

Impact of the Global Financial Crisis on East Asia

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Introduction

- ◆ What Caused the Global Financial Crisis?
- ◆ Impact on East Asian Economies
- ◆ Simultaneous Coordinated Economic Stimuli
- ◆ Concluding Remarks

What Caused the Global Financial Crisis?

- ◆ Easy money coupled with microeconomic regulatory failure in the United States
- ◆ The real rate of interest in the U.S. has been negative for quite some time
- ◆ The regulators did not learn their lessons and repeated their mistakes in an even bigger way
- ◆ It is not global imbalances per se that caused the global financial crisis. In fact, the central banks of East Asia have acted with great self-restraint in this crisis (in their own self interests) by refraining from selling their US\$-denominated assets.

What Caused the Global Financial Crisis?

- ◆ Enron failed because of losses in its off-balance-sheet activities which it ultimately had to recognize on its balance sheet. The venerable auditing firm Arthur Andersen was dragged down along with Enron. But off-balance-sheet activities have continued to be allowed—Sarbanes-Oxley Act, despite its many costly and intrusive provisions, did not address this issue at all.
- ◆ Many of the world’s largest banks, Citicorp, HSBC, UBS, etc. suffered huge losses because of their off-balance-sheet activities in the form of “special investment vehicles (SIVs)” or “structured investment vehicles” and have had to take these off-balance-sheet activities onto their balance sheets and write off hundreds of billions (US\$) of bad assets.

What Caused the Global Financial Crisis?

- ◆ Long Term Capital Management (LTCM), a hedge fund, failed in 1998 in part because of its high leverage—at the time it had capital of US\$4 billion but assets of US\$100 billion and even greater potential liabilities.
- ◆ Bear-Stearns and Lehman Brothers had leverage of between 30 and 50 to 1 when they failed.
- ◆ High leverage not only makes the firms themselves failure-prone, as an ever so slightly adverse development can make them insolvent (negative net worth), but also greatly magnifies the spillover effects when they do fail. They bring down otherwise well managed banks and firms that do business with them.
- ◆ The high leverage also in turn increases the risk of having them as “counter-parties.”
- ◆ The U.S. regulators (Securities and Exchange Commission) decided to allow the high leverage in the securities firms some time in the early 2000s.

What Caused the Global Financial Crisis?

- ◆ The sub-prime mortgage loan crisis was possible because of the failure to control moral hazard.
- ◆ Originating lenders made residential mortgage loans to borrowers with no capacity of repayment, based only on a vague hope of appreciation of the property in the future.
- ◆ They sold these mortgage loans off through securitization with no residual liability. Thus, they had no incentive to make sure that the loans would perform—that the borrower was credit-worthy and that the collateral was worth its value. There was no attempt to check the borrower's credit worthiness or the property's real value, since the mortgage loans would be sold without recourse to the originating lender.
- ◆ If the originating lender is required to retain some residual liability, e.g., a mandatory buy-back if the loan does not perform during the first three years of the loan, or a holdback of 20 percent of the value of the mortgage loan for three years, contingent on loan performance, he or she would have been much more careful and the sub-prime mortgage loan crisis could have been averted.

What Caused the Global Financial Crisis?

- ◆ Credit default swaps (CDSs) are basically insurance contracts. In principle, they insure the bonds, the outstanding obligations, of a firm.
- ◆ However, the insurance companies that sold the CDSs lost sight of the fact that they were selling insurance.
- ◆ A fundamental principle of insurance is that the insured must have an insurable interest. Thus, for example, it is reasonable for someone who owns Lehman Brother bonds, or who is a contractor or supplier owed money by Lehman Brothers, to purchase a CDS from AIG for the amount outstanding. But it is not reasonable for anyone else with no direct exposure to Lehman Brothers, especially if this person has the power to influence the outcome, to purchase CDSs on Lehman Brothers.

What Caused the Global Financial Crisis?

- ◆ It is like a person buying insurance on someone else's house and setting fire to it and collecting the insurance. Or a pirate buying insurance on someone else's ship from Lloyds and then sinking it to collect the insurance. This is the well known problem of moral hazard in insurance that every insurance company should know.
- ◆ But AIG sold many, many times more CDSs on Lehman Brothers than Lehman Brothers had bonds outstanding. Many were simply gambling on a Lehman Brothers failure. It would have been fine if these purchasers had no influence on whether Lehman would go under or not. However, many of the purchasers had the power to force Lehman under, for example, by massively shorting its stocks or bonds, so that it would be effectively prevented from accessing the capital and credit markets.
- ◆ In retrospect, even considered as insurance, the CDSs on Lehman Brothers were not priced correctly. The price of the CDSs did not reflect adequately the probability of its failure, given its high degree of leverage.

What Caused the Global Financial Crisis?

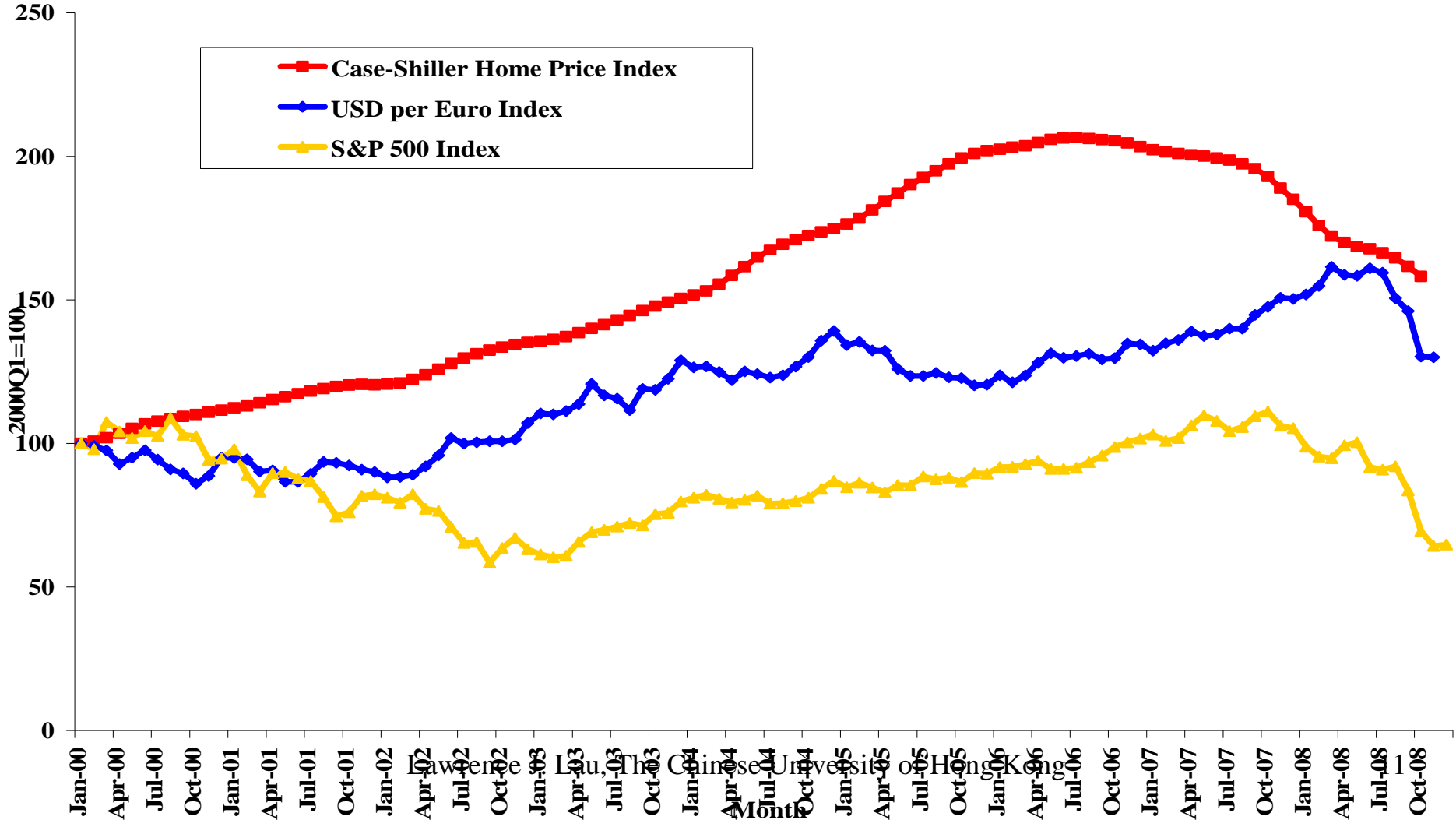
- ◆ It does not help that the rating agencies did not fulfill their function. One of the problems is that they are paid by the firm they are rating, and if the firm does not like the rating it receives it does not have to pay. The ratings are therefore worse than worthless. They mislead potential investors and give them a false sense of security.
- ◆ I have always argued that rating agencies are not very useful ex ante because if they are really good at discriminating between the good and the bad securities they should be in the asset management business in which they can make a great deal more money and not in the ratings business.
- ◆ In as early as 2007 I noticed that the interest rate spread between junk bonds (and sub-prime mortgage backed securities) and U.S. Treasury was less than 100 basis points. I thought that was not possible because no matter how clever one is in financial engineering, someone has to wind up with the bad risks. The rating agencies might have contributed to this super-thin risk premium on junk bonds.

What Caused the Global Financial Crisis?

- ◆ Thus, ultimately, it is not global imbalances per se that caused the global financial crisis, but multiple regulatory failure in the United States.

Case-Shiller Home Price Index, US\$-Euro Exchange Rate, and the S&P 500

Comparison of Case-Shiller Home Price Index, S&P 500 Index and the Exchange Rate of U.S. Dollar
(2000Q1=100)

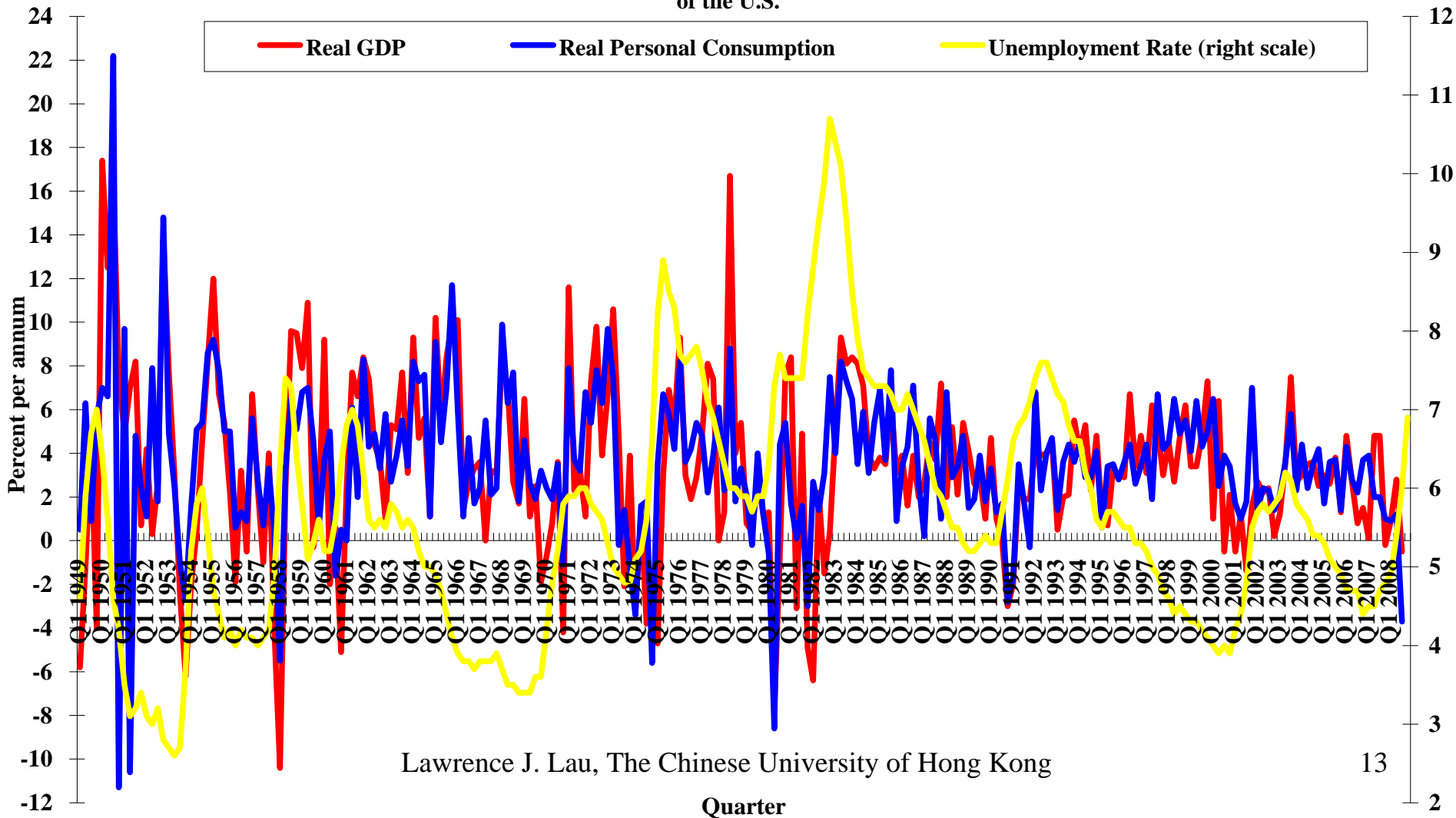


The Impact of the Economic Recession in the U.S.

- ◆ The overall economic slowdown and recession in the U.S. will last another year or two, until more positive expectations are restored for both firms and households and the mortgage loan default/negative equity problems are straightened out.
- ◆ U.S. home prices still have some way to fall, and the rate of growth of real GDP turned negative in 2008Q3 and is likely to continue through at least the first couple of quarters of 2009, and the unemployment rate has reached a new high of 7.1%, the highest level since 1994.
- ◆ The U.S. demand for imports will likely decline with the reduced household consumption. Such decline will have a negative effect on the rate of growth of Chinese exports to the U.S. and hence on Chinese GDP, but the effect is expected to be marginal.
- ◆ Despite the current near-term strength of the U.S. Dollar, caused in part by the repatriation of U.S. investment overseas to the U.S., in the longer term horizon of 3-5 years, it is likely to weaken relative to other reserve currencies as the net inflow of capital, especially that of direct and portfolio investment, is reduced.

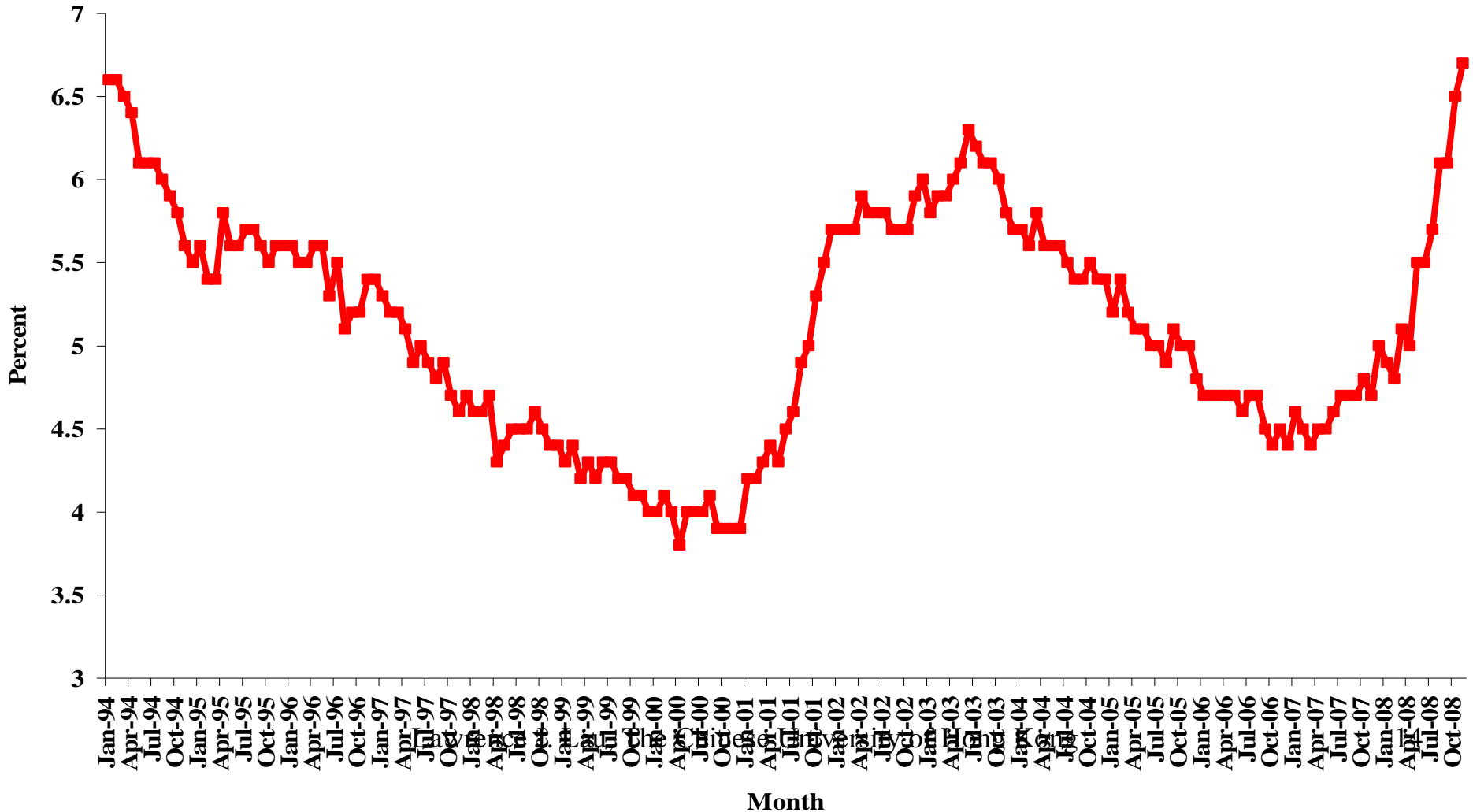
U.S. Unemployment Rate and Rates of Growth of Real GDP and Consumption

Seasonally Adjusted Quarterly Rates of Unemployment Rates and Growth of Real GDP and Personal Consumption of the U.S.



U.S. Unemployment Rate Seasonally Adjusted

Monthly Rates of U.S. Unemployment, seasonally adjusted



Impact on East Asia

- ◆ Since mid-September, 2008, when Lehman Brothers failed, there has been a precipitous decline in export orders received by East Asian firms across the board—by as much as 50 percent.
- ◆ There has also been a sharp decline in the East Asian stock markets.
- ◆ Between mid-September and mid-December, the East Asian currencies, with the exception of the Japanese Yen, have all declined in value relative to the US\$. But they have begun to stabilize and appreciate relative to the US\$ since mid-December.
- ◆ All of these are temporary one-time occurrences and will pass.

The Partial De-Coupling Hypothesis

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.

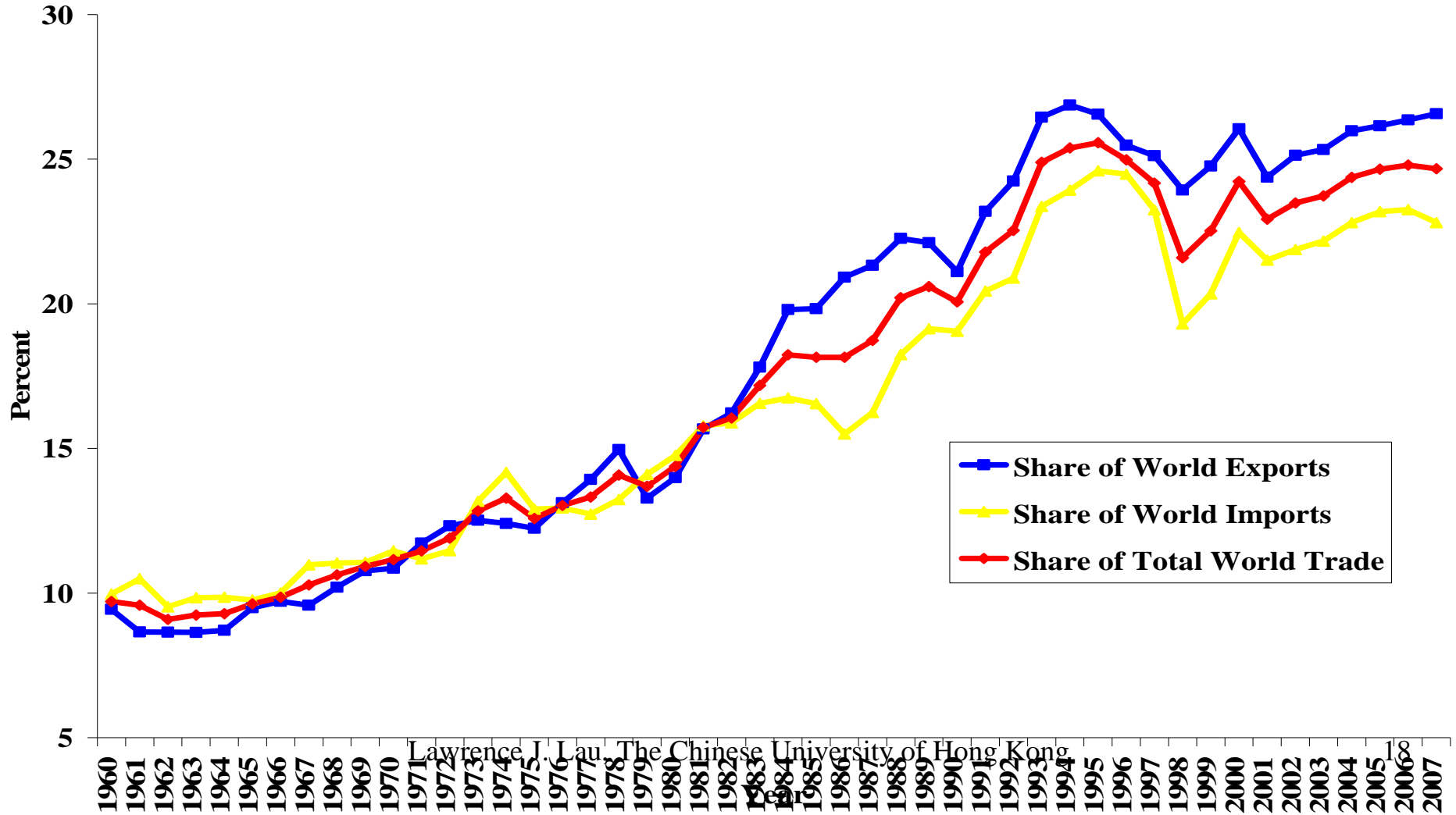
The Partial De-Coupling Hypothesis

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



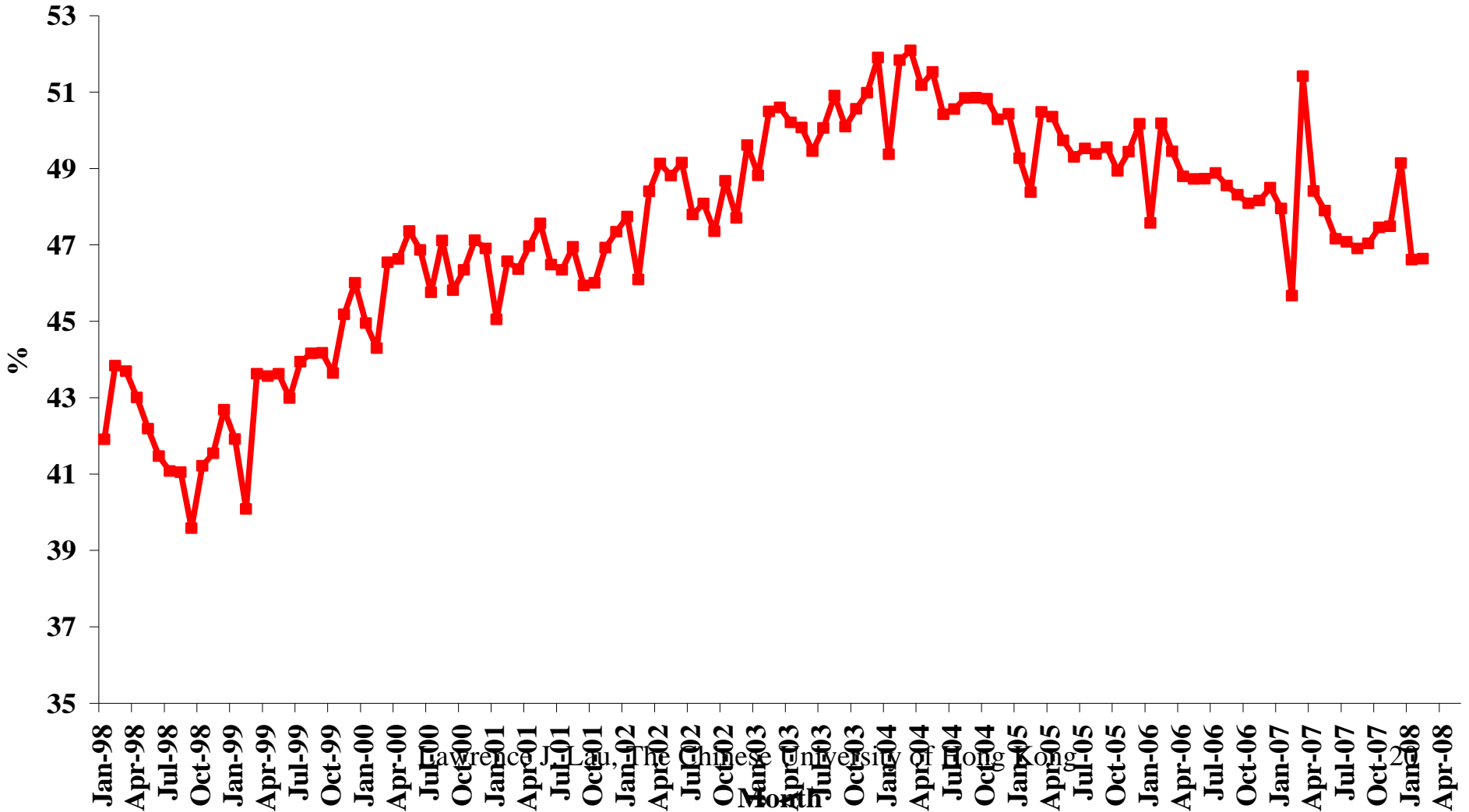
The Partial De-Coupling Hypothesis

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.

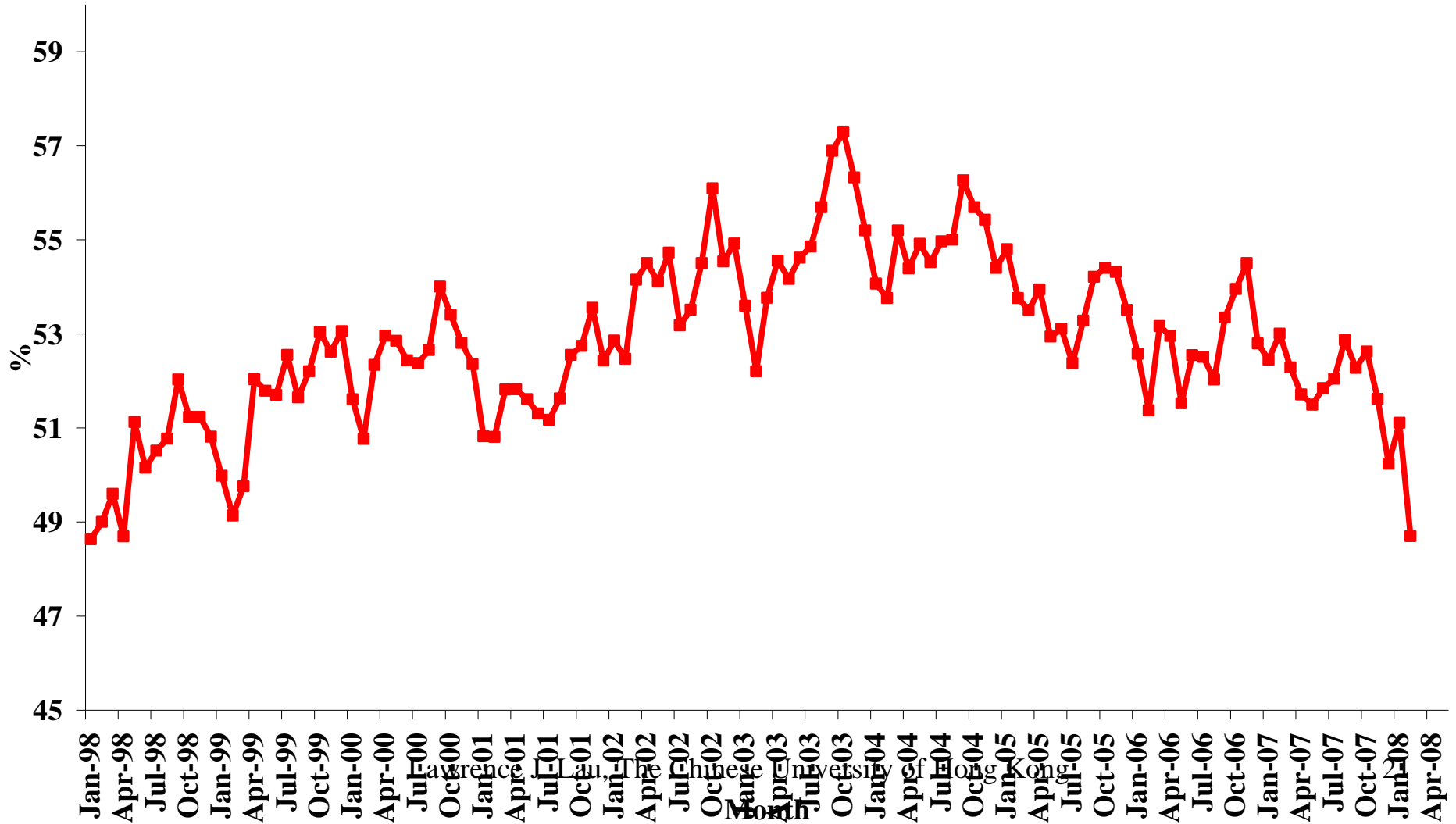
The Share of East Asian Exports Destined for East Asia

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

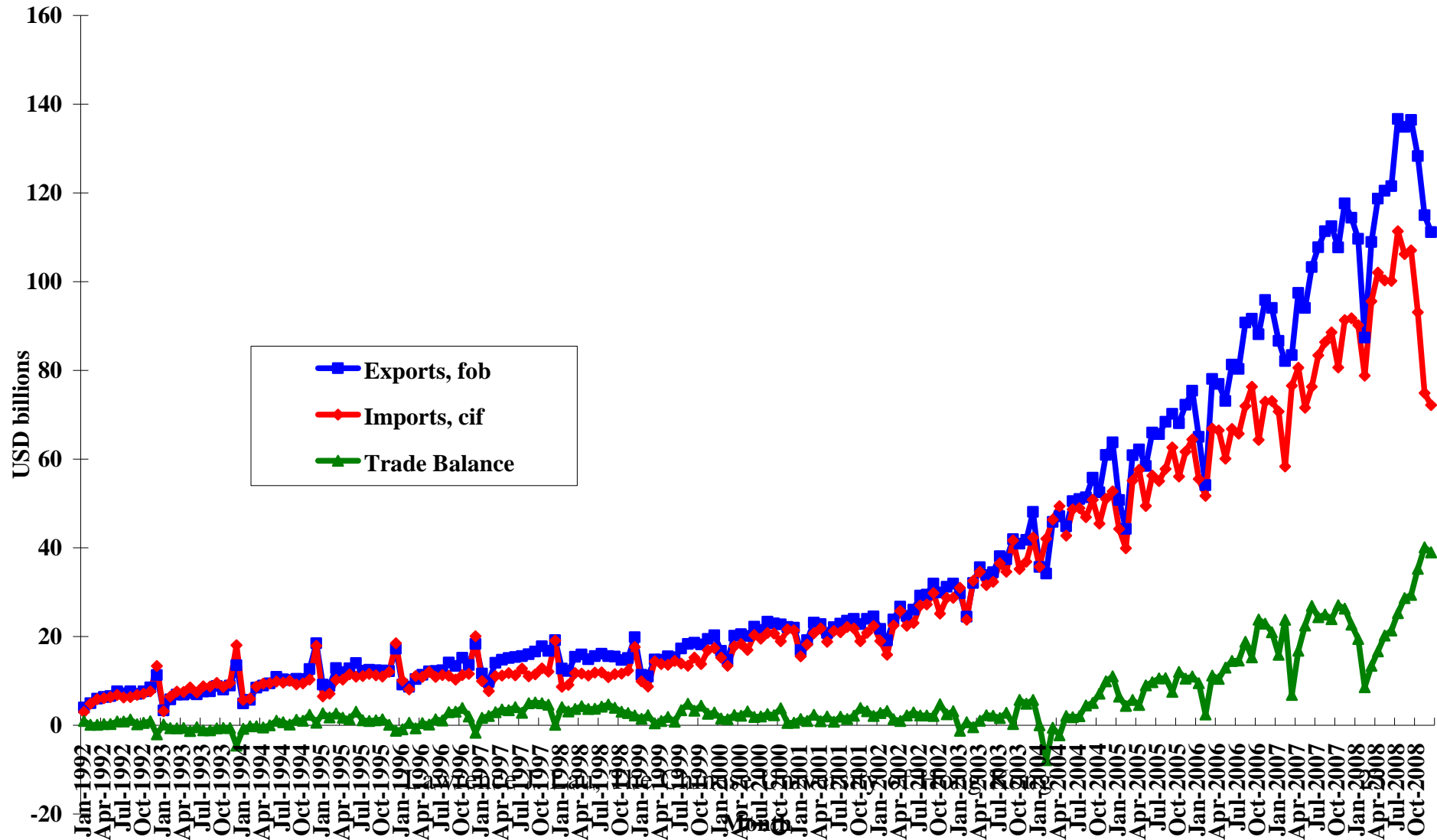


Can Mainland China Grow at 8% ?

- ◆ Is 8% economic growth achievable?
- ◆ Yes, despite the difficulties in the export sector, there should be sufficient aggregate demand to sustain a rate of growth of 7-8%.

Chinese Exports, Imports and Trade Balance, US\$, Monthly Data

The Levels of Exports, Imports and Trade Balance of Goods at the End of the Month, in U.S. Dollars



The Impact of the Economic Recession in the U.S. on Chinese Exports

- ◆ Chinese exports to the U.S. constitute between 8% (Chinese estimate) and 12% (U.S. estimate) of Chinese GDP; however, the direct domestic value added content of Chinese exports to the U.S. is quite low, averaging 17.7%. Thus, the Chinese GDP originating from Chinese exports to the U.S. is only approximately 2.2% ($12\% \times 18\% = 2.16\%$).
- ◆ 2.2% of GDP is reasonably significant and will result in hardships in some localities if completely lost. However, even if Chinese exports to the U.S. falls by 10% in real terms, it will cause Chinese GDP to fall by only 0.22%, which is clearly tolerable, especially if the remaining 97.8% of the Chinese economy continues to grow.
- ◆ If the indirect domestic value added of Chinese exports to the U.S. is also taken into account, a 10% real decline in Chinese exports to the U.S. may result in a decline of Chinese GDP of no more than 0.5%⁰⁴

The Impact of the Economic Recession in the World on Chinese Exports

- ◆ Chinese exports to the World constitute approximately 35% of Chinese GDP; however, the direct domestic value added content of Chinese exports to the World. is also quite low, averaging 20.0%. Thus, the Chinese GDP originating from Chinese exports to the U.S. is only approximately 7% ($35\% \times 20\% = 7.0\%$).
- ◆ 7.0% of GDP is quite significant (almost one whole year's real economic growth) and will result in hardships if completely lost. However, even if Chinese exports to the World. falls by 10% (which is considered unlikely), it will cause Chinese GDP to fall by only 0.7%, which is tolerable, especially if the remaining 93% of the Chinese economy continues to grow. If the indirect domestic value added of Chinese exports to the World is also taken into account, a 10% decline in Chinese exports may result in a decline of Chinese GDP of no more than 1.5%.

The Impact of the Economic Recession in the World on Chinese Exports

- ◆ The decline in export orders received by Chinese exporters of almost 50% year-over-year since September took almost everyone by surprise. It is true that export orders have been expected to decline and have been declining, but not to this order of magnitude.
- ◆ Why was there such a large, precipitous decline? This was principally caused by the importers in the U.S. and elsewhere having their access to bank credit frozen. Importers cannot get their bankers to issue letters of credit to the Chinese exporters, or if they can, these letters of credit may not be accepted by the Chinese commercial banks. For those importers with impeccable reputation whose orders would be accepted by Chinese exporters even without a letter of credit, such as Hewlett-Packard, Nike and Wal-Mart, the problem is with the ability to finance their inventory with bank loans from their U.S. banks. As the availability of such credit dwindles, they also reduce their orders and wait until the inventory is exhausted. The net result is a huge reduction in orders for Chinese (and East Asian) exports.

The Impact of the Economic Recession in the World on Chinese Exports

- ◆ It is, however, important to realize that this is not the result of a reduction in the expected demand for Chinese exports of this magnitude, but the result of the credit freeze in the U.S. It is also not the result of Chinese exports being too expensive, and thus a devaluation of the Renminbi and/or an increase in the proportion of Value-Added-Tax (VAT) rebate on exports are also not likely to be effective.
- ◆ According to the historical experience of the U.S. economy, real personal consumption is a much smoother time series than real GDP or real personal income. Since 1949, the worst quarterly decline (at annualized rates) of personal consumption was 12% and since 1952 was less than 10%.
- ◆ Imports of consumption goods would therefore be expected to decline with personal consumption, but probably no more than double the rates of decline of real personal consumption. For Chinese exports, which consists of mostly daily consumption goods targeted at the low-price market, the effect should be much smaller, as consumers switch from high-price to low-price items in an economic downturn.

The Impact of the Economic Recession in the World on East Asian Exports

- ◆ So the expectation is that the export orders would bounce back in a quarter or two, that this decline in export orders is only temporary and basically represents a delay or postponement of the demand by a quarter or two for East Asian exports, as opposed to a permanent reduction. Thus, the decline in East Asian exports, when averaged over a whole year, should not exceed 20%. In terms of Chinese GDP, the impact should be a reduction on the order of 1.5%, a significant but still tolerable amount.

The Impact of the Economic Recession in the World on East Asian Exports

- ◆ The East Asian Governments can however shorten the delay or postponement of demand by encouraging the commercial banks to finance the exports of long-term seasoned exporters to their long-term customers so that they can ship their goods on a consignment basis and allow payment terms of 6 months after receiving the goods. This will allow East Asian export enterprises to continue their production with minimal interruption and layoffs of workers. To make this happen, the Governments may need to guarantee these loans in whole or in part, possibly through their Export-Import Banks—otherwise the commercial banks may not be willing to extend such credit to the exporters.

The East Asian Economy in a Post-Financial Crisis World

- ◆ The Continuing Shift in the Economic and Financial Center of Gravity
 - ◆ U.S. and Europe gradually lose their pre-dominance.
 - ◆ There is a relative redistribution of wealth in favor of East Asia.
- ◆ New Global Financial Architecture and Regulatory Regime
 - ◆ The global financial system will have to be restructured to limit the spillover effects.
 - ◆ The global financial markets will be reorganized and reoriented, with new, hopefully safer products.
 - ◆ The use of leverage, which used to be a substitute for savings, will be greatly reduced.
 - ◆ Short-term capital flows, which is a principal source of contagion, may be more tightly regulated and monitored; this is especially the case for commercial banks which face not only maturity mismatch but also currency mismatch.

The East Asian Economy in a Post-Financial Crisis World

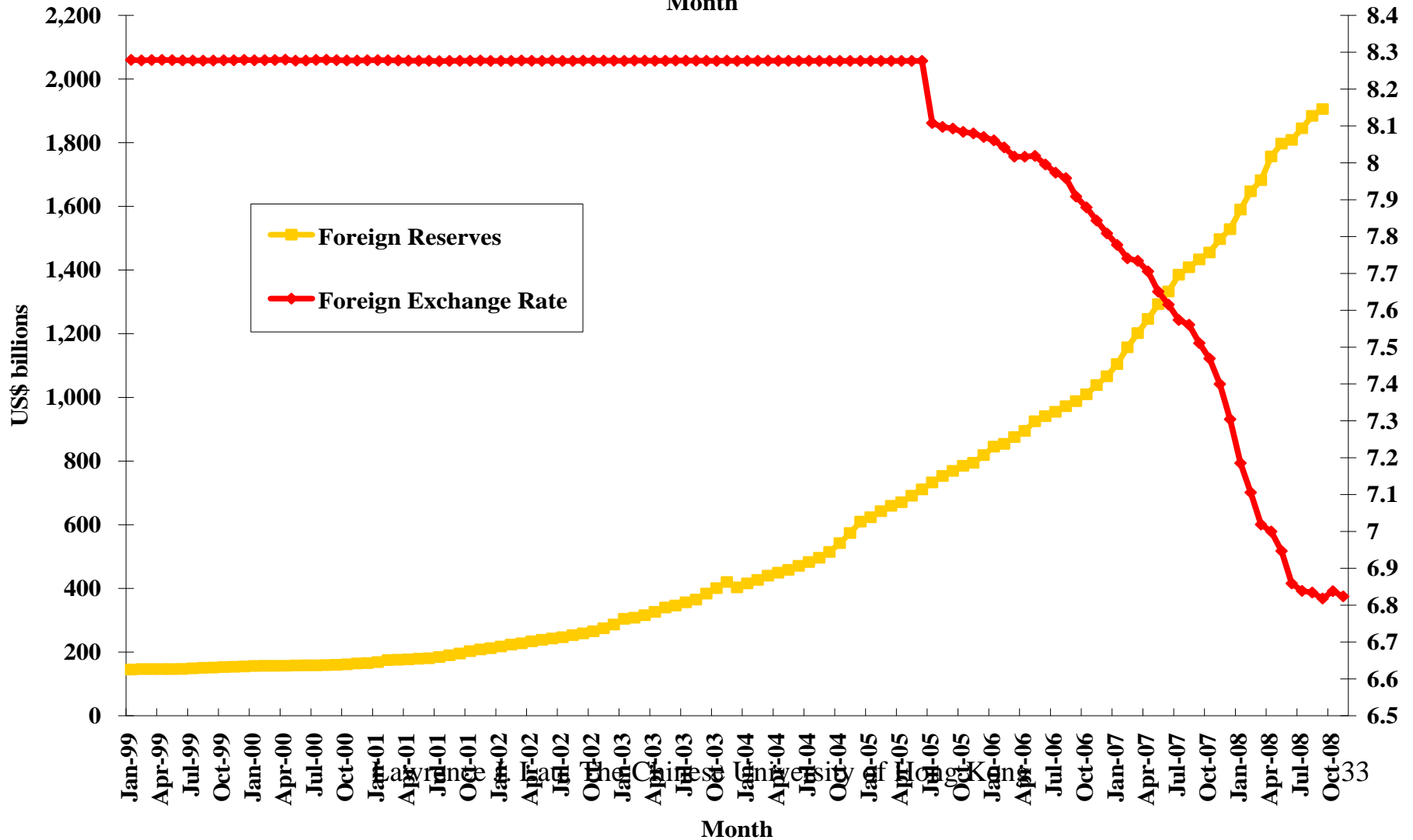
- ◆ Cash and Savings are King
 - ◆ Savers will own the world—East Asian economies have high saving rates.
- ◆ While East Asia accounts for 25% of World GDP, China is only 10% of the World economy, compared to the Euro Zone and the U.S. of approximately 25% each. East Asia and China are probably able to keep their economies growing, albeit at reduced rates; but they will be unable to turn around the economic situations facing the U.S. and Western Europe.

The Renminbi-U.S.\$ Exchange Rate

- ◆ The near-term expectation is that it will be relatively stable—neither appreciating nor devaluing.
- ◆ Everyone in the world has an interest in trying to restore stability in the markets—the fewer changes, the better.
- ◆ A revaluation of the Renminbi would require the selling of US\$ assets (including bonds and notes) and the buying of Renminbi by the People's Bank of China—it will help neither the U.S. nor China.
- ◆ However, as the Renminbi becomes much more widely acceptable, especially in East Asian economies, it may gradually supplant the U.S. Dollar as the currency of denomination in international trade.

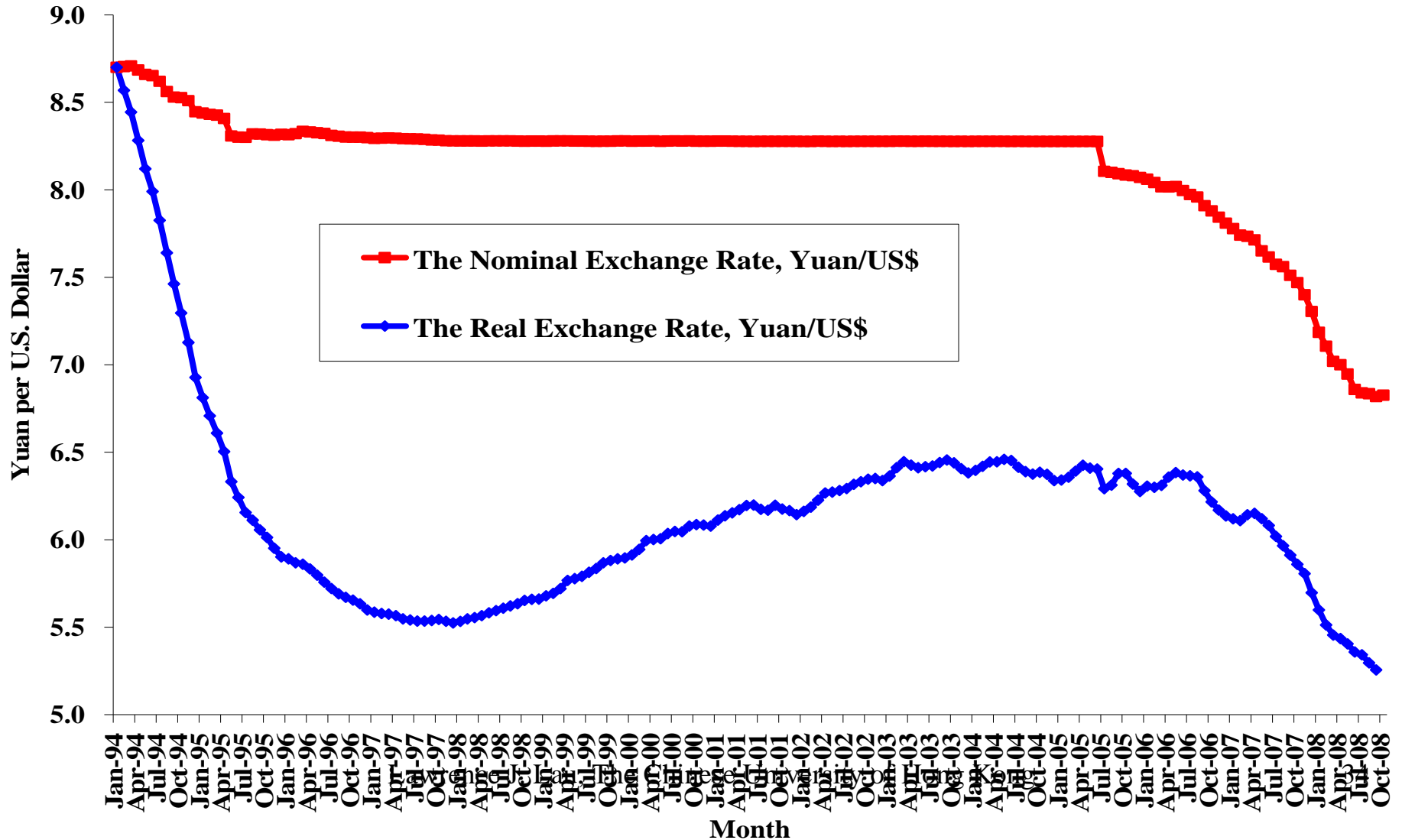
Foreign Exchange Reserves and the Yuan/US\$ Exchange Rate

The Level of Foreign Exchange Reserves and Exchange Rate (Yuan per US Dollar) at the End of the Month



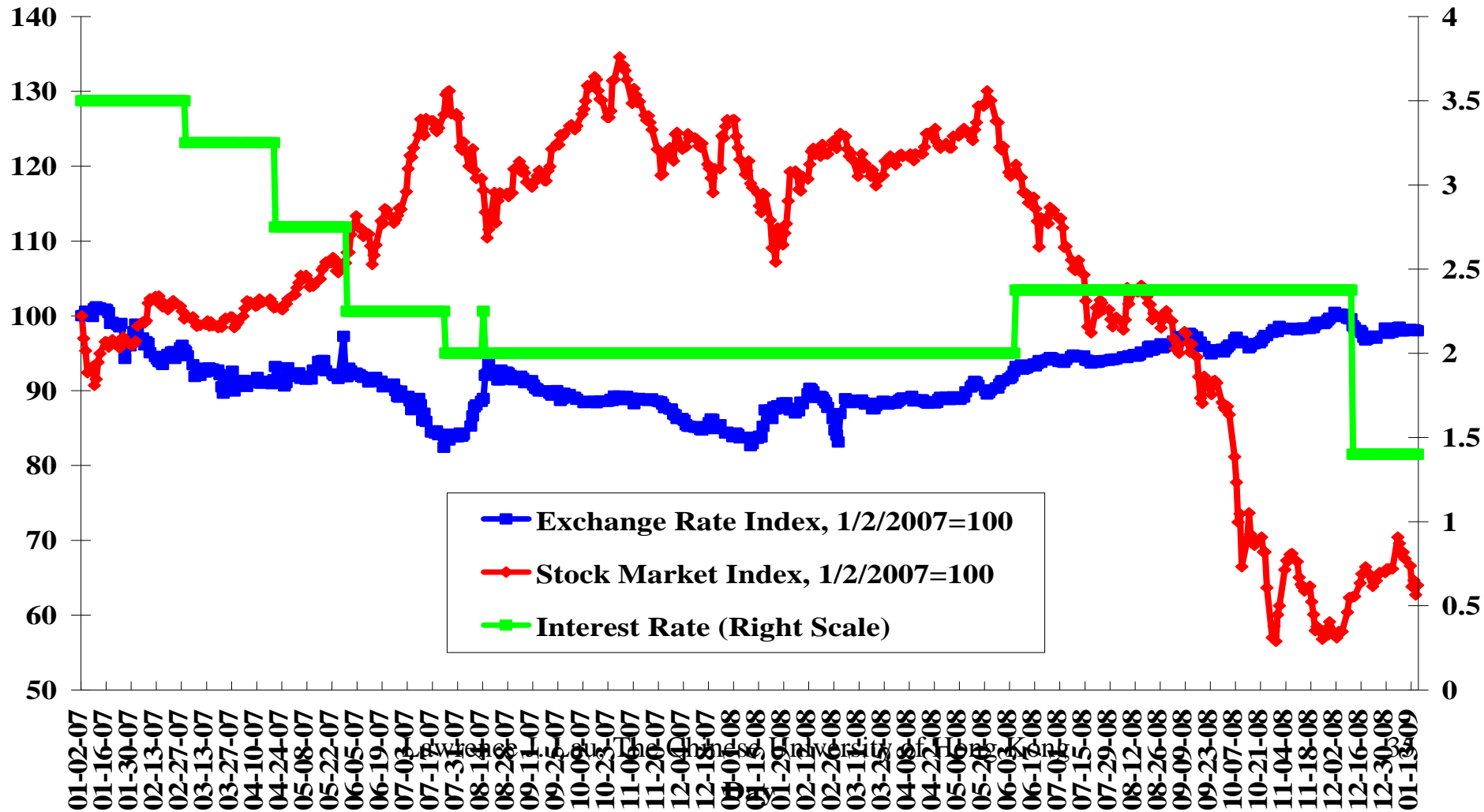
The Nominal and Real Yuan/US\$ Exchange Rates

The Nominal and Real Exchange Rates (1994 prices), Yuan/US\$



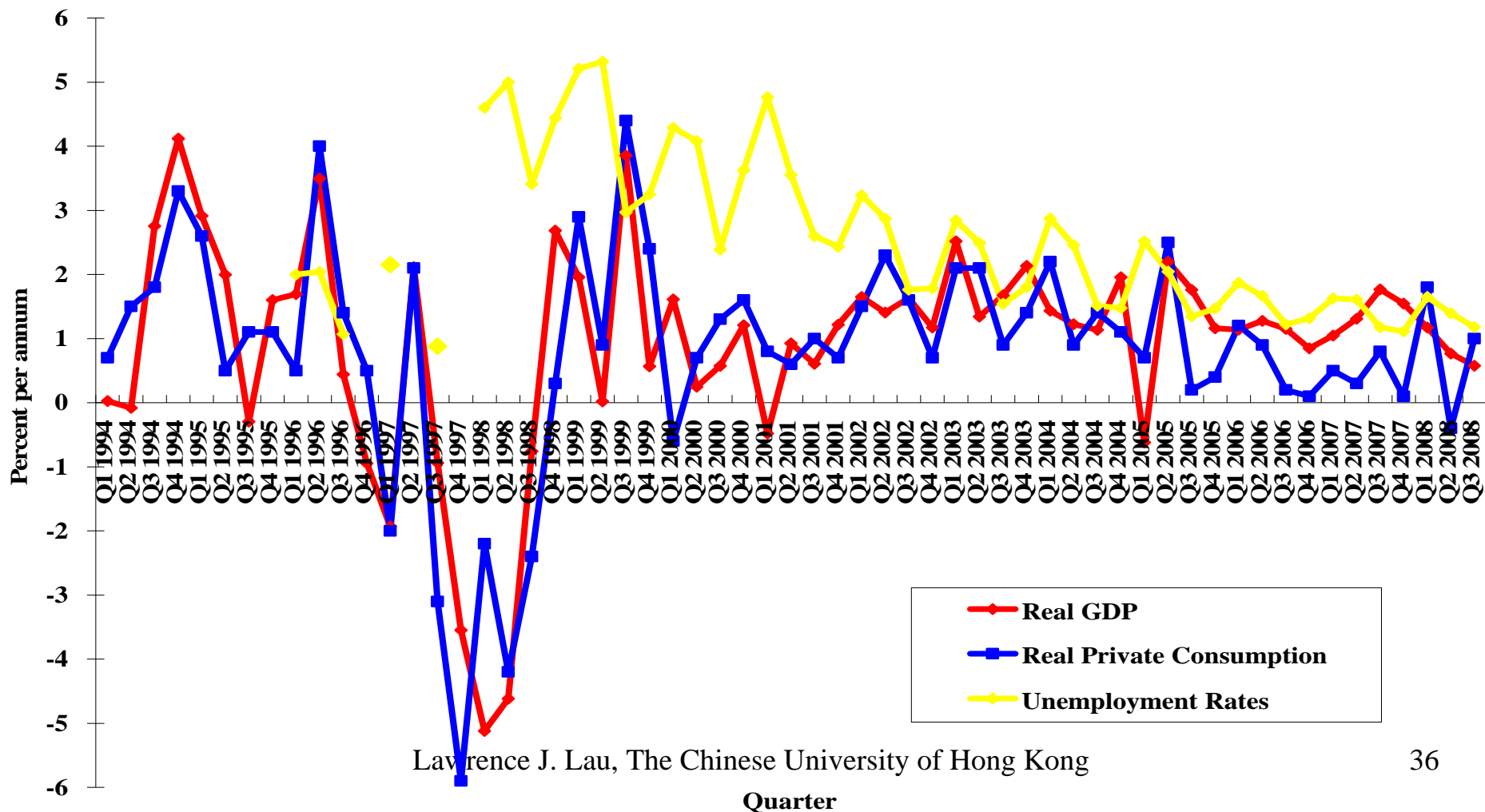
Exchange Rate, Stock Market Index and Interest Rate, Thailand

Relationship between Exchange Rate, Stock Market Index and Interest Rate, Thailand



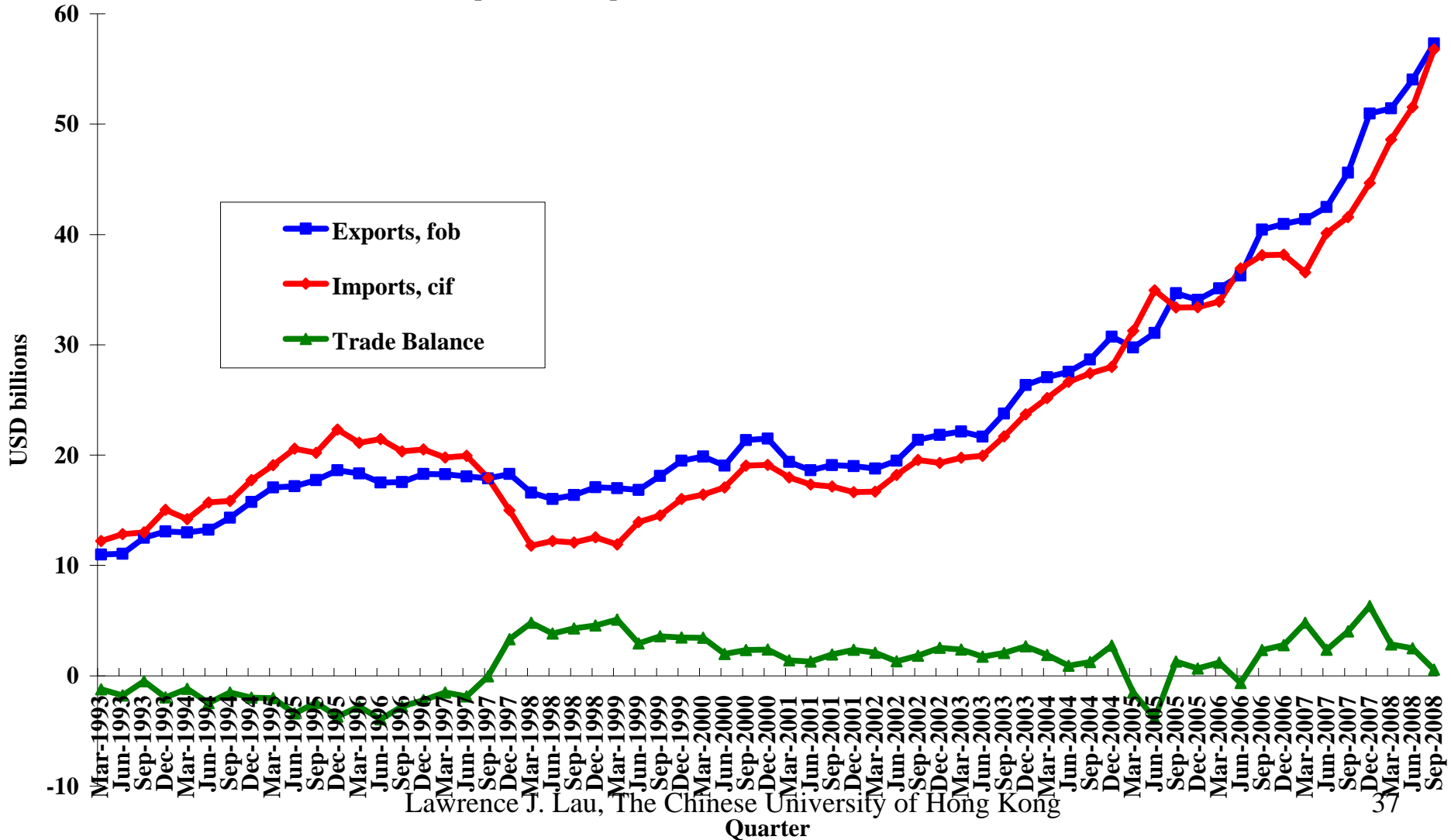
Quarterly Rates of Growth of GDP, Unemployment and Private Consumption

Seasonally Adjusted Quarterly Rates of Unemployment and Growth of Real GDP and Private Consumption of Thailand



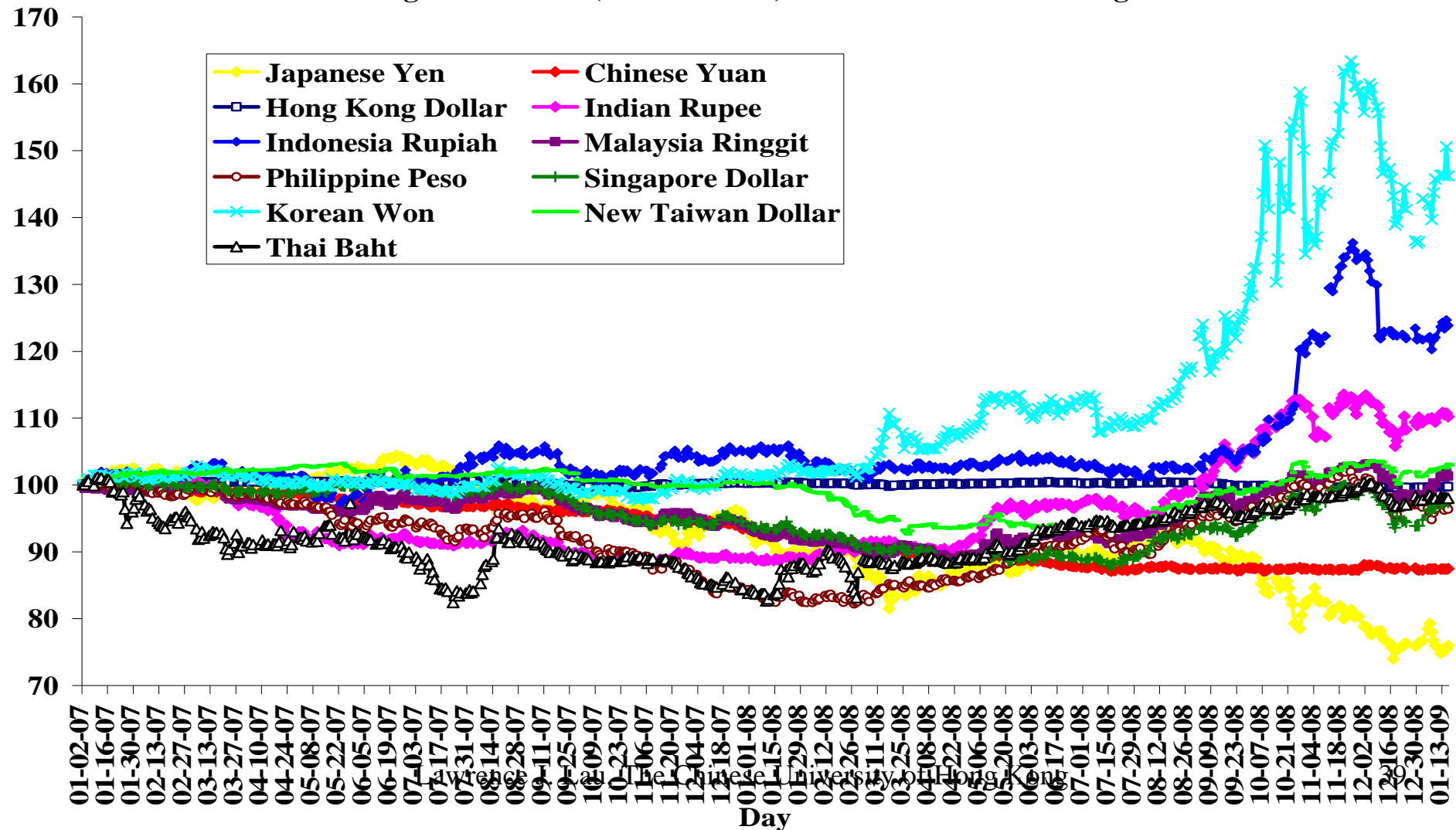
Exports, Imports and Trade Balance of Thailand

Exports and Imports of Goods and Services of Thailand



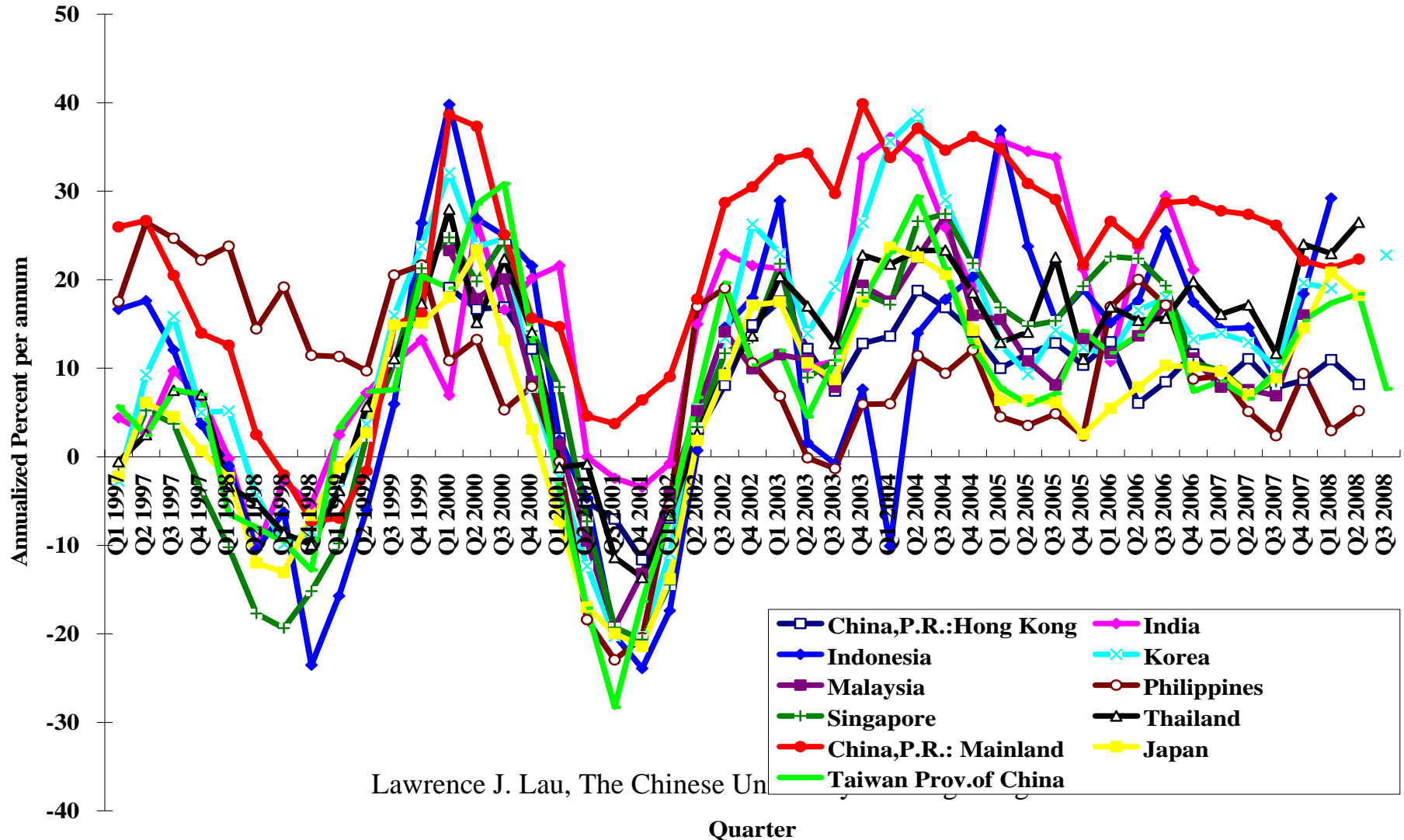
Exchange Rates of Selected East Asian Economies

Exchange Rate Index (1/2/2007=100) of Selected Countries/Regions



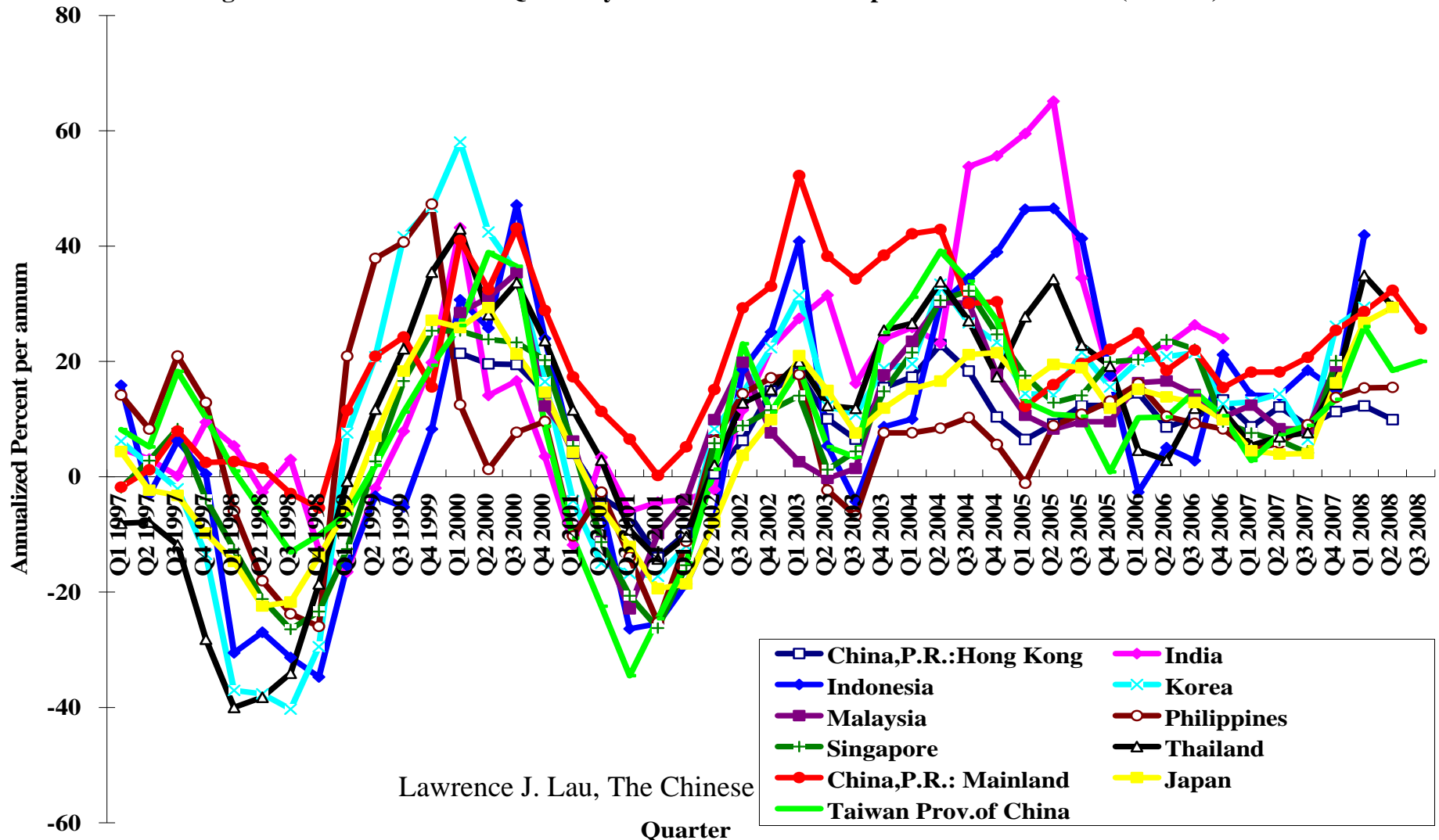
Quarterly Rates of Growth of Exports of Goods: Selected East Asian Economies

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



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

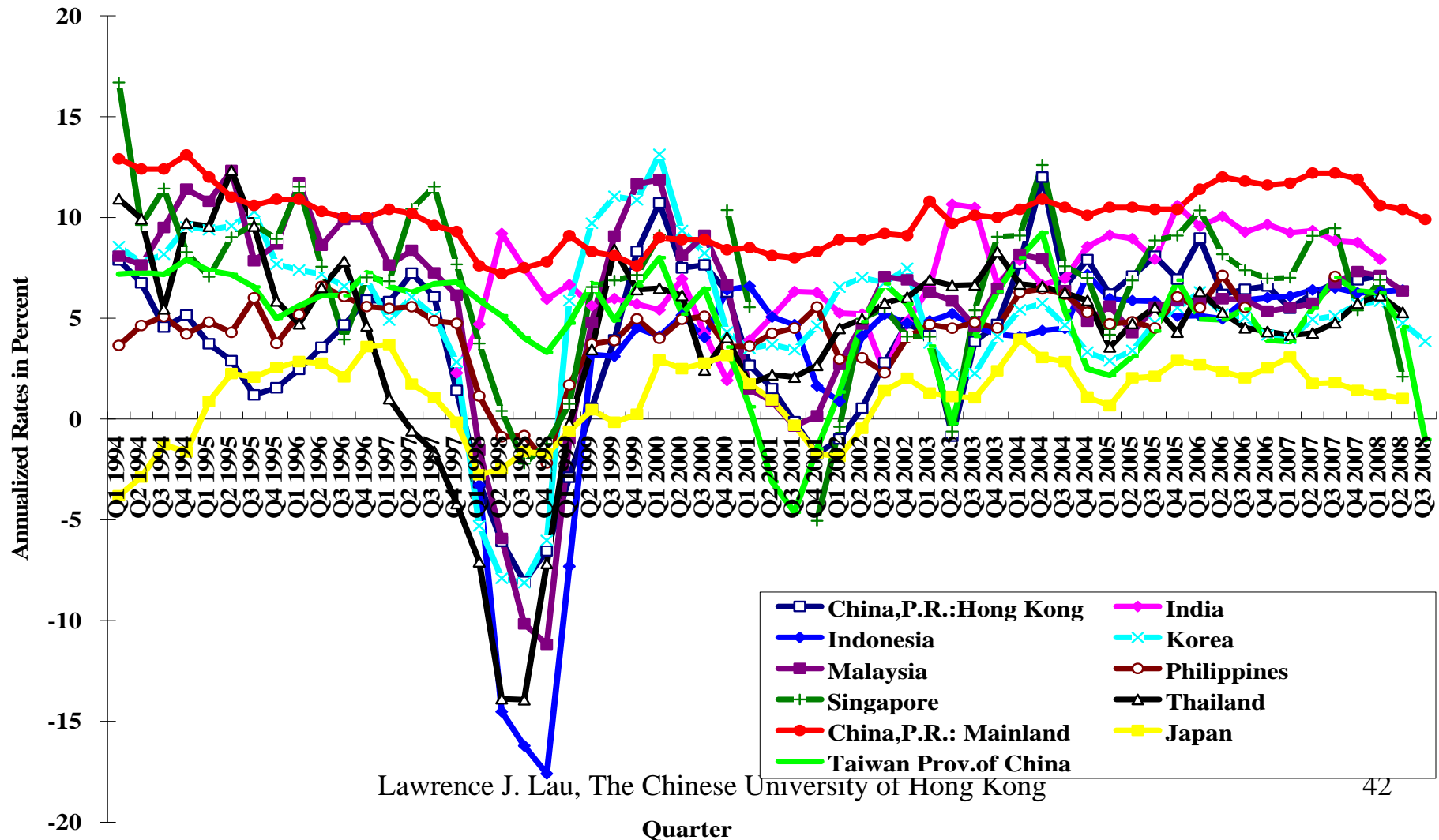
Figure 3.3: Year-over-Year Quarterly Rates of Growth of Imports of Goods in US\$ (Percent)



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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



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Concluding Remarks

- ◆ The experience of the East Asian Currency Crisis in 1997 shows that the downturns were sharp when they occurred simultaneously but the upturns were also rapid and sharp when all economies recovered together. This also shows that the East Asian developing economies as a group can still manage to grow independently of the U.S. and Europe.
- ◆ The previous charts also shows that while the exports and imports of China have fluctuated just like all other East Asian economies, the rate of growth of the Chinese real GDP has remained quite stable, unlike those of the other East Asian economies.

Concluding Remarks

- ◆ The de-coupling of global economic growth is a new phenomenon. But with the rapid economic growth of not just East Asia, but also the other BRIC economies (Brazil, Russia and India), the world should be able to manage even as the U.S. economy slows down and goes into a recession.
- ◆ Continuing economic integration of the East Asian economies is inevitable—East Asian economies now trade more with one another than with either United States or Europe and are likely to continue to do so, especially given the economic problems being faced by the United States.

Concluding Remarks

- ◆ The situation facing the Chinese economy was much more adverse back in 1998, during the East Asian currency crisis, with the Chinese Government then having far less resources. But the Chinese economy managed to do all right then (and refrained from devaluing the Renminbi, and thus earned the gratitude and respect of the other East Asian economies). Today the Chinese Government has far more resources and instruments at its disposal to cope with a negative external environment—It has much higher official foreign exchange reserves (almost US\$2 trillion compared to approximately US\$100 billion then), large and rising fiscal surpluses, and a much more effective social safety net. The Chinese economy should be able to grow at between 7 and 8 percent in 2009. And that should be good news for the other East Asian economies.