

Table 20.1 Non-student Working Age Population, 1952-2005 Headcount, Educational Attainment, Education-enhanced Total							
Year	Total Number L Age 16-65	Percentage of Workers in Each Education Category					Ratio H/L
		No diploma	Primary	Junior High	Senior High	Tertiary	
1952	313,346,294	73.9	19.6	4.8	1.4	0.4	0.90
1965	372,783,230	56.8	30.2	9.2	3.0	0.8	0.98
1978	506,667,822	39.6	33.4	20.6	5.7	0.7	1.07
1990	722,042,872	27.6	33.5	25.8	12.1	1.0	1.18
2000	808,414,668	18.5	34.4	30.6	14.7	1.8	1.26
2005	849,636,604	15.1	32.8	33.6	15.7	2.7	1.31
Mincer weights from 2000 wage data		0.818	1	1.346	2.010	3.277	

Source: Appendix. Working age population includes ages 16-65.

Table 20.2
Average Annual Growth of GDP, Fixed Capital, Labor, and TFP,
With Contributions to TFP Growth, 1952-2005 (percent)

Period	GDP	Average Growth of Inputs			Average TFP Growth	Percentage Shares of GDP Growth Attributable to		
		Fixed Capital	Raw Labor	Education Enhanced		Fixed Capital	Education Enhanced Labor	TFP
		K	L	H		K	Labor H	
1952-2005	7.0	7.7	1.9	2.6	2.1	47.7	21.4	30.9
1952-1978	4.4	5.8	1.9	2.5	0.5	56.3	32.7	11.0
1952-1957	6.5	1.9	1.2	1.7	4.7	12.7	14.9	72.4
1957-1978	3.9	6.7	2.0	2.7	-0.5	73.7	39.7	-13.4
1957-1965	2.4	5.2	1.5	2.1	-1.0	93.1	49.5	-42.6
1965-1978	4.9	7.7	2.4	3.1	-0.2	67.7	36.7	-4.4
1978-2005	9.5	9.6	1.9	2.7	3.8	43.7	16.2	40.1
1978-1985	9.7	9.2	3.4	4.5	3.2	40.6	26.6	32.8
1985-1990	7.7	6.9	2.5	2.9	3.1	38.8	21.5	39.7
1990-1995	11.7	9.1	1.4	1.9	6.7	33.3	9.5	57.3
1995-2000	8.6	10.5	0.9	1.6	3.2	52.7	10.5	36.8
2000-2005	9.5	12.6	1.0	1.8	3.1	57.1	10.6	32.3

Source: Appendix.

Note: Calculations assume that 1952 capital stock is two times that year's GDP; assumed depreciation rate is 9.6 percent.

Table 20.3
Population and Dependency Ratio, 1990-2045

Year	Population (Millions)	Percentage Share			
		Working Age 16-65		Dependents	
		Including Working Age Students	Excluding	Including Working Age Students	Excluding
1990	1,130	65.4	64.1	34.6	35.9
2000	1,263	66.7	64.5	33.3	35.5
2005	1,308	68.8	65.3	31.2	34.7
2015	1,390	70.6	66.4	29.4	33.6
2025	1,457	67.9	63.4	32.1	36.6
2035	1,489	64.1		35.9	
2045	1,497	61.4		38.6	

Source: Data for 1990 from official census results for that year.
Numbers of high school and college students are from Appendix.
Other data are from China population projections posted at
<http://genderstats.worldbank.org/hnpstats/dp.asp>,
accessed 12 November 2006.

Notes:

Dependents are defined as persons aged under 16 and over 65.
We assume that high school and college students are of working age.

Table 20.4
 Projections of Working Age Non-Student Population Ages 16-65: Size and Composition, 2005-2025

Year	Labor Force and Graduates (Millions)			Educational Composition of Non-student Workforce (Percent)					Ratio H/L
	Working Age Non-students L	Annual Graduates Senior High	Tertiary	No Diploma	Primary	Junior High	Senior High	Tertiary	
2005	849.6	8.3	3.1	15.1	32.8	33.6	15.7	2.7	1.31
2010	885.3	9.9	5.0	11.6	29.3	36.6	17.8	4.7	1.39
2015	913.4	12.8	5.0	9.5	25.3	37.8	20.2	7.2	1.48
2020	903.6	11.5	6.9	7.4	21.9	38.2	21.7	10.8	1.58
2025	885.6	12.8	6.6	5.7	19.4	37.0	23.2	14.7	1.69

Source: Appendix

H/L is the ratio of education-enhanced work force (H) to the actual workforce headcount (L)

Values of 1 (respectively 1.35, 2.01, and 3.28) indicate that the average worker has earned a diploma at the primary (respectively junior high, senior high, tertiary) level

Table 20.5
Productivity Consequences of Input Projections and 6 or 9 Percent Growth to 2025

Period	Annual	Average Growth of Inputs %			Average TFP Growth %	Annual Growth of GDP (%)			TFP Share of GDP Growth percent
	GDP Growth %	Fixed Capital K	Labor Input			Attributable to			
			Raw Labor L	Education Enhanced Labor H		Fixed Capital K	Education Enhanced Labor H	TFP Growth	
Version 1									
2005-2015	9.0	9.8	0.7	2.0	3.6	4.2	1.1	3.6	40.4
2015-2025	9.0	8.2	-0.3	1.0	4.9	3.5	0.6	4.9	54.4
2005-2025	9.0	9.0	0.2	1.5	4.3	3.9	0.8	4.3	47.4
1978-2025	9.3	9.4	1.2	2.2	4.0	4.0	1.2	4.0	43.1
1952-2025	7.5	8.1	1.4	2.3	2.7	3.5	1.3	2.7	36.3
Version 2									
2005-2015	9.0	9.0	0.7	2.0	4.0	3.9	1.1	4.0	44.5
2015-2025	9.0	6.6	-0.3	1.0	5.6	2.8	0.6	5.6	62.4
2005-2025	9.0	7.8	0.2	1.5	4.8	3.3	0.8	4.8	53.4
1978-2025	9.3	8.8	1.2	2.2	4.2	3.8	1.2	4.2	45.6
1952-2025	7.5	7.7	1.4	2.3	2.9	3.3	1.3	2.9	38.3
Version 3									
2005-2015	6.0	8.1	0.7	2.0	1.4	3.5	1.1	1.4	23.1
2015-2025	6.0	5.6	-0.3	1.0	3.0	2.4	0.6	3.0	50.7
2005-2025	6.0	6.8	0.2	1.5	2.2	2.9	0.8	2.2	37.0
1978-2025	8.0	8.4	1.2	2.2	3.1	3.6	1.2	3.1	39.1
1952-2025	6.7	7.5	1.4	2.3	2.2	3.2	1.3	2.2	32.4
Version 4									
2005-2015	6.0	7.3	0.7	2.0	1.7	3.1	1.1	1.7	28.7
2015-2025	6.0	4.0	-0.3	1.0	3.7	1.7	0.6	3.7	61.7
2005-2025	6.0	5.7	0.2	1.5	2.7	2.4	0.8	2.7	45.4
1978-2025	8.0	7.9	1.2	2.2	3.3	3.4	1.2	3.3	41.8
1952-2025	6.7	7.1	1.4	2.3	2.3	3.1	1.3	2.3	34.5

Memo item: average TFP growth 1978-2005: 3.8 percent (Table 20.2)

Source: Appendix

Versions 1 and 2 assume 9% GDP growth; Versions 3 and 4 assume 6% growth
Ratio of fixed capital formation to GDP declines linearly from the 2005 figure of 42.3 % to a terminal 2005 level of 35 percent (Versions 1 and 3) or 25 percent (Versions 2 and 4).

Table 20.6
Increase of Per Capita GDP Before and After Growth Deceleration in Three East Asian Economies
(U.S. dollars at 2005 prices and percent per year)

Country	Slowdown Begins	Per Capita GDP When Slowdown Begins Calculated Using		Average Annual Growth of GDP Per Capita			
		PPP	Exchange Rate GDP	Period	Growth Rate	Period	Growth Rate
Japan	1971	\$13,800	\$16,500	1960-1970	10.5	1971-1979	5.2
Taiwan	1990	\$13,370	\$10,880	1980-1989	8.1	1990-1999	6.3
Korea	1992	\$13,370	\$8,810	1982-1991	9.1	1992-2005	5.3

Sources: World Bank, 1981, p. 137; Bank of Korea, 2006, pp. 162-163; Heston, Summers and Aten, 1982; Directorate General of Budget, Accounting and Statistics, 2005 p. 153.

Note: Purchasing power parity per capita GDP figures in current prices were converted to 2005 prices using the GDP deflator for the United States, the main source of international prices used in making the purchasing power parity calculations.

Table 20.7

China's Prognosis for Variables Included in Cross-National Growth Studies:

Variable (expected correlation with growth)	Chinese Prognosis
Openness to trade (+) and foreign investment (+)	Exceptional
Geography (+)	Favorable – long coastline
Tropical location (-)	Favorable – outside tropics
Rich resource endowment (-)	Good (China lacks resources)
Government consumption as share of GDP (-)	Good (ratio is moderate)
Education/human capital (+)	Good to excellent
Political stability (+)	Good (late 1970s-present)
Quality of Institutions	
Law/Property rights (+)	Fair
Corruption (-)	Poor/Fair
Administrative Competence (+)	Good, perhaps excellent
Growth-oriented policy environment (+)	Excellent
Democratic institutions (+)	Poor

Table 20.8
 Changing Ownership Structure for Chinese Industrial Output, 1980-2005
 Percentage Shares of Gross Output at Current Prices

	State Ownership*	Shareholding & Limited Liability Corporations	Collective	Foreign Invested**	Domestic Private
1980	80.78	n.a.	18.51	0.01	0.00
1985	73.12	n.a.	25.48	0.43	0.01
1990	54.60	n.a.	35.62	1.88	5.39
1995	38.50	4.06	37.10	15.85	3.40
2000	34.92	12.52	17.07	26.07	4.46
2005 output share	15.06	25.73	4.42	30.20	22.36
profit share	5.1	33.4	3.8	29.1	18.5
ROA	3.3	6.4	6.3	6.4	6.7

n.a. indicates category for which no data is provided.

* Data for 2000 and 2005 include corporations with 100% state ownership

** includes firms with partial or full ownership by Overseas Chinese and non-Chinese interests.

Sources: for 1980 and 1985, Industrial Census (1985, 3: 88-89); for 1990, Industrial Yearbook (1991, p. 3); for 1995, Industrial Census (1995, General volume, p. 6); for 2000 and 2005, Yearbook (2001, p. 401) and (2006, p.505).

Notes: Omission of minor categories causes annual shares to sum to less than 100 percent.
 1980 and 1985 data limited to "independent accounting units."
 1995 data exclude private, individual, and village-level firms with sales below RMB 1 million.
 2000 and 2005 data exclude non-state firms with sales below RMB5 million.
 ROA = annual pre-tax profits as percent of total assets

Table 20.9
Completed Investment in Fixed Assets
Monthly share of annual total (percent)

	1975	1990	2000	2002	2003	2004	2005
Jan/Feb	6.4	3.4	3.9	4.3	4.5	5.6	5.6
Mar	5.1	4.9	5.3	5.6	6.0	6.4	6.4
Apr	6.0	5.2	5.7	6.5	6.5	6.8	6.6
May	7.2	6.2	6.7	7.5	7.8	7.5	7.6
June	9.1	8.6	9.5	9.8	10.5	10.9	11.0
July	7.4	7.5	7.6	8.2	8.6	9.0	8.9
Aug	7.3	7.2	7.5	8.3	8.5	8.6	8.7
Sept	8.9	8.7	9.4	9.9	9.7	10.0	10.1
Oct	8.0	8.7	9.1	9.4	9.3	9.4	9.4
Nov	9.8	9.5	10.3	9.9	9.7	9.8	9.9
Dec	24.8	30.1	25.0	20.7	18.8	15.9	15.8
Q1&Q2	33.8	28.3	31.1	33.7	35.3	37.3	37.2
Q4	42.6	48.3	44.4	39.9	37.8	35.1	35.1

Source: *China Statistical Yearbook on Investment in Fixed Assets 1950-1995*, p. 77.
China Monthly Economic Indicators, no. 1 (2001), p. 36; no.2 (2003), p. 32; no. 12 (2003),
p. 32; various issues for 2004-2005; *China Monthly Statistics*, various issues, 2005-2006;
and from <http://www.stats.gov.cn/was40/detail> (consulted 25 March 2004)

Table 20.10
Investment in Prevention and Remediation of Environmental Pollution, 1991-2005
Billion current yuan and percent

	1991	1995	2000	2005
Environmental Investment	17.0	30.7	101.5	238.8
as percent of GDP	0.84	0.68	1.13	1.30
as percent of annual investment	3.09	1.88	3.08	2.69

Sources: data for 1991 and 1994 from Vermeer (1998, p. 956).

Data for 2000 and 2005 from Yearbook (2004, p. 454; 2006, pp. 189, 444).

Note: Annual GDP and investment are in current prices.