

# China's Consumption Market: Potential and Outlook

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# A Preview

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- ◆ The U.S. sub-prime mortgage loan crisis—Is there “de-coupling”?
- ◆ The consumption and savings pattern of Chinese households
- ◆ The effects of inflation and expected inflation
- ◆ Focus of consumer demand--housing and transportation; education and healthcare
- ◆ Demand for environmental preservation, protection and enhancement
- ◆ The role of the government
- ◆ Concluding remarks

# The Impact of the Sub-Prime Mortgage Loan Crisis

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- ◆ The U.S. demand for imports will likely decline with the reduced household consumption, or at a minimum the rate of growth will decline.
- ◆ 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.
- ◆ The overall economic slowdown in the U.S. will last a while, until more positive expectations are restored for both firms and households; however, it may not occur until after the presidential election in November—there is too much uncertainty about future government policies.
- ◆ The U.S. dollar will continue to weaken over the next year or so relative to other reserve currencies as the net inflow of capital, especially that of direct and portfolio investment, is reduced, although one cannot rule out a short-term technical rebound.

# The Impact of the Sub-Prime Mortgage Loan Crisis

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- ◆ 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% (which is considered unlikely), 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.

# The Impact of the Sub-Prime Mortgage Loan Crisis

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- ◆ If the indirect domestic value added of Chinese exports to the U.S. is also taken into account, a 10% decline in Chinese exports to the U.S. may result in a decline of Chinese GDP of no more than 0.5%.
- ◆ However, the impact may be quite severe on certain localities where most of the economy is dependent on exports, e.g., the cities of Dongguan and Shenzhen in the Province of Guangdong, and Suzhou in the Province of Jiangsu, where the value of exports is greater than the local GDP. Measures must be put in place in these localities to take care of expected lay-offs of workers as a result of the slowdown in export demand.

# The Impact of the Sub-Prime Mortgage Loan Crisis—De-Coupling

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- ◆ In general, the phenomenon of “de-coupling” is expected to be operative. Chinese economic growth is largely unaffected by external developments, including a possible economic recession in the United States. The other so-called BRIC countries—Brazil, Russia and India—are even less dependent on exports to the U.S. Brazil has recently discovered huge oil reserves and should be entering a new era of rapid economic development, financed by its new found oil wealth instead of foreign loans. Russia has already been benefiting from the high world price of oil and is not a major exporter of manufactured goods and hence will be relatively unaffected by external developments. India is also not a major exporter, except in computer software, and its economic growth is mostly internally driven.

# The Impact of the Sub-Prime Mortgage Loan Crisis—De-Coupling

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- ◆ The BRIC countries can be expected to maintain their rates of growth, more or less, the rest of the world, including developing East Asia, should be able to manage.
- ◆ During the East Asian currency crisis of 1997-1998, the impact of simultaneous downturns and upturns on the part of East Asian economies was amply demonstrated. So that so long as they continue growing together, by creating demands for one another's exports, their collective growth can be sustained.

# The Growth of the Chinese Economy and the Pattern of World Trade

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- ◆ Because of the rapid economic growth of China, and the demand and supply that such economic growth has generated, the economies of East Asia now trade more with one another than with economies outside of East Asia, including the United States. This is a sea change compared to twenty-five years ago. Interdependence of the East Asian economies has been rising over the years and dependence on the United States and Western Europe has declined.
- ◆ China has become the most important export market for most East Asian economies and runs trade deficits vis-à-vis almost every one.
- ◆ China has been a staunch supporter of the ASEAN Free Trade Area and has offered “early harvest” to ASEAN countries to foster the ASEAN-China Free Trade Area and the ASEAN + 3 (China, Japan and South Korea) Trade Area.
- ◆ The Chinese economy is complementary to the developed economies of the West and Japan. Chinese does not export the goods exported by these economies and vice versa. Thus the gains to international trade are maximized when these economies trade with China.

# China as a Continental Economy

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- ◆ China is a large continental economy. While individual provinces and regions can pursue an export-led strategy (including exports to not only foreign countries but also other provinces/municipalities/regions), the country as a whole cannot pursue a solely export-led strategy. International trade will never be as important as other, smaller countries and regions and China must rely on domestic demand for further economic growth.
- ◆ China will realize and exploit the advantages of its own large domestic market.
- ◆ Chinese economic growth would be quite similar to the experience of the United States in the 19th century. The United States grew largely on the basis of domestic demand. There was some foreign investment, and imports of capital equipment, but by and large exports was not important. The shares of exports in GDP in the United States and Japan are quite low. The share of Chinese exports in GDP will eventually decline to similar levels.

# Vulnerability to External Disturbances

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- ◆ Despite fluctuations in exports and imports, the rate of growth of Chinese real GDP has remained remarkably stable at the high single digits and low double digits. This is due to the combination of two factors: the relatively low share of exports in GDP, and the relatively low domestic value-add content of Chinese exports.
- ◆ Chinese economic growth to date has also been investment-led, as opposed to consumption-led or export-led, with the bulk of the investment domestically financed with domestic savings. Foreign direct investment accounts for less than 10% of aggregate domestic gross fixed investment.

# Vulnerability to External Disturbances

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- ◆ Exports constitute approximately 35-40% of Chinese GDP (36% in 2007); however, the direct domestic value added content of Chinese exports is low. It averages 20.4% on exports to the world, and 17.7% on exports to the United States.
- ◆ Thus, the GDP originating from exports is only approximately 8% (40% times 20% = 8%).
- ◆ 8% of GDP is a very significant amount that will result in hardships if lost overnight; however, even if the 8% of the economy does not grow, the economy as a whole will do fine if the remaining 92% continues to grow.
- ◆ Even if we include both direct and indirect domestic value-added, which amount to 46.6% of exports, the GDP originating from exports would constitute less than 20%. Even if 20% of the economy does not grow, the rest of the economy can still grow healthily.

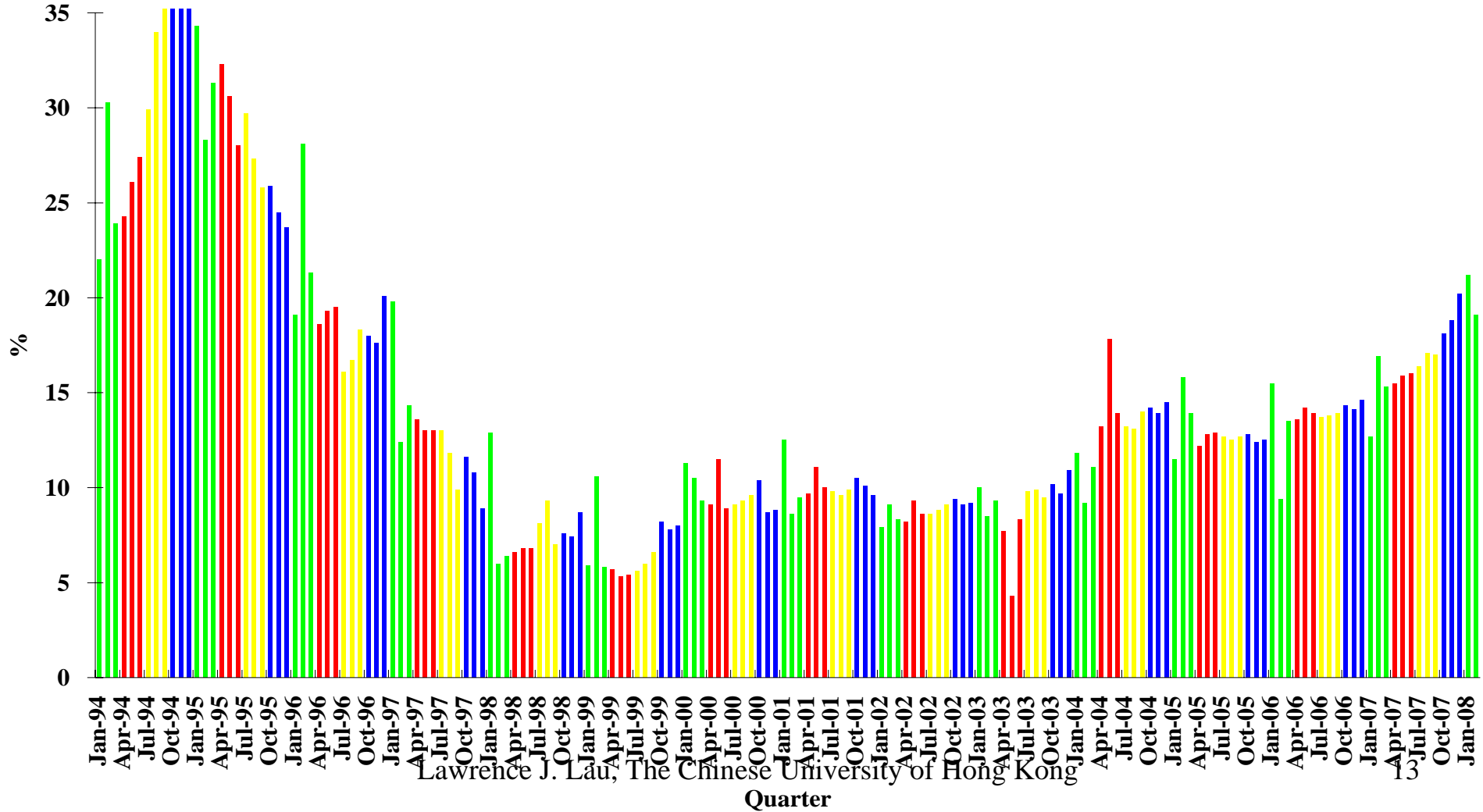
# Vulnerability to External Disturbances

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- ◆ China might, however, be vulnerable to interruption of foreign energy supplies. Thus China must pursue a policy of:
  - ◆ (1) Energy conservation;
  - ◆ (2) Imposition of a gasoline tax so that the retail price of gasoline approaches the levels comparable to those of Western Europe and Japan to encourage both conservation and efficiency;
  - ◆ (3) Intensified development of coal resources and clean coal technologies;
  - ◆ (4) Establishment of strategic petroleum reserves;
  - ◆ (5) Development of renewable energy.

# Monthly Rates of Growth of Retail Sales, Year-over-Year

Monthly Growth Rates of Retail Sales (YoY)



# High Household Savings Rate

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- ◆ Aggregate personal consumption is low in China not because it is crowded out by investment. On the contrary, the high investment rate is caused by the low consumption rate (high savings rate) and the abundance of liquidity in the commercial banks.
- ◆ There are many reasons for the high household savings rate (low personal consumption) in China.
  - ◆ (1) The absence of a credible social security system (pension, health care, unemployment);
  - ◆ (2) The inadequate provision of social services (education, health care);
  - ◆ (3) The relative unavailability of consumer credit; and
  - ◆ (4) The unequal distribution of income (high-income households have low marginal propensities to consume).

# High Household Savings Rate

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- ◆ However, comparisons of household consumption behavior across Hong Kong and Taiwan households suggest that the behavior of Mainland Chinese households is not that different—the household savings rates are all approximately 30%.
- ◆ The exceptionally high national savings rate is not the result of an exceptionally high household savings rate but the result of an exceptionally high corporate savings rate. Almost all earnings are re-invested. Cash dividend distributions are low and infrequent.

# The Growth of Personal Consumption

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- ◆ China's consumer market did register a steady and relatively fast growth since 2005. It is expected to grow faster than the rate of growth of GDP. Personal consumption of services is extremely difficult to measure accurately.
- ◆ More recent data suggest that household consumption has been rising as a percentage of household income. Survey data indicate that on average, the savings rates of households in Mainland China, Hong Kong and Taiwan are all around 30%. Thus, the high national savings rate must be due to savings by enterprises (the central government typically runs a small budget deficit).
- ◆ Continuing significant demand for consumption can come from two sources, both related to urbanization—affordable owner-occupied housing and transportation.

# The Growth of Personal Consumption

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- ◆ The time has come for the government to promote and build mass-transit systems in both old and new cities. An efficient and clean mass transit system can reduce the demand for automobile usage (but not necessarily ownership) and hence environmental pollution and traffic congestion. It also permits the government to plan the urban locational patterns for commercial, industrial, and residential uses efficiently and effectively.
- ◆ The demand for other consumer durables—automobiles, motorcycles, bicycles, electrical appliances, furniture—many of which are also housing-related, will continue to be strong, especially in the urban areas on the coast.
- ◆ There has been and will continue to be a rapid increase in the demand for personal consumption services—education, health care, food and beverages services, and tourism.

# The Rate of Inflation

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- ◆ The Consumer Price Index (CPI) reportedly grew 1.5% in 2006, following a 1.8% increase in 2005. However, the rate of growth has been accelerating since mid-2007: from 4.4% in 2007/06 to 5.6% in 2007/07, 6.5% in 2007/08, 6.2% in 2007/09, 6.5% in 2007/10, 6.9% in 2007/11 and 6.5% in 2007/12. For the whole year of 2007, the National Bureau of Statistics has recently projected a rate of inflation of 4.8%. Because of adverse weather conditions, the rate of inflation rose to 7.1% Year-over-Year in 2008M1, caused principally by the rise in the price of food by 18.2% in January and further by 8.1% Year-over-Year in February due to the further rise in the price of food by 23.3% in part as the result of the “Big Freeze.” But the jump in the price of food is expected to be temporary.

# The Rate of Inflation

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- ◆ Core inflation has however remained low, a little more than 1%, thus far, that is, the rate of inflation net of changes in the prices of energy and agricultural goods, despite the relatively high rate of growth of the money supply (M2). The relatively low core inflation rate was the result of the excess capacity in many sectors such as steel and cement, driving down prices from their peaks, and that much of the growth in the money supply was absorbed by the growth of transactions in assets (financial and real) rather than goods and services.

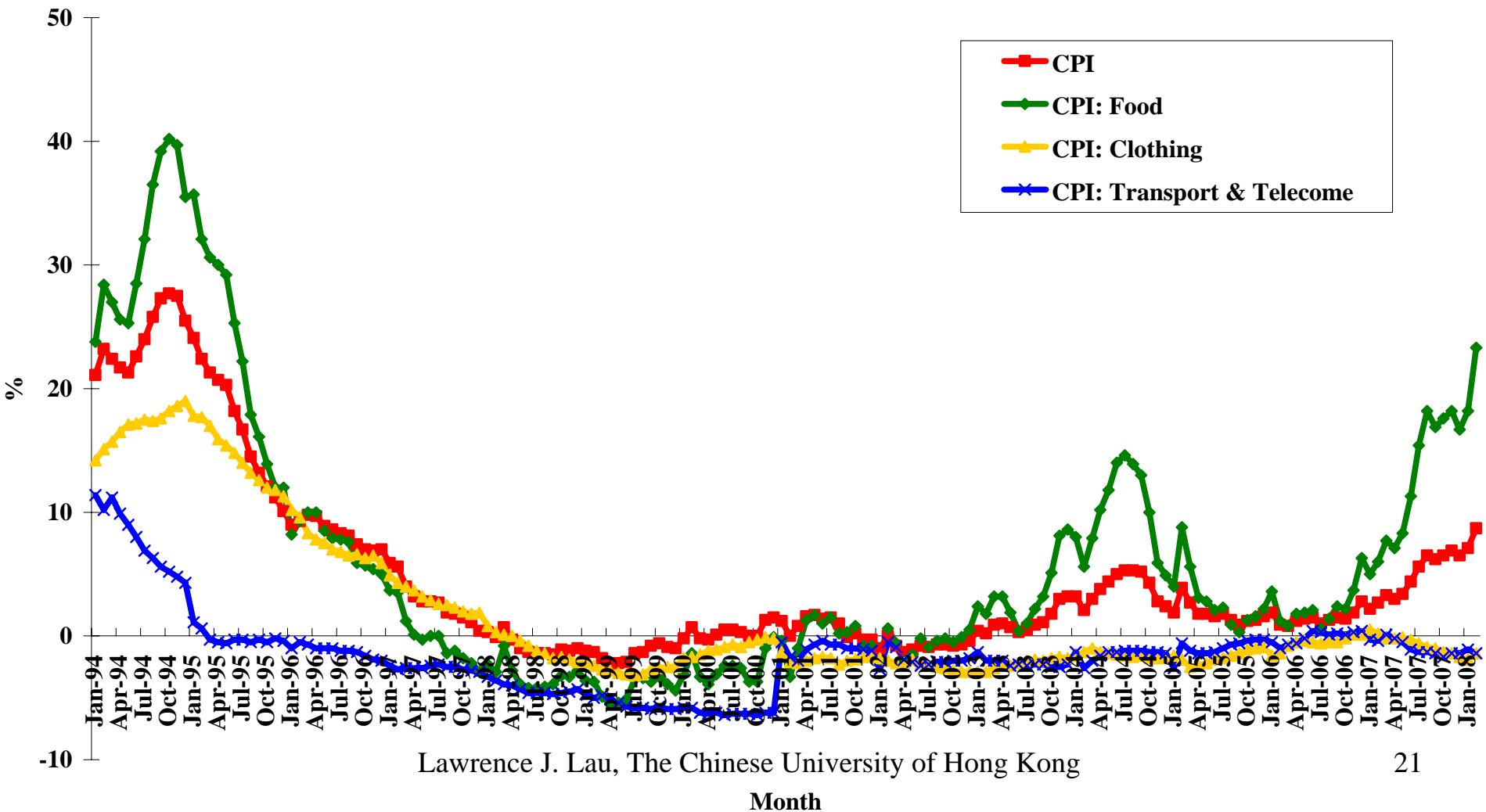
# The Rate of Inflation

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- ◆ But there has been some acceleration in the rate of growth of agricultural prices and the price of food. Agricultural prices are cyclic as well as subject to the vagaries of the weather. The phenomenon of the “hog cycle” is well known. High prices of pork in one year can lead to excess supply and low prices in the following year and hence diminished supply and high prices in the still following year. Government intervention in these cyclic markets may be necessary and can take the form of an offer to purchase from each pig farmer a fixed quantity at a fixed price. This guarantees the livelihood of the pig farmers in a year of excess supply. The pork purchased can be sold by the Government into the market in the following year which is likely to be a year of excess demand.

# Monthly Rates of Change of the CPI, Year-over-Year

Monthly Rates of Change of Consumer Price Index and Its Components Since 1994, Year-over-Year



# The Focus of Consumer Demand

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- ◆ A real rate of growth of GDP of 7-8 percent per year is likely to be sustainable over the next two decades, as long as surplus labor continues to exist in the Chinese economy and there is ample domestic savings to finance the domestic investment.
- ◆ The growth of internal demand for household consumption of goods and services (including housing), for public goods (public services and infrastructure, including highways, railways and mass transit systems) in China will remain strong for decades to come.

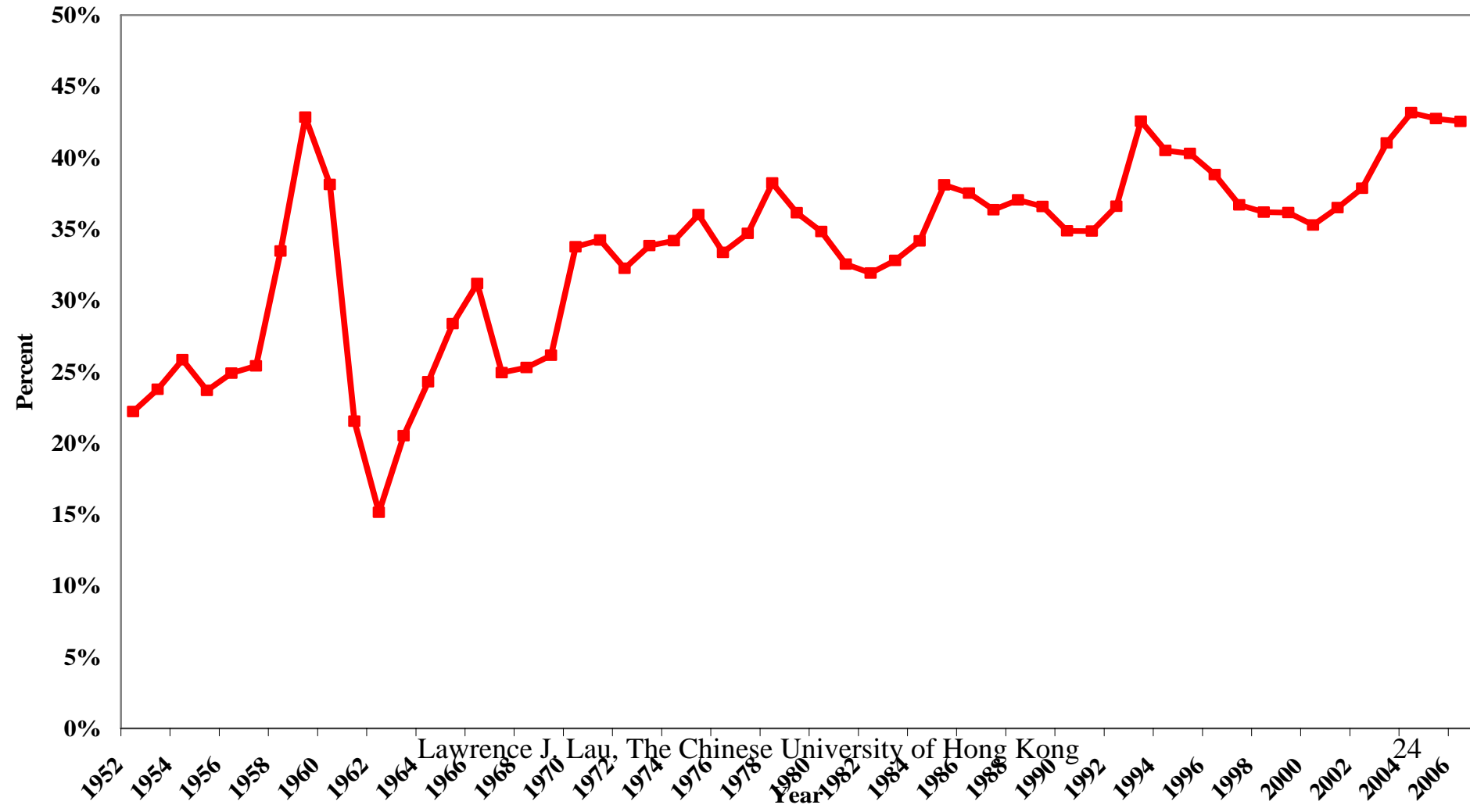
# The Fundamental Importance of Domestic Savings

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- ◆ The bulk of the gross domestic investment in China is financed by domestic savings. Except for a short early start-up period in the early 1950s, the Chinese domestic savings rate has always been high, on the order of 30 percent. In recent years, it has approached 40-50%.
- ◆ Foreign direct investment accounts for approximately 10 percent of gross domestic investment in China. While helpful, 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 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.

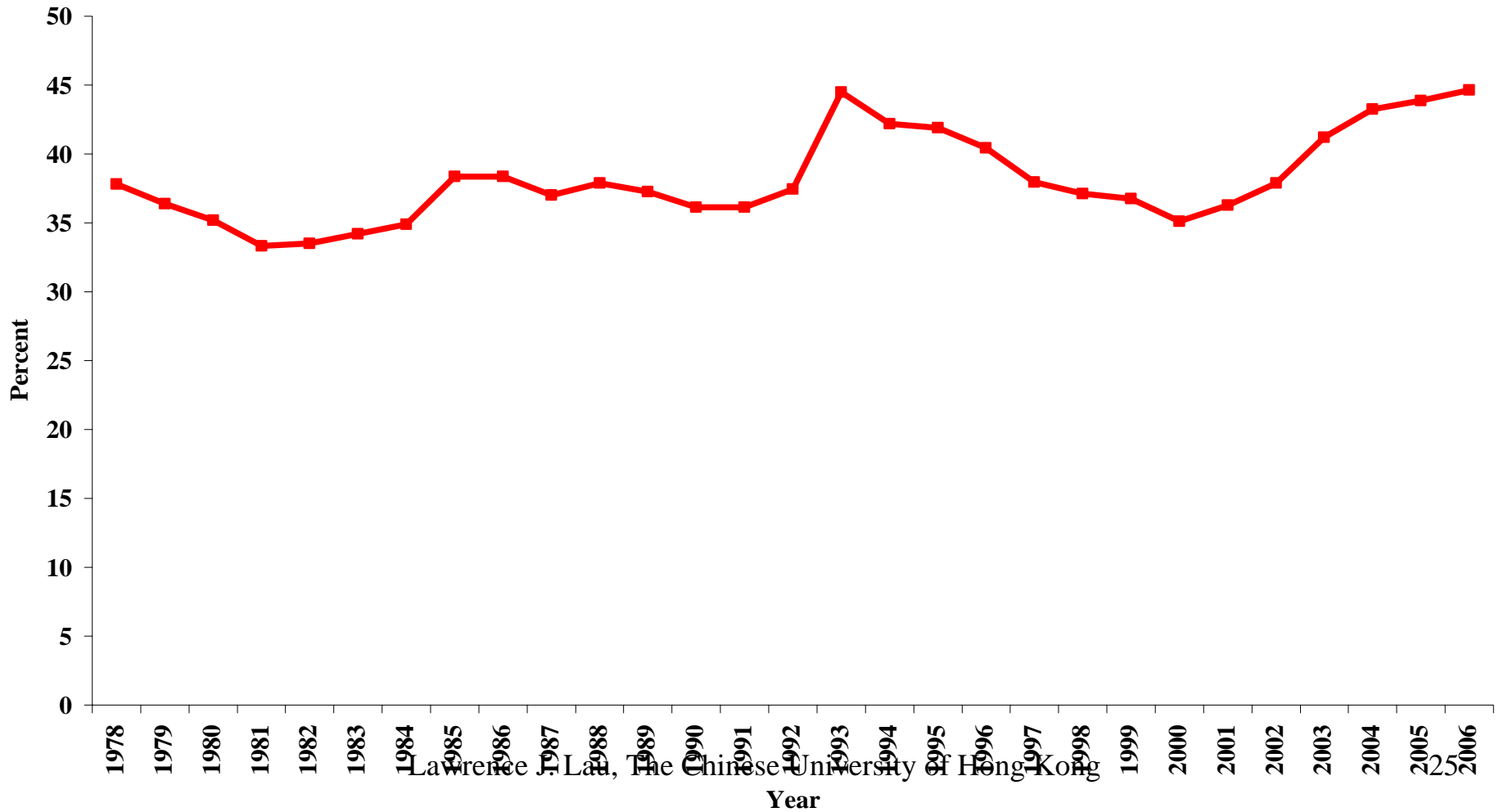
# China's Gross Domestic Investment as a Percent of GDP

Gross Domestic Investment-GDP Ratio



# China's Gross Domestic Investment as a Percent of GDP

China's Gross Domestic Investment as a Percentage of GDP



# The Risks of Inflation

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- ◆ Inflation may be becoming a real risk because of possible changes in long-term expectations. Inflation has two components—the prices of goods and the prices of assets, including real estate.
- ◆ Agricultural and food prices depend on the weather and often have their own dynamics because of the necessary period of production—for example, the hog cycle and the Christmas tree cycle.
- ◆ Domestic energy prices have yet to reflect true scarcity prices and negative externalities on the environment and quality of life (e.g., pollution and congestion) in general.
- ◆ Inflation must be nipped in the bud. Once inflationary expectations set in, it will take a long time to change.
- ◆ Inflation also tends to widen income disparity and worsens the income distribution—wealthy individuals are more likely to be net borrowers and in any case are better able to hedge against inflation than ordinary people.
- ◆ However, price controls typically have only short-term effects and only encourage a black market.

# The Risks of Inflation

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- ◆ Excess capacity in manufacturing, resulting from too low a cost of capital, have kept prices of goods from rising in China. But enterprises cannot keep on losing money forever. The rise in the price of raw materials, energy and commercial real estate must eventually be reflected in the price level, even though the real wage rate of entry-level unskilled labor has remained relatively stable because of the abundance of surplus labor in China.
- ◆ Paradoxically, raising the prices of energy to reflect their true scarcity value (and the reduction/elimination of value-added tax rebates on exports), will lead to a decline in the exports of some manufactured goods and thereby a decline in the domestic prices of these goods.

# The Risks of Inflation

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- ◆ Real interest rates for bank deposits are now negative in China. If allowed to persist over time, it may cause massive withdrawals of deposits from the Chinese commercial banks, leading to disintermediation. One solution is to raise the deposit rate on long-term fixed deposits (of over one year in maturity), without raising the lending rate (there is still a large spread between the two rates). One can limit such fixed deposits to Chinese citizens only, reducing the possibility of a massive inflow of hot money.
- ◆ Another solution is for the commercial banks to offer as an option indexed bank deposit accounts, the rate of interest on which is linked to the rate of change of the Consumer Price Index (CPI) during the period the funds are on deposit. Indexed deposit accounts have been previously introduced in China twice--once in 1949 and the early 1950s, and once in 1988 until the early 1990s, both in response to high and accelerating inflation. They both proved to be effective in stopping the flight of bank deposits from the commercial banks and in lowering the expectation of inflation.

# The Risks of Inflation

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- ◆ But how can Chinese commercial banks hedge against the changes in the CPI? Securities similar to the Treasury Inflation Protected Securities (TIPS) issued in the United States by the U.S. Treasury should be introduced in China. This enables commercial banks to offer indexed deposit accounts linked to the Consumer Price Index (CPI) without assuming the risks themselves. They can simply purchase inflation protected bonds issued by the Chinese Ministry of Finance with the funds they have in indexed bank accounts.
- ◆ Chinese lending rates are becoming very low in real terms, that is, the rate of interest after subtracting off the rate of inflation, if not yet negative. Low or negative real interest rates encourage moral hazard and hence indiscriminate and reckless borrowing since real cost to the borrower is low or negative.

# The Risks of Inflation

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- ◆ Reduction of the rate of growth of money supply should help to slow down the rate of inflation. However, this is of course also related to the net inflow of capital and hot money and the exchange rate and sterilization policies of the People's Bank of China.
- ◆ There is clearly excess liquidity in China today. The China Investment Corporation, the new sovereign wealth management agency of China, has been funded through the issuance of Renminbi denominated bonds equivalent to US\$200 billion by the Chinese Ministry of Finance so as to absorb some of the excess liquidity. China Investment Corporation has used the proceeds to purchase US\$200 billion worth of foreign exchange from the People's Bank of China. The transaction resulted in the reduction of 1.5 trillion Yuan of liquidity and US\$200 billion of official foreign exchange reserves.

# Tightening of Credit

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- ◆ China will try to balance its international trade, which means a reduction in its overall surplus vis-à-vis the world, and a reduction in the world's trade deficit vis-à-vis China, and so should be a net positive factor for the economies of the rest of the world.
- ◆ The present tight policy will probably continue because of the fears of rising inflation and of over-heating. Job creation continues to be important but the stock market may not be the best vehicle for the creation of jobs and its boom exacerbates the income inequality in China. There is therefore likely to be increased public infrastructural investment.

# China and the Environment--

## Early Awareness

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- ◆ Early awareness relative to other developed economies. China, with a per capita GDP of only US\$2,541, is to be congratulated for focusing on environmental quality at this stage of its economic development. The U.S. did not begin to clean up the air in Los Angeles until the 1970s, when its per capita GDP was already well in excess of US\$20,000. And Japan did not begin to clean up the pollution in Tokyo Bay and Osaka until the early 1970s when its per capita GDP was well in excess of US\$10,000.

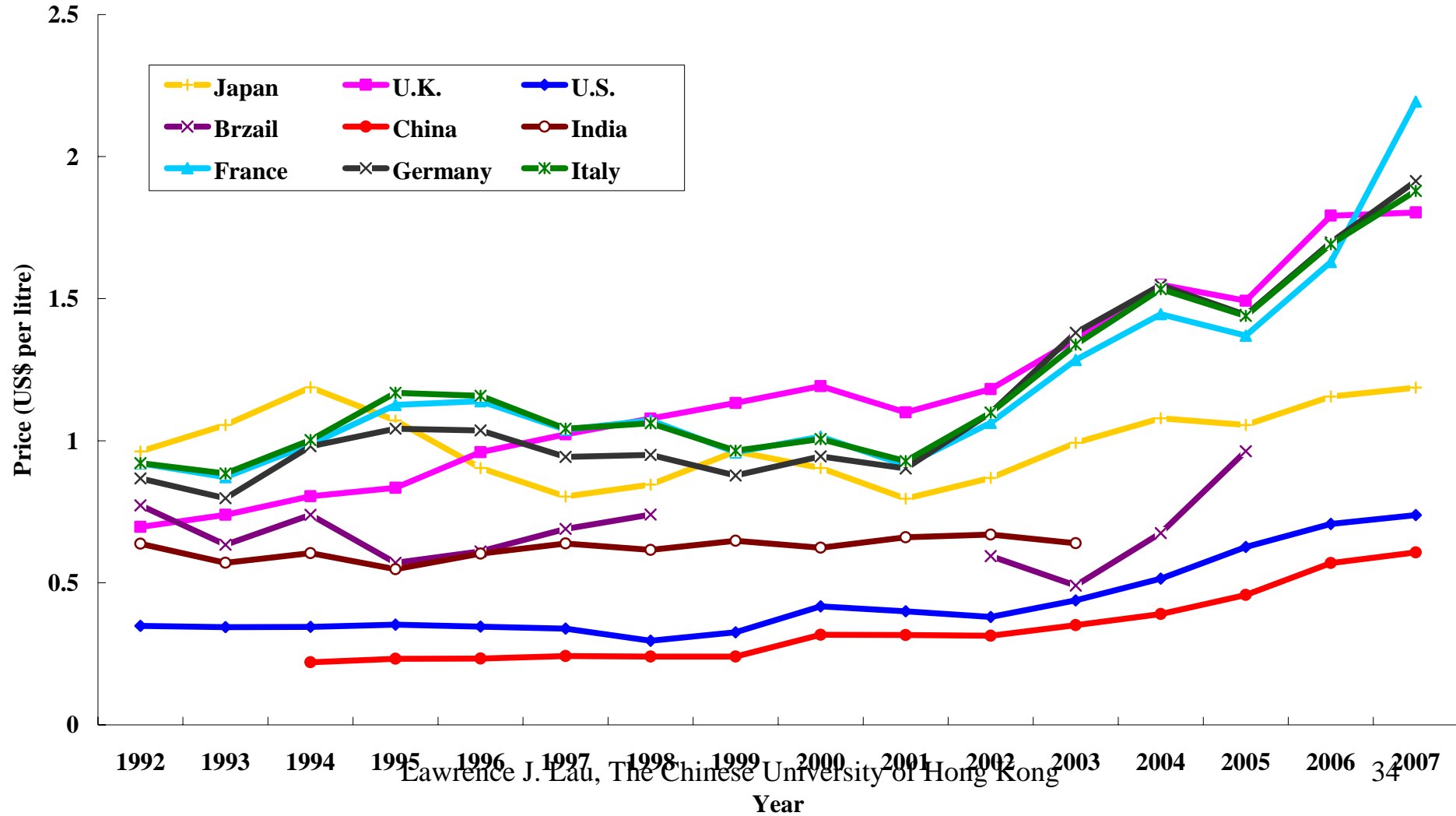
# Incentives—The Gasoline Tax and the “Gas Guzzler Tax”

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- ◆ The retail price of gasoline in China is among the lowest in the world, even lower than in the United States. China can impose a tax on gasoline that is similar in order of magnitude to that in the Western Europe and Japan.
- ◆ It is a myth that the high price of domestic gasoline deters the development of the automobile industry. Both Japan and Western Europe have long had high retail prices of gasoline and both have prosperous automobile manufacturing firms.
- ◆ China can also impose a gas guzzler tax (license fee) linked to the fuel efficiency of the automobile that penalizes inefficiency.
- ◆ The gasoline tax and the “gas guzzler” tax can reduce the externalities generated by the use of the automobile (e.g., congestion and public health (including loss of productive time), local and global environmental pollution, as well as global warming).
- ◆ China can take the lead in promoting “energy-efficient” and/or “green” automobiles.

# Retail Prices of Gasoline in Selected Countries

Retail Price of Gasoline in Selected Countries



# The Gasoline Tax and the “Gas Guzzler” Tax

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- ◆ The best time to impose and/or raise gasoline taxes and other user taxes is before there are too many automobile owners, not afterwards. It becomes politically difficult or even impossible to do so once the majority of the households own and depend on automobiles for their daily transportation needs.
- ◆ The gasoline tax does not necessarily discourage automobile ownership—it does change the relative demands for different types of automobiles by making it more advantageous to acquire more “fuel-efficient” automobiles. It does have impact on the usage of automobiles, especially if a good alternative mode of transportation is available.
- ◆ Such taxes as the gasoline tax and the “gas guzzler” tax are likely to be progressive in China because only high-income people are likely to have private automobiles. It may therefore be viewed as another means of “redistribution”

# The Implementation of the Gasoline Tax and Other Measures

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- ◆ The gasoline tax can be flexibly structured so as to maintain the retail price of gasoline (in real terms) at a stable level, independently of the short-term fluctuations in the world price of oil.
- ◆ The proceeds of the gasoline tax can be used to finance public investment in mass transportation. But it can also be done in a revenue-neutral manner, reducing the income taxes of the low income households, providing some compensation for the increase in the retail price of gasoline.
- ◆ Access fees to the central business districts during peak periods, as used in Singapore, are also an option.
- ◆ The promotion of a car rental industry and the encouragement of ride-sharing and car-pooling.

# The Dynamic Processes

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- ◆ It takes time for the energy-consumption characteristics of the capital stock of both the enterprises and households to change—it can be five years or even longer—one has to await the replacement or retrofitting of the existing capital stock with new investment. But early signaling is essential to the users.
- ◆ Even the announcement of planned future price/tax increases, holding current price/tax constant, can have a substantial impact because they affect directly the expectations and hence the choice of new capital equipment in terms of its energy efficiency in the future.
- ◆ For example, one can announce today an increase in the gasoline tax to take effect three years from now. It will have a large impact as users turn over their stock of automobiles over the next three years. However, it will not have an immediate impact on the owners of existing automobiles, there by smoothing the adjustment processes of both the automobile owners and the automobile industry.

# The Dynamic Processes

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- ◆ The experience of the oil shocks in 1973 and 1980 showed that while there was little adjustment in the short run, there would be substantial adjustment in the long run, so much so that the oil price had to come back down in the early to mid-1980s.
- ◆ An early announcement or phasing in of a future increase in the gasoline price permits smooth and orderly adjustment by enterprises and households so that any transitional hardship can be minimized.

# A Collective Life-Style Choice

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- ◆ What is an appropriate temperature for the summer? For the winter?
- ◆ What types of cities are the best for China (and for the world)?
- ◆ “A car in every garage” is a nightmare scenario for China and the World. (Imagine 400 million automobiles on the road and a replacement demand of at least 40 million automobiles a year eventually!)
- ◆ Urban sprawl and the traffic congestion that it generates are the natural outcomes of the growth of cities in the absence of adequate urban planning.
- ◆ Convenient, user-friendly urban mass transit is the only feasible substitute to the automobile, but it works effectively only in cities with high-density residential and non-residential neighborhoods.

# A Collective Life-Style Choice

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- ◆ Thus, one of the most important policy choices with long-term implications facing China is what can be described as a choice of urban life-style: Does China want its existing and future cities to be like Los Angeles and San Jose, where automobile ownership is a necessity, or London, New York, Paris and Singapore, where convenient and efficient mass transit systems exist and automobile ownership and/or use are genuine choices?
- ◆ It is critical for China to maintain a viable alternative to the automobile as a means of daily urban travel for the vast majority of the middle class, in addition to bicycles and walking.

# A Collective Life-Style Choice

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- ◆ However, such urban life-style choices must be made early on. Once made, often by default, they cannot be easily reversed. For example, it is far too late for Los Angeles and San Jose to try to become a city like New York—the low density and the sprawl have basically made such a change impossible.
- ◆ The modes of mass transportation also require a collective governmental choice as well as integrated urban planning and regulation on density, land use, spatial distribution and transportation routes. They must take into account the externalities and cannot be left alone to the invisible hand of the market.

# The Role of the Urban Middle Class

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- ◆ The emergence of an urban middle class has both positive and negative implications on energy conservation and environmental protection. On the one hand, the urban middle class demands many products and services (e.g., automobiles and gasoline) that are both resource-intensive and environmentally unfriendly. On the other hand, the urban middle class, being better educated, tends to be more socially and environmentally conscious and values the quality of life.

# The Role of the Government

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- ◆ Supply management in the case of market failure
- ◆ Maintaining free entry and competitive markets
- ◆ Balancing international trade
- ◆ Controlling inflation and offering protection against inflation
- ◆ Perfecting the safety net

# Concluding Remarks

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- ◆ Household consumption has been rising and the household savings rate is likely to stabilize around 30%
- ◆ Public consumption has a great deal of room to rise—education, health care, environmental preservation and protection—financed in part from cash dividends paid by state-owned enterprises
- ◆ The reduction in the aggregate trade surplus vis-à-vis the world should also allow consumption, household and government, to rise
- ◆ Household consumption should continue to rise as the social safety net continues to be improved and household incomes and wealth continue to rise (there may be some hiccups on the way as the asset price bubbles burst).
- ◆ Controlling inflation and offering protection against inflation is important (panic buying and hoarding are not consumption)