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An Evaluation of the Chinese Economy 1949-1972

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INTRODUCTION

When in October 1949 Mao Tse-Tung and the Peoples' Liberation Army seized control over mainland China they were faced with the immense problem of establishing a stable communist economy.

When discussing the economy of the Peoples' Republic of China one is confronted with the problem of relying upon somewhat undependable figures concerning growth. This is perhaps due to either the poor system of accounting or the want of the country to look as if it is reaching a rather stable condition. Therefore I have neglected to present many figures for want of hard evidence. I have, on the other hand, attempted to show general trends within the economy. This I feel will present fairly the current economic condition of the Peoples' Republic of China.

Rather than present a purely chronological account from October 1949 to the present I have arranged this report in the following manner.

The Five Year Plans. Showing the major emphasis of each plan. The first five year plans were dedicated to all aspects of Chinese life. However, in later years agriculture and industry received the bulk of attention. Therefore, attention has been devoted toward these sectors in the latter plans.

Advances in agriculture and industry. This section deals with the trends of growth in both the agricultural and industrial sectors.

Factors influencing economic growth. This section presents a look at the various policies of resource allocation, the price system, foreign aid and trade, capital investing, wages and employment, and gross national product.
Looking ahead. This final section is an attempt to show how well the Chinese economic system has done in the past twenty-two years. This section also states what we can expect from the Peoples' Republic of China and its impact on the economy of the rest of the world.
THE FIVE YEAR PLANS
ECONOMIC REHABILITATION

The Peoples' Republic of China, the most populous country in the world, was founded at the end of thirty years of chaos on October 1, 1949. At its head was Mao Tse-Tung, chairman of the Communist Party of China, next in the chain of command were Liu Shao-ch'i, head of state, and Premier Chou En-lai. The basic economic principles were communistic. However, Chairman Mao added his interpretations. These were that the source of strength is the peasant not the proletariat, there must be a permanent confrontation of the classes, there must be an unremitting cyclical pattern of tension and relaxation, and finally violence is the most powerful incidence of change.

The first objective was to reform or rehabilitate specific areas of the economy. There were five such areas; land, industrial and commercial, financial, social and political.

The goals in land distribution were three-fold. First and foremost, prior to 1949 the land-lord class comprised ten percent of the population yet this group controlled nearly seventy percent of the total real estate available. This land-lord class had been the supporters of the status quo and hence the government was compelled to eliminate them. In doing this virtually all of the land-lords' holdings were confiscated. As for the land-lords themselves, many were sent to labor camps for rehabilitation and education in the Communist doctrine.

Secondly, the land that was taken was redistributed to the peasants. This appears as though the peasant was receiving a large gift. However, quite the opposite occurred. Upon the completion of the land reform the average size of landholdings for the country as a whole was about two acres.¹ Yet the important task had been completed.

The peasants now owned their own land and more significant all plots were relatively the same size. This was material in promoting the concept of one class or no class distinction.

Finally, the third goal of land reform was to increase agriculture output. The underlying principle was, if the peasant was farming for himself he would produce a larger harvest than he would if he was working for the land-lord.

Playing an intricate part in land reform was the cadre. A cadre was a member of the party, usually a former member of the Peoples' Liberation Army. His goal was, while living and working in a village, to start peasant associations. The peasant association, initiated by the cadres, held peoples tribunals and tried land-lords. Another duty of the cadre was to prepare large class structure lists for the redistribution of land.²

There was a substantial problem in the elimination of the land-lords. The land-lords provided most of the wage fund. This problem, the government felt, would be overcome by providing seeds and food enabling the peasants to become self-sufficient.

In the area of industrial and commercial reform the goal of the state was to be the command post in the design of the business sector. The state was to supervise distribution and allocations of all supplies to markets. Also the government was to oversee all business operations, labor relations, and technical innovations.³

With these goals established the government was obliged to wait until the period of collectivization and industrialization. The main purpose during the rehabilitation was help the war torn industries back upon their feet.


The aim of financial reform was to control all phases of monetary policy. In achieving this monopoly over the banking system the government was faced with two immediate issues. The foremost problem was that the government was confronted with the postwar hyperinflation. Rather satisfactory control was exerted over this hyperinflation through the concentration of bank deposits, reductions in the liabilities of commercial banks, and direct restrictions on the extension of credit.4

The second issue was what type of banking system should the Peoples' Republic of China have? The answer is simple, it is a duplicate of the Soviet model. Hence in 1950 the Peoples' Bank of China was founded. The process of conjoining the banks was relatively simple. Commercial banks were required to increase their capital and then gradually consolidate their operations. This amalgamation ultimately led to the formation of the state bank.5

The Peoples' Bank required that all government enterprises conduct their business with other similar units through the bank. All transactions must be cleared through the bank and only minor operations can be financed with currency. All enterprises are required to draw-up a statement of all receipts and expenditures. Only in the case of planned credit can the statement not be in balance. The national plan for receipts and expenditures is the basis for all transactions. The bank receives all copies of contracts so it may debit or credit the appropriate accounts. The bank can also halt any transaction which is not authorized through the national plan. Enterprises may only borrow against their account if specifically stated in the plan and for short term financing.


5Ibid.
The banking system has remained relatively unchanged since 1950. It has, however, added specific facilities. In 1952 the Agriculture Bank was instated. Also it has created special agencies to finance long term capital construction and investments in particular sectors.  

In the area of social reform the government embarked upon a massive campaign to drastically rearrange the entire social structure which dated back thousands of years. The social structure at the village level was drastically altered with the elimination of the land-lord class. The government wanted to eliminate all phases of life that resembled capitalism. Consequently the land-lords and their families received a multitude of abuse. After public hearings millions were either killed or sent to labor camps. This and several other campaigns were launched to prepare the populace for collectivization.

The business sectors also suffered tremendous blows from similar campaigns. Two such campaigns were launched at the industrialists and merchants. The two campaigns were called the "Three-Anti" or San Fan and the "Five-Anti" or Wu Fan. Both were attempts to stamp out bourgeois and pro-western attitudes. The San Fan attacked the three evils of corruption, waste and bureaucratic abuse of power in government. The Wu Fan, the campaign most directed against businessmen, assailed the evils of tax evasion, bribery, theft of state assets, utilizing knowledge of state economic projects for private gain and cheating on labor or materials.

Another program designed to promote communistic life also served to strengthen nationalistic feelings. It was the Resist-America Aid-Korea campaign. In this thousands of "volunteers" entered Korea to resist the advancing United Nations

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6 Wu, pp. 411-17.


8 Ibid.
Troops. The government promoted the theory that after Korea the mainland would be invaded. At this time the first national bond issue was circulated. The name of the bond was the Peoples' Victory Bond.9

By 1952 the government had completely altered traditional life in the Peoples' Republic of China. Many people were firmly convinced that Chairman Mao would lead them to a better life with communism. Firm acceptance and a positive response to the above mentioned campaigns, and in particular the "Three and Five-Antis" provided a sturdy base for collectivization.

In order to unify the country, the Chinese Communists adopted on September 29, 1949 the Common Program. The Common Program "directed the government to 'abolish all prerogatives of imperial countries in China' and to 'undertake to wage the peoples' war of liberation to the very end, liberate all the territory of China, and accomplish the cause of unifying the country.'10 The instrument of the Common Program was the governmental structure. The Communist Party of China (CPC) follows the standard Marx-Leninism interpretation of communism. This interpretation pursues the doctrines of strong central control of the party, the elect select group of leaders know the correct interpretations of Marx, and freedom to reform. In the Chinese experiment Mao Tse-Tung adds the doctrine of agrarian and military communism. Agrarian communism essentially states that the source of strength comes from the peasant and not the proletariat. Military communism implies that there should be a continual involvement of the military in the government.

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9Chen and Galenson, pp. 156-7.

10Barnett, p. 91.
The framework of the government in 1950 was as follows:

National Party Congress

Central Committee

Politburo

Politburo Standing Committee

Permanent Central Controlling Power

Local Party Branches

All levels of the government are important but the source of energy comes from the central controlling power. In 1949 the three most important men in the government were Mao Tse-Tung; chairman of the CPC, Liu Shao-ch'i; head of state, and Premier Chou En-lai.

Another important facet of the CPC was the forementioned cadre. Along with establishing local parties they aided in firmly promoting the wisdom of Chairman Mao.

THE FIRST FIVE YEAR PLAN

By the end of 1952 the government announced that the period of rehabilitation was coming to an end and that the First Five Year Plan for development would begin in 1953. A formal plan, however, was not drafted until 1955. It seems rather strange that the plan would be put into effect two years prior to its formulation. Yet there are two very good reasons for beginning this early. First, and most important, the forementioned "Five-Anti" campaign of 1952 reduced the economic power of private enterprises. The "Five-Antis" were so effective that "by the end of the year private enterprises accounted for only 36 percent of the total wholesale trade, 58 percent of retail trade, and 39 percent of factory production, as compared to 76 percent, 84 percent
and 52 percent in 1950."\textsuperscript{11} It was, therefore, evident that again the economy needed an injection. This came in the form of the First Five Year Plan.

The underlying objective of the plan was to establish a socialist society through "socialist industrialization".\textsuperscript{12} This socialist industrialization was to be completed over three plans or fifteen years. The first plan covered three major areas, agriculture, industry and investment, with socialist industrialization (this has also been called state capitalism) the primary mission.

The plan followed the basic Soviet model. Therefore it may be interesting to compare the resources available in 1952 with the Soviet Union's First Five Year Plan.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Resources of the Peoples' Republic of China and the Soviet Union at the outset of the First Five Year Plans.\textsuperscript{13}</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>China 1952</td>
</tr>
<tr>
<td>Population (millions)</td>
<td>567</td>
</tr>
<tr>
<td>Crop area per head of rural population (acres)</td>
<td>0.7</td>
</tr>
<tr>
<td>Per capita output of grain (kg.)</td>
<td>272</td>
</tr>
<tr>
<td>Railroads (km. per million population)</td>
<td>43</td>
</tr>
<tr>
<td>Electric power generating capacity (mill. kw.)</td>
<td>2.0</td>
</tr>
<tr>
<td>Industrial Production</td>
<td></td>
</tr>
<tr>
<td>Coal (mill. metric tons)</td>
<td>63.5</td>
</tr>
<tr>
<td>Steel (mill. metric tons)</td>
<td>1.3</td>
</tr>
<tr>
<td>Cement (mill. metric tons)</td>
<td>2.9</td>
</tr>
<tr>
<td>Cotton cloth (mill. of meters)</td>
<td>4,158</td>
</tr>
</tbody>
</table>


\textsuperscript{12}Ibid.

\textsuperscript{13}Chen and Galenson, p. 35.
The Peoples' Republic of China was unquestionably far behind the Soviet Union at the start of their first Five Year Plan. Like China the Soviet Union was not then a world power to be reckoned with. Today, almost twenty-two years later China is a world power; and like the Soviet their growth started with the First Five Year Plan.

They seemed to follow a normal course up until 1955 when Chairman Mao called for a rapid speed-up of collectivization and socialization. The reason for the acceleration of collectivization is rather hard to assess. However, keeping in mind that this formal plan was not announced until 1955 may be of assistance. Perhaps the first two years of the plan were not going as well as expected and to "save face" collectivization was established to help achieve desired goals.

Announced agricultural goals were stated in the midst of collectivization so it is difficult to ascertain whether the figures are original or adjusted targets.

The plan called for a 25 percent increase in gross agricultural production by 1957. This increase was to be accomplished through various development programs.

The development programs called for expanded cultivated area through reclamation, irrigation extensions to increase arable land and unit-area yield, planting high yield crops, usage of fertilizers, and the adoption of newer techniques in farming. The government's role in this development program was to establish machine tractor stations, installation of agricultural schools, and the use of state operated farms as experimental stations.

The agricultural portion of this plan also called for the beginning of the first phase of state capitalism or collectivization. The program was to start with mutual-aid teams. The teams were to be comprised of from five to eight families who would work together during the peak seasons. Until mid-1955 when Chairman Mao increased collectivization it appeared as though this was as far as the government wished to pursue
the program. However, with the increment to collectivization, there were no mutual-aid teams in 1957 as compared to the 40 percent of total households in early 1952. The remainder of the program was to be completed in two stages, the formulation of first level cooperatives and collectives.

The first level cooperatives were also called elementary co-operatives. These differed from mutual-aid teams in that land and labor was pooled. Members of the cooperatives still retained title to the factors of production but their use was controlled and planned collectively through local planning committees on this basis of targets received from the government planning committee.

The final step of collectivization was the actual formation of collectives. These collectives were called advanced producers cooperatives. Collectives were larger than the cooperatives; the outstanding characteristic was common ownership of nearly all properties including land. Evidence of the push toward collectivization is that in 1955 2 percent of peasant holdings had joined collectives, but one year later the figure rose to 87 percent and by June 1957 to 97 percent.

The impact of collectivization may be seen by the following table.

<table>
<thead>
<tr>
<th>Year</th>
<th>Mutual-Aid Teams</th>
<th>Elementary Cooperatives</th>
<th>Advanced Cooperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952</td>
<td>40.0</td>
<td>0.1</td>
<td>--</td>
</tr>
<tr>
<td>1953</td>
<td>40.0</td>
<td>0.2</td>
<td>87.0</td>
</tr>
<tr>
<td>1954</td>
<td>58.0</td>
<td>2.0</td>
<td>97.0</td>
</tr>
<tr>
<td>1955</td>
<td>50.0</td>
<td>14.0</td>
<td>87.0</td>
</tr>
<tr>
<td>1956</td>
<td>--</td>
<td>8.5</td>
<td>97.0</td>
</tr>
<tr>
<td>1957</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Compensation for work in the collectives, as well as the elementary cooperatives, was tendered in the form of the work-point system. This meant that each worker was given a norm based upon the performance of an average worker doing an average days labor. Work-points were given for the fulfillment of norms. These work-points were based upon skill, strength required, and the importance of the task. The work-point system weighed heavily in the success of collectivization. Extra work-point credits or bonuses were granted in the agricultural sector during this period. The government apparently realized the importance of the success of the collectives by also increasing the amount of credit granted to agriculture. The government "poured three times as much agricultural credit into the countryside in 1956 as in 1955, as a means of insuring an increase in farm production and in the money income of the household".

The official statistics show that the gross agricultural product rose at a rate of 4.8 percent a year. This is very close to the target figure of 5.0 percent per year. The reliability of this figure is questionable. However, a look to other figures can compare the success of agriculture during the period. One way of judging the final product is by looking to the population growth from 1952 to 1957. This again may not be competent, but we can measure general patterns in both. Population growth could serve as a means of determining how well the agricultural sector performed during the First Five Year Plan. The average population growth rate was about 2 percent. This suggests that population grew at a rate of \( \frac{1}{2} \) the agricultural output. Hence it appears that the population, though not enjoying an abundance of food, was above the

\[15\] Chen and Galenson, p. 149.

\[16\] Li, p. 69.

The designated goal for industry was to increase gross industrial output by 50 percent. Also, the industrial participation in gross national product was to increase by 25 percent from 1952 to 1957. The industrial portion of the plan was divided into two segments heavy industry and light industry and handicrafts. The announced goal was to move from an agricultural nation to an industrialized nation. The major concern of industry was directed toward the hinterland with emphasis upon the metallurgical and machine industries. Simultaneously the government wanted to develop railroads and communications in the interior.

Soviet assistance played an important role in the formulation of the industrial plan. The Soviets initially agreed to aid in the construction or reconstruction of 156 major industrial plants. The major emphasis was on iron and steel plants, electric power stations and machinery plants.

The presence of private enterprise offers the greatest threat to a Communistic system. It was therefore, the prime objective of the Chinese government to nationalize industry as fast as possible. The transformation to complete socialization was to advance through three stages. The first stage involved smaller industries which were to be formed into collectives of like industries. This stage was called elementary state capitalism. The second stage, advanced state capitalism was a form of joint ownership or partnership between the state and private enterprise. The final stage was the complete ownership by the state.

At the start of the First Five Year Plan the state did in fact completely control roughly 57 percent of all industry. This was due to confiscation during the Economic Rehabilitation period. An additional 11 percent was annexed during the
"Five-Anti" program. The process, like collectivization, was to be relatively slow.

But in mid 1955 the program was greatly accelerated. By the end of 1956 virtually all industry was either totally state controlled or in the advanced state capitalism stage.

The impact of socialization may be seen by the following table.

<table>
<thead>
<tr>
<th></th>
<th>1952</th>
<th>1955</th>
<th>1956</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private enterprise</td>
<td>14</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Elementary State Capitalism</td>
<td>23</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td>Advanced State Capitalism</td>
<td>6</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>State enterprises</td>
<td>57</td>
<td>68</td>
<td>68</td>
</tr>
</tbody>
</table>

The process of state ownership was accomplished by the government purchasing the private enterprise. The industry was assessed and the former owners were given bonds for payment. The bonds paid 5 percent per year and were scheduled to expire in 1962. With this payment the former owner enjoyed no stock ownership and had no share in profits. With completion of payments the industry would then move into complete state control.

The second segment of the industrial plan was for light industry and handi-crafts. These represented the consumers goods portion of the plan. The investment in this sector amounted to about 11 percent of the total investment applied to industry. This allows for few significant advances in this area. The value of output essentially remained the same throughout the plan. The only significant changes came through

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19 Li, p. 10.
the push to socialization with small industries being moved from private enterprises to elementary state capitalism then to advanced state capitalism. The same process of confiscation was employed in this sector as in heavy industry.

Advances in the industrial sector can be largely attributed to Soviet assistance. During the period the average increase in heavy industry was 16 percent per year while the remaining sector grew 7 percent annually.\textsuperscript{20} The general pattern of growth was essentially the same as it was during the recovery period. The relatively large difference between heavy and light industry is due to the decision to adopt the Soviet model of industrialization and concentration in heavy industry.

THE GREAT LEAP FORWARD

The First Five Year Plan was hailed as a great success and the time had come for the institution of a new economic plan. The planned output was to be even greater than the first plan.

The crux of the plan was to mobilize human resources to a maximum degree by developing both agriculture and industry. Heavy industry was to be subsidized by the institution of large labor-intensive projects. Local initiative was to be promoted through the decentralization of management. The major campaigns were in the areas of water conservation, tool improvement and new technology, local small scale self-built labor-intensive industries, and the full development of peoples' communes. It appears that agriculture and industry were to come together to be the inspirational force in Chinese life.

Water conservation projects were to increase the amount of arable land to 150 million acres and raise the percentage of cultivated land from 31 percent to 56 percent. This was to be accomplished during the non-planting and non-harvesting seasons. The peasant was called upon to aid in the construction of dams and irrigation canals. Due to the lack of competent leadership the dams and canals were poorly constructed. This meant many lost water and did not perform as expected.

The second area, tool improvements and new technology in the agricultural sector took the form of experimenting with deep plowing, close planting, and an intensive program of collection of manure fertilizer. The industrial sector was aided in the advancement of technology by the presence of Soviet advisors. These advisors played an important role in providing for the elevation of innovations.

The third campaign of the Great Leap followed more closely the policy of decentralizing management. This portion dealt with the building of local small scale labor-intensive industries. The most important feature of this portion was the installation of thousands of backyard blast furnaces. The furnaces were to be used for the production of steel and small implements. Another program was to install home generating stations by re-conditioning old vehicle generators.

The last phase of this Great Leap was to fully develop the peoples' communes. The agricultural collectives and cooperatives of the First Five Year Plan had been replaced with the commune. The communes averaged about 4,600 families.

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21 Barnett, p. 60.

22 Wu, p. 78.
communes were to be concerned with all facets of life. They were to manage all the possible resources in an area. In effect the communes were to be the ultimate in Communistic life.

The Great Leap was to last for five years but it turned into disaster and the near collapse of the Peoples' Republic of China after two years. Explanation of the failure of the Great Leap may perhaps be rendered through knowledge of opportunity costs. Opportunity costs arise through a trade off of one commodity for the production of another. The classic example of opportunity costs is the devotion of more resources to produce guns means less resources available to produce butter. The opportunity cost of guns is the amount of butter foregone.

While the communes provided a pool of labor they permitted little room for specialization. The labor traded off to the various projects most likely could have been used in other sectors. For example 3.08 million tons of the locally made steel were unusable for modern industrial purposes. Many of the irrigation canals proved to be hastily dug and ruined natural irrigation and perhaps raised the water table.

The years 1959 and 1960 also proved to be very bad crop years. This made it impossible for agriculture to support industrial development. This in turn forced the government to reopen rural markets in a few areas in late 1959 and to return private plots to the peasants in 1960.

Also in 1960 Sino-Soviet relations were severed. The split started with the Great Leap and Chairman Mao's dislike for Nikita Khrushchev's de-Stalinization policy. The dispute was over Communistic doctrine. Mao's Great Leap did not follow the normal

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24 Chen and Galenson, p. 103.
progression of Communism and neither did Khrushchev's. Several volleys of attacks upon each others policies followed and finally in 1960 the Soviets were said to have "unscrupulously withdrawn the 1,390 Soviet specialists...tore up 343 contracts... and scrapped 257 projects of scientific and technical co-operation all within the short span of a month". 25

THE PERIOD OF CONSOLIDATION AND READJUSTMENT

This period has no specific name and ran from 1961 to 1965. It seemed that the government operated by a series of year to year plans. Following the Great Leap the mainland was faced with an overwhelming depression. In fact the gross domestic product in 1960-61 declined by 31 percent! 26 This depression can be compared to the Great Depression of the United States in 1929-33. It was known as the "Great Slide". While it can be compared to the Great Depression in the United States (where there was a 30 percent decline in GNP through the period), there are two notable differences. The Great Slide occurred in little over a year whereas the Great Depression spanned four years. Secondly in the United States investment fell, whereas in China, due to the serious grain shortages consumption fell.

The government devoted the majority of their effort toward agriculture and the consumer goods industries. Heavy industry was to support these two sectors. The major objective was to recover agriculture through modern technology. The use of electricity, machinery, and improvement of irrigation were the main implements to improve agricultural production.


26 Wu, p. 158.
Through out the period, resource allocation seems to have been adjusted to a satisfactory level. Machine production was revised to provide tractors, pumps, and farm implements. Also quality control was stressed. After the reorganization of priorities industrial output rose sharply again. The readjustment lasted roughly a year and by 1962 the 1960 level had been about 2/3 restored. Evidence is shown by the following table.

**Table IV**

Index of Modern Industry output, 1952-1962. (1952 = 100)\(^\text{27}\)

\[
Y_c = 109.52 + 23.51x
\]

This growth shows a substantial effort toward fulfillment of the new policy. The number of tractors in use at the reinstated machine tractor stations increased by approximately 40,000 from 1959 to 1962. Also production of chemical fertilizer increased over the period by roughly 1.6 million tons.

The progress of this "agriculture first" policy can be greatly attributed to the industrial policy. Once the planners realized the importance of this the agricultural sector was able to get back upon its feet and remain relatively stable.

\(^{27}\) Wu, p. 126.
The disastrous effect and recovery can be seen by the following table.

### Table V

<table>
<thead>
<tr>
<th>Year</th>
<th>Output (in million tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1957</td>
<td>185</td>
</tr>
<tr>
<td>1958</td>
<td>250</td>
</tr>
<tr>
<td>1959</td>
<td>270</td>
</tr>
<tr>
<td>1960</td>
<td>150</td>
</tr>
<tr>
<td>1961</td>
<td>162</td>
</tr>
<tr>
<td>1962</td>
<td>174</td>
</tr>
<tr>
<td>1963</td>
<td>183</td>
</tr>
<tr>
<td>1964</td>
<td>200</td>
</tr>
<tr>
<td>1965</td>
<td>200</td>
</tr>
</tbody>
</table>

Production had been restored to the pre-Leap period in three years. This figure is impressive and it appears that the country was doing well. However, keeping in mind that the population increases by 2 percent per year is rather disturbing. The important point to remember in this instance is that when the irrigation projects were restored there was an increase of approximately 20 million hectares. With the economic recovery from 1961 to 1964 the government was ready to issue The Third Five Year Plan.

**THE THIRD FIVE YEAR PLAN**

Published in 1966 the Third Five Year Plan was to increase agriculture productivity, reinforce industrialization, and raise the standards of living of the populace. Planning was still decentralized. Industries received control figures concerning planned cost, quantity, and employment while the agricultural sector received output targets.

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28Chen and Galenson, p. 98.
The basic concept was to continue the growth which took place between 1961 and 1965.

Shortly after the plan was initiated the Cultural Revolution erupted. One of the major issues of the Cultural Revolution was the future path of the Chinese economy. The dispute caused a split along party lines between Chairman Mao and the party apparatus lead by Liu Shao-Ch'i. Liu and his supporters favored centralized economic planning and emphasized technical expertise. Where as Mao preferred decentralized planning, self-reliant economic operations, and an elimination of specific classes by a mixture of ideas between the expert and the worker.

Also Mao sought to revitalize the revolutionary spirit similar of that which was present during the early days of the republic. Aligned with Mao were the Peoples' Liberation Army (led by Lin Piao who is today the heir apparent to the Chairmanship), radical party members, and the Red Guards. Liu and his followers were still disillusioned by the policies of the Great Leap and also felt that the people wanted a settled way of life.

It is difficult to assess the effects of the Cultural Revolution. At first many people believed that it was going to be a repeat of the Great Leap. The spirit of the revolution swept through the country. Schools were closed, many factories were closed, and there were serious grain shortages.29 Also "...Shanghai's heavy industry as a whole was operating at about 50 percent capacity... consumers industries were lagging about 30 percent behind their normal production levels".30 There is little doubt that the country was in serious trouble during the period. Industrial production and grain output were said to have only achieved those levels reached during the Post-Leap period.


30 Ibid
The unrelenting pressures on the economy forced Mao’s opposition to give in and try to restore production. On April 14, 1969 at the Ninth Communist Party Congress the Party adopted a new constitution bringing to a close the Cultural Revolution. The new constitution specifically stated that Mao is to be the head of the CPC with Lin Piao as his successor. The dynamic portion of the new constitution is the decentralization of government activity.\textsuperscript{31}

The overpowering aspect of the revolution is the positive ideological effect it has upon the populace.

THE FOURTH FIVE YEAR PLAN

The Fourth Five Year Plan was launched in 1970 with the new constitutional policy of decentralization. The emphasis is to modernize agriculture. The goal is to make each county self-reliant by being able to produce its own food and light industrial products. Another feature of the plan was the re-introduction of population control (first introduced during the First Five Year Plan but suspended since the Great Leap period). The traditional figure was set at an increase of 2 percent per year. Now with the introduction of contraceptive devices and an increase in the marriage age requirement the population growth rate is said to have dropped appreciably to 1.5 percent.\textsuperscript{32}

It appears that while suffering an economic set back during the Cultural Revolution the people are working harder now then ever before and the economy is making a comeback. Grain production is reported to have had a record year in 1970 of 240 million metric tons.\textsuperscript{33} Also there are accounts such as "Under the impetus of the


Cultural Revolution we have greatly increased output and turned out 2,600 sets of machines in 1970 as compared with 1,600 in 1966."

The Peoples' Republic of China appears to be returning to the policy of striving to become a modern industrial nation. The present policy is dubbed "Socialist Cooperation" and is to couple small and large plants. Large plants provide basic machinery and expertise while small plants are to act as suppliers and markets for the large firms.

34 Durdin, "An In-Depth Look at Shanghai," Report From Red China, p. 132.

ADVANCES IN AGRICULTURE AND INDUSTRY
AGRICULTURE

The Peoples' Republic of China like any other developing nation is faced with the problem of increasing agricultural production while transferring resources into more productive non-agricultural sectors. Two methods have been tried in order to raise agricultural output. First by increasing the cultivated land area and secondly by increasing the level of land productivity.

The major concern in increasing the cultivated land is water conservation. The project, though well intended, suffered from the dilemma of decentralization. Work projects were not coordinated between provinces. Hence, it is probable that dikes and levies were built differently in each province. Therefore during heavy rains some levies would contain excess water whereas others would not. First attempts to greatly increase the arable land proved frugal; also due to poor construction. However, lately construction of irrigation canals has been devoted to the rebuilding of existing facilities.

To increase the level of land productivity the government has embarked upon a sustained drive to collect manure and manufacture chemical fertilizer. Through the collection drives, production by small and large plants, and importation the supply of chemical fertilizers is to have reached an unprecedented level of 14 million tons in 1970.36

Agricultural grain production has fluctuated with the economic programs of the nation. During the rehabilitation period grain output regained the pre-World War II level and continued to increase slowly until the Great Leap Forward. The Great Leap presents a problem with the actual production. Perhaps the extensive program of irriga-

tion did temporarily increase the grain output. This fact is hard to assess due to the prevailing economic conditions during the period. If the projects of the Great Leap were a success then the following three years marked their resounding failure. In the 1960's the policy turned to "agriculture first" in an attempt to make the agricultural sector self-sufficient. As the following table shows, grain production is increasing slowly. However, the important fact to remember is that while grain output is rising gradually the population growth rate is declining. The present rate is said to have declined from 2 percent per year to between 1.8 and 1.5 percent.

**Table VI**


<table>
<thead>
<tr>
<th></th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Rehabilitation (1949-52)</td>
<td>108.1</td>
<td>154.4</td>
</tr>
<tr>
<td>First Five Year Plan (1953-57)</td>
<td>156.9</td>
<td>185.0</td>
</tr>
<tr>
<td>Great Leap Forward (1958-59)</td>
<td>250.0</td>
<td>270.0</td>
</tr>
<tr>
<td>Consolidation and Readjustment (1960-65)</td>
<td>150.0</td>
<td>200.0</td>
</tr>
<tr>
<td>Third Five Year Plan (1966-70)</td>
<td>200.0</td>
<td>215.0</td>
</tr>
<tr>
<td>Fourth Five Year Plan (First year only)</td>
<td></td>
<td>230</td>
</tr>
</tbody>
</table>

The important feature of Table VI is the gradual increases in production of grain. This seems to indicate that regardless of the climatic conditions the government is attaining fields which are stable in yield. Suggesting that the fields are weather-proof and can resist insect and disease damage.

It appears that the Chinese are becoming somewhat self-sufficient in food grain. In fact the current output "... would suffice to maintain a caloric intake of about 1800 per capita per day from grain, this is far from being a starvation, or un-healthy diet..." A With advancements in the fertilization process the government will

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37 Wu, pp. 160-64.
be able to release more and more grain for indirect consumption. Indirect consumption in this instance means animal feed and processed foods.

Critics of the current policy say that if the Chinese are increasing grain production why must they still import wheat from other nations? The answer to this is rather practical. The government has continually increased rice production. The average level of exportation during 1967-1969 was 900,000 tons a year.38 Rice brings a higher price than wheat in the world market, representing a favorable balance of trade between the two commodities.

An outstanding feature of the present agricultural program is that if it continues to be developed along with small scale industry in the rural areas more funds will be released for production of investment goods.

INDUSTRY

Industry in the Peoples' Republic of China has gone through several changes since 1949. Upon take over the major objective was to rebuild the existing factories. There was an increase in the heavy industrial sector during the First Five Year Plan. During the Great Leap industry was decentralized however investment continued to grow. The disastrous effect that the Great Leap had upon the economy forced a turn around in policy during the Consolidation and Redistribution period. The policy was "agriculture first" and industry was to accommodate agriculture. Agriculture continued to be first and industrial production grew until the Cultural Revolution where many plants were shut-down or forced to work at a limited capacity. During this period, undoubtedly, industrial output suffered greatly. Since then, however, output seems to be growing rapidly. The call

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38 Wu, pp. 160-64.
now is for decentralization with small industrial plants interspersed through the countryside. The major objective is to link small and large plants. Large plants provide basic equipment and technology while small plants supply raw materials and markets for the large plants.

Two problems have faced the industrial sector for quite some time. Both are policies affecting production and profit. The first problem is that of a dual economy. During the Great Leap this was called "walking on two legs" by Chairman Mao. This policy calls for the capital-intensive and labor-intensive factions to work side by side. This concept is not unique only to China but to most developing nations. The problem is to develop a median between the two. The labor-intensive programs take longer to complete but unemployment is minimized. On the other hand, capital-intensive programs can be completed relatively quickly and are able to service the building of other sectors of the economy. However, with capital-intensive projects unemployment rises.

The second problem is perhaps somewhat greater. It is called "anti-economism". During the Cultural Revolution cost accounting systems were abolished as being capitalistic. The significance of this is that profits can not be measured to determine the amount of investment necessary. This can only result in inefficiency through either over or under investment.

Industrial output however has been increasing. There appears to be a large scale drive to establish small industries throughout the country-side. In fact, in a recent official report "... more than 90 percent of the counties in the nation have erected networks of small plants which can produce walking tractors, small-sized power machines,

39Cheng, pp. 154-159.
farm implements and spare parts, chemical fertilizer, coal, cement, iron and steel". 40

Also the government has been placing interest in several industries, the following is an analysis of the development of a few selected industries:

**Electrical Power** – In 1952 the capacity of existing electrical plants amounted to 1.96 million kilowatts. 41 Priority was given to the building of thermal units due to the expediency with which they can be built. The trend has turned recently to the building of local power plants utilizing both the excellent rivers and the abundance of labor to where nearly all of the counties supply their own electrical power. 42

**Fuel** – The coal industry in early years received a very high priority with the emphasis placed upon steel. The output grew rapidly and there were reports that the Peoples' Republic of China ranked third in world production. However, in recent years China is facing the problem of serious shortages. 43

The petroleum industry did not actually expand rapidly until very recently. However, there have been various new finds which in turn will stimulate other factors of the industrial sector.

40 Cheng, pp. 154-159.
41 Chen and Galenson, p. 78.
42 Cheng, pp. 154-159.
43 Cheng, pp. 154-159.
Electronics - The Chinese can now produce a wide range of electrical equipment and components. Technological advances have greatly improved the ship building and nuclear industries. These improvements have enabled the Chinese to compete with the Soviet Union and the United States in the arms race.

The important event in the outlook for industry is the attempt for most counties to become self-sufficient. If this can be accomplished, more and more funds will be able to be provided for investment. If this is to happen, however, there must be a turn about in the policy of anti-economism. This would allow industries to become more efficient by correctly calculating planned investment.
FACTORS INFLUENCING GROWTH
RESOURCE ALLOCATION

The Peoples' Republic of China has established as their economic goal, through their short history, to build as rapidly as possible a great industrial and military state. The accomplishment of these goals is to be determined by Party ideology, political ambition, and the underdeveloped nature of the economy.

Resource allocation in the Chinese experience has been controlled through two methods. The first method is exerted by direct control through the state planning structure. The basic concept is to control the assignment of jobs and to control transfers of labor from one industry to another or from one geographic area to another. Another technique employed by the planning structure is direct control over the monetary system. This process calls for all transfers of goods payments to pass through the State Bank.

The second method of controlling resource allocation is the mobilization of savings which in turn is converted to capital investment. Capital investment is financed in total through state enterprises. Revenues come through profits of state enterprises and by taxes upon the industrial and agricultural sectors.

Profits since the Fourth Five Year Plan are not being calculated. However, it seems that revenues are disbursed according to the need of each industry. Taxes on industry are mostly transfer taxes. This is a tax imposed at each level of finished goods. If a product takes four stages of production from raw material to finished product, it is taxed four times. The transfer tax has different names in various economic systems; 

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in the United States it is called the "value added" tax. Agricultural taxes are imposed on gross farm output. The drawback of this is that the tax is imposed on normal rather than actual yield. This was particularly significant in poor harvest years. During early years of development this created serious problems, however, recently the crop yield has been consistent, averting any serious crisis.

The Chinese in recent years and during the Fourth Five Year Plan have devoted their attention toward the making of a completely autarky state. From all appearances this has been accomplished.

MARKET PRICES AND THE PRICE SYSTEM

The function of a command economy is to adjust demand to supply which accordingly reflects the price. The price is determined by the addition of constant capital (labor) plus variable capital (wages) plus surplus value (unrenumerated number of hours put into labor). The equation is as follows:

\[ p = c + v + s \]

Excluded in the computation are interest and land rent. The exclusion of land rent is of particular importance when computing the price of agricultural products. This problem has been adjusted to by the use of average purchase prices. The manipulation of these prices in early development was important. Prices could be raised and lowered on specific commodities stimulating the supply of these items. Today the interconnection of both the agricultural and the industrial sectors has eliminated the need for adjusting these prices.

45 Chen and Galenson, p. 156.

46 Briefly, an autarky is a state which is completely self-sufficient being non-dependent upon imports from other nations.

47 Chen and Galenson, p. 164.
TRADE AND FOREIGN AID

Foreign trade has constituted a major factor in the effort to modernize the economy. In the early years the government relied heavily upon the Soviet Union and Eastern Europe to provide the greatly needed technology, capital goods, and materials.

Trade in agricultural goods has been used to compensate for grain shortages of the past. Today even though the agricultural sector is relatively stable the Chinese continue to import wheat. The reason for this is that there has been an effort to export large quantities of rice which earns a higher price than wheat; constituting a favorable balance of trade in the agricultural sector.

Due to the split in relations with the Soviet Union trade declined sharply until 1964. Trade, since then, has been with the less developed countries of Asia and Africa. The Chinese have little to offer in the way of luxury goods so many of the goods exported have been textiles and industrial materials.48

Foreign aid can possibly help to explain how the government plans to regain a high volume of trade. The Peoples' Republic of China since 1956 has been extending aid for trade commitments. In January 1964 Premier Chou En-lai announced an eight point plan concerning foreign aid policy. Several of these points were "...aid should always be mutual, never unilateral, and it should be without preconditions on privileges which would adversely affect the national sovereignty of the assisted country... loans are to be interest free...the object of assistance is to make the countries independent..."49


The peculiar characteristic of aid grants is their repayment through the purchase of Chinese goods by the grantee. The extension of foreign aid can be seen by the following table.

**Table VII**

<table>
<thead>
<tr>
<th>Chinese Aid Commitments 1956-1970 (million U.S. dollars)(^50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1956-1960</td>
</tr>
<tr>
<td>1961-1965</td>
</tr>
<tr>
<td>1966-1970</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Chinese aid grants and trade can be criticized as being quite small in terms of the world trading leaders. Yet the important point is that the economy is so large and diversified that even a small increase in the favorable balance of trade can increase economic activity greatly.

In recent years the value of foreign trade has amounted to about 4 percent of the gross national product. The total volume of trade has been estimated at $8.0 billion by 1980.\(^51\) Also since shortly before the Soviet pull-out Chinese have maintained a favorable balance of trade. There is no reason to believe that in the future this policy will change.

Table VIII shows how the Chinese have fared in world trade.

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\(^50\) Prybyla, pp. 142-147.

\(^51\) Eckstein, pp. 114-115.
The Chinese in the future will be competing with the major world powers for world trade and if the present policy of foreign aid and trade continues they should be able to expand their economy greatly.

**CAPITAL INVESTMENTS**

The government employs the basic Soviet model in investment projects. This system is called the Coefficient of Relative Effectiveness or C.R.E. The equation is as follows:

$$\frac{E_2 - E_1}{C_1 - C_2}$$

Where $E =$ method and $C =$ capital. The coefficient determines the percent of cost involved in the investment.

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52 The figures from 1950 to 1965 were taken from data compiled by Robert L. Price, "International Trade of Communist China, 1950-1965", Chen and Uppal, p. 338. Figures from 1966 to 1980 are projections based upon Mr. Eckstein's estimates.

One would think that this type of system could not work in the Peoples' Republic of China because of the large work force. However, with the current decentralization policy this seems to fit into the planners' schedule. The work force is localized and the planners know exactly the number of people to mobilize for particular projects. Therefore, the cost of labor can be determined effectively.

The trend of investment today, as earlier stated, is to "see the country as a chessboard". Formerly, the aim was directed toward heavy industry but with the policy of "agriculture first" the emphasis is on promoting the agricultural sector to the point where it becomes self-sufficient. In accomplishing this investment then can be devoted to increasing capital goods production.

WAGES AND EMPLOYMENT

The basic formula for wage payments is designed so that there are incentives or bonuses. However, the payment of wages is not to exceed the productivity by a stated percentage, usually approximately 50 percent.

The payment of wages in the agricultural section is based upon the Tachai Work-Point System and in the industrial sector the wage system is based upon the Anshan Constitution. Both of these systems were instated during the Cultural Revolution. However, they resemble the policies followed in the past of the work-point systems. The only difference is the connotation of the Maoist revision which occurred during the Cultural Revolution.

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54 Topping, p. 214.

The labor force in the Peoples' Republic of China has been disbursed throughout the country as a result of the Cultural Revolution. This allows for better planning of local projects. Hence a more efficient use of available labor.

GROSS NATIONAL PRODUCT

The Gross National Product for the Peoples' Republic of China has grown since 1950. The growth pattern followed the course of the various plans. There was a gradual increase until the Great Leap and then decline with the resulting "Great Slide" followed by a period of redevelopment which caused G.N.P. to again increase slowly. There was a leveling effect caused by the Cultural Revolution at which G.N.P. was reportedly $94 billion in 1969. Gross National Product has been projected to be $178 billion by 1980, representing a growth rate of 6 percent per year. This figure represents roughly one-fifth of the United States G.N.P. in 1968. Table IX shows the pattern of Chinese G.N.P. projected to 1980.

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Table IX
Chinese Gross National Product 1950 to 1980. (Billions U.S. dollars) 58

<table>
<thead>
<tr>
<th>Year</th>
<th>1950</th>
<th>1960</th>
<th>1970</th>
<th>1980</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>25</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>75</td>
<td>100</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>125</td>
<td>150</td>
<td>175</td>
<td>200</td>
</tr>
</tbody>
</table>

The growth to 1980 of course is fully dependent upon the fact that there are no major changes in economic policy.

58 Based upon figures provided in Chen and Galenson, p. 169 for 1950 to 1965. The projection to 1980 is taken from Mr. Chen's estimate.
LOOKING AHEAD
In looking toward the future of the Chinese economy it appears that it will continue to mature into a notable world power.

Criticism of many capitalistic countries has come in the form of ways to improve the economic system. A capitalistic system is so designed that it is supposed to run itself. However, sometimes the built-in mechanisms fail making the system easy to criticize. A theoretical communistic system, because it is planned, does not have this feature. Therefore, the system can only be criticized for its technology. It is in this context that the Peoples' Republic of China should be evaluated.

In its brief history the economy has taken many turns. It has gone from centralized planning to decentralized planning (the current state) no less than three times. Both types of planning have succeeded in increasing the standard of living. The government's first attempt at decentralization (the Great Leap Forward) ended in complete disaster. The apparent reason for this being that the economy and the populace was not ready for such an injection. The planning techniques had not been sophisticated enough to absorb the impact of planning the distribution of labor efficiently.

On the other hand, a decentralization policy is currently working and from all evidence it is doing rather well. A possible explanation for this could be that the quality of education has increased greatly. The planners on the local level are capable of making competent decisions.

The question then is raised as to the labor force. Is there full employment in the Peoples' Republic of China or is there widespread unemployment? The answer is difficult to assess and, of course, the government would not relinquish any figures concerning unemployment. There is, however, an important fact to remember. The people have been disbursed throughout the country. These people are required to stay in the provinces to
which they are assigned. The conclusion to be drawn from this is the people can not go to other areas searching employment causing under-employment in the area they came from or over-employment in the area into which they are moving.

There also seems to be no current problem in feeding the population. The current grain output has been increasing at a rate of approximately 4 percent per year while the estimated population growth rate is about 1.5 percent per year. This indicates two significant factors. First, this is evidence that there is no wide spread starvation. Secondly, there is sufficient grain to feed livestock.

Another possible reason for the current decentralization policy working well could be the outcome of the Cultural Revolution. Chairman Mao wanted to revitalize the revolutionary spirit present during the founding of the government. From all appearances he has accomplished this. Many of the accounts of Mr. Nixon's current trip show pictures of Chairman Mao and his sayings. Also there were stories of virtually everyone carrying his Red Book. This is very important in establishing a firm ideological acceptance to Mao's communism.

There may have been another reason for the Cultural Revolution quite different than that of the Great Leap Forward. During the Great Leap it is believed that Mao was making a play at being the leader of the communist world. This does not seem to be the case during the Cultural Revolution. Most of the top officials in the government are now over 65 years of age. Perhaps Mao was trying to insure that his doctrine will be carried out after the current leaders pass away.

At any rate the current resurgence of Maoist thought has been reflected in the attitude of the people. The current rate of growth in Gross National Product is 6 percent per year. It does not seem likely that this will change in the near future.
There are, however, two drawbacks that resulted from the Cultural Revolution which must be resolved if the Peoples' Republic of China is to become the world's leading nation. The first is the policy of anti-economism. This policy abolished the use of profits as a measure of efficiency. Without this cost, and most important investment, is very hard to calculate. This can only cause the mis-management of funds making the enterprises highly inefficient. Secondly, the policy of self-sufficiency may tend to deter the introduction of new technology. This does not seem to be the general trend though. Evidence of this can be shown by the fact the Chinese are willing to trade with the more developed nations of the world.

The introduction of new technology is the key to the future of the Peoples' Republic of China. The Chinese have many favorable assets; land, an abundance of natural resources, a large labor force, and a high spirit of nationalism. Yet innovations must be presented. These innovations currently must come from the United States and Western Europe. These areas, in turn, must be prepared to absorb the labor-intensive products which the Chinese can supply cheaply. This is the pattern of trade that is the nations best hope for the future.
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