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A Comparison of the Economic Rates of Growth in India and Mainland China During Their First Five Year Plans

Jack Gore

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A COMPARISON OF THE ECONOMIC RATES OF GROWTH
IN INDIA AND MAINLAND CHINA DURING
THEIR FIRST FIVE YEAR PLANS

by
Jack Gore

A Thesis
Submitted in Partial Fulfillment of the
Requirements for the Degree of
Master of Arts in Economics

The University of New Mexico

1958

This thesis, directed and approved by the candidate's committee, has been accepted by the Graduate Committee of the University of New Mexico in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

E. C. Oastetter

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MASTER OF ARTS

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DATE

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DATE

Thesis committee

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CHAPTER I

INTRODUCTION

The objective of this paper is to bring up to date and expand the recent comparisons of the rates of economic growth in India and China. It is an accepted fact that the rates of economic growth in the Soviet Union represent a threat in the next generation to the economic supremacy of the United States. This in turn raises the problem of undermining the more democratic political institutions of some countries in the West whose strength has been primarily based on the economy of the United States. While this race is proceeding between the two giants a similar contest is taking place between the two major underdeveloped countries of the world, India and China. India and China together compose over one-third of the population of mankind. China's road to economic growth and self sufficiency is proceeding rapidly under the acknowledged leadership of and after the pattern of the Soviet Union. India has borrowed the concept of economic planning from the Soviet Union but has chosen the democratic political institutions of the West. The overwhelming majority of mankind in the have-not nations are watching the race for economic growth between these two countries to determine what path they should follow and which road will provide wanted results for their people. These inhabitants of underdeveloped areas, as Myrdal says, have

CHAPTER I

INTRODUCTION

The objective of this paper is to investigate the
and extend the results of the previous work on the
growth of India and China. It is an attempt to show that
rates of economic growth in these two countries are
threat in the long run. The results of the study are
the United States. This is a preliminary study and
undoubtedly the results will be revised in the future.
some countries in the world are growing faster than
based on the results of the study. It is a preliminary
is presented in the form of a table. The results of the
study are presented in the form of a table. The results of the
of the world, India and China are shown in the table.
comparative study of the growth rates of India and China
road to economic growth and development. The results of the
rapidly growing economies of India and China are shown in
pattern of economic growth. The results of the study are
of economic growth in India and China are shown in the
the results of the study are shown in the table. The
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are shown in the table. The results of the study are shown in
countries to India and China. The results of the study are
road will be a long and difficult one. The results of the
inhabitant of the world. The results of the study are shown

experienced the "Great Awakening"; that is, they want a much better life than they have had so far. The outcome of this race between the two underdeveloped giants may influence world political institutions more profoundly than all the atom bombs held by both the United States and the Soviet Union. The recent "economic offensive" of the Soviet Union, in fact, indicates that the battleground for future political allegiance may well be in the economic development of underdeveloped countries. It is for this reason that considerably more attention has been paid to economic development in underdeveloped countries in recent years in economic literature, and especially to India and China.

It is the thesis of this paper that India is falling behind the rate of growth in China, and that this has extremely serious long run consequences for more democratic political institutions in India and the whole world. It is time for a realistic appraisal of the relative rates of growth of these two countries so that the current prevailing underestimation of China does not become an excuse for inadequate aid to India from the West. Perhaps as important as aid, the weakness's in the Indian economy can be traced to outmoded economic theory, mainly from some western economists who are trying to apply the experience of 250 years of capitalist development in the West to the situation in India which politically demands results in a generation or less. In no sense intending to belittle or underestimate the advances in the Indian economy I am convinced, nevertheless, that much

experience of the world... better life... race between... world political... from bonds held by... Union. The... in fact,... alliances may well... underdeveloped... erably more... in underdeveloped... literature... it is the... behind the... extremely... political... time for a... of these... estimation of... aid to India... the... model... who are... capitalist... which... In the... in the...

greater efforts and results are necessary than are forthcoming in India.

The methodology of this paper is to compare India and China to demonstrate that while great progress has been made in India, peoples of the underdeveloped world will judge this progress in the light of the Chinese experience and within a few years probably find it wanting. In my opinion, such a situation might be avoided if we took a more realistic view of China and her accomplishments in the economic field on the one hand, and faced some of the weakness's of the Indian economy on the other hand. (There are also important weakness's in the Chinese situation, but they are mainly political. The dislike of the political power in China by many western economists unfortunately distorts an objective economic analysis of that country.)

This study is limited in its scope in that it only attempts to demonstrate that the economic rate of growth in India is much less than China. No attempt is made to show why this is true, although some causal factors are touched on in the process of examining relative rates of growth in the two economies. No assessment of the reasons for the slower rate of Indian growth would be possible without a more detailed study of the Indian economy, and this monograph points up the need for such a basic reexamination.

Professor Wilfred Malenbaum made the initial study in his article "India and China: Development Contrasts," (Journal of Political Economy, LXIV, February, 1956, p 1-24).

This was followed by an excellent short work for the Senate Committee of Foreign Relations by J. Clement Lapp of the Legislative Reference Service of the Library of Congress--Economic Development in India and Communist China (U. S. Senate, Committee on Foreign Relations, Staff Study No. 6, prepared for the Technical Program Sub Committee, 1956). These two studies were limited in several respects. Malenbaum was working entirely without quantitative data on Chinese production which was subsequently released when the Chinese Five Year Plan was officially adopted in late 1955. In fact, his data were so limited that no estimate of comparative performance was even attempted.¹ The article, therefore, was mainly concerned with estimating the pre-Plan base (1950 in India and 1952 in China) in agriculture, industry, power, and national income in each country.

Mr. Lapp's study had the advantage of the official publication of the Chinese First Five Year Plan published in August, 1955.² However, he faced serious drawbacks in the lack of adequate data on performance in 1953-54, shifting targets that were obviously based on inadequate early planning techniques in China, and the limited scope of the study.

The present study is possible because of: (1) the

¹Wilfred Malenbaum, "India and China: Development Contrasts," Journal of Political Economy, LXIV, (February, 1956), pp. 1-24.

²Fu-Chun Li, Report of the First Five Year Plan for Development of the National Economy of the Peoples Republic of China in 1953-1957 (Peking: Foreign Languages Press, 1955).

completion of both Five Year Plans, (2) a number of excellent studies of the Chinese and Indian economies³ in recent years that were not available to the earlier writers, and (3) most important, considerable improvement in statistical work by the United Nations Economic Commission For Asia and the Far East from both India and China.⁴ In the last two years economic information from India, and especially from China has become increasingly more detailed and reliable and makes possible a fairly complete estimate of relative growth rates.

I will attempt to round out the comparison of the two countries by discussing their military expenditures, consumption, tax structure, capital formation, and foreign trade which were touched on lightly or not at all in the two previous studies.

³Yuan-Li Wu, An Economic Survey of Communist China (New York: Bookman Associates, 1956).

Solomon Adler, The Chinese Economy (New York: Monthly Review Press, 1957).

Theodore Shabad, China's Changing Map, A Political and Economic Geography of the Chinese People's Republic (New York: Frederick A. Praeger, 1956).

K. C. Chacko, The Monetary and Fiscal Policy of India (Bombay: Vora and Co. Publishers, Private Ltd., 1956).

C. N. Vakil and P. R. Brahmanand, Planning for an Expanding Economy (Bombay: Vora & Co. Publishers, Private Ltd., 1956).

⁴United Nations, Economic Survey of Asia and the Far East: 1955 (Bangkok, 1956), p. 80 fn.

CHAPTER II

PRE-PLAN ECONOMIES

The overall situation in India and China immediately preceding their Five Year Plans (1947-50 in India and 1949-52 in China) had remarkable similarities. India had emerged from a period during which production had gone down following a World War II boom. Religious riots and partition had resulted in the killing of thousands and the movement of nine million people. Inflation had become a serious problem during the war and there was a tremendous shortage of goods. Machinery and railroad stock had deteriorated due to the depression and war, and a large part of the capital equipment needed replacing. The 1947-49 period in India was characterized by the absorption of millions of refugees from Pakistan, the reorganization of foreign trade as the result of losing the main cotton and jute growing areas for its textile mills, and preparation for the gigantic effort involved in the First Five Year Plan.

China had, if anything, a more severe problem due to World War II and the Civil War. The Russians had taken large parts of the remaining Manchurian industrial machinery that the Japanese had not destroyed in retreating. Inflation was probably the worst the world has ever seen--the Chinese yuan in circulation increased from "544 million in August 1948 to

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67,694,600 million in May, 1949, an increase of 120 thousand times".¹ Production was non-existent in many cities as the armies fought across the nation from North to the South. As we shall see later, it took the central government (established in 1949) until 1952 to reorganize the economy to levels of production previously achieved.

The common problems faced by both governments, with little experience behind them, in the pre-Plan years were the establishment of central authority, the resumption of previous production levels, the control of inflation, and the organization of a planning mechanism. India's "peaceful" revolution had left the country a little less disrupted than China, but the partition and the unification of hundreds of princely states was politically painful and time consuming.

The most pressing problem of both China and India was the population pressure on the available arable land. Both countries had had recurrent famine based on droughts, poor communication systems, and inadequate production of basic food grains. The average density of population in China was estimated in 1951 at 123 persons per square mile and in India at 270 persons per square mile.² (The United States had an average density of 44 persons per square mile.) Official

¹Ronald Hsia, Price Control In Communist China, Distributed by Institute of Pacific Relations, 1953 (Mimeographed), p. 24.

²U. S. Senate, Committee for Foreign Relations, Economic Development in India and China, Staff Study No. 6, Prepared for the Technical Assistance Program Sub Committee under the direction of J. C. Lapp, 1956, p. 4.

67,694,600 million in 1949, an increase of 171 percent in 1952. Production was non-existent in many districts in 1949. It was thought across the nation from 1949 to 1952 that we shall see later, it took the country 1949-1952 in 1949) until 1952 to recognize the country as having production previously achieved.

The common problems faced by both countries, the little experience behind them, in the first years of establishment of central authority, the removal of production level, the control of inflation, and the realization of a planning mechanism. India's "five-year" plan had left the country a little less than the partition and the realization of unity of the states was politically painful and the economic.

The most pressing problem of both countries was the population pressure on the available land. India had had recurrent famine based on outdated communication systems, and inadequate production of food grains. The average density of population in India was estimated in 1951 at 125 persons per square mile, at 270 persons per square mile. The United States had an average density of 44 persons per square mile.

Revised India, Five Year Plan, 1951-56, published by Institute of Pacific Relations, 1951, p. 24.
U.S. Senate, Committee for Foreign Relations, Development in India and China, Staff Study, 1951, for the Technical Assistance Program and Committee on the direction of J. C. Lapp, 1956, p. 4.

estimates placed the population of India at 356,879,394 million in 1951 and the population of China at 582,603,417 million in 1953.³ With a land area approximately three times the size of India, China has only 63 per cent more population. Looked at in another manner, China's pressure of population on food supply was more severe. In 1941 it is estimated that the number of persons per square mile of cultivated land in China was 1,485 while in India it was only 535. The reason for this, of course, is the large Western areas in China of mountain terrain and desert (in Sinkang, Tsinghai and Tibet) which constitute about half the land mass of China but supports only about seven per cent of the population.⁴ My estimate of annual population growth, based on official figures for 1951-1957, are 1.1 per cent for India and 1.8 per cent for China. The somewhat faster rate of Chinese growth will obviously place greater pressure on food grain production as well as greater need for expansion of agricultural acreage than in India. This population situation, coupled with inadequate political and economic organization, had resulted in both India and China having a declining food production per capita over at least a period of fifty years⁵ preceding the Five Year Plan.

³United Nations, Economic Survey of Asia and the Far East: 1954 (Bangkok, February 1955), p. 184.

⁴Yuan-Li Wu, op. cit., p. 21.

⁵Asit Biswas, "A note on the Trend of Agricultural Production in India, 1893-1946" (Cambridge: Center for International Studies, M.I.T., 1953.)

United Nations, Economic Survey of Asia and the Far East: 1949 (New York, 1950), pp. 4-8.

estimates placed the population of India at 1.5 billion in 1950 and the population of China at 1.5 billion in 1950. With a large and growing population, the size of India, China and other countries looked at in another way. India's population on food supply was not enough. The number of people in India was 1.5 billion in 1950. For this, of course, the Chinese population was 1.5 billion. Mountain terrain and other factors which contribute to the only about seven annual population growth rate of 1.1 per cent in 1950. The somewhat faster growth of the Chinese population place greater stress on the need for expansion of agricultural production. India's population growth and economic development political and economic growth and development. India and China having a similar population growth over at least a period of years.

United Nations, Economic Survey of Asia and the Pacific, 1954 (Bangkok, 1954).
Asian Affairs, 1954, pp. 1-10.
Asian Affairs, 1955, pp. 1-10.
Production in India, 1954-55, pp. 1-10.
International Yearbook of Statistics, 1954, pp. 1-10.
United Nations, 1954, pp. 1-10.
United Nations, 1955, pp. 1-10.

National income and per capita income figures for pre-Plan India and China were very rough. Malenbaum suggests that per capita income in 1952 may have been \$52.80 in India and \$49.00 in China in prices of that year.⁶ Considerably lower estimates are given for China (\$23.00) and India (\$43.00) for 1947 by the United Nations.⁷ It is possible that the 1949 United Nations's figure of \$23.00 for China is compatible with the situation at the height of the Civil War disruptions and climbed back to \$49.00 by 1952 in China.⁸ Gross national product in India for 1952 would be 22 billion dollars. But Chinese figures are not net value added, but rather the aggregate of all transactions, and therefore are not comparable with India. The most recent calculations would place per capita income at 1952 prices at \$52.00 in India for 1952, and at \$54.00 in China for 1953.⁹ Such contradictory statistics can lead to only tentative conclusions.

⁶Malenbaum, op. cit., p.5.

⁷U.N., E.S.A.F.E.: 1949, op. cit., p. 395.

⁸United Nations, Economic Survey of Asia and the Far East: 1957 (Bangkok 1958), p. 107, 214.

⁹It is interesting to note that at the official exchange rate, \$1.00 = 2.343 New Peoples Bank Yuan, recently released government figures for per capita national income would be \$47.80 for 1952, compared with Professor Malenbaum's earlier estimate for 1952 of \$49.00. This is extremely close and tends to confirm present official figures. However, all our estimates of dollar equivalents of Chinese money will be calculated on the basis of \$1.00 = 2.355 New Peoples Bank Yuan which was the midway point between the buying and selling rates of the Yuan in 1953, and this reduces our 1952 per capita income to \$47.60. For Chinese exchange rates see:

U.N., E.S.A.F.E.: 1954, op. cit., p. 100.

U.N., E.S.A.F.E.: 1957 (Bangkok, 1958), p. 107.

U. S. Senate, Committee on Foreign Relations, op. cit., p. 31.

Per capita national income in the pre-Plan years (1947-1950) in both countries was among the lowest in the world and within the probable range of \$40.00 to \$50.00. There is some indication that India was slightly ahead but only because of the internal political disruption in China and a considerable unused capacity in both agricultural and industry in the Chinese economy.

The railway transportation picture in the pre-Plan years was one of extreme deficiencies in both economies: in China in relation to the shortage of trackage and rolling stock, and in India in relation to the extreme deterioration of both trackage and rolling stock. At the end of 1949 India had 54,745 kilometers of railway line against China's 18,391 kilometers. China's rolling stock situation was even worse in numbers of units: China had 2,444 locomotives, 3,694 passenger cars and 31,354 freight cars at the end of 1948.¹⁰ However, 262 locomotives and 3,445 freight cars brought in by UNRRA helped relieve this shortage. India had 8,228 locomotives, 21,112 passenger cars, and 214,270 freight cars at the end of 1949. Using Professor Wu's higher estimates of rolling stock, India had almost three times the trackage and locomotives and five times the passenger cars and freight cars that China had for a geographical area about one-third as large. On the other hand by the inclusion of

¹⁰U.N., E.S.A.F.E.: 1949, op. cit., pp. 56-67. Professor Wu's estimates were somewhat higher for China at the end of 1949--- 3,355 locomotives, 4,412 passenger cars and 44,401 freight cars; see Wu, op. cit., p. 364.

Per capita national income in 1952 was 100 yuan in both countries as compared with 150 yuan in 1949. Within the possible range of variation, the indicator that most clearly indicates the internal economic situation is the national income. It has increased by 50% in the last five years, and is expected to reach 150 yuan by 1955.

The railway network in China is one of the most extensive in the world. It has a total length of 29,000 kilometers, and is expected to reach 35,000 kilometers by 1955. The railway network is the backbone of the Chinese economy, and is expected to play an increasingly important role in the future. The railway network is the backbone of the Chinese economy, and is expected to play an increasingly important role in the future. The railway network is the backbone of the Chinese economy, and is expected to play an increasingly important role in the future.

107. The railway network in China is one of the most extensive in the world. It has a total length of 29,000 kilometers, and is expected to reach 35,000 kilometers by 1955. The railway network is the backbone of the Chinese economy, and is expected to play an increasingly important role in the future.

Manchuria and the UNRRA shipments in postwar China, China's rolling stock had increased almost one hundred per cent compared to pre-war. Indian rolling stock (taking Pakistan and India together to eliminate the statistical effect of partition on India) had declined about five per cent and a large part of the remainder was obsolete.¹¹ An overall estimate of the railway systems would undoubtedly give India some advantage in the pre-Plan period, but the extent of the advantage is not at all clear considering the obsolete equipment which was estimated at eleven per cent of the locomotives, twenty-six per cent of passenger cars and ten per cent of the freight cars in 1951.¹²

The highway system in China seems to have been 22,553 miles of major and 203,414 miles of total highway in 1949 while India had 91,857 miles of hard surfaced and 384,753 miles of total highways.¹³ Estimated entrance and clearance of vessels in foreign trade in 1949 were about the same for India as in 1938 and less than half for the ports of China in 1949 compared to pre-war figures.¹⁴ Reliable statistics are not available for inland water transport in either India or China. It is known that India had about 200,000 tons of ocean going vessels, but it is not known how much salvagable

¹¹Ibid., p. 62.

¹²Planning Commission, Government of India, First Five Year Plan (Delhi: 1953), p. 202.

¹³ U.N., E.S.A.F.E.: 1949, op. cit., p.69.

¹⁴Ibid., p. 75.

Manchuria and the United States...
...rolling back...
...compared to...
...and India together...
...partition on India...
...large part of the...
...estimate of the...
...some advantage...
...advantage in...
...equipment which...
...locomotives, twenty...
...per cent of the...
...The highest...
...miles of major...
...while India had...
...miles of total...
...of vessels in...
...India as in 1929...
...in 1949 compared...
...are not available...
...or China. It is...
...ocean going vessels...

11 India, 1949.

12 Planning Commission, Government of India, Year Plan (Outline), 1949-50.

13 U.S., Bureau of Census, U.S. Census of Transportation, 1945.

14 India, 1949.

ocean going tonnage fell into the hand of the mainland Chinese government.¹⁵

The pre-Plan situation in agriculture in both India and China was, by any standard, extremely grave. Some seventy to eighty per cent of the population was dependent on agriculture for a living. In India only about fifty per cent and in China about sixty per cent of national income was actually produced by agriculture in the period 1947-1950. Farm tenancy and small inefficient farm holdings were characteristic of both economies. The reported size of average Indian holdings was less than 5 to 7.4 acres and Chinese holdings averaged from 2.5 to 5 acres.¹⁶ In any case, with farm families averaging over five persons per family the areas would be extremely small and uneconomical by the standards of western agriculture. Land reform was perhaps more pressing in India where it is estimated that over 66 per cent of the peasants in the pre-Plan period,¹⁷ were tenant farmers against estimates running from thirty to fifty per cent for China. Immediate pre-Plan net cultivated land was 295 million acres in India in 1950-51 and 332 million acres in China in 1952. China partly made up for the fact that only 11 per cent of her land surface was cultivated compared to India's nearly forty per cent, by significantly

¹⁵Adler, op. cit., p. 158.

¹⁶Malenbaum, op. cit., p. 61.

¹⁷Professor Wu has an excellent discussion of various aspects and history of Chinese land ownership; see Wu, op. cit., pp. 118-123.

ocean going commerce half that of the United States.
Chinese government.

The pre-war situation was as follows:

and China was, by any standards, extremely poor. The average income per capita was only about \$1.00 per year. The population was about 450 million. The land was mostly owned by a few landlords, and the peasants worked the land for them. The peasants received only a small share of the harvest. The government was corrupt and inefficient. The economy was stagnant. The people were poor and hungry. The country was divided by class and regional differences. The government was unable to provide basic services to the people. The country was a backward and feudal society.

1949, October 1, 1949.

1949, October 1, 1949.

larger yields per acre---almost double for cotton, rice, wheat and other grains.¹⁸ Overall food grain consumption in both countries had dropped per capita from pre-World War II. In addition, absolute quantities of basic grain had still not reached 1934-38 averages in either India or China.¹⁹ Thus both countries lacked agricultural self sufficiency and in 1947-50 they had become net importers of food compared to their prewar status as net exporters of food. This was aggravated in India's case by the loss of the rich rice area of Burma in 1938 and Pakistan in 1947.

This brief picture of agriculture in pre-Plan India and China shows that two problems stand out as decisive if economic growth of a more rapid nature is to be undertaken: (1) Increased productivity and new methods would have to be adopted to keep agricultural production up to population growth: (2) Land reform in both countries could result in social and economic changes that would increase production. Increased agricultural production was absolutely essential, not only for self sufficiency, but to help pay for foreign imports necessary to purchase finished consumer and producer goods. Given the population pressure on the land and the large number of underemployed, structural changes were necessary in the economy to absorb a growing labor force outside the agricultural sector. One more important point might be added.

¹⁸Malenbaum, op. cit.

¹⁹U.N., E.S.A.F.E.:1949, op. cit., p. 4,6,8.

larger yields per acre--which would be essential for wheat and other grains. In addition, absolute production of wheat and other grains in both countries had to be increased from 1947-50 to 1957-60. In addition, absolute production of wheat and other grains had not reached 1957-60 levels in either country. These two countries, however, had achieved a significant increase in 1957-60 they had become self-sufficient in wheat and in 1957-60 they had become self-sufficient in wheat. Compared to their wheat stocks in 1947-50, the stocks in 1957-60 were significantly increased in both countries. The area of wheat in 1957-60 was 1.5 million hectares.

This table shows the results of the analysis. It shows that China shows that the wheat and other grains in 1957-60 were significantly increased in both countries. The area of wheat in 1957-60 was 1.5 million hectares. (1) Increased production of wheat and other grains in 1957-60 was significantly increased in both countries. The area of wheat in 1957-60 was 1.5 million hectares. (2) Land reform in both countries was significantly increased in both countries. The area of wheat in 1957-60 was 1.5 million hectares. Increased agricultural production in both countries was significantly increased in both countries. The area of wheat in 1957-60 was 1.5 million hectares. not only for self-sufficiency, but also for the export of goods. Given the production of wheat and other grains in 1957-60, a large number of units of wheat and other grains were produced in the economy to ensure a sufficient supply of wheat and other grains. Agricultural production in both countries was significantly increased in both countries. The area of wheat in 1957-60 was 1.5 million hectares.

13. Agricultural production

1957-60. The area of wheat in 1957-60 was 1.5 million hectares.

Considering the very high yields per acre in China and the low yields in India, the indications are that in the short run India could perhaps increase food production more cheaply than China merely with improved seed, 'Japanese methods of rice cultivation, and better use of their water supply.²⁰ While these same methods are applicable in China, it would seem that the application of chemical fertilizer on the pattern of Japan, which, of course, is very expensive in an underdeveloped economy, must be the main method of increasing productivity.

Unlike the generally similar agricultural decline in India and China resulting from political disturbances in the post-World War II period and population growth, industrial comparison shows striking differences. Manchuria's industrial potential was largely destroyed by the Civil War and the remaining factories were carried off by the Russians. Chinese industrial production in 1949 was 42 per cent of 1938 production in coal, 11 per cent in iron ore, 37 per cent in tin, 10 per cent in steel ingots, and 51 per cent in cotton yarn production.²¹

On the other hand, in 1949 India had achieved 194 per cent of 1938 production in electric power, 137 per cent in

²⁰Malenbaum, op. cit., p.7. Professor Malenbaum suggests that the higher Chinese yields are based on China's greater use of the surface flow of water and "indigenous" methods which can be relatively easily and cheaply adapted to India and could result in much more immediate and rapid progress in Indian agriculture than in Chinese.

²¹Ibid., pp. 21-55.

Considering the very low yields in India, the productivity of the land is low. India could produce more food than China merely by increasing the area under cultivation, but this is not possible. While these facts are true, it is also true that the productivity of the land in India is low. The pattern of land use in India is such that the land is not used to its full potential. The land is used for agriculture, but the productivity is low. The land is used for agriculture, but the productivity is low. The land is used for agriculture, but the productivity is low.

United States and India: A Comparison

India and China are the two largest countries in the world. India is the seventh largest country in the world, and China is the third largest. The population of India is 1.1 billion, and the population of China is 1.3 billion. The land area of India is 3.3 million square kilometers, and the land area of China is 9.6 million square kilometers. The land area of India is 3.3 million square kilometers, and the land area of China is 9.6 million square kilometers. The land area of India is 3.3 million square kilometers, and the land area of China is 9.6 million square kilometers.

Production

On the other hand, in 1977, the production of food in India was 10 percent of the production in the United States.

20. Production of Food

suggests that the United States and India are the two largest countries in the world. The population of India is 1.1 billion, and the population of China is 1.3 billion. The land area of India is 3.3 million square kilometers, and the land area of China is 9.6 million square kilometers. The land area of India is 3.3 million square kilometers, and the land area of China is 9.6 million square kilometers. The land area of India is 3.3 million square kilometers, and the land area of China is 9.6 million square kilometers.

21. Production of Food

iron ore, 100 per cent in pig iron, 140 per cent in steel ingots, 122 per cent in finished steel, and 150 per cent in cement output. These figures, however, can be misleading if it is not kept in mind that 1949 was the low point in Chinese production due to the Civil War disturbances. However, the figures do indicate the scope of the problem of Chinese reconstruction and the relative lead in Indian industrial production, but not the absolute quantities or per capita output. A more realistic view of China's pre-Plan potential can be seen by examining the peak production in Manchuria and China proper of various items in Table 1. Also by 1952 production in China had surpassed these pre-Plan peaks in ten items but was still behind in the six key items of pig iron, coal, sugar, electric power, wheat and soy bean production. We can further see in Figure 1 the industrial lead of India in a number of key items by examining the per capita output. Here we notice the distinct but not striking superiority of per capita production of India in coal, pig iron, crude steel, cotton spindleage and cement in 1951 compared to China in 1952. Altogether the pre-Plan industrial comparisons show an extremely thin industrial base in both countries, concentrated in the main in a few coastal cities (Bombay and Calcutta in India; Canton, Shanghai, Tientsin and Anshan in China) with a slight edge in India in coal and steel and a more decided lead in cotton goods, cement and power generating capacity per capita. This was offset to a certain extent, however, by pre-war capacity in

TABLE 1

ESTIMATED PRODUCTION OF SELECTED ITEMS IN PRE-PLAN
YEARS AND 1952 FOR MAINLAND CHINA*

Product	Unit	Pre-Plan Peak ^a	1952
Pig Iron	In 000 Metric Tons	2,000	1,589
Crude Steel	" " " "	900	1,215
Rolled Steel	" " " "	500	740
Coal	" " " "	59,000	53,000
Crude Oil	" " " "	330	389
Cement	" " " "	2,140	2,311
Paper	" " " "	120	264
Flour	" " " "	2,450	3,087
Sugar	" " " "	410	328
Cotton Cloth	In 000 Bolts	41,000	56,580
Cotton Yarn	In 000 Bales	2,400	2,784
Cigarettes	In 000,000 Sticks	82,000	102,500
Electric Power	In 000,000 K.W.H.	6,900	5,700
Rice	In 000 Metric Tons	48,000	55,890
Wheat	" " " "	24,000	22,800
Soybeans	" " " "	10,000	8,900
Cotton	" " " "	1,115	1,290

SOURCE: Alexander Eckstein, "Conditions and Prospects for Economic Growth in Communist China", World Politics, VII, No 1, (October, 1954).

a - Pre-Plan peak refers to various years for different items before 1952.

ESTIMATED TARIFFS ON IMPORTS FROM THE UNITED STATES

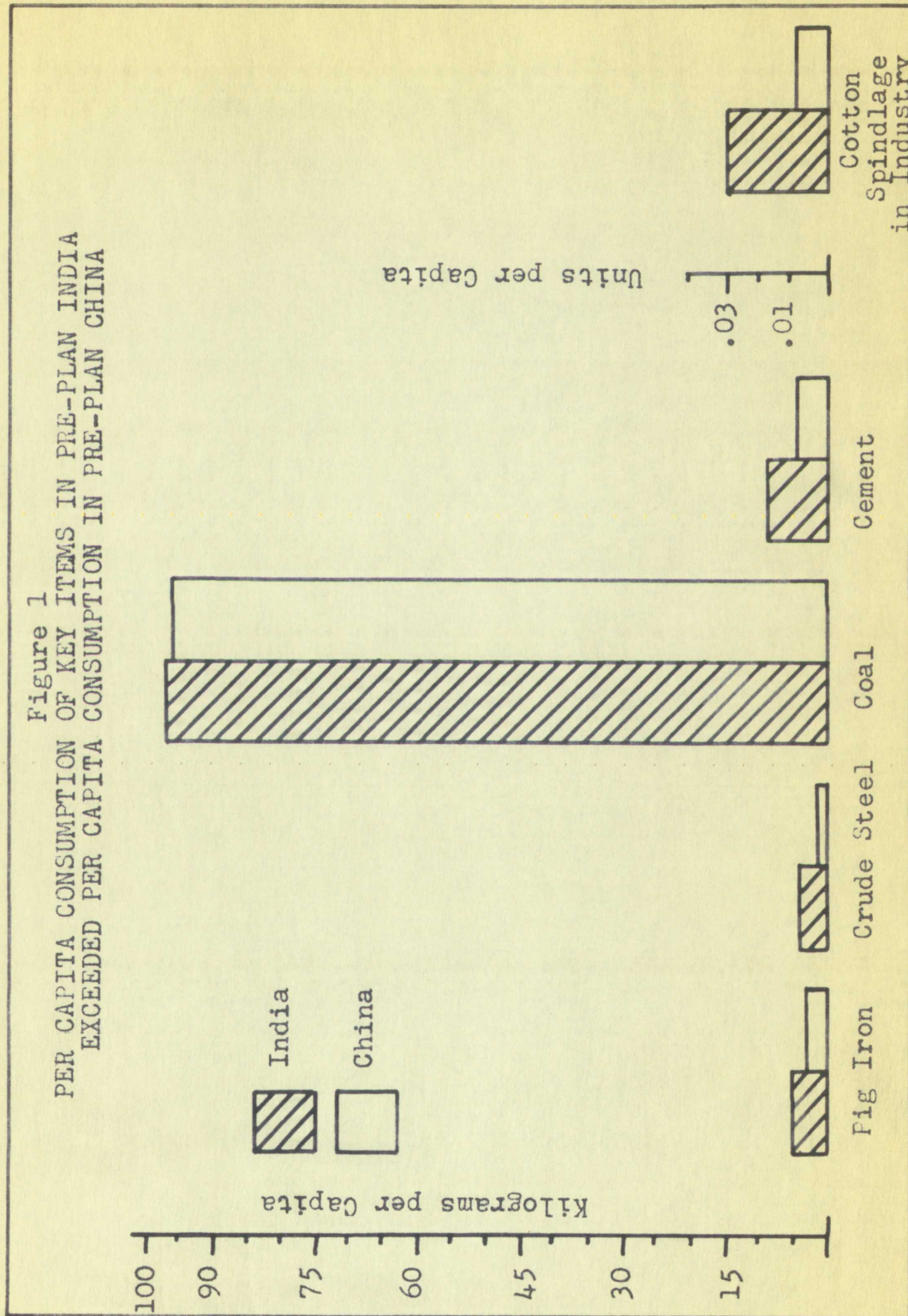
THREE AND A HALF PER CENT

Product	Value	Quantity	Unit
Pig Iron	100,000	100,000	tons
Crude Steel	100,000	100,000	tons
Roller Steel	100,000	100,000	tons
Coal	100,000	100,000	tons
Crude Oil	100,000	100,000	tons
Cement	100,000	100,000	tons
Paper	100,000	100,000	tons
Flour	100,000	100,000	tons
Sugar	100,000	100,000	tons
Cotton Cloth	100,000	100,000	tons
Cotton Yarn	100,000	100,000	tons
Cigarettes	100,000	100,000	tons
Electric Power	100,000	100,000	tons
Rice	100,000	100,000	tons
Wheat	100,000	100,000	tons
Soybeans	100,000	100,000	tons
Cotton	100,000	100,000	tons

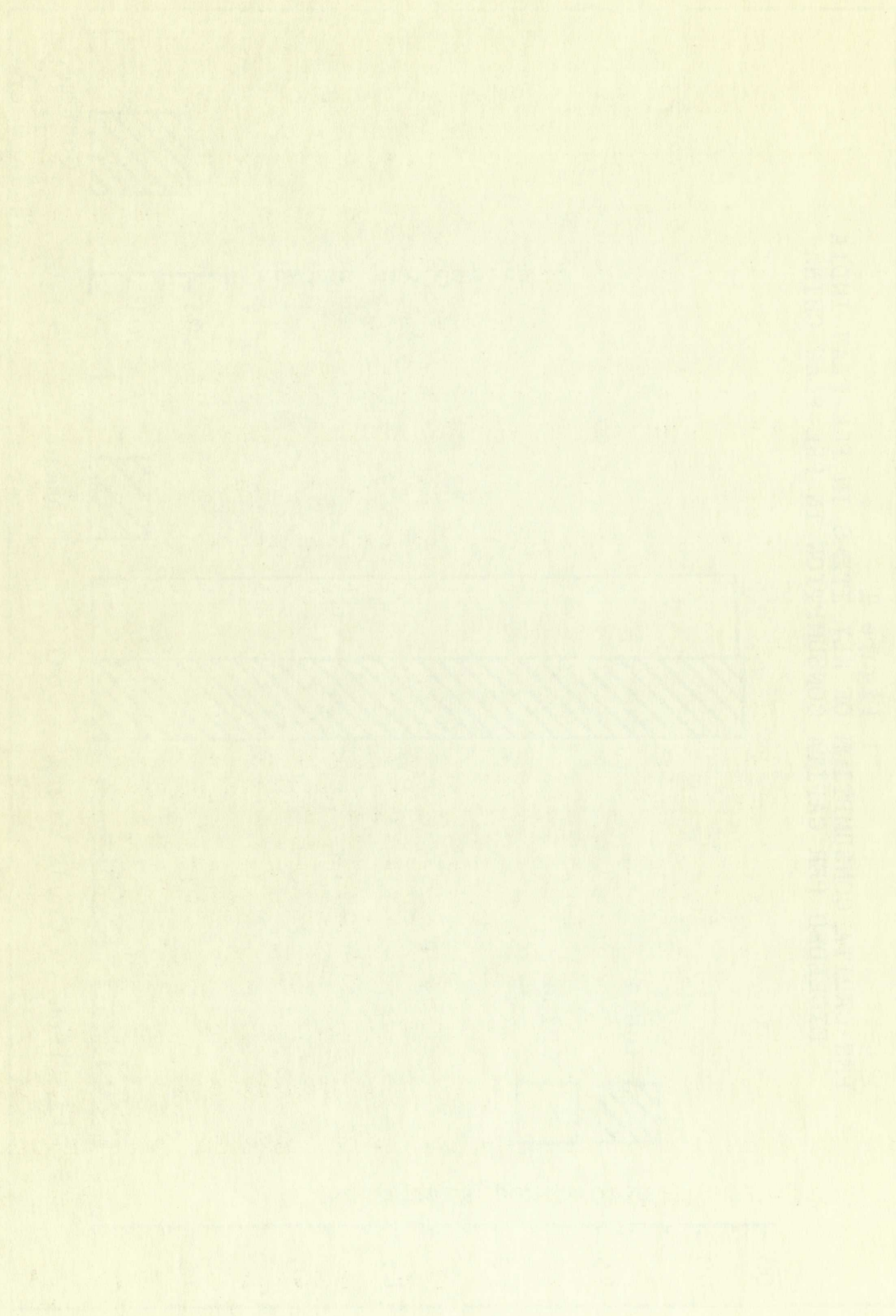
SOURCE: Bureau of Economic Warfare, Department of War, for Economic Warfare, Department of War, VII, No. 1, (October, 1941).

2 - The Bureau of Economic Warfare, Department of War, VII, No. 1, (October, 1941).

Figure 1
PER CAPITA CONSUMPTION OF KEY ITEMS IN PRE-PLAN INDIA
EXCEEDED PER CAPITA CONSUMPTION IN PRE-PLAN CHINA



See Appendix Table 1 for data



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China in pig iron, coal and generating capacity which had not been restored in China by 1952 as Table 1 shows. Rostow places Chinese development in 1949 at about the level of India in 1946. Considering all factors, closer examination of Chinese pre-Plan potential would, I believe, place India and China on about equal terms after the Chinese reconstruction (largely completed in 1952).²²

One additional factor needs to be briefly described in order to have an overview of the two economies--namely the mineral resource base. Mineral resources in general are large in India and China but of uneven quality. Geological surveys have not been concluded in either country in any complete way but tentative estimates for industrial use are available.

India has:

In respect to coal and iron--the minerals essential for basic industry--the resources are ample; indeed India's deposits of high grade iron ore are among the richest in the world. Likewise, there are large reserves of titanium and thorium ores and of mica, bauxite, almenite, and monazite; and supplies of refractories, abrasives and limestones are fairly adequate. The country is however, deficient in copper, tin, lead, zinc, nickel, cobalt, and sulphur and above all in petroleum.²³

Indian coal reserves are estimated at 20 billion tons, coking coal at 2 billion tons, iron ore at over 10 billion tons, bauxite at 250 million tons with unknown but substantial quantities of magnesite, mica and gypsum.²⁴ In regard to

²²W. W. Rostow et al, The Prospects for Communist China (New York: John Wiley & Sons, Inc., 1954), p. 230.

²³Planning Commission, Gov't. of India, op. cit., p. 164.

²⁴Ibid., pp. 165-172.

their industrial needs the main problems that remain to be solved in the Indian geological survey which has been recently undertaken are adequate supplies of copper, sulphur and petroleum.

China has greater estimated coal deposits than India, but on the other hand she has iron ore deposits of only 2.5 to 5 billion metric tons, about one-half of India's. In addition, India's iron ore is rated among the best in the world with most of it over sixty per cent iron ore content while China's known deposits are generally of poorer quality. India has an added advantage in the proximity of coal and iron, while China's ore is known to be generally scattered and requires considerable cost in transportation because of its generally low grade. China seems to have an adequate supply of "manganese, mica, tungsten, vanadium, cobalt, and the refractories."²⁵

China, as we now know, also lacks industrial quantities of copper and petroleum as does India. Over all mineral resources in both countries seem to be ample to start major industrial complexes, whether or not they are sufficient in the long run. India has among the best manganese and iron ore deposits in the world which possibly could be exchanged for short items such as copper, sulphur and petroleum. Likewise, China may be able to trade tin and tungsten for her relative shortages in copper and petroleum, although these are less

²⁵U.S. Senate, Comm. on For. Rel., op. cit., p. 11.

their industrial needs the main problem is to find a way to solve the problem of obtaining the necessary raw materials and energy. The main problem is to find a way to solve the problem of obtaining the necessary raw materials and energy. The main problem is to find a way to solve the problem of obtaining the necessary raw materials and energy.

China has great reserves of coal, iron, and other minerals, but on the other hand, the country is short of oil, natural gas, and other energy resources. India's rich coal reserves are concentrated in the eastern part of the country, while China's reserves are distributed throughout the country. India has an abundant supply of iron, while China's supply is limited. India's rich coal reserves are concentrated in the eastern part of the country, while China's reserves are distributed throughout the country. India has an abundant supply of iron, while China's supply is limited. India's rich coal reserves are concentrated in the eastern part of the country, while China's reserves are distributed throughout the country. India has an abundant supply of iron, while China's supply is limited.

China, as we know, is a country with a long history of copper and petroleum production. The country is rich in copper and petroleum resources, but it is short of oil, natural gas, and other energy resources. India's rich coal reserves are concentrated in the eastern part of the country, while China's reserves are distributed throughout the country. India has an abundant supply of iron, while China's supply is limited. India's rich coal reserves are concentrated in the eastern part of the country, while China's reserves are distributed throughout the country. India has an abundant supply of iron, while China's supply is limited.

U.S. General Sherman D. ...

11-15-1962

likely than the Indian manganese and iron ore to have a high value in world trade. It would appear, then, that mineral resources as presently known (with the exceptions noted) present no obstacles in themselves to rapid industrialization in either country.

From the brief summary the economic comparability of India, 1951-56, and China, 1953-57, appears to be relatively valid. Political disturbances and economic reconstruction in both countries had come largely to an end. China had incorporated the Japanese built industrial base in Manchuria. Pre-war production in industry and agriculture was largely accomplished in important commodities and surpassed in others. India had accomplished a political miracle in the incorporation of 522 former princely states into the Indian Union, absorbed millions of refugees, and had attained or surpassed pre-war industrial production in all important lines. In order to get an overview we turn now to an outline of the First Five Year Plans.

CHAPTER III

OUTLINE OF PLANS

The preceding chapter described conditions in India and China prior to the adoption of their respective First Five Years Plans. It was pointed out that pre-Plan agriculture in the two countries were in similar states of decline but industrial production in pre-Plan India was much higher, as measured by pre-war standards than in pre-Plan China. It was concluded that as of 1952 the pre-Plan economic development potential of the two countries was approximately equal. It was further shown that both countries possess an adequate mineral resource base for industrial development.

The overall Five Year Plan objectives of India and China can best be viewed from an examination of investment plans, government revenue and expenditures planned, and agricultural and industrial physical output targets. Initial plans for investment by sector can be seen in Table 2.

The Investment ratios shown for India are the same as estimated by Professor Malenbaum and include the private and public sector. But the rates shown for China are twice as large as Malenbaum's on the basis of the more current material available from the United Nations. These corrected rates of investment are significant in two main respects. India's total investment of seven billion dollars would reach an

CHINA'S FIVE YEAR PLANS

1953-1957

The preceding chapters have dealt with the

and China prior to the establishment of the People's

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annual average of seven per cent of national income and China's would be slightly over eighteen per cent. This higher Chinese investment ratio would lead to significantly higher national income in subsequent years as the new capital-output ratio made itself felt.

TABLE 2
COMPARATIVE NET INVESTMENT
FIRST FIVE YEAR PLANS^a

Investment Allocations	India ^b 1951-56		China 1953-57	
	Dollars ^b (Billions)	Percentage	Dollars ^c (Billions)	Percentage
Agriculture	1.04	14.8	2.59	8
Irrigation	0.82	11.8	...	...
Industry (incl. power)	1.92	27.4	13.30	40.9
Transp. & Communication	1.26	18.0	4.72	14.5
Other	<u>1.96</u>	<u>28.0</u>	<u>11.93</u>	<u>36.6</u>
Total	7.00	100.0	32.54	100.0
Yearly Average	1.40		6.4	

^aCalculated by the author from United Nations, E.S.A.F.E.: 1955, op. cit., p. 96; and Malenbaum, op. cit., p. 13.

^bOne dollar = 4.76 Rupees.

^cOne dollar = 2.35 N.P.B.Y.

The pattern of investment is also significant and shows the considerable difference in the approach of the two Plans. Not counting possible non-monetized investment in Chinese or

annual average of 1.5% for the period 1952-1955.

China's total output of goods and services in 1955 was 10.5 billion yuan.

Higher Chinese investment in the economy was 1.5 billion yuan in 1955.

Higher national income was 1.5 billion yuan in 1955.

Output ratio was 1.5% in 1955.

Table 1

China's National Income and Output Ratio, 1952-1955

Year	1952	1953	1954	1955
Investment	1.5	1.5	1.5	1.5
Allocation	1.5	1.5	1.5	1.5
Output	1.5	1.5	1.5	1.5
Ratio	1.5	1.5	1.5	1.5
Other	1.5	1.5	1.5	1.5
Total	1.5	1.5	1.5	1.5
Average	1.5	1.5	1.5	1.5

1955. On the other hand, the national income was 1.5 billion yuan in 1955. The ratio of national income to output was 1.5% in 1955.

The ratio of national income to output was 1.5% in 1955. The ratio of national income to output was 1.5% in 1955.

Indian agriculture and irrigation by peasants, the ratio of investment in agriculture in India compared to China is over three to one. Industry and transport gets 45.4 per cent in India and 55.4 per cent in China. Other investment includes retail and wholesale trade, education, banking and the like. The Chinese percentage is substantially larger for "Other" because of central government control of commerce. The actual percentage going to education and welfare seems to be slightly lower in the Chinese than in the India Plan.

A further breakdown of the figures shows one additional fact of great importance---in the nature of the industrial investment figures. Malenbaum estimates that heavy industry components comprise forty per cent of the Indian industrial investment or 0.75 billion dollars.¹ On the other hand 88.8 per cent of the Chinese investment in industry² is allocated to heavy industry which, on the basis of our new investment figures, comes to about 11 billion dollars. Overall figures for development outlays would allocate a little over ten per cent to heavy industry in India and a little over thirty per cent in China. It should also be noted that the Chinese Plan was based generally on early Soviet models and the Indian Plan emphasized welfare--attempting the twin goals of raising investment ratios while increasing consumption.

We can turn now to the quantitative targets shown in

¹Malenbaum, op. cit., p. 14.

²Li, op. cit., p.47.

Indian agricultural... investment in agriculture... three to one... India and 35.4 per cent... retail and wholesale... The Chinese pattern... because of... actual per capita... slightly lower in the... A further... fact of... investment... components... investment of... per cent of the... so heavy industrial... figures... for development... cent to heavy... cent in China... was based... emphasized... investment... We have...

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Appendix Table 2. It is clear that China's plan envisaged more substantial absolute and percentage increases in producer goods industries while the Indian plan contemplated more substantial gains in consumer goods and production for export. This follows logically from the capital input allocations, and the different emphasis in the two Plans. India envisaged substantial increase in cement, agricultural machinery, jute production, bicycles, irrigated acreage, chemical fertilizer and cotton production; all geared to increased consumption, increased agricultural output or export needs. China emphasized steel, cement, coal and fertilizer, mostly geared to producer goods production.

An analysis of Table 3 shows that about thirty per cent of the national income is collected by the Chinese government compared to only ten per cent for the Indian central government and states. This shows the financial basis for the Chinese net investment ratio of eighteen per cent of the national income with the balance of thirty per cent of the national income being used for military outlays and general administrative expenses.

India had projected a gross savings ratio of twenty per cent of the annual national income by 1955/56 but because of the private sector investment this would not entirely show up in central or state government budgets. The Chinese planned the near elimination of the private sector by 1957 so that essentially all investment would be indicated in government investment plans.

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TABLE 3

NATIONAL AND STATE GOVERNMENT REVENUE AND
EXPENDITURE AS A PERCENTAGE OF NATIONAL
INCOME IN INDIA AND CHINA IN
SELECTED YEARS*

INDIA				
(Billions of dollars)				
	1950/51	% Nat. Income	1955/56	% Nat. Income
Revenue	1.83	9.6	2.30	10
Expenditures	<u>2.05</u>	10.7	<u>3.53</u>	15
Balance (+) or (-)	- .22		-1.23	

CHINA				
(Billions of dollars)				
	1953	% Nat. Income	1956	% Nat. Income
Revenue	9.24	29	11.95	30
Expenditures	<u>9.12</u>	28.9	<u>12.65</u>	31
Balance (+) or (-)	+ .12		- .70	

Compiled by the author

SOURCE: U.N., E.S.A.F.E.: 1955, op. cit. and U.N.,
E.S.A.F.E.: 1957, op. cit.

STATE OF TEXAS

REPORT OF THE COMMISSIONER OF THE GENERAL LAND OFFICE
FOR THE YEAR 1901

REVENUE

REVENUE FROM LANDS

REVENUE FROM LANDS

Revenue

Expenditures

Balance (—) or (+)

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Revenue

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Foreign investment, while extremely important qualitatively was not seen in either Plan as a decisive source of financial assistance. India planned to draw down her sterling balances which were considerable and borrow about twelve per cent of the total (costs) of the Plan. China's plans for foreign assistance were not known, but early reports placed Soviet assistance in the form of loans at a level of 100 million dollars to 140 million dollars per year, or 500 to 700 million dollars over the life of the First Plan. Here again the level of foreign assistance does not seem significant, except in terms of the machinery imported that could be secured nowhere else.

It would seem from the figures available that India has done considerably more deficit financing than have the Chinese. While little deficit financing was contemplated at the beginning of the Indian Plan by 1955/56 about one-third of government expenditures were deficit financed. This was increasingly resorted to as the Plan progressed but fortunately had little inflationary effect because of considerable unused capacity on the one hand and deflationary pressures that set in after the Korean War boom and the bumper crops of 1952/53. Chinese planners seem to be dealing with tendencies of short food supplies and other inflationary pressures, and as far as we know have had relatively small deficit financing.³ They

³Choh-Ming Li, Review of The Chinese Economy, by Solomon Adler, American Economic Review., XLVIII (June, 1958) p. 466. See also U.N., E.S.A.F.E.: 1955, op. cit., p.94. These references describe four years of small budget surplus and two years of relatively small deficits in the six year period--1950-55 in China.

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Foreign Investment, which was not seen in the assistance. The assistance which were considered the total (about 10 million dollars) were not assistance in the form of dollars to 10 million dollars of the level of foreign except in terms of secured nowhere else.

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Section 1. Solomon Islands, 1952-1953. These rates of interest and two years of...

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have resorted to rationing when necessary. Two or three bond drives have been conducted sporadically however, with the obvious purpose of mopping up excess money to reduce pressure on short supplies of consumer goods. In the face of no excess capacity then, the Chinese planners evidently do not plan any appreciable deficit financing.

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have received information that the
bond driver has been released and
the obvious attempt to release him
pressure is being made. It is
of no exact certainty that a
do not plan any further action.

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CHAPTER IV

ACCOMPLISHMENTS IN AGRICULTURE

The analysis presented in the previous chapter, of the First Five Year Plans of China and India brought out China's First First Five Year Plan (1953-37) as in the case of its Russian model, called for a high rate of investment in producer goods, less emphasis on consumer goods and for a belt-tightening ratio of savings to national income. The Indian First Five Year Plan (1951/52-1955/56), on the other hand sought to achieve two objectives--a relatively rapid increase in the production of consumer goods coupled with a higher per cent of national income earmarked for investment. The comparative percentages of national income to be annually invested are worth repeating for the sake of emphasis; eighteen per cent for China and seven per cent for India.

Judged on pre-World War II production and long term trends in agricultural production, both India and China set for themselves impressive targets in Five Year Plans in agriculture. India's proportionally greater inputs, as described in the last chapter, seemed to have paid off with substantially greater progress in agriculture than China achieved in the same period. In order to follow this argument the problem of measurement must first be examined.

It is well know that pre-1950 statistical work in both China and India was poor by western standards, and very

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approximate. In addition, problems of inflation and deflation were relatively severe because of wars, civil disturbances and the problems connected with the terms of trade of primary producing countries. Statistical coverage of crops was in many areas on an average acre-yield basis, which took into account very inadequately floods, droughts, and spoilage. Value-added concepts in agriculture, used in both countries, had little comparative significance because of violent price movements. Taking all these factors into account, therefore, I have adopted the procedure of comparing only the physical output figures in agriculture, industry, transport and power production as the major criteria of economic growth. I will include sections on national income and foreign trade, but the heart of the comparison will lie in units of physical output dealt with in Chapters IV, V and VI. There are two reasons why this is a more valid approach. The physical output measurements are considered the most reliable statistics we have for both India and China, especially since 1950 for India and 1952 for China. The further back in years figures are taken, the more unreliable they become. Central statistical work was required to launch both Five Year Plans, and noticeable improvement has taken place in both countries in the last few years. Most writers agree that the Chinese and Indian figures may not be as exact as in the West, but they indicate generally correct magnitudes and accurately show trends. Percentage changes in Chinese statistical work, as in the Soviet Union, has the obvious problem of using low base

years in addition to price movements and changes in product mixes in output, which make them a poor basis for comparison with India. Price indices present problems in both countries, but especially in China where we do not know to what extent official price indices reflect real prices. In fact, the large scale rationing of certain food items in China tends to indicate official price indices would have many statistical traps. As the production of these two countries becomes more complex over the next few decades, the simple physical output comparison made in this paper would have serious shortcomings. However, considering the fact that about one-half the national product over the period reviewed is known in both countries to have been produced in agriculture, and considering that both have had primarily agricultural economies and have had relatively simple production in the industrial sector, comparison of physical output is as accurate a measurement of growth as is available at the present time.

Appendix Table 3 indicates the available data on India and China for agricultural production for their respective Plan years. In order to eliminate distortions in both countries percentage increases in production are figured not on pre-Plan years but on actual production in both countries in the first Plan year. Overall official agricultural and foodgrain indices are not available for these years. Therefore, I have constructed foodgrain indices based on 1951-52 for India and on 1953 for China. Insufficient

years in which the country has been in a state of
mines in output, which has been a steady increase
with India. The country has been in a state of
but especially in the last few years, the
official figures show that the country has been
large scale reduction in output, which has been
to indicate that the country has been in a state of
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more complex, the country has been in a state of
output compared with the country has been in a state of
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one-half the output of the country has been in a state of
known in both countries, it has been in a state of
and considering that the country has been in a state of
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Approximately 10% of the country has been in a state of
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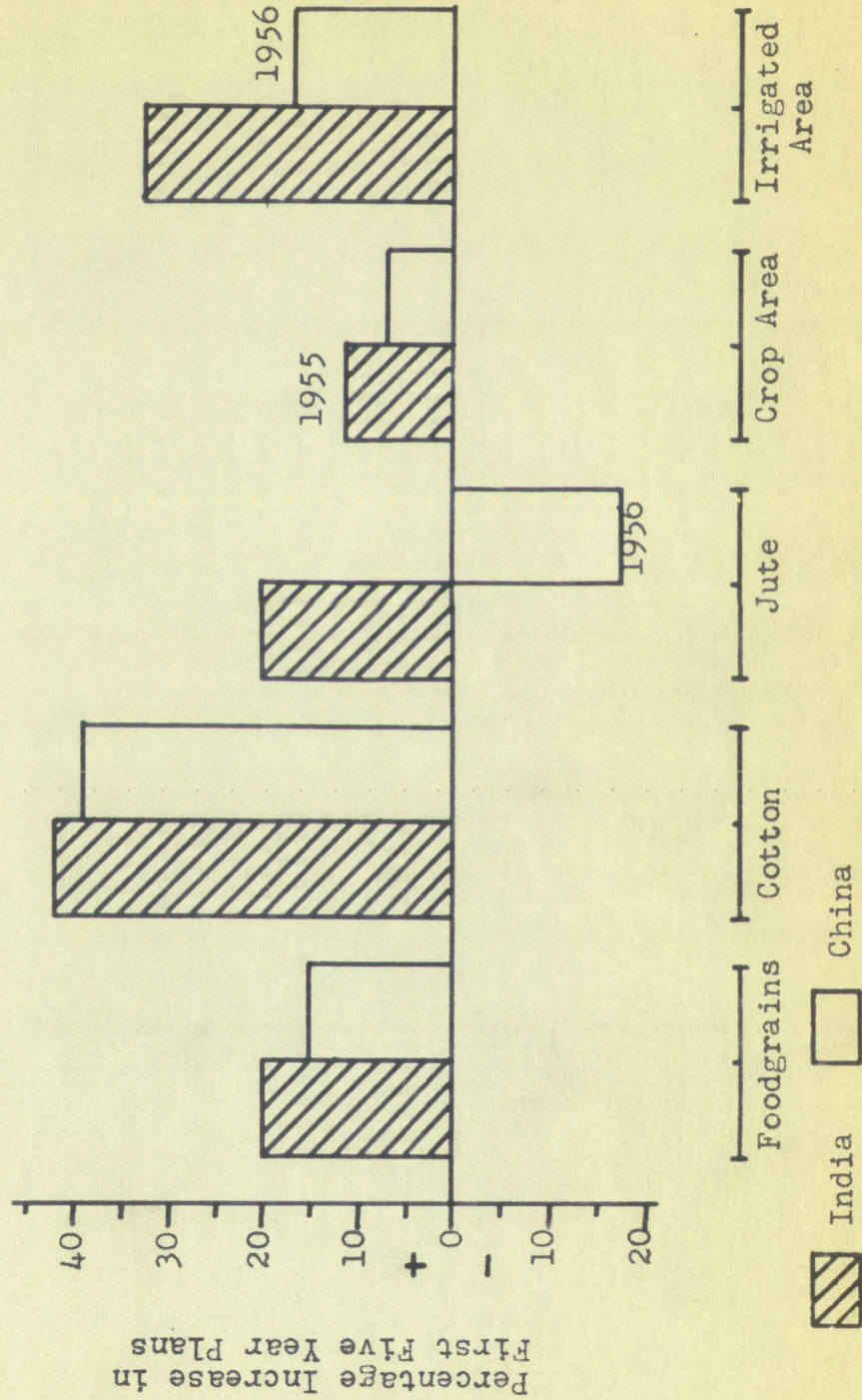
information is available to construct overall agricultural indices of foodgrain and raw materials. Original targets when available are given in the last column of the table for purposes of comparison with actual production. Because of their inexperience with national planning techniques not too much weight can be given to the original targets in either country. The selection of jute, cotton and foodgrains was made on the basis of these items comprising over eighty per cent of the value of all production in agriculture. Figure 2 shows that India exceeded Chinese percentage increases in all these items in addition to a superior performance in the development of new crop land.

It is clear from Appendix Table 3 that India did not achieve plan targets in jute production or the extension of irrigated acreage, but the targets for foodgrains on the whole were substantially exceeded, averaging a four per cent annual increase. The Chinese fell below planned output and achieved an average of a three per cent annual increment. Considering the population growth, India's achievement was far more substantial and led to a drop in imports of foodgrains from a high in 1951 of 4.7 million tons to less than 800,000 tons in 1956.¹ Judging by exports reported for China² her added agricultural production was being used in large part to

¹U.N., E.S.A.F.E.: 1955 (Bangkok: 1957), p. 106.

²U.N., E.S.A.F.E.: 1957, op. cit., pp. 102-103.

Figure 2
INDIA EXCEEDS CHINA IN PERCENTAGE INCREASES IN AGRICULTURAL CROPS AND LAND DEVELOPMENT IN THE FIRST FIVE YEAR PLANS



See Appendix Table 3 for data

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finance imports and in part to increase urban and rural consumption.³

Possibly the greatest Indian accomplishment in agriculture was not the absolute increase in production so much as the new spirit of hope created among the cultivators stimulated by the Community Development Projects. It is well known that by the end of the Plan period eighty million people in 123,000 villages had been reached by the Community Development Projects.⁴ This program of building schools, roads, wells, village councils, and health centers had generally improved the welfare of eighty million people. While India's increase in agricultural output can largely be attributed to the use of new seed, favorable monsoons, sixteen million additional irrigated acres, and increased use of fertilizer, it is generally conceded that the Community Development Projects are slowly changing the attitude of India's cultivators from one of resignation to one of hope.⁵ In the long run, such changes in attitudes as well as the raising of the general level of culture and of health standards may have as decisive an influence as the introduction of modern technology in raising the

³Ibid., p.98.

⁴Planning Commission, Government of India, The New India, Progress Through Democracy (New York: The MacMillan Co., 1958), p. 169.

⁵W. S. Woytinsky, "India, Awakening Giant", The New Leader (New York: September, 1957). See also, Planning Commission, Gov't of India, op. cit., pp. 168-179.

Finance Department and the Ministry of Agriculture and
Conservation.

During the period 1951-52, the Government of India
collected data on the food and nutrition situation
in the new states of India. This was done in
collaboration with the Food and Agriculture Organization
of the United Nations. The results of this survey
are well known and are the basis of the present report.
In 1952, 100 villages were selected for the survey.
Development projects, such as the construction of
roads, wells, village committees, and the like, were
generally approved and carried out. The survey was
while India was in the process of achieving
independence. The results of the survey are
contributed to the knowledge of the food and
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the introduction of health and nutrition.

Report of the
Planning Commission, Government of India,
India, 1952-53.
Co., 1953.
Dr. B. R. Ambedkar, Minister of Law and
Leader (New York, 1953).
Commission, 1953.

productivity in Indian agriculture.

Land reform in India presented many special problems. The Indian Constitution gave jurisdiction over land law to the States. The First Five Year Plan, therefore, merely indicated to the States a general policy needed in land reform. By the end of the Plan period land reform laws had been passed in all the major states limiting the ultimate size of land holdings, compensating landlords for confiscation and taking over the tenants as State tenants, and generally reducing rents by sixteen to fifty per cent. Despite the remaining high rents in a number of States the average rents in India were greatly reduced and several million acres were redistributed. However, no exact figures are available.⁶ Land reform continues to pose problems in a number of respects.⁷ Tenants have been evicted through land reforms in many States; land holdings have become even smaller and more uneconomical. It was proposed that this problem be met in India by cooperative farming, but the First Plan set no goals and only about 1000 Farm Cooperatives were formed.⁸

In contrast to India a forced pace of land reform, mutual aid teams and then cooperative, collective, and state farm programs were carried out during China's First Five

⁶Planning Commission, Gov't. of India, op. cit., p. 188.

⁷Frank J. Moore and Constance A. Freydid, Land Tenure Legislation in Uttar Pradesh, South Asia Studies, Institute of East Asiatic Studies, University of California (Berkeley: 1955), pp. 77-82.

⁸Planning Commission, Gov't. of India, op. cit., p. 7.

Year Plan. By June 1956 there were about one million producer cooperatives with 110 million farm households in existence.⁹ Unlike India's more or less peaceful legislative beginnings in land reform, the Chinese central government had led the redistribution of millions of acres of land by village and state executions of an unknown number of landlords. Immediately after mutual aid teams were organized (1949-52) and beginning in 1953 large numbers of mutual aid teams were converted to cooperatives. The pattern of land collectivization in China closely follows the Soviet Collectivization after 1928 with some important modifications.¹⁰ These differences, compared to the Soviet Union, are mainly reflected in a slower pace of collectivization proceeding through mutual aid and cooperative farming with the objective of minimizing opposition and unfavorable effects on production. To what extent this rapid collectivization may have produced the lower Chinese rates of growth in agriculture compared to India we cannot determine. However, it is interesting to note that Chinese agricultural production evidently did not decline, during the period under review, as agricultural production did in the Soviet Union during its early days of collectivization. The hazards of natural phenomena and their influence on agriculture seem to be evenly balanced in the two countries for the periods we

⁹Adler, op. cit., p. 113.

¹⁰Shabad, op. cit., pp. 71-72. Also see Wu., op. cit., pp. 145-46.

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are considering. Weather conditions helped to produce exceptionally good crops in India in 1952-53 and in China in 1955. On the other hand, China had particularly bad floods in 1954, inundating ten per cent of her crop area. India faced similar misfortune in 1955-56. The interesting fact is that despite natural calamities, substantial firm overall increases seem to have been secured in both countries.

Another remarkable achievement of the Indian First Five Year Plan in the agricultural sector was the extension of her irrigated cropland by approximately sixteen million acres. As Appendix Table 3 indicates this was equal to one-fourth of the irrigated land in all previous Indian history. This was accomplished by the addition of seven million acres of cropland through large and medium sized multipurpose projects for irrigation and power and about nine million from minor works largely provided by tube wells.¹¹ Given the undependability of the monsoons and recurrent floods to which Indian agriculture has historically been subject, the rise of irrigated land to twenty per cent of her total cropland is a major achievement, especially in connection with multipurpose flood control and power production.

In summary, India's inputs in agriculture, plus her Community Development Program has produced a distinct lead in the First Five Year Plan over Chinese performance. Major

¹¹Planning Commission, Government of India, First Five Year Plan, p. 102. See also Henry Hart, New India's Rivers (Calcutta: Orient Longmans, 1956) pp. 249-262.

are considering... are considering... are considering...
exceptionally good crop in 1955-56 in China
in 1955. On the other hand, China had serious
floods in 1954, illustrating the fact that
India faced similar misfortune in 1953-54. The
fact is that despite several calamities, India's
overall increase seems to have been greater in both countries.
Another remarkable achievement of the Indian Five
Year Plan in the agricultural sector was the extension
of her irrigated upland by approximately 10 million
acres. As Appendix Table 1 indicates, this was equal to one-
fourth of the irrigated land in all Greater India.
This was accomplished by the addition of 10 million acres
of cropland through large and medium-scale irrigation
projects for irrigation and power and about 10 million from
minor works largely provided by the states. It is the
independence of the monsoon and recurrent floods to which
Indian agriculture has historically been subject, the need
of irrigated land to twenty per cent of her total population
is a major achievement, especially in comparison with
purpose flood control and power production.
In summary, India's impact on the world, particularly
Community Development Program has been a significant factor
in the First Five Year Plan, which has been a major
achievement.

Planning Commission, Government of India, New Delhi
Year Plan, 1955-56, and also the First Five Year Plan
(Calcutta: Office of the Secretary, Planning Commission, 1955)

targets which were surpassed in India, were not quite realized in China. China did achieve considerable progress in the irrigation of twelve million additional acres up to 1956 and a foodgrain increase of fifteen per cent at the same time that her population increased about nine per cent. The net results in strengthening dykes and increasing irrigation may have been considerably less as great flood damage occurred in 1954 along the Yangtze and Huai rivers.¹² Although land reforms were preceeding slowly in India, there were few signs that this would produce any less output or that the basic food consumption of the Indian cultivator has not developed slightly more rapidly than had the Chinese.

¹²Richard L. Walker, China Under Communism, The First Five Years (New Haven: Yale University Press, 1957), pp. 229-230.

CHAPTER V

ACCOMPLISHMENTS IN INDUSTRY

In the previous chapter, as a prelude to the examination of the comparative First Five Year Plan results in agriculture in the two countries, an appraisal was made of the reliability of the available quantitative data. It was concluded that physical production statistics, as contrasted with expressions of monetary value, are "generally correct magnitudes and accurately measure trends." In the agricultural sector Indian progress exceeded that of China and not least among the gains of Indian agriculture was the new spirit of hope engendered by the Community Development Projects.

We can now proceed to take a look at the industrial sector.

Appendix Table 4 clearly indicates relative growth between the industrial sector of the Indian and Chinese economies during the First Plan. As implied by the inputs noted in Chapter III, Chinese targets were a great deal higher for physical output than were Indian goals. This is clearly brought out in Appendix Table 4 where generally increases in outputs were calculated in China at almost twice those in India. The basic plans differed in investment goals between agricultural emphasis and industrial emphasis, and Figure 3 generally confirms the results in Chinese industrial output. Much greater stress in overall inputs

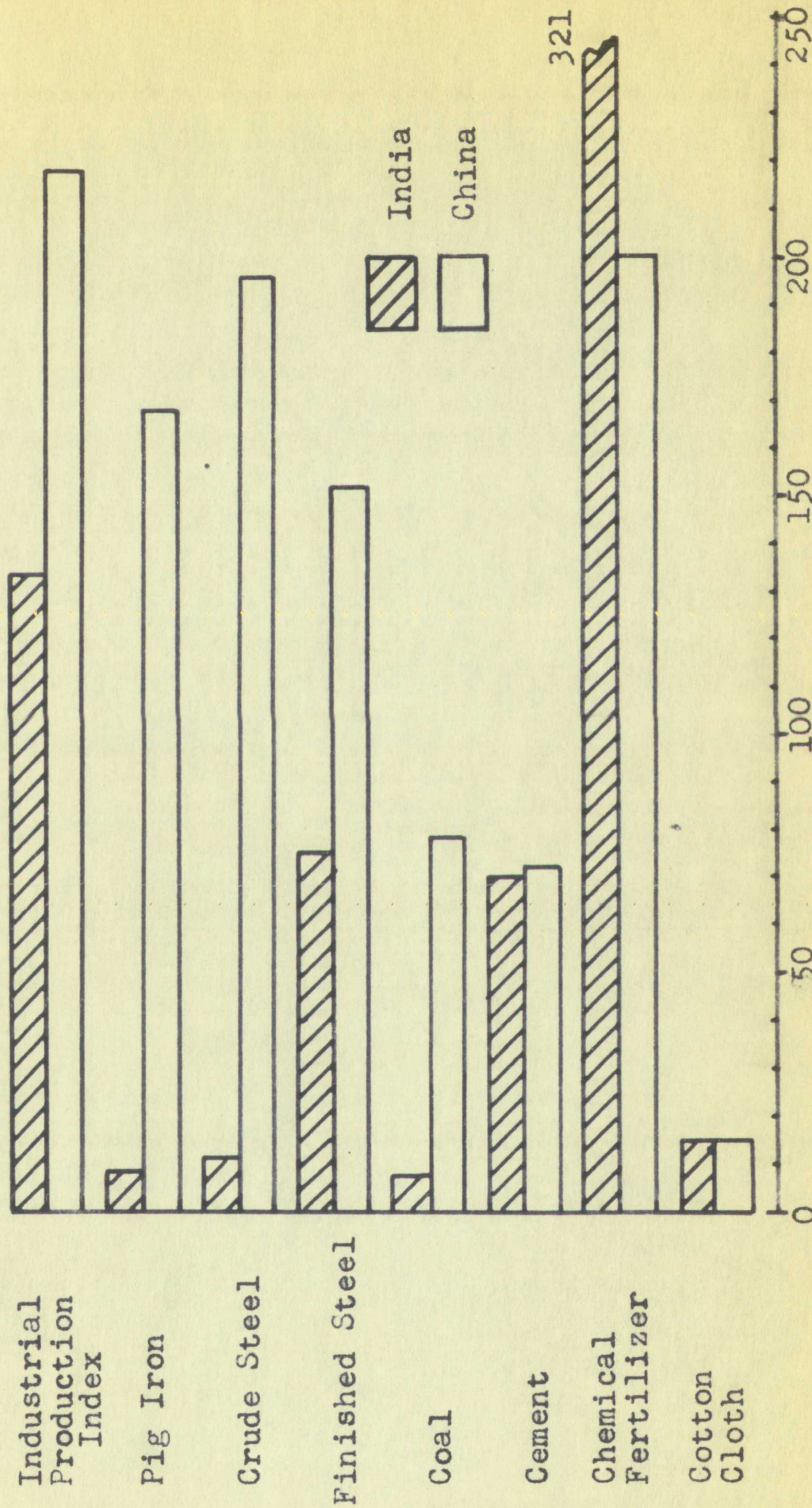
INDUSTRIAL DEVELOPMENT

In the past, the industrial sector of the economy has been characterized by a high degree of concentration in the hands of a few large firms. This has led to a situation where the interests of the small and medium-sized enterprises are often overlooked. The government has recognized this and has taken steps to promote the growth of these enterprises. This has been done through the establishment of various institutions and the provision of financial assistance. The result has been a significant increase in the number of small and medium-sized enterprises, which has led to a more diversified and resilient industrial sector.

sector.

Appraisal of the industrial sector is a complex task, requiring a detailed analysis of the various factors that influence its performance. This includes an examination of the government's policies, the availability of resources, and the competitive environment. The industrial sector is a key component of the economy, and its development is crucial for the overall growth and prosperity of the country. The government has a responsibility to ensure that the industrial sector is able to meet the challenges of the future and to continue to provide employment and income for its citizens. This requires a commitment to reform and innovation, and a willingness to take bold action when necessary.

Figure 3
 THE RATE OF INCREASE OF PRODUCTION IN THE FIRST FIVE YEAR PLAN PERIOD
 IN KEY INDUSTRIAL ITEMS IN CHINA, EXCEPT CHEMICAL FERTILIZER AND
 COTTON CLOTH, HAS BEEN SUBSTANTIALLY GREATER THAN IN INDIA



See Appendix Table 4 for data

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were on multi-purpose power development in India, as mentioned before, and much greater emphasis in China on producer goods production. In the main, the thirty-three per cent increase in industrial production in India was planned with existing capacity in the private sector. In China considerable additional capacity was to be created during the First Plan period. As can be seen from Appendix Table 4 average annual rates of increase in industrial production in India 1951-56 were about six per cent and in China 1953-57 they were almost sixteen per cent. Figure 3 clearly shows this disparity in key items.

As of 1956 the most noteworthy advances in India had been made in chemical fertilizer - 321 per cent, cement - 70 per cent, finished steel - 77 per cent, aluminum - 103 per cent, machine tools - 135 per cent, electric motors - 144 per cent, and bicycles - 395 per cent.¹ All of these large increases, it must be remembered, were on a very small base, but nevertheless registered important progress. In addition, the Chittaranja Locomotive Works started production and overfulfilled its plan (130 locomotives); the public sector Hindustan Shipyard delivered more than thirteen ships, including the first diesel engine ship built in India; a government owned penicillin factory went into production in 1955; and a thorium-uranium plant started

¹Those items not on Table 7 were taken from Planning Commission, Government of India, Second Five Year Plan, op. cit., pp. 37-38.

production in 1955.² Significant additional capacity was installed in aluminum, textile spindles, rayon manufacturing, wool manufacturing, petroleum refinery and cement production.³ This industrial expansion took place within the framework of the Industrial Policy Resolution of 1948 and 1956 revised, which states that the industrial economy would be built as rapidly as possible, consistent with democratic principles, in three main sectors; public, private, and cooperative enterprises. While Indian private industry only achieved about seventy-three per cent of the planned investment⁴ the public sector very slightly exceeded its planned outlay in industry during the Plan period.⁵ The reason for this can be found in the fact that the private sector investment was for the production of consumption goods and largely reflects demand created by increased income in the agricultural sector. Effective market demand evidently fell below levels necessary for the private sector to invest the full amount envisaged in the Plan. On the other hand public sector investment was planned and carried through independently of market demand largely in power and transport development. Whereas Appendix Table 4 shows the major achievements which took place many shortcomings developed

²U.N., E.S.A.F.E.: 1955, op.cit., pp. 106-107.

³U.S. Senate, Comm. on For. Rel., op. cit., pp. 26-27.

⁴Planning Commission, Gov't. of India, The New India, op.cit., p. 274.

⁵Planning Commission, Gov't. of India, Second Five Year Plan, op.cit., p. 35.

in investment and production targets in the Indian Investment Plan. But given the rough nature of the targets, shortages in private investment and the limited inputs into industry it can be said that considerable progress was made.

Turning now to the Chinese economy, a very different picture emerges. In general, all Chinese industrial targets were exceeded--with the exception of targets for cotton cloth, cotton yarn, and sugar production.⁶ As shown in Figure 3 coal products increased 79 per cent, pig iron 159 per cent, crude steel 194 per cent, cement 72 per cent, and fertilizer production 200 per cent.

We have seen in Chapter II how most pre-1949 industrial peaks had been achieved or surpassed by the Chinese in 1952. Therefore, using 1953 as a base year in Appendix Table 4 we can see the remarkable achievements in Chinese industrial production. However, these percentages still reflect exceedingly small base years. Far more impressive than the physical output increments are the 694 major industrial projects started under the First Five Year Plan in iron and steel, non-ferrous metals, chemicals, machine manufacturing, oil, electric power, and coal mining.⁷ Of these major construction projects 472 were to be placed in interior provinces completely changing the historical pattern of location of Chinese industry in the

⁶U.N. E.S.A.F.E.: 1957, op.cit., p. 92.

⁷For a good list of these projects (approx. 200) and their locations see Wu, op. cit., pp. 265-269.

North-East in Manchuria and along the coastal cities like Shanghai and Tientsin.⁸

Among the major works started in the First Plan period which will not be completed until some time during the Second Plan age: Two truck factories with an annual capacity of 90,000 units, two heavy machine factories capable of turning out an integrated 1.5 million ton iron and steel plant each year, electrical generating machine plants capable of producing 800,000 kilowatts of power generating equipment, two tractor factories and four chemical fertilizer factories. And these are only the more dramatic of their projects.

In the investment calculations total development expenditures exceeded plans by about twelve per cent in constant prices. Industrial investment exceeded plans by more than six per cent and totalled a little over 14 billion dollars--or thirty-nine per cent of total development outlay.⁹ The achievements in industry of the Chinese First Five Year Plan have undoubtedly laid the basis for a significantly larger industrial economy than the Indian and has pulled the Chinese ahead in industry. It is interesting to note at the same time that the main Chinese consumer items were the only ones that fell short of the targets set. Also, Appendix Table 4 shows a great instability in Chinese cotton cloth production, apparently

⁸Shabad, op.cit., p. 69.

⁹U.N., E.S.A.F.E.: 1957, op.cit., p. 100.

due to inadequate raw material supplies.¹⁰ While both Indian and Chinese cotton milled cloth production increased by about fifteen per cent over the Plan periods it is important to remember that India started with twice as large a base.

A key weakness that seemed to develop in the Indian industrial sector was the underutilization of capacity. The United Nations says, "The private sector, which was marking time during the first three years of the Plan, became more adventurous during the fourth year and there are signs of its going ahead at a fast rate during the concluding year of the Plan."¹¹ Figure 4 and Figure 5 seem to indicate an underutilization in transport and power capacity. In addition, Professors Brahmanand and Vakil made a detailed study of 78 industries from 1946 to 1954. Their study "brings out the important fact that in both 1952 and 1953 (two Plan years) nearly half the number of industries worked at a level of utilization which was less than 50 per cent of their capacity. The position improved somewhat in 1954. Detailed figures of capacity are available for all the four years between 1950 and 1953 for 78 industries. Out of this, 28 industries were throughout working at less than 60 per cent of capacity for a period of three years or more. In other words, about 57 per cent of the industries worked for a period of three years or more at less

¹⁰Ibid., p. 92. See also Li, op. cit., p. 48. Li notes that the main limiting factor in increasing consumer goods is not investment but the supply of raw materials.

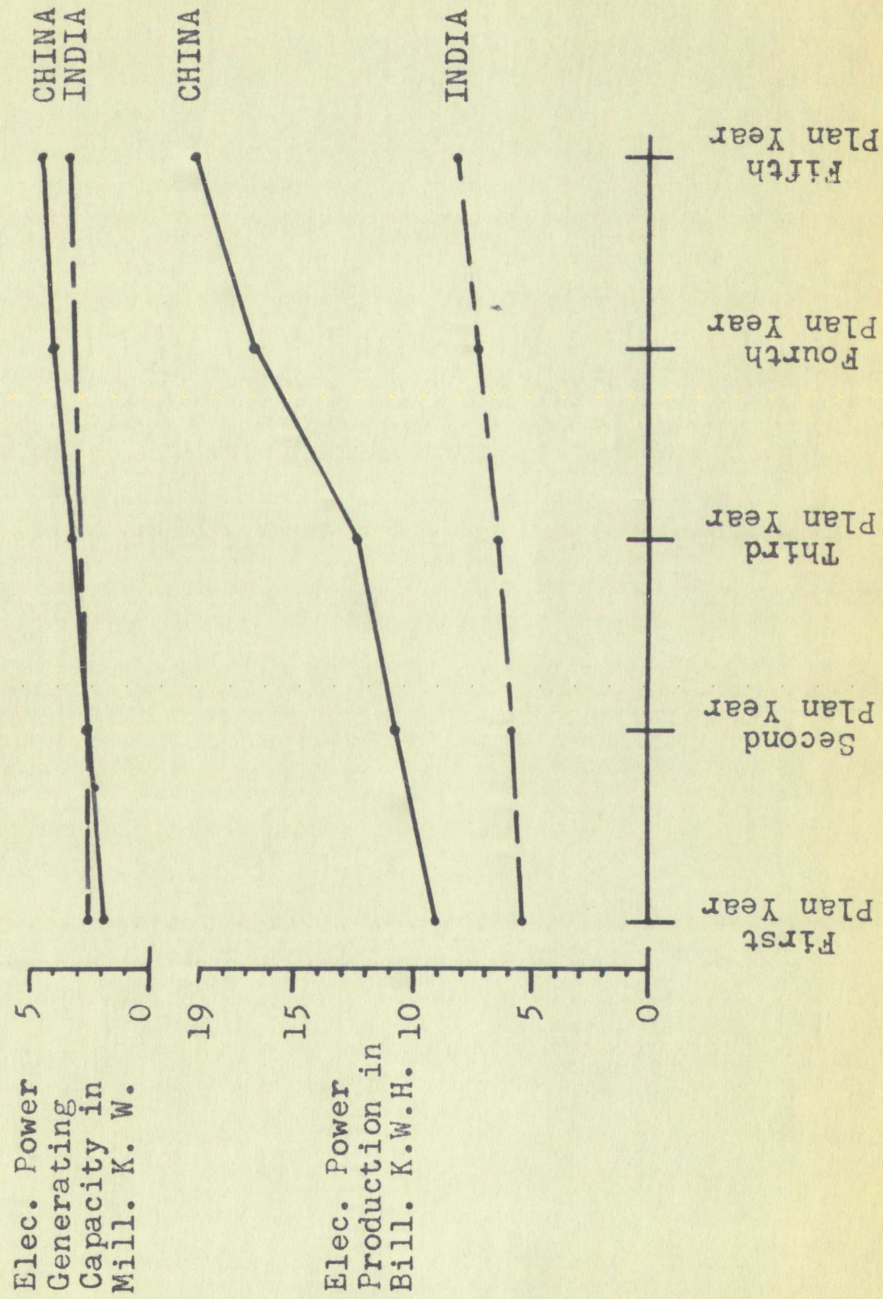
¹¹U.N., E.S.A.F.E.: 1955, op.cit., p. 105.

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Figure 4
CHINA MAKES MUCH GREATER USE OF ITS ELECTRIC GENERATING CAPACITY
DURING FIRST FIVE YEAR PLAN



See Appendix Table 5 for Data

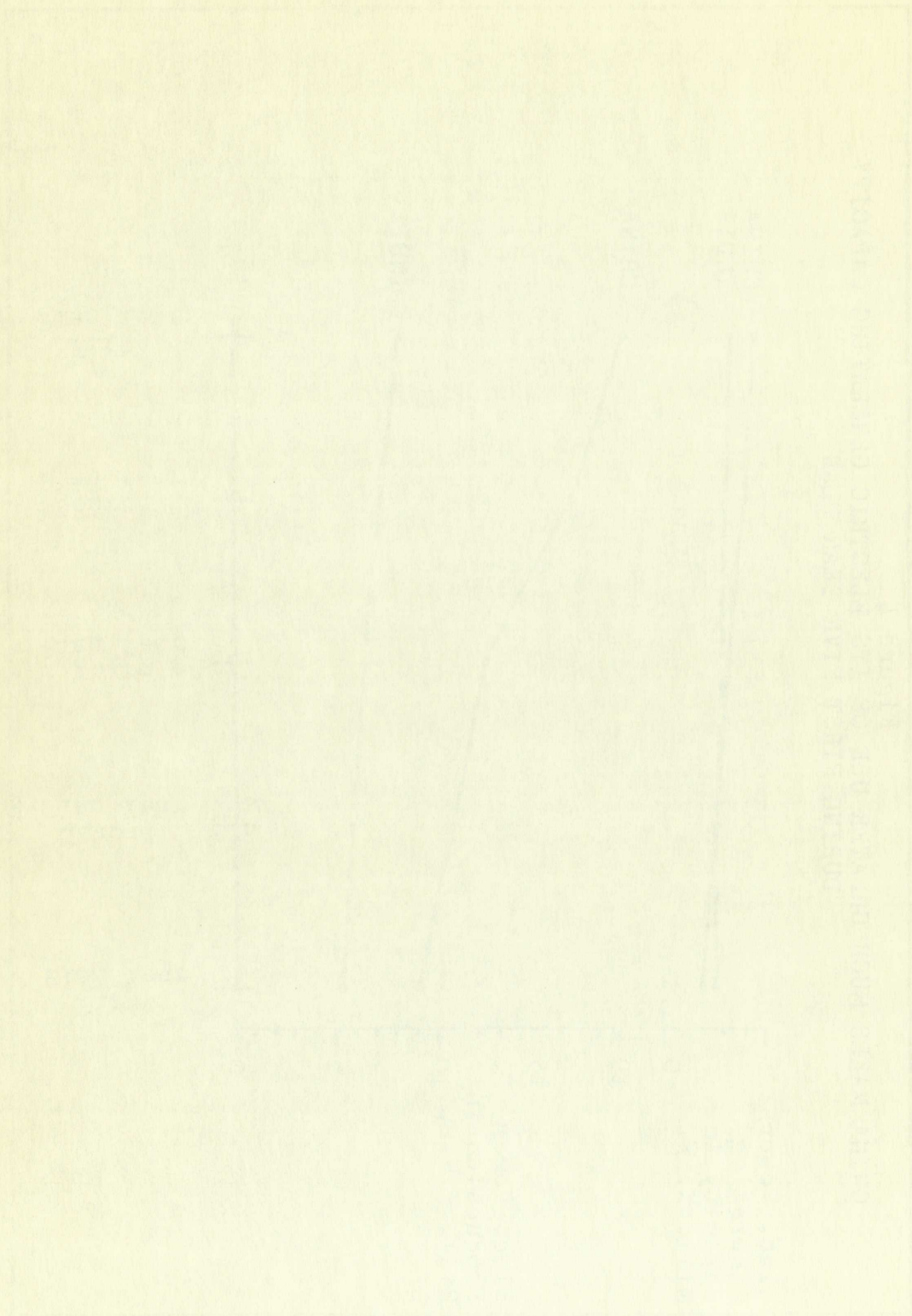
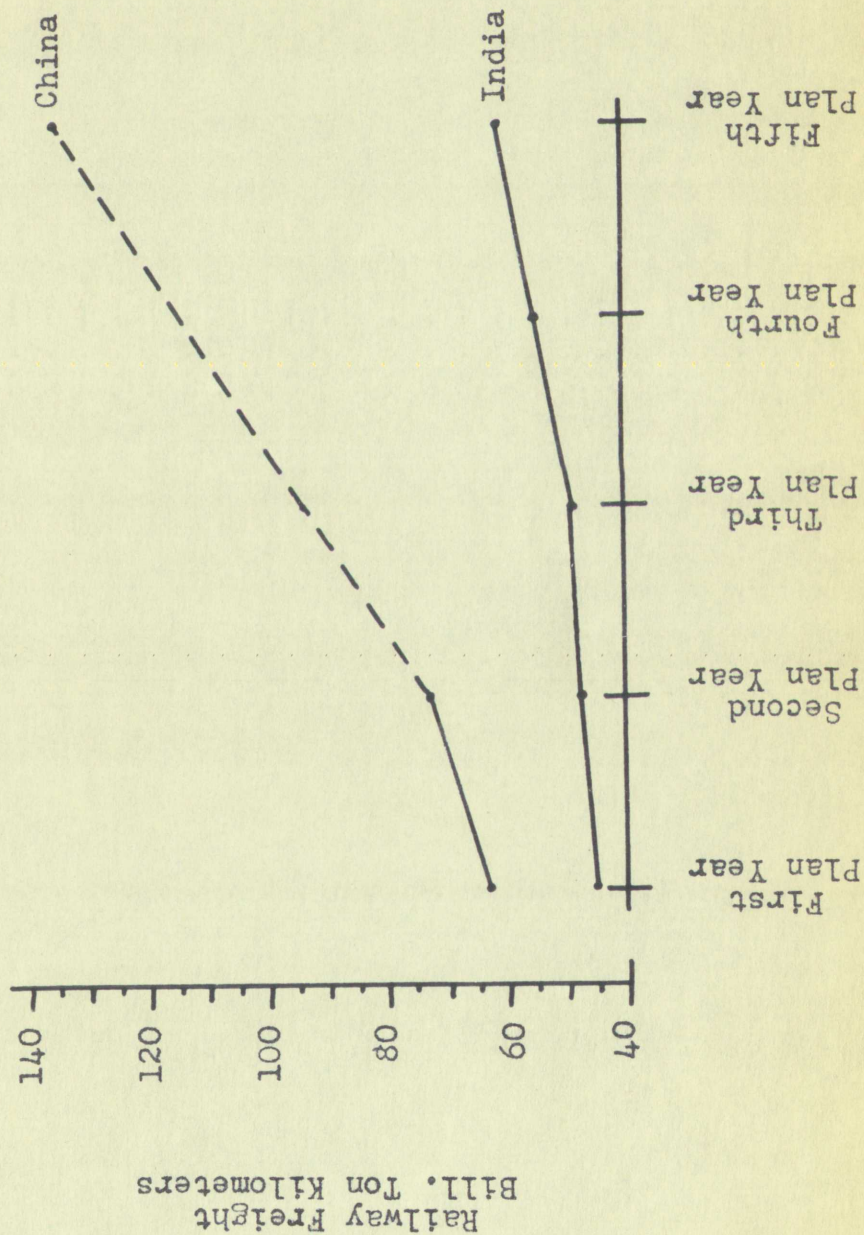


Figure 5
CHINA SHOWS A FASTER RATE OF RAILWAY FREIGHT TRANSPORTATION
GROWTH DURING FIRST FIVE YEAR PLAN THAN INDIA



See Appendix Table 6 for data

2000 1000 500 0

1000 1000 500 0



2000 1000 500 0

2000 1000 500 0

than 60 per cent of capacity."¹²

Several factors seem to account for the superior performance in the industrial sector by the Chinese: (1) much higher absolute capital inputs; (2) a substantially higher percentage of total development outlays in industry; (3) the type of investment expenditures seems to reflect the aim of greater output ratios per input; and (4) India evidently falls far behind China in the utilization of industrial capacity.¹³

Beginning in 1949 with a relatively large private sector, by 1957 this sector in the Chinese industrial economy had been largely eliminated.¹⁴ From the point of view of production planning this removed a clumsy administrative problem of government orders, rationing of raw materials and the like in relation to the private sector. India had to cope with the difficult problems of planning and interpretation of plans between the private and public sectors with only about three per cent of the net output of factories coming from the public sector. Even with large plans for public sector expansion in steel and iron projected for the Second Plan, it was estimated that the public sector would account for only seven per cent of the net output of factories by 1961.¹⁵

¹²C. N. Vakil and P. R. Brahmanand, Planning for an Expanding Economy (Bombay: Vora & Co., Publishers, Private Ltd., 1956), p.23.

¹³Ibid.

¹⁴U.N., E.S.A.F.E.: 1957, op.cit., p. 89.

¹⁵N. A. Sarma, "Economic Development in India: The First and Second Five Year Plans", International Monetary Fund Staff Papers, VI (April, 1958), p. 194.

This had special importance for the future of the relative growth of the two economies. Professor Brahmanand's study may point to serious weaknesses in effective demand in the basically market controlled Indian economy which may not exist in the physically planned production of the Chinese economy.

Without minimizing the Chinese achievement in industrial products, it is necessary to make one further comment on their physical output statistics. It is an accepted fact that the Chinese government, like the Soviet, tends to issue statistics that stress their positive accomplishments. Therefore, it would be wise for purposes of comparison not to discount the figures, but to realize that we are probably working with gross figures that do not take into account a considerable amount of spoilage, waste and low quality production.¹⁶ Similar problems may, however, exist in the process of Indian industrialization as well.

¹⁶Fu-Chun Li, Chairman of the State Planning Commission of China, in a section entitled "Practicing Strict Economy" describes numerous examples of loss of pig iron, agricultural tools, meat packing produce and other items through poor quality production and inefficiency. See Li, op. cit., pp. 102-114.

CHAPTER VI

ACCOMPLISHMENTS IN TRANSPORT AND POWER

An examination of industrial output in the previous chapter showed that the Chinese increased industrial production substantially more than the Indians and that pre-Plan leads in Indian physical production in a number of items like pig iron, crude steel, and cement were overtaken and surpassed by the Chinese. India fell short of planned increases in a number of items as did the Chinese, especially consumer goods lines. We turn now to an analysis of growth in transport and power.

It is not known exactly how much in the way of capital inputs were allocated for power development in China, but it is known that the greater share of industrial investment went into coal and power, iron and steel and engineering.¹ We know that about eighteen per cent of the Indian and fourteen per cent of the Chinese development outlay was planned for transportation and communication during the First Five Year Plans (see Table 2). Much larger absolute investments were made in China than in India in both transport and power development (see Table 2). Despite similar percentage allocations (a large nine per cent) India's power allocation was significantly different and different problems had to be

¹U.N., E.S.A.F.E.: 1955, op.cit., p. 83.

tackled.

As mentioned before, the main Indian need was multi-purpose hydro-power which could add power, irrigation and flood control benefits. With great zeal the Indians commenced work in the First Five Year Plan on the Bhakra-Nangal, Damodar Valley, Hirakud, Tungabhadra, Ghataprobha and other projects which added seven million acres to irrigation and about one million kilowatts of installed power capacity. By the end of 1956 this tremendous accomplishment saw an increase of nearly fifty per cent in installed capacity and fifty-six per cent in energy production compared to the first year of the Plan (see Appendix Table 5). Professor Henry Hart's book, New India's Rivers, is a most interesting and dramatic presentation of the problem and accomplishments of the builders of these projects, one of which, the Bhakra-Nangal, approaches and perhaps surpasses the feat of Hoover Dam.

This expenditure of large sums on hydro-power in India proved more costly than original estimates and certainly more costly than thermal plants for power alone. This probably accounts for the faster rate of Chinese growth as thermal plants usually can be built and put into service more rapidly than hydroelectric plants. In addition, thermal units are not dependent on the water supply which may make India's hydro production more unstable than China's thermal plants as a source of electric output.

China scheduled ninety-two power projects with sixteen hydro-electric and seventy-six thermal plants.² Only one of the hydro-electric plants in China--in the Sammen Gorge on the Yangtze River-- was reported as being anywhere near the scale of several of the Indian projects.

It is interesting to note the productivity ratios that emerge from our power capacity and power generated statistics in Figure 4. In 1951 and 1956 (the years for which we have figures) the output ratio of capacity to electrical power production is 1:2.4 in India. In China the ratio of capacity to production is close to 1: 4.3. In other words, 1 kilowatt hour of electric generating capacity in China produces almost twice the kilowatt hours of electric production compared to India. While this undoubtedly reflects a high pressure economy in China, it also must reflect considerable unused capacity in the Indian power plant. Large shortages in capacity exist in a number of areas of both India and China as demonstrated by the closing down of mills in some areas of India during irrigation seasons and the rationing of home consumption in China, particularly in Manchuria.

It is estimated that India has about 35 million kilowatts of potential hydro-electric capacity, of which less than five per cent has been developed.³ Hydro-power resources in China

²U.S. Senate, Comm. on For. Rel., op.cit., p. 38.

³Planning Commission, Gov't. of India, The New India: Progress Through Democracy, op. cit., p. 328.

are now estimated at approximately 150 million kilowatts of which 65 per cent is in the Southwest at a considerable distance from population or present industrial centers.⁴ Of these resources less than an estimated one per cent have been developed. Even considering location, the Chinese seem to be deliberately making a choice in favor of thermal power in order to exploit their coal resources and to get more rapid results than can be gained in hydro-power construction.

The Indians plan to build about one-third of their additional electric generating capacity in the second Plan in hydroelectric development. Taking into account the annual benefit in irrigation and flood control the "more expensive" Indian development may prove more economical in the long run.⁵ We do not have the figures for China, but we know that the number of villages in India served by electricity doubled during the First Five Year Plan, but still served only about one per cent or less than 6,000 villages in 1956. Considering all factors, major accomplishments in increasing power generating capacity were registered in both countries, but even including the agricultural effects in India the magnitude of the Chinese effort stands out. Yet the Indian performance in generating capacity appears outstanding when we consider that the Chinese probably made a much larger absolute investment.

⁴U.N., E.S.A.F.E.:1955, op. cit., p. 91.

⁵For estimates of the irrigation and power benefits of the major Damodar and Hirakud projects in Northeast India see Hart, op. cit., p. 153.

The pre-Plan survey in Chapter II indicated the respective problems in transport were shortage of rolling stock, obsolescence of equipment and of shortage of trackage, particularly in China. Appendix Table 6 shows the relative progress in both economies in freight carried, trackage, highways, and for India the number of freight cars.

It is difficult to make comparison in the two economies in transport, largely because of the different nature of their problems. China spent over 80 per cent of her 2.4 billion dollar investment in railways on reconstructing or building new lines. Only about fifteen per cent or 372 million dollars was to be spent on rolling stock.⁶ India increased her trackage very little, feeling no need for trackage except to connect up a few new industrial projects not previously connected with trunk lines. The bulk of the investment resources of India were spent on new rolling stock, and this in relation to a substantially larger stock of locomotives, freight and passenger cars which were obsolete. It was estimated at the beginning of the Second Plan, despite the growth in rolling stock indicated in Appendix Table 6 and an eight per cent increase in locomotives,⁷ that thirty-two per cent of the locomotives, 19 per cent of the freight cars and 26 per cent of the passenger coaches were overage in 1956--

⁶U.N., E.S.A.F.E.: 1955, op. cit., p. 91.

⁷U.N., E.S.A.F.E.: 1957, op. cit., p. 202.

a larger per cent than at the beginning of the Plan.⁸

This situation in India can be accounted for by noting the significantly higher increase in freight tons carried compared to the increase in freight cars. Over all, the increase in Chinese rolling stock is not known but the increases in trackage and freight tons carried are very impressive. It is known that the bulk of the 4,900 kilometers of trackage was built in Northwest and Southwest China.⁹ One line running through Outer Mongolia connects China more directly with the Trans-Siberian railroad. Another line running through Kansu and Kingkang provinces in the Northwest in 1959 will connect China with Alma Alta in Soviet Central Asia. In connection with a number of these new lines, considerable work had already been done by the Nationalists.¹⁰ Too much weight should not be given, then, to the increase in trackage as such. The increase in freight carried, however, is impressive.

Since we have no reliable estimates of the increase in Chinese rolling stock¹¹ we cannot make direct comparison with India. However, knowing the pre-Plan ratios averaged over three to one in India's favor the outstanding fact that emerges from Figure 5 is that with considerably less rolling stock and about

⁸Planning Commission, Gov't, of India, Second Five Year Plan, op.cit., p. 144.

⁹U.N., E.S.A.F.E: 1957, op.cit., pp. 92-94.

¹⁰Wu, op. cit., p. 362.

¹¹Ibid, pp. 364-365.

three-fifths the trackage China carries over twice as much as much freight (in millions of ton-kilometers) as India.

Disregarding rates of investment, quantities of trackage and rolling stock for lack of adequate data China again stands out, as she does in basic industry and power, as moving substantially faster in growth percentages than India. A word of caution is again in order on Chinese statistics. While figures for trackage and freight haulage carried are probably of a generally correct magnitude, nothing is indicated as to quality.¹² Since we have inadequate data on air, river, ocean going and highway transport we will not attempt an analysis of their relative growth. It is known that these modes of transport constituted less than twelve per cent of Chinese and Indian freight traffic in 1952¹³ so that our figures and estimates for railway expansion tell most of the story.

¹²See Yung-Seen Chao, Railways in Communist China, Union Research Institute (Hong Kong: 1955) (mimeographed), for a discussion of accidents, faulty bridges and tracks taken from Chinese sources and indicating great problems in quality. The same work seems to incorrectly underestimate the value of the "Full-carload, overhauling, and 500 kilometer movement" in raising railroad productivity despite the weaknesses in quality.

¹³U.N., E.S.A.F.E.: 1957, op.cit., p. 93 and p. 223.

CHAPTER VII

NATIONAL INCOME COMPARED

The outstanding feature of our review of transport and power developments in the previous chapter is that while Indian and Chinese investments were both large, and both registered steady expansion, the Chinese seemed to get more production per unit of capacity. This in turn seemed to assist the Chinese to achieve more rapid rates of growth in transport and power than the Indians. We turn now to a review of the available data on national income.

An attempt to compare national income statistics from India and China poses several problems. The first problem is the questionable validity of the official statistics in both countries. Brahmanand and Vakil suggest that the official government statistics may overstate the Indian increase in national income over the First Plan period because of increases in statistical coverage and windfalls in agriculture due to weather condidtions.¹ A number of economists concur with this opinion² and place the Indian national income increase at

¹Vakil and Brahmanand, op. cit., pp. 205.

²U.N., E.S.A.F.E.: 1957, op.cit., p. 76.

Wilfred Malenbaum, "Economic Growth in India, 1955/56-1960/61" (Cambridge: Center for International Studies, M.I.T., 1955), p. 25.

S. A. Shah, "Some Aspects of Indian and Chinese Economic Development", Science and Society, XXII (Winter, 1958), p.51.

Paul A. Baran, Political Economy of Growth (New York: Monthly Review Press, 1957), p. 224.

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The essential... power development... Indian and Chinese... registered steady expansion... production per unit of capacity... assist the Chinese... transport and power... of the available data... As regards... India and China... the questionable validity of the official... countries... Government statistics... national income... in statistical coverage... weather conditions... opinion² and... and... and...

¹Yoshi and...
²...
1950/51" (Cambridge...
1955), p. 25.
Development...
Monthly Review...
1955, p. 21.

10-12 per cent instead of at 18 per cent as stated by the Indian government. Professor Eckstein suggests that the figure for China on accumulation (i.e. net investment) should be taken as gross investment instead of net investment--this would greatly deflate the official Chinese statistics, particularly the growth rates.³

We do not have official gross national product figures for India for all years. Based on the Soviet practice, Chinese gross national product figures are aggregate transactions and are not comparable with India's GNP figures which follow western practice of net value added. Population figures after 1951 in India and after 1953 in China are government estimates based on theoretical rates of growth determined by sample surveys. India's population figures seem low for a country realizing rapid developments in public health, and China's figures seem high by comparison with other Asian countries (the official Chinese government estimates are two per cent per year but Appendix 7 shows an internal inconsistency in their figures and gives an average of 1.8 per cent annual increment over the five years). The picture is further complicated by the fact that official sources give gross investment figures for India and net investment figures for China.

Despite the difficulties involved the most accurate method of comparing national income seems to be through use of the official sources from both countries. The Indian

³Eckstein, op.cit., pp. 442-443.

official sources, in my opinion, appear basically correct. The conclusion that such a large part of India's increased national income can be accounted for on the basis of windfall and particularly good monsoons does not seem warranted. If such a conclusion were valid foodgrains and agricultural production would have fallen much more sharply in 1954-56. Appendix Table 3 clearly indicates that it did not. In other words since about fifty per cent of national income is derived from agriculture, and agricultural production declined only slightly in 1955-56 compared to 1953-54, this would tend to indicate that given the steady industrial production increases, the overall increase in national income of eighteen per cent in the First Plan was relatively firm.

I have been able to construct an Indian national income table in constant 1952-53 prices from Government Planning Commission and United Nation sources.⁴ Gross investment figures are taken from Brahmanand and Vakil,⁵ and estimates made of gross investment and consumption for 1954-55 and 1955-56 on the basis of Planning Commission assumptions. Indian national income by industrial origin changed considerably over the years of the Plan, agriculture dropping from about 50 per cent of domestic product to 43 per cent, and industry, construction,

⁴Planning Commission, Gov't. of India, Second Five Year Plan, p. 26.

⁵Vakil and Brahmanand, op. cit., pp. 33, 37. Their figures were compiled from the Central Statistical Organization reports: "Estimates of National Income" and "Note on Capital Formation".

official sources, it is not possible to say whether the
The construction of the first five-year plan was based on
national income and the growth of the national economy
and particularly the growth of the national income
such a construction is not possible. The construction of the
production would have been based on the growth of the
Appendix Table 1 shows the growth of the national income
words since about 1950, the rate of national income is
from agriculture, and the growth of the national income
slightly in 1950-55, 1955-60, and 1960-65.
indices that given the growth of the national income
the overall increase in national income is about 100%
in the first five-year plan.

I have been able to construct an index of the national
income in constant 1950 prices from 1950 to 1965.
Commission and United Nations. The index is based on
are taken from the Statistical Yearbook of the United Nations
gross investment and construction in 1950-55 and 1955-60 on
the basis of planning construction in 1950-55 and 1955-60
income by industrial and agricultural production in 1950-55
years of the first five-year plan. The index is based on
of domestic product in 1950-55 and 1955-60.

Planning Commission, Ministry of Finance, People's Republic of China
Year Plan, p. 20.
2. The figures were compiled from the "Statistical Yearbook of the
People's Republic of China, 1966" and the "Statistical Yearbook of the
People's Republic of China, 1967".

mining, transportation and commerce all gaining slightly.⁶ The Indian targets for the First Five Year Plan were to increase national income by 11 per cent, the ratio of net investment from 5 to 6.75 per cent of national income. With the assumption of a 1.25 annual population increment it was hoped to raise per capita income about 5 per cent over the course of the First Plan.

The general internal consistency of the official Chinese figures of national income estimates offers adequate reason for accepting their figures. Also, official calculations of national income figures are actually about 5 per cent lower than those calculated by Eckstein in his earlier estimates, where he was working with limited data.⁷

Validity of the Chinese population figures has been questioned. Shabad aptly notes that if the Chinese were using exaggerated population figures it would provide less effective political propaganda than lower figures which would show greater per capita growth - at the same time exaggerated population figures would raise serious obstacles to national planning. Discussing the consistency of Chinese figures with his own independent calculations of production statistics Shabad says: "The accord (between his and official figures)

⁶U.N., E.S.A.F.E.: 1957, op.cit., p. 77, 214.

⁷Eckstein, op. cit., p. 258. Eckstein estimated national income in 1952 at 28.4 billion dollars. U.N., E.S.A.F.E.: 1957, op. cit., p. 107 gave China a 27.0 billion dollar national income for 1952 at the previously explained exchange rate.

INDONESIA

mining, transportation, and other sectors.

The Indonesian government has been

increasing national investment in

investment from 1955 to 1960.

The assumption of a 5% annual

needed to raise the level of

course of the development plan.

The general trend of development

Chinese figures in general, however,

reason for accepting these figures

ations of national income figures

lower than those calculated by

estimates, where the national

validity of the Chinese government

questioned. These data were

using exaggerated population figures

effective policies have been

show greater per capita growth

population figures would make

planning. The government of

his own independent calculations

Shahab says: "The second

income for 1952 at the

income in 1952 at the

income in 1952 at the

income in 1952 at the

income in 1952 at the

income in 1952 at the

demonstrates that after an early period of confusion the Chinese statistical system has evolved into a consistent pattern and that it can be used with virtually the same degree of confidence as Soviet statistical data."⁸

There is another reason for using the Chinese figures and feeling that they can justifiably be compared with the Indian to show trends in the definition of national income and net investment. If anything, the Chinese define national income more narrowly than the Indians. Their's is essentially a "net value of production" concept similar to the one used by the Soviet Union which excludes most services. The Chinese concept of accumulation is essentially: "net investment (gross investment minus depreciation charges) as defined in western practice. However, for purpose of international comparison it should be noted that the price structure of mainland China, which maintained low prices for farm products and high prices for industrial products (at least up to 1955), tends to exaggerate the proportion of net investment as compared with western countries".⁹ Chinese figures are based on 1952 prices, deflated by changes in the wholesale price index.¹⁰ Appendix Table 7 shows that both India and China achieved substantial increases in national income in their respective Five Year

⁸Theodore Shabad, "Communist Production Statistics", Far Eastern Survey, XXIV (July, 1955), p. 107.

⁹U.N., E.S.A.F.E.: 1957, op.cit., p. 106.

¹⁰Ibid, p. 107.

democratically elected government... Chinese statistical system... pattern and style... of confidence... There is... and feeling... Indian to... and... income more... a "net value... by the... concept of... investment... practice... it should be... which maintained... for technical... exaggerate the... western countries... defined by... Table 7 shows... increase in...

Source: Ministry of Economic Affairs, Republic of China.
Far Eastern Survey, 1955 (July 1955), p. 10.
J. H. K. (1955), p. 10.
1955, p. 10.

Plans. Using 1950-51 as a base, India's planned national income increase was 11 per cent and she actually achieved for the period 1951-56 over 18 per cent or 14 per cent using 1951-52 as a base year. China's increase in national income for the period 1953-57 using 1952 as a base, was 50 per cent over the Plan, but only 27 per cent if we use the first year of the Plan as the base.

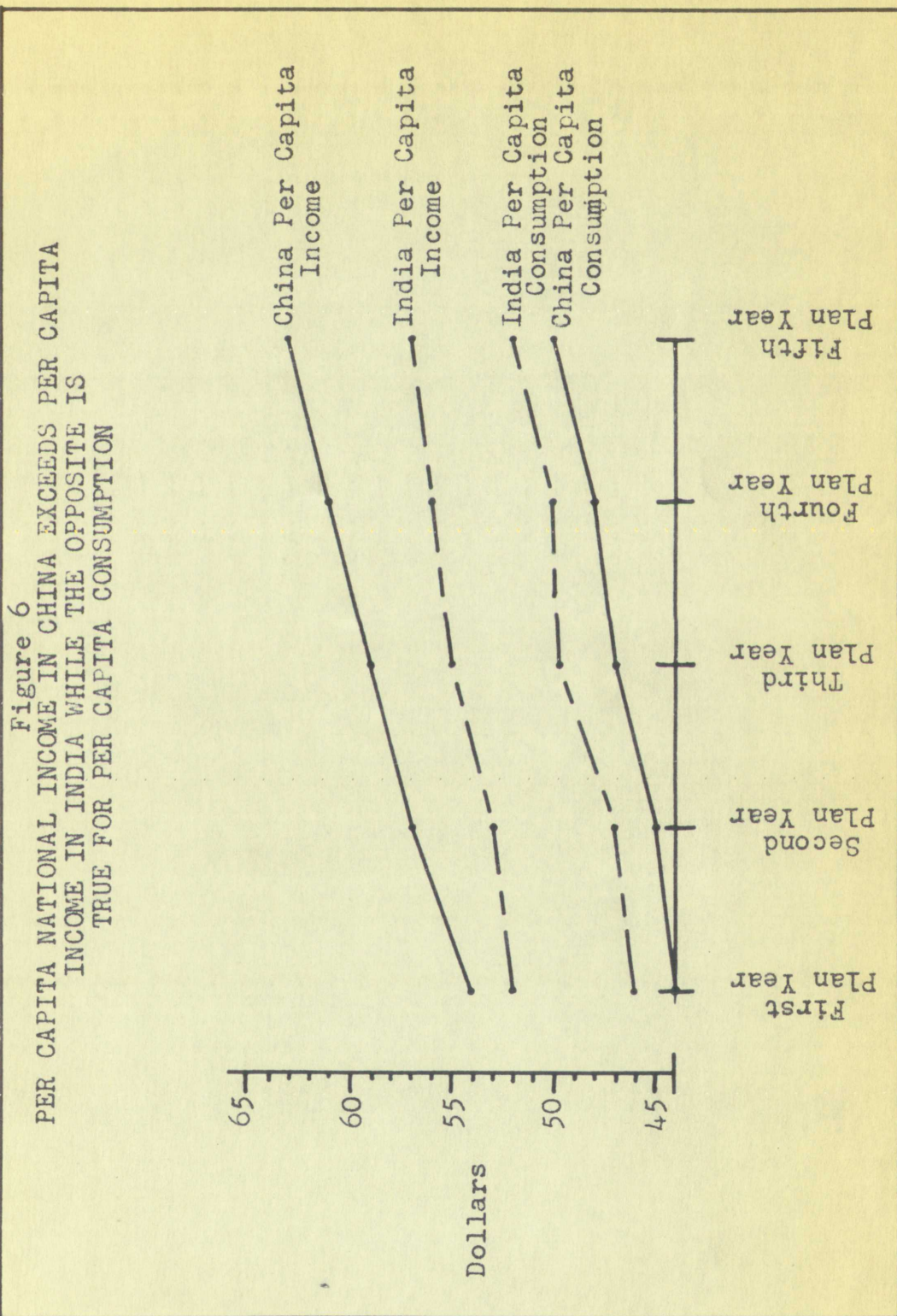
As indicated previously, the reason for using the first year of the Plans as the base years was to remove certain abnormally high growth rates resulting from the 1952 figures in China. Even allowing for this correction we find annual national income rates are almost double in China compared to those of India. Using the first year of the Plan as the base we find an average annual rate in India of 2.8 and in China of 5.4 for national income. While India planned an increase in gross investment of 35 per cent only 10 per cent was achieved. China's net investment went up 46 per cent. While net investment as a per cent of national income at the end of India's First Five Year Plan had reached about 7 per cent, Appendix Table 7 shows clearly that Chinese investment was 20 per cent of national income.

Consumption increased substantially in both economies-- 20 per cent in India and 25 per cent in China, but it is interesting to note that per capita consumption increased by the same amount, namely 14 per cent. This can be accounted for by the different rates of population growth between the two countries.

It seems evident that one cause for India's lag behind the Chinese in national income and investment increments lies in her significantly lower level of net investment. Or, it might be argued, the lag in Indian net investment was the result of a proportionately smaller rise in national income in India compared to China. Actually, as Figure 6 tends to show, the lag in Indian net investment compared to the Chinese is at least in part based on higher levels of per capita consumption in relation to per capita income. We see in Figure 6 that although per capita income in China is higher than India, per capita consumption is actually higher in India than China. Despite China's larger population growth, the government was effectively able to raise the pre-Plan level of net investment from less than 10 per cent to 20 per cent of national income. This increase in China in net investment was possible largely as a result of increases in national product. At the same time per capita consumption remained roughly stable at about eighty per cent of per capita income. India on the other hand seems to have increased per capita consumption more rapidly than per capita income as Figure 6 illustrates--with per capita consumption rising from eighty-eight per cent of per capita income in the first Plan year to ninety-three per cent of per capita income in the last Plan year. Even if we were to assume that the price mechanism mentioned above overstates the net investment by 6 per cent, China's rate of accumulation would still be double that of India.

India.

China's rate of accumulation will still be lower than that mentioned above overestimated the net investment. Even if we were to assume that the rate of investment year to ninety-three per cent of net capital income in the 1953-54 period, eighty-eight per cent of net capital income in the 1954-55 period, Figure 6 illustrates—what per capita consumption would be. capita consumption more rapidly than per capita income. India on the other hand seems to have maintained per remained roughly stable at about eight per cent of per capita in national product. At the same time per capita consumption not investment was possible largely as a result of investment 20 per cent of national income. While income remained in Plan level of investment, India seems to have maintained growth, the government was able to keep this rate at the level in India than China. Japanese income is lower than India, higher than India, per capita income is actually higher see in Figure 6 that although per capita income in China is per capita consumption in relation to per capita income, the Chinese is at least in 1953-54 in 1954-55 tends to show, that in India per capita income is income in India compared to China. Actually, the result of a hypothetical transfer of income to Or, it might be argued, that in India the investment is much less in net significantly lower level of investment behind the Chinese in national income and investment. It seems evident that the rate of investment in



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A number of writers have assumed that the emphasis on agriculture in the Indian Plan would lead to greater increase in consumption than the Chinese could achieve with their emphasis on industry.¹¹ The Chinese estimates for per capita consumption of major consumption items remain very low. In 1956 110 million rural families had 81 yuan (\$34.00) and approximately 17 million urban families had a per capita consumption of main items valued only at 180 yuan (\$76.00).¹² The extent to which exports reduce the aggregate increases in consumption will be considered in the next chapter.

Without placing too much weight on these national income statistics, some tentative conclusions seem possible: (1) significantly larger "surpluses" have been channelled through the Chinese central government and reinvested than has been done in India; (2) this in turn has produced significantly higher percentage growth rates in every sector except agriculture; (3) and this in turn has been partly reflected in increased per capita income and consumption in China similar to India; and (4) India's targets in national income increases were modest compared to China and were more easily surpassed. It remains to be seen after an examination of foreign trade, the tax structure, employment and military outlays to what extent the aggregates reflect actual increases in welfare.

¹¹Malenbaum, "India and China, Development Contrasts", op. cit., p. 22.

¹² U.N., E.S.A.F.E.: 1957, op. cit., p.108.

CHAPTER VIII

FOREIGN TRADE COMPARED

Foreign trade has been extremely important to both India and China in the fulfillment of their Five Year Plans. Historically both countries had been exporters of raw materials and semi-finished consumer goods. This pattern has been essentially continued in the period under review. The primary export commodities of India during the First Plan were tea, spices, hides and skins, vegetable oils, cotton and jute yarns.¹ Similarly China exported mainly agricultural, forest, mineral and handicraft products.²

The outstanding change that took place in both India and China was the change in the character of imports. Traditionally both countries had exported raw materials and agricultural products in exchange for consumer goods of various kinds. Even before the First Five Year Plans both India and China began to increase their imports of machinery and equipment and this was greatly accelerated in the effort to carry through the industrial aspects of their Plans. India's expansion of domestic food production made possible the reduction during the Plan of purchases of basic grains and sharp

¹Ibid, p. 209.

²Ibid, p. 89.

Foreign trade has been extremely important in India and China in the fulfillment of their basic needs. Historically, both countries had been exporters of raw materials and semi-finished consumer goods. This pattern has been essentially continued in the period under review. The primary export commodities of India during the three years were tea, spices, hides and skins, vegetable oils, cotton and jute yarns. Similarly China exported mainly agricultural, forest, mineral and handicraft products.¹

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¹Ibid, p. 209.

²Ibid, p. 89.

increases in the importation of manufactured machinery and base metals.³

The available figures for China are not as detailed, but we do have the following report on her imports in 1953-55: "245 complete sets of industrial equipment, 20,639 metal cutting machines, 4.25 million tons of iron and steel, 4.35 million tons of petroleum and its products, (and) 438,000 tons of raw cotton".⁴ These imports came mostly from the Soviet Union. Another report notes that of the total goods imported from the Soviet Union in 1953 (698 million dollars) 23 per cent (160 million) was machinery and by 1956 the amount of machinery had increased to 41 per cent of the total (or 305 million dollars out of a total of 744 million dollars). These import figures for India and China represented sharp curtailment in imports of consumer goods and food because of the plans for expansion of domestic industrial production.

Assuming the national income at the levels shown in Appendix Table 7 it can be seen in Appendix Table 8 that imports and exports were not a dominant part of national income in either country as they are in some underdeveloped countries. By 1956 exports and imports in both India and China constituted only between 6-7 per cent of national income. Therefore, it was the nature of the trade and not the quantity that was significant. Given the natural resource base and the desire

³Ibid, p. 207.

⁴Ibid, p. 102.

increases in the production of base metals.

The available resources are:

but we do have the following resources:

"SAS" complete set of machinery and equipment.

cutting machines, 100 million tons of machinery.

million tons of machinery and equipment.

tons of raw cotton.

Soviet Union.

imported from the Soviet Union.

23 per cent (100 million tons of machinery).

of machinery had increased in the Soviet Union.

million dollars out of a total of 100 million dollars.

import figures for India and China.

in imports of consumer goods and foodstuffs.

expansion of domestic industrial production.

Assuming the national income is 100 million dollars.

Appendix Table 1: It is assumed that the national income is 100 million dollars.

and exports were 100 million dollars.

either country as they are assumed to be 100 million dollars.

By 1956 exports and imports are assumed to be 100 million dollars.

only between 5-7 per cent of national income.

was the nature of the crisis and not the amount of the crisis.

significant. Below the national income is 100 million dollars.

Table 1, p. 101.

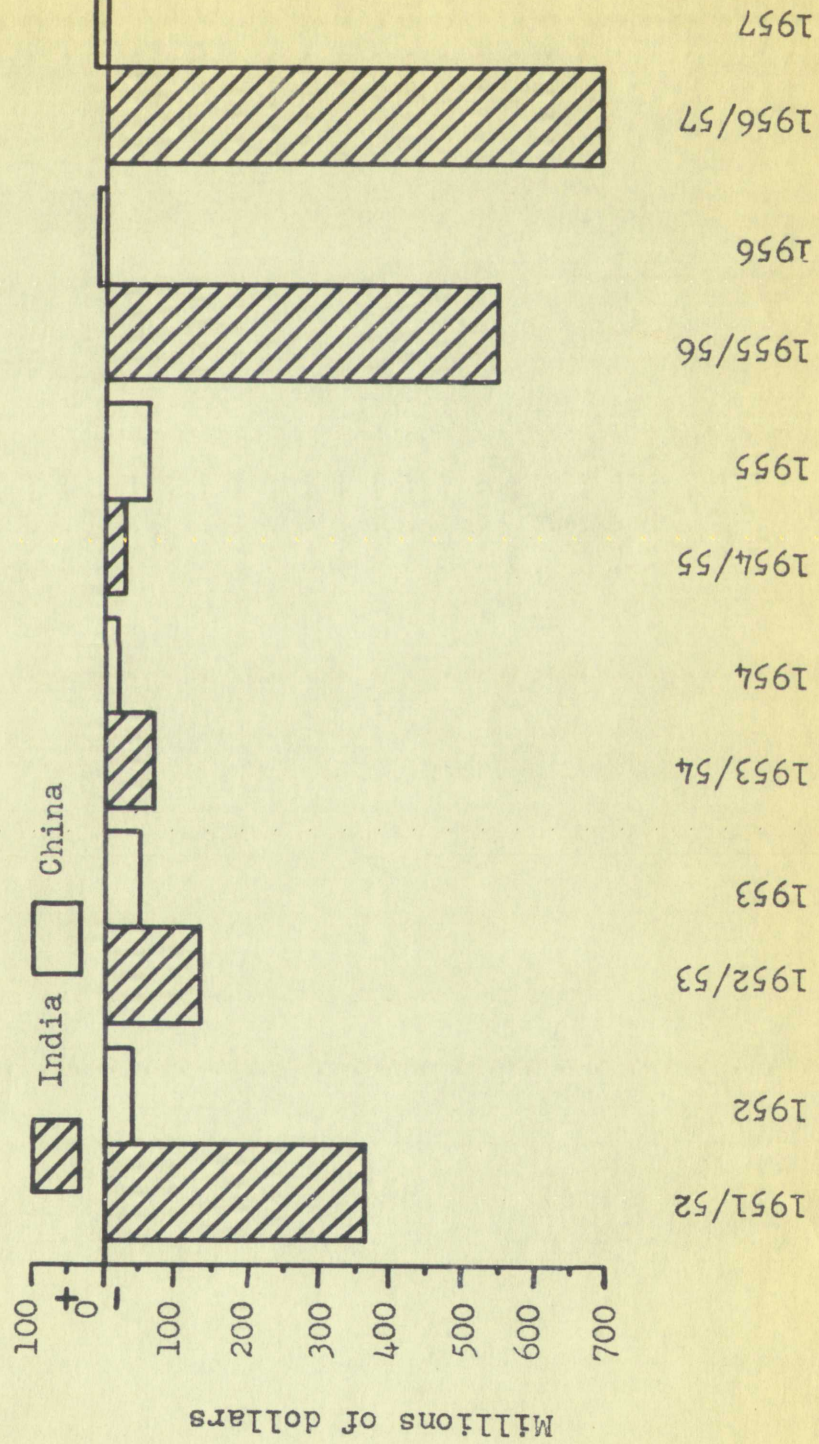
Table 1, p. 102.

exemplified in both Plans foreign trade was looked at in a new way--as a tool to accelerate economic development.

Appendix Table 8 points up more difficulty in this objective for India than for China. The level of trade for India reached a high point during the Korean War and fell off sharply until 1956/57 when large imports ran the total trade back up to Korean War levels. During the period of the First Plan no serious problems arose in India's balance of payments because of import controls, relatively small demands for machinery in the First Plan, and foreign aid. Nevertheless, the fall off in the export of a number of primary commodities due to a fall in world demand after the Korean War, the general deterioration of the terms of trade after the Korean War, and the lifting of many import controls in 1956 laid the basis for a serious problem which has made itself felt in the first two years of the Second Plan. A sharp deterioration of India's balance of payment position began in 1956. (see Figure 7.) This development can be traced to the stepped up rate of machinery purchases for the Second Plan, the lifting of import controls and the consequent increase in the importation of consumer goods and raw materials for consumer goods, and reversals in agricultural production which necessitated larger food grain purchases.⁵ (The increase in government food grain purchases stemmed from rising consumer demand and some speculative holding of stocks. Food prices have risen

⁵Ibid, pp. 81-82.

Figure 7
INDIA'S BALANCE OF PAYMENT WORSENS WHILE CHINA
ACHIEVES A SMALL FAVORABLE BALANCE
DURING FIRST PLAN PERIOD



in the last 18 months with considerable deficit financing which has not been met with an equal increase in production.) The situation outlined above resulted in the deterioration of India's foreign exchange reserves from 1.57 billion dollars at the beginning of the Second Plan in April 1956 down to .56 billion dollars as of April 1, 1958. The decrease in amount of foreign exchange in those two years is more than twice that contemplated for the whole Second Plan period!⁶

Unlike India, China's foreign trade seems to have consistently grown in absolute volume from 1952 until 1955, and then to have become more or less stabilized. Figure 7 indicates the successful Chinese effort to bring about a balance in foreign trade as well as to raise the volume. Beginning in 1951 with the United Nations embargo on Chinese trade, a sharp change took place in the direction of Chinese trade. By the end of the First Five Year Plan it was reported⁷ that over 80 per cent of mainland China's trade was within the Soviet Bloc compared to 25 per cent in 1950 and less than one per cent before the Second World War.⁸ As noted before, essentially the same commodities were exported and almost entirely new items were being imported. Chinese export prices

⁶N. A. Sarma, "Economic Development in India: The First and Second Five Year Plans", International Monetary Fund Staff Papers. VI, (April, 1958), p. 228.

⁷U.N., E.S.A.F.E.: 1957, op. cit., p. 101 fn.

⁸Howard L. Boorman, et al., Moscow-Peking Axis (New York: Harper & Bros., 1957), p. 69.

in the last 10 years... which has not been... The situation... of India's... at the... billion dollars... of foreign... conferred... Unlike India... consistently... and then to have... indicates the... balance in... beginning in 1951... trade, a sharp... trade. By the end... that over 30... Soviet also... per cent before... essentially the... entirely new...

¹U.S. Bureau of Economic Analysis, "India: The First and Second Five Year Plans, 1951-1955 and 1956-1960", Prospects, VI, (April, 1957), p. 11.
²U.S. Bureau of Economic Analysis, "India: The First and Second Five Year Plans, 1951-1955 and 1956-1960", Prospects, VI, (April, 1957), p. 11.
³Howard L. Boorman, India: A Country Study, (New York: Harper, 1960), p. 11.

to the Soviet Bloc appeared to be close to world market prices, and there is some evidence of Soviet subsidies in the form of buying products they could not use and reselling them in Western Europe. This also appeared to be another way of getting around the United Nations embargo on trade with China. While there is some suggestion that the Chinese were paying 5 to 10 per cent more than world prices for their imports from the Soviet Bloc,⁹ the growth and relative stability of Chinese foreign trade compared to India's seems to offset this disadvantage.¹⁰

An interesting point shown in Appendix Table 7 is the relative level of foreign aid. It can be seen that loans and grants from all sources to India totaled about 623 million dollars during the First Plan. Soviet aid to China during its First Plan is officially reported at over twice that amount (on a per capita basis the difference would only be \$2.2 in China to \$1.7 in India) or approximately 1,324,000,000 during the First Plan, and over 900 million dollars between 1949-52 before the Plan period.¹¹ This comparison is based on the rates of exchange of the Chinese yuan, and we do not

⁹Ibid, p. 100.

¹⁰ For the problems of India's terms of trade in world markets see: U.N., A Study of Trade Between Asia and Europe (Geneva: Department of Economic Affairs, 1953), p. 56;

U.N., Instability in Export Markets of Underdeveloped Countries (New York: Department of Economic Affairs, 1952) pp. 3-4.

U.N., Relative Prices of Exports and Imports in Underdeveloped Countries (New York: Department of Economic Affairs, 1949), pp. 16-17, 23.

¹¹U.N., E.S.A.F.E.: 1957, op.cit., p. 103.

know the exact rouble equivalent. However, we do know that compared to western countries the Soviet Union over-values machinery in relation to agricultural products, and this may lead to a certain discounting when compared to dollar equivalents for loans and grants received by India.¹²

China has claimed that she extended more aid than she received during the period of 1953-57. From the incomplete data available it would seem that the bulk of this aid went to Northern Korea and Northern Viet-Nam in the form of food and military aid. India, on the other hand, loaned nominal sums to Ceylon and Nepal.

Although no certain comparison can be made it appears that foreign aid has been expended at different rates in the two economies. Appendix Table 8 indicated that India actually used less than two-thirds of the foreign aid extended during the Plan period. While we do not have similar figures for China there are indications that the bulk of the aid was expended. It was stated that a large part of "the equipment for the 156 major capital construction projects (raised to 205 in April 1956) which the Soviet Union was to supply by 1960 was reported to have already been imported by 1955."¹³ Sixty-five of these projects were to be completed by 1957. This

¹²Perhaps as significant as the scale of Soviet aid to China has been its character. Between 15,000-20,000 Soviet technicians have been reported working in China during the First Five Year Plan. See Boorman, op. cit., p.192. and Adler, op. cit., p. 57.

¹³U.N., E.S.A.F.E.: 1957, op. cit., p. 89.

know the exact results of the... compared to... machinery in relation to... lead to a certain... for loans and grants received...

China has raised... received during the period of... data available to... to Northern... and military... sums to Ceylon and India.

Although no... that foreign... two economies... used less than... the plan period... China there are... expanded... for the 1950... in April 1950... was reported to have already... five of these projects...

12... China has... technicians have... First Five Year Plan... op. cit., p. 52.

may explain the reduction in Chinese foreign imports in 1956 and planned curtailment in 1957. The payment for these imports up to 1955 may also explain the substantial increase in exports in 1956-57 compared to the 1952-54 level.

Earlier estimates of Soviet aid to China are lower than official figures now available. Professor Rostow suggests that the level of Soviet credits to the Chinese are "at the rate of 60-100 million dollars per annum".¹⁴ Newer estimates of levels of foreign trade and aid, I believe, would come close to two and one half times Rostow's earlier figures. Admittedly the amount of the loans in proportion to the total investment in both the Indian and Chinese economies is small. But, the character of the loans are extremely important--in producer goods, transport, and power which cannot as yet be produced domestically in either country. The disparity between the absolute amount of foreign aid extended as well as the actual character of imports may partially explain the small beginnings of Indian industrial expansion in the First Plan compared to the leap forward in China described in Chapter V. Unfortunately it is impossible because of the lack of data to determine to what extent the rising quantity of Chinese exports, to pay for industrial imports, reduced potential new food consumption. However, given the data on agricultural production in Chapter IV and personal per capita consumption in Chapter VII it seems probable that food consumption (especially for the rural

¹⁴Rostow, et al., op. cit., p. 192.

may explain the reduction in Chinese foreign interest in 1955

and planned curtailment in 1956. The balance for 1955 was

up to 1952 may also explain the substantial increase in 1953

in 1956-57, compared to the 1953-54 level.

Earlier estimates of Soviet aid to China are lower than

official figures now available. Provisional figures indicate

that the level of Soviet aid to the Chinese was "in the

rate of 60-100 million dollars annually." The lower estimates

of levels of foreign trade and aid to China, however, are close

to two and one half times higher than earlier figures. Although

the amount of the loan is proportionate to the total investment

in both the Indian and Chinese economies, the level of aid, the

character of the loans and the nature of the goods and services

goods, transport, and power which would be used in production

domestically is different. The character of the aid to the

absolute amount of foreign aid extended as well as the nature

character of imports and exports is different. The nature of the

of Indian industrial expansion in the 1950s has been no

the leap forward in China described in Chinese sources. Information

it is impossible because of the lack of data to determine the

what extent the rising productivity of Chinese industry is due

for industrial expansion, and the resulting new and expanded

However, given the data on industrial expansion in China

IV and personal per capita consumption in 1955-56, it seems

probable that food consumption is especially high in the rural

Moscow, at 27, compared to 22 in 1952.

population) was slightly increased as well as agricultural exports.¹⁵

¹⁵U.N., E.S.A.F.E.: 1957, op. cit., pp. 108-109. Rural per capita consumption in 1956 is listed at \$36.00 and urban consumption at \$76.00 per year. Their estimates for foodgrain, oil, and cotton cloth consumption evidently do not take into account requirements for foreign trade including exports and industrial use. These figures do suggest government consumption of approximately 4 billion dollars or 11 per cent of national income. (NI 1956- 38 billion; personal consumption- 25.97 billion; total consumption- 30 billion dollars! -- Investment 8 billion.)

CHAPTER IX

SOME OTHER FACTORS AFFECTING GROWTH

An important factor limiting growth during the period under review in both India and China has been the weight of military expenditures. This has been especially true in China. Of the total Chinese government receipts (56.6 billion dollars¹) during 1953-57, 22 per cent² (12.5 billion dollars) went to defense expenditures. It should be noted that the Korean War fighting had stopped and that this outlay represented substantial cutbacks in military expenditures from the 1951-52 period during the height of the Korean War.

India, during the First Five Year Plan, spent a little over 2 billion dollars or 25 per cent of central government expenditures for military purposes during the Plan period. However, this military outlay was only 16 per cent of total government expenditure including expenditures of the Indian states where approximately one-third of total government

¹Ibid, p. 101.

²Adler, op. cit., p. 189. Adler claims that 22 per cent of government expenditures for military purposes is a lower percentage than most other world powers and illustrates the peaceful intentions of the Chinese. While it is true that Chinese military expenditures have fallen from 42 per cent in 1951 (during the Korean War) to 22 per cent in 1953, the proportion of expenditures to the military seems somewhat large for a peaceful country--which a comparison with India shows.

CHINA'S MILITARY EXPENDITURE

An important factor in the growth of military expenditure

under review in 1951-52 and 1952-53 was the increase of

military expenditure. This was due to the fact that in 1951

of the total Chinese military expenditure was 10.1 per cent

during 1951-52, 11.1 per cent in 1952-53. This increase was due to

defense expenditure. It should be noted that the increase of

fighting has stopped and that the military expenditure has

been cut back in military expenditure from 1951-52 to 1952-53

during the height of the Korean War.

India; during the five years 1947-48 to 1951-52

over 2 billion dollars (2,000 million rupees) were spent on

expenditure for military purposes during the five years.

However, this military expenditure was only 10 per cent of total

government expenditure including expenditure of the Indian

states where approximately one-third of total expenditure

1949-50, 1950-51

India, on 1949-50, 1950-51. After 1950-51 the expenditure

of government expenditure on military purposes was 10 per cent

percentage than most other world powers and this was due to

peaceful intentions of the Indian Government. It is to be noted

Chinese military expenditure was 10.1 per cent in 1951-52 and

in 1952-53 (during the Korean War) and 11.1 per cent in 1953-54

proportion of expenditure on military purposes was 10.1 per cent

large for a peaceful country. This is shown in the following

shows.

revenues are dispersed. Therefore, a reasonable comparison between the Chinese and Indian military outlay would show that China spends about 6 times the absolute amount (400 million to 2.5 billion) annually and an appreciably higher per cent of government expenditures and of national income than does the Indian government.

It seems unfortunate that with the limited resources of both countries such large sums are allocated to military use. Perhaps there is more reason for India to spend two per cent of her national income on the military than there is for the Chinese to spend between 6 and 7 per cent. This opinion is based on India's concern with Pakistan's military buildup and the Kashmir dispute. No similar threat would seem to exist on Chinese borders and the expenditure of 2.5 billion annually for military purposes would seem to be based on political and strategic considerations. Regardless of the national political implications of military expenditures, the Indian allocation of 400 million dollars, almost one-fourth the annual investment in the First Five Year Plan, seems disproportionate in view of her development needs. From this point of view the settlement of the Kashmir dispute could release considerable resources for Indian economic development. It would be sheer speculation to suggest what considerations could result in the reduction of Chinese military allocations--undoubtedly this awaits relaxations in East-West tensions. In the likely event that both India and China spend a large percentage of their military outlays (figures are not available)

revenues are dispersed. Therefore, a balanced budget is maintained between the Chinese and Indian military budgets which shows that China spends about 5 times the amount (100 billion to 2.5 billion) annually and is not really a major power of government expenditures and of the total income and the Indian government.

It seems reasonable that with this limited resources of both countries such large sums are allocated to military use. Perhaps there is some reason for this as about two per cent of per national income in the military area there is for the Chinese to spend between 5 and 7 per cent. This opinion is based on Indian sources with Chinese's military buildup and the Kashmir dispute. To estimate that would seem to exist in Chinese sources which the expenditure of 2.5 billion annually for military purposes would seem to be based on political and strategic considerations. Regarding the national political considerations of military expenditures, the Indian allocation of 100 billion dollars, almost one-tenth the annual investment in the first five year plan, seems disproportionate in view of her development needs. From this point of view the settlement of the Kashmir dispute could release considerable resources for Indian economic development. It would be sheer speculation to suggest that such a settlement could result in the reduction of Chinese military allocations. Undoubtedly this would relax the East-West tension. In the likely event that both India and China spend a large percentage of their military outlays (figures are available)

on subsistence for their armed forces, it seems unlikely that a reduction in military expenditures would lead to increased investment in the economy. However, if this manpower were government supported and directed to agricultural or other labor intensive activities it would seem that total production and hence national income could be substantially increased.

The tax structure and fiscal and monetary management shows wide divergence in India and China over the First Five Year Plan periods. According to official sources the Chinese tax on peasants through grain collection actually decreased as production rose during 1953-57.³ The expansion of state enterprises and cooperatives saw proportionate rises in government receipts from these sectors⁴ as grain tax's and purchases reportedly fell. Because of the turnover tax system in China it is difficult to tell from the above to what extent there was any shift in the tax burden. With the virtual elimination of the private sector in China, private profits were shifted to the government and with the introduction of effective turnover taxes and fixed prices for government grain purchases taxation became far more effective, extensive and indirect than it was prior to 1949. This enabled a rise of 38 per cent in Chinese government receipts from 1953-57⁵ while agricultural production increased about 17 per cent and

³U.N., E.S.A.F.E.: 1957, op.cit., p. 98.

⁴Ibid, p. 101.

⁵Ibid.

on expenditures for their armed forces, it seems unlikely that a reduction in military expenditures would lead to increased investment in the economy. However, if this argument were government supported and directed to agricultural or other labor intensive activities it would seem that total production and hence national income could be substantially increased.

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J. H. B. A. F. M. 1957, op. cit., p. 98.

ibid., p. 101.

ibid.

industrial production increased about 80 per cent. The effectiveness of the Chinese tax structure seems to have been in the elimination of private profit and the elimination of practically all income inequality (except for the differential between rural and urban income) and to use the greater share of the production increases in agriculture and industry for reinvestment, military and administrative expense. This was accomplished not by means of increasing taxes and grain collections as such, but indirectly through the turnover tax system as clearly shown by 72 per cent of government receipts in 1957 coming through state enterprises.⁶ In other words instead of going to the villages with additional grain taxes or monetary assessments, prices of commodities going through commercial channels have been adjusted upward (via the turnover tax) to such an extent that nearly three-quarters of all government revenues now come from state enterprises. Most of these state enterprises would then be government trading organizations. As mentioned before, fiscal management in China seems responsible and relatively well managed, particularly when compared to the period prior to 1949. Monetary reforms and an exchange of currency took place in 1955 which strengthened the government's control over the money supply and reduced the amount of currency in circulation by currency conversion in smaller denominations.

The tax structure before and during the Indian First

⁶Ibid.

Five Year Plan did not experience the kind of radical changes that occurred in China. Both the central and state government revenues remained more or less stable throughout the First Five Year Plan--falling between 9-10 per cent of national income while expenditures by 1955/56 reached about 16 per cent of the national income.⁷ This was possible because of foreign loans, deficit financing (money creation through private bank loans to government and the Reserve Bank of India) and public purchases of development bonds. The total effect over the First Plan was largely non-inflationary as other deflationary forces were at work. (These deflationary forces included the increases in agricultural production in 1953-54 which resulted in less hoarding of food stocks and a large drop in food prices, the monetization of additional parts of the economy which absorbed some of the new money supply, and substantial increase in annual net imports over exports.)

The revenue resources of the Indian government (including the states) are vastly different than China. Custom duties accounted for over 14 per cent, income tax about 18 per cent, sales tax about 26 per cent, and land tax about 10 per cent of total revenues by 1956-57.⁸ Revenue had, of course, increased as national income increased with some structural change in the direction of lower receipts from customs, a small increase in income tax and substantial increases in sales and excise taxes.

⁷U.N., E.S.A.F.E.: 1956, op. cit., pp. 188-189.

⁸U.N., E.S.A.F.E.: 1957, op. cit., p. 186.

Five Year Plan also not experienced the kind of rapid growth that occurred in China. Both the central and local government revenues remained more or less stable throughout the first Five Year Plan--falling between 2-15 per cent of national income while expenditures by 1957-60 reached about 15 per cent of the national income.⁷ This was possible because of foreign loans, deficit financing (money created through foreign bank loans to government and the Reserve Bank of India) and public purchases of foreign exchange bonds. The total of all over the first plan was largely non-inflationary. In other deficitary forces were at work. These inflationary forces included the increases in agricultural production in 1953-54 which resulted in less hoarding of food stocks and a large drop in food prices, the monetization of additional parts of the economy which absorbed some of the new money supply, and substantial increases in annual net imports over exports.

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⁷U.N., E.S.A.F.A.: 1950, op. cit., pp. 188-189.

⁸U.N., E.S.A.F.A.: 1957, op. cit., p. 188.

If we consider custom duties on imports as primarily excise taxes on consumption we will see that a substantial burden (46 per cent) falls on consumption goods with the remainder on business and wealth. (The bulk of the small land tax, 10 per cent, may also fall heavily on the poor.)

Far more important than the structure of Indian government revenues is the absolute level of their revenues. As clearly indicated by their need for deficit financing the revenues are inadequate for development and current financial obligations. While one-fourth of the Second Five Year Plan was supposed to have been deficit financed, it seems clear now that the deflationary forces at work in the First Plan are not present now and substantial price rises have taken place in 1957 and 1958, partly due to deficit financing. This raises the question of where the burden of additional taxes might fall. No answer to this question is at hand. A number of economists argue that additional taxes on wealth or curtailment of imports to the private sector will "stultify this private entrepreneurial drive".⁹ At the same time, other writers say it is difficult to shift any heavier burden to excise or sales tax because of the extremely low standard of living of the Indian people. The tax structure of India in the First Five Year Plan seems to indicate an inability to resolve this debate. Although stringent new tax laws have been passed in

⁹Wilfred Malenbaum, "The Economic Crisis in India" (Cambridge: Center for International Studies, M.I.T., 1957), p. 4.

If we consider the effect of a 10 per cent increase in
taxes on consumption it will be found that the effect is
(10 per cent) (10 per cent) (10 per cent) (10 per cent)
on business and industry. The effect is also 10 per cent
per cent, may also be 10 per cent on the whole.
For more information see the following table:
ment revenues in the following table: (10 per cent) (10 per cent)
clearly indicated by the following table: (10 per cent) (10 per cent)
revenues are indicated by the following table: (10 per cent) (10 per cent)
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say it is difficult (10 per cent) (10 per cent) (10 per cent) (10 per cent)
sales tax because of (10 per cent) (10 per cent) (10 per cent) (10 per cent)
the Indian people. (10 per cent) (10 per cent) (10 per cent) (10 per cent)
five years has been (10 per cent) (10 per cent) (10 per cent) (10 per cent)
debate. (10 per cent) (10 per cent) (10 per cent) (10 per cent)

(Cambridge: University Press, 1955)
The following table shows the effect of a 10 per cent increase in
taxes on consumption it will be found that the effect is
(10 per cent) (10 per cent) (10 per cent) (10 per cent)

the last 18 months that will substantially increase government revenues,¹⁰ it is not at all certain that Indian development plans will not be hampered by financial weaknesses. This situation does not seem to reflect on the outstanding ability and achievement of the Reserve Bank of India and its understanding of monetary management. Nor does it point to serious weaknesses in the fiscal management of the government. Inherent in the tax revenue shortages relative to development and current needs seems to be the question of decisions on private versus public control of the economy. One other point seems warranted. With the relatively small government revenues in India compared to China, and the small structural changes in revenues, it would seem that per capita consumption rates of growth in India shown in Appendix Table 7 would be somewhat more accurate for India than for China.

In line with our analysis of investment targets, the figures indicate industrial employment has grown faster in China than in India. Available statistics on India show that the level of factory employment increased by about 10 per cent or by about 240 thousand workers by the end of the First Plan with some temporary decline in 1952 and 1953. Chinese goals called for a 79 per cent increase in industrial employment reaching 5 million workers by 1957. While no figures are

¹⁰Planning Commission, Gov't of India, The New India, Progress Through Democracy, op. cit., p. 138.

The last 10 years have seen a rapid growth in the revenue, so it is not at all surprising that the Government plans will not be hampered by financial considerations. The situation does not seem to reflect on the Government's policy and achievement in the Reserve Bank of India and the Ministry of Monetary Management. The Government is in a position to meet the needs in the fiscal management of the Government. The Government in the tax revenue estimates relative to development and current needs seems to be the product of decisions on revenue versus public capital of the country. The Government seems warranted. The Government's fiscal management relative to India compared to China, and the Government's fiscal management relative to revenue, it would seem that the Government's fiscal management growth in India shows a similar trend to the Government's more accurate for India than for China.

In line with the Ministry of Industries, the

figures indicate industrial production has shown a rise in China than in India. Available statistics on India show that the level of factory employment increased by about 10 per cent or by about 240 thousand workers by the end of the year 1957 with some temporary decline in 1956 and 1957. Chinese goals called for a 79 per cent increase in industrial employment reaching 5 million workers by 1957. While no figures are

available for Chinese industrial employment at the end of 1957,¹¹ it would seem from the industrial production figures that a considerably higher growth than 10 per cent took place. In part this was a result of a two and three shift system introduced in certain lines of manufacturing and mining and in part from new or expanded plants completed under the First Plan.

According to official sources Chinese industrial productivity increased 69 per cent and real wages 27.6 per cent during the first four years of the Five Year Plan.¹² Another report states that money wages increased 20 per cent while real wages increased only 12 per cent in 1955 over 1952.¹³ This latter figure is less than half the first quoted real wage increase and seems more probable. In any case, the significant thing is that productivity in China is growing much more rapidly than real wages and is another source of revenue for government investment. It is impossible to determine from state enterprise revenue figures what proportion represents the difference in worker productivity and wages and what proportion represents turnover tax at this early

¹¹U.N., E.S.A.F.E.: 1957, op.cit., p. 90. This report shows that total government employment increased 4.2 million. The target was 5 million additional government workers, of whom, 2.2 million would have been industrial workers. The report shows no breakdown, but if we assume that the industrial workers increased by the same 84 per cent of target as total government workers, the increase would be 1.8 million in the industrial sector during 1953-1957.

¹²Ibid.

¹³Ibid.

date in Chinese statistics.

India apparently followed a similar pattern in productivity and real wage increases for industrial labor. Productivity in India increased 24.3 per cent from 1951 to 1954; real wages went up 10.5 per cent.¹⁴

While it is impossible to draw any welfare conclusions because of the rough nature of our data, a probable conclusion is that productivity is growing faster in China than in India in factory production, and small annual real wages increases took place in both countries during the period of the Plans.¹⁵

¹⁴Vakil and Brahmanand, op.cit., p. 35.

¹⁵If we accept the lowest Chinese figure of a 3 per cent per year real wage increase this would be slightly reduced by compulsory union dues, bond drive subscription, and rationing of some items. See Wu, op.cit., pp. 442-447.

India's average annual wage increase for industrial workers would be 2.6 per cent and China's would be very similar.

CHAPTER X

SECOND PLANS OUTLINED

The Second Five Year Plan (1958-1962) for mainland China was released in September, 1956. As yet, only the bare outline for production, income and agricultural targets is available. It is an extremely ambitious Plan, and if completed successfully it would make China a major industrial power approaching the Japanese in the Far East.

The Plan calls for an increase in national income from 40 to 60 billion dollars, a 50 per cent increase. Gross production is to increase 75 per cent; agriculture--35 per cent, and industrial production--100 per cent. Employment in the public sector is to increase between 6 and 7 million; wages and peasant's income between 25-30 per cent, while productivity increases 50 per cent. In addition, investment in capital construction is to be almost doubled compared to the First Plan and would be equal to about 36 billion dollars during the Second Five Year Plan. Projected capital construction (power, transport, and industry) for the five years would be equal to the national income in 1955.¹

Industrial production targets based on 1957 production would give an increase of 176 per cent in power, 104 per cent

¹U.N., E.S.A.F.E.: 1957, op. cit., p. 90.

CHINA

THE SECOND FIVE YEAR PLAN

The second five year plan is being prepared.

China was released in September, 1955. The plan

outline for production, income and expenditures

available. It is an extremely ambitious plan, and

necessity to make sure that a major industrial

approaching the Japanese level by 1960.

The plan calls for an increase in total

40 to 60 billion yuan, a 50 percent increase.

production is to increase by 10 percent

and industrial production by 10 percent.

Public sector is to increase by 10 percent

and peasant's income by 10 percent.

increases 50 per cent. In addition, investment

construction is to be almost doubled

Plan and would be about 100 billion yuan

the second five year plan. Production of

(power, transport, and agriculture) will

equal to the national income in 1957.

Industrial production would give an

would give an increase of 10 per cent

in 1957, and 1957, and 1957.

in coal, 175 per cent in petroleum, 191 per cent in steel, 1107 per cent in chemical fertilizer, 381 per cent in machine tools, 108 per cent in cement, 70 per cent in cotton yarn, 123 per cent in cotton cloth, 40 per cent in sugar, 76 per cent in edible oils, and 74 per cent in paper.² This represents some impressive quantitative figures such as 12 million tons of steel, 5 million tons of petroleum, 230 million tons of coal, 7 million tons of fertilizer and 12.5 million tons of cement. (Compare with pre-Plan peaks in Table 1.) Foodgrain production would be increased from 185 million tons to 240 million tons, or about 30 per cent. The total development outlays would give a slight increase in the investment in agriculture from 7-8 per cent of the First Plan to 10 per cent of the Second. Otherwise investment is largely planned on the same basis as the First Plan with higher targets planned for producer goods and lower targets planned for consumer goods. The target of doubling the planned increase in foodgrain production compared to the First Plan with only a 25 per cent increase in investment looks especially ambitious. Perhaps the Plan contemplates stepping up imports of chemical fertilizer in addition to increased domestic fertilizer production.

As yet only scattered reports exist as to the fulfillment of these ambitious goals for the Chinese mainland during this first year of their Second Plan. Those reports that we have

²Ibid, p. 92.

indicate that the goals in both industry and agriculture for the Second Plan in China may be revised upward! For example, it is reported that 39 million tons of wheat will be harvested on the mainland in 1958,³ compared to a reported 24.8 million tons in 1956. (Also see pre-Plan peak in Table 1) The 1958 steel production may be 8 million tons or 10 per cent ahead of Plan.⁴ Another report indicates a new turn in Chinese planning which seems to have greatly stimulated production.⁵ This was a decentralization program launched in late 1957 which calls for greatly stepped up local investment in small production units. This was apparently accompanied by the sending of several million government workers in large cities to smaller units like counties, districts, provinces and collective farms to establish thousands of small producing units of all kinds. If the First Five Year Plan offers any guide of possible performance in the Second Plan, it would seem likely that industrial targets will be exceeded, but that agricultural production will fall somewhat short of planned increases. If the large tractor plant is completed and chemical fertilizer production reaches planned targets, however, even the agricultural targets may not be unrealistic. Given the central controls present in the Chinese economy increased production can be largely plowed back into investment. Therefore, the 100 per cent increase in capital construction, while

³N. Y. Times, July 13, 1958, p. 45.

⁴Ibid.

⁵N. Y. Times, April 27, 1958, p. 23.

indicate that the...
the second...
it is reported...
on the...
sons in 1953...
steel production...
plan...
planning which...
This was a...
which calls for...
production units...
sending of...
to smaller...
collective...
units of all...
guide of...
seem likely...
agricultural...
increase...
fertilizer...
the agricultural...
central...
production...
fore, the 100...

Dr. Y. I. Tseret

April

Dr. Y. I. Tseret

extraordinarily ambitious, would not seem impossible if national income does increase 50 per cent during the Plan.

The Indian Second Five Year Plan was launched in March, 1956, and it is now almost at the half way mark. The Second Plan saw a sharp reversal of investment allocations compared to the First Indian Plan. Total public development funds were slated to be about 10 billion dollars. Investment targets in both the public and private sector were double those of the First Plan. In the public sector alone agriculture and community development would drop from 33 per cent of all development outlay to 21 per cent in the Second Plan, but the absolute amount would increase more than 50 per cent. Industry, power, and transport would rise from 42 per cent in the public sector alone to 57 per cent of development funds, and a somewhat higher proportion for all investment, including the private sector. The plan for national income increase was 25 per cent, while net investment was to rise to 10.7 per cent of national income and per capita income was to be raised 18 per cent.

Original production targets included a 15 per cent increase in foodgrains from 65 to 75 million tons, a 38 per cent increase in cotton production, a 231 per cent increase in finished steel to 4.3 million tons, a 58 per cent increase in coal production to 60 million tons, a 183 per cent increase in cement to 13 million tons, a 128 per cent increase in automobiles to 57,000 units, and an additional 32 per cent increase in irrigated acreage from about 65 to 88 million acres.

extraordinarily rapid, and the country's income rose sharply.

The country's income rose sharply in 1956, and it is now about 10% higher than in 1955.

There has been a sharp reversal of the trend in the country's income.

to the first half of 1956, the country's income rose sharply.

were also to be seen in the country's income.

in both the public and private sectors.

the first time. In the public sector, the country's income rose sharply.

community development work in the country.

development work in the country.

absolute amount of work in the country.

power, and the country's income rose sharply.

sector also to be seen in the country's income.

somewhat higher growth in the country's income.

private sector. The country's income rose sharply.

25 per cent. The country's income rose sharply.

of national income and the country's income rose sharply.

per cent.

Original production of iron ore in the country.

increase in the country's income.

cent increase in the country's income.

(finished steel) to the country's income.

coal production to the country's income.

cement to the country's income.

mobiles to the country's income.

in finished output to the country's income.

Subsequently foodgrains, cotton, and jute targets have been revised upwards so that the increase for all agricultural commodities would be 27 per cent instead of 18 per cent. The private sector investment outlay was likewise expected to be doubled to 24 billion rupees or about 5 billion dollars.

Taking the combined public development expenditures and net private investment--26 per cent will be spent on transport and power, 20 per cent in industry and mining, 17 per cent in agriculture, 13 per cent in social services, 10 per cent in construction and lesser amounts for miscellaneous activities. The changes in investment allocation in the Second Plan compared to the First Plan seem to reflect a feeling that the basic problem of a stagnant agricultural economy had been solved, and that development of heavy industry was the order of the day.

The financial plan in the public sector called for roughly 25 per cent from government revenues, 25 per cent from public borrowing, 25 per cent from external sources and 25 per cent from deficit financing. Considering that the national income would be about 120-125 billion dollars over the five years, it was not considered dangerously inflationary to inject 2.5 billion dollars (or about 2 per cent of national income) of deficit financing into the economy. The external resources planned were to come from drawing 200 million in sterling balances, net foreign private investment of 200 million with approximately 2 billion dollars to be secured from the International Bank for Reconstruction and Development, grants and

Subsequently, following, costs, and the...
revised amounts on that the...
commodities would be...
private sector investment...
debited to \$2 billion...
Taking the combined...
and net private investment...
transport and power, 10 per cent...
per cent in agriculture, 10 per cent...
per cent in construction and...
activities. The changes in...
Plan compared to the...
the basic problem of a...
solved, and that...
of the day.

The financial...
roughly 25 per cent...
public borrowing, 15 per cent...
cent from deficit financing...
would be about 100-120 million...
it was not considered...
billion dollars...
deficit financing...
planned were to come...
balances, net foreign...
approximately 2 billion...
national bank for...
national bank for...

foreign loans. This goal had not been achieved by March, 1958. (See Table 8.)

While considerable achievements have taken place in the first two years of the Indian Second Five Year Plan, recent months have brought forward proposals to reduce the goals of the Plan and organize an orderly retreat.⁶ The argument for downward revision is based on rising prices, especially in 1957 and 1958, the loss of foreign exchange reserves of 1 billion dollars from March 1956 to March, 1958, and the inadequacy of voluntary savings.⁷ To this should be added the criticism that the original investment targets were unrealistically low for the planned outputs,⁸ especially in relation to foreign purchases of producer goods. This argument is still unresolved and the fate of the fulfillment of substantial parts of the India Second Five Year Plan hang in the balance.

⁶Sarma, op. cit., pp. 235-238.

Malenbaum, op. cit., says that such pressure for downward revision comes mainly from the private sector.

U.N., E.S.A.F.E.: 1957, op. cit., p. 84. U.N. economists suggest downward revision may not be necessary if sufficient external finance is available.

⁷Sarma, op. cit., p. 235.

⁸Malenbaum, "Economic Growth in India, 1955/56-1960/61" op. cit., p. 53.

foreign loans. This would mean a further increase in

1958. (See Table 2.)

While considerable progress has been made in the

first two years of the Indian economic development plan,

much has been accomplished in the field of foreign

the plan and especially in the area of foreign

downward revision of the foreign exchange

1957 and 1958. The foreign exchange

billion dollars from 1955 to 1957, 1958, and

adequacy of voluntary exports.

criticism that the original investment program was

initially low for the planned output, especially

to foreign sources of funds in order to meet the

unresolved and the need for foreign exchange

parts of the Indian economy.

downward revision of the foreign exchange

U.S. and other countries.

suggest downward revision of the foreign exchange

external finance.

U.S. and other countries.

downward revision of the foreign exchange

U.S. and other countries.

downward revision of the foreign exchange

U.S. and other countries.

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downward revision of the foreign exchange

U.S. and other countries.

CHAPTER XI

SUMMARY

All the available data indicates that the rate of economic growth in China, with the single exception of the agricultural sector, has been higher than that of India. The difference in their rates of growth seems to be in part, based on the level of net investment, and to some extent, on the sectoral allocation of that investment. As Professor Lewis has stated, "The central problem in the theory of economic growth is to understand the process by which a community is converted from being a 5 per cent saver to a 12 per cent saver--with all the changes in attitudes, in institutions and in technique which accompany this conversion".¹ India has not solved this basic problem as yet.

In their First Five Year Plans China doubled the national income increase of India and widened the per capita national income from two to six dollars. (See Figure 6) China's rate of industrial increase was nearly three times as great as India. In transport and power China far outpaced India in freight ton-kilometers carried, and electric power capacity installed in both absolute and percentage terms. China's foreign trade, starting at significantly lower levels has grown larger than

¹Arthur W. Lewis, The Theory of Economic Growth (London: George Allen and Unwin Ltd., 1955), pp. 225-226.

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¹ Arthur W. Lewis, *The Theory of Economic Growth* (London: George Allen and Unwin Ltd., 1955), pp. 225-226.

India's and seems to have somewhat more stability. Available evidence seems to suggest the increase in actual per capita consumption increased at about the same rate in both countries.

The main advantages that India seemed to have over China in the pre-Plan period² have evidently been lost. Starting at approximately the same levels, by 1958 China appeared to have an industrial base (except in consumer goods industries and transport) that was about twice that of India's. It would appear that a few of the factors producing these results in China were: (1) higher net investment or faster rates of increase in national product, (2) import controls that resulted in the importation of a high proportion of capital goods to total imports, and (3) Soviet technical aid and credits. On the international side India was evidently handicapped by a lower level of aggregate credits and less technical aid. On the domestic side India appears to be unable to establish a large enough tax base to raise sufficient revenue for investment and current expenses. The difficulty of solving the latter problem through private investment is illustrated in the following from Coale and Hoover:

Savings among large sections of the people are not primarily determined by the investment motive, in the sense of a desire for more current income from the investment, but express themselves a great deal in ceremonial expenditures which is high in relation to income, in hoarding as a security reserve, and in land which is the main economic foundation for the perpetuation of the family. As a

²Malenbaum, "India and China: Development Contracts", op. cit., p. 10. See also Figure 1.

India's and seems to have somewhat more stability. The evidence seems to suggest the increase in second-hand consumption increased at about the same rate in both countries. The main advantages that India seemed to have over China in the pre-1950 period have evidently been lost. It is approximately the same level, by 1950 China seemed to have an industrial base (except in consumer goods industries and transport) that was about twice that of India. It would appear that a law of the factors producing these results in China were: (1) higher net investment or faster rate of increase in national product, (2) larger consumer base, (3) the importation of a high proportion of capital goods for replacement, and (4) Soviet technical aid and credits. On the international side India was evidently hampered by a lower level of aggregate credits and less technical aid. On the domestic side India appears to be unable to establish a large enough tax base to raise sufficient revenue for investment and current expenses. The difficulty of solving the latter problem through private investment is illustrated in the following from Caste and Hoover:

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corollary, investment is not so markedly effected by the judgements on the financial rate of return. Much of the additional income of the wealthier groups escapes through high ostentatious consumption, or is invested in building or land, or in foreign currencies. In using funds to earn more income, there is a preference for trade or finance rather than investment in concrete capital for industrial or agricultural production.³

It should also be noted that India's distribution of income in one of the most unequal in the world.⁴

The shortage of investment funds has been further aggravated by the abandonment of food rationing, and decontrol of imports which in recent months have fed inflationary trends. The crisis in Indian planning has reached the point where a number of Indian economists and others have called for scaling down the already modest targets for the Second Plan. Instead of cutting down the Second Plan, it would seem to be important that steps be taken to increase the targets for the Second Plan so that the gap between India and China does not widen still further. Import controls have been reimposed, but it would seem essential to quickly implement plans for wholesale market controls of foodgrains⁵ and negotiate additional foreign credits. Perhaps as important as new credits is the more rapid utilization

³Ansley Coale and Edgar Hoover, "Population Growth and Economic Development in India, 1956-1986", Preliminary draft privately circulated, Office of Population Research, Princeton University, 1956. pp. 22-23.

⁴Colin Clark, The Conditions of Economic Progress (London: MacMillan & Co. Ltd., 1951) pp. 538-9.

⁵U.N., E.S.A.F.E.: 1957, op. cit., p. 85. The Food-grains Enquiry Committee appointed by the Indian Government has recently advocated "progressive and planned socialization of the wholesale trade in foodgrains."

corollary, have been found to be...
industrial at present...

It should also be noted that...
in one of the most important...

The shortage of investment funds has been...
aggravated by the...
of imports which...
The crisis in India...
number of Indian...
down the already...
of cutting down...
that steps be...
so that the...
further...
been essential...
controls of...
Perhaps as...

3. Industry and Commerce
Economic...
privately...
University...

4. Public Administration
MacMillan & Co. Ltd.

5. Education
Grains...
has recently...
of the wholesale...

of those available already and especially by a stepped up use of foreign technicians to train Indians in all branches of production.

The comparison of economic progress in China and India which has just been completed takes on additional emphasis when examined in the light of available data on the effort China is making to achieve a lower rate of population growth. Reference has previously been made to the pressure of population on the available resources in both China and India. Orthodox Marxian doctrine, of course, does not concede that the rate of population growth has any bearing on levels of living. But the Chinese leaders have evidently abandoned Marxist dogma on this point and have initiated an educational campaign and allocated significant sums for the production of contraceptives in order to popularize birth control. This important change in Chinese policy was first documented by Irene Taueber in Population Index.⁶ Subsequent travelers to China have verified Mrs. Taueber's original thesis and stated that the birth control movement in China is gaining momentum. Quantative data are not yet available for comparing China's effort with that of India but the information at hand suggests that China is making a more determined effort in this direction also than India is. While the Government of India is spending considerable sums of money for propaganda for family limitation China seems to be concentrating her efforts on methods, like

⁶Population Index, October 1956, Vol. 22, No. 4 pp. 261-276.

contraceptives, that have proved far more effective in western countries. The success of family limitation programs in both countries will obviously have very important ramifications on long range economic growth rates as well as minimum standards being established in food, health, education, and housing requirements of such large populations.

This paper has established that the economic growth rates in India are considerably below those of China. It would take considerable more study to determine all the reasons for this discrepancy. Some writers suggest that all the advantages for rapid economic growth lie with a centrally controlled dictatorship like the Chinese and that the democratic methods of persuasion are necessarily slower. Others argue that the neo-classical model is inapplicable to the underdeveloped countries and that modifications of that system will enable countries like India to develop rapidly without abandoning political democracy. Still others believe that the neo-classical model is applicable to countries like India, and the only economic system that is compatible with political democracy. This paper leaves this question unanswered but clearly shows that some model for economic growth in underdeveloped countries like India must be forthcoming from economic theory that are better than we have at present. The more rapid growth rates in China compared to India are attracting considerable attention already among the peoples of the underdeveloped countries, particularly in Asia. This study demonstrates that the growth rates in India are relatively

contrasted, that have proved to be more successful in
western countries. The success of these institutions is
in both countries will obviously have very important
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rates in India are considerably below those of Britain.
would take considerable time and effort to determine a
for this discrepancy. Some writers suggest that the
advantages for rapid economic growth lie with a
controlled discipline like the British and the
methods of operation are essentially similar. It is
that the neo-classical model is applicable to the
developed countries and that modification of that model
will enable countries like India to achieve rapid growth
enhancing political democracy. It is stated that the
the neo-classical model is really not so simple as it
and the only economic system that is consistent with the political
democracy. This paper takes into account the
clearly shows that some model for economic growth in
developed countries like Britain and the United States
economic theory that are better than the neo-classical
more rapid growth rates in India compared to Britain
attracting considerable attention directly from the
of the underdeveloped countries, particularly in India.
study demonstrates that the growth rates in India are

low and from the point of view of western political leadership must be stepped up, unless China is to become the leading model for these underdeveloped countries. Perhaps a study along the lines suggested by Mrydal to young economists in the underdeveloped countries would give us some answers as to why India is proceeding so much more slowly than China and how growth can be speeded up. His statement in any case, should be examined for its possible relevance to the race between India and China and our desire to see India move forward more rapidly while maintaining democratic political institutions. Mrydal says:

In this epoch of the Great Awakening, it would be pathetic if young economists in the under-developed countries got led astray by the predilections of the economic thinking in the advanced countries, which are hampering the scholars there in their efforts to be rational, but would be almost fatal to the intellectual strivings of those in the under-developed countries.

I would instead wish them to have the courage to throw away large structures of meaningless, irrelevant and sometimes blatantly inadequate doctrines and theoretical approaches, and to start their thinking afresh from a study of their own needs and problems. This would take them far beyond the realm of both outmoded Western liberal economics and Marxism.

Instead of chewing over our old doctrines and doctrinal controversies many of them a hundred years old or more, they should take their pick of what is really practical and useful in our tradition, and then proceed to make their own theoretical constructions to suit their problems. They would then find that many old and familiar arguments and theorems become useful when adjusted to fit into a new frame.

All the under-developed countries are now starting out on a line of economic policy which has no close historical precedent in any advanced country. In the same way as the course of economic events and policies in advanced countries always gave rise to new re-alignments of social and economic theories better

low and first the point of view of the... must be stepped up, and then it is to be... model for these under... along the lines... the underdeveloped countries... to why India is progressing so slowly... how growth can be accelerated... should be a standard for the... between India and China and... more rapidly while maintaining... Myrdal says:

In this sense of the word, the... pathetic in young countries... countries are not... economic thinking... are not... be rational, but... real activities... contrast... I would... throw away... and... theoretical... already... This would... out... instead of... decision... old or... really... then... so... old and... when... All... out... historical... save... in... alignment of...

fitted to, and closely conditioned by, the immediate historical circumstances, it would be entirely appropriate if the very different events and policies in under-developed countries today were accepted as a challenge to produce new and different theoretical frames for social and economic research.⁷

⁷Gunnar Myrdal, Economic Theory and Under-Developed Regions (London: Gerald Duckworth & Co. Ltd., 1957), pp. 101-102.

filled to, and slowly condensed to, the same
historical situation, it is not a
piece of the very old world, but a
newly-developed world, and it is
called a new world, and it is
called a new world, and it is

General, I am not a
Resident, I am not a
pp. 101-102.

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APPENDIX

TABLE 1

COMPARATIVE LEVEL OF PER CAPITA CONSUMPTION
IN INDIA AND CHINA OF SELECTED ITEMS*

Product	Units	China		India	
		Amount	Years	Amount	Years
Pig Iron	Mill. tons	1.589	1952	1.9	1951
	Kilograms per capita	2.75	1952	5.00	1951
Crude Steel	Mill. tons	1.215	1952	1.5	1951
	Kilograms per capita	2.00	1952	4.00	1951
Coal	Mill. tons	53.0	1952	34.9	1951
	Kilograms per capita	96.0	1952	97.0	1951
Cement	Mill. tons	2.311	1952	3.20	1951
	Kilograms per capita	4.00	1952	9.00	1951
Generating Capacity	Thousand Kilowatts	2.850	1952	2.409	1951
	Kilowatts per capita	.005	1952	.01	1951
Cotton Spindleage in Industry	Total in Millions	5.0	1952	10.144	1951
	Units per capita	.01	1952	.03	1952

* SOURCE; Alexander Eckstein, "Conditions and Prospects for Economic Growth in Communist China", World Politics, Vol VII, No 2, January 1955.

TABLE I

COMPARATIVE LEVEL OF PER CAPITA CONSUMPTION
IN INDIA AND CHINA OF SELECTED ITEMS

Product	Units	Amount	Year	Amount	Year
Pig Iron	Mill. tons Kilograms per capita	1.550 2.75	1952 1952	1.0 5.00	1951 1951
Crude Steel	Mill. tons Kilograms per capita	1.215 2.00	1952 1952	1.5 4.00	1951 1951
Coal	Mill. tons Kilograms per capita	23.0 96.0	1952 1952	24.9 97.0	1951 1951
Cement	Mill. tons Kilograms per capita	2.311 4.00	1952 1952	2.20 2.00	1951 1951
Generating Capacity	Thousands Kilowatts Kilowatts per capita	2.650 1.002	1952 1952	2.469 1.01	1951 1951
Cotton Spindleage in Industry	Total in millions Units per capita	5.0 1.01	1952 1952	10.144 1.03	1951 1952

* SOURCE: Alexander Eckstein, "Conditions and Prospects for Economic Growth in Communist China", World Politics, Vol. VII, No. 2, January 1955.

APPENDIX
TABLE 2

FIRST FIVE YEAR PLAN TARGETS OF SELECTED
ITEMS IN INDIA AND CHINA*

Items	Units	INDIA			CHINA		
		1950/51	1955/56	% Inc	1952	1957	% Inc
Pig Iron	M. Tons	.35	.66	85	1.9	4.67	146
Crude Steel	M. Tons	...	...	..	1.35	4.12	206
Finished Steel	M. Tons	.98	1.37	40	1.11	3.045	175
Coal	M. Tons	32.3	...	...	63.6	113.0	78
Cement	M. Tons	2.7	4.8	78	2.86	6.0	110
Electric Power	M. K. W.	2.3	3.5	52	...	...	...
Electric Power	B. KWH	...	...	...	7.26	15.900	119
Chemical Fertil.	M. Tons	.105	.630	500	.118	.548	191
Cotton Cloth	M. Yds.	4.53	6.40	41	...	...	...
Sugar Cane	M. Tons	5.6	6.3	13	7.12	13.18	85
Food-grains	M. Tons	54.0	61.6	14	163.92	192.81	17
Cotton	M. Bales	2.97	4.22	42	...	...	...
Irrigated Acreage	M. Acres	50.0	69.7	39	...	...	...
Jute	M. Bales	3.3	5.39	63	.31	1.37	19
Sown Area	M. Acres	...	...	...	348.27	372.97	7
Bicycles	Thousand	101.0	530.0	424	...	...	....
Agricul. Mach.							
Pumps	Thousand	34.3	85.0	150	...	...	...
Diesel Engines	Thousand	5.5	50.0	809	...	...	...

*Compiled by the author, Some targets in both countries were adjusted upward or downward during the course of the Plan.

Source: Planning Commission, Government of India, First Five Year Plan; Fu-chun Li, Report on the First Five Year Plan for Development of the Economy of the Peoples Republic of China in 1953-1957, Foreign Languages Press, Peking, 1955; and United Nations, Economic Survey of Asia and the Far East 1955, Bangkok, 1956

M. = Millions.

APPENDIX
TABLE 3AGRICULTURAL PRODUCTION INDEX AND ACTUAL PRODUCTION OF SELECTED COMMODITIES IN
INDIA AND CHINA DURING THEIR FIRST FIVE YEAR PLANS*

Units		First Plan Year	Second Plan Year	Third Plan Year	Fourth Plan Year	Fifth Plan Year	Percent Increase	Original Targets
Agricultural Index	1951/52 - 100	900.0	...	122.2	121.8	120.8	20.4	...
	1952 - 100	...	...	...	...	123.3(P)	...	123.3%
Foodgrain Index	1949/50 - 100	...	101.1	119.1	114.4	113.5	...	...
	1953 - 100	100.0	102.8	112.0	114.0	116.0	16	17.6%
Foodgrain Index	India	54.0a	...	66.0	65.8	65.0	20	15%
	China	52.7b 118.9c	122.2c	132.5c	135.9c	137.0c	15	17.66%
Cotton Index	India	.53	.56	.69	.76	.75	42	4.2
	China	1.18	1.06	1.5	1.58	1.64	39	1.64
Jute Index	India	159	...	...	.53	.71	20	5.39
	China	.31	...	...	126	...	-17(1956)	.37

Commodity	Unit	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	2893	2894	2895	2896	2897	2898	2899	2900	2901	2902	2903	2904	2905	2906	2907	2908	2909	2910	2911	2912	2913	2914	2915	2916	2917	2918	2919	2920	2921	2922	2923	2924	2925	2926	2927	2928	2929	2930	2931	2932	2933	2934	2935	2936	2937	2938	2939	2940	2941	2942	2943	2944	2945	2946	2947	2948	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TABLE 3--Continued

Comparative Acreage Figures							
Units		First Plan Year	Second Plan Year	Third Plan Year	Fourth Plan Year	Fifth Plan Year	Per cent Increase Original Targets
Crop Area India China	Mill. Acres	324	...	...	350.	...	11(1955)
	Mill. Acres	348.9	...	...	...	374.5	7 10%
Irrigated Area India China	Mill. Acres	51.5	...	...	67.0	...	31
	Mill. Acres	70.5	72.2	...	82.5	...	17(1956) 37% 14%

Compiled by the author

*1951/52-1955/56 in India and 1953-1957 in China

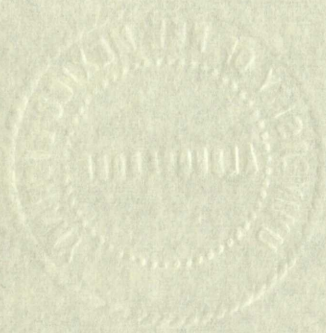
SOURCE: U.N. E.S.A.F.E.: 1953-1957, Bangkok.

a Target was figured from this base

b Actual production in base year.

c Adjusted by the Food and Agricultural Organization of the United Nations.

p Plan targets where actual figures not available.



ВНЕШНЕЭКОНОМИЧЕСКИЕ ОТНОШЕНИЯ
СОВЕТСКОГО СОЮЗА
В 1975 ГОДУ

Страна	Внешнеторговая торговля				Внешнеэкономические связи			
	Экспорт	Импорт	Сальдо	Всего	Экспорт	Импорт	Сальдо	Всего
США	10000	5000	5000	15000	10000	5000	5000	15000
СФРГ	8000	4000	4000	12000	8000	4000	4000	12000
Великобритания	7000	3500	3500	10500	7000	3500	3500	10500
Франция	6000	3000	3000	9000	6000	3000	3000	9000
Италия	5000	2500	2500	7500	5000	2500	2500	7500
ГДР	4000	2000	2000	6000	4000	2000	2000	6000
Дания	3000	1500	1500	4500	3000	1500	1500	4500
Швейцария	2000	1000	1000	3000	2000	1000	1000	3000
ФРГ	1000	500	500	1500	1000	500	500	1500
Япония	500	250	250	750	500	250	250	750
Другие страны	1000	500	500	1500	1000	500	500	1500
Итого	48000	24000	24000	72000	48000	24000	24000	72000

Составлено по данным ВНЕШЭКОСТАТА

APPENDIX
TABLE 4

INDUSTRIAL PRODUCTION IN INDIA AND CHINA DURING THEIR FIRST FIVE YEAR PLANS*

Units		First Plan Year	Second Plan Year	Third Plan Year	Fourth Plan Year	Fifth Plan Year	Per cent Increase	Original Targets
Industrial Production	1951 100	103.6	105.6	112.9	122.9	133.0	33	...
	1952 100	131.0	154.0	162.0	205.0	219.0	...	...
Pig Iron	Mill. Tons	...	1.65a	...	1.76a	1.8a	7	...
	Mill. Tons	2.24	300	3.6	4.6	5.8	159	...
Crude Steel	Mill. Tons	1.59	1.53	1.72	1.73	1.76	11	...
	Mill. Tons	1.77	2.22	2.8	4.3	5.2	194	4.12
Finished Steel	Mill. Tons	.98	...	...	1.73	1.74	77	1.37
	Mill. Tons	1.43	1.73	2.5	3.6	...	152(1956)	3.04
Coal	Mill. Tons	36.0	36.0	36.0	38.0	39.0	8	...
	Mill. Tons	69.4	82.0	94.0	105.9	123.9	79	113.0
Cement	Mill. Tons	2.7	3.8	4.4	4.5	4.6	70	4.8
	Mill. Tons	3.9	4.6	4.5	6.4	6.7	72	6.6
Chem. Fert.	Mill. Tons	.11	...	...	...	.48	321	.63
	Mill. Tons	.25	.31	.32	.66	.75	200	.58
Cotton Cloth	Mill. Meters	4,200	4,464	4,572	4,670	4,850	15	...
	Mill. Bolts	135.3	152.9	103.0	170.8	156.2	15	163.7

Compiled by the author

SOURCE: U.N. E.S.A.F.E.: 1953-1957, Bangkok

* 1951-52 in India and 1953-57 in

China

a Calendar year, Source Eastern World
July 1957

APPENDIX
TABLE 5

SELECTED INDICATORS OF POWER OUTPUT IN INDIA AND CHINA DURING FIRST FIVE YEAR PLAN

	Units	First Five Year Plan					Per cent Increase	Original Targets
		First Plan Year	Second Plan Year	Third Plan Year	Fourth Plan Year	Fifth Plan Year		
Electric Power	Mill. K.W.	2.3	...	...	...	3.4	48	...
India		2.13	2.5	2.9	3.9(E)	4.5(E)	111	...
China								...
Electric Power	Bill. K.W.H.	5.16	5.59	6.25	7.16	8.03	56	...
India		9.0	10.9	12.28	16.6	19.0	111	...
China								...

Compiled by the author.
 * 1951/52-1955/56 for India and 1953-1957 for China.
 (E) is authors estimate based on billion KWH produced.
 SOURCE: U.N. E.S.A.F.E.: 1953-1957, Bangkok.

APPENDIX
TABLE 6

SELECTED INDICATORS OF TRANSPORT DEVELOPMENT* IN INDIA
AND CHINA DURING FIRST FIVE YEAR PLANS

Units		First Plan Year	Second Plan Year	Third Plan Year	Fourth Plan Year	Fifth Plan Year	Per cent Increase	Original Targets
Railway Tracks Kilometers								
India		49,221	49,500	49,746	50,205	50,316	2	...
China		24,232	24,690	25,304	26,733	29,152	20	28,316
Highways (Surfaced) Kilometers								
India		60,225	...	...	...	66,250	10	...
China		129,614	138,585	142,885	...	...	10(1955)	139,614
Freight Cars Thousand								
India		215	224	229	234	243	13	...
China		...	...	...	...	...	...	...
Railway Freight Bill. Ton Kilometers								
India		45.5a	48.0a	49.8a	55.1a	61.9a	35	...
China		64.8b	74.8b	...	...	134.1	123	120.9

Compiled by the author.

* 1951/52-1955/56 in India and 1953-57 in China.

SOURCE: U.N., E.S.A.F.E.: 1953-1957, Bangkok.

a is calendar year.

b is 1952 instead of 1953.

NATIONAL INCOME, INDIA AND CHINA, FIRST FIVE YEAR PLANS*

	Units	First Plan Year	Second Plan Year	Third Plan Year	Fourth Plan Year	Fifth Plan Year	Per cent Increase	Average Annual Increase
National Income	Bill. dollars							
India		19.13	19.87	21.07	22.60	22.75	14	2.8
China		31.85	34.39	36.09	38.22	40.40(E)	27	5.4
Investment								
India (Gross)	Bill.	2.25	2.25	2.37	2.42	2.48(E)	10	2.0
China (Net)	dollars	5.52	7.47	7.22	7.64	8.07(E)	46	9.2
Consumption								
India	Bill.	16.89	17.63	18.70	19.16	20.27(E)	20	4.0
China	Dollars	25.90	27.18	28.87	30.14	32.27(E)	25	5.0
Population								
India	Billions	367	372	377	382	387	5.4	1.01
China		581	595	608	621	633(E)	9	1.8
Per Capita Income								
India	Dollars	52.10	53.36	55.88	56.51	57.61	13	2.6
China		54.78	57.75	59.45	61.57	63.69	16	3.2
Per Capita Consumption								
India	Dollars	46.00	47.27	49.58	50.21	52.31	14	2.8
China		44.59	45.86	47.56	48.41	50.95	14	2.8

* 1951/52-1955/56 in India and 1953-1957 in China.

Compiled by the author from U.N. E.S.A.F.E.: 1952-1957, Bangkok; Government of India, Second Five Year Plan: A Draft Outline, 1956, Brahmanand and Vakil, Planning for an Expanding Economy, 1956; Y. L. Wu, An Economic Survey of Communist China, 1956; S. Adler, The Chinese Economy, 1957; and W. W. Rostow, The Prospects for Communist China, 1954.

APPENDIX
TABLE 8

BALANCE OF PAYMENTS AND FEDERAL AID^a
(All figures shown are in billions of dollars)

	INDIA						
	1951/52	1952/53	1953/54	1954/55	1955/56	1956/57	Total
Exports	1.53	1.26	1.13	1.25	1.35	1.34 ^b	
Imports	2.02	1.32	1.24	1.44	1.57	2.126 ^b	
Invisible Receipts	.137	.170	.170	.162	.176	.225	
Current Accounts (net)	-.353	.106	-.059	-.021	-.550	-.697	
Total Trade	3.55	2.58	2.37	2.69	2.92	3.60	
Loans Received (Not annual, Total Five Year Plan)				.623 ^c	.230 ^d	1.246 ^e	1,869
Aid Extended	...	...	...	...	...	...	...

TABLE 8 (Continued)

CHINA						
	1952	1953	1954	1955	1956	1957 ^f Total
Exports	1.17	1.49	1.72	2.08	2.37	2.21
Imports	1.58	1.94	1.88	2.58	2.25	2.02
Current Accounts	-.41	-.45	-.16	-.50	.12	.19
Total Trade	2.75	3.43	3.60	4.66	4.62	4.23
Loans from USSR	...	.186	.375	.704	.50	.010 1.324
Aid Extended	...	.676	.267	.194	.172	.216 1.524

Compiled by the author

aU.N., E.S.A.F.E.: 1957, op. cit., pp. 81, 83, 103.

bPreliminary estimates.

cTotal loans during the First Plan.

dCarry over loans from the first to the second Plan.

eAdditional loans obtained - to March 31, 1958.

fTargets.

(continued) TABLE 2

CHINA					
Year	1952	1953	1954	1955	1956
Population	58.5	60.5	62.1	64.1	66.1
Urban	28.5	30.5	32.1	34.1	36.1
Rural	30.0	30.0	30.0	30.0	30.0
Male	29.5	29.5	29.5	29.5	29.5
Female	29.0	29.0	29.0	29.0	29.0
Age 0-14	35.0	35.0	35.0	35.0	35.0
Age 15-64	55.0	55.0	55.0	55.0	55.0
Age 65+	10.0	10.0	10.0	10.0	10.0
Married	70.0	70.0	70.0	70.0	70.0
Divorced	0.0	0.0	0.0	0.0	0.0
Widowed	10.0	10.0	10.0	10.0	10.0
Single	20.0	20.0	20.0	20.0	20.0

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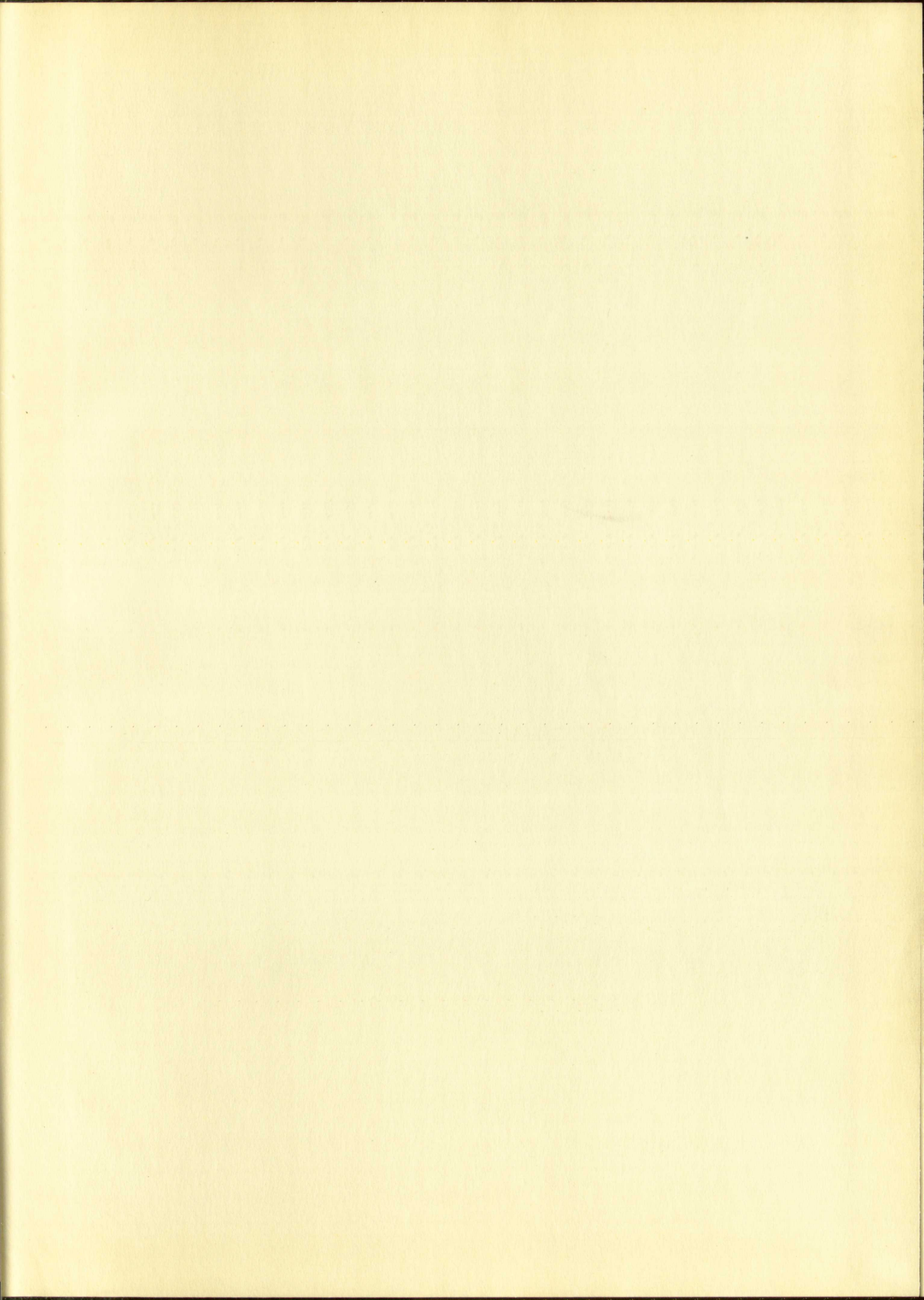
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