

# The World Economy and Deflation

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# A Preview

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- ◆ The World Economic Situation
- ◆ Is There Deflation?
- ◆ Exchange Rate Movements

# The World Economic Situation

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# The Chinese Economy Today

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	1979	2002
	US\$ (2002 prices)	
Real GDP	177 bill.	1.24 trill.
Real GDP per capita	183	960

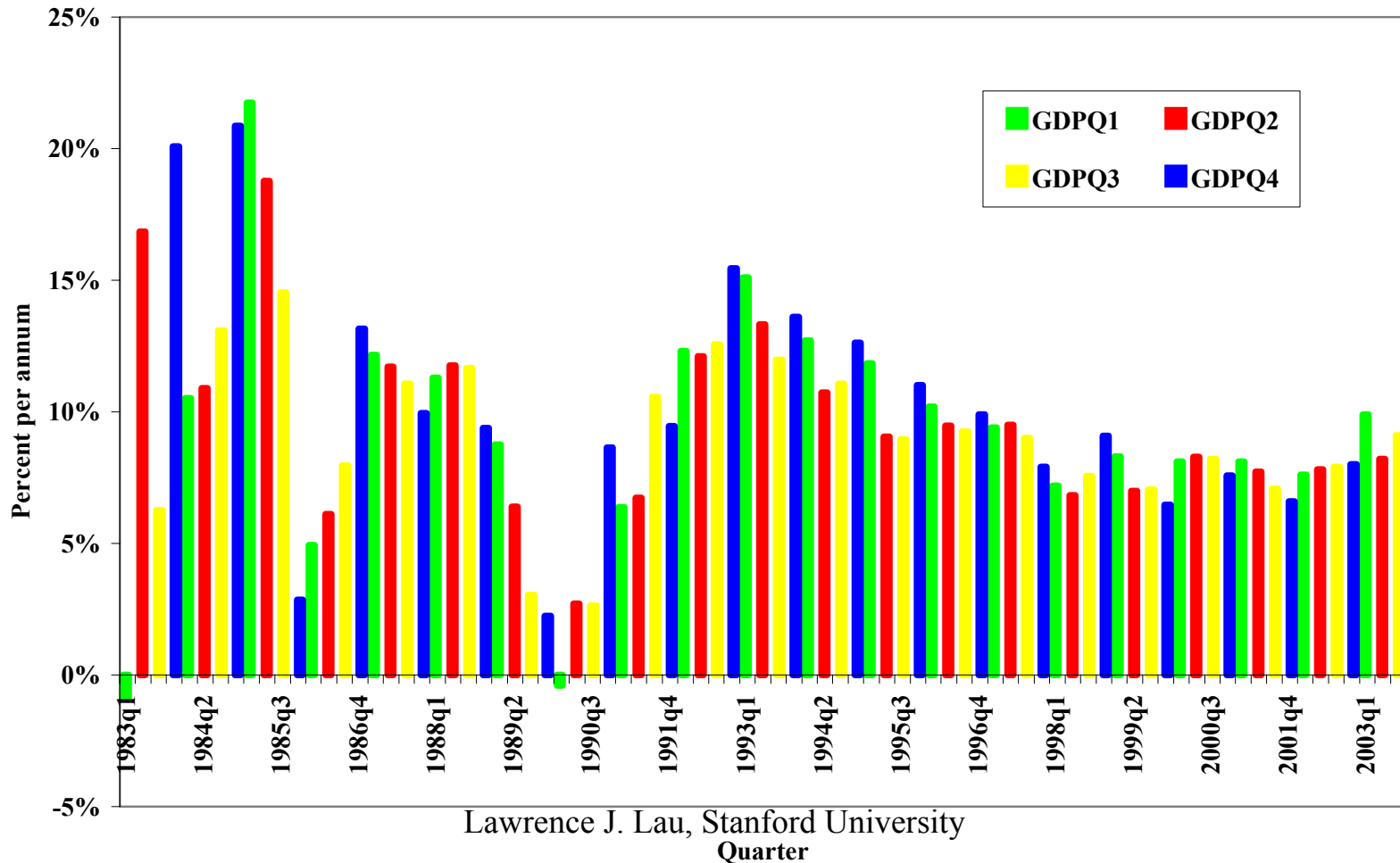
# The Chinese Economy Today

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	U.S.	China
	US\$ (current prices)	
2002 GDP	10.5 trill.	1.24 trill.
2002 GDP per capita	37,000	960

# Quarterly Rates of Growth of the Real GDP of the Chinese Economy, Y-o-Y

YoY Quarterly Rates of Growth of Real GDP



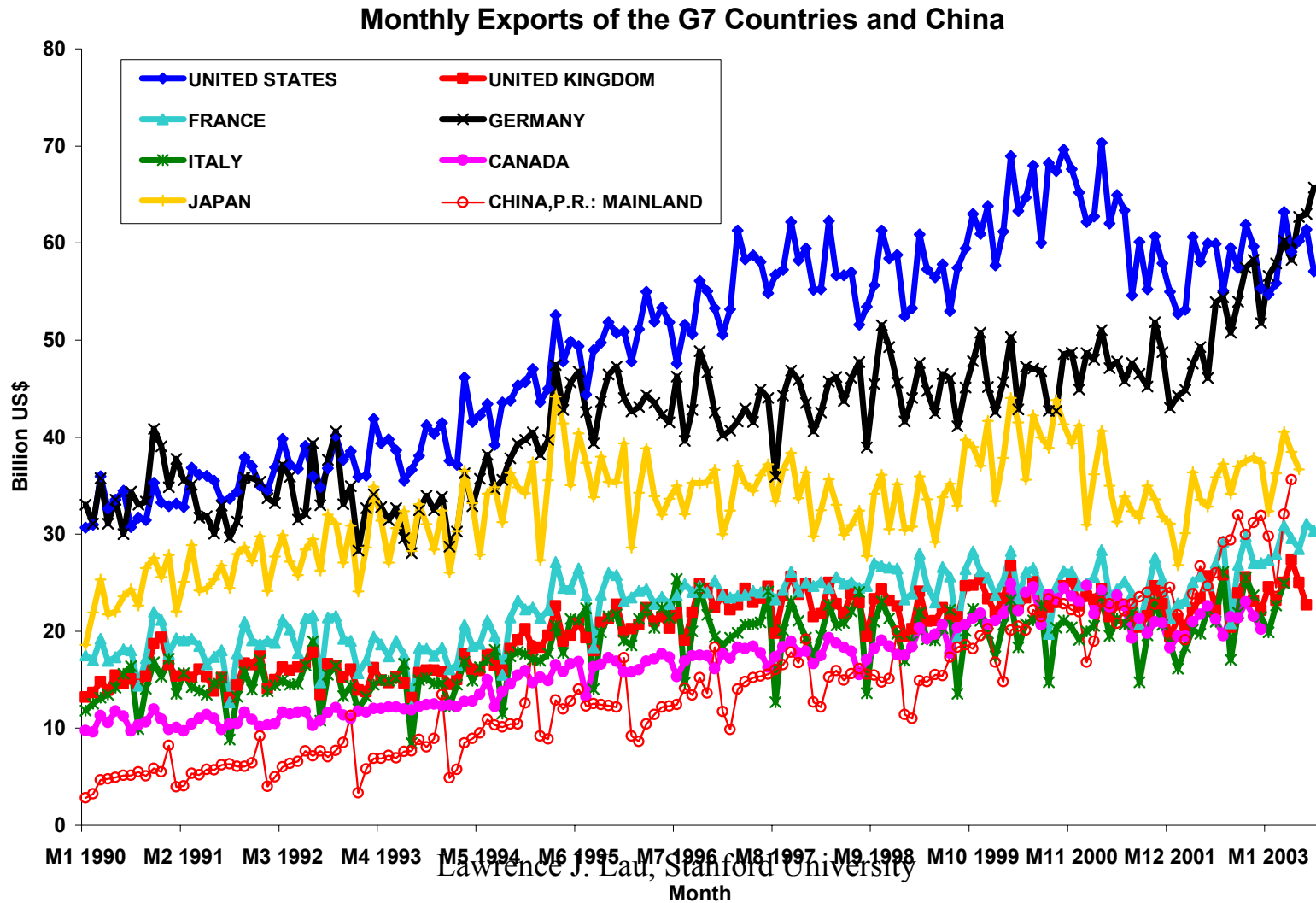
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Quarter

# Rates of Growth of Real GDP and Inflation (% p.a.)

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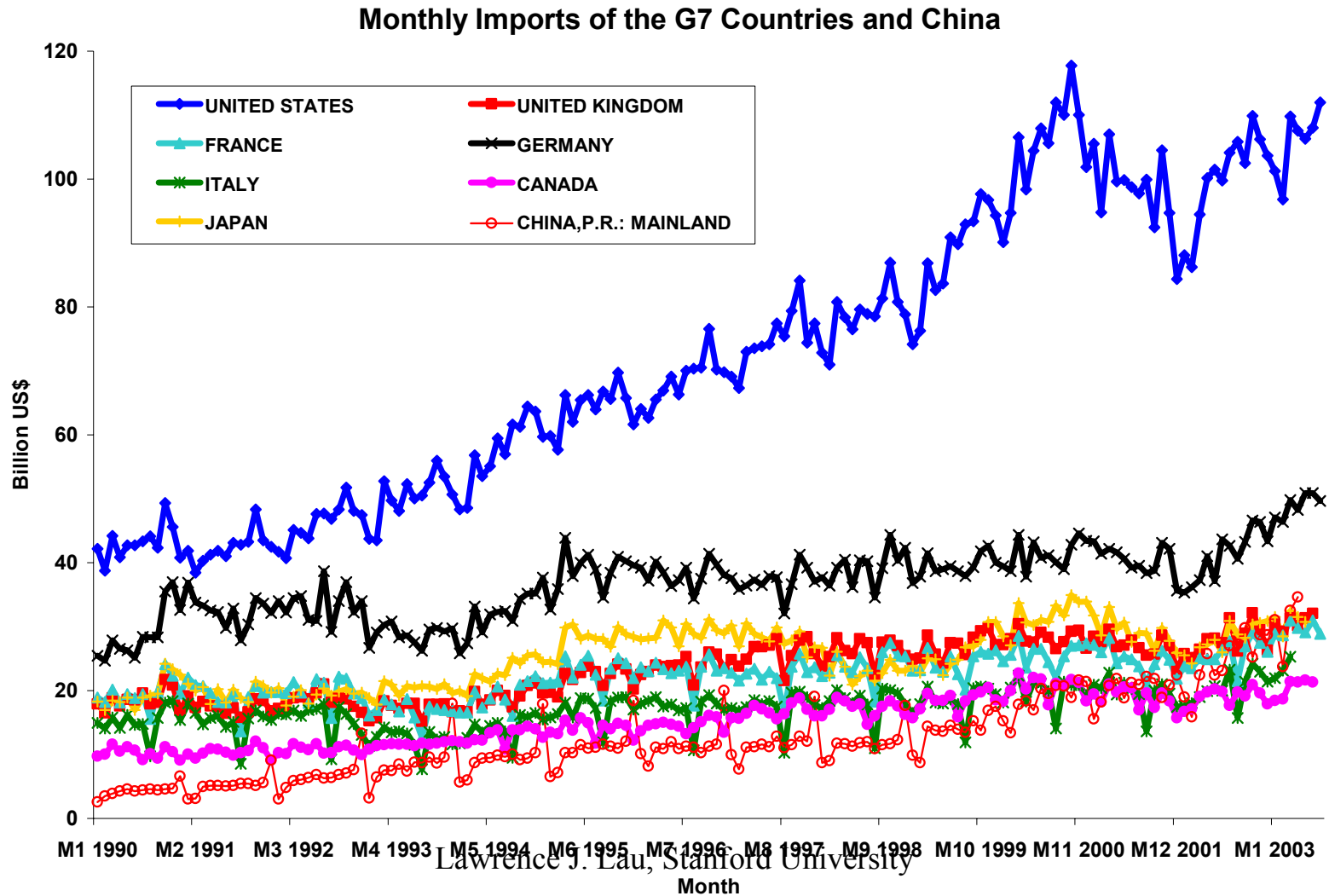
◆ Actual	Real GDP	RPI	CPI
1997	8.8	0.8	2.8
1998	7.8	-2.6	-0.8
1999	7.1	-2.9	-1.3
2000	8.0	-1.5	0.4
2001	7.3	-0.8	0.7
2002	8.0	-1.3	-0.8
2003Q1	9.9		0.5
2003Q2	6.7		0.7
2003Q3	9.1		0.9

# Monthly Exports of G-7 Countries and China





# Monthly Imports of G-7 Countries and China



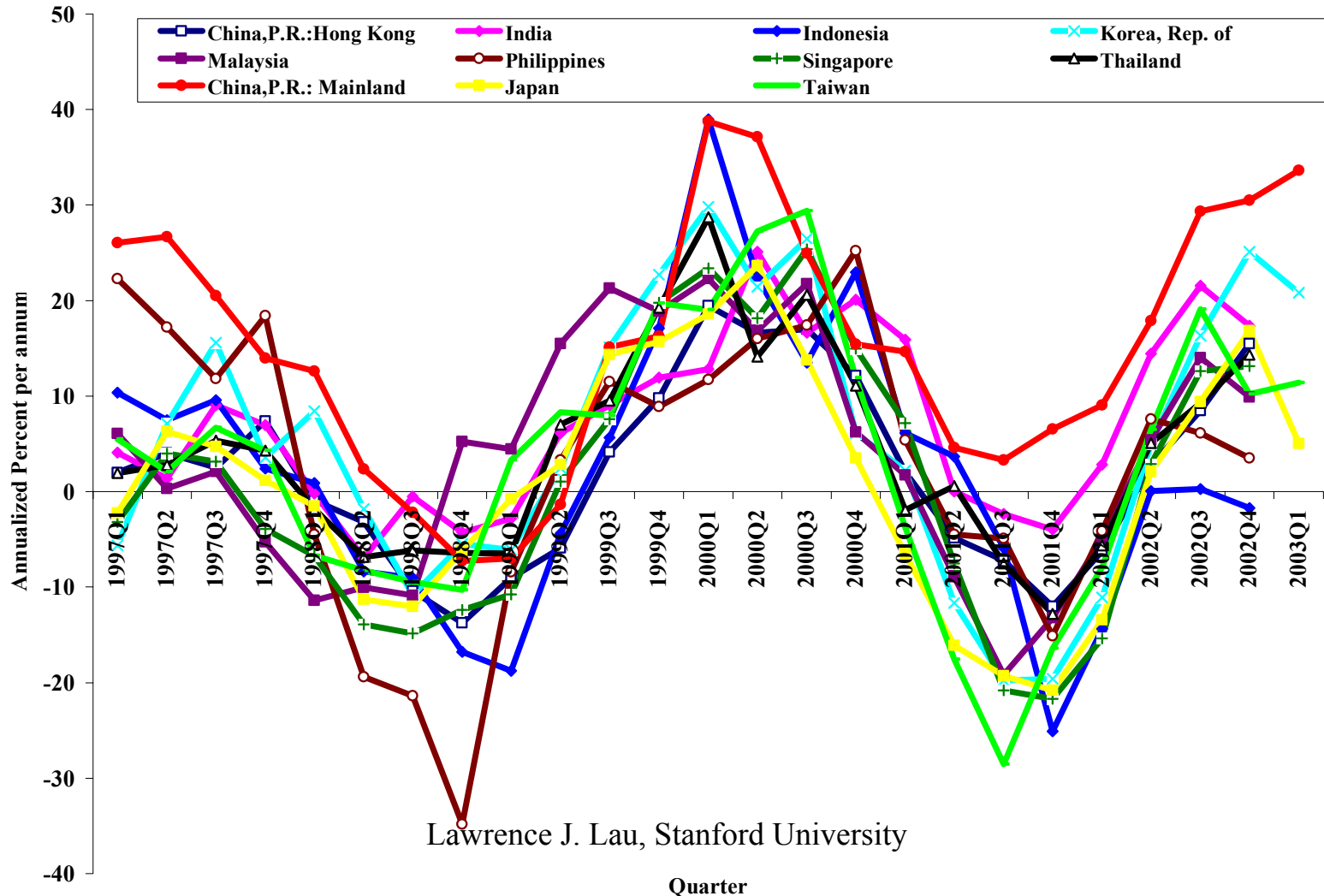
# The Relative Stability of the Rate of Growth of Real GDP

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- ◆ Despite fluctuations in exports and imports, the rate of growth of real GDP has remained remarkably stable at 7-8%. Exports are approximately 25% of GDP, but the value-added content of exports is only approximately 30%, resulting in an export-generated value-added to GDP ratio of 7.5%. Chinese exports to the U.S. is approximately 8% of Chinese GDP (according to adjusted U.S. data), with a value-added content of 20%, resulting in a value-added to GDP ratio of 1.6%.
- ◆ Gross domestic investment is mostly financed through domestic savings rather than foreign investment or loans.
- ◆ Foreign direct investment (FDI) accounts for approximately 10% of gross domestic investment in China, a relatively small proportion.
- ◆ The contribution of net exports of goods and services to the economic growth of 2002 is approximately 1% but is likely to be negative for 2003. The volatility of the Chinese annual rates of growth has also declined over time, indicating an improved capacity for macroeconomic management.

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

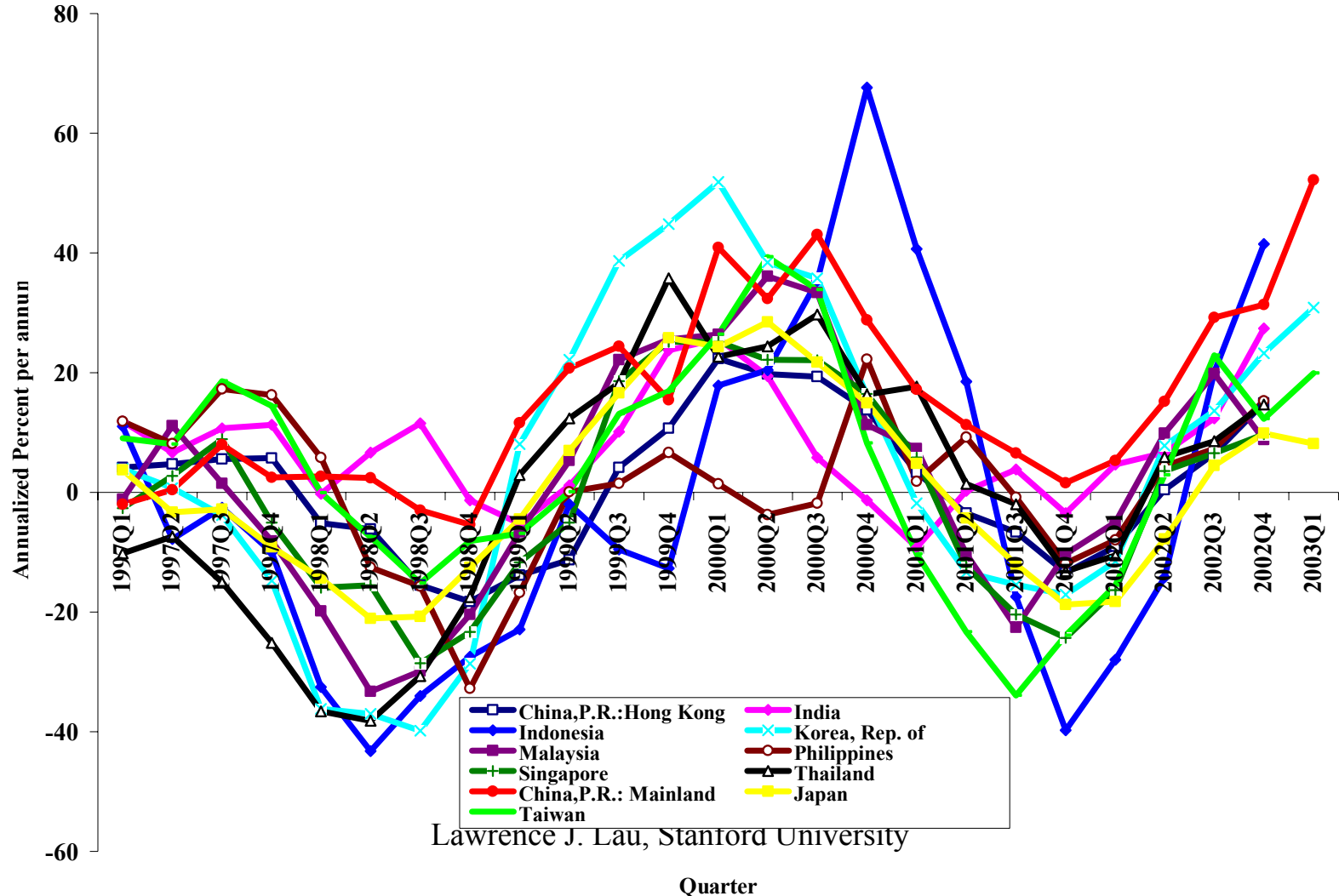
Year-over-Year Quarterly Rates of Growth of Exports in U.S.\$ (Percent)



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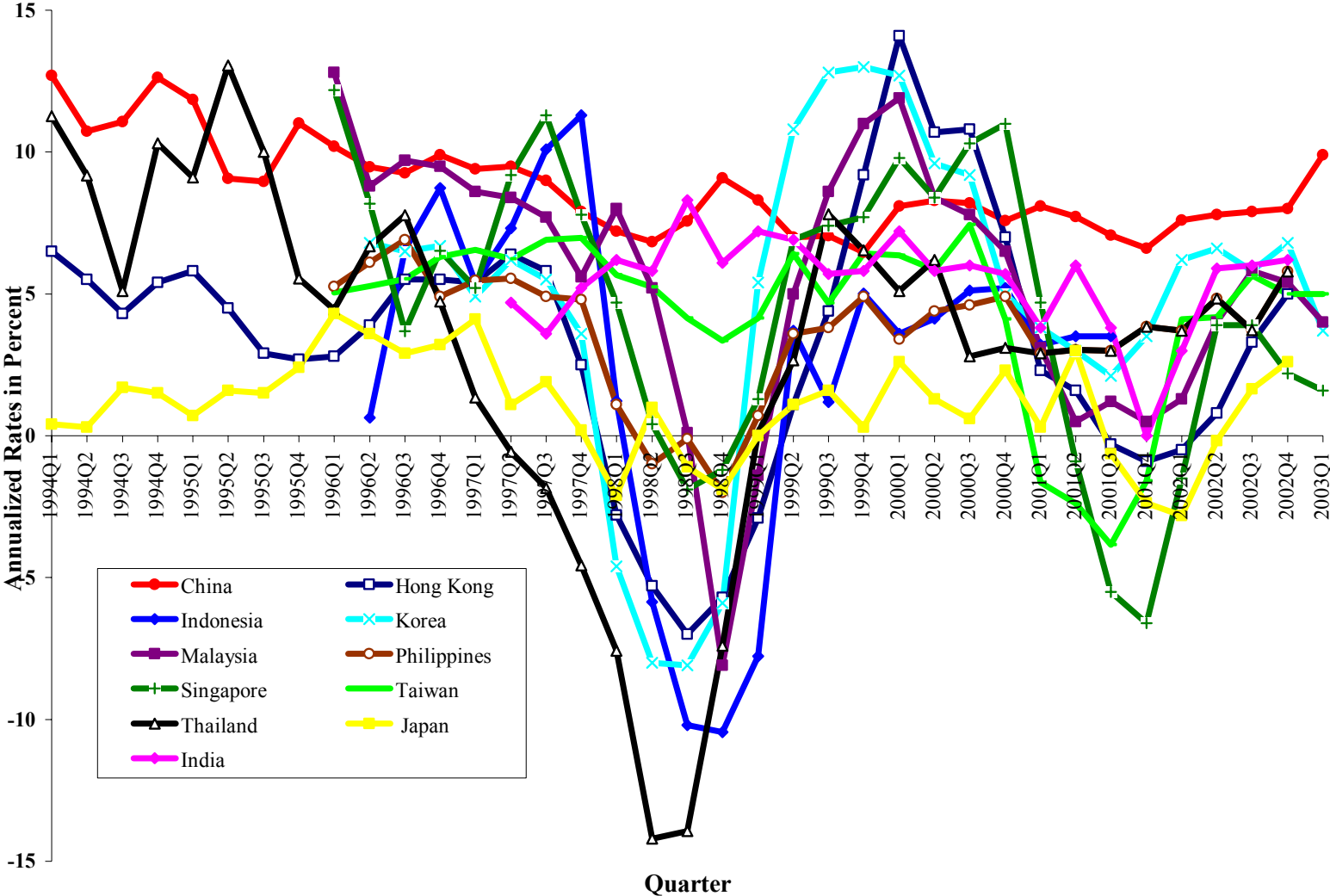
# Quarterly Rates of Growth of Imports : Selected East Asian Economies

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



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

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

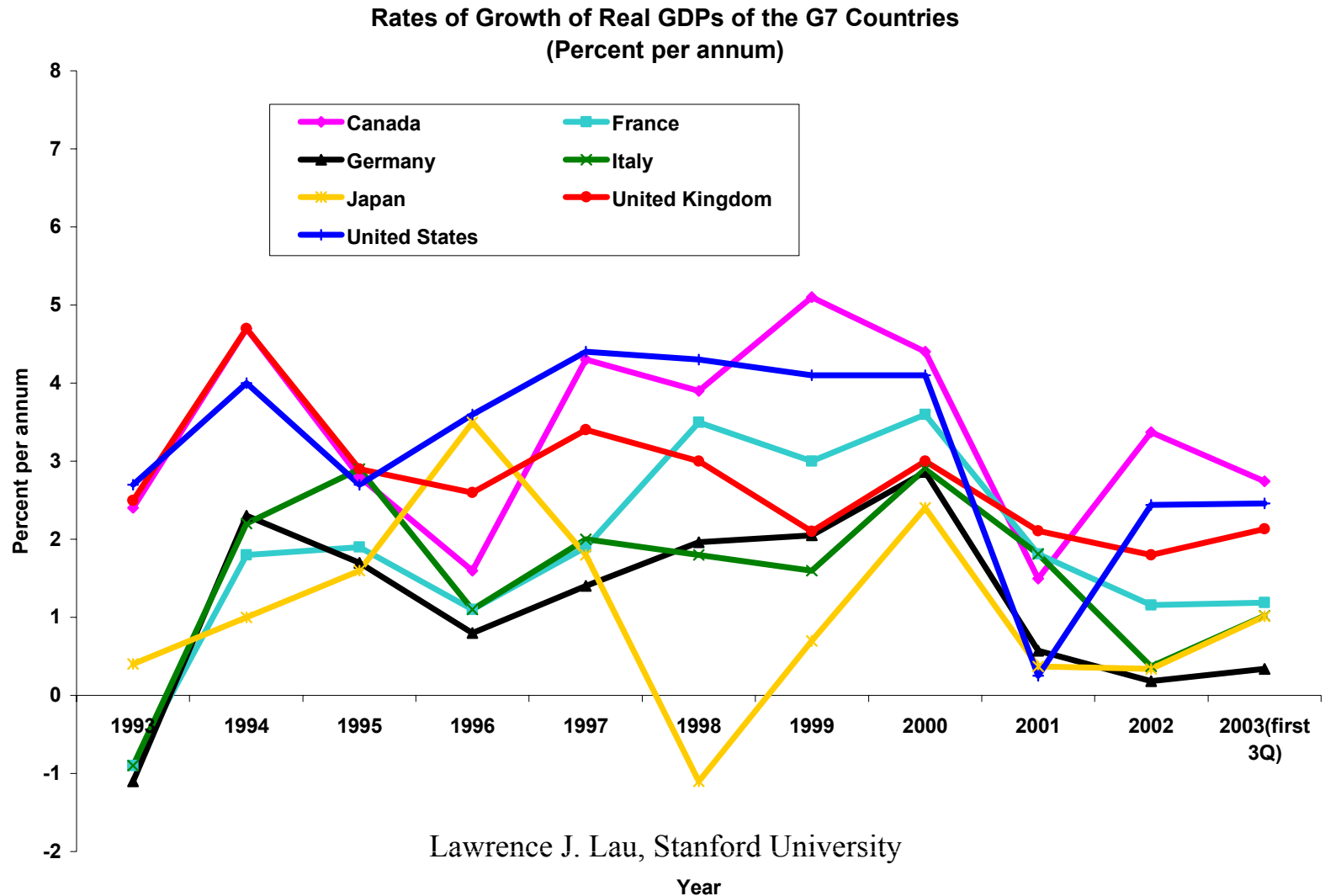


# The World Economic Situation—United States

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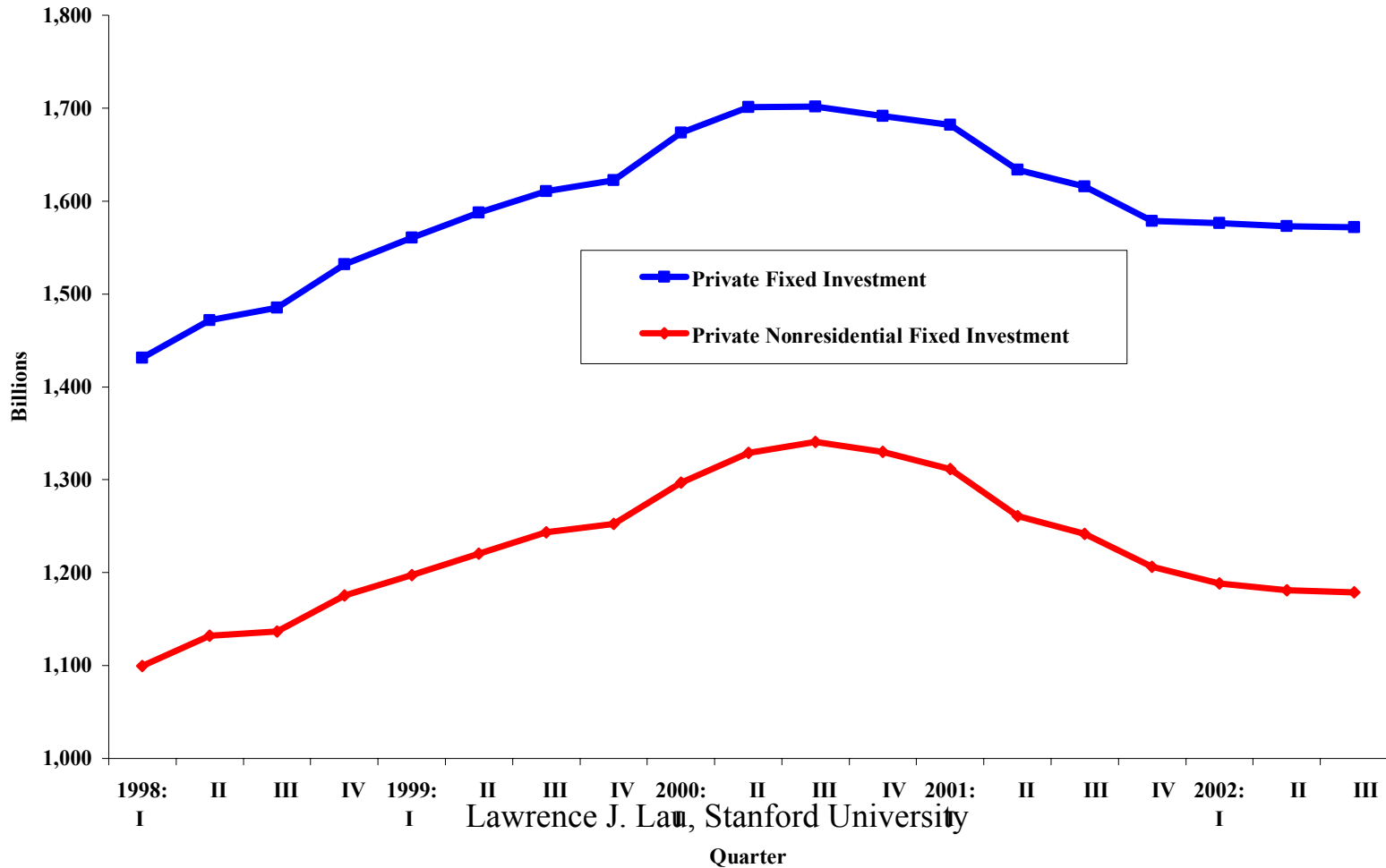
- ◆ The United States has begun to show signs of an economic recovery. The real rate of growth in 2003/Q3 was a surprisingly strong annualized rate of 7.2%, the highest rate of growth since 1984. Business capital expenditure has also begun to rise after a continuous decline of almost two years. Moreover, the unemployment rate has begun to dip to 6%. However, it remains to be seen whether the recovery will continue to be “jobless”, since it has been mostly led by the growth of personal consumption and government expenditure rather than investment.
- ◆ The uncertainty about the future, caused by the war on Iraq and the tensions elsewhere in the world, has also discouraged or delayed business investment, which is critical for the creation of new jobs. Instead, the corporate sector has focused on cost reduction and productivity improvement—thus increasing value-added (GDP) without significantly increasing employment in the aggregate.
- ◆ Without a sustained increase in business capital expenditure, the economic recovery remains vulnerable because it is not possible to rely on re-financing of homes and continuing tax cuts to support the growth of personal consumption indefinitely.
- ◆ The projected government deficits at both the federal and state levels have begun to cause concerns in the capital market.
- ◆ For 2004, a rate of growth of approximately 4% may be projected.

# Rates of Growth of Real GDP of G7 Countries



# Real Private Fixed Investment in the U.S. Billion 1996 Dollars

Real Private Fixed Investment in the U.S. (billions 1996 dollars)





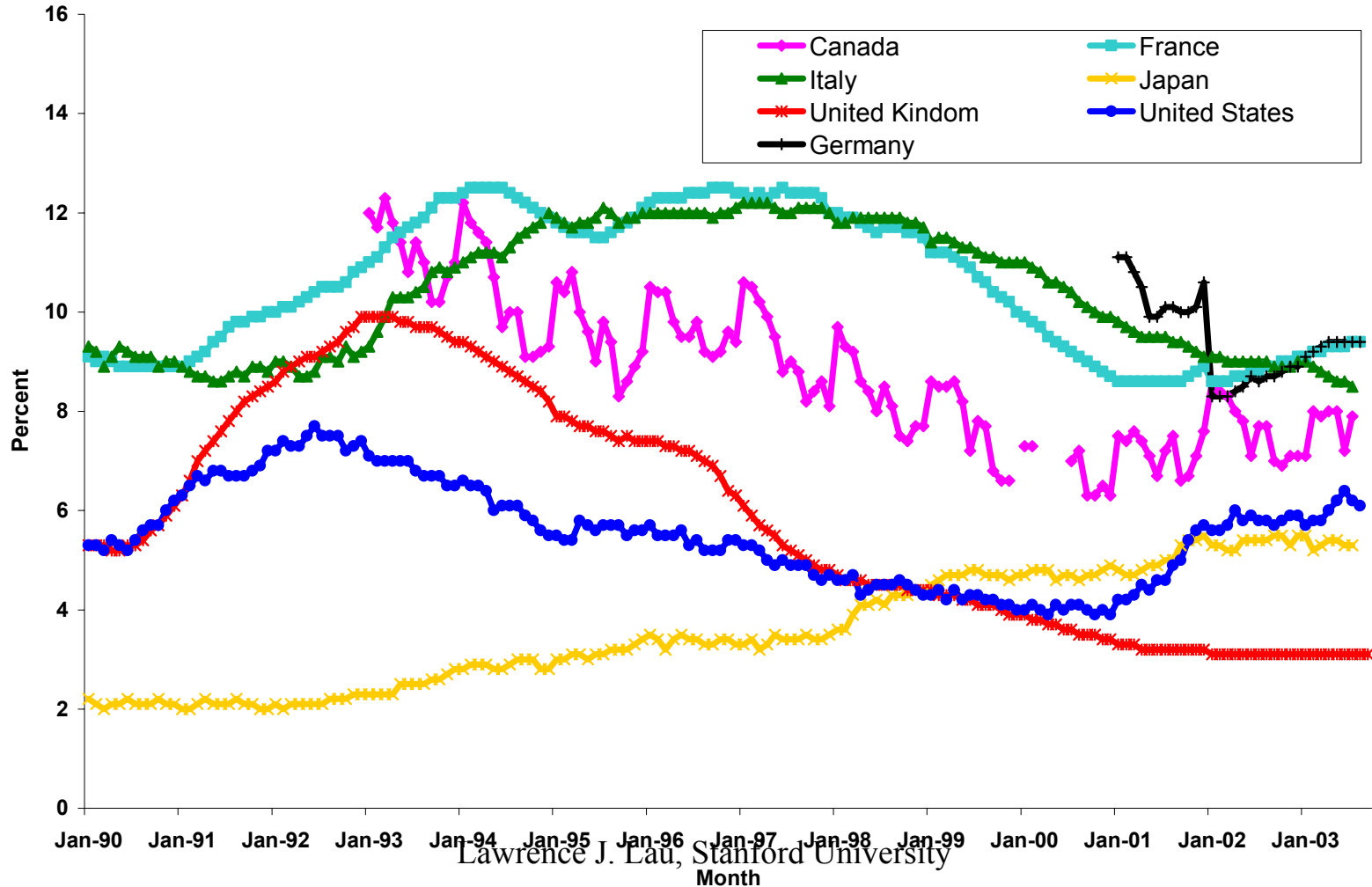
# The World Economic Situation

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- ◆ Europe has yet to emerge from its low-growth equilibrium, without the exception of the United Kingdom. The benefits of the monetary union have yet to be fully realized.
- ◆ The Japanese economy has been showing signs of stirring lately and is expected to grow 2.5% in 2004.
- ◆ China (and India) are the bright spots, continuing to grow at the high single-digit range. Despite the SARS epidemic, the rate of growth of Chinese real GDP in 2003/Q2 was still a respectable 6.7%, YoY, the lowest for the same period since 1992. The rate of growth in 2003/Q1-3 was 8.5%. For the year as a whole, the rate of growth should easily exceed 7.5%.
- ◆ The rapid economic growth in China in 2003 has been pulling the other East Asian economies, including Japan, along. Japanese exports to China has risen 40% in 2003 to-date and similar rates of growth have been registered for the exports of other East Asian economies to China. One consequence of the growth in intra-East Asian trade, with a large proportion consisting of intermediate and semi-finished goods, is the large increase in Chinese exports to the United States and the corresponding decreases in the exports of the other East Asian economies to the United States.
- ◆ The rapid economic growth in China has also raised the following questions: Are there risks of an asset-price bubble and an over-heated economy in China? Are the economic statistics reliable? Is Chinese economic growth sustainable?

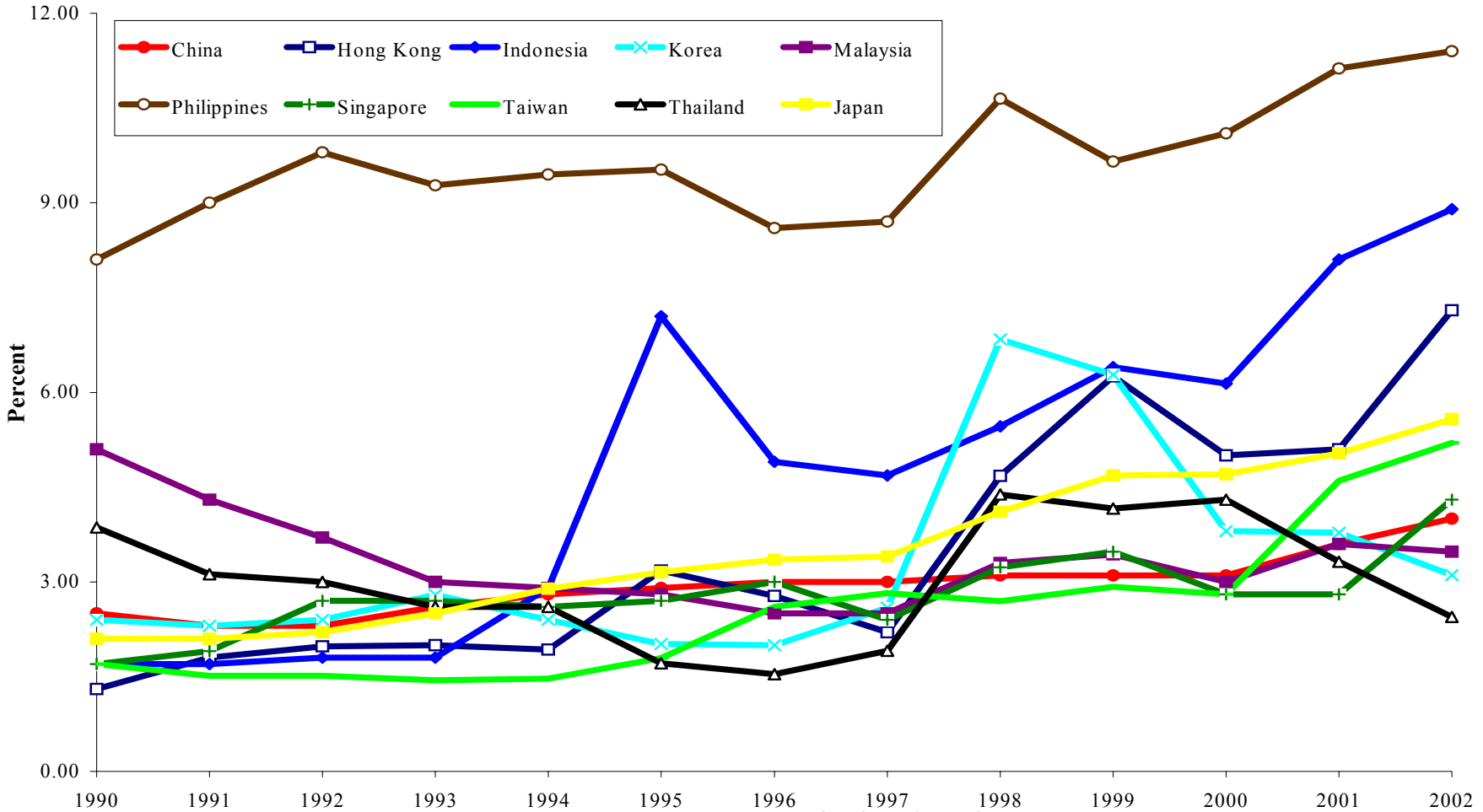
# Rates of Unemployment of G-7 Countries

Monthly Unemployment Rates of the G7 Countries



# Annual Rates of Unemployment: Selected East Asian Economies

Annual Unemployment Rates of Selected East Asian Economies



# Can China Deal with Another SARS Epidemic?

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- ◆ The SARS virus does not transmit easily.
- ◆ With isolation of patients and potential patients, protection of medical personnel and individual exercise of personal hygiene, transmission can be reduced to a minimum.
- ◆ Early and widespread warning is the key.

# Is There Deflation?

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# Is There Deflation in China?

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- ◆ In 2003Q1, the rate of growth of the consumer price index (CPI) is a positive 0.5%. In 2003/Q1-3, the rate of growth of the CPI is approximately 0.7% YoY.
- ◆ The “core” rate of inflation is non-negative
  - ◆ The decline in prices over the past few years was due in part to the fall in the prices of energy, in particular oil, and agricultural products, in particular food grains.
  - ◆ It was also due in part to the increase in productivity (reduction in cost) and in competition, the decrease in the degree of monopolistic market power (reduction in profit margin), especially in the distribution sector, and more recently by the decrease in prices induced by realized and expected import tariff reductions mandated by the accession agreement to the WTO.
  - ◆ The long-term core inflation rate--inflation rate net of changes in the prices of energy and food--may be estimated at between 0 and 1 percent--there is no deflation.
  - ◆ The key to determining whether there is deflation in the classic macroeconomic sense is whether the components of aggregate demand—real consumption and investment—are growing. They They have both been growing at respectively 10.2% and 16.1% in 2002. In 2003/Q1-3, real gross fixed investment grew 30.5% YoY; retail sales grew 8.6% (9.7% in 2003/Q3).
- ◆ Lack of upward pressure on the wage rate of unskilled labor and hence on the price level.
- ◆ The target for the growth of the money supply for 2003 is 16%. In April, 2003, M1 grew 18%. M2 grew 19.2%, 20.2% and 21% YoY in April, May and June respectively.

# Is the Money Supply Growing Too Fast?

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- ◆ The target for the growth of the money supply for 2003 is 16%. In April, 2003, M1 grew 18%. M2 grew 19.2%, 20.2% and 21% YoY in April, May and June respectively.
- ◆ Developing economies undergoing rapid structural transformation can have a rate of growth of money supply that is higher than the sum of the rate of growth of real GDP and inflation. This is because of the effects of (1) reorganization of production, e.g., de-verticalization, and (2) financial deepening, e.g., the monetization, marketization, and securitization of real assets, on the volume of market transactions. The ratio of the volume of monetary transactions to real GDP can rise rather than fall. For example, buying and selling existing real estate per se creates relatively little real GDP but large volumes of monetary transactions.

# Are There Signs of an Asset Price Bubble and Over-heating?

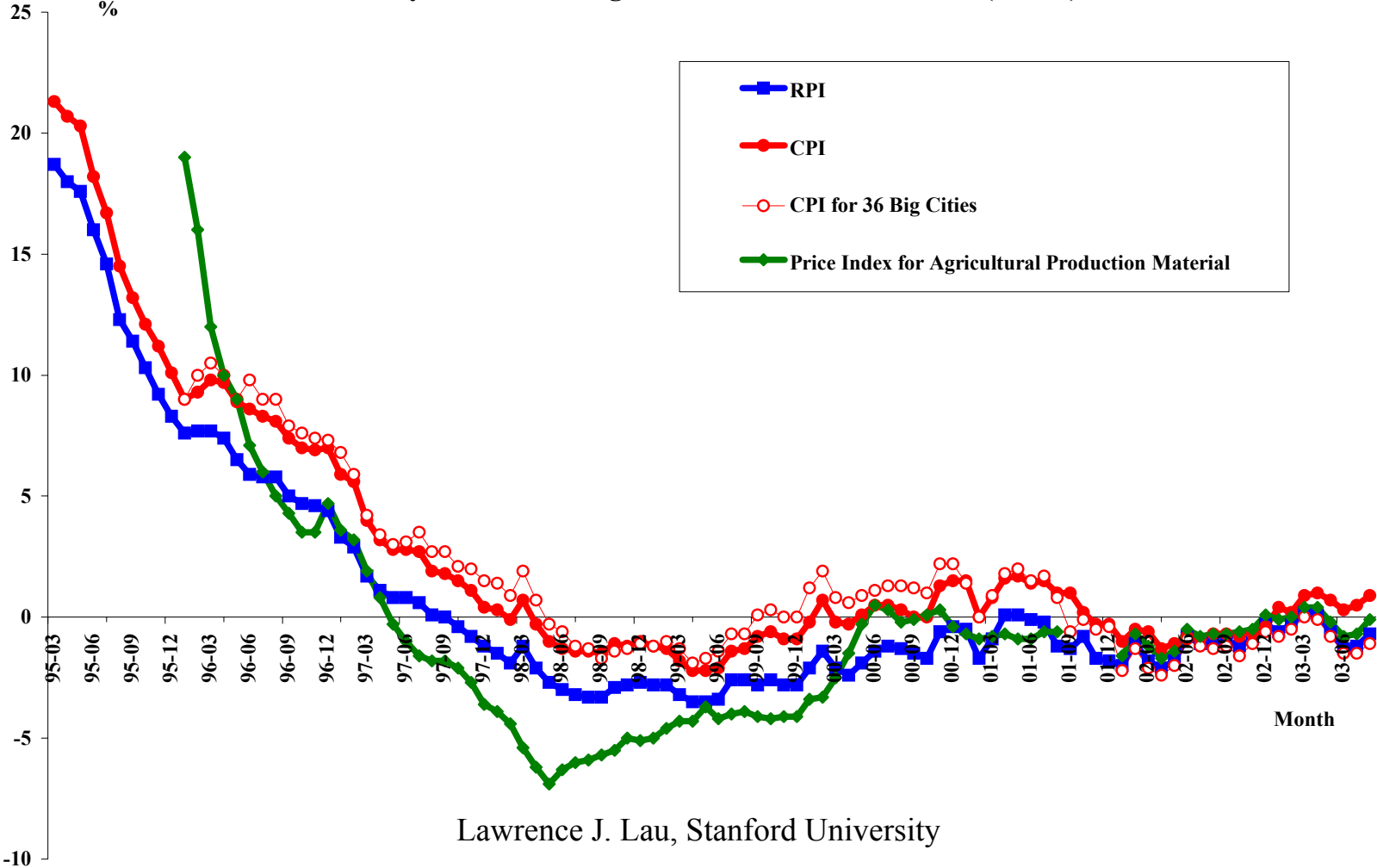
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- ◆ Real estate prices have been rising very rapidly in the urban areas, fueled by bank lending.
- ◆ The futures markets have also been rising very rapidly (e.g. copper, wheat).
- ◆ How to cool down the economy without causing economic growth to come to a halt? The overheating can be controlled by (1) reducing the proportion of real estate purchases that can be financed, i.e. increasing the percentage equity requirements and (2) putting in place and enforcing budget constraints on public investment projects (public investment projects should be counter-cyclical).
- ◆ While a revaluation of the Renminbi will have a deflationary effect, it is neither necessary nor wise to use revaluation as an instrument for restraining inflation and cooling down the economy, given the relatively small share of the international sector in the Chinese economy.
- ◆ The People's Bank of China has raised the reserve ratio from 6% to 7% to slow down the growth of money supply and credit—it indicated that it might increase the reserve ratio further if the growth of credit continues to exceed the target.
- ◆ Now is the time to consider the use of tax policies at both the corporate and the individual levels as additional instruments for stabilizing the economy.



# The Consumer and Retail Price Indices

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

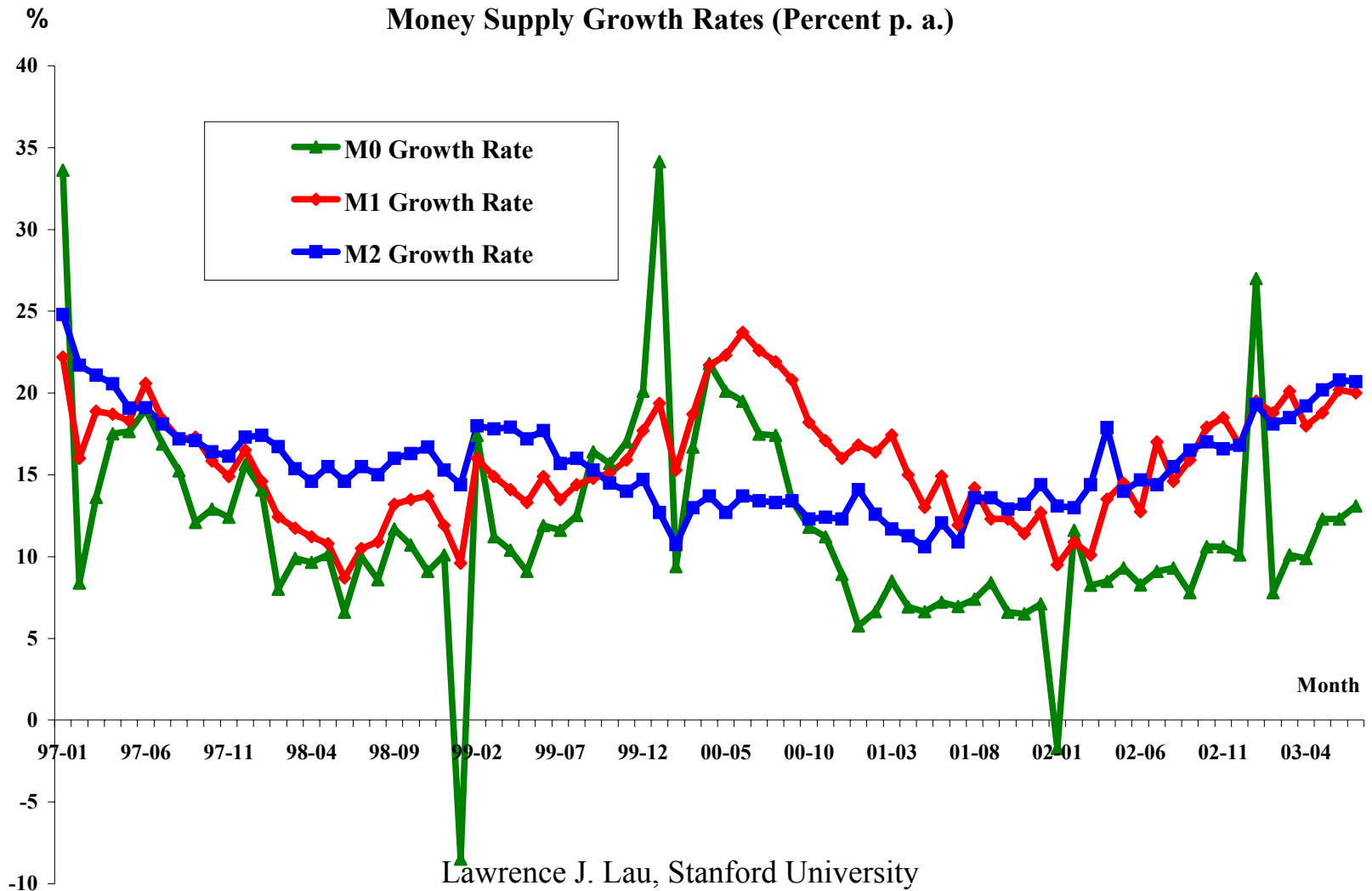


# Are There Signs of an Asset Price Bubble and Over-heating?

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# Growth Rates of the Money Supply



# Anti-Monopolistic Pricing Practices Regulations

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- ◆ Anti-competitive pricing practices regulations have been issued by the State Development and Reform Commission, to take effect on November 1, 2003. Such anti-competitive practices include:
  - ◆ Collusive price-fixing
  - ◆ Resale price maintenance
  - ◆ Price gouging
  - ◆ Predatory pricing practices, dumping
  - ◆ Price discrimination

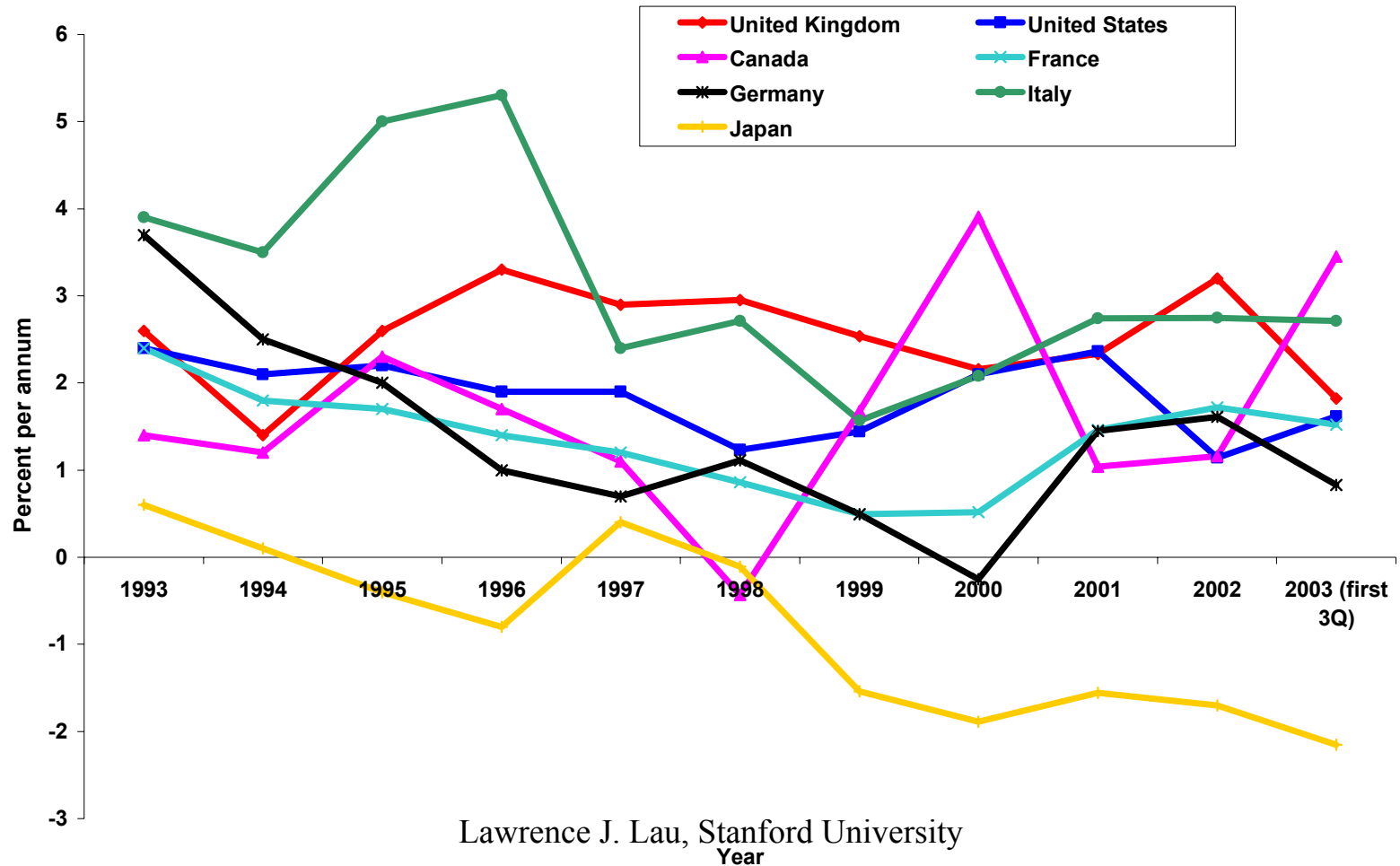
# The Identification of Deflation

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- ◆ To determine whether there is real classical deflation, one also has to look at aggregate demand and unemployment in addition to the changes in the aggregate price level. If declining prices are accompanied by robust growth in the components of aggregate demand there is no deflation in the classical sense.
- ◆ There is deflation in Japan but not in China or the United States.
- ◆ There do not appear to be real signs of persistent deflation in Europe.

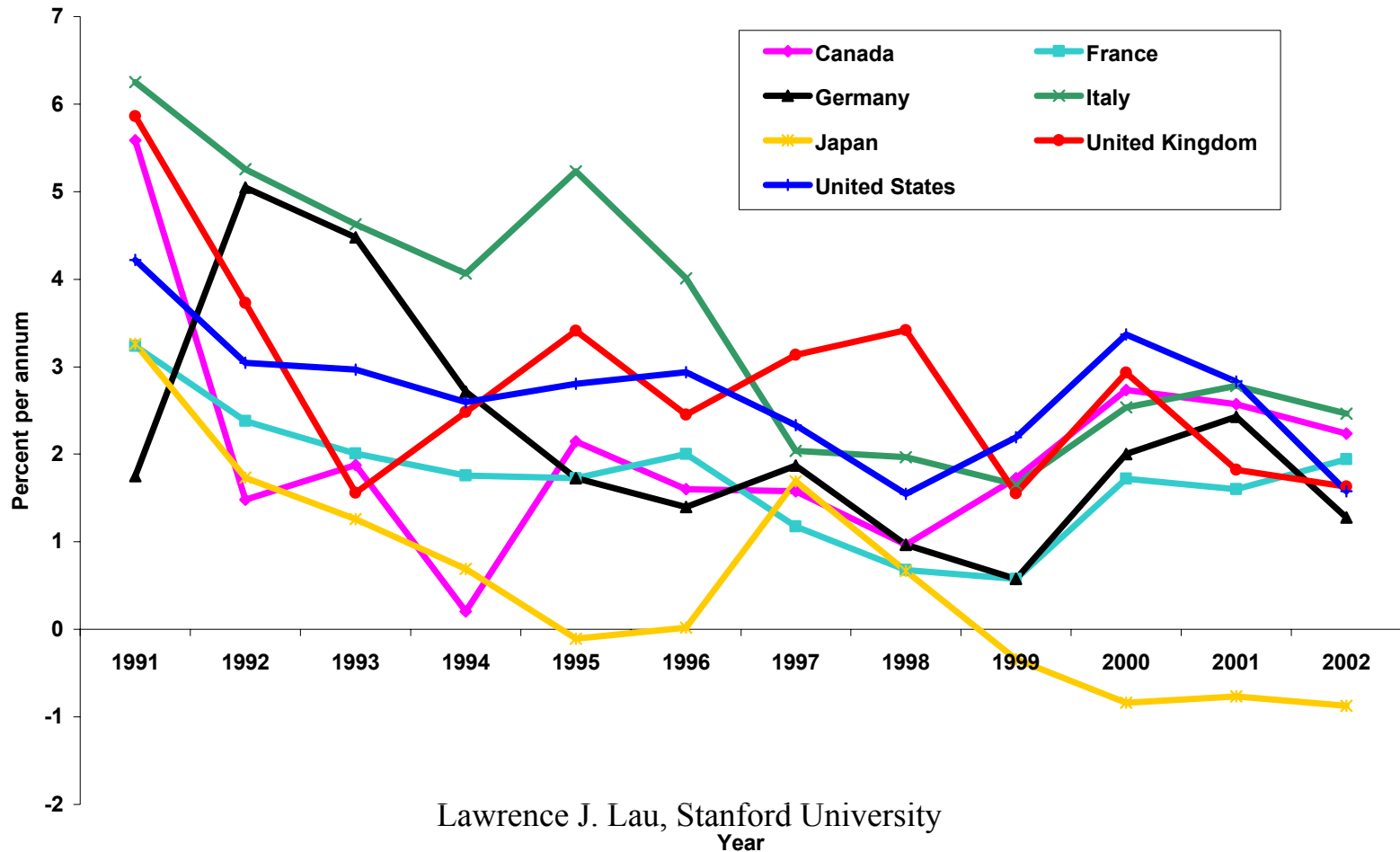
# Rates of Inflation of G-7 Countries (GDP Deflator)

Rates of Inflation of the G7 Countries (GDP Deflator)



# Rates of Inflation of G-7 Countries (CPI)

Rates of Inflation of the G7 Countries (CPI)



# Is There Deflation in the U.S.?

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- ◆ There does not appear to be deflation. The spread between the ten-year inflation-protected bonds and non-inflation protected bonds has widened recently, indicating an expectation of a rising inflation (albeit very mildly for now).
- ◆ The decline in the U.S. Dollar vis-à-vis the Euro and the Yen can fuel inflation (as well as any measures undertaken to reduce the competitiveness of Chinese exports).
- ◆ The budget deficit can also be a longer-term problem if not addressed.



# Exchange Rate Movements

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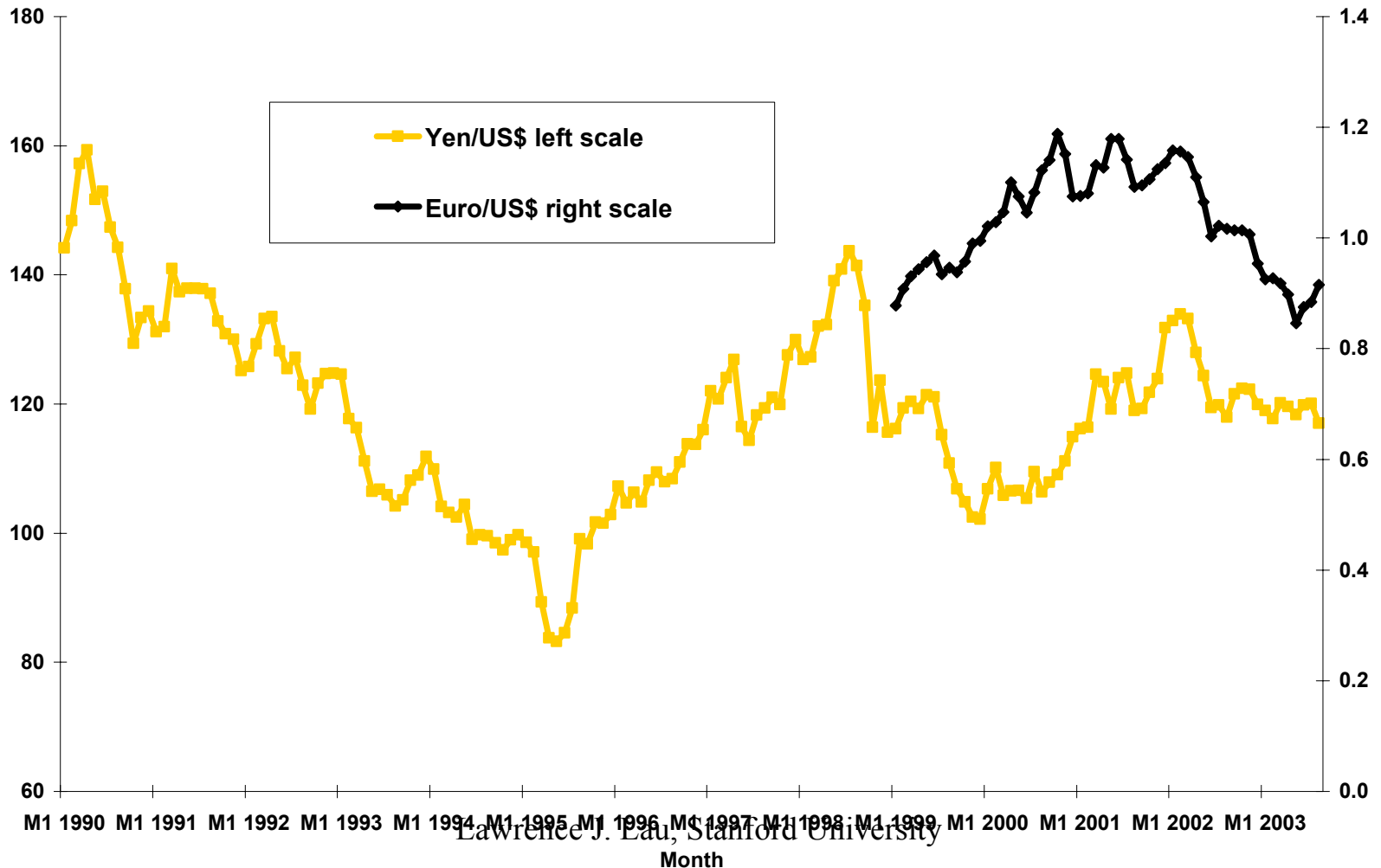
# Exchange Rate Movements Caused by Capital Flows

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- ◆ The exchange rate movements among the major currencies (the U.S. Dollar, the Euro and the Japanese Yen) are caused mostly by capital flows, particularly short-term capital flows, rather than by trade flows or by relative price movements.
- ◆ There is a large and persistent discrepancy between market exchange rates and the “Purchasing Power Parity (PPP)” exchange rates. For example, the Japanese Yen is over-valued relative to its purchasing power parity.
- ◆ The exchange rate of the Renminbi vis-à-vis the U.S. Dollar has remained stable since 1994 (in fact, there has been a slight appreciation from 8.7 Yuan/US\$ to 8.28 Yuan/US\$) and is expected to remain so. (Trading in non-deliverable one-year forwards (NDFs) suggests that the expected exchange rate is 8.137 Yuan per US\$.) Dr. Frederick Hu of Goldman Sachs predicted that the trading band might be widened to 2.5% by mid-year 2004, making possible a slight revaluation.

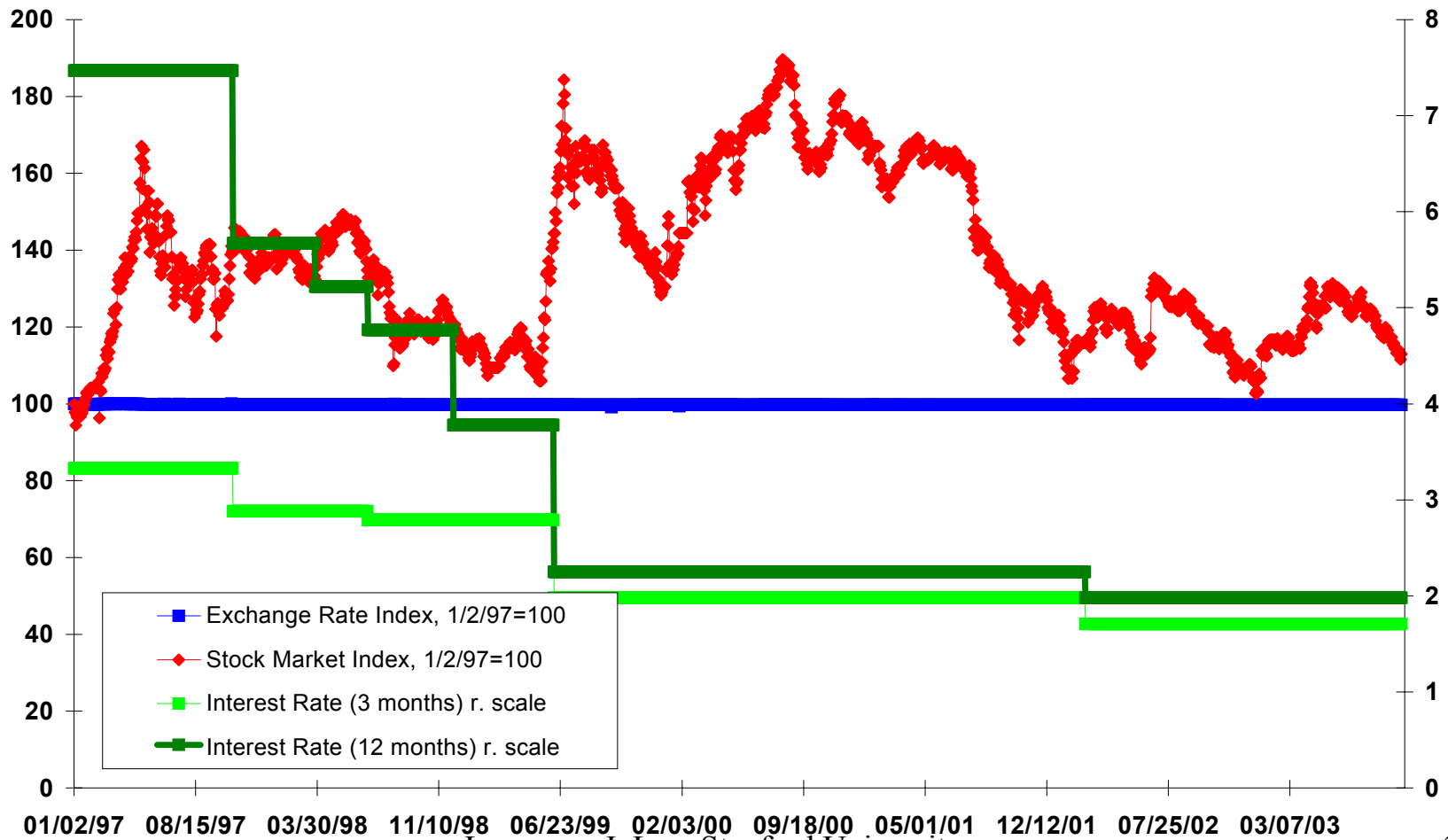
# The Exchange Rates of the Japanese Yen and the Euro

The Exchange Rates of the Japanese Yen and the Euro (in terms of US\$)



# The Exchange Rate, the Interest Rates and the Stock Market Index

Exchange Rate, Stock Market Index and Interest Rates  
China



# Foreign Exchange Reserves

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- ◆ Chinese international trade totaled US\$600 billion during 2003/Q1-3. It is expected to reach US\$800 billion by the end of 2003.
- ◆ At the end of 2003/M10, Chinese official foreign exchange reserves stood at US\$401 billion, an increase of US\$104.5 billion over year-end 2002. This increase during 2003/M1-10 occurred despite a relatively small trade surplus of approximately US\$10 billion. During the same period, actual FDI inflow amounted to some US\$40 billion, suggesting an inflow of “hot money” of approximately US\$55 billion.
- ◆ The official foreign reserves also surpass total outstanding external loans (approximately US\$165 billion as of year end 2002) by a wide margin.
- ◆ At the end of 2003/M4, foreign exchange deposits in Chinese financial institutions reached US\$148.6 billion, an increase of 5.4% YoY, out of which corporate deposits constituted US\$48.7 billion and savings deposits US\$90.2 billion.

# Exchange Rate Mechanism: The Chinese Trade Surplus vis-à-vis the United States

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- ◆ The Chinese trade surplus in goods and services vis-à-vis the United States is large and growing.
- ◆ Official U.S. data overestimate the Chinese surplus and official Chinese data underestimate the Chinese surplus because of their different treatments of re-exports through Hong Kong and other trans-shipment points. Fung and Lau have estimated the Chinese trade surplus in 2002 to be approximately US\$75 billion, midway between the Chinese estimate of US\$43 billion and the U.S. estimate of US\$103 billion.
- ◆ Despite the large and growing Chinese trade surplus vis-à-vis the U.S., the overall Chinese trade surplus with the World as a whole has become relatively small, especially after Chinese accession to the World Trade Organization (WTO). The trade surplus vis-à-vis the U.S. is projected to be in the US\$80 billion range for 2003. China will have a trade deficit with the rest of the World, projected to be on the order of US\$70 billion. The overall trade surplus may be projected to be approximately US\$10 billion for 2003, or 1.25% of total Chinese international trade.

# Exchange Rate Mechanism: The Chinese Trade Surplus vis-à-vis the United States

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- ◆ In contrast, Japan has a large trade surplus both with the U.S. and the World as a whole. For 2002, Japan has a trade surplus of US\$62 billion with the U.S. and a trade surplus of US\$80 billion with the World as a whole.
- ◆ The continuing growth of the Chinese trade surplus with the U.S. is a direct consequence of the shifting of the location of final assembly/finishing of many goods from these East Asian economies to China. The finished goods are considered to have originated from China when they are exported to their final users from China.
- ◆ As a result, simultaneous with the rise of the Chinese trade surplus with the U.S., the trade surpluses of these other East Asian economies vis-à-vis the United States decline, or stop growing, and the trade surpluses of these economies with China rise. In other words, a significant part of the trade surpluses that these economies once had with the U.S. have been shifted to and “inherited” by China.
- ◆ The Chinese trade deficit in goods and services vis-à-vis the rest of the World may be expected to continue to rise in the future because of the rapid growth of oil imports (driven by rapidly increasing domestic demand for automobiles) and outbound tourism.

# Exchange Rate Mechanism: Will Revaluation Work?

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- ◆ The low domestic value-added content, 20%, of Chinese exports to the U.S. implies a high import content, 80%. Thus, a revaluation of the Renminbi, while it raises the cost of processing and assembly in China, also lowers the cost of the imported intermediate inputs, which constitute 80% of the total cost of the product, at the same time. A 10% revaluation will therefore increase the cost of Chinese exports to U.S. importers by approximately 2%. It is therefore unlikely to have a significant effect in reducing Chinese exports to the U.S.
- ◆ The postwar Japanese experience is not encouraging-- The Japanese Yen appreciated from 360 Yen/US\$ in the early 1960s to its current 115 Yen/US\$, but the revaluation did not seem to have reduced the Japanese trade surplus vis-à-vis the United States.
- ◆ Mere revaluation of an exchange rate seldom works and will not in this case. It is far more important, and effective, to change the mercantilist mindset prevalent in China.



# Exchange Rate Mechanism: Equilibrium in the Foreign Exchange Market

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- ◆ There actually has been a cumulative real exchange rate appreciation of the Renminbi versus the U.S. Dollar of approximately 15% since January 1, 1994.
- ◆ The Chinese current accounts are at the present time approximately balanced vis-à-vis the World as a whole despite large surpluses vis-à-vis the United States, with only a small surplus of approximately US\$10 billion. This implies Chinese trade deficits with many other countries, in contrast to the Japanese situation.
- ◆ However, the Chinese overall balance of payments is in disequilibrium with a significant surplus, mostly because of the large capital inflow on account of the inbound foreign direct investment (FDI), currently running at a rate of US\$60 billion a year.
- ◆ But the capital accounts are in surplus also because of controls on capital outflows. Only inflows of capital but no outflows of capital are permitted (with some exceptions) in China. Thus, while it is true that the Renminbi exchange rate is not “market-determined” by spot supply and demand, whatever exchange rate that may emerge from simply eliminating the government intervention in the foreign exchange market is not a truly market-determined exchange rate either, because many potential buyers of foreign exchange and sellers of Renminbi have been excluded.

# Exchange Rate Mechanism: Equilibrium in the Foreign Exchange Market

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- ◆ If capital controls are lifted to-morrow, it is not clear that the Yuan will appreciate. Dr. Nicholas Lardy of the Institute for International Economics, Dr. Stephen Roach of the Morgan Stanley, and Dr. Weijian Shan, a General Partner of Newbridge Capital all seemed to believe that the value of the Yuan in terms of U.S. Dollars will go down, not up, if capital controls are lifted. (I personally do not share their view.)
- ◆ However, lifting capital controls abruptly is extremely risky--it may trigger a massive financial crisis in China. If Chinese depositors withdraw their deposits from the Chinese commercial banks and exchange them into U.S. Dollars en masse, the commercial banks may be faced with an illiquidity and insolvency crisis, because of the extraordinarily high proportion of non-performing loans in their portfolios.

# Exchange Rate Mechanism: Can Anything be Done to Reduce the Chinese Surplus?

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- ◆ The disequilibrium in the Chinese overall balance of payments can be corrected through quantity adjustments rather than price adjustments.
  - ◆ Increasing the imports of goods and services (as opposed to decreasing exports);
  - ◆ Promoting outbound direct and portfolio investment;
  - ◆ Financing inbound direct (and even portfolio) investment with Renminbi-denominated loans (with appropriate collateral or guarantees).
- ◆ Changing the mercantilist/fish-trap mindset
  - ◆ China can afford to and should run a trade deficit as long as it has a large net surplus on the capital account.
  - ◆ China can also afford to have regulated orderly outflows of not only direct but also portfolio investments.
  - ◆ It is not the money or the foreign exchange that China really needs from the foreign direct investors, it is their technology, know-how, markets, organizations, business methods and models.

# Exchange Rate Mechanism:

## Alternatives--Voluntary Export Taxes

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- ◆ Voluntary Export Taxes (VET)—this is permitted under WTO rules (either vis-à-vis the U.S. or vis-à-vis the rest of the World). An export tax is better for China than a revaluation because while it raises the terms of trade in the same way as a revaluation, it does not lead to losses for holders of the U.S. dollars, e.g., the People's Bank of China or other commercial banks and enterprises that may have to recognize the foreign exchange losses.
- ◆ It also does not generate windfall gains for the holders of the Renminbi and thus does not reward currency speculators or encourage continuing currency speculation.
- ◆ Moreover, an export tax can be easily lifted if and when the balance of payments conditions so warrant.
- ◆ An export tax has the same effects as the reduction in the rebate of the value-added tax in discouraging Chinese exports but it is much easier to implement and does not treat different industries discriminatorily. A uniform export tax is neutral in its effect across industries.
- ◆ For the U.S. and other importers of Chinese goods, a revaluation and an export tax is equivalent (an export tax of 2% is equivalent to a revaluation of 10%).
- ◆ A voluntary import subsidy also has the same effects on trade flows as a revaluation or an export tax. However, from a fiscal point of view, an export tax is better because it generates revenue whereas an import subsidy requires expenditure.
- ◆ The consideration of an export tax as an alternative to a revaluation by itself is likely to discourage currency speculators who can benefit from a revaluation but not from an increase in the export tax. The implications for Chinese exporters in terms of competitiveness are identical under either an export tax or an equivalent revaluation.

# Exchange Rate Mechanism:

## Adjusting the Exchange Rate

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- ◆ Given that exports contributes less than 10% of the Chinese GDP in terms of value added, adjusting the exchange rate constantly in response to external fluctuations of exchange rates that may not be based on fundamentals is like letting the tail wag the dog.
- ◆ The best strategy is to focus on achieving a Chinese overall balance of payments of approximately zero, and not on the method for achieving it. The choice of instrument, or combination of instruments, should be left to China. The U.S. has advised the Japanese Government to revalue the Japanese Yen quite a few times during the past several decades, which it dutifully did each time, but the revaluations never achieved the desired outcome—a reduction or elimination of the large Japan-U.S. trade surplus or even the Japan-World trade surplus--the trade surplus only became bigger. The U. S. should have simply asked the Japanese Government to reduce the overall balance of payments surplus, in whichever way that it thinks it can.

# Exchange Rate Mechanism: Long-Term Prospects

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- ◆ Chinese economic policy makers are committed to the gradual evolution to a market based exchange rate determination mechanism.
- ◆ The most important task is to lay the groundwork for the orderly and regulated liberalization of the controls on the different types of capital outflows, with the objective of achieving an equilibrium in the overall balance of payments.
- ◆ It is desirable for the continued stable development of both trade and foreign direct investment, outbound as well as inbound, to maintain a stable real exchange rate.
- ◆ It is desirable if a system of stable relative parities can be devised for the currencies of the East Asian developing economies, including China, Indonesia, Malaysia, Philippines, Thailand and Vietnam. “Beggar thy neighbor” policies can be avoided only through cooperation.
- ◆ Such a system of stable relative parities can be the beginning of an Asian currency “snake” and wider monetary cooperation among East Asian economies.