Contributing Factors to China's High Growth, and Its Future Prospects

Summary and Selected Figures and Tables

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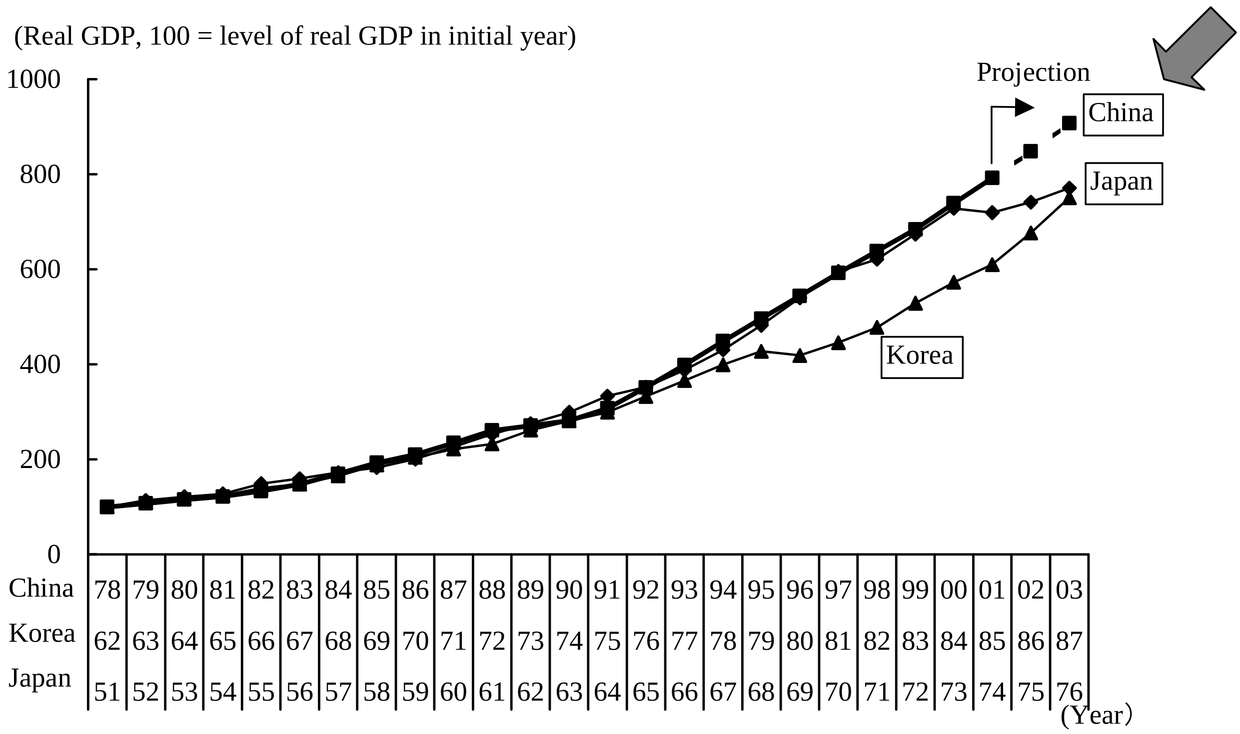
1. Dramatically Changed Chinese Economy: Using FDI Inflows As Leverage

- China's economy maintained high growth throughout the 1990s; it not only increased industrial product exports, but also expanded its world export market share in high-tech products. It became "The Factory of the World."

Figure 1. Comparison of Growth Performance in High Growth Era: China, Japan, Korea



Source: World Bank, *World Development Indicators*, Cabinet Office, Japan.

Note: Average annual growth rate in China's high growth era (1979-2001) is 9.4%. For Japan (1951-73) and Korea (1962-1971), the growth rates are 9.4%, 9.3%, respectively.

- The main underlying condition for the change was: foreign direct investment (FDI) inflows rapidly grew in the 1990s and played a significant role in economic growth. FDI functioned (a) by working as capital formation in the non-state-owned sector, and (b) by improving productivity through technology transfer.

- Against this background, an "argument for an economic threat by China" has been developed in Japan, which stems in part from an excessively sensitive psychological response.

Table 2. China as "The Factory of the World"

(i) The top 10 export winners ranked by a rise in export share, by technology category (1985-2000)

	all sectors	Resource-based manufactures	Non-resource-based manufactures	High-technology manufactures	Medium-technology manufactures	Low-technology manufactures
1	China	Ireland	China	China	China	China
2	United States	United States	Mexico	Malaysia	Mexico	United States
3	Republic of Korea	China	Malaysia	Taiwan Province of China	United States	Mexico
4	Mexico	Republic of Korea	United States	Republic of Korea	Republic of Korea	Indonesia
5	Malaysia	India	Thailand	Singapore	Spain	Thailand
6	Ireland	Russian Federation	Republic of Korea	Mexico	Taiwan Province of China	Malaysia
7	Thailand	Thailand	Singapore	Philippines	Malaysia	Canada
8	Taiwan Province of China	Indonesia	Philippines	Thailand	Thailand	Turkey
9	Singapore	Israel	Indonesia	Ireland	Hungary	India
10	Spain	Japan	Taiwan Province of China	Finland	Indonesia	Poland

Source: UNCTAD, *World Investment Report 2002.*

Note: Russian Federation is ranked based on 1995-2000 data.

(ii) China's export structure

	1985	1990	1995	2000
I. Market share in the world export	**1.6**	**2.8**	**4.8**	**6.1**
1.Primary Products	2.4	2.6	2.5	2.3
2.Manufactures based on natural resources	1.1	1.3	2.1	2.7
3.Manufactures not based on natural resources	1.5	3.4	6.1	7.8
Low technology	4.5	9.1	15.5	18.7
Medium technology	0.4	1.4	2.6	3.6
High technology	0.4	1.4	3.6	6.0
4.Others	0.7	0.7	1.4	1.8
II. Export composition	**100.0**	**100.0**	**100.0**	**100.0**
1.Primary Products	35.0	14.6	7.0	4.7
2.Manufactures based on natural resources	13.6	8.2	7.4	6.9
3.Manufactures not based on natural resources	50.0	76.2	84.6	87.1
Low technology	39.7	53.6	53.6	47.6
Medium technology	7.7	15.4	16.9	17.3
High technology	2.6	7.3	14.2	22.4
4.Others	1.4	0.8	1.0	1.1

Source: UNCTAD, *World Investment Report 2002.*

(iii) Comparative advantage of east Asian economies by stages of production

	Primary	Basic manufacturing	Intermediate goods	Equipment goods	Mixed products	Consumption goods	Others
China	-3.5	-2.0	-17.5	-7.9	4.1	28.6	-1.7
Thailand	-0.4	-8.5	-9.1	-5.1	10.2	13.1	-0.2
Malaysia	8.2	-6.5	-6.4	-4.2	4.1	7.4	-2.5
Indonesia	22.9	-7.8	-5.9	-22.5	5.7	9.5	-1.9
Philippines	-7.6	-5.6	0.5	3.3	1.2	8.9	-0.8
India	-4.2	-4.3	2.5	-12.8	-0.7	17.0	2.3
Taiwan	-12.7	-8.8	4.2	12.7	4.8	2.4	-2.6
Korea	-20.4	-5.0	9.4	0.4	2.4	12.9	0.4
Japan	-27.1	0.0	14.9	18.2	-10.9	4.4	0.5

Source: F. Lemoine, "FDI and the Opening Up of China's Economy," *CEPII Working Paper* 00-11.

Note: Comparative advantage is calculated as a difference between each category's share in exports and in imports.

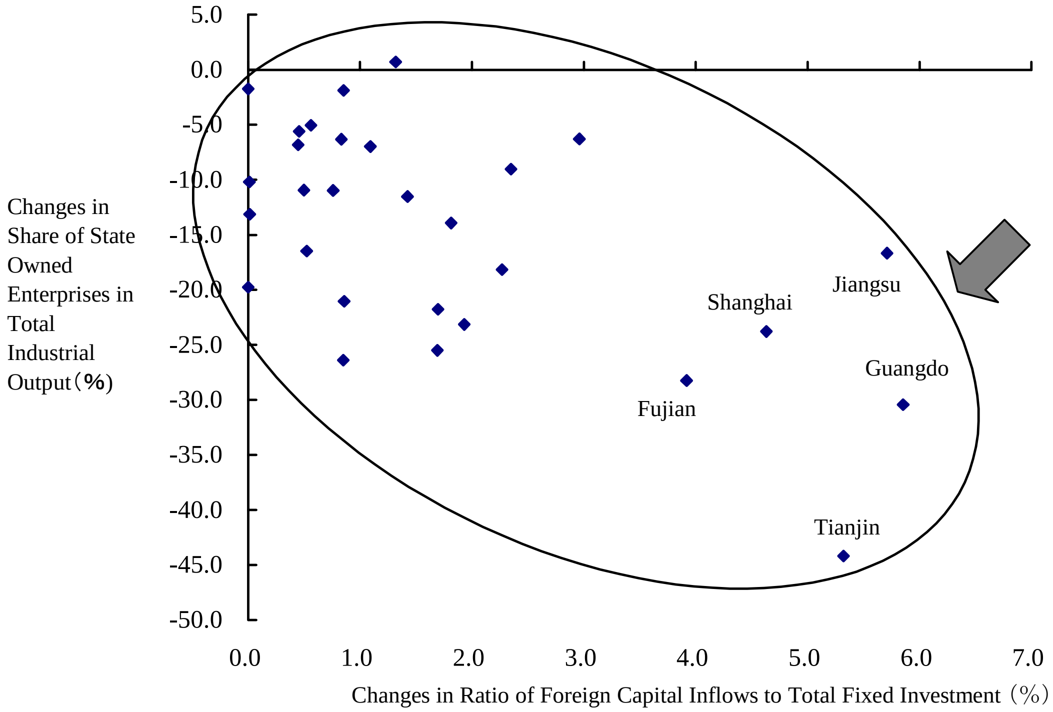
2. Policies and Economic Conditions That Helped To Attract FDI Inflows

- China gradually introduced a market-oriented system during the reform period, which contributed to the stable economic growth of the time. This constituted the fundamental policy background for the massive FDI inflows.

- In particular, favorable treatment aimed at attracting export-oriented foreign manufacturers since the 1980s facilitated the expansion of foreign invested enterprises (FIEs) specialized in processing and assembling.

Figure 3. Changes in Share of State Owned Enterprises in Total Industrial Output, and Ratio of Foreign Capital Inflows to Total Fixed Investment (1990-2000)

Shares of state owned industrial output declined in provinces or municipalities where FIEs expanded intensively



Source: *China Statistical Yearbook.*

Note: Value-added industrial output. Data for Sichuan, Chongqing, and Hainan are excluded.

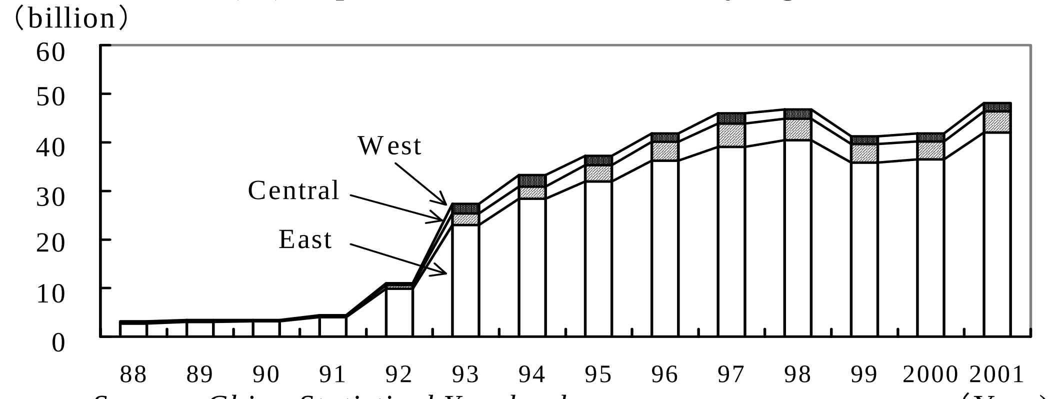
- Moreover, Deng Xiaoping's famous trip to the southern coastal regions in 1992, which accelerated China's economic reform process and its open-door policy, resulted in the expansion of FIEs' activities to domestic market-oriented manufacturing, to a burgeoning real estate industry, and the spread to the mid-west regions.

- Economic conditions that contributed to attracting FDI inflows are: internationally lower labor costs, and a huge consumer market that is emerging with the country's 1.3 billion people. Neither condition will become exhausted in the near future, considering the abundant labor force in rural areas, and the observed lasting population inflows into urban areas.

Figure 4. FDI Inflows to China by Region

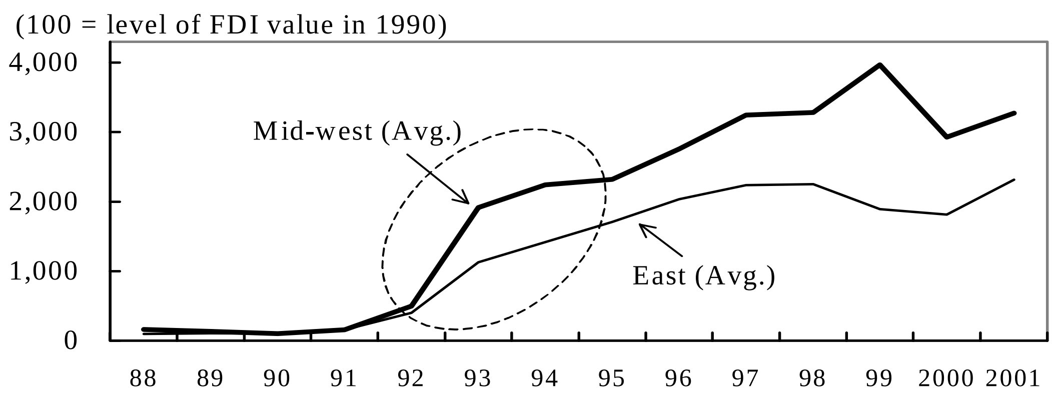
FDI inflows spread to mid-west regions in the 1990s

(i) Implemented Value of FDIs by region



Source: China Statistical Yearbook.

(ii) Growth of FDI implemented value by region



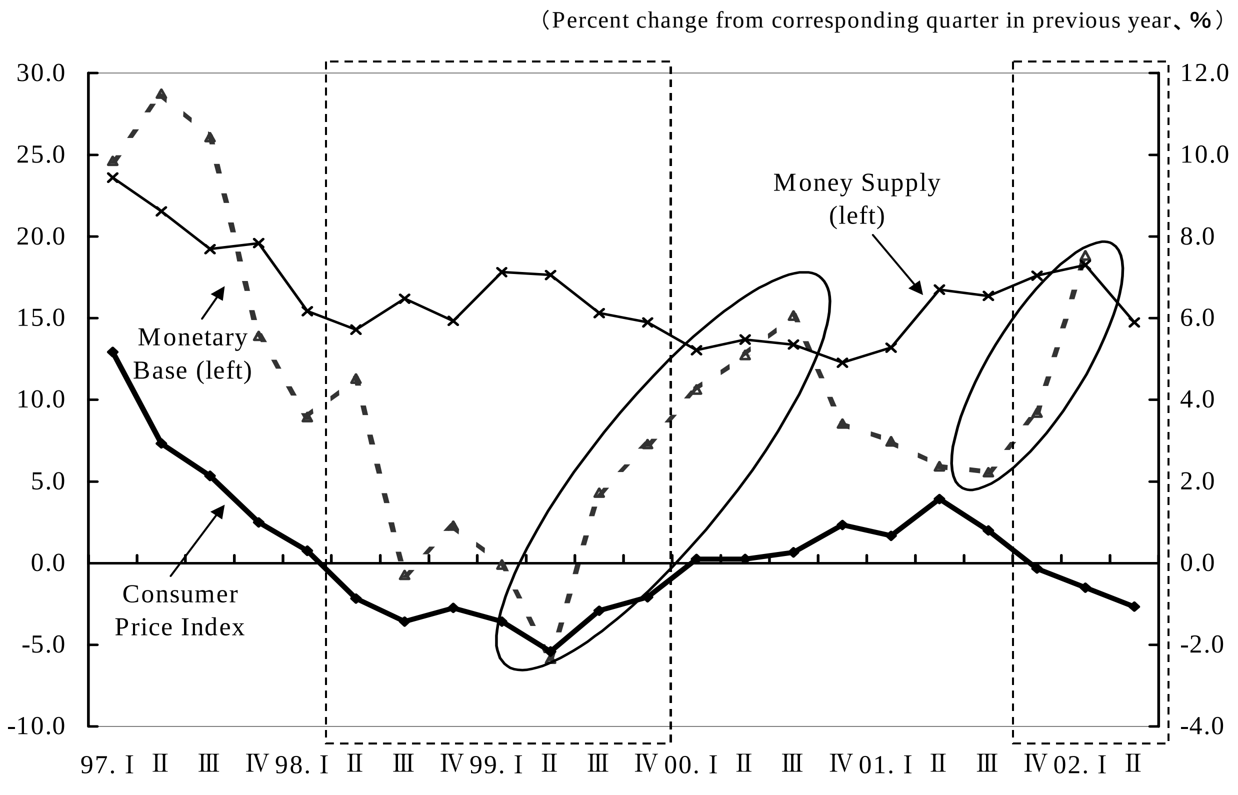
Source: China Statistical Yearbook.

3. Possibly Lasting Deflationary Pressures

- China's nation-wide deflationary trend since 1998 is mainly attributable to the supply-side of the economy, such as excessive production by the state-owned enterprises (SOEs) and an abundant labor force. Since supply-side economic problems are difficult to overcome in the short run, deflationary pressures could last for a while.

Figure 5. Aggressively Eased Monetary Condition Against Deflation

Money supply and inflation rate in China



Source: *The People's Bank of China Quarterly Statistical Bulletin, China Statistical Yearbook.*

- Despite the massive FDI inflows in the 1990s, SOEs' tendencies of inflexible production and excessive hiring are relatively maintained.

- China's accession to the WTO will attract more various FIEs, and will induce tariff rate reductions and relaxations or the elimination of non-tariff barriers. As a result, the exposure of SOEs and the agricultural sector to international competition may generate huge unemployment and might add deflationary pressures.

Table 6. Contributing Factors to a Consumer Price Decline in 1999

Abundant labor force, and excessive production by SOEs
are the main causes of deflation

1. Estimation method

For 30 China's provinces and municipalities, we regressed regional inflation rates in 1999 (percent change of CPI from previous year) on the explanatory variables shown in the table below.

2. OLS results

(Figures in parentheses are t-statistics)

Constant	Labor market condition	Labor cost	Excessive production	Adjusted R-squared
0.371 (0.747)	-2.073 (-2.287)	0.054 (2.440)	-0.311 (-1.647)	0.363

3. Contributions to percent change in CPI

percent change in CPI	Labor market condition	Labor cost	Excessive production	Others
-1.40	-0.61	-0.44	-0.57	0.22

Appendix: Percent change in CPI by region (1999)

(Number of provinces and municipalities)

	East	Central	West
0.0 to 1.5	2 (Beijing,Shanghai)	1 (Hunan)	0
-1.0 to 0.0	2 (Fujian,Guangdong)	1 (Shanxi)	6 (Chongqing,Guizhou,Yunnan, Qinghai,Tibet,Inner Mongolia)
-2.0 to -1.0	7 (Tianjin.Hebei,Liaoning,Jiangsu, Zhejiang,Guangdong,Hainan)	1 (Jiangxi)	2 (Sichuan,Ningxia)
less than or equal to −2.0	0	5 (Jilin,Heilongjiang,Anhui, Henan,Hubei)	4 (Shaanxi,Gansu,Xinjiang,Guangxi)

Source: *China Statistical Yearbook.*

Note: Explanatory variables for labor market condition, labor cost, and excessive production are;
(1- job offers/job seekers), (nominal wage growth - labor productivity growth in manufacturing sector), and (1- proportion of SOEs' industrial products sold), respectively.

4. Two Possible Scenarios for the Chinese Economy up to 2010

- Foreign capital significantly contributed to GDP growth in the first half of the 1990s, in which FDI inflows grew rapidly.

Table 7. Contributing Factors to Economic Growth in the 1990s

Foreign capital significantly contributed to GDP growth in the first half of the 1990s

(Yearly average, figures in parentheses are contribution ratio expressed as percentages)

	Real GDP growth rate					
		Real per capita GDP growth rate	Contributions			Population growth rate
			Foreign capital-labor ratio	Domestic capital-labor ratio	TFP	
1990-1995	12.0 (100.0)	10.8 (90.1)	3.4 (28.5)	4.4 (36.7)	3.0 (24.9)	1.2 (9.9)
1995-2000	8.3 (100.0)	7.3 (88.3)	0.7 (8.7)	3.3 (39.4)	3.3 (40.1)	1.0 (11.7)

1. Estimation method

For 30 China's provinces and municipalities, we regressed changes in regional real per capita GDP on changes in foreign and domestic capital-labor ratio. (Regression results are shown below.) The labor force is proxied by the population.

2. OLS results

(Figures in parentheses are t-statistics)

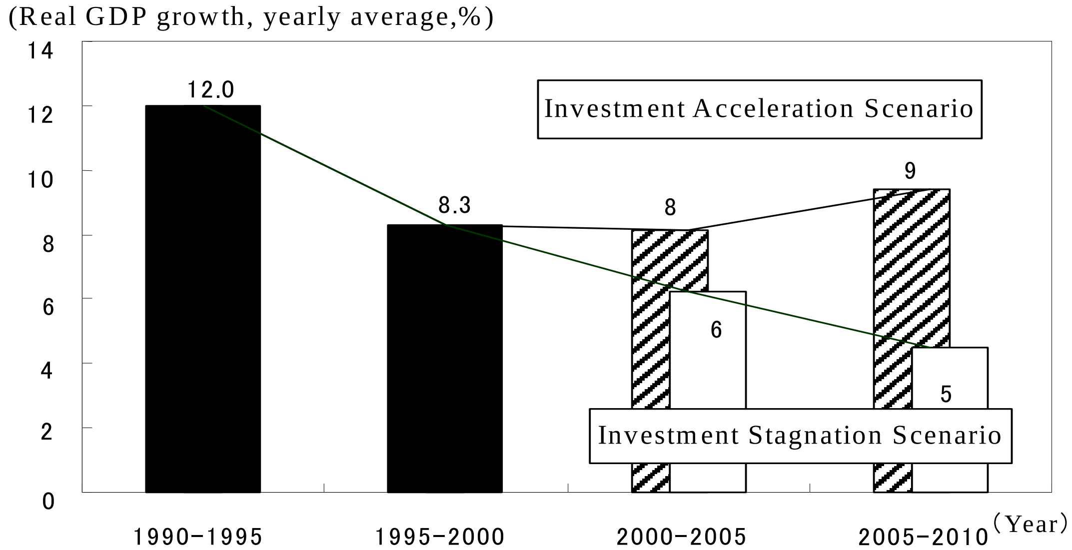
	Constant	Changes in foreign capital-labor ratio	Changes in domestic capital-labor ratio	Adjusted R-squared
1990-1995	2.915 (1.446)	0.071 (2.604)	0.333 (2.635)	0.333
1995-2000	3.964 (3.507)	0.049 (1.843)	0.318 (3.705)	0.345

- Based on the estimates of domestic and foreign capital contribution to growth in the 1990s, a yearly average of 8 to 9 percent growth is projected for the decade 2000-2010 in the investment acceleration scenario. However, a 5 to 6 percent growth is an alternative possibility in an investment stagnation scenario.

- China's accession to the WTO enhances the necessity of a more rapid domestic economic reform process, which has been gradually implemented so far. Whether China can gain the benefits from the WTO accession smoothly or not hinges on the extent of its capability of further utilization of the market mechanism.

Figure 8. China's Economic Outlook up to 2010

Yearly average of 8 to 9% growth in the investment acceleration scenario,
5 to 6% in the investment stagnation scenario



Contributions to percent change in real per capita GDP growth rate

	Real GDP growth rate	Real per capita GDP growth	Contributions			Population growth rate
			Foreign capital-labor ratio	Domestic capital-labor ratio	TFP	
(i) Investment Acceleration Scenario						
2000-2005	8.2	7.4	0.5	3.6	3.3	0.7
2005-2010	9.4	8.7	0.4	4.9	3.3	0.7
(ii) Investment Stagnation Scenario						
2000-2005	6.2	5.5	0.4	3.1	2	0.7
2005-2010	4.5	3.8	0.2	2.6	1	0.7