Chinese Economic Outlook
and
Key Issues

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A Preview

◆ The Chinese Economy Today
◆ Short-Term and Long-Term Economic Outlook
  ◆ The Three Paradigms of Economic Growth
◆ Key Issues
  ◆ National Treatment
  ◆ Integration of National Markets
  ◆ Intellectual Property Rights Protection
◆ Potential Risk Factors
  ◆ Recurrence of the SARS epidemic
  ◆ Financial Stability
    ◆ The Banking Sector (Non-Performing Loans, Pyramid Schemes)
    ◆ The Stock Market
  ◆ Reform of the State-Owned Enterprises
  ◆ The Social Safety Net
    ◆ Pension
    ◆ Unemployment
◆ Exchange Rate Mechanism (Capital Flight, Abolition of Capital Control)
◆ Taiwan Straits
The Chinese Economy Today
The Chinese Economy Today (1)

- East Asia is the fastest-growing region in the world over the past two decades, the East Asian currency crisis of 1997-98 notwithstanding.
- China is the fastest growing country in East Asia—approximately 9% p.a. since beginning of economic reform (1979) and 7.7% over the past five years.
- Between 1979 and 2002, Chinese real GDP grew from $177 billion to $1.24 trillion (2002 prices) (6th largest GDP in the world) and real GDP per capita grew from $183 to $960. The U.S. GDP (approximately $10.5 trillion) and GDP per capita (approximately $37,000) are respectively more than 8 and 38 times the comparable Chinese figures in 2002.
- China survived the East Asian currency crisis relatively unscathed.
- Despite the SARS epidemic, the rate of growth of real GDP in 2003/Q2 was 6.7%, YoY, the lowest for the same period since 1992. The rate of growth in 2003/H1 was 8.2%. For the year as a whole, the rate of growth should easily attain 7.5%.
- China is one of the very few socialist countries that have made a successful transition from a centrally planned to a market economy—the 10th Five-Year (2001-2005) Plan is only indicative and not mandatory; the rate of interest (the price of money) and the exchange rate are the only prices that are still administratively determined on the margin.

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## The Chinese Economy Today (2)

<table>
<thead>
<tr>
<th>Year</th>
<th>Real GDP</th>
<th>Real GDP per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>177 bill.</td>
<td>183</td>
</tr>
<tr>
<td>2002</td>
<td>1.24 trill.</td>
<td>960</td>
</tr>
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</table>

US$ (2002 prices)
## The Chinese Economy Today (3)

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>US$ (current prices)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002 GDP</td>
<td>10.5 trill.</td>
<td>1.24 trill.</td>
</tr>
<tr>
<td>2002 GDP per capita</td>
<td>37,000</td>
<td>960</td>
</tr>
</tbody>
</table>
The Chinese Economy Today (4)

- The private (non-state) sector accounts for more than 65% of GDP and an even greater percentage of employment in 2002—non-state-owned firms face hard budget constraints and ordinary citizens can make a good living without being beholden to the state.
- China is no longer a “shortage” economy--insufficient aggregate demand is a real possibility.
- China is the 6th largest trading country in the world (exports of goods of US$325.6 billion—an increase of 22.3% over 2001—and imports of goods of US$295.2 billion—in increase of 21.1%—totaling US$620.8 billion in 2002). In 2003/H1, despite the SARS epidemic, Chinese exports grew 33.6% YoY.
- Trade with East Asian economies, both exports and imports, have been increasing at rates of 20% and higher. In particular, China has become a major export destination for and has trade deficits vis-à-vis most East Asian economies.
- Chinese accession to the World Trade Organization has been very smooth; many anticipated negative effects have not occurred. The WTO General Council has said that “China has basically completed the commitments and obligations for the first year.”
- The “World’s Factory” (surplus labor) but also the “World’s Market”
# Rates of Growth of Real GDP and Inflation (% p.a.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>Real GDP</th>
<th>RPI</th>
<th>CPI</th>
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<tbody>
<tr>
<td>1997</td>
<td>8.8</td>
<td>0.8</td>
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<td></td>
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<tr>
<td>1998</td>
<td>7.8</td>
<td>-2.6</td>
<td>-0.8</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>7.1</td>
<td>-2.9</td>
<td>-1.3</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>8.0</td>
<td>-1.5</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>7.3</td>
<td>-0.8</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>8.0</td>
<td>-1.3</td>
<td>-0.8</td>
<td></td>
</tr>
<tr>
<td>2003Q1</td>
<td>9.9</td>
<td></td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>2003Q2</td>
<td>6.7</td>
<td></td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>2003H1</td>
<td>8.2</td>
<td></td>
<td>0.6</td>
<td></td>
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</tbody>
</table>
Quarterly Rates of Growth of the Real GDP of the Chinese Economy, Y-o-Y
Quarterly Rates of Growth of Real Gross Fixed Investment of the Chinese Economy, Y-o-Y
The Tenth Five-Year Plan (2001-2005)

- 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 as a proportion of GDP rose from 14.2% of GDP in 2000 to 17.1% of GDP in 2001.
- Indirect (macroeconomic) control of the economy using instruments such as money supply, interest rate and exchange rates rather than direct (microeconomic) control through administrative directives, commands and central planning with mandatory targets.
National Savings Rate as a Percent of GDP: Selected Countries and Regions
The Savings Rate as a Percent of GDP: Selected East Asian Countries and Regions

The Savings Rate as a Percent of GDP

- China
- Hong Kong
- Indonesia
- Korea, Republic of
- Malaysia
- Philippines
- Singapore
- Taiwan
- Thailand
- Mexico
- India

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China’s Gross Domestic Investment as a Percent of GDP

China's Gross Domestic Investment as a Percentage of GDP

percent

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The Relative Stability of the Rate of Growth of Real GDP

- 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.
- 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%.
- 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
Quarterly Rates of Growth of Imports: Selected East Asian Economies

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

- China, P.R.: Hong Kong
- Indonesia
- Malaysia
- Singapore
- China, P.R.: Mainland
- Japan
- Korea, Rep. of
- Philippines
- Thailand
- Taiwan

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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

Annualized Rates in Percent

Quarter
Exports as a Percent of GDP: Selected East Asian Economies and U.S.
Imports as a Percent of GDP: Selected East Asian Economies and U.S.
The Shares of FDI in Chinese Gross Domestic and Gross Domestic Fixed Investment

Fig. 1.2. The Share of Foreign Direct Investment in China (Percent)
Globalization and Investment Diversification

- Geographical diversification has to be re-thought because of globalization
  - Diversification by multinational corporations: e.g., IBM is not a U.S. risk because of its significant business around the globe; similarly, Nestle is not a Swiss risk; these are all globally diversified corporations
  - Covariance due to supply-chain connections, e.g., Dell, and its sub-contractor in Taiwan, Quanta Computer, face the same risks—Quanta is not really a Taiwan risk
  - Covariance of markets—the stock markets have in recent years tended to move together
- There are gains from geographical diversification only if the economic performance of the different regions of investment are uncorrelated or negatively correlated
- The apparent “home bias” of the portfolios of domestic investors may be due to legal restrictions (both outbound and inbound), explicit or implicit restrictions on foreign ownership, transactions costs (including information acquisition and monitoring), corporate governance (and available float for the general public), competitiveness and fairness of the stock market, and exchange rate risks.
- China, India, and potentially Latin America are candidates for investment if diversification is the objective because they are large economies the rates of growth of which are not very sensitive to what happens outside
Investment in China by Foreign Investors: Considerations

- Covariance between East Asian and U.S. markets
  - Covariance increased by globalization
  - The high-technology sector versus the traditional and the non-tradable sectors
  - Covariance between U.S. and China is small, hence maximum gain from diversification

- Public versus private markets
  - Credibility of public markets (insider trading, manipulation, protection of minority shareholders, disclosure and transparency)
  - Ease and necessity of direct financial monitoring
  - Casino mentality of public markets

- Portfolio versus direct investment
  - Possibility of capital control and other forms of restrictions on short-term capital flows
  - Necessity of continuous active direct monitoring
  - Choice of joint-venture partner(s), if any, critical
  - Availability of depositary receipts in liquid, transparent and well-regulated markets with no capital control

- Competitive advantage
  - Money alone is not sufficient because of relative abundance of domestic savings—foreign direct investors must have superior technology, know-how, knowledge or control of markets

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Investment in China by Foreign Investors: Considerations

◆ The nature of foreign direct investment (FDI) in China has been undergoing a transformation
  ◆ The nature of FDI has changed gradually from export-oriented to domestically oriented, taking advantage of the large Chinese domestic market; from light industry to heavy and high-technology industries, and from small projects to large projects
  ◆ Foreign direct investors increasingly view China not so much as an export base but as a market for their finished products--e.g., BASF, General Motors, Motorola all plan to market at least a significant proportion of the products they produce in China in China itself
Short-Term and Long-Term Economic Outlook
## Projected Rates of Growth of Real GDP and Inflation (% p.a.), 2003-4


<table>
<thead>
<tr>
<th>Organization</th>
<th>2003</th>
<th>2004</th>
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<tbody>
<tr>
<td></td>
<td>Pre-SARS</td>
<td>Post-SARS</td>
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<tr>
<td></td>
<td>GDP</td>
<td>CPI</td>
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<tr>
<td>National Bureau of Statistics, China</td>
<td>&gt;7.0</td>
<td>&gt;8.0</td>
</tr>
<tr>
<td>People's Bank of China</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development Research Center, China</td>
<td>7.0-8.0</td>
<td>7.8</td>
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<tr>
<td>Chinese Academy of Social Sciences</td>
<td>8.6</td>
<td>8</td>
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<tr>
<td>Asian Development Bank</td>
<td>7.5</td>
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<td>International Monetary Fund</td>
<td>7.5</td>
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<td>The World Bank</td>
<td>7.2</td>
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<tr>
<td>Citicorp.</td>
<td>7.6</td>
<td>6.7</td>
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<tr>
<td>Credit Suisse Frist Boston</td>
<td>7.9</td>
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<tr>
<td>Goldman Sachs</td>
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<tr>
<td>J. P. Morgan Chase</td>
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<tr>
<td>Merrill Lynch</td>
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<td>Morgan Stanley</td>
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<td>UBS Warburg</td>
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</tr>
<tr>
<td>Lau</td>
<td>7.5</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note: Lawrence J. Lau, Stanford University*
Prospects for Economic Growth

- Chinese economic growth during the next five years, indeed the next decades, will depend mostly on internal factors and be largely unaffected by the policies of other countries or events outside of China (a disruption of the oil supply may be an exception).
- There are numerous serious problems confronting the Chinese economy—however, these problems are not intractable.
- On the margin, foreign involvement in the Chinese economy will make some, but not a critical, difference; but it can be mutually beneficial for both China and the foreign countries.
- Chinese GDP and GDP per capita will remain low relative to the industrialized economies (G-7) for at least three or more decades.
- The share of Chinese GDP produced by the non-state-owned sector will rise from 65% to 80% in another decade.
- There is significant complementarity between the Chinese and G-7 economies--the G-7 economies do not export anything that China exports (and have not done so for decades) and China does not export anything that the G-7 exports. It is this complementarity that maximizes the potential gains from free trade between the two sides.
Tasks Ahead

- Maintaining and increasing employment (moving labor from agriculture to industry and services)
- Implementing Chinese commitments under the accession agreement to the World Trade Organization (WTO)
- Establishing a credible and sustainable social safety net
- Socialization of basic social services such as education and healthcare
- Reform of the state-owned enterprises (SOEs)
- Reform of the banking and financial systems
- Integrating and unifying the domestic market
- Controlling corruption
Difficult Issues

- Domestic stability—domestic stability can be maintained as long as the economy performs well and the gap between the have’s and have-not’s does not become too large. The agricultural procurement program, the establishment of the social security fund, the Western Development Initiative, and the renewed focus on education are all intended to address these issues.

- Acceleration of urbanization and industrialization (building new cities or enlarging old cities?)

- Centralization versus decentralization—power to raise and collect taxes, to issue debt, to regulate provincial and local commerce, to adjudicate and enforce the law (interstate commerce clause, national commercial and tax court)

- The reliability of information (e.g., GDP statistics, SARS)
Sources of Growth of Aggregate Demand: Affordable Owner-Occupied Housing

- Huge pent-up demand for new affordable owner-occupied residential housing and rebuilt and renovated residential housing—a housing boom that can last for decades
- 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
  - Simultaneous adjustment of salaries and rents, providing purchasing power for employees not currently provided housing
  - Establishment of properties (transfer) rights to residential housing similar to those already available in the rural areas
  - Provision of long-term, preferably fixed rate, mortgages; development of secondary markets for such mortgages to avoid maturity mis-match; adoption of “safe-harbor” rules to overcome “reluctance to lend”
  - Institution of urban zoning and land use laws; absorption of land costs but maintaining fairness through land leases adjustable upon renewal
  - Development of mass urban transit

- Housing reform has taken root in major urban centers except Beijing
Sources of Growth of Aggregate Demand: Affordable Individual and Mass Transportation

- Huge pent-up demand for new affordable automobiles—annual domestic demand now estimated to be in access of 2 million units.
- In 2003Q1, production of automobiles increased 120% YoY to almost 400,000 units; production of all motor vehicles increased 54% to 1.05 million units.
- In 2003/H1, production of passenger automobiles reached 903,000 units; production of all motor vehicles reached 2.126 million units, an increase of 32.2% YoY.
- Automobile assembly lines are now operating in 23 provinces, autonomous regions and municipalities.
- Huge need for mass transit in both old and new cities.
Sources of Growth of Aggregate Demand: Promotion of Science and Education in China

- 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
Long-Term Economic Growth: Three Paradigms of Chinese Economic Growth

- Domestic demand-driven growth--the domestic market paradigm a la the United States in the 19th century. China is a large continental economy--International trade will never be as important as other, smaller countries and China must rely on internal demand for further economic growth. Value-added from exports constitutes only 7.5 percent of Chinese GDP.
- The "wild-geese-flying pattern" metaphor of East Asian industrial migration over time can apply to Chinese provinces and regions
- Privatizing the economy without privatization--shrinking the state sector through the growth of the non-state sector in the absence of explicit privatization--the experience of Taiwan and South Korea
- 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 tangible and intangible property rights and the rule of law (a national commercial and tax court?)
  - Maintenance of an internationally open economy--the role of the "open door" (WTO)
Long-Term Economic Trends

◆ Aggregate GDP
  ◆ The Chinese economy is likely to continue to grow, more or less independently of what happens in the rest of the world, over the next several decades at an average annual rate of approximately 7%
  ◆ The source of this growth will come primarily from tangible capital accumulation, supported by a national savings rate of 40%, human capital accumulation, and economies of scale, and to a lesser extent on the growth of intangible capital (for example, R&D capital) and improvements in efficiency
  ◆ By 2020, aggregate Chinese GDP will exceed the aggregate GDP of Japan (and approximately half of aggregate U.S. GDP)
  ◆ By 2035, aggregate Chinese GDP will reach the same level as aggregate U.S. GDP

◆ Per capita GDP
  ◆ However, Chinese GDP per capita will only reach US$10,000, or approximately 20% of U.S. GDP per capita, in 2035
  ◆ Chinese GDP per capita will approach the level of U.S. GDP per capita only beyond 2050

◆ Population
  ◆ By 2035, India will have overtaken China as the most populous nation in the world

◆ The currency
  ◆ The Renminbi will in time become one of the strongest currency in East Asia and a quasi-reserve currency like the Euro
Long-Term Projections

<table>
<thead>
<tr>
<th>Year</th>
<th>Real GDP</th>
<th>Real GDP per capita</th>
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<tbody>
<tr>
<td>2002</td>
<td>1.25 trill.</td>
<td>980</td>
</tr>
<tr>
<td>2010</td>
<td>2.25 trill.</td>
<td>1,750</td>
</tr>
<tr>
<td>2020</td>
<td>4.5 trillion</td>
<td>3,400</td>
</tr>
</tbody>
</table>

US$ (2002 prices)
The New Economy and China: The Advantages of Backwardness and Size

- The possibility of leap-frogging—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; mobile and wireless telephones instead of fixed lines; debit and credit cards instead of checks
- The possibility of influencing/setting standards—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 and on the distribution of royalties and license fees
  - e.g., Linux operating system; 3G mobile telephone standards (TD-SCDMA); digital TV; digitization of audio-video signals (AVS as a substitute for MPEG-4)
- 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
- Transformation of the “Old Economy” through the information and communication technology
The New Economy Levels the Playing Field between Large and Small Firms

- Small firms can have access to services and supplies heretofore only available to large firms
  - E.g., by bringing down the cost of securities trading, Charles Schwab and E-trade benefit small investors proportionally much more than large investors
  - Rapid delivery services and warehousing facilities, e.g., Federal Express, 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 more developed economies
  - E.g., B2B dot.coms seem to have relatively greater success in East Asia than in the United States
Key Issues
National Treatment

- The WTO accession agreement provides for national treatment for all foreign enterprises. By extension, national treatment will also apply to all non-state domestic enterprises. This should facilitate mobility of capital and enhance competition.
Integration of National Markets

- Abolition of provincial and local barriers to the flow of goods and services.
- Reform of the procurement practices of the provincial and local governments.
- Promotion of government-supported and supervised standardization and certification.
- Protection of capital against unauthorized taxes and fees and other forms of local predation.
- Enhancement of the mobility of labor.
  - Reform of the residence permit “hukou” system
  - Portability and vesting of pension and retirement accounts
Intellectual Property Rights Protection

- A national commercial and tax court to enforce intellectual property rights over the entire country.
- The central government should take the lead in bulk licensing of software.
- Reciprocity in the protection of patents, copyrights, trademarks and other forms of intellectual property.
Potential Risk Factors
Can China Deal with Another SARS Epidemic?

- 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.
The Critical Path for Continuing Economic Reform (1)

- In order to reform the Chinese commercial banking sector, the non-performing loans (NPL) problem of the state-owned commercial banks must be resolved.
- In order to resolve the NPL problem of the Chinese commercial banks permanently, it is necessary not only to take care of the outstanding stock, but also to stop the continuing flow.
- In order to stop the flow, it is necessary to restructure the borrower enterprises, so that they are independently viable without relying on new loans afterwards.
- In order to insure the viability of the restructured SOEs, most of the existing obligations of the SOEs must be assumed by the central and local governments, i.e., “socialized,” or by the individual employees themselves.
The Critical Path for Continuing Economic Reform (2)

- Socialization of these obligations requires, in turn, the creation of a credible social safety net—a viable social security and pension system (including unemployment “insurance”) to take care of both the inherited historical problems and the future—and the provision of social services by the local governments instead of the SOEs.
- Provision of social services by the provincial and local governments instead of the enterprises requires an independent source of revenue, through either the sharing of revenue with the central government, the division/sharing of tax bases, and direct and indirect central government subsidies (e.g., through tax preferences).
- Thus, continued economic reform must start with the creation of a social safety net and the division/sharing of social responsibilities and revenue/tax bases.
Non-Performing “Loans” of the State-Owned Commercial Banks

- The four major state-owned commercial banks account for 67% of all deposits (approximately 20 trillion Yuan) and 61% of all loans (15 trillion Yuan) and 90% of the loans of the state-owned enterprises (SOEs). The total volume of loans at the four major commercial banks amounted to 8 trillion Yuan (or US$967 billion).
- Non-performance is no surprise to either the lenders or the borrowers
- In terms of flows, they amount to 2-3% of GDP, comparable to government budget deficits in many countries
- In terms of stocks, they range from approximately a quarter of the outstanding loans, or approximately 2 trillion Yuan (US$240 billion) (People’s Bank of China (PBOC)) up to US$500 billion; in June 2003 (22.19% according to the China Banking Regulatory Commission (CBRC), down 4.02% from year end 2002), Moody’s Investors Service estimates that the level of non-performing loans can be as high as 45% or 3.6 trillion Yuan (US$430 billion) (IHT, June 27, 2003) and Standard and Poor estimated these non-performing loans to be US$750 billion (IHT, 6/24/2003). Standard and Poor also estimated the NPL ratio to have declined from 50% at year end 2001, to 48% at year-end 2002 and 44-45% at year-end 2003 (WSJ, 9/9/2003). As a percent of GDP, these estimates range between 20 and 60%.
- Average loan loss reserves are approximately 6% of total loans and hence approximately 13% of the non-performing loans.
- In the mid-1990s, four asset management companies (AMCs) were formed to assume 1.4 trillion Yuan (US$169 billion) of NPLs from the four major state-owned commercial banks
Non-Performing “Loans” of the State-Owned Commercial Banks

- Assuming that only 25% of the NPLs are ultimately recoverable, the bad debt provision required ranges between 15 and 45% of the current GDP of 10 trillion. (Auctions for the NPL portfolios have been held successfully recently with a recovery ratio of approximately 25%. Goldman Sachs used a recovery ratio of 40%).

- More recent experience indicates that the recovery ratio may well be higher—the People’s Bank of China reported in October 2002 that the four asset-management companies have disposed of a total of US$28.1 billion of non-performing loans and recovered US$10 billion, or slightly more than 30%. Hua Rong Asset Management Company, which was formed to handle the non-performing loans of the Industrial and Commercial Bank of China (ICBC), sold US$5.3 billion of non-performing loans and recovered US$2.6 billion, or almost half. Similarly, Agricultural Bank of China, Bank of China, and the Construction Bank of China sold respectively US$10 billion, US$4 billion and US$9 billion worth of non-performing assets.

- The recovery rate is not independent of the criteria used for the classification of the NPLs. It is reasonable to use a higher recovery rate if the estimated NPL ratio is higher.

- In May 2003, LIU Mingkang, Chairman of the China Banking Regulatory Commission, indicated that non-performing loans have been reduced from 26.12% of the total to 24.13% of the total as of year-end 2002. They are likely to be further reduced to 20-21% at the end of 2003. (The China Construction Bank recently announced that its NPL ratio was down to 12.91% at the end of 2003/H1.)
Non-Performing “Loans” of the State-Owned Commercial Banks

The loans should be regarded as indirect loans to the central government which also owns all of the major banks, i.e. public debt.

Outstanding Chinese national debt is approximately 18% of GDP (compared to 60-70% for the United States, 140% for Japan, 75% for Zone Euro and 160% for Belgium).

Total public debt, assuming the conversion of all non-recoverable non-performing loans into public debt, may be estimated to be approximately 35-55% of Chinese GDP.

Vice Minister LOU Jiwei estimated that state assumption of the NPLs would have raised the public debt/GDP ratio by approximately 20 percentage points.
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.

despite the large 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). It is projected to be approximately US$10 billion for 2003, or 1.5% of total Chinese international trade.

China will have a trade deficit with the rest of the World, which is projected to be on the order of US$70 billion, for 2003. The trade surplus vis-à-vis the U.S. is projected to be in the US$80 billion range.

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. 

Lawrence J. Lau, Stanford University
## Alternative Estimates of U.S.-China Merchandise Trade Balance (billion US$)

<table>
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<tr>
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Lawrence J. Lau, Stanford University
### Table 2: U. S. Balance of Trade

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<tr>
<th>Billions of US$</th>
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<th>2003H1</th>
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<td>($32 )</td>
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<td>($14)</td>
<td>($14)</td>
<td>($5)</td>
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<tr>
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<td>($15)</td>
<td>($14)</td>
<td>($7)</td>
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U.S. Trade Balance (billion US$) with the World and Selected East Asian Economies
Chinese Trade Balance (billion US$) with the World and Selected East Asian Economies

<table>
<thead>
<tr>
<th></th>
<th>Billions of US$</th>
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<th>2002</th>
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<td>($12)</td>
<td>($36)</td>
<td>($18)</td>
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Table 3: Chinese Balance of Trade
Exchange Rate Mechanism: The Chinese Trade Surplus vis-à-vis the United States

- However, the exports have mostly originated from foreign-invested enterprises and are the direct consequences of the rapid expansion of global out-sourcing made possible by the revolution in information and communication technology.
- The domestic value-added content of Chinese exports to the U.S. is low—it may be estimated at 20%. (Equivalently, the import content of Chinese exports to the U.S. is a high 80%.) Chinese exports to the World is not quite 30% of Chinese GDP. Chinese exports to the U.S. may be estimated to be less than 10% of Chinese GDP. Thus, the Chinese GDP attributable to Chinese exports to the U.S. is no more than 2%. The Chinese GNP attributable to Chinese exports to the U.S. is most likely smaller because most of the profits from such exports accrue to the foreign shareholders and owners of the exporting enterprises.
- Most of the exports operations consist of “processing and assembly”—the final finishing of products using intermediate inputs produced elsewhere. What used to be exported from Japan, Hong Kong, South Korea and Taiwan are now finished and exported from China. They are considered Chinese exports—Thus, the trade surpluses of Japan, Hong Kong, South Korea and Taiwan vis-à-vis the United States have fallen at the same time that their surpluses vis-à-vis China have risen, and the Chinese surplus vis-à-vis the United States has risen. It is due mostly to the shifting of the location of the final finishing of the product. (E.g., Dell, Nike).
Exchange Rate Mechanism:
The Relative Value-Added from Exports

- The domestic value-added content of Chinese exports to the U.S. is only 20 percent. The domestic value-added content of U.S. exports to China is much higher. (The top 5 U.S. exports to China in 2002 are: 1. Aircraft and associated equipment; 2. Thermionic, Cold Cathode and Photocathode Valves; 3. Telecommunication Equipment; 4. Oil Seeds and Oleaginous Fruit; and 5. Measuring/Checking/Analysing Instruments.)

- The adjusted Chinese exports to the U.S. is approximately US$105 billion, f.o.b. and the adjusted U.S. exports to China is approximately US$27.5 billion, f.o.b. If we assume the U.S. domestic value-added content is 60 percent, then the domestic value-added of Chinese exports to the U.S. is US$21 billion and the domestic value-added of U.S. exports to China is US$18.5 billion. These two numbers are not that far apart and 60% may well be an under-estimate of the domestic value-added content of U.S. exports to China.

- In terms of value-added created in each country, the gains from trade between U.S. and China seem not to be too inequitably distributed. In addition, the U.S. has a surplus in trade in services vis-à-vis China of more than US$ 2 billion, and in trade in services the domestic value-added content is almost 100%.
Exchange Rate Mechanism: Will Revaluation Work?

- 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: Will Revaluation Work?

Moreover, there are both macroeconomic and microeconomic reasons why a revaluation of the Renminbi will not reduce the U.S. trade deficit:
- Savings-investment imbalance
- Diversion of processing and assembly activities to third countries with similarly low costs

Far more effective in increasing U.S. exports and reducing the U.S. trade deficit is a revaluation of the currencies of countries that compete directly with U.S. exports. China competes with the U.S. in very few export markets. For third countries like China, it is not the values of their exchange rates vis-à-vis the U.S. Dollar that determine whether they will buy from Airbus or Boeing, it is the Euro/US$ exchange rate.

A precipitous revaluation of the Renminbi may lead to a flight from the US$ by Chinese nationals, possibly driving up the rate of interest in the United States.

Both Dr. Glenn Hubbard, a former Chairman of the Council of Economic Advisers, and Dr. Gregory Mankiw, the current Chairman of the Council of Economic Advisers, have said that a revaluation of the Renminbi is unlikely to be very effective in reducing job losses in the U.S.

Standard and Poor, the rating agency, supports the decision of China not to revalue the Yuan on the grounds that a floating of the currency will damage China’s credit rating.
Exchange Rate Mechanism: Will Revaluation Work?

- Revaluation of the Renminbi, even unaccompanied by the removal of outbound capital control, is also likely to pose some risks to the financial institutions and enterprises in China because of the requirement of “marking to market”. For example, the People’s Bank of China (PBOC), the central bank, holds approximately US$360 billion of foreign exchange reserves, with perhaps more than 70% of which denominated in US$. It will have to take a massive write-down in Renminbi terms upon revaluation. It has been estimated that an additional US$150 billion are held by Chinese enterprises and households as deposits at Chinese commercial banks. A full-fledged banking crisis may ensue if Chinese commercial banks have to write down their currency losses.

- It is probably counterproductive for the United States to demand that China do something that is costly to China but does not do the United States any good. Forcing China to revalue does not really help the U.S. solve its job problem fundamentally.
Exchange Rate Mechanism:
Equilibrium in the Foreign Exchange Market

- 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

- 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?

- 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: China Can Import More from the U.S. and Elsewhere

- China can import more from the United States
  - In effect, Chinese firms exchange goods for greenbacks, pieces of paper that can be printed at virtually zero cost; they sell the greenbacks to the Chinese central bank for Renminbi; and the central bank in turn exchanges the greenbacks for other pieces of paper, call bonds, which can also be printed at virtually zero cost. It is high time that the Chinese should turn back the pieces of paper for some real goods.
  - Given the levels of Chinese exports and imports and external debt levels relative to its GDP, there is no need for the Chinese central bank to accumulate more foreign exchange reserves.

- Promotion of U.S. exports of goods to China
  - Specialty exports such as Harley-Davidson motor cycles, Corvette cars
  - Expedited processing for applications of export control waiver by the U.S.

- Promotion of invisible/intangible “exports” of services—China has really opened up tourism in a big way (US$5,000 per person per trip, individual passports, individual tourism is now a legitimate reason for traveling abroad)
  - Promotion of tourism, education (more Chinese students for universities and graduate schools), and healthcare (medical treatment) in the United States
  - Logistics and distribution activities by U.S. and other foreign firms
  - Sports exhibitions, movie rentals, and other service imports from U.S. and elsewhere

- Enhanced intellectual property rights protection can greatly augment U.S. export revenue from China.

- Building strategic reserves of oil and other minerals and natural resources.
Outbound foreign direct investment, especially strategic foreign direct investment, should be promoted and encouraged. For example, Chinese firms may be encouraged to invest in oil reserves and other natural resources overseas. For another example, Chinese textile firms may be encouraged to invest in the U.S. textile industry. There may well be complementarities and synergies between industries on the decline in one country but on the rise in the other. Many of the benefits and costs of international trade can be internalized. In particular, the potentially displaced workers can be compensated by the potential beneficiaries of the trade, firms that can, in turn, pass the cost to the general public by charging slightly higher prices. Chinese firms should also be encouraged to make strategic investments in listed and unlisted companies in the U.S. and elsewhere.

Tax treaties can be concluded between China and the U.S. and other countries to facilitate Chinese outbound foreign direct investment.

China can make it easier for foreign direct investors to repatriate their principal and profits.
Exchange Rate Mechanism: Direct and Portfolio Investments and Loans

- China can afford to have regulated orderly outflows of portfolio investments, e.g., through closed-end outbound mutual funds (e.g., indexed funds based on U.S. market indexes (S&P 500 funds?)) and China Depositary Receipts issued by foreign (including U.S.) publicly listed companies and listed on the Chinese Stock Exchanges, and “qualified domestic institutional investors (QDIIs)”. These vehicles have the characteristics that they still require approval so that the Chinese Government can control both the timing and the volume of these flows. In addition, with the exception of the QDIIs, the other vehicles only generate a one-time outflow of foreign exchange and does not create potentially disruptive back and forth flows of foreign exchange.

- China can permit foreign firms and multilateral organizations to raise funds in either Renminbi or in U.S. Dollars in the domestic Chinese capital markets. Funds raised in Renminbi, can, at the option of the issuer, be converted into U.S. dollars through the People’s Bank of China at the time that the funds are raised.

- Instead of floating the shares of good Chinese companies overseas, they should be floated domestically (China no longer needs the foreign exchange) but can open up to foreign portfolio investors to invest in the Chinese market.

- Increased foreign aid and foreign loans to multilateral organizations and to low-income developing economies—e.g., loans repayable in the local currency.
Exchange Rate Mechanism: Adjusting the Exchange Rate

- 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.
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 the real exchange rate more or less constant.

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.
The Taiwan Straits

- Taiwan is the only issue on which there is little flexibility for any movement.
- A war in the Taiwan Straits will have disastrous consequences for all.
- However, the status quo can be maintained with careful management.
Conclusion

- The prospects for continued rapid growth of the Chinese economy are excellent.
- The high domestic savings rate implies a high rate of capital accumulation. The abundant supply of surplus labor implies a low and steady real wage rate and keeps the marginal productivity of capital high. A continuing high rate of growth of real output is the result.
- The low external debt (coupled with capital control) and the existence of significant state-owned assets minimize the probability of a major crisis.