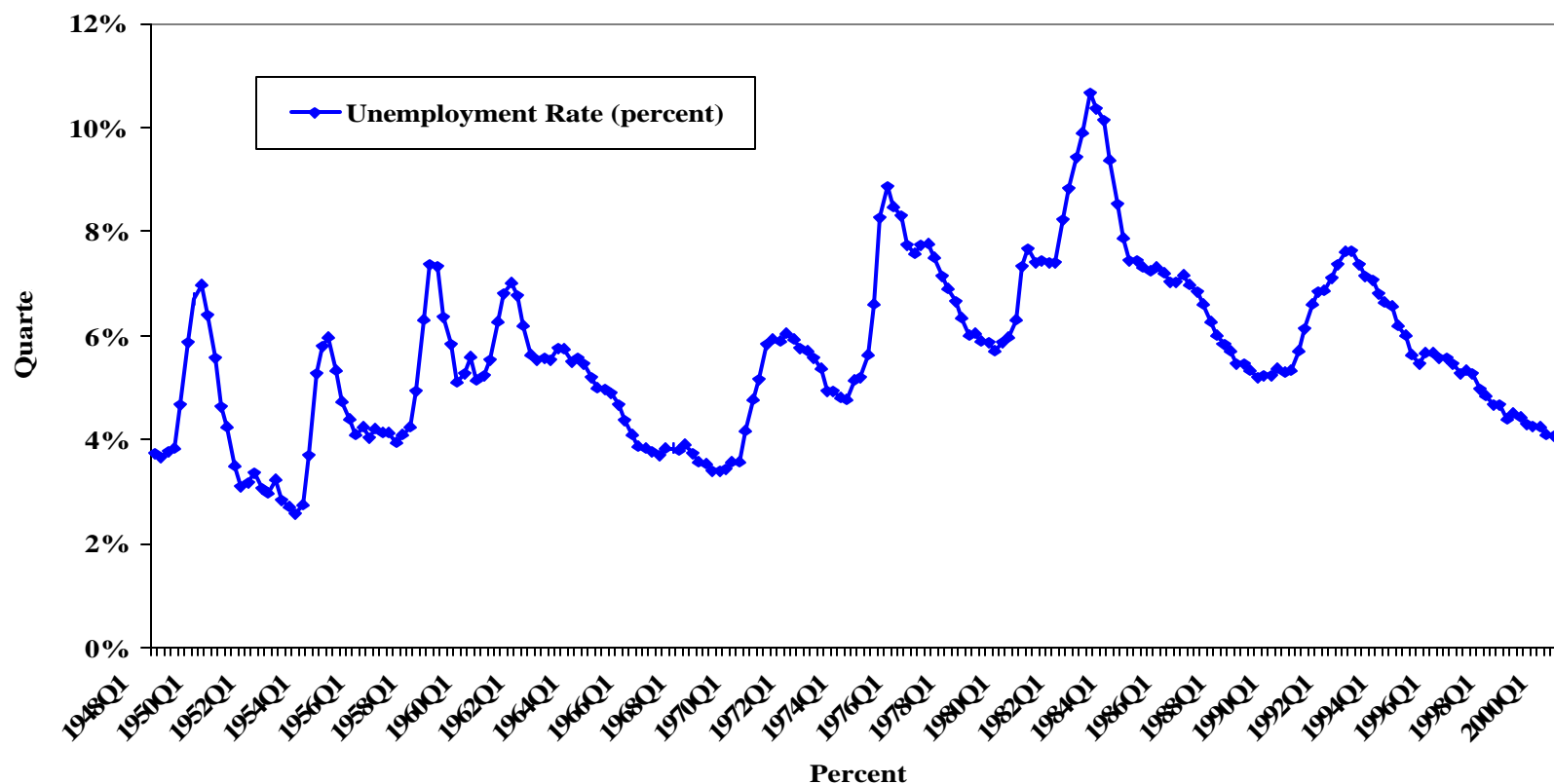
# The Rates of Inflation of the United States

Rates of Inflation in the United States



# The Unemployment Rate of the United States

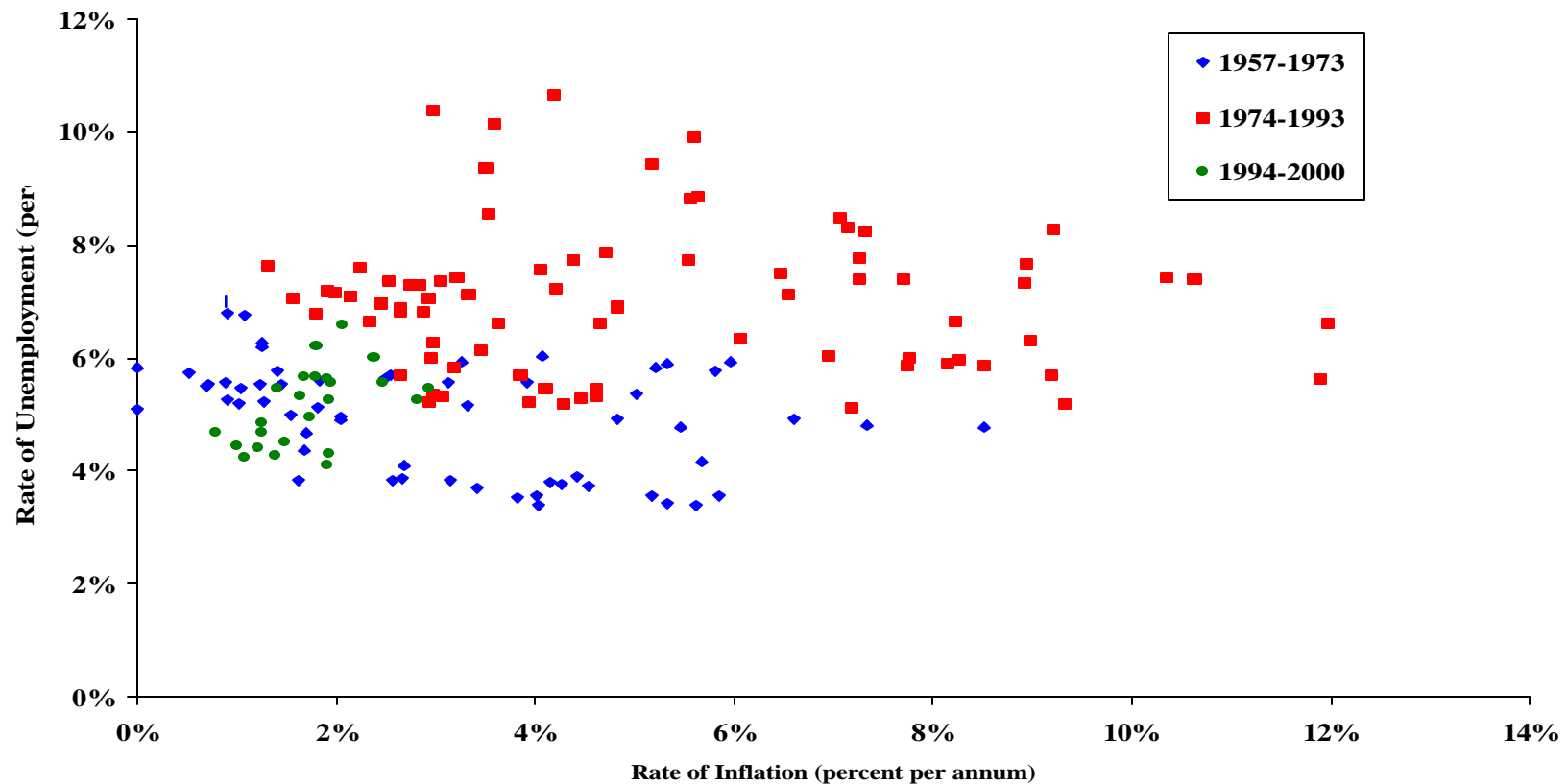
Unemployment Rate of the United States (percent)



# The Relationship between the Unemployment Rate and the Rate of Change of PGDP

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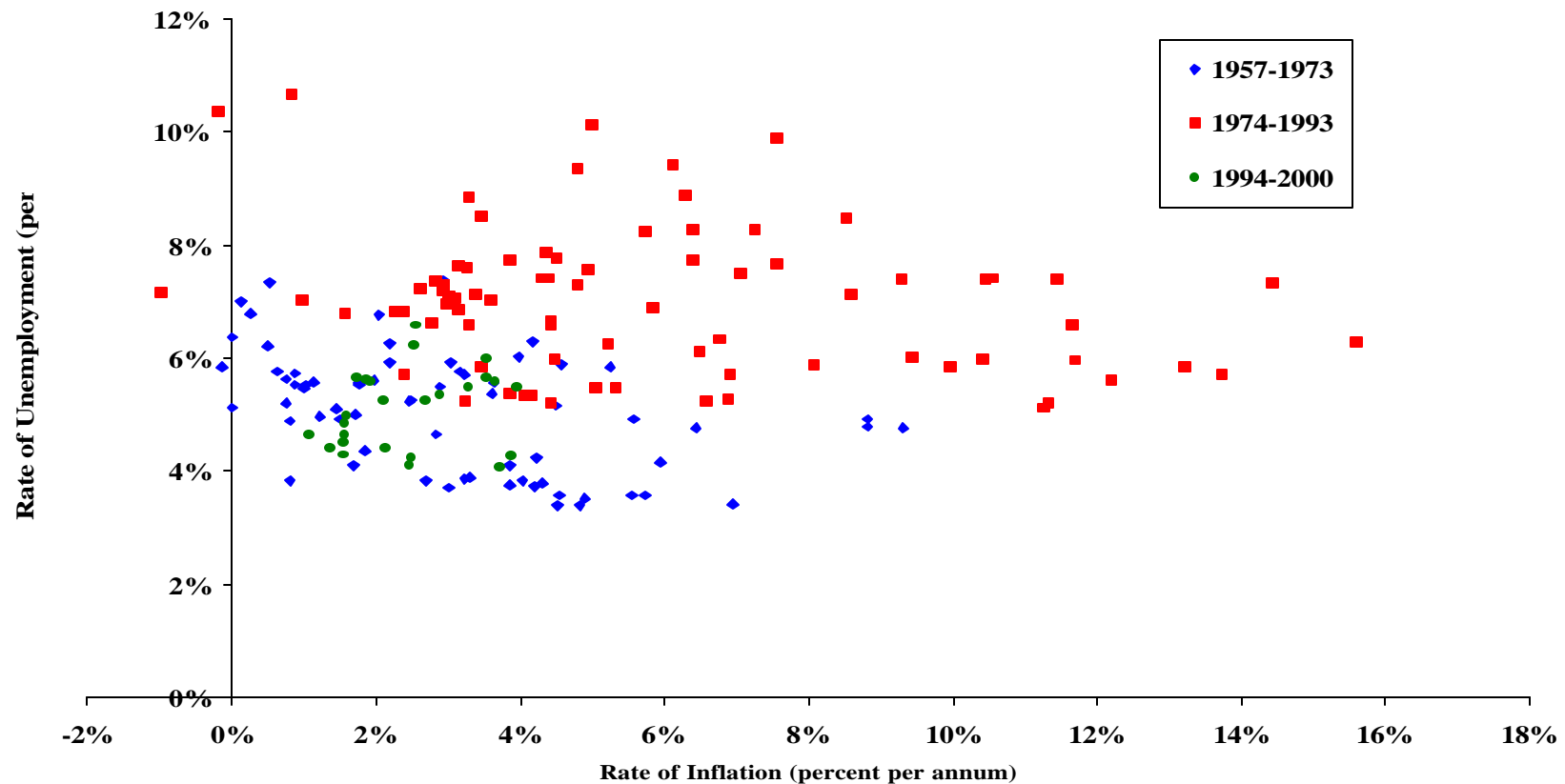
The Relationship between Unemployment and Inflation



# The Relationship between the Unemployment Rate and the Rate of Change of the CPI

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**The Relationship between Unemployment and Inflation**



# Was the U.S. Market in High-Technology Stocks a Bubble?

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- ◆ There is genuine added value in some firms
- ◆ However, there is also a bubbly quality to the stocks of the internet start-ups, many of which have no established track record
- ◆ There is also significant duplication of investment
- ◆ In a sense, many of the IPOs (initial public offerings) of the past two years represent the securitization of venture capital. These firms would not have been able to go public five years ago and would have to settle for venture capital. However, their success rate should be approximately the same as venture capital.

# The Evolution of Measured Technical Progress over Time

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- ◆ Some problems of the recent measures of total factor productivity
  - ◆ The measurement of labor inputs is based on a standard number of hours, or hours paid, rather than hours worked--the discrepancy between hours paid and hours work for employees in the high-technology sector is believed to have risen during the high-technology boom of the past five years
  - ◆ The change in the accounting practice on expenditure on software not bundled with hardware from full expensing to capitalizing will in the first few years result in a higher measured real GDP even though nothing has changed
  - ◆ The hedonic price index adjustment may over-state the pecuniary benefits of purely technological innovations
  - ◆ The price indexes may not have taken fully into account the shift in the composition of consumption and investment away from goods to services. The prices of services, however, have risen faster than the prices of goods
  - ◆ Moreover, the deterioration in service sector quality has not been taken into account
  - ◆ The pricing of upgrades of subscription type services--how to distinguish between quality improvement and pure price increase

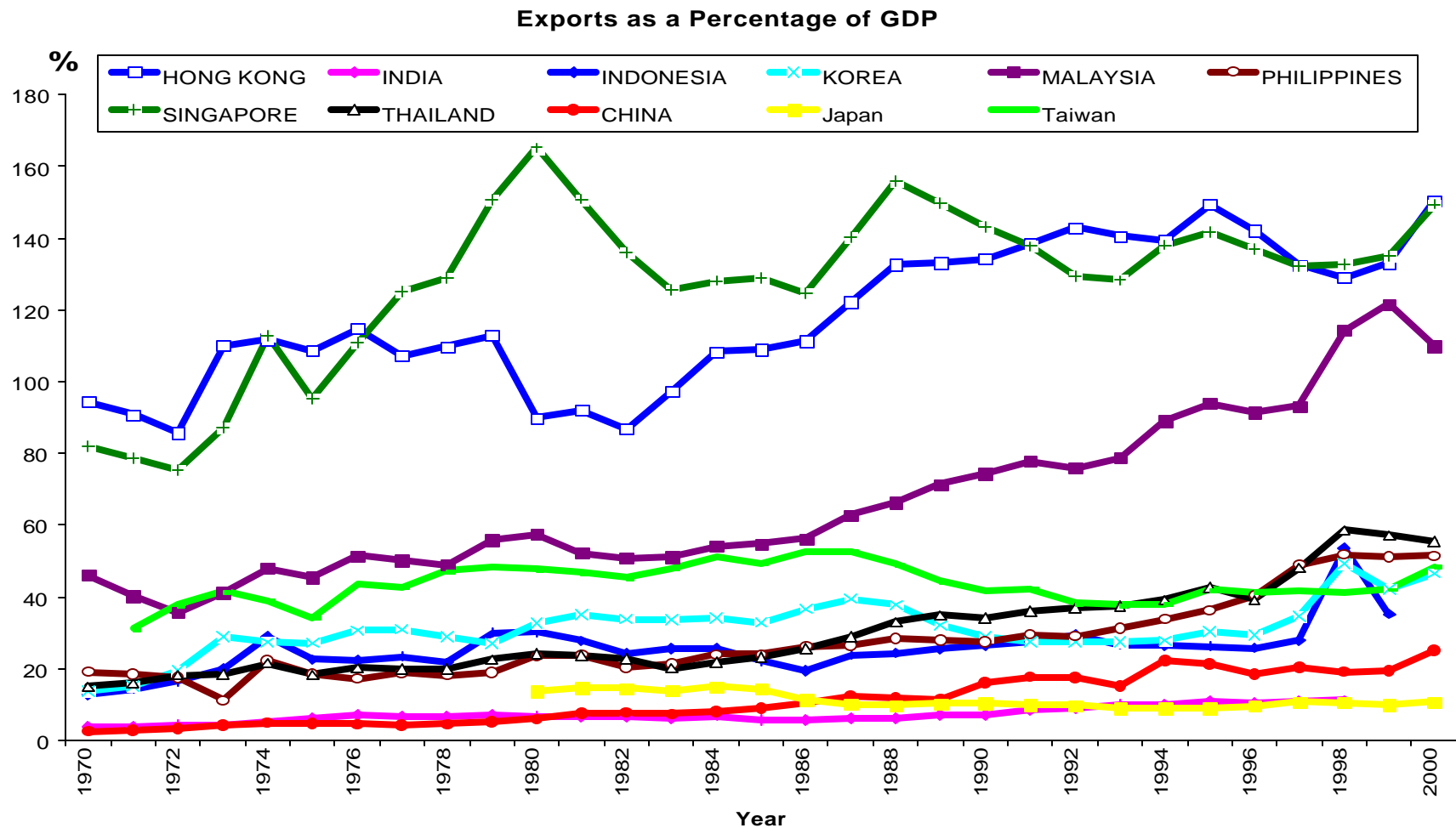
# How Important is the Wealth Effect?

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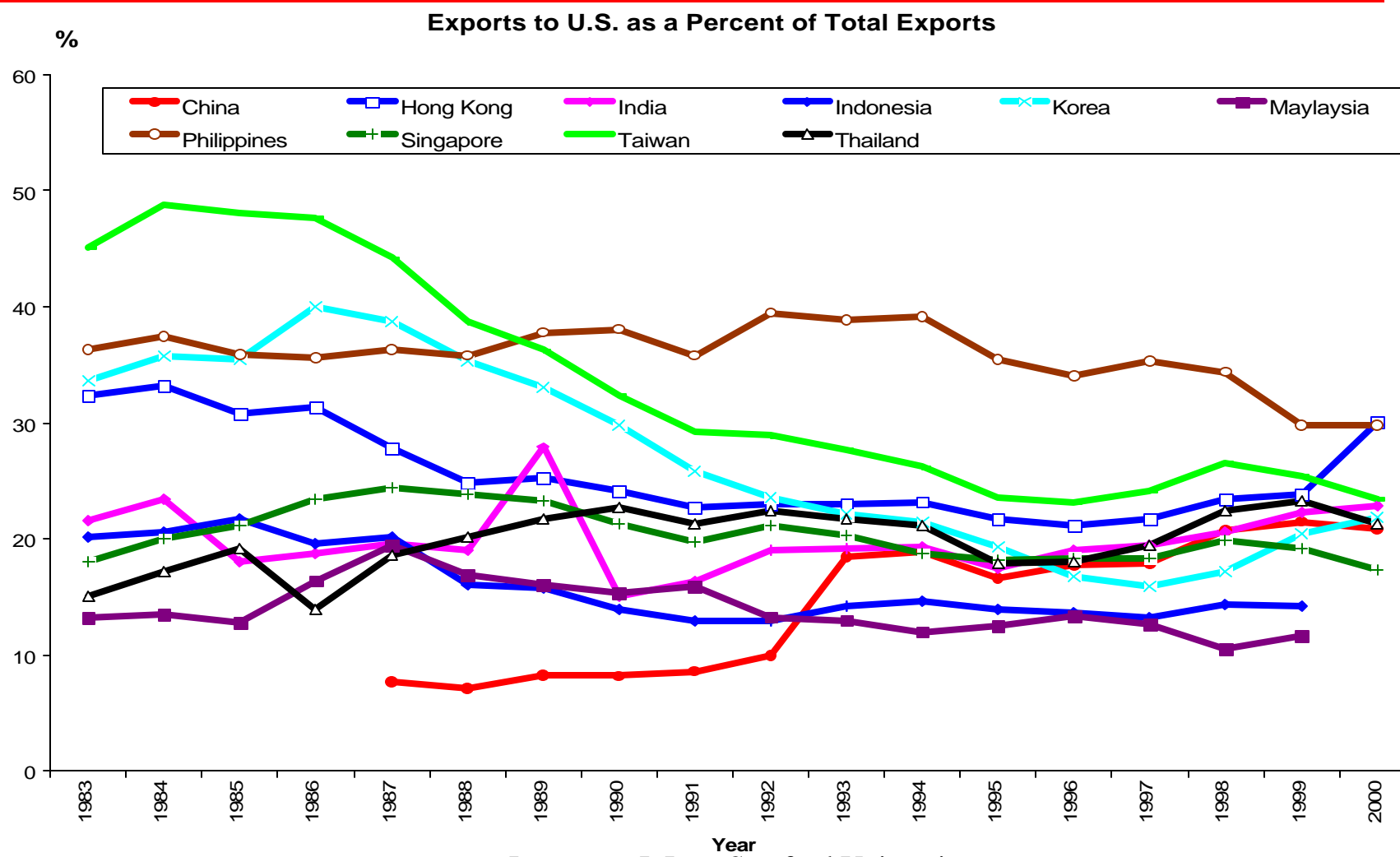
- ◆ Is there a wealth effect?
  - ◆ The wealth effect is not as strong as some analysts believe—both the rise and fall in wealth are caused by the change in the stock market valuation of approximately 50 firms and their effects are concentrated on a very small group of people



# Exports as a Percent of GDP: Selected East Asian Economies



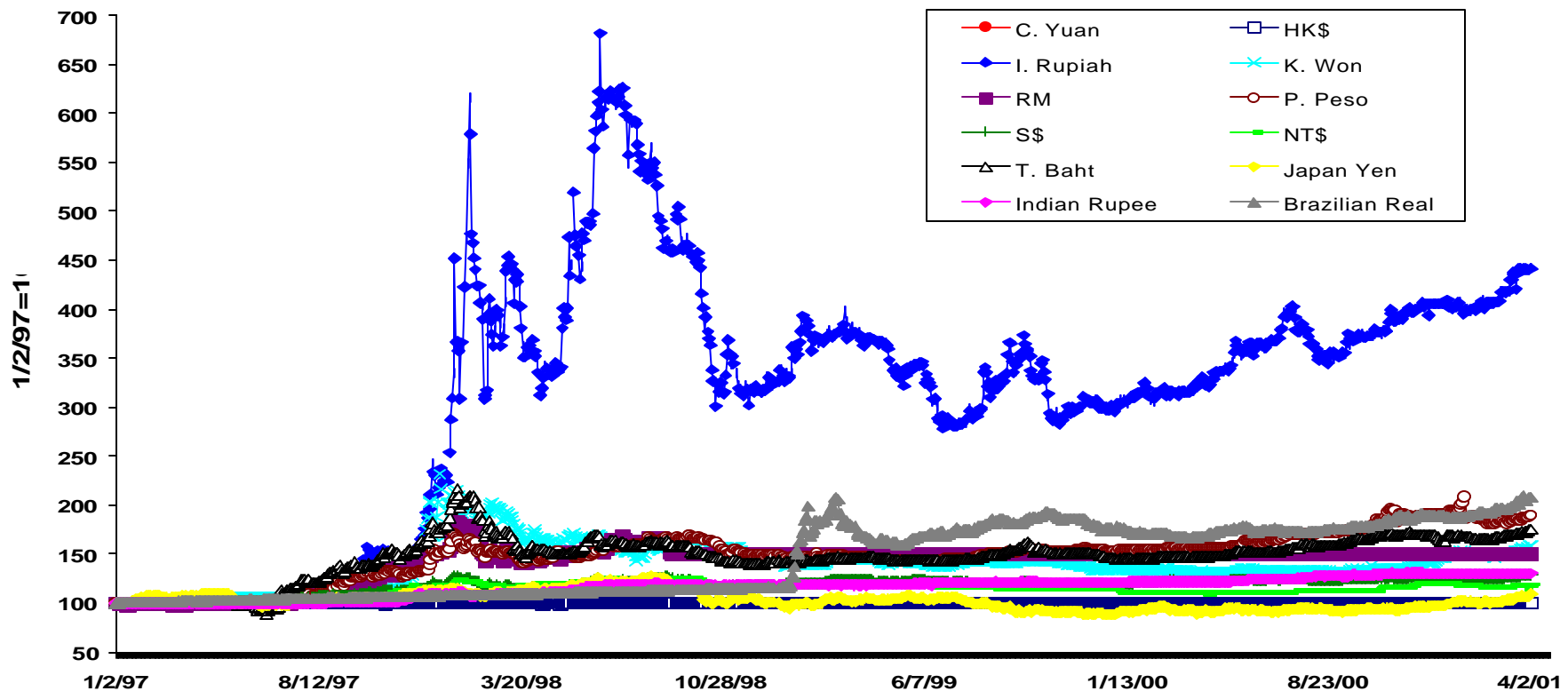
# Exports to U.S. as a Percent of Total Exports



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# Indexes of East Asian Exchange Rates: Local Currency per US\$ (January 2, 1997=100)

Indices of East Asian Exchange Rates  
(Local Currency per U.S. Dollar, 1/2/97=100)

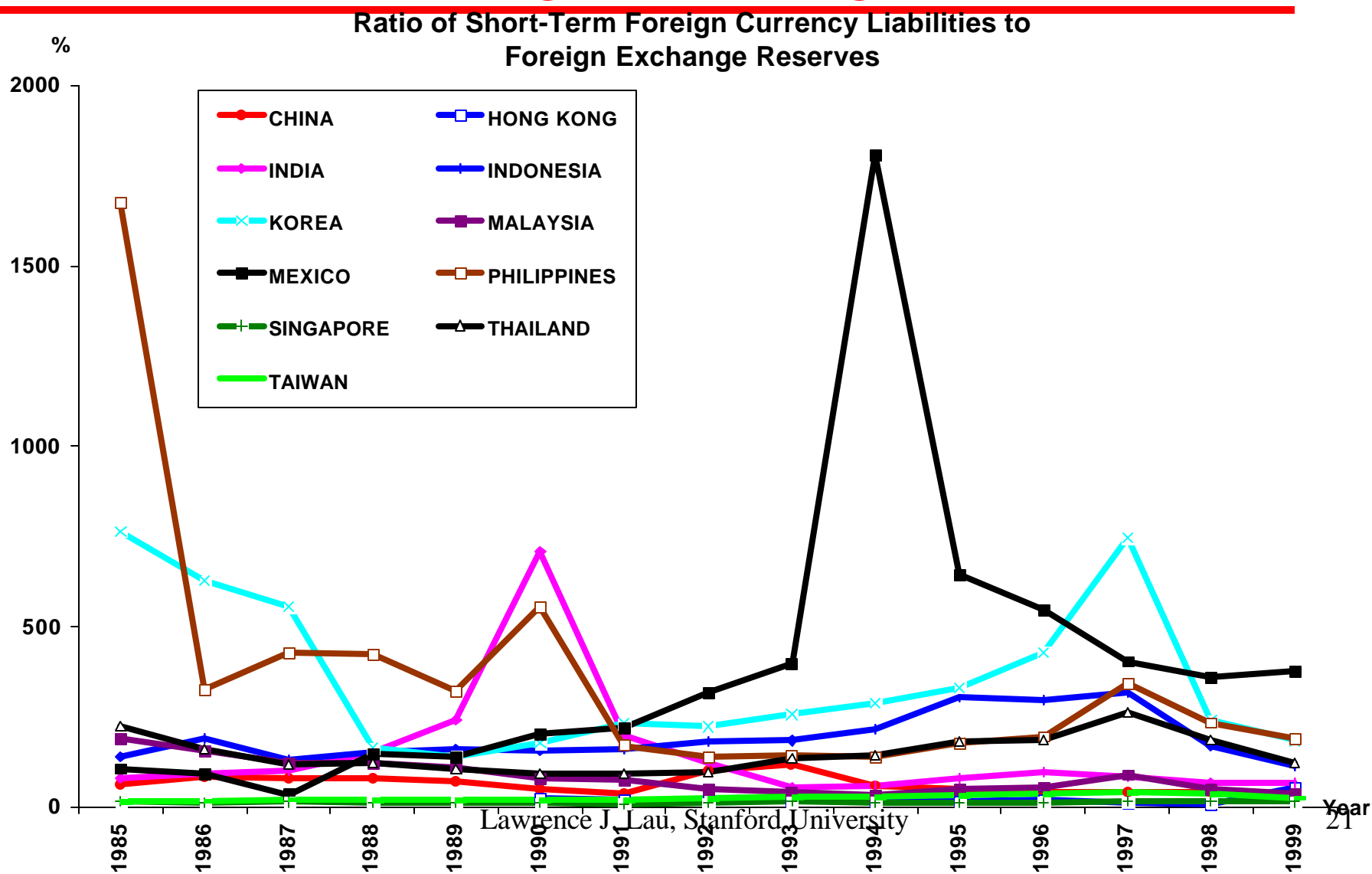


# Ratio of Short-Term Foreign-Currency Liabilities to Foreign Exchange Reserves

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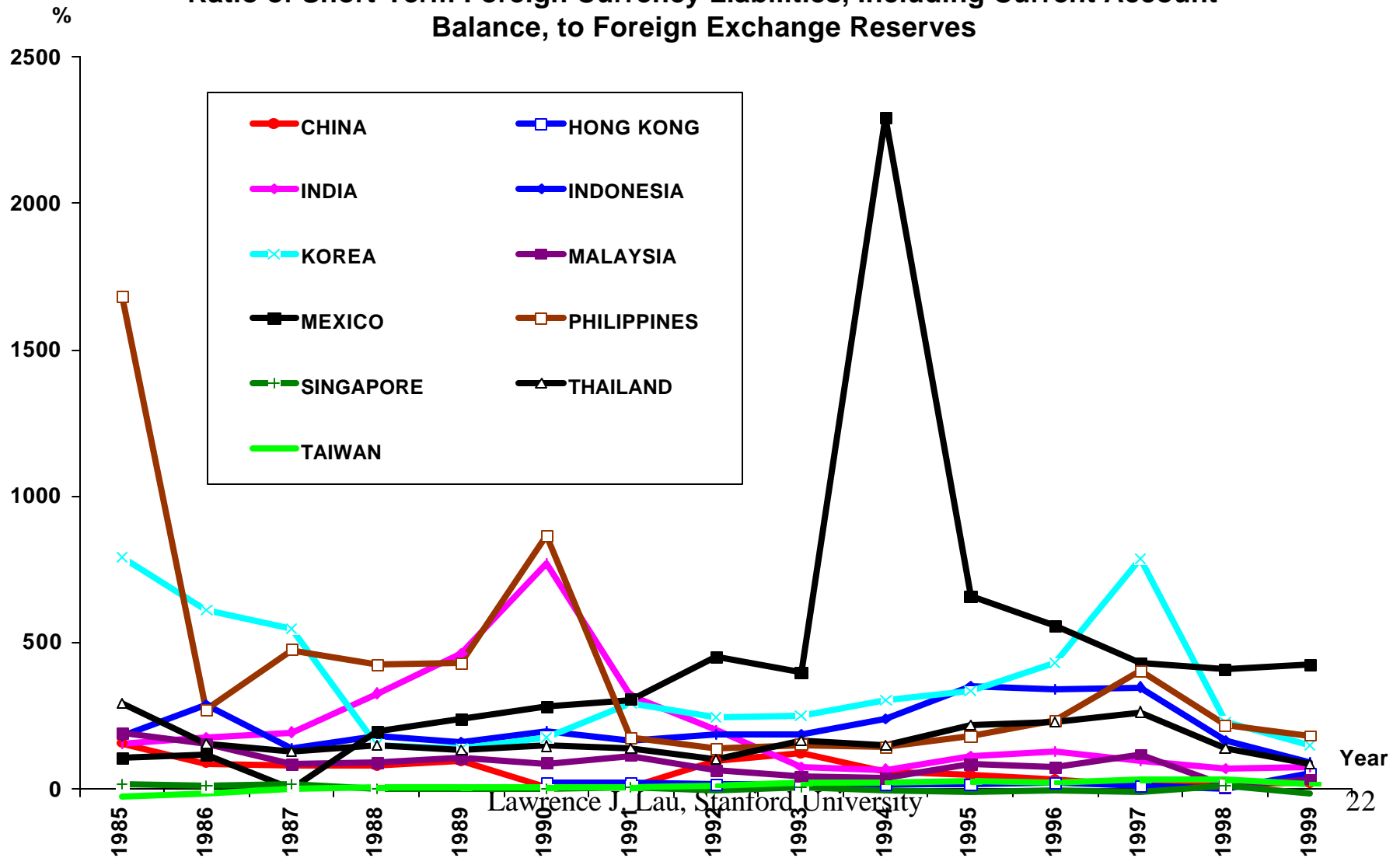
- ◆ The potential short-term foreign exchange liabilities, that is, the foreign exchange that can be withdrawn with little or no prior notice, consists of the stock of foreign portfolio investment and short-term foreign loans
- ◆ The stock of foreign portfolio investment can be estimated by cumulating past foreign portfolio investments; however, the existing stock may be under- or over-estimated by this procedure because of the possibilities of gains and losses from these investments
- ◆ To these may be added the current account deficit of the current period
- ◆ If foreign exchange reserves are low relative to these potential demands on foreign exchange, the currency may be vulnerable to a run

# Ratio of Short-Term Foreign-Currency Liabilities to Foreign Exchange Reserves



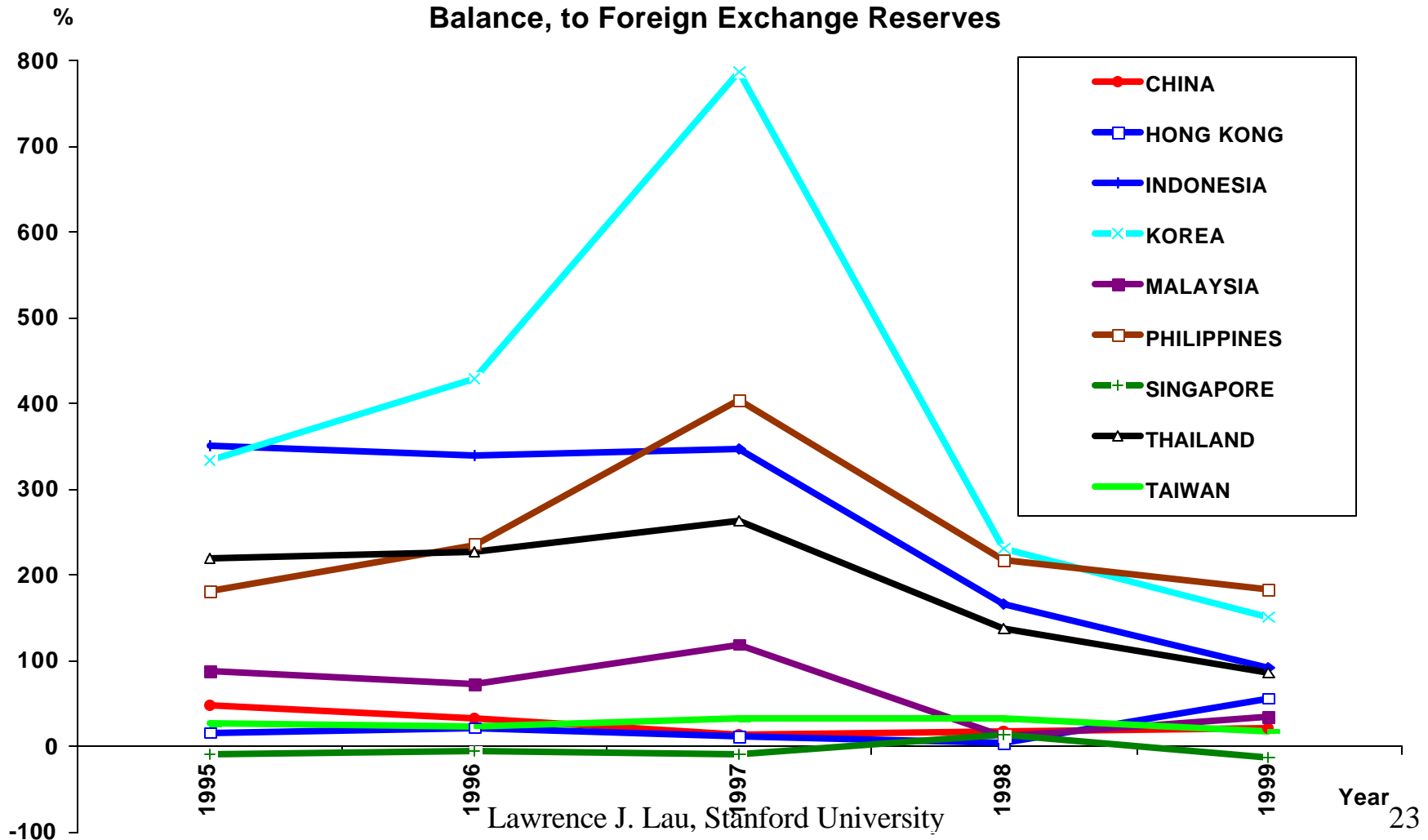
# Ratio of Short-Term Liabilities, Including Current Account Balance, to Reserves

Ratio of Short-Term Foreign Currency Liabilities, Including Current Account Balance, to Foreign Exchange Reserves



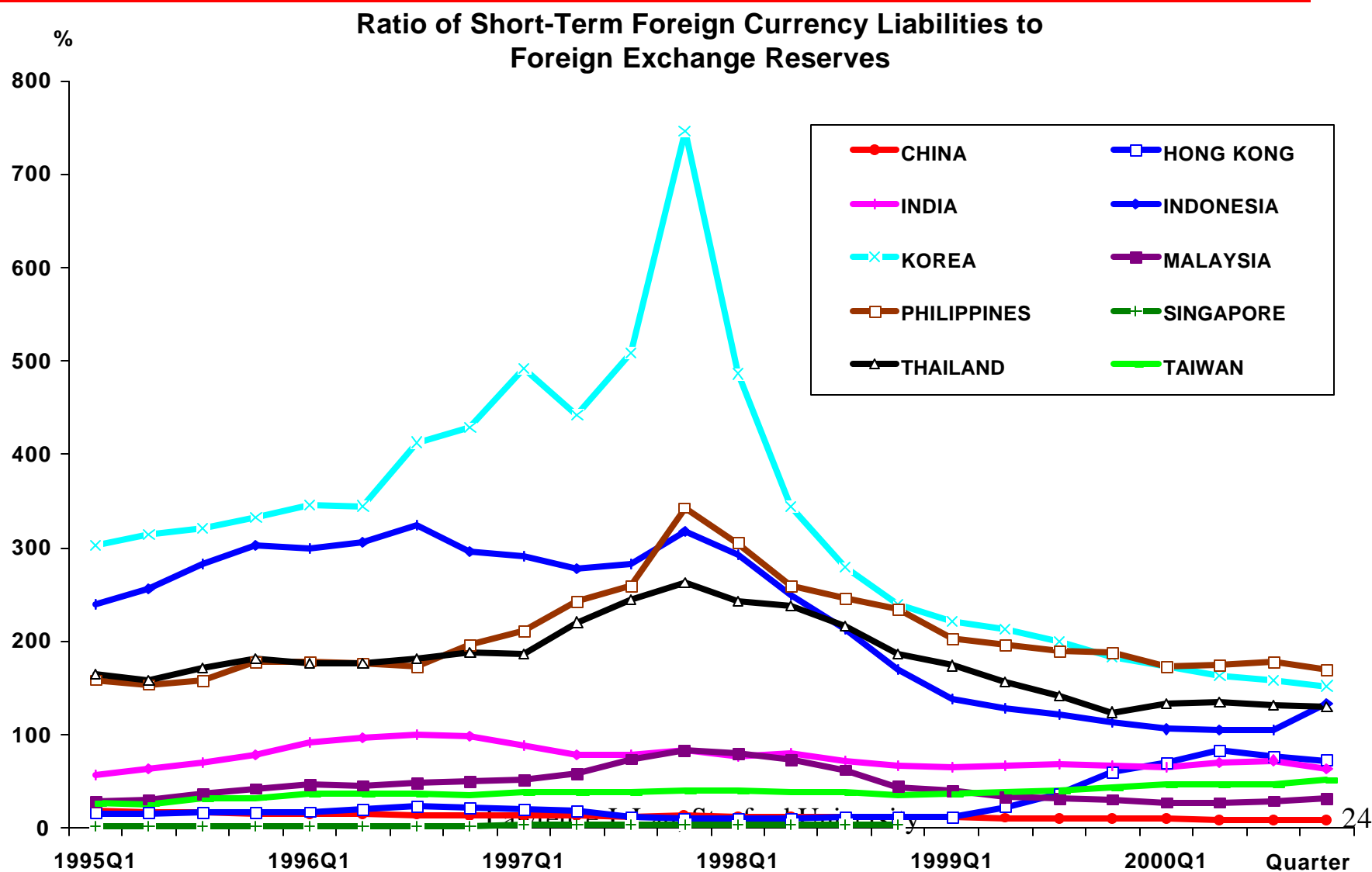
# Ratio of Short-Term Liabilities, Including Current Account Balance, to Reserves

Ratio of Short-Term Foreign Currency Liabilities, Including Current Account Balance, to Foreign Exchange Reserves



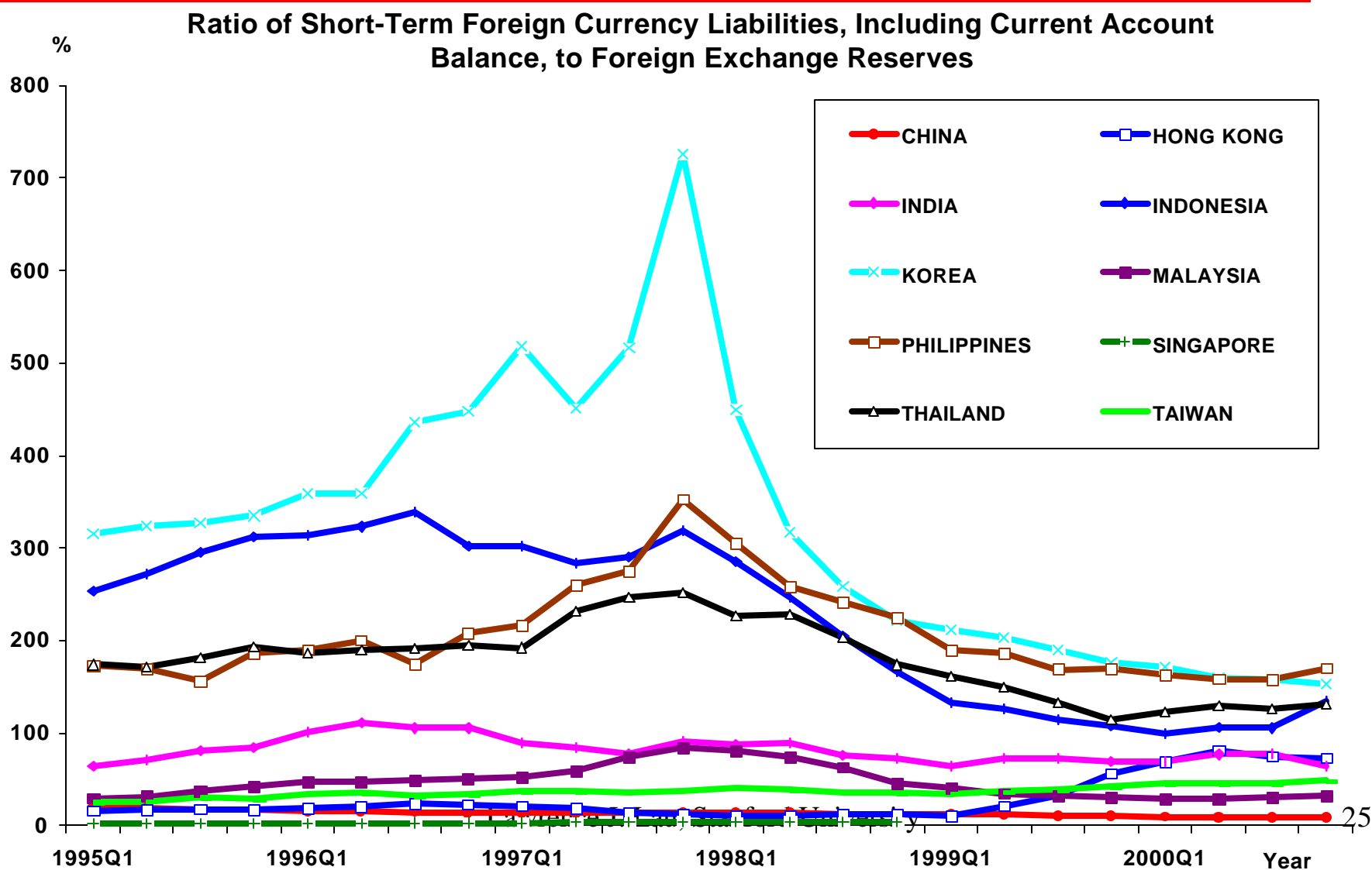
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# Ratio of Short-Term Foreign-Currency Liabilities to Foreign Exchange Reserves



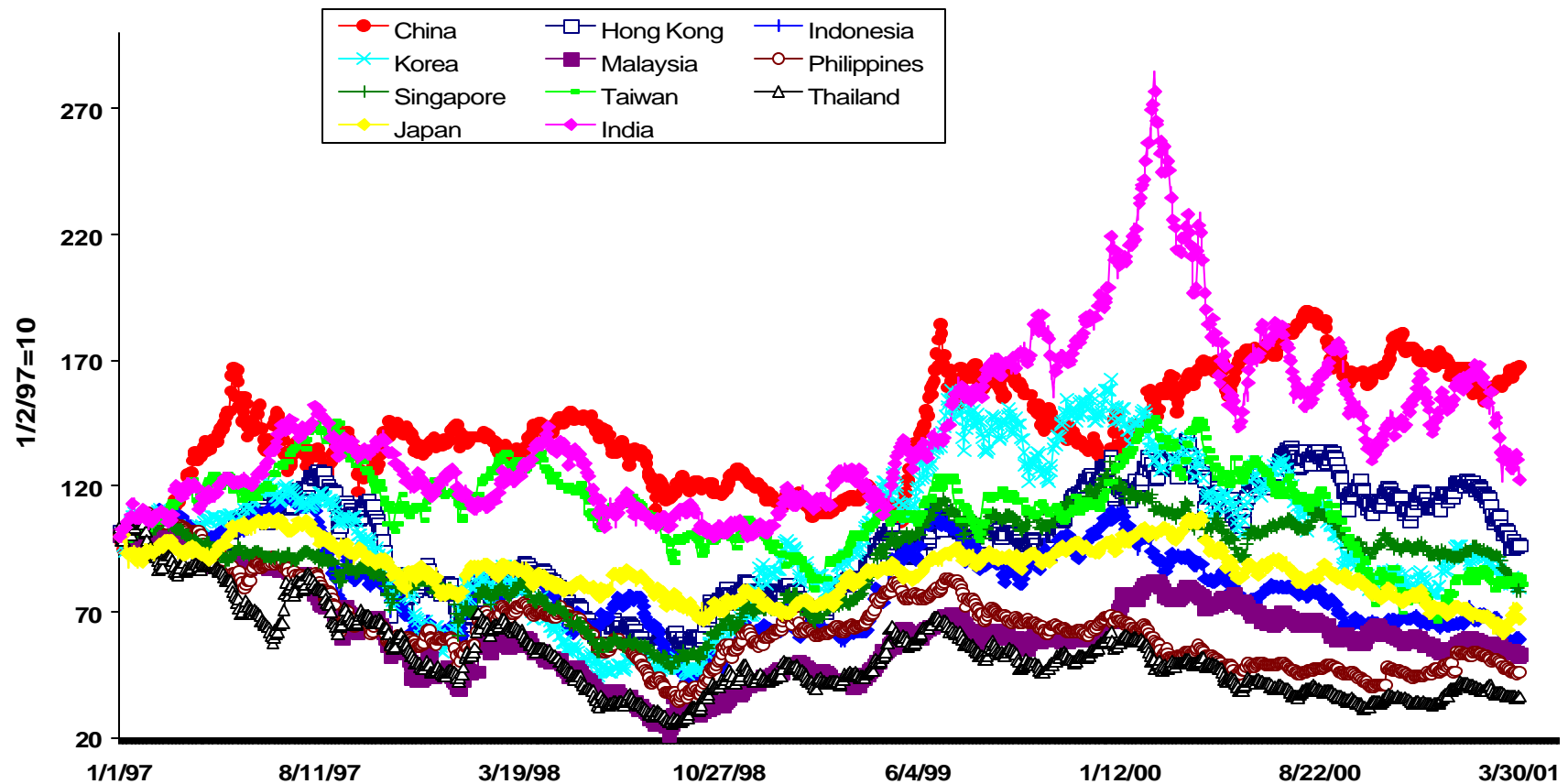


# Ratio of Short-Term Liabilities, Including Current Account Balance, to Reserves



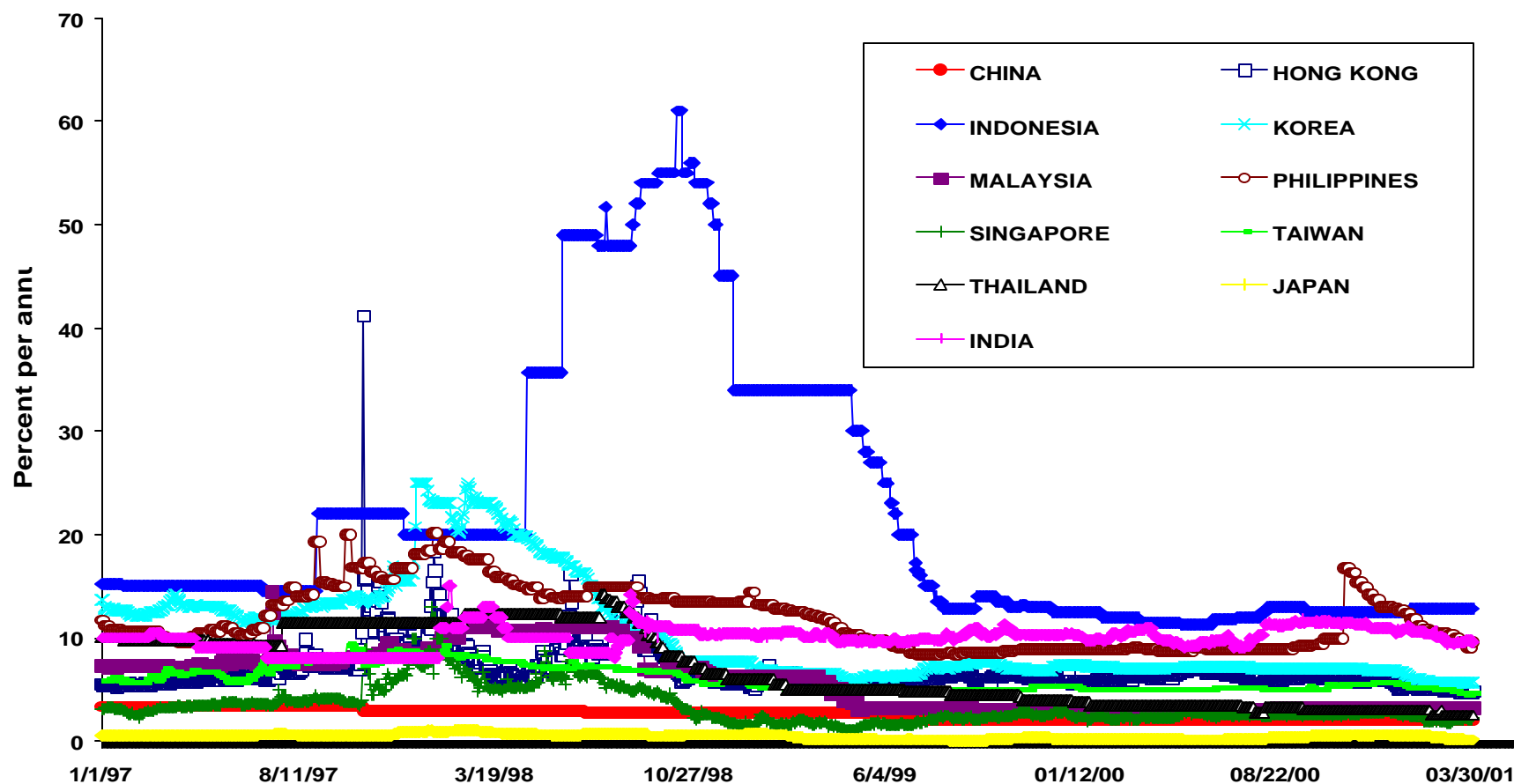
# Indexes of East Asian Stock Market Indexes: Local Currency (January 2, 1997=100)

Indexes of East Asian Stock Exchange Indexes  
(Local Currency, 1/2/97=100)



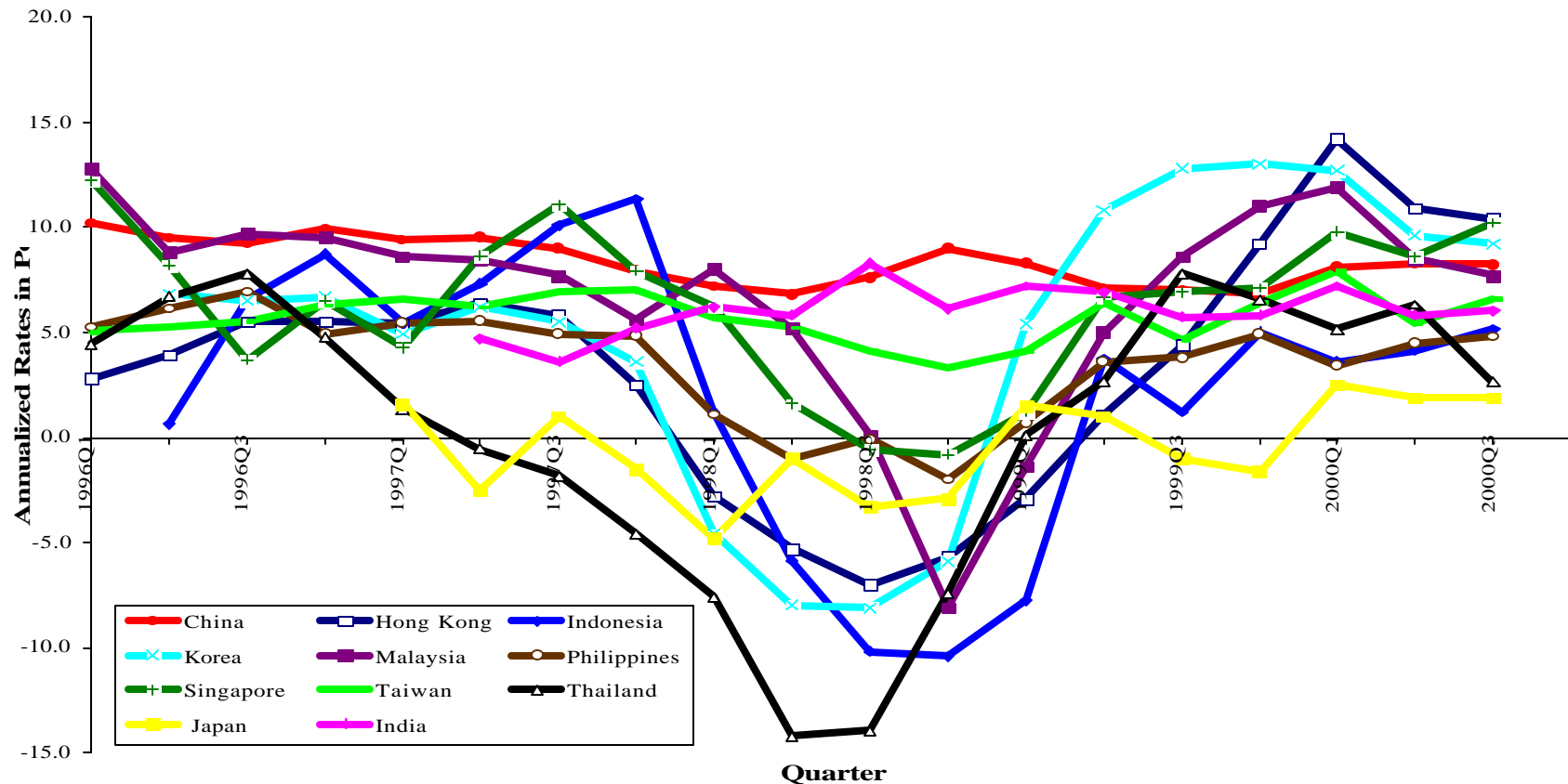
# Short-Term Rates of Interest

Short-Term Rates of Interest, Selected East Asian Countries  
(percent p.a.)

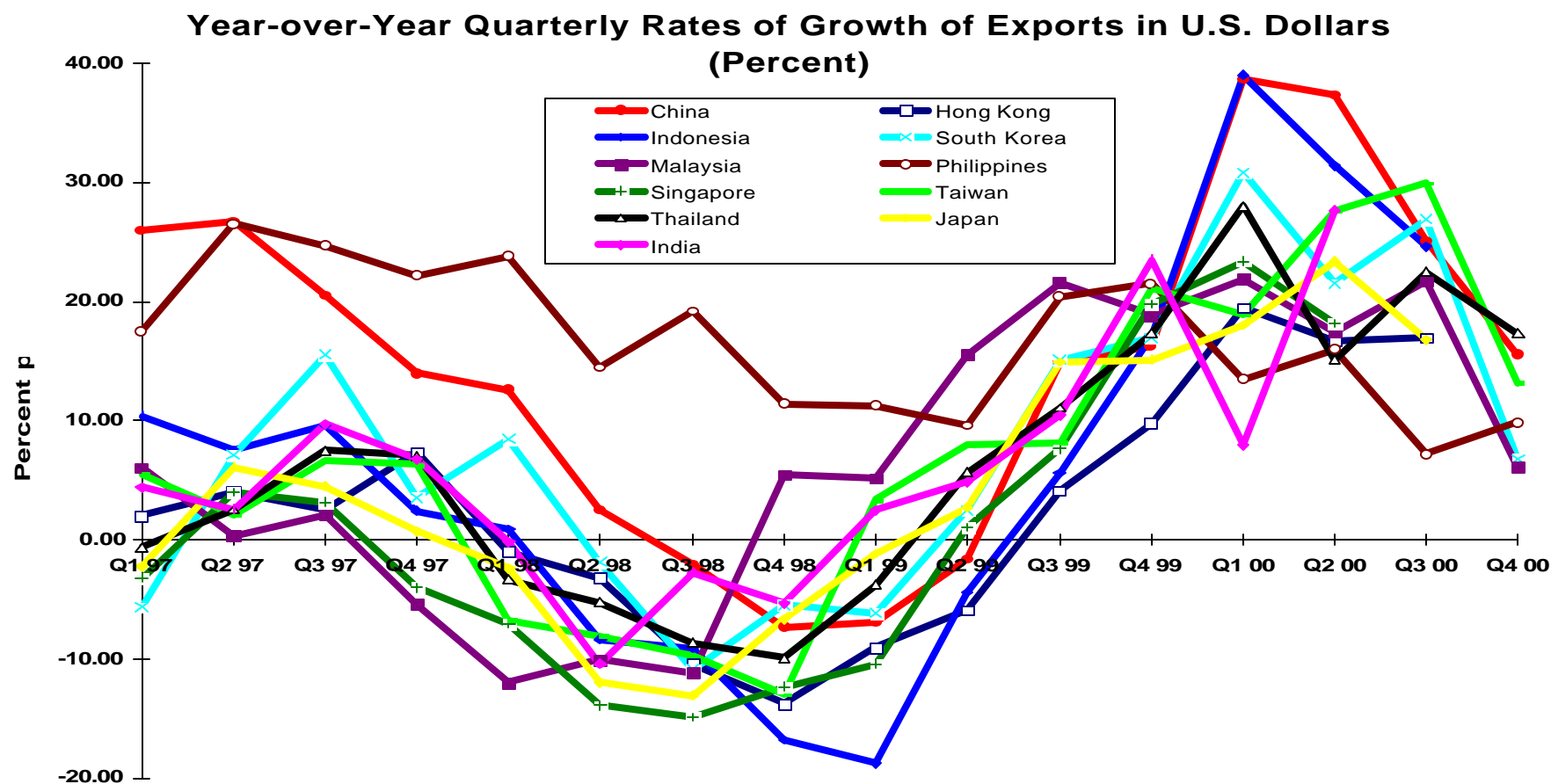


# The Rates of Growth of Real GDP Have Begun to Turn Downwards Again

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

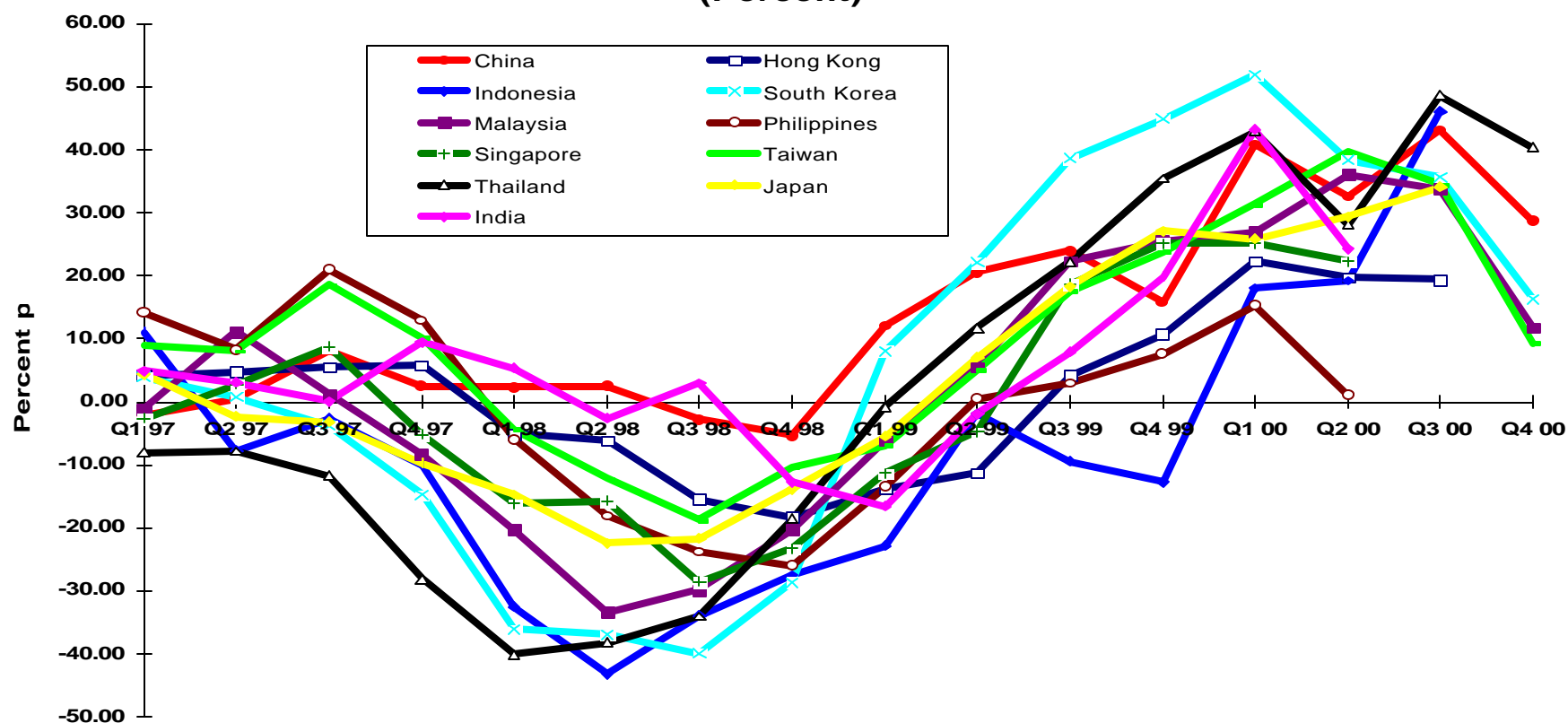


# Quarterly Rates of Growth of Exports

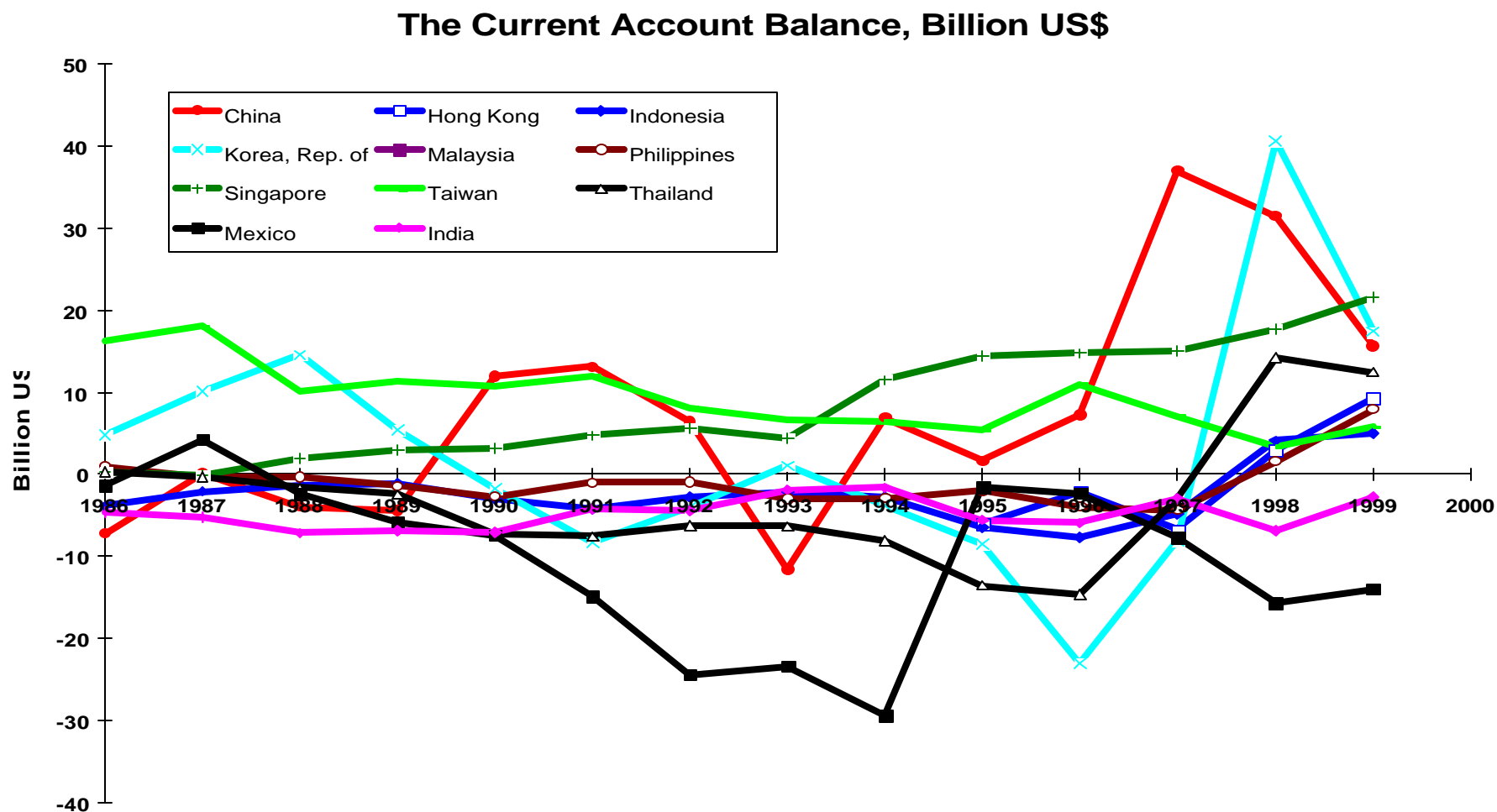


# Quarterly Rates of Growth of Imports

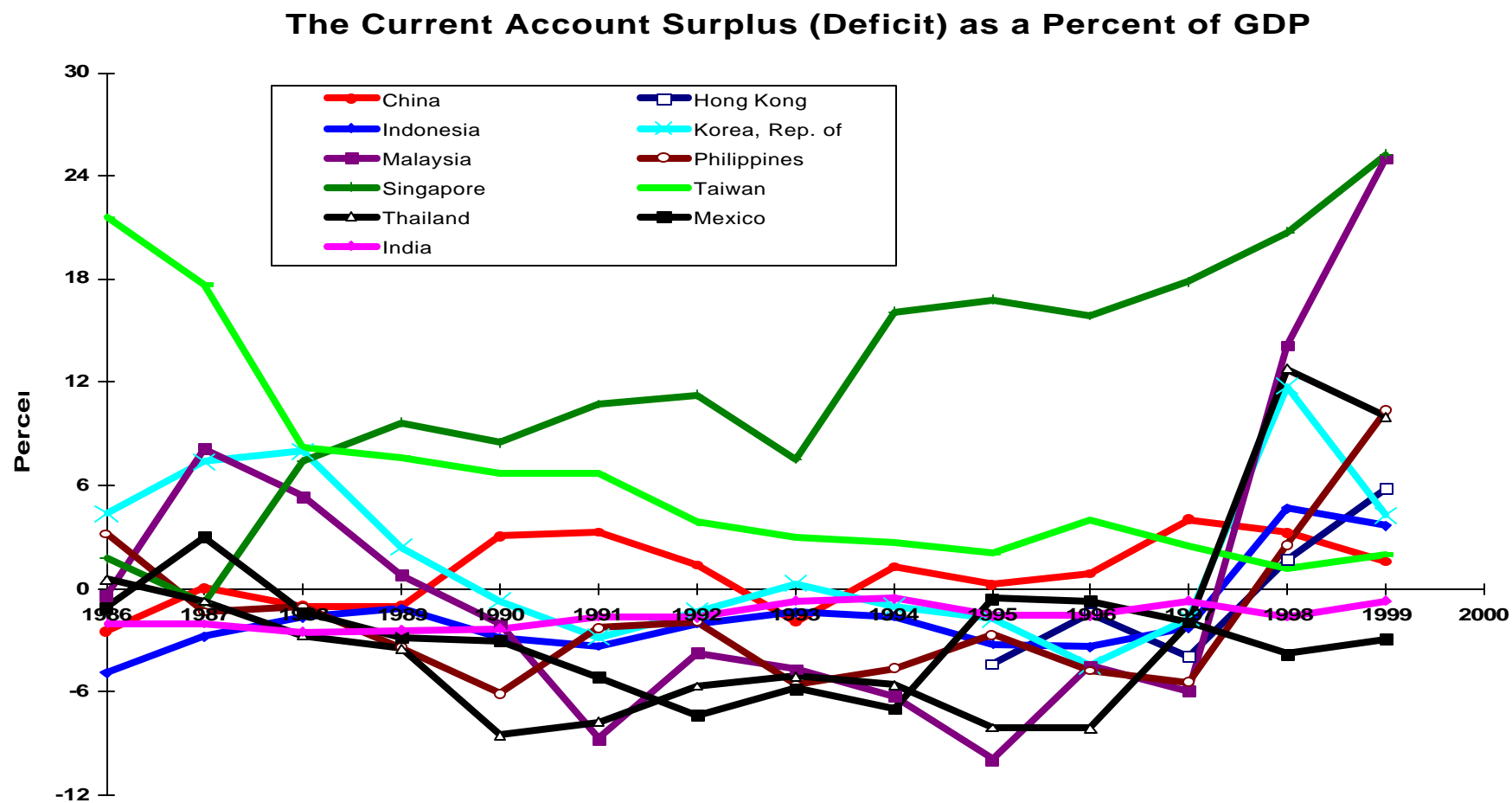
Year-over-Year Quarterly Rates of Growth of Imports in U.S. Dollars  
(Percent)



# The Current Account Balance



# The Current Account Balance as a Percent of GDP





# Is Another Crisis Likely?

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- ◆ Based on the early warning economic indicators, the East Asian economies are unlikely to have another crisis in the foreseeable future
  - ◆ The savings rates have remained high while the savings-investment gaps--also reflected as the current account gaps--have largely disappeared
  - ◆ The dependence on short-term foreign capital (portfolio investment--both equity and debt instruments--and loans) has been significantly reduced
    - ◆ Foreign investment now consists mostly of direct rather than portfolio investment
    - ◆ Both total and short-term external debts have declined
    - ◆ The ratio of short-term to total external debts has also declined
  - ◆ Foreign exchange reserves have risen both absolutely and as a percentage of annual imports
  - ◆ Real exchange rates have depreciated significantly from their peaks in most of the affected economies

# The Impact on China:

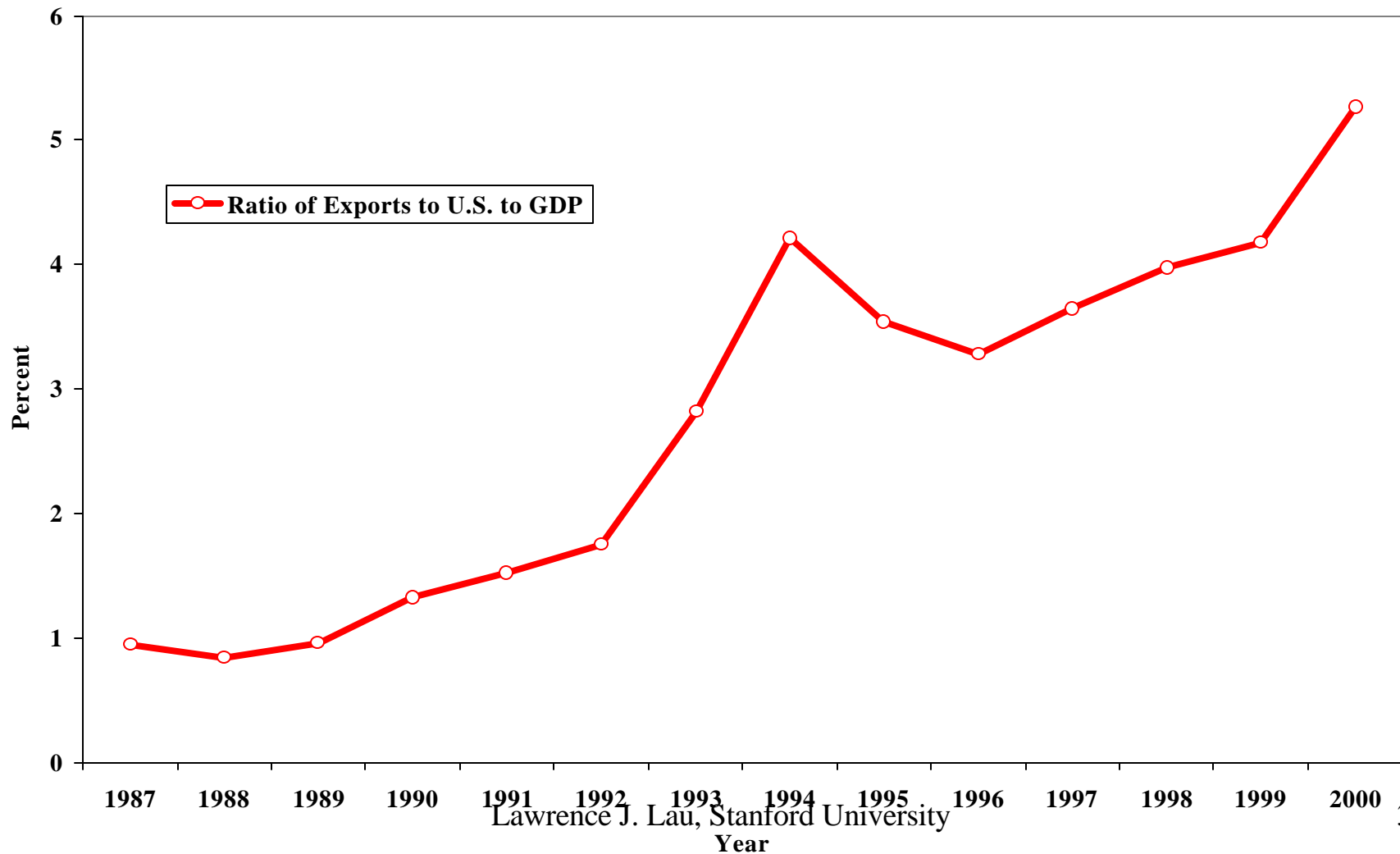
## The External Environment Has Deteriorated

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- ◆ The U.S. economy, and its high-technology sector in particular, has slowed down rather precipitously--the rate of growth of real GDP is expected to be no higher than 1% in 2001
- ◆ The slowdown in the U.S. will have an impact on East Asia, both directly and indirectly, and in particular in economies where the high-technology sector is important, such as South Korea, Malaysia and Taiwan
- ◆ The continuing stagnation of the Japanese economy does not help but is not expected to have a negative impact because it has gone on for an entire decade
- ◆ The European economies are expected to grow somewhat faster and thus to provide a partial offset to the U.S. economic slowdown
- ◆ Chinese exports to the U.S. constitutes only 5% of Chinese GDP--the U.S. slowdown will have only an impact on Chinese economic growth of less than 0.5%, after taking into account both the direct effects of a slowdown in Chinese exports to the U.S. and the indirect effects of a slowdown in Chinese exports to other East Asian economies, due to a slowdown in these economies caused by the slowdown in the U.S.

# Chinese Exports to the United States as a Percent of Chinese GDP

Chinese Exports to U.S. as a Percent of Chinese GDP



Lawrence J. Lau, Stanford University

# The Effects of the Slowdown in the United States Economy on China

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- ◆ While exports is a very high percentage of GDP in Hong Kong, Malaysia, Singapore and Taiwan, it is a relatively low percentage of the Chinese economy, amounting to approximately 20 percent
- ◆ The proportion of total exports destined for the U.S. has generally declined in the East Asian economies over the years, to less than 30 percent
- ◆ The one exception is the Chinese economy, where the proportion of Chinese exports destined for the U.S. has been rising to its current level of approximately 20 percent
- ◆ The slowdown in the U.S. economy will have a significant, but not overwhelming, negative impact on the rate of growth of real GDP in the East Asian economies--on the order of 1 percentage point decline in Hong Kong, Malaysia, Singapore and Taiwan and a less than 0.5 percentage point decline in the other East Asian economies, including China

# Direct and Total Effects of Non-Competitive-Imports (NCI) Model (Value-Added)

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	Direct	Total
◆ Processing Exports	0.153	0.176
◆ Textiles	0.147	0.165
◆ Wearing Apparel	0.158	0.170
◆ Non-Processing Exports	0.329	0.925
◆ Textiles	0.195	0.934
◆ Wearing Apparel	0.229	0.944
◆ All Exports (Weighted Average of Processing and Non-Processing Exports)	0.240	0.545
◆ Textiles	0.178	0.657
◆ Wearing Apparel	0.183	0.441

# Direct and Total Effects of Non-Competitive-Imports (NCI) Model (Employment)

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	Direct	Total
◆ Processing Exports	0.048	0.057
◆ Textiles	0.044	0.050
◆ Wearing Apparel	0.048	0.052
◆ Non-Processing Exports	0.214	0.703
◆ Textiles	0.107	0.845
◆ Wearing Apparel	0.108	0.745
◆ All Exports (Weighted Average of Processing and Non-Processing Exports)	0.130	0.375
◆ Textiles	0.084	0.558
◆ Wearing Apparel	0.069	0.294

# Is There Sufficient Aggregate Demand?

## Consumption and Investment

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- ◆ In 2001Q1, fixed investment grew 12.4% and retail sales grew 10.3%
- ◆ Real personal consumption has revived as shown by the retail sales data
- ◆ Public infrastructural investment has continued

# Sources of Growth of Aggregate Demand

## Infrastructural Investment

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- ◆ Infrastructural investment (US\$750 billion-1.2 trillion within the period 1998-2001)
- ◆ Infrastructural investment projects include roads and highways, railways, telecommunications networks, irrigation and water conservancy facilities, ecological projects such as reforestation, urban infrastructure such as mass transit systems, environmental protection, urban and rural electricity networks, urban mass transit
- ◆ Development of the Central and Western Regions
- ◆ Promotion of affordable owner-occupied residential housing investment for and by the domestic population is one of the few alternative new and durable sources of growth of aggregate demand
- ◆ Promotion of urban mass transit systems



# Sources of Growth of Aggregate Demand

## Promotion of Science and Education in China

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- ◆ Investments in information technology
  - ◆ Leap-frogging traditional development in telecommunication (the experience of the wireless phone)
  - ◆ E-commerce among enterprises
  - ◆ New models of marketing, distribution and sales
  - ◆ A PC in every classroom (in every urban home)
  - ◆ Set-top boxes on television sets with point and click device and numeric pad can link 400 million households to the internet
  - ◆ New modes of education and information dissemination
  - ◆ The Chinese language is uniquely suited to communication based on a graphic interface (the experience of the fax machine)
- ◆ Extension of compulsory education to 12 years
- ◆ Investments in tertiary education and in R&D

# The Development of the Great West: Three Paradigms of Economic Growth

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- ◆ Growth through domestic demand--the domestic market paradigm ala the United States in the 19th century
- ◆ Industrial migration over time--the "wild-geese-flying pattern" metaphor applied to Chinese provinces and regions
- ◆ Privatization is not always necessary--shrinking the state sector without privatization--the experience of Taiwan
- ◆ What does it take?
  - ◆ Availability of infrastructure (transportation and communication, including the internet)
  - ◆ Continued marketization of the economy
  - ◆ Maintenance of a domestically open economy (the equivalent of the "interstate commerce" clause of the U.S. constitution)
  - ◆ Affirmation of property rights and the rule of law
  - ◆ The role of the "open door"--WTO

# The Development of the Great West: Reducing Regional Inequalities

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- ◆ Even though all regions benefited from the economic reform since 1979, the coastal regions benefited much more than the inland regions
- ◆ Interregional income inequality has risen, resulting in:
  - ◆ Dissatisfaction and restiveness
  - ◆ Deterioration of social services, especially education and health care
  - ◆ Massive illegal migration from the inland regions to the coastal regions, creating huge pressure on social and physical infrastructure
- ◆ Moving jobs to where people are, not people to where jobs are
- ◆ Urbanization through the creation of new towns and cities, not the growth of existing towns and cities
- ◆ Developing a truly integrated national market
- ◆ Maintaining long-term competitiveness without devaluation

# Foreign Direct Investment (FDI)

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- ◆ Foreign Direct Investment
  - ◆ FDI arrivals totaled US\$40.39 billion in 1999, an 11% decline from 1998--however, the sources of the FDI were different--real FDI probably rose if “round-tripped” capital were excluded
  - ◆ FDI commitments amounted to US\$41.24 billion in 1999, a decline of 20.9%
  - ◆ FDI arrivals totaled US\$40.7 billion in 2000, a 1% increase over 1999; for 2001Q1, FDI arrivals rose 11.7%
  - ◆ FDI commitments amounted to US\$62.4 billion in 2000, an 51.3% increase over 1999, partly in response to expected Chinese accession to WTO; for 2001Q1, FDI commitments rose 44.3% Y-o-Y
  - ◆ The nature of FDI has also changed--from export-oriented to domestically oriented; from light industry to heavy and high-technology industries, and from small projects to large projects
- ◆ Collateralized loan program as a natural hedge for foreign direct investors
- ◆ Initial public offerings (IPOs) and listings on Chinese stock exchanges as a potential exit strategy for foreign direct investors

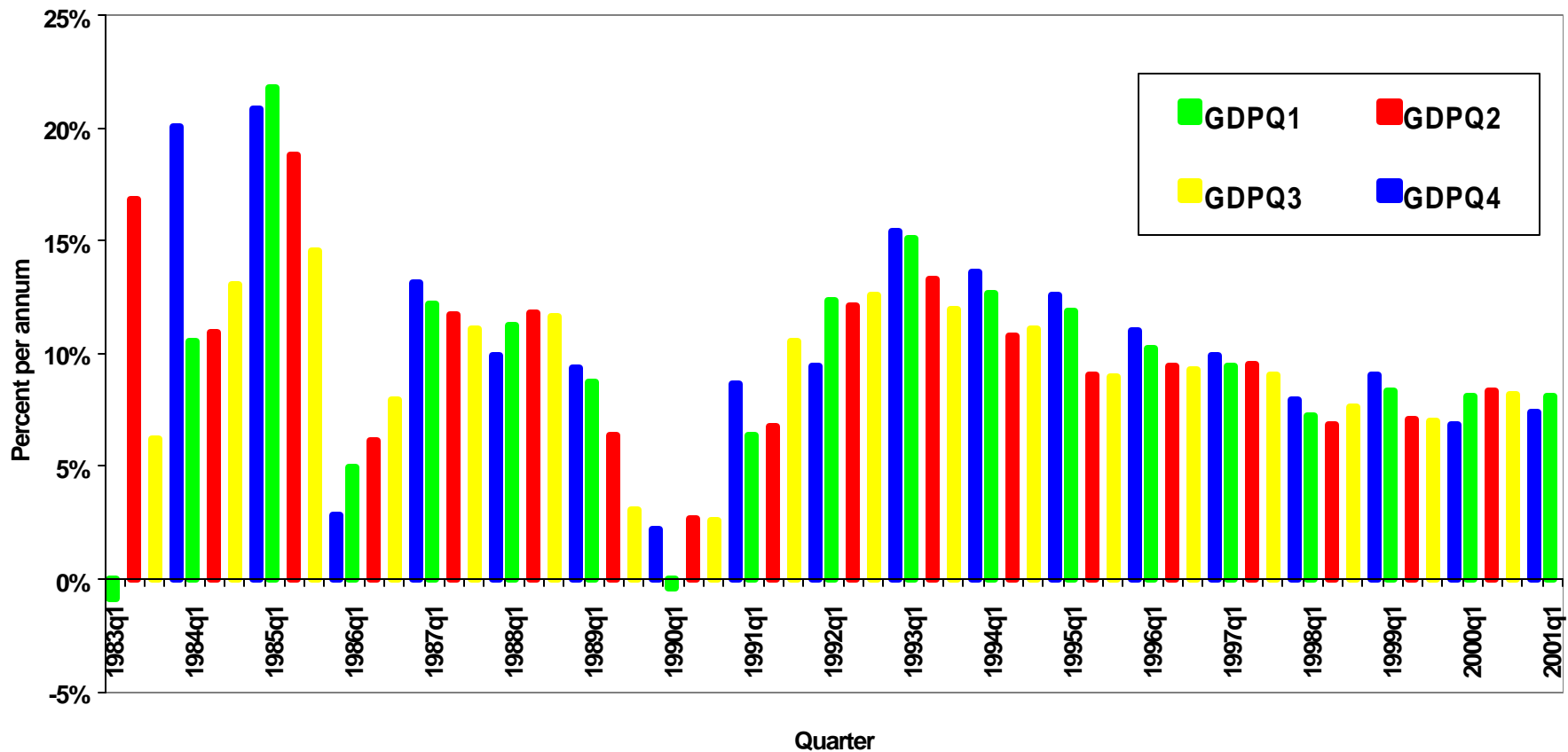
## The Tenth Five-Year Plan (2001-2005)

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- ◆ An indicative (or predictive) plan rather than a mandatory plan
- ◆ Doubling of real GDP between 2001 and 2010, with an implied rate of growth of 7.2% p.a.
- ◆ An inflation target of less than 3% p.a.
- ◆ An increase in the share of central government revenue in GDP (the introduction of a comprehensive individual income tax)—tax revenue rose 22.8% to 1.266 trillion Yuan, or 14.2% of GDP, in 2000
- ◆ The National People's Congress has stressed the importance of fighting corruption, organized crime and cults such as the Falun Gong

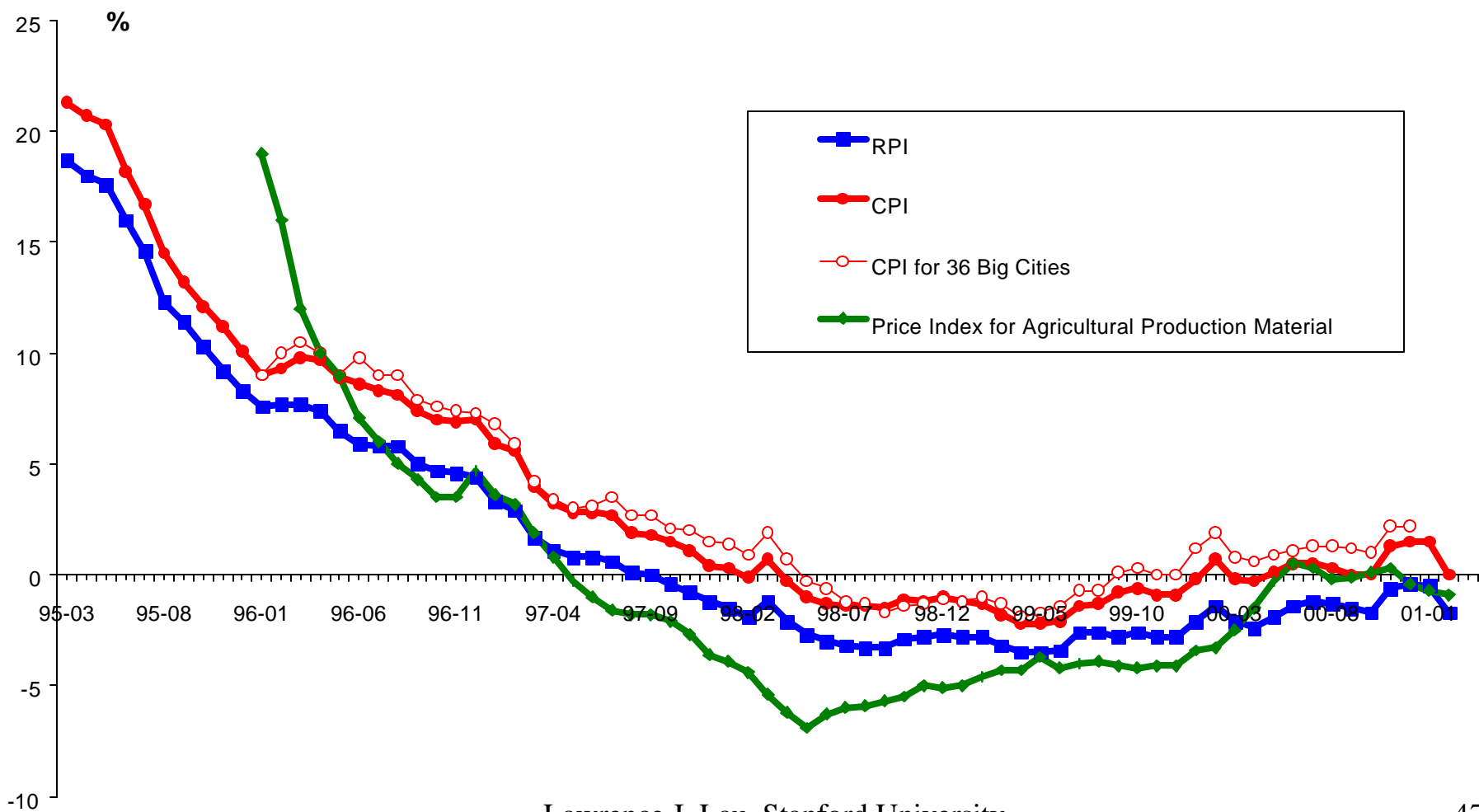
# The Pace of Economic Growth Has Picked Up: YoY Quarterly Rates of Growth of Real GDP

YoY Quarterly Rates of Growth of Real GDP



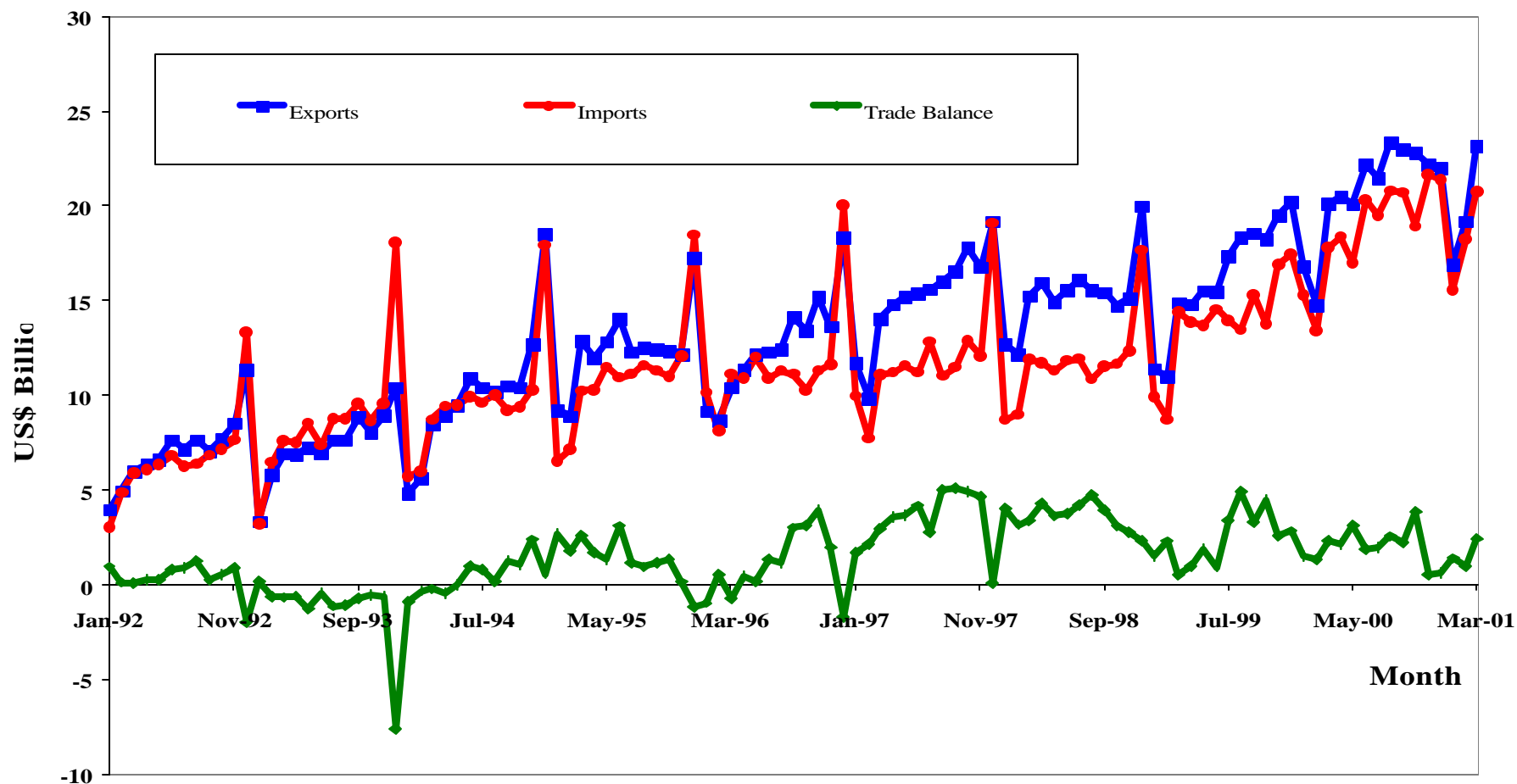
# The Consumer and Retail Price Indices

Monthly Rates of Change of Price Indices Since 1995 (Y-o-Y)



# Monthly Exports, Imports and Trade Balance Official Chinese Data

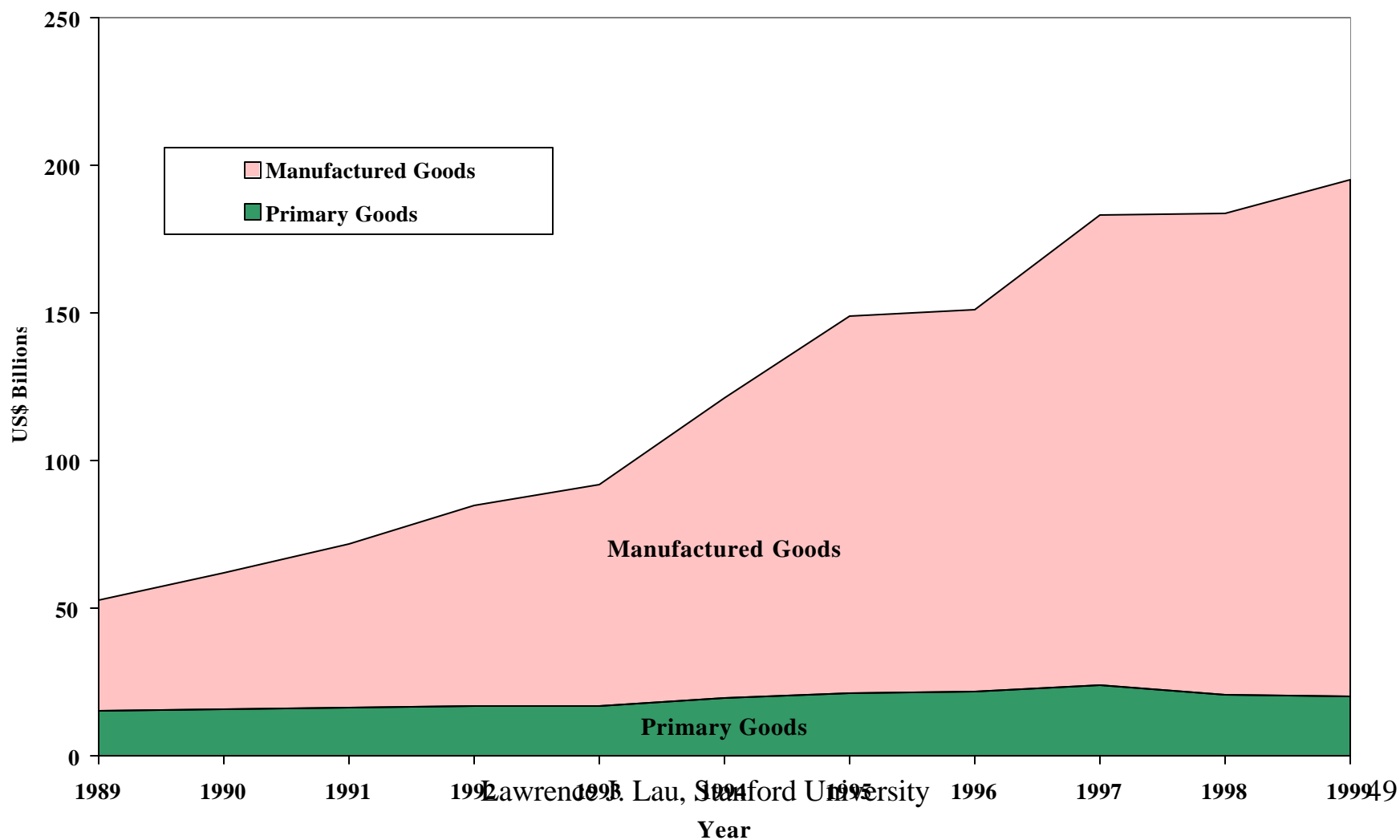
Monthly Exports, Imports, and Trade Balance





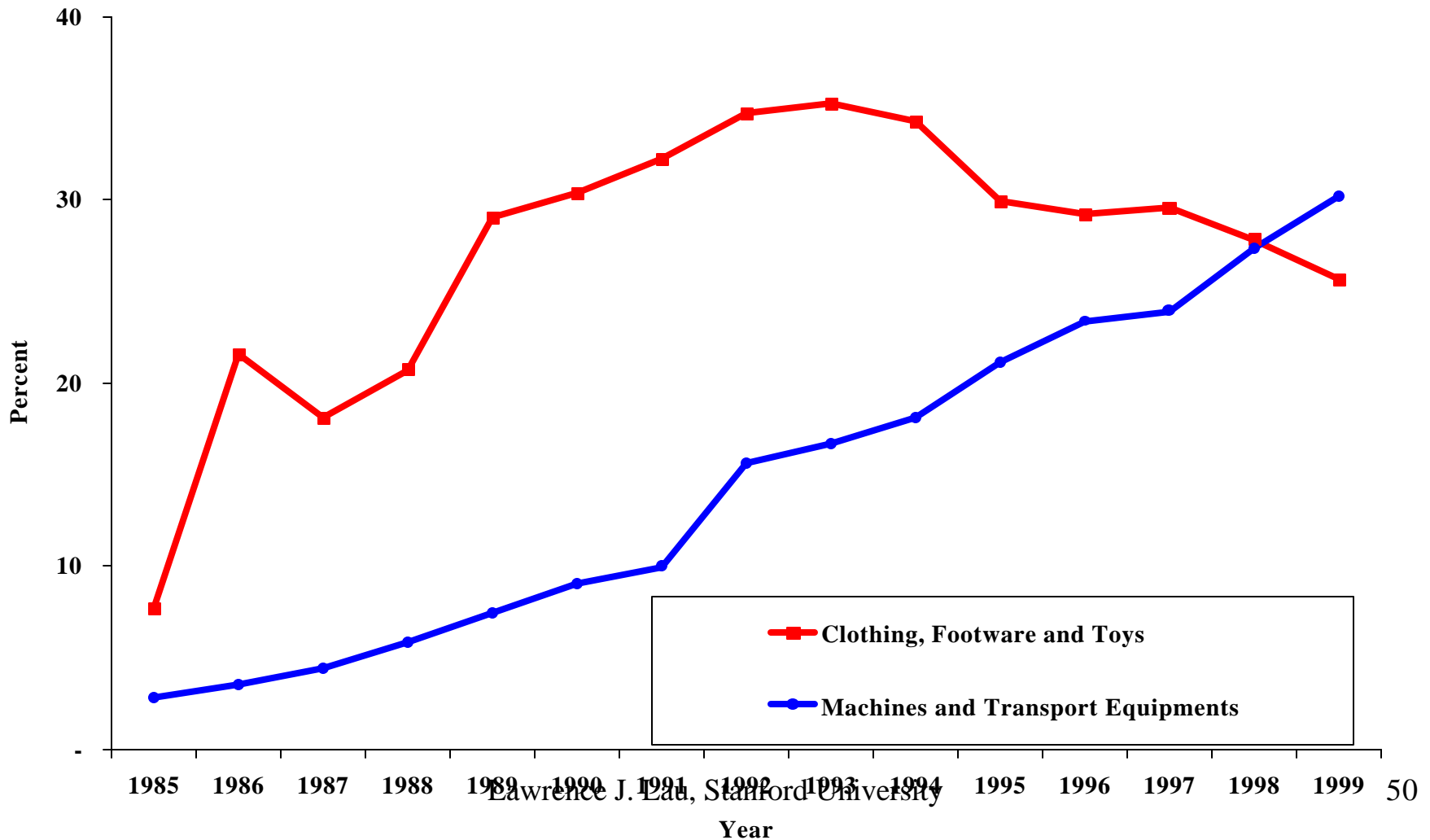
# Composition of Chinese Exports

Chinese Exports by Commodities: Primary versus Manufactured Goods



# Manufactured Exports as a Percent of Total Chinese Exports

Distribution of Chinese Manufactured Exports as Percent of Total Exports  
1985-1999



# China and the World Trade Organization (WTO) (1)

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- ◆ “Permanent Normal Trade Relations” has passed the U.S. Congress
- ◆ The government is committed to an “open-door” policy and national treatment for foreign direct investors--a “level playing field” for all, including domestic non-state-owned enterprises
- ◆ Remaining obstacle in the trade of agricultural commodities and allowable domestic subsidies has been removed

# The Impact of the Accession to the World Trade Organization (WTO) on China (2)

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- ◆ Signaling effect
  - ◆ Reform and open-door policies are on track and will be continued
- ◆ Long-term benefits include:
  - ◆ A permanent commitment to an openness and a lock-in to the global economy
  - ◆ Replacement of the current discretion-based system by a more transparent and rule-based system in economic regulation
  - ◆ National treatment for all enterprises--foreign as well as domestic non-state-owned enterprises
  - ◆ Insurance for domestic economic efficiency through open global competition--inefficient domestic monopolies will no longer be protected

# The Impact of the Accession to the World Trade Organization (WTO) on China (1)

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- ◆ Immediate impact small but change in long-term expectations
  - ◆ FDI should rise, especially in the services sector--distribution, finance, and telecommunication
  - ◆ Exports and imports should rise moderately in the short and intermediate term
  - ◆ Massive imports of agricultural commodities unlikely because of limitations of world market supply
  - ◆ Closure and consolidation of inefficient enterprises likely even without WTO accession
  - ◆ More trade in intermediate goods
  - ◆ Tariff reductions from 22% to 17% on average
  - ◆ A deadline for reform of the state-owned enterprises and the banking sector
  - ◆ WTO accession provides additional incentive and pressure for development of an integrated national market not only for goods but also for factors

# Internet Users in the Asia/Pacific Region

Internet Users in the Asia/Pacific Region (millions)								
	1999	2000	2001	2002	2003	2004	2005	Annual Rate of Growth
<b>China</b>	<b>16.5</b>	<b>27.2</b>	<b>40.4</b>	<b>59.4</b>	<b>84.5</b>	<b>111.6</b>	<b>141.3</b>	<b>43.0</b>
<b>Hong Kong</b>	<b>1.9</b>	<b>2.5</b>	<b>3.0</b>	<b>3.2</b>	<b>3.8</b>	<b>4.6</b>	<b>5.4</b>	<b>19.0</b>
<b>India</b>	<b>3.2</b>	<b>6.2</b>	<b>11.0</b>	<b>18.9</b>	<b>30.3</b>	<b>42.3</b>	<b>62.5</b>	<b>64.1</b>
<b>Indonesia</b>	<b>1.0</b>	<b>1.4</b>	<b>1.9</b>	<b>2.5</b>	<b>3.6</b>	<b>5.2</b>	<b>7.3</b>	<b>39.3</b>
<b>South Korea</b>	<b>5.3</b>	<b>8.1</b>	<b>10.7</b>	<b>14.1</b>	<b>17.7</b>	<b>22.1</b>	<b>26.8</b>	<b>31.0</b>
<b>Malaysia</b>	<b>1.2</b>	<b>1.7</b>	<b>2.4</b>	<b>3.5</b>	<b>4.7</b>	<b>6.2</b>	<b>8.1</b>	<b>37.5</b>
<b>Philippines</b>	<b>0.6</b>	<b>1.1</b>	<b>1.6</b>	<b>2.7</b>	<b>4.1</b>	<b>6.3</b>	<b>8.6</b>	<b>55.9</b>
<b>Singapore</b>	<b>0.8</b>	<b>1.0</b>	<b>1.3</b>	<b>1.5</b>	<b>1.7</b>	<b>1.9</b>	<b>2.4</b>	<b>20.1</b>
<b>Taiwan</b>	<b>4.4</b>	<b>5.5</b>	<b>6.9</b>	<b>8.6</b>	<b>10.8</b>	<b>12.4</b>	<b>15.8</b>	<b>23.7</b>
<b>Thailand</b>	<b>1.0</b>	<b>1.5</b>	<b>2.3</b>	<b>3.5</b>	<b>4.6</b>	<b>6.5</b>	<b>8.7</b>	<b>43.4</b>
<b>Asia/Pacific Region</b>	<b>66.2</b>	<b>94.5</b>	<b>128.0</b>	<b>173.3</b>	<b>231.5</b>	<b>295.7</b>	<b>374.4</b>	<b>33.5</b>

Note: 1999 figures estimated and 2000-2005 figures projected by the Yankee Group.

# Penetration Rates in the Asia/Pacific Region

Penetration Rates in the Asia/Pacific Region (percent)							
	1999	2000	2001	2002	2003	2004	2005
<b>China</b>	1.3	2.0	2.9	4.2	5.8	7.4	9.2
<b>Hong Kong</b>	26.9	35.6	40.6	42.5	49.6	57.7	65.3
<b>India</b>	0.3	0.6	1.0	1.7	2.7	3.6	5.2
<b>Indonesia</b>	0.5	0.6	0.9	1.1	1.5	2.1	2.9
<b>South Korea</b>	11.2	17.0	22.3	29.3	36.2	44.8	53.9
<b>Malaysia</b>	5.3	7.4	10.0	13.9	18.1	23.3	29.8
<b>Philippines</b>	0.8	1.4	2.1	3.3	4.8	7.2	9.5
<b>Singapore</b>	24.2	29.0	37.7	42.5	47.9	54.0	66.1
<b>Taiwan</b>	19.9	24.7	30.5	37.8	46.8	53.3	67.4
<b>Thailand</b>	1.6	2.4	3.5	5.1	6.6	9.1	11.7
<b>Asia/Pacific Region</b>	2.4	3.3	4.5	6.0	7.8	9.6	11.9

Note: 1999 figures estimated and 2000-2005 figures projected by the Yankee Group

# Opportunities and Challenges of the New Economy

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- ◆ The “New Economy” brings about a one-time permanent increase in potential output, hence, productivity
- ◆ The “New Economy” depends on both tangible and intangible capital--the importance of complementarity of different forms of capital (tangible, infrastructural, human, R&D, knowledge)
- ◆ The “New Economy” is here to stay
- ◆ The “New Economy” facilitates and encourages the process of “de-verticalization” or “fragmentation”, which began in 1984 as a result of the economic reform
- ◆ The need to identify, improve and sharpen “core competence” in order to survive; productivity can actually be enhanced by taking advantage of the opportunities for “de-verticalization” and “out-sourcing”
  - ◆ e.g., the choice amongst being a designer, manufacturer or a marketer



# Opportunities and Challenges

## Implications for the Chinese Economy

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- ◆ The “New Economy” facilitates and encourages global division of labor--i.e., globalization of sources of supply; it also shortens the “Product Cycle”--hence new opportunities but also competitive challenges

# The Possibility of Leap-Frogging

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- ◆ China has the ability to leap-frog--there are no vested interests to protect; no existing businesses to be cannibalized; there can be “creation without destruction”
  - ◆ e.g., facsimile machines instead of telexes; video compact discs instead of VCRs; a new keyboard layout;
  - ◆ Computer/word processor/printer combination instead of typewriters;
  - ◆ mobile and wireless telephones instead of fixed lines;
  - ◆ debit and credit cards instead of checks;
  - ◆ internet trading of stocks and bonds;
  - ◆ E-commerce rather than traditional commerce (B2B and B2C, e.g., books and magazines)

# The Possibility of Influencing/Setting Standards

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- ◆ The markets are potentially large enough in China for the benefits of economies of scale to be realized and for it to have a significant influence on future standards
  - ◆ e.g., Linux
  - ◆ wireless telephone standards (CDMA)
  - ◆ Promotion of experiments with other, non-PC-based access devices to the internet--television sets, web TV type devices, digital set-top boxes, screen phones and wireless

# The Possibility of Local Adaptation

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- ◆ The possibility of local adaptation--taking advantage of local conditions
  - ◆ e.g., the Legend story
    - ◆ language
    - ◆ local supply and demand conditions, e.g., stability of the voltage of the electric power supply
  - ◆ The Chinese language is uniquely suited to communication based on a graphic interface (the experience of the fax machine)
    - ◆ Set-top boxes on television sets with point and click device and numeric pad can link 400 million households to the internet
- ◆ Transformation of the “Old Economy” through the information and communication technology, especially in light of the accession to the World Trade Organization (WTO)

# The New Economy Levels the Playing Field between Large and Small Firms

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- ◆ Small firms can have access to services and supplies heretofore only available to large firms
  - ◆ E.g., Charles Schwab and E-trade benefit small investors by bringing down the cost of securities trading proportionally much more than large investors
  - ◆ Rapid delivery services and warehousing facilities, e.g., FedEx, are available to both large and small firms
- ◆ Small firms can also become more accessible to their customers and potential customers through the Internet with only marginal expenditures on advertising and public relations
- ◆ Small firms have access to large firms as potential suppliers in a global supply chain
- ◆ The Chinese economy with its high and potentially even higher concentration of smaller firms and more primitive information infrastructure (and thus the potential for leap-frogging) may benefit much more from the new economy than other economies
  - ◆ E.g., B2B dot.coms seem to have relatively greater success in East Asia than in the United States