

China's Recent Economic Performance in International Comparison

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Introduction

At the end of the 1970s China started implementing a policy of opening up trade and investment links with the West (mainly by establishing and expanding a number of special economic zones) and began reforming its economic structure, while maintaining the traditional framework of predominant public ownership. In the context of these reforms, China gradually relaxed mandatory planning, decentralized economic decision-making by granting local governments as well as the non-state sector more power, and liberalized an increasing number of prices. The introduction of gradual reform measures has undoubtedly significantly stimulated economic growth in China.

In view of the fact that China is rapidly emerging as a world economic power, there have recently been lively discussions and controversies about the following important issues:

- to what extent is the Chinese-style gradual transformation superior to the so-called "shock therapy" applied in the eastern part of Europe, and
- where does China now stand in the "catching-up" process of the other rapidly growing Asian economies.

In order to examine these two critical topics empirically, the changes in the (real) GDP level and the level of (real) GDP per capita are investigated in a number of selected transformation and Asian countries (including China) for the period 1960-92.¹ For the purpose of this type of multilateral com-

¹ The real GDP measures annual production of final goods expressed in base year prices and exchange rates. In many cases, however, the real GDP account overstates or understates the economic activities of a country due, for example, to the following reasons:

- This measure excludes underground activity as well as all voluntary and unpaid domestic household work.

parison the GDP data expressed in the so-called Geary-Khamis² International Dollars in 1990 are applied, which were recently estimated by the OECD (see Nam, 1995; Maddison, 1995).

Yet one should bear in mind that there is still a serious statistical inconsistency in measuring China's economic level, also due in part to high inflation and a volatile exchange rate. Consequently, some caution is necessary when interpreting and comparing macroeconomic data from different sources. For example, the World Bank indicated that, although China's GDP per head in 1990 was US\$ 370 on a bilateral exchange-rate basis, it rose to US\$ 1950 when adjusted to purchasing power parities. Other economists argue that it reached US\$ 2600 in the same year.³ According to the OECD multilateral calculation based on the Geary-Khamis method, in 1990 China's GDP per capita amounted to 2700 in 1990 Geary-Khamis International Dollars (see table A3 in annex).

Comparison with Selected Transformation Countries in Eastern Europe

The big bang transformation strategy implemented in eastern Europe since the end of the 1980s made the economies of former socialist countries (Poland, Hungary and former Czechoslovakia as well as USSR) investigated in this study revert to the situation of the early or mid-1970s within a few years. By contrast, China's economic growth has smoothly continued from a low level after the introduction of rural reform in 1978 (see figures 1

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- Since sales of used goods generally do not entail current production, these transactions are also excluded.
 - Changes in the quality of goods and services are not reflected automatically in GDP.
 - GDP includes the production of so-called bads (such as pollution) and goods to counteract, neutralize and control the negative externalities associated with production of such bads (see also Streifford, 1990).

In spite of the shortcomings mentioned above, the real GDP is a reliable indicator which is particularly useful when making an international comparison.

² The Geary-Khamis aggregation approach - initiated by Geary (1958) and amplified by Khamis (1972) - was firstly applied in practice in the context of the United Nations International Comparison Project (ICP) aimed at developing a reliable system of estimating and comparing real GDP and "true" purchasing power of the currencies of a large number of countries (see also Kravis/Heston/Summers, 1978). In this multilateral aggregation method, international prices of various expenditure categories and purchasing power parities (PPPs) of countries are estimated simultaneously from a system of linear equations. These international prices are then employed to value the category quantities of individual countries in international dollars so that they can be added together to get the total GDP.

³ See: A Survey of China, in: *The Economist*, March 18th, 1995.

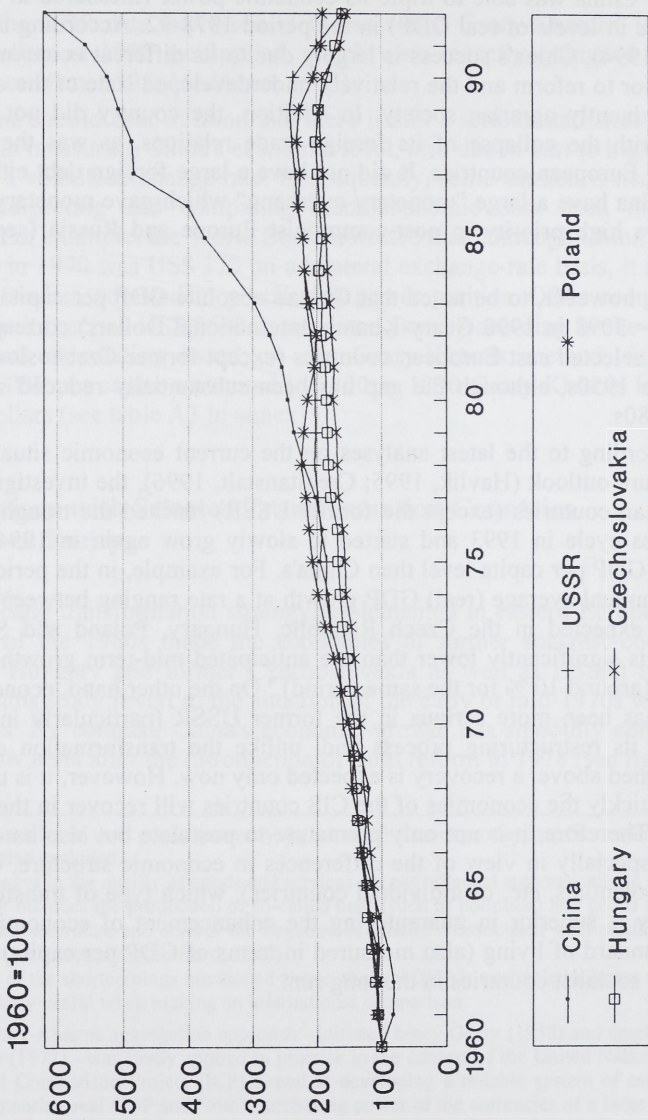
and 2). China was able to triple its economic power (measured in terms of increase in levels of real GDP) in the period 1978-92. According to Sachs/Woo (1994), China's success is largely due to its different economic structure prior to reform and the relatively underdeveloped state of the country's predominantly agrarian society. In addition, the country did not have to cope with the collapse of its foreign trade relations, as was the case in eastern European countries. It did not have a large foreign debt either. Nor did China have a large "monetary overhang" which gave monetary stabilization a high priority in post-communist Europe and Russia (see Nolan, 1994).

It is, however, to be noted that China's absolute GDP per capita level in 1992 (= 3098 in 1990 Geary-Khamis International Dollars) corresponds to that of selected east European countries (except former Czechoslovakia) in the late 1950s, although the gap has been substantially reduced since the late 1980s.

According to the latest analyses on the current economic situation and the future outlook (Havlik, 1995; Creditanstalt, 1996), the investigated east European countries (except the former USSR) reached the trough of their business cycle in 1993 and started to slowly grow again in 1994 from a higher GDP per capita level than China's. For example, in the period 1994-98 an annual average (real) GDP growth at a rate ranging between 3% and 6% is expected in the Czech Republic, Hungary, Poland and Slovakia, which is significantly lower than the anticipated mid-term growth rate for China (around 10 % for the same period).⁴ On the other hand, economic decline has been more serious in the former USSR (particularly in Russia) during its restructuring process and, unlike the transformation countries mentioned above, a recovery is expected only now. However, it is uncertain how quickly the economies of the CIS countries will recover in the coming years. Therefore, it is not only premature to postulate but also hard to predict (especially in view of the differences in economic structure, development potentials, etc. of individual countries), which type of transformation strategy is superior in guaranteeing the enhancement of economic power and standard of living (also measured in terms of GDP per capita) of these former socialist countries in the long run.

⁴ The real GDP growth rate in China amounted to 13.2% in 1993 and to 11.8% in 1994.

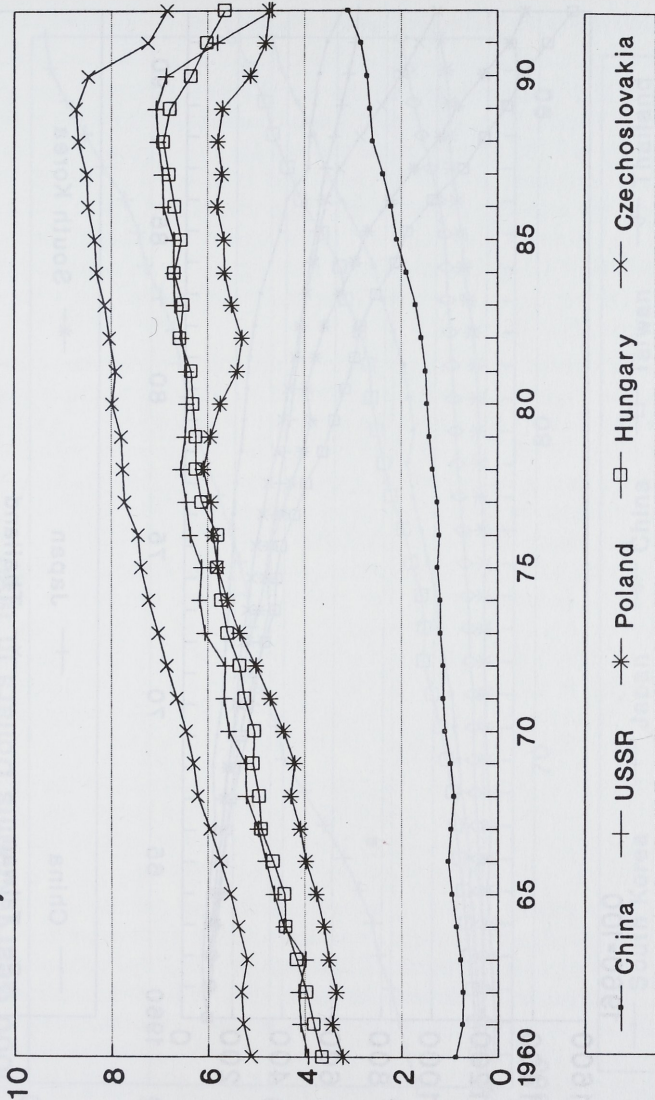
Figure 1: Relative Levels of GDP in Selected Transformation Countries
(Measured in 1990 Geary-Khamis Dollars)



Source: Table A1

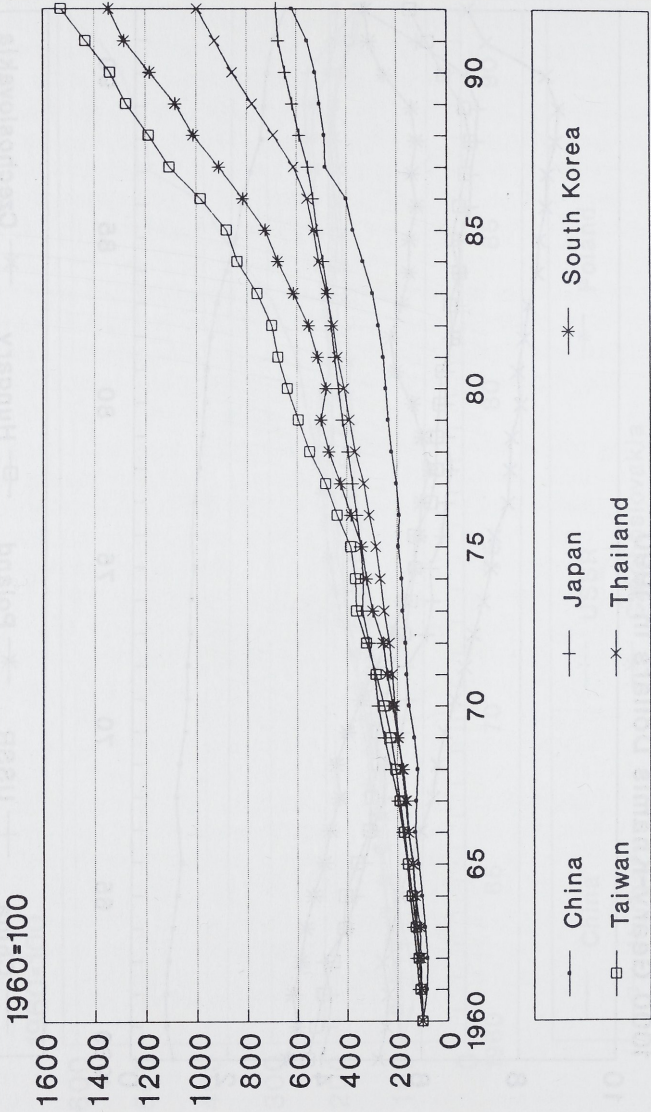
Figure 2: Levels of GDP per Capita in Selected Transformation Countries

1000 Geary-Khamis Dollars in 1990



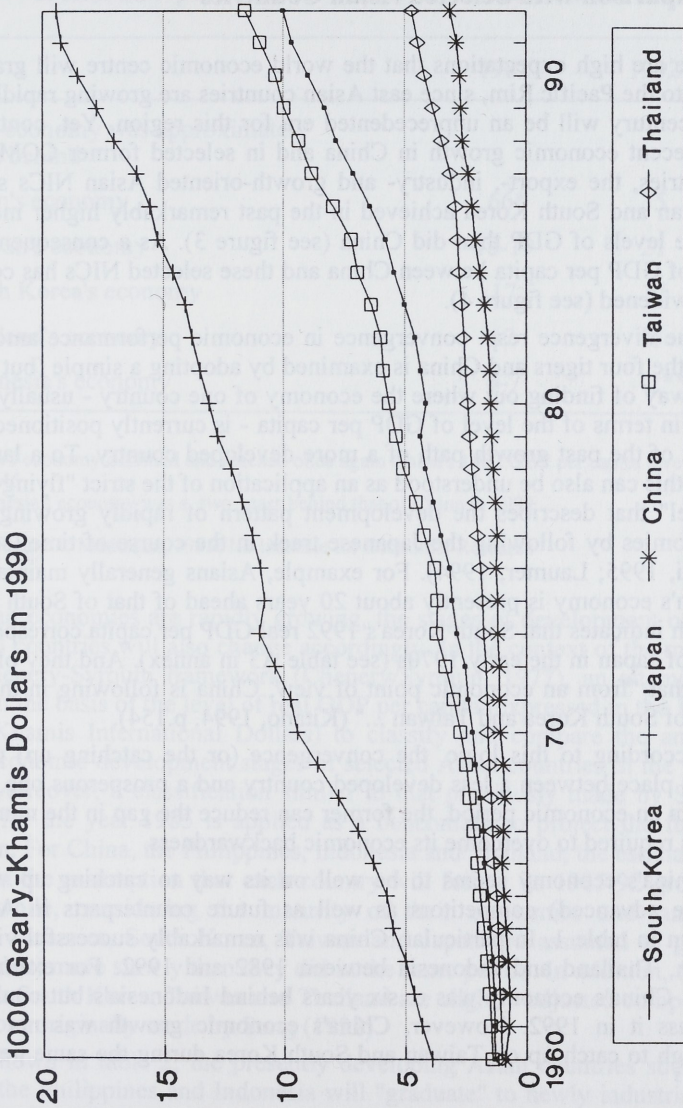
Source: Table A4

Figure 3: Relative Levels of GDP in Selected Asian Countries
(Measured in 1990 Geary-Khamis Dollars)



Source: Table A2

Figure 4: Levels of GDP per Capita in Selected Asian Countries



Source: Table A3

Comparison with Selected Asian Countries

There are high expectations that the world economic centre will gradually shift to the Pacific Rim, since east Asian countries are growing rapidly. The 21st century will be an unprecedented era for this region. Yet, contrary to the recent economic growth in China and in selected former COMECON countries, the export-, industry- and growth-oriented Asian NICs such as Taiwan and South Korea achieved in the past remarkably higher increases in the levels of GDP than did China (see figure 3). As a consequence, the gap of GDP per capita between China and these selected NICs has continually widened (see figure 4).

The divergence resp. convergence in economic performance among Japan, the four tigers and China is examined by adopting a simple (but practical) way of finding out where the economy of one country - usually measured in terms of the level of GDP per capita - is currently positioned in respect of the past growth path of a more developed country. To a large extent, this can also be understood as an application of the strict "flying-geese-model" that describes the development pattern of rapidly growing Asian economies by following the Japanese track in the course of time (see also Ezaki, 1995; Laumer, 1994). For example, Asians generally maintain that Japan's economy is presently about 20 years ahead of that of South Korea, which indicates that South Korea's 1992 real GDP per capita corresponds to that of Japan in the early 1970s (see table A3 in annex). And they often argue that "from an economic point of view, China is following in the footsteps of South Korea and Taiwan ..." (Kitano, 1994, p.154).

According to this logic, the convergence (or the catching up) process takes place between a less developed country and a prosperous one, when, within an economic period, the former can reduce the gap in the number of years required to overcome its economic backwardness.

China's economy seems to be well on its way to catching up with its (more advanced) competitors as well as future counterparts in Asia, as shown in table 1. In particular, China was remarkably successful vis-à-vis Japan, Thailand and Indonesia between 1982 and 1992. For example, in 1982 China's economy was c. six years behind Indonesia's but could well surpass it in 1992. However, China's economic growth was not strong enough to catch up on Taiwan and South Korea during the same period of time.⁵

⁵ It is generally expected that the growth rate for South Korea and Taiwan will decline in the second half of the 1990s.

Table 1: Economic Development Hierarchy in Asia, Classified in Terms of Real GDP per Capita (in 1000 Geary-Khamis Dollars in 1990)

	1982	1992
China's economy was approximately ... years behind		
Japan's economy	66*	35
Taiwan's economy	18-19	21
South Korea's economy	17	17
Thailand's economy	12	5
Indonesia's economy	6-7	-2**

* Japan's economy declined and reached once again China's 1982 GDP per capita level in 1945

** Indonesia's economy was c. two years behind that of China in 1992

Source: Figure 4; Maddison, 1995; Ifo Institute for Economic Research

As Asian economies are rapidly growing, the stages of development of individual countries will also change accordingly. In the context of the modified Chenery-Syrquin framework (Chenery/Syrquin, 1977), an attempt is made on the basis of the level of real GDP per capita (expressed in the 1990 Geary-Khamis International Dollars) to classify and compare the anticipated economic development stages of selected Asian countries in the year 2000. Moreover, a classification similar to that previously made by Song (1992) for the year 1985 is applied as a benchmark to project the future situation. For China, the Philippines, Indonesia and Thailand, the estimate is made on the assumption that each country will follow its 1985-92 growth track, while, considering the maturity of their economies and current growth dynamics, South Korea, Taiwan and Japan are assumed to grow (somewhat) more slowly than they did in the same period. In addition, forecasts for South Korea, Taiwan and Thailand are slightly adjusted compared with those originally made by Song (1992).

As shown in table 2, the presently developing Asian countries such as China, the Philippines and Indonesia will "graduate" to newly industrializing countries (NIC) status by the year 2000, while all current Asian NICs including South Korea and Taiwan will achieve advanced country status

(see also Song, 1992). In general, China's development prospects seem to be more optimistic than those for the Philippines and Indonesia.

Table 2: Development Stages of Economies in Selected Asian Countries, Classified in Terms of Real GDP per Capita

	Type of Stage	Situation in 1985	Anticipated situation in 2000
1	LDC I		
2			
3	LDC II	China/Indonesia/Philippines	
4			
5	NIC I	Thailand	Philippines/Indonesia
6			China
7	NIC II		
8		South Korea	Thailand
9	NIC III	Taiwan	
10			
11	AC I		South Korea
12			Taiwan
13	AC II	Japan	
14			
15	AC III		Japan

Note: LDC = Less developed country; NIC = Newly industrializing country; AC = Advanced country

Source: Ifo Institute for Economic Research; Chenery/Syrquin 1977; Song 1992; Maddison 1995

Conclusion

In contrast to the big bang transformation strategy implemented in most east European countries at the end of the 1980s, China's economic growth has smoothly continued from a low level since the introduction of reform in 1978. It must, however, be noted that China's absolute GDP per capita in

1992 corresponds only to that of most of the east European countries investigated at the end of the 1950s, although the gap has recently been substantially reduced. In addition, economies in selected European transformation countries (except Russia) started to grow again in 1994 from a higher GDP per capita level than China's current one. Because one can not correctly predict the long-term growth pattern of the economies in those transformation countries, it seems to be premature to postulate to what extent the Chinese-style, gradual transformation strategy is superior in guaranteeing the enhancement of the economic power and standard of living (also measured in terms of real GDP per capita) in the long run.

China's economy seems to be well on the way to catching up with its (more advanced) competitors as well as future counterparts in Asia. According to the classification of the development patterns and stages (made on the basis of the level of GDP per capita expressed in the 1990 Geary-Khamis International Dollars) by the flying-geese approach and the Chenery-Syrquin model, China has achieved remarkable success compared with Thailand and Indonesia since the beginning of the 1980s, while its economic growth was not strong enough to catch up on Taiwan and South Korea. Furthermore, China will graduate to newly industrializing country status by the year 2000.

Yet, apart from the fact that Beijing's powerful ruling communists remain unable to reconcile economic growth through the introduction of the free market system, one should also bear in mind that some (economic and political) weaknesses and mistakes have been made in the Chinese transformation process, which are, however, concealed behind its overall success. These errors and negative consequences of the economic reform have recently become more apparent viz. the high volatile inflation rate, the widening east-west regional and urban-rural economic disparity, the instability of state-sector reform, etc. They could seriously hinder future development in China.

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Table A1: Levels of GDP in Selected Transformation Countries (in Million 1990 Geary-Khamis Dollars)

	China		USSR		Poland		Hungary		Czechoslovakia	
	absolute	1960 = 100	absolute	1960 = 100	absolute	1960 = 100	absolute	1960 = 100	absolute	1960 = 100
1960	585598	100.0	843434	100.0	95121	100.0	36431	100.0	69749	100.0
1965	675876	115.4	1068117	126.6	118368	124.4	44770	122.9	78270	112.2
1970	893745	152.6	1351818	160.3	144018	151.4	51974	142.7	92592	132.8
1975	1145317	195.6	1561399	185.1	197289	207.4	61135	167.8	109301	156.7
1976	1121845	191.6	1634585	193.8	202209	212.6	61316	168.3	111050	159.2
1977	1182331	201.9	1673159	198.7	205975	216.5	65164	178.9	116073	166.4
1978	1292770	220.8	1715215	203.4	213446	224.3	66743	182.3	117489	168.4
1979	1375825	234.9	1707083	202.4	209498	220.2	66875	183.6	118488	169.9
1980	1434204	244.9	1709174	202.6	204213	214.7	67549	185.4	121763	174.6
1981	1484760	253.5	1724741	204.5	193341	203.3	68026	186.7	121153	173.7
1982	1595199	272.4	1767262	209.5	191579	201.4	70477	193.5	123512	177.1
1983	1736332	296.5	1823723	216.2	201055	211.4	69753	191.5	125371	179.7
1984	1955405	333.9	1847190	219.0	208526	219.2	71579	196.5	128313	184.0
1985	2189825	373.9	1863687	221.0	210713	221.5	69819	191.6	129313	185.4
1986	2346907	400.7	1940363	230.1	217394	228.5	71217	195.5	131700	188.8
1987	2567484	483.4	1965457	233.0	214479	225.4	72319	198.5	132366	189.8
1988	2848849	486.5	2007280	238.0	219217	230.5	73421	201.5	135308	194.0
1989	2963501	506.1	2037253	241.5	215815	226.9	71776	197.0	136418	195.6
1990	3061000	522.7	1987995	235.7	194920	204.9	66990	183.9	132560	190.1
1991	3257203	556.2	1686868	200.0	183501	192.9	62171	170.7	113686	163.0
1992	3615603	617.4	1365759	161.9	181314	190.6	58141	159.6	106886	153.2

Source: Maddison, 1995; Ifo Institute for Economic Research

Table A2: Levels of GDP in Selected Asian Countries (in Million 1990 Geary-Khamis Dollars)

Year	China		Japan		South Korea		Taiwan		Thailand	
	absolute	1960=100	absolute	1960=100	absolute	1960=100	absolute	1960=100	absolute	1960=100
1960	585598	100.0	354791	100.0	32465	100.0	15611	100.0	27134	100.0
1965	675876	115.4	570624	160.8	44539	137.2	24550	157.3	37987	140.0
1970	893745	152.6	985736	277.8	70480	217.1	39210	251.2	57062	210.3
1975	1145317	195.6	1223760	344.9	110472	340.3	60080	384.9	77372	285.1
1976	1121845	191.6	1275321	359.5	124582	383.7	68408	438.2	84115	310.0
1977	1182331	201.9	1335430	376.4	138088	425.3	75377	482.8	90181	332.4
1978	1292770	220.8	1400434	394.7	152470	469.6	85625	548.5	99263	365.8
1979	1375825	234.9	1477914	416.6	163279	502.9	92624	593.3	105278	388.0
1980	1434204	244.9	1531612	431.7	156404	481.8	99387	636.6	111344	410.3
1981	1484760	253.5	1586414	447.1	167213	515.1	105511	675.9	118352	436.2
1982	1595199	272.4	1636597	461.3	179044	551.5	109257	699.9	123198	454.0
1983	1736332	296.5	1680782	473.7	199200	613.6	118488	759.0	130389	480.5
1984	1955405	333.9	1752541	494.0	219445	676.0	131047	839.5	138471	510.3
1985	2189825	373.9	1839879	518.6	235716	726.1	137537	881.0	144008	530.7
1986	2346907	400.7	1888201	532.2	264646	815.2	153547	983.6	151287	557.6
1987	2567484	483.4	1965750	554.1	295456	910.1	172489	1104.9	165876	611.3
1988	2848849	486.5	2087760	588.4	328631	1012.3	185152	1186.0	188123	693.3
1989	2963501	506.1	2186196	616.2	351505	1082.7	199165	1275.8	211144	778.2
1990	3061000	522.7	2291456	645.9	384174	1183.3	208859	1337.9	232858	858.2
1991	3257203	556.2	2384170	672.0	416425	1282.7	223969	1434.7	251491	926.8
1992	3615603	617.4	2415190	680.7	436416	1344.3	238750	1529.4	270353	996.4

Source: Maddison, 1995; Ifo Institute for Economic Research

Table A3: Levels of GDP per Capita in Selected Asian Countries (in 1990 Geary-Khamis Dollars)

	China		Japan		South Korea		Taiwan		Thailand	
	absolute	1960=100	absolute	1960=100	absolute	1960=100	absolute	1960=100	absolute	1960=100
1960	878	100.0	3879	100.0	1302	100.0	1399	100.0	1029	100.0
1965	945	107.6	5771	148.8	1578	121.2	1899	135.7	1237	120.2
1970	1092	124.4	9448	243.6	2208	169.6	2692	192.4	1596	155.1
1975	1250	142.4	10973	282.9	3131	240.5	3755	268.4	1871	181.8
1976	1205	137.2	11309	291.5	3475	266.9	4189	299.4	1982	192.6
1977	1253	142.7	11727	302.3	3792	291.2	4524	323.4	2072	201.4
1978	1352	154.0	12186	314.2	4124	316.7	5044	360.5	2226	216.3
1979	1420	161.7	12754	328.8	4350	334.1	5352	382.6	2306	224.1
1980	1462	166.5	13113	338.1	4103	315.1	5634	402.7	2384	231.7
1981	1494	170.2	13484	347.6	4318	331.6	5871	419.7	2480	241.0
1982	1582	180.2	13817	356.2	4553	349.7	5971	426.8	2528	245.7
1983	1697	193.3	14093	363.3	4991	383.3	6372	455.5	2621	254.7
1984	1886	214.8	14602	376.4	5431	417.1	6944	496.4	2730	265.3
1985	2084	237.4	15237	392.8	5777	443.7	7187	513.7	2786	270.7
1986	2200	250.6	15542	400.7	6426	493.5	7932	567.0	2873	279.2
1987	2369	269.8	16101	415.1	7107	545.8	8817	630.2	3094	300.7
1988	2586	294.5	17028	439.0	7829	601.3	9357	668.8	3449	335.2
1989	2649	301.7	17757	457.8	8294	637.0	9955	711.6	3808	370.1
1990	2700	307.5	18548	478.2	8977	689.5	10324	738.0	4173	405.5
1991	2832	322.6	19240	496.0	9645	740.8	10957	783.2	4437	431.2
1992	3098	352.8	19425	500.8	10010	768.8	11590	828.4	4694	456.2

Source: Maddison, 1995; Ifo Institute for Economic Research

Table A4: Levels of GDP per Capita in Selected Transformation Countries (in 1990 Geary-Khamis Dollars)

	China		USSR		Poland		Hungary		Czechoslovakia	
	absolute	1960=100	absolute	1960=100	absolute	1960=100	absolute	1960=100	absolute	1960=100
1960	878	100.0	3935	100.0	3218	100.0	3649	100.0	5108	100.0
1965	945	107.6	4626	117.6	3759	116.8	4409	120.8	5528	108.2
1970	1092	124.4	5565	141.4	4428	137.6	5028	137.8	6460	126.5
1975	1250	142.4	6136	155.9	5799	180.2	5805	159.1	7384	144.6
1976	1205	137.2	6366	161.8	5885	182.9	5791	158.7	7444	145.7
1977	1253	142.7	6459	164.1	5936	184.5	6126	167.9	7722	151.2
1978	1352	154.0	6565	166.8	6097	189.5	6253	171.4	7761	151.9
1979	1420	161.7	6480	164.7	5947	184.8	6251	171.3	7790	152.5
1980	1462	166.5	6437	163.6	5740	178.4	6307	172.8	7978	156.2
1981	1494	170.2	6442	163.7	5385	167.3	6350	174.0	7911	154.8
1982	1582	180.2	6544	166.3	5288	164.3	6580	180.3	8038	157.4
1983	1697	193.3	6692	170.1	5498	170.9	6519	178.7	8133	159.2
1984	1886	214.8	6715	170.6	5649	175.5	6703	183.7	8300	162.5
1985	2084	237.4	6715	170.6	5664	176.0	6551	179.5	8343	163.3
1986	2200	250.6	6924	176.0	5804	180.4	6693	183.4	8479	166.0
1987	2369	269.8	6943	176.4	5695	177.0	6809	186.6	8504	166.5
1988	2586	294.5	7032	178.7	5790	180.0	6929	189.9	8675	169.8
1989	2649	301.7	7078	179.9	5685	176.7	6787	186.0	8729	170.9
1990	2700	307.5	6871	174.6	5113	158.9	6348	174.0	8464	165.7
1991	2832	322.6	5793	147.2	4798	149.1	6010	164.7	7244	141.8
1992	3098	352.8	4671	118.7	4726	146.9	5638	154.5	6845	134.0

Source: Maddison, 1995; Ifo Institute for Economic Research