

**INDIA AND CHINA: CONTRASTS IN DEVELOPMENT PERFORMANCE**

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**Restricted for Internal Governmental Use**

**Center for International Studies  
Massachusetts Institute of Technology  
February, 1959**

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A decade has passed since the problems of economic growth in the poorer nations became a major foreign policy concern of the wealthy and powerful nations of the world. In the underdeveloped lands, the ten years reveal extensive planning activity as well as unprecedented inflows of technical and capital assistance on government account. During this period also, the imagination and efforts of many economists and other social scientists all over the world have turned to the task of uncovering the secret to the critical transition--the process by which stagnation may become growth, or progress at a slow rate may be accelerated. Yet very few countries have succeeded in making this transition during the decade. In Asia, where live a large part of the world's population and an even larger part of its poor people, India and Mainland China alone offer some prospect of such achievement in the near future.

The relative progress in the development of these two countries is of great significance. There were strong parallels in their preplan structure and strong contrasts between China's totalitarian and India's democratic programs (18, pp.1-24). Their performance

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relative to one another may influence the programs adopted by other, now less advanced, countries. It will certainly bear upon Soviet and United States foreign policies. Furthermore, the record of the course of development in these two lands provides a unique opportunity for examining the process of development as such. What are the essential economic ingredients? Can they be used with equal effectiveness in democratic and communist societies?

#### I. COMPARATIVE PERFORMANCE

India is now in the last half of its Second Five Year Plan. China initiated its Second Plan on January 1, 1958. Records can actually be compared over the nine-year period ending in 1959. Of course, records are available "more or less." India has continued to publish extensively on its economy and its problems. Since mid-1955 there has been a great expansion in the information available for Mainland China, in official communist publications, and in an expanding flow of press and visiting mission reports.

In some major respects, comparison of the development record is hampered more by lack of data from "open" India than from "closed" China. Inevitably, it is more difficult to estimate national savings or investment when a private sector plays an important role in these basic economic activities than when they are more nearly the prerogative of government. Furthermore officialdom in

India has not yet adapted its statistical services to the requirements of a national development program. Thus, even the official record of the First Five Year Plan does not present investment data for each of the years 1951-1956. There is no explanation as to how the rough figures for total investment over the five years were obtained nor any indication of their sectoral allocation. It is not clear just how such basic magnitudes as total investment in sectors of the economy play their role in planning or in postauditing the plans. In contrast the Chinese, less encumbered, it is true, with the traditional statistics of normal times, focus pointedly on "accumulation," or on "capital constructions." They leave no doubt that these are key magnitudes for their own needs, in planning and in actual development operations. In these circumstances, nonofficial and even personal estimates play a significant role in the Indian data as well as in the Chinese. On the other hand, it is possible to discuss such estimates with Indian officials, to study basic underlying data, and to observe. For China, much of the data, even official data, must remain simply numbers to most students. The data can be "tested" only through checks of internal consistency or logical relationship to some past figures.

A. Gross National Product and Gross Investment

The aggregate figures used in the present analysis are given in Table 1.

TABLE I  
GROSS NATIONAL PRODUCT AND GROSS INVESTMENT  
(At Constant Market Prices)

## A. India

Year <sup>a</sup>	Gross National Product		Gross Investment		
	Billions of Rupees	Ratios (1952=100)	Billions of Rupees	Ratios (1952=100)	Per Cent of GNP
	(1952 Prices)		(1952 Prices)		
1950	101	93.4	9.4	88.7	9.3
1951	103.7	95.9	9.9	93.4	9.5
1952	108.1	100	10.6	100	9.8
1953	114.4	105.8	11.1	104.7	9.7
1954	117.8	109	13.4	126.4	11.4
1955	120.1	111.1	14.5	136.8	12.1
1956	126.1	116.7	16.7	157.5	13.2
1957 <sup>b</sup>	126.8	117.3	17.2	162.3	13.6
1958 <sup>c</sup>	130	120.3	17.5	165.1	13.5

## B. China

Year <sup>a</sup>	Gross National Product		Gross Investment		
	Billions of Yuan	Ratios (1952=100)	Billions of Yuan	Ratios (1952=100)	Per Cent of GNP
	(1952 Prices)		(1952 Prices)		
1950	55.02	81.1	5.31	52.6	9.7
1951	62.85	92.6	7.39	73.2	11.8
1952	67.86	100	10.09	100	14.9
1953	77.06	113.6	12.94	128.2	16.8
1954	81.92	120.7	15.65	155.1	19.1
1955	85.41	125.9	15.38	152.4	18
1956	97.21	143.2	18.62	184.5	19.2
1957	102.42	150.9	24.47	242.5	23.9
1958 <sup>c</sup>	117.50	173.2	25.85	256.2	22

Table 1 (Continued)

- a. For India, accounting year begins April 1; for China, January 1.
- b. Estimates constructed from preliminary official component data.
- c. Orders of magnitude based upon general reports from the two countries.

## Sources:

India. All data for India are my personal estimates, based, however, upon official materials available through 1956-1957 and to a lesser extent for 1957-1958 and 1958-1959. The Government of India (GOI) does prepare estimates of national income at both factor cost and market price level. These are published in an annual "white paper" in March (6). Government has not yet released official annual estimates of capital formation. Where the GOI does make use of investment figures these are given on a net basis (generally for groups of years together), for monetized investment only, and exclusive of changes in stocks (13, pp. 9-10, and 14, pp. 8-11). Finally, GOI estimates in constant prices are based on the year 1948-1949.

Where a large proportion of national product is generated without benefit of financial transactions, as is true for much of agriculture and rural activity in India (and China), nonmonetized investment is of great importance. Indeed, in the very nature of the rural economies, it becomes difficult if not impossible to categorize any meaningful component. Similarly, the accounting devices available when most output is produced by entrepreneurs who are generally illiterate raise doubts about the depreciation adjustment for the private sector, especially in small enterprise. Moreover, "replacement" for depreciated capital takes on a net aspect where the new equipment is modern and the existing machinery long outdated--the frequent situation in these economies. Official data provide estimates for depreciation on government account only. However, the GOI has released "unofficial" estimates on a gross basis and inclusive of transactions made on a barter basis (8, pp. 154-159). These data, and subsequent materials from the same source, were used in deriving the estimates for Table 1.

Preliminary unofficial estimates for changes in working stocks suggest that these expanded by only 1.4 billion rupees over the First Plan. The year-to-year pattern of changes indicates wide annual variations rather than any persistent movement. In view of the partial nature of these data, they could not be incorporated into Table 1. Finally, all data available only in current prices, or in constant 1948-1949 prices, were shifted to a 1952-1953 price basis by the

Table 1. (Continued)

use of official series, with separate price indexes applied for the consumption and investment components of the gross product. (Thus the data of Table 1 do not reflect the post-1952 tendency for the unit costs of investment to increase relative to other costs.)

All these adjustments serve to raise the general level of both the national product and investment series for India in the table above those usually presented; year-to-year fluctuations are less affected, especially for the national product series.

China. Data, 1950-1957 are from W. W. Hollister (5, pp. 132-133). These were constructed from budget and retail sales data and augmented by direct estimates for farm consumption, private investment, various consumer services, and inventory changes (5, pp. xxii-xxiv). Except for the inclusion of changes in working stocks, the data are analytically identical with those presented for India. I have added the 1958 figures. They reflect about as large an increase in real product as any actually achieved in the period since 1950. The investment ratio for 1958 (22 per cent) has some basis in official source materials. (Actual developments of 1958 assure that gross real product will be appreciably above that in the table.)

The gross national product figures of Table 1 are generally higher than those derived directly from official Chinese sources; also they increase at a somewhat slower rate than do the more official estimates. On the other hand, Table 1 estimates for gross investment tend to be below official estimates. (The most convenient source for the official data are in the translations prepared by the American Consulate in Hong Kong. A recent survey (25, passim) gives basic data for national income and its separation into consumption and investment. These are reported in current prices.)

Official estimates of output are formulated with a Marxist concept of value: they exclude certain transport and service earnings which are included in Western (and Indian) national income figures--and in the Hollister data. The differences in the rate of increase in the two series can be attributed at least in part to important underestimates in official output figures in agriculture, 1950-1953, thus exaggerating the upward trend in total output over the plan years (5, pp. 17-23).

With respect to investment, the present estimates have been built up by major sectors on the basis of all the Chinese material available. For 1953-1957 these components and their total are consistent with the complete account of investment expenditures presented by the Chinese in their 1956 publication on the First Five Year Plan (1, pp. 27-37). This governmental source gives 89.2 billion yuan

as the five-year total, on both public and private account, for various kinds of investment and for depreciation as well as for expenditures for the "maintenance of schools" and for "operating expenses of urban public utilities"--items appropriately considered current rather than capital outlays. Nonetheless, this comprehensive total is below the five-year total (92 billion yuan) of the official investment figures--and these are presented as net investment in fixed and working capital. The official investment series appears to be the result of applying a net investment ratio to estimates of national income. No sectoral data are given, and the total net investment is consistently larger than other investment data--for "economic expenditures" and for "capital construction expenditures"--used by the Chinese for budgetary purposes. Components of these latter are given in detail and over time; they include working capital, research and development expenditures, and outlays for repair and replacement as well as for new capital. Because of the lack of component data in the official series and because its totals of net investment are consistently above careful estimates--including some by the Chinese themselves--for gross investment, the investment series of Table 1 are considered to be more meaningful than those officially presented.

It should also be noted that, in converting estimates in current prices to a 1952 basis, separate price indexes are applied to gross investment. This retains the 1952 price relationship of capital to other goods. (There is some tendency in China for the prices of other goods to increase relative to capital goods in the years after 1952. This is the opposite of that noted above for India. It was therefore important to eliminate the effect of this divergent movement from the original data.)

1. Relative rates of change. India achieved an annual rate of growth of real income of almost 3.5 per cent in the period from April 1, 1950 through March 31, 1959. Over essentially the same period, the Chinese growth rate was at least three times as great. China recorded impressive gains in the preplan years when expanding meant primarily reactivating and rebuilding; large increases in output were the results of greater use of existing plants rather than of new investment. It was not until 1952-1953 that China regained past levels of aggregate real product. In India, on the other hand, the expansion has meant new levels of output more or less from 1950. In addition to comparisons over the entire period, therefore, it is appropriate to contrast rates of growth for the respective First Plan periods, from 1951 in India and 1953 in China. Table 1 shows a 19 per cent growth in India's gross product during 1951-1956, the First Plan period, in contrast to China's 51 per cent for 1953-1957. There has been a higher annual rate of population growth in China than in India--perhaps 2 to 2.2 per cent as against India's 1.4 to 1.7 per cent in these years; increases in per capita gross income show a somewhat narrower margin for China over India than do increases in total income.

Gross investment ratios were close to the same level in 1950; thereafter they increased about three times as fast in China. Moreover, given the greater expansion in Chinese product, these ratios mean

that in 1957 and 1958 the real level of gross investment in China was about five times what it was in 1950; in India, it was not quite twice the 1950 level. Can these differences be in any way attributed to differences in foreign capital inflows over these years? Apparently 3.1 per cent of China's gross investment in the years through 1957<sup>1</sup> (and some 2.1 per cent during the First Plan) was offset by a net import surplus. The comparable figures are 8.2 per cent (and 2.3 per cent) for India. If anything, therefore, China financed more of its investment program on the basis of domestic savings from current income. However, this is quite consistent with the fact that China obtained relatively more assistance from other countries. The net import surpluses in China were financed essentially by loans from other communist countries and especially the Soviet Union. In India, on the other hand, a reduction in foreign exchange reserves made possible some 60 per cent of the import surplus, with only the residual amount dependent upon foreign grants and loans.

It is interesting to note that China seems to have achieved some balance in its foreign accounts. For 1957, for example, the international account shows a small export surplus such as would be consistent

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1. Data for 1958 were not included in this comparison, which is thus confined to the 8 years ending in 1957. As indicated in the next paragraph of the text, the preliminary evidence is that the contrast will be strengthened further when firm 1958 figures are available.

with the need to repay past borrowings (5, pp. 127-129, 132-133)<sup>2</sup>. India's foreign trade deficit was larger in 1956-1957 and again in 1957-1958 than in any other year considered here. The need for an import surplus may long continue. The differing experiences on foreign account mean that gross domestic savings ratios have expanded at an even more rapid rate in China, relative to India, than is the case for the gross investment series of Table 1. This is also borne out by comparing the increase in domestic savings as domestic product expands. Over the entire period 1950-1958, China allocated at least 40 per cent of the expansion in gross output to investment; for the First Plan period, 1953-1957, it was 44 per cent. Over the same two time intervals in India, the marginal propensity to save was almost 20 per cent, although for the First Plan itself it was 38.5 per cent.<sup>3</sup>

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2. Hollister (5, pp. 132-133). On June 29, 1957, the Chinese Minister of Finance stated ". . . we may say that we are now in a better position to rely on our own accumulation to carry on national construction . . . ." (Quoted by P. C. Mahalanobis, 15.) Mahalanobis, director of the Indian Statistical Institute and the person responsible for the statistical basis for Indian planning, attributed the favorable performance in China to a concentration upon the production of "basic industries (heavy machinery, heavy electricals, machine tools, steel, fertilizers, trucks, etc.)" to which Russian aid was in considerable measure directed. India's foreign exchange difficulties arise, he argues, from the failure to pursue a similar source. But a sufficient interpretation must run in terms of the growth of output and savings. Thus, assuming that Russia and Czechoslovakia, for example, were prepared to continue to export capital goods, China's ability to invest might have been at least as great if the export surplus of grains had been expanded at the expense of a growth in basic industries. Which is better as a matter of the relative costs incurred in acquiring the same amount of capital goods by the two methods.

3. No inconsistency need exist between this high figure for 1951-1956 and the ratios for 1951-1958 and 1953-1958. The savings series fluctuates: its peak is in 1955-1956. These computations are crude approximations to the marginal propensities at best, since they have been computed directly from the figures in constant prices.

Even in democratic India, the propensity to consume was significantly smaller than is usually assumed to be the case in poor agricultural countries.

2. Absolute comparisons. China's higher rates of domestic savings obviously mean that India can allocate to consumption a higher ratio of its domestic product. Furthermore, current expenditures by government--part of consumption--run at appreciably greater relative levels in China than in India: the respective ratios in 1957 were 10 per cent and 7 per cent. During many of the years 1950-1958, not more than 75 per cent of national product thus became available for household consumption in China; in India the percentage has yet to fall as low as 80 per cent and is usually about 85 per cent. What are the absolute levels of income to which these very different consumption ratios are applied? Can China drain larger shares of national product away from consumption because the Chinese have higher levels of living than do Indians?

Some absolute comparison of output in the two countries is possible.<sup>4</sup> India and China have had similar enough economies so that analytical problems in making the comparisons are relatively small. On the other hand, some of the data needed are not adequately reported, especially the prices. The data available permit the following

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4. See Gilbert and Kravis (3) for the techniques to be employed.

conclusions:<sup>5</sup>

a. Per capita agricultural product was about 15 per cent higher in China than in India in 1952. This is consistent with a higher differential in favor of China for food grains alone, since other foods play a larger role in India and since China usually exports and India imports grains.

b. For the rest of the economy, per capita output was higher in India in that year. This conclusion involves some judgment, since data did not permit a complete comparison for all or nearly all other goods and services. For commercial fuel and power the per capita advantage seemed to be with China; in heavy industry, India was ahead by at least a 20 per cent margin; comparisons for other items ranged between these limits. Quantitatively, nonagricultural product per person might have been some 10 per cent higher in India.

c. Per capita incomes in the two countries in 1952 were essentially of the same order of magnitude--about Rs. 260 or 130 yuan. This is concluded simply from the preceding two statements. Agricultural income provided more than half the total product in China in 1952; it constituted somewhat less than half in India. Despite very large differences in favor of India in the national income estimates

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5. I am indebted to George Perry and Delmar Underwood, both graduate students at M.I.T., for the computations upon which these were in part based.

generally made, it seems more than likely that the actual incomes are or were about the same in 1952.<sup>6</sup>

At this relatively early stage of the development effort in both countries, China was investing some 50 per cent more than was India out of essentially the same real product.<sup>7</sup> After allowing for the different levels of government consumption, it appears that the average level of household consumption in China was actually 10 per cent to 15 per cent below that in India. As Table 1 suggests, this situation changed rapidly. Sometime in 1955 or 1956--despite China's larger allocations to investment and to other governmental uses, and despite its more rapid rate of population growth--the per capita levels of household consumption began to forge ahead of the levels prevailing in India.

#### B. Levels of Physical Output

1. Agriculture. Table 2 presents series for the all-important food grains, as well as for sugar cane and the major fibres, cotton and jute. Up to the current year--for which results are still uncertain--the data indicate a larger expansion in food grains in China than in India. However, India's performance during its First Plan was more impressive than was China's in 1953-1957--a 30 per cent increase compared with a 22 per cent increase. On a per capita basis,

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6. Thus per capita income in China during the forties has been estimated at about \$30, roughly half the official figures for India converted at the going rates of exchange.

7. In 1952, net import surplus financed 9 per cent of China's gross investment India had a net export surplus equal to about 5 per cent of its gross investment.

domestically produced food grains in India increased very rapidly from 335 pounds in 1950-1951 to 444 pounds in 1953-1954. The level in this year of very favorable weather was not again attained in the four following years. Indeed, output per capita in 1957-1958 fell below 400 pounds. In China, there was an early increase from 500 pounds to 600 pounds; favorable harvests in 1954-1955 then boosted the per capita figure to 645 pounds. The two years through 1957-1958 have seen somewhat higher levels, close to 660 pounds per capita. Given the importance of weather in the year-to-year pattern of output in both countries, however, it is perhaps more significant that only the Chinese data provide some evidence of a persistent upward trend. While this might suggest a greater measure of success in overcoming the natural and human deterrents to expanding production, the record is scarcely definitive.

Indian agricultural statistics are consistent with the claim that the potential for food grains output has expanded in the course of the First Plan years to a new level, some 20-25 per cent above preplan production. At least half of this might be attributed to additional acreage, mostly the result of expansion in the area irrigated. The remainder could be due to the effects upon yields per acre of a number of developments, including more fertilization, better seed, and improved farm practices generally. However, these underlying factors would be expected to exert their influence gradually,

Table 2

## AGRICULTURAL OUTPUT: MAJOR COMMODITIES

Year <sup>a</sup>	Food Grains <sup>1</sup> (Million Tons)		Cotton (Thousand Tons)		Jute <sup>2</sup> (Thousand Tons)		Sugar Cane <sup>3</sup> (Million Tons)	
	India	China	India	China	India	China	India	China
1950	53.5	122.72	509	681.5	586	77.6	56.2	3.1
1951	55.06	132.92	548	1,014.3	835	245.7	60.7	4.6
1952	62.45	151.96	559	1,283.1	820	300.7	50.2	7
1953	74.08	154.42	690	1,156.2	552	135.7	44.2	7.1
1954	69.76	157.9	740	1,042.1	523	134.5	56.9	9.5
1955	69.93	174.81	700	1,494.4	749	252.7	59.3	8
1956	73.2	182.5	830	1,445	768	258	67	8.7
1957 <sup>b</sup>	67.1	185.00	835	1,640	730	305	64	10.2
1958 <sup>c</sup>	72.5	225.00	825	2,500	750	325	65	13

a Crop year beginning in:

b Official estimates for 1957-1958 subject to final revision.

c Preliminary.

1. Excludes pulses but includes potatoes; rice in terms of paddy. (Data for India usually given in terms of clean rice; rice : paddy = 2 : 3.)
2. Includes hemp for China.
3. Excludes sugar beets which are important in China.

## SOURCES:

India: 1950-1954, (10, pp. 92-102). 1955-1958, (9, current).

China: 1950-1955, (10, pp. 92-102). 1956-1958, (24, despatch No. 884, April 30, 1958).

while the output data suggest a shift to a new level during 1952 and 1953, without systematic expansion thereafter. Even the rather favorable estimate for the 1958-1959 crop can be attributed in part to climatic conditions; in any event, grain output of 72.5 million tons does not necessarily mean that an upward trend in output has been resumed.<sup>8</sup>

Although food grains output in China in 1957 is officially reported to exceed the Five Year Plan targets by 1.9 per cent, Chinese sources have made clear that performance in this sector has been disappointing. And some observers abroad argue that the official record actually exaggerated the true achievement.<sup>9</sup> But even so, limited progress is indicated through 1957. Of the 20 per cent expansion during the plan, about 75 per cent represented increases in yields per acre. To some extent this was also true in the pre-plan rehabilitation period, although acreage expansion was then relatively more important. Systematic change--the persistent growth in output, however small, and the consistency of the contributory factors--probably constitutes

8. A principal conclusion of the first round of India's National Sample Survey was that "...official statistics (of food grains production in 1948-1949 and 1949-1950) seem to be underestimates by something between roughly 20 and 25 per cent..." (7, pp. 26-28). While the official statistics do reflect a subsequent expansion of this order of magnitude, the NSS view is not universally accepted in India. See, for example, Dandekar (2, pp. 153-155).

9. The American Consul at Hong Kong indicated that 1957 output levels were "not unreasonable but the means of derivation warn against treating them as solid" (24, Despatch No. 884). Foreign experts claim that the data for 1950-1953 are too low and thus overstate the degree of improvement (5, pp. 17-23). One careful study argues that the official figures, whatever the actual expansion they reveal since 1949, are still below the output levels of the early thirties. The 1957 target would only achieve that earlier production level--due to an underestimate (by about one-third) of the actual prewar output (22, passim).

the most significant aspect of Chinese development in this area.

Other agricultural production in China also reflects the major rehabilitation efforts of the years through 1952-1953. Thereafter it is only in cotton, a key product for Chinese industry, where there is evidence of a major drive for expanded output. In India, products other than grain reveal about the same proportionate output increase over the entire period through 1957-1958 as do the food grains. On the whole, the record in agriculture suggests a more impressive performance for China in the food grains; for India in other food products and industrial raw materials.

These offsetting tendencies are reflected in the indexes of agricultural output available for the two countries. From 1950 through 1957, aggregate output in agriculture rose by some 25 to 30 per cent in China and 15 to 20 per cent in India. This is a much smaller difference than exists for the food grains alone. Agricultural production has increased at a lower rate in China than has aggregate production; income from agriculture has become of lesser importance in the total product. For India, agriculture and the rest of the economy seem to have kept more nearly in line.<sup>10</sup>

The agricultural effort in China has been closely directed by government. While there was much talk of broadening and improving diets, the focus has been on the food grains in order to derive

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10. See page 31.

maximum energy output per unit of expenditure for agricultural expansion. Even in adverse weather years, the Chinese did succeed in expanding grain output by about as much as population. The picture in India has been quite different. The degree of government direction was relatively small. Profitability considerations governed with respect to commercial production. The bulk of the output, especially grains, is produced for local or even for producer use, and the underlying motivations here are less readily characterized. Certainly, the programs of government--for expanding the acreage under irrigation, for improving methods of cultivation including the greater application of commercial fertilizers--had a smaller influence than the development plans promised. Weather remained the predominant factor and accounts for the largest increases in production observed over past years.

The scope for improvement in agriculture remains large, and particularly in India (19, pp. 7-8, 11-12). Thus rice, the preferred food grain, accounts for about half the grain output in both countries. Yet, the yield per acre in China in 1957 was about half that in Japan; it is generally about twice that in India. Officialdom in both countries has recognized the need to devote much greater effort to this sector. Thus, over the past two years, Indian leadership has increasingly questioned whether a basis for systematic expansion of food grain output has in fact been established in India. Today, this is the major problem on the Indian development scene, and new

programs for agricultural progress are receiving ever greater priority.<sup>11</sup> In China, new efforts initiated in 1957 began to manifest themselves early in 1958. Already the rapid extension of small scale irrigation, the increased rates of fertilization, and much more intensive cultivation bid fair to assure record levels of crop yields for 1958-1959, and this despite relatively unfavorable weather in many parts of important agricultural regions.<sup>12</sup>

2. Industry. For major industrial products (Table 3) the comparative records are more straightforward. Aggregate industrial output in the modern sector has made much greater progress in China. Both indexes give some evidence of a slackening of the rates of growth of big industry during 1957, although current reports from China suggest that the revised figure for 1958 will testify to a resumption of a pronounced upward trend. In interpreting the series, it should be noted that 1950 was still a year when expansion was primarily the result of reactivation and rehabilitation of existing plant, and this was true to a greater extent in China than in India. Also.

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11. India's National Development Council, in January 1958 and again in May, made pointed reference to the unevenness of past results and to the gap between expenditures and performance. Striking were the observations on the failure to make use of the irrigation facilities already constructed. For the outlines of the crash program adopted for the current crop, see (11, pp. 39-49, and 12, pp. 13-15).

12. Reports stress the "big leap forward" in crop yields. Thus the Chinese claim that the major early rice crops already promise a 50 per cent increase over the 1957 yields per acre. Total food grain output is officially projected at 300 million tons, almost 65 per cent above last year's crop (24, Despatch No. 995, June 13, 1958; and No. 364, November 3, 1958). While this may reflect early optimism, a record increase can be expected. As was indicated earlier (p. 10), there is evidence that First Plan levels of grain output are well below prewar figures of 200 to 220 million tons (22, pp. 11-20).

The Chinese indexes suffer from considerable double counting, given Marxist procedures for adjusting for intermediate goods in production. Fortunately, available data permit straightforward comparison for physical output of more or less identical products.

For every commodity in Table 3 Chinese rates of increase have exceeded India's by sizable amounts. In some cases--steel, cement, electrical power, textiles--Chinese output and capacity were smaller in 1950 than India's. In fertilizer and coal, larger absolute production in China was about the same or even smaller on a per capita basis. In every case, however, production levels for these major commodities are now above those of India. Through 1957 India did retain some advantage in cement and fertilizer on a per capita basis, but it is probable that such margins are now disappearing.

On the basis of the less comparable information available for consumer goods, Chinese performance is not nearly so spectacular. As in the case of textiles, there is evidence of a deliberate limitation of industrial production for consumers whenever such output would curtail the supplies of power, transport, management and other scarce inputs for the hard producer goods industries. On the whole, output of consumer goods by modern industry seems to have expanded more in India during 1950-1957, and from an originally higher level.

Details as to China's handicraft and cottage industries under the communists are not at hand, but there appears to be little parallel

Table 3

## INDUSTRIAL OUTPUT: MAJOR COMMODITIES

Year <sup>a</sup>	Aggregate Production 1952=100		Steel (Million Tons)		Cement (Million Tons)		Electric Power (Million Kwh)		Coal (Million Tons)		Fertilizer (Ammonium Sulphate) (Thousand tons)		Textiles (Million Yards)	
	India	China	India	China	India	China	India	China	India	China	India	China	India	China
1950	85	37	1.01	.40	2.68	1.41	5,112	4,580	32.5	40.9	47.3	75	3,650	2,940
1951	96.5	76	1.08	.79	3.19	2.48	5,856	5,790	34.3	50.8	52.7	129	4,065	3,570
1952	100	100	1.10	1.19	3.54	2.86	6,192	7,261	36.1	63.5	220.3	181	4,600	4,700
1953	102	129	1.02	1.56	3.78	3.88	6,708	9,165	35.8	66.6	319.6	226	4,875	5,900
1954	109	152	1.25	1.95	4.41	4.60	7,500	11,001	36.8	79.9	340.2	298	5,000	6,250
1955	118	166	1.26	2.51	4.48	4.50	8,496	12,278	38.3	93.6	393.1	324	5,090	5,330
1956	128	226	1.34	3.88	4.93	6.42	9,636	16,588	39.4	105.9	389	446	5,310	6,500
1957	133	244	1.34	4.26	5.60	6.69	10,725	19,025	43.5	130	379.7	535	5,320	5,825
1958 <sup>b</sup>	137	288	1.28	5	6.29	8.18	12,100	23,000	44.8	165	391.3	700	4,940	6,250

a. Calendar years.

b. Preliminary: For India, based on monthly reports through September 1958 (21); for China, based on latest available U.S. government reports (24).

## SOURCES:

India: Official Series (21).

China: Based on figures in (24).

Prior to 1952, estimated from employment and other data.

to the direct emphasis given this sector, so important in consumer goods output, by the government of India. On the other hand, the Chinese have given much attention to the expansion of modern small scale industry. This sector constitutes an important adjunct of big industry in a labor rich country, and China has deliberately furthered an increase in output from a wide variety of small industries--including the production and processing of chemicals and pig iron. Achievement here is far beyond what has yet been accomplished, or is even projected, by India.

3. Education. In regard to education and professional training, India seems to have started its development program with a considerable advantage. There were some 22 million children in school in 1950, almost one-third of those in the 6-14 age group. Today there may be 37 million. 45 per cent of those in this age group (14, pp. 501-504, and 11, pp. 91-93). China had a lower percentage in 1950 (22.5 per cent) but is reported to have almost 60 per cent of children aged 6-14 in school today (1, pp. 201-203, and 24). At the other end of the educational process, China in 1955 was training annually 30.9 engineers and 11.2 medical doctors per million persons in its population. <sup>23</sup> Comparable figures for India were 18.4 and 8.1 respectively. Continuation of these rates would within ten to twenty years reverse the more advanced position which India had in these professional fields in 1955 (15, p. 5).

Additional activities might be mentioned, although the major areas have been considered. Thus cinema attendance and passenger travel have increased considerably in India over the past decade or so--probably much more than in China, and again from an initially higher level. It is not possible to extend such physical comparison to encompass the entire national product. Nor will this ever reflect differences of a qualitative sort--the variety of food and other consumer goods in India, the opportunity to select goods and services. On the whole, however, the Chinese margin of 1952 in per capita agricultural production does seem to have been maintained--and even widened over the years to 1958. With respect to big industry, India lost ground relatively--the result of a large expansion in China which made its modern industry sector a much more important part of total product than is India's. However, the actual availability of nonfood consumer goods to the Indian citizen seems to have increased more than in China. Given the major role of grain in consumption and of food in the levels of living in the two countries, these general statements certainly do not impair the plausibility of our earlier conclusion on the relative growth of national output in India and China.

The record of comparative performance thus reveals that China has taken greater strides in investment, and this on the basis of

greater reliance upon domestic savings. Gross output per person actually increased more than twice as fast as India's. Indeed, Chinese consumption (governmental and personal) per capita in 1957 was about 20 per cent above the 1952 figure; the comparable increase in India was 8 per cent in 1955-1956 over 1950-1951. The present analysis thus indicates economic developments overwhelmingly favorable to the Chinese effort, with respect to both actual performance and potential for further growth.

## II. REASONS UNDERLYING THE CONTRAST IN PERFORMANCE

What explains the different results? One characteristic of the data which warrants special attention is the relationship between investment and total output. Table 1 yields the following ratios between gross investment and the increase in gross product over the indicated time intervals:

	<u>India</u>	<u>China</u>
1950-1957	4	2.2
First Plan	3.1	2.5
Pre-First Plan	6.7	1.4
Post-First Plan	5.1	1.7

For the period as a whole, China seems to have generated a unit of gross income flows with little more than half the gross investment

that was applied in India.<sup>13</sup> Only for the plan periods proper are the calculations for the two countries in reasonable line--with India's about one-quarter above the figure for China. The record thus indicates greater "efficiency" in China in converting a given

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13. So striking are these differences that the computations warrant a few further observations. The underlying statistics of product and investment were presented as comparable sets of estimates. (See notes to Table 1 pp. 4a-4d.) In fact, the major departure arose from our inability to include changes in working stocks in India's gross investment; on this account the ratios above understate the difference between India and China.

Official Chinese figures for depreciation in the economy as a whole do tend to be on the low side. But these estimates do not play a direct role in the figures of gross investment used here. In any case, low depreciation levels in the official statistics mean high estimates of accumulation (net investment) rather than low estimates of gross investment. Another point is that, in communist countries generally, prices of capital goods, and indeed unit costs of capital formation, tend to be low relative to other prices. This might in itself provide lower capital output ratios than prevail in a free market economy. However, while it was not possible to make a direct comparison of the pertinent price relationships in India and China in 1952, the deflating procedures used here maintained in each country the price relationships of that year. The different relative movements over the years should thus not affect the capital output calculations.

With regard to the ratios themselves, it is true that they fluctuate markedly from year to year in each country; most of the specific figures above would thus be different were the time coverage altered somewhat. Yet, there are no groups of years which would give reverse results, or indeed very different relative results, for the two countries. Thus, were rough adjustments made for the special influences which weather had upon output in some years in each country, the relative ratios would reveal a wider margin in favor of China than is shown for the two plan periods, for example. Similarly, inclusion of the preliminary data for 1958 does not appreciably alter any of the calculations. Thus differences observed are not attributable to the particular groups of years selected for the comparisons.

amount of gross investment into additional capacity or at least product.<sup>14</sup>

This phenomenon is magnified by the fact that the Chinese have been able to increase their allocations of current product to investment at a more rapid rate. Rough calculations suggest that, for the period as a whole, 55 per cent of the difference in the rate of growth in the two countries can be attributed to the greater efficiency with which the Chinese apply investment; 45 per cent is thus attributable to the more rapid rate of expansion in investment.

A. Different Allocations of Investment

The different results must be traceable to allocations of investment and to the specific forms in which investment is actually made. Thus scale of plant may reduce capital costs per unit of product; investment costs will be low if outlays for labor in construction, for example, exclude or undervalue contributed or forced labor, and the like. What evidence is there for differences between the development effort in India and China in these regards?

Although data will not permit ready comparison of the allocation patterns in all years, it is possible to separate out for both countries the investment in two broad groupings: agriculture, including irrigation, water conservancy, community development, and some simple handicrafts

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14. In characterizing the conversion as more "efficient," I mean only that less capital is used for the same volume of output, presumably with the same lag.

close to agriculture such as rice polishing; and industry, which includes modern industry and power. Table 4 gives these allocations on a percentage basis for groups of years.

Table 4

ALLOCATION OF GROSS INVESTMENT  
(Per Cent)

	Pre-Plan		First Plan				Second
			First 3 years		Last 2 years		
	India (1950)	China (1950-52)	India (1951-53)	China (1953-55)	India (1954-55)	China (1956-57)	India (1956-57)
Agriculture	28	32.7	26.5	27.6	26.5	27	24.5
Industry (including power)	23.4	36.6	25.6	35.5	24.3	45	29.2
Other sectors	48.6	30.7	47.9	36.9	49.2	28	46.3

## SOURCES:

India: My estimates based on provisional data released by government (9, pp. 154-159).

China: Estimates based primarily on (5, 24, and 1).

Over the period, investment has become relatively less important in agriculture and more important in industry, as would be expected. Both movements have been more marked in China. More significant, however, are two other comparisons reflected

by Table 4. Contrary to the impression which prevails generally,<sup>15</sup> a large percentage of total investment has been allocated to the agricultural sectors in China; throughout the period, this percentage has exceeded India's. In addition, there has been a marked difference in the emphasis given by China to physical product as against services. Thus, despite the superiority of India's road and railway network in the preplan years, India in the last few years seems to have allocated almost as large a proportion of total investment to transport and communication as China allocated to these plus social services, trade and finance, education, health, and the like.

These striking contrasts notwithstanding, Table 4 itself throws little light on the problem of "efficiency" of investment. China puts more into agriculture, which has frequently turned out to be a sector where relatively large returns follow from a unit of new capital--at least in underdeveloped areas where yields per acre are very low initially. On the other hand, the still larger Chinese allocation to industry, and to a type of industry where the capital/

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15. My earlier observations (18, pp. 13-14) were also in this vein. Actually, agricultural investment was planned at less than 10 per cent of the public program but much larger amounts were to be invested by the peasants themselves "...in addition the development of agriculture credit cooperatives will make it possible to draw a huge amount of idle capital into agricultural production" (1, p. 33). A delegation of Indian governmental specialists in agriculture also reported this same preponderance of agricultural investment in China relative to India (10, pp. 133-135).

labor ratio is high, might well operate the other way. Also, India's emphasis upon tertiary sectors would suggest on the whole a larger increase in output from the same level of new investment, although this argument is not firm, since transport itself tends to have a high capital output ratio, as does also investment in housing, included here under social services. On this last, one point does warrant mention. The greater allocations to services might mean more investment in the overhead sectors which in turn will permit greater returns from direct investment in the future. India's past pattern, in other words, may well be the more efficient, given a longer time horizon. However relevant this possibility, other evidence does not suggest that the rate of growth prospects for the years ahead can be considered more favorable to India as a consequence of the current investment patterns.

#### B. Some Sectoral Capital Coefficients

A few precise relationships can be traced with the data at hand. Thus the ratio between gross real investment and the increase in real income in agriculture in India is 2.33 for the period 1951 through 1956. Essentially the same figure (2.28) is obtained for China for 1951 through 1957.<sup>16</sup> A comparison of the investment which corresponded

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16. The ratios appear to be more volatile in India. Thus a much less favorable relationship is obtained if the computation for India includes the disappointing crop year 1957-1958.

to an increase of (productive capacity for?) one million long tons of food grains over the period also reveals a similar parallelism in the experience of the two countries. Again, there is some basis for imputing an advantage to the Chinese on the ground of relatively more consistent results over the period.<sup>17</sup>

While the evidence in the agricultural sectors can be interpreted as suggesting reasonably comparable capital output relationships, for industry it indicates a clear advantage for China. The gross capital output ratio for Indian industry and power was at least 6:1. For China, value-added computations for industry are less readily presented, given the problem of double counting. The ratio of gross investment in industry to the total value of industrial production lies in the .9-1.1 range for different groups of years during 1950-1957. On the assumption that total value is of the order of three times the value added,<sup>18</sup> this suggests that the comparable capital output ratio for China would be about 3:1--or half the level of India's.

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17. Essentially equal results in these calculations involve an assumption that the official yuan:rupee rate of 1:2 undervalues the yuan to some extent. Other evidence on relative prices does not support this inference. See, for example, (10, p. 41, 20. pp. 60-61, and above, pp. 7-9). For whatever relevance it has, the recent Hong Kong free market rate of 1:1.2 suggests the opposite.

18. Based on computations made by W. W. Hollister (as reported in a personal communication).

The national income series in the two countries show quite different patterns with respect to the relative importance of income from agriculture. In India this ratio was 50 per cent before the Plan, 47 per cent during it, but seems again to be close to 50 per cent in recent Second Plan years. The accounts for China show a fairly steady decline from 70 per cent<sup>19</sup> in 1950 to 50 per cent in 1957. Thus the major sector where capital-output ratios seem to be more or less the same in the two countries became of appreciably less importance in China. A sector where the ratios are notably different--modern industry--has grown relatively in China. Finally, the different rates at which the tertiary sectors expand would also favor larger product, at least in the short run, in China. Together, these different sectoral results may explain the differences in over-all capital output ratios--although nothing in the above explains these sectoral results.

#### C. The relative Scale of Public Investment

There are important differences between India and China in the relative scales of public investment. While this direct role of government in development has been expanding at a more rapid rate in India (Table 5), the Chinese ratio for the economy as a whole in the

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19. This figure reflects the underutilization of existing nonagricultural plant in the 1949-1951 period. By 1951 the ratio was close to 60 per cent, and it has been declining rather steadily since then (5, p.9).

past two years was still double that of India. Modern industry and power are today essentially entirely within China's public sector; even in agriculture which was relatively free enterprise in 1950, government participation is now more important than is true in India.

Does the degree of centralization of investment activity influence efficiency?

Table 5

THE RATIO OF PUBLIC INVESTMENT TO TOTAL INVESTMENT  
(Per Cent)

	Pre Plan		First Plan				Second Plan
	India (1950)	China (1950-52)	First 3 Years		Last 2 Years		India (1956-57)
			India (1951-53)	China (1953-55)	India (1954-55)	China (1956-57)	
All sectors	27.8	67	28.4	76.3	38.2	81	38.7
Agriculture	28.4	20.6	29.9	31.9	41.4	39.3	35.2
Industry	17.8	89.6	19.8	93.7	28.1	96.7	34

Sources: Same as in Table 4.

Presumably, identical enterprises could be established and managed with comparable efficiency by government, or by private interests, or by the two combined in some mix. But limited delegation of authority in government enterprise might serve to make public operation less efficient in a relatively free-market economy. Conversely, the talents of the private entrepreneur must be less evident in an economic order

in which his operations are intertwined with operations of government-controlled economic activities. On such counts alone, the output from enterprises in a mixed economy may be smaller than from the same enterprises in a more monolithic economic order. However, the relative efficiency of the two patterns revealed in Table 5 cannot be assessed simply by evaluating the performance of public and private enterprises under different conditions. More relevant is the fact that the seemingly same type of enterprise becomes quite different in the highly centralized Chinese effort and in the much less controlled program in India.

Within agriculture, within industry, within each category of service, there is in each country a different collection of end-products which comprise output. Of the current flow of goods and services in the Indian economy the private sector still creates 90 per cent. Product must thus satisfy the demands on a relatively free market. Today, even steel is produced almost entirely in the private sector. While government allocates most of the steel available in India, a significant percentage of the total supply (50 per cent or so) does not go to government. In China, essentially all finds its way into defense, railways, and the broad public development program. Output per unit of investment must be lower for a steel industry which processes to meet the needs of many different users. This is even

more true for consumer goods. Thus the modern textile industry in India produces a greater number of counts per million yards than does any other country's, and particularly China's. Increasingly, construction specifications for all buildings in China have been tailored to meet standards for costs per square foot established by region. India has moved much less far here.

As there are differences in product from the same type of enterprise, so also with respect to production techniques. Thus it is relevant that China does use, in construction activity particularly, a large volume of unpaid or underpaid labor. Frequent attention has been called to the possibilities in this direction in lands like India and China where the social order generally provides for consumption even though workers are persistently underemployed. India seeks to mobilize this productive capacity through various voluntary programs, notably in the community development projects. Chinese efforts of this sort seem to have gone much farther and on a less voluntary basis (4, pp. 27-28).<sup>20</sup>

The predominance of public investment in China may thus contribute to lower investment costs per unit of product because government restricts the degree of choice in either factor or product

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20. In India (13, p. 116) the value of all popular contributions to the community development program was of the order of 3.5 rupees per person in the project area. This would mean at the outside less than 5 days of contributed labor per person over as long as four and one half years in some villages.

markets.<sup>21</sup> The private sector is indeed a decisive force in India's economy. In the plans, government has consistently over-estimated the extent to which private enterprise will govern its investment and production activities "according to plan." Thus, since 1950, government has actually invested less and the rest of the economy more than was planned. A vigorous private sector has retained a greater volume of its savings for direct investment; there was a reduced transfer of private savings to the public sector. New investment in private industry has been of a more capital-intensive type than was appropriate to India's factor endowment (16). In contrast, China's centralized control of investment has meant investment more nearly as planned and with centralized decisions as to the techniques for production. When unplanned developments occurred--unfavorable harvests, lower grain deliveries--the control of savings in the economy gave government considerable flexibility in adapting annual programs to actual events.

#### D. Contrasting Policies with Regard to Saving

Nearly half the difference in output performance arose from China's higher investment ratios. Government has assumed responsibility for a very large part of the savings function through an

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21. Many people would argue that freedom of choice and variety itself are attributes which enhance product values. The question here is only the point at which they impinge upon (physical) output in very poor countries.

expansion in the scale and forms of taxation, especially upon agriculture, and through the growing importance of state enterprises in many fields. Thus tax receipts more than doubled between 1950 and 1952; thereafter they increased by about 50 per cent, aggregating almost 15 per cent of gross national income in each year. Limitations upon private consumption and investment meant also that private savings (especially nonagricultural) moved readily to the public sector through the banks, other savings schemes, and the bond market. Indeed, government--central, provincial, and local--in China has spent at least 25 per cent of the total national income in each year since 1952. About 11 or 12 per cent went for the usual administrative activities of government, including military services, and 13 to 18 per cent for capital maintenance and expansion (5, p.6). An increasing percentage of this last was accounted for by the profits and capital consumption allowances of state enterprises. The total of domestic gross savings mounted steadily (with one set-back in 1955) and have averaged 22 per cent of GNP in the past few years. Government development plans envisage a slight reduction--or at most the maintenance--of this ratio in the future.

Savings in India are still essentially private. Government surpluses on current account were not expected to be significant over  
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the Second Plan period. The public investment program essentially

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22 The plan shows a surplus of about Rs. 10.5 billion, but this is more or less matched by current rather than investment outlays in the development program (16).

has depended upon borrowing domestically and abroad. Actual performance from 1956 to date has apparently intensified this situation. Revenue from taxation has varied between 7.5 and 9 per cent of gross national income since 1950. While direct taxes on agriculture (land and income) have been increasing, they still account for less than 10 per cent of the total tax revenues in 1956-1957. Rough estimates of the total tax burden for agriculture suggest an order of magnitude of about 20 per cent of all taxes, as compared with a ratio at least three times as great in China. Profits and capital consumption allowances from state enterprises in India are still essentially confined to the traditional public enterprises--the railways and postal services. These contribute a relatively small amount to government finance. The government of India, currently responsible for less than 40 per cent of total investment in India, is thus much more heavily dependent on outside, nongovernmental sources of investment finance than is the government of China, which is responsible for more than 80 per cent of total investment in that country. The domestic savings ratios do not seem to have expanded since 1955, and government has had considerable difficulty in attracting them to public investment. As mentioned earlier, the public development program over the next few years will certainly be more heavily dependent upon foreign resources than in the past, and the turning point in this dependence cannot yet be foreseen (17).

### III. IMPLICATIONS FOR ECONOMIC DEVELOPMENT ELSEWHERE

There are no magic formulas for achieving an expanding per capita income. The tasks confronting nations with very low levels of average output are most difficult at best. The rapid growth periods in India during the last few years of the First Plan and in China in some of the years treated here need to be considered abnormal. They were related to favorable weather or to the exploitation of existing excess capacity. These apart, continuing progress requires persistent efforts by the people under capable and inspiring leadership.

Consider a few key problems and the different approaches to them in India and China. Most poor countries have abundant supplies of labor relative to capital. Along with the need to move toward more capital-intensive methods of production in certain sectors, there is a complementary role for labor-intensive pursuits in rural areas especially, but in cities also. The gains from expanding the productivity of labor now inefficiently used are enhanced by the fact that there do exist complementary capital resources--in existing equipment, in nonmonetized savings-- which cannot be transferred. Despite the greater emphasis given by the Chinese to the development of modern industry, they have also devoted major energy to the task of mobilizing these underutilized resources for plan objectives. Through a sequence of devices, culminating in today's communes, China's government has played a fundamental role in organizing local resources--labor, existing

plant, raw materials, savings (especially nonmonetized), leadership of both enterprise and public administration--to expanded agricultural and industrial product.

Mention has already been made of nonmonetized savings. Wherever a significant part of national product is imputed because it never goes to market, there will be savings in the form of inventories of final product which are used directly, perhaps as payments in kind, in capital creation. In both India and China some 25 to 30 per cent of all gross investment may have occurred in nonmonetized form in 1950. This ratio has apparently not changed much in India, but it has declined markedly in China, partly because the Chinese attempt to siphon out of the rural areas whatever is or can be monetized, and partly because of the differential expansion of nonagricultural investment. In contrast to China, India does not even take explicit account of this important form of rural savings and investment, despite the fact that Indian experience has pointed up both its size and potential (23, p. 63).

Unemployment constitutes a political as well as an economic threat in underdeveloped countries. The employment objective explains part of India's preoccupation with the handicraft sector; emphasis here has even been allowed to interfere with cost and efficiency considerations in the production of consumer goods by the modern industry

sector. Progress is only now beginning to be made toward the expansion of the modern small-scale sector which either competes with large industry or complements it. Great attention is now given this sector in Chinese industrial development. There are benefits to employment and output gains from using resources raised locally. The Chinese have found that emphasis on this small-scale sector of industry has also facilitated the program of regional development by providing employment opportunities away from the large industrial centers.

The inability of the large cities to provide as much employment as people seek has become most apparent, even in China with its strong stress on industrial development. The Chinese have recognized explicitly the dangers arising from the unemployment of overurbanization and have devised various measures (involving involuntary transfers of people, compulsory registration, etc.) for dealing with the problem. In this context, the emphasis on employment opportunities in the smaller centers and rural areas takes on greater importance. In India, the parallel dangers have not yet produced a clear policy. Growing overurbanization has tended, rather, to expand social overhead expenditures in urban areas beyond what the development requirements of these centers might otherwise have been.

For some parts of the program, particularly for industry, the government of India has chosen to rely heavily upon the private sector. The experience here leaves no doubt about the major gains possible

from energy and drive of private entrepreneurs. But these can be realized over a prolonged period only when government also fulfills major investment responsibilities: in the social and economic overhead sectors, and in certain directly productive fields where private investment has limited experience and resource requirements are very high (e.g., steel and producer goods) or where effective economic change involves a major program of social action (as in peasant agriculture, rural output generally). Fulfilling this complementary role in a society of mixed enterprise requires careful study of the flow patterns of domestic savings and the determination to adopt policies which can appropriately influence this pattern.

Structural unemployment, underutilized resources, overurbanization, non-monetized savings and investment flows--these are illustrative of the types of problems that must be understood and treated if there are to be steady output gains in most of today's underdeveloped areas.

Indian leadership has not yet assumed the responsibilities for organization and planning required to meet these problems. This is highlighted by the fact that the ratio of government to total expenditure is lower than in any other country for which national product statistics are available.<sup>23</sup> China's relative success in its development effort

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23. For a complete listing of a related statistic, see (19, pp. 382-84). The ratio for India is less than 1/3 that for the United States or Canada, for example.

bids fair to be maintained, if not expanded. It is not unrealistic to expect internal pressures to impede progress. Indeed, apart from adverse harvests and the like, the years ahead may well see some reduction in the relative allocations of income to investment and some increases in levels of living.

Are the contrasts in methods--and achievements--inseparable from contrasts in political philosophy? It is true that Chinese resource mobilization and allocation, Chinese methods of dealing with unemployment and urban growth do weigh seriously upon the individual citizen and especially on a peasantry long proud of its individualism. These procedures could not be reconciled with the dictates of the Indian Constitution or with the political and social philosophy of present-day leadership in that country. But alternative actions might well accomplish the same, or nearly the same, objectives. For reasons which cannot be attributed to India's adherence to the tenets of democracy, rural taxation is minimal; tax evasion is high; government controls a small proportion of the economy. The community development schemes offer an excellent and democratic mechanism for mobilizing idle or poorly allocated resources in rural areas. Economic inducements might deter the rural-urban population push. The scope for such actions under democracy is broad.

The growing awareness of Chinese achievement relative to India's can have a profound influence upon world political and economic

developments. But the lesson to be derived from the comparative performance of the two countries over these years of intensive development planning is not that totalitarian methods serve better than those conceived and implemented under democracy. It is rather that government in nations aspiring to economic expansion needs to define the tasks of growth realistically; more, government must implement them faithfully.

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