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REPORT
No. 348

MAINLAND CHINA IN THE WORLD ECONOMY

REPORT

OF THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

TOGETHER WITH

SUPPLEMENTAL VIEWS

JUNE 19 (legislative day, JUNE 12), 1967.—Ordered to be printed

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JUNE 19 (legislative day, JUNE 12), 1967.—Ordered to be printed

Mr. PROXMIRE, from the Joint Economic Committee, submitted the following

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MAINLAND CHINA IN THE WORLD ECONOMY

INTRODUCTION

The economic strength of Mainland China and the use made of its resources have a great bearing on the issues of war and peace in the world. In spite of the fact that China's capacity to wage war or cause other trouble abroad depends ultimately upon her economic capacity, the American people, Congress, and the American press have not had a basic framework for understanding the potentials and directions of what is going on in this, one of the largest and most populous nations of the world. Preoccupied with the role of China in international politics today, we have tended to neglect the economic side which so largely shapes that same political posture.

Our lack of clear knowledge is, primarily, an unfortunate byproduct of the self-imposed isolation which the Chinese leaders have prescribed for their country. It may be, through 132 meetings since 1956 between American and Communist Chinese negotiators in Geneva and Warsaw, that the United States has had more continuing contact on matters of high policy with the Chinese Communists than any other Western country. Unfortunately, this window on Mainland China has produced little of substantive significance leaving us dependent upon secondary sources for information. The fact that the Communist Chinese leaders have been unwilling to take steps which would indicate that they value, or desire, participation in Western affairs represents a challenge requiring continuing study and assessment of our policies seeking to encourage a change in their attitude.

To this end, the Joint Economic Committee undertook a study of China's involvement as an entity in the economic world. The first phase of this factfinding effort was the preparation and release of a two-volume study in the form of a symposium containing papers by a score of invited specialists recognized as authorities on various aspects of the economy of China, her trade and economic development. This compilation entitled "An Economic Profile of Mainland China," was designed to provide an up-to-date body of factual data and interpretative comment on the domestic economy of that country, surveying the record of its recent experience in economic development and its relations with the outside world.[1]

The second phase of the committee's efforts to throw light on the Chinese economy since the new regime came to power in 1949 was to get the views of still other experts through 4 days of public hearings. At these hearings 10 especially competent witnesses discussed with the committee the impact of the recent ideological differences on the performance of the economy, and how economic resources are allocated

[1] "An Economic Profile of Mainland China," studies prepared for the Joint Economic Committee; vol. 1 General Economic Setting, the Economic Sectors; vol. 2: Population and Manpower Resources, External Economic Relations, appendix; U.S. Government Printing Office, Washington, 1967.

in an economy wavering between economic pragmatism and revolutionary dogmatism. The hearings, like the compendium, were focused entirely on basic source material and thought-provoking questions rather than upon an appraisal of, or recommendation concerning, appropriate Government policy, as such.[2]

The committee wishes to thank the witnesses for their excellent papers and observations. We have drawn freely from their own words in this report, but they are, of course, neither individually nor collectively responsible for this summary or its emphasis. Obviously, no summary can serve as an adequate substitute for the record itself; the committee, for this reason, commends to the Members of Congress and interested readers the full record of the prepared statements and colloquy with the witnesses.

The participating witnesses, each of whom has contributed so much to a better understanding of China's economy, were:

Kang Chao, Assistant Professor of Economics, University of Wisconsin.

Robert Dernberger, Assistant Professor of Economics, member of faculty on Far Eastern languages and civilizations, University of Chicago.

Audrey Donnithorne, Reader in Chinese Economic Studies, University of London; Visiting Professor of Economics, American University.

Alexander Eckstein, Professor, Department of Economics, University of Michigan; member of Joint (Social Science Research Council—American Council of Learned Societies) Committee on Contemporary China.

John G. Gurley, Professor of Economics, Stanford University and the Center for Advanced Study of the Behavioral Sciences.

Charles Hoffmann, Professor of Economics, State University of New York at Stony Brook.

Ta-Chung Liu, Goldwin Smith Professor of Economics; Director, Program on Comparative Economic Development, Cornell University; Visiting Professor of Economics, Brandeis University.

Dwight H. Perkins, Assistant Professor of Economics and Associate of the East Asia Research Center, Harvard University.

Edwin O. Reischauer, University Professor, East Asia Research Center, Harvard University; former U.S. Ambassador to Japan.

Barry Richman, Chairman, Management and Industrial Relations Divisions, Graduate School of Business Administration, University of California, Los Angeles.

It should be emphasized that this study represents only a modest beginning of an inquiry into the economy of Mainland China. Hopefully this beginning, making clear as it does the limitations of the knowledge even our experts possess, will serve to stimulate further inquiry and public discussion.

It should also be emphasized that the "findings" of the committee largely represent a digest of the areas of agreement of those witnesses who testified at the hearings. There is no intention to suggest that these witnesses represent all possible points of view on these issues,

[2] "Mainland China in the World Economy," hearings before the Joint Economic Committee, 90th Cong., 1st sess., Apr. 5, 10, 11, and 12, 1967.

nor that these views in all instances represent the policy recommendations of each individual member. Indeed, in the light of the complexities of the subject and the limitations of our knowledge, there are undoubtedly other experts who would disagree with the conclusions of some of our witnesses.

There are two other points that should be made: first, possible use of trade as a bargaining tool in future negotiations with the Mainland Chinese requires continuing study. Second, the principal thrust of the committee's study focused on the economic aspects of Mainland China and for this reason the committee does not take a position on such political questions as our present trade embargo.

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FINDINGS

I

In spite of the difficulties of making satisfying and reliable estimates and granting the frequent discrepancies in the estimates made by various China experts, it is still fair to conclude that we know a considerable amount about Communist China. The sources of information on Communist China that are available to the United States are apparently quite representative, and, taken as a whole, present a reasonably accurate picture of significant changes. Even so, there is a tendency on the part of observers to feel a sense of frustration because of the added difficulty of comprehending the motivations and behavior of the leadership and, hence, being able to understand fully what is going on and to predict what its future turns may be.

II

One of the most striking features about the performance of the Chinese economy under Communist leadership has been its unevenness. Performance and motivations have oscillated with pendulum-like swings between ideological extremism and pragmatic and technical management.

III

When used in moderation, ideological teaching and principles have produced positive results with emphasis on an egalitarian society, widespread education, and health services. These gains have, on several occasions, been almost lost by a turn toward disruptive extremism. Statistical information is conflicting, but if we take into account eyewitness and refugee reports, the image of China projected over the last 2 or 3 years is one of a reasonably satisfactory food situation with no indication of food stringency, although at times this has required substantial grain purchases from abroad. With the supply of arable land per inhabitant less than one-fifth that of the United States, the Chinese leadership has been faced with some hard choices between more extensive and more intensive agricultural development. In spite of this, there appear to be no authentic reports of starvation n recent years of the kind once associated with this vast country.

IV

Remarkable gains have been made, the committee was told, in investment in education, medicine, public health, and scientific research, including part-time education, spare-time education, and study groups organized in the communes and factories. There are said to be schools everywhere in China. Gains in medical and related public health fields have been attested to by many sources. While it is difficult, if not impossible, for the outside observer to evaluate the quality and substance of the teaching being given, we may be sure that the teachings of Mao Tse-tung are assured a prominent place in the educational system.

V

With her present and prospective resources, Mainland China can do just about what she wants to do in nuclear weapon developments within the limits of her not inconsiderable and expanding technical know-how. Despite this rather impressive capability, it will take time before China can hope, if ever, to approach a position of parity with the United States or the Soviet Union, either in numbers or sophistication of nuclear weapons. In terms of more conventional military power, assuming no chaotic internal breakdown, China can support a major involvement in a border war. However, this is not to say that she can fight a guerrilla-type war serving as proxy for, say, the guerrilla forces in Vietnam. She can supply them, but should she elect to send in a large number of troops, the entire character of the war would be changed from a guerrilla conflict to a more conventional war.[3]

VI

There has been a marked shift in the commodity composition of Chinese international trade from the earlier period when it was governed more by distinctly ideological preferences and was conducted primarily with Communist bloc countries, to the present situation in which non-Communist countries now account for 70 percent of the foreign trade of Mainland China.

VII

An overwhelming consensus among the experts* heard by the committee pointed to the conclusions that: (1) The American embargo on nonstrategic trade with China has accomplished very little in terms of retarding growth of the Chinese economy. (2) It may actually have been detrimental to the longrun interests of the United States in its relations with current and prospective trading partners with Mainland China. (3) It would be a mistake, however, to assume that any relaxation of the embargo would result in a significant expansion of bilateral trade with the United States so long as the United States has a large military presence in Asia, especially in Vietnam. (4) Working against any significant increase in United States-China trade would be the ready availability of existing alternative trading relations with Western Europe and Japan, which reduces the need for direct trade with the United States. (5) Hopefully, closer trade relations between China, the United States and the major non-Communist industrial nations could significantly contribute to integrating China into the world international system through eroding many of the simpler ideological components with which an isolated China must view world trade and politics. (6) Since the embargo policy is not warranted on economic grounds, its continuation must be weighed as a part of our international political policy.

[3] Hearings, p. 190.

*Senator Ribicoff says: "In view of the role of China in support of the North Vietnamese war effort, its demonstrated belligerency in foreign affairs, and the internal turmoil and total suppression of individual freedom and initiative by the Government of Mainland China, I cannot concur in the views of these witnesses. While every aspect of U.S. foreign policy—including the current embargo policy with regard to China—must constantly be reevaluated, it is my strong belief that a relaxation of our embargo policy at this time would gain nothing. The ability of the United States to relax the embargo should rather be viewed as a positive tool to be used in response to constructive steps by the Mainland China regime. Until China demonstrates by its actions that it is prepared to act responsibly as a member of the family of nations, the United States, in my view, has no choice but to continue its current policy."

Our Information About Modern-Day Mainland China

Any serious study of the Chinese economy must begin with a comment about the accuracy and availability of data. Information which has been released from Communist China and the significance and validity of its content have depended to a large extent on the political atmosphere of the specific period involved.[4] Our witnesses generally agreed on several distinct phases in data gaps and credibility, these coinciding, more or less, with changes in political climate.

The first phase covers the recovery years of 1949–52. During this period the task of rebuilding war-torn China was so obviously "cut out" that the new regime was not greatly in need of, nor was it too concerned with, the collection or publication of meaningful economic information. Such surveys as were conducted were often based upon benchmarks inherited from the old regime, and were both incomplete and inaccurate.

In 1952 the State Statistical Bureau was established, and the quality and quantity of information began to improve significantly. Data for the period of the First Five-Year Plan, 1952–57, especially the 3 years 1955 to 1957, is considered, for the most part, to be relatively reasonable and unbiased.

Then came the period of the "Great Leap Forward." The baneful effect on the trustworthiness of published data from the Mainland during this period is notorious. The deterioration of statistics was, moreover, only one aspect of the contamination of the whole media of information. The consequence has been that everything which was published during 1958 and the first part of 1959 has had to be scrutinized carefully and usually adjusted for known and suspected statistical or political bias. The collapse of the Great Leap movement inevitably brought down its whole corrupt statistical system with it.

By 1960 a new campaign was underway to improve the accuracy of statistics. The regime admitted the overestimating of production achievements compared to goals, and once again centralized the control of statistics under the State Statistical Bureau. The disruption, however, was too great to reverse rapidly, and the immediate result turned out to be a drastic reduction in the flow of information, accurate or inaccurate, from China. As conditions began to improve publication of suspended periodicals and other materials was resumed. The easier atmosphere of 1963–65 brought more and improved information.

The most recent months have seen another reversal. With the advent of Mao's Cultural Revolution the flow of information has once again been shut down, and we are increasingly forced to rely on such things as wall posters and translations of controlled or inspired news articles for a basic source of information.

Viewing these limitations on official data, it would be easy to conclude that our information is grossly inadequate for drawing an ac-

[4] Hearings, p. 229.

curate picture of China's economic performance. The average observer in the United States is disposed to assume, moreover, that the Chinese themselves and other countries with more direct contacts with China know a great deal more about what is going on there than we do. Actually our position for evaluating the Chinese economy is much better than this description might suggest. When assessing the data which we have in the United States it is important to keep several facts in mind.

First, although we always desire more and more information, we must remember that we do have a great deal of data, especially for the pre-1958 period and again for the interim which preceded the current "cultural revolution." The testimony given before the committee during the Hearings, and the papers prepared for the compendium, "An Economic Profile of Mainland China," published recently by the committee, provide ample evidence of this fact.

Second, we should not be quick to conclude that, if the Communists were not in control, we would have more abundant and more accurate data. China is still largely an underdeveloped country, despite its nuclear power attainments; given this fact alone, the uncertain quality of our information becomes more understandable in perspective. Our information concerning other less developed countries in Asia, Africa, and Latin America is often not any better.

Third, the data problem, in most instances, is just as great for the Chinese as it is for persons looking at China from the outside. The present regime itself is known to be struggling with the data deficiencies similar to those that discourage Western analysts. Even with the current data, nonresidents may not be at too serious a disadvantage as compared to the Chinese scholar or bureaucrat who may have access to more information, but who has much less experience in techniques of analysis, and in methods of handling inadequate and gap-ridden sources of data. This is not to say that the leaders are without information, only that it is partial and hampered at the sources by poor bookkeeping and accounting. Perhaps the more significant thing for the American observer as one witness remarked, is that it is doubtful whether some of the leaders, especially Mao, are people who think primarily in economic terms in any case.[5]

Finally, it is important to realize that quantitative estimates are but a first step in our understanding of the Chinese economic development effort. As one witness put it, the greater analytical problem is that "against this background of available quantitative information, such as it is, economists must ask *what* economic policies were adopted, *why* were they adopted, *what* alternative policies were available, and *what* were the results of these policies."[6]

The scarcity and questionable accuracy of the data does, of course, place a burden on analysis by the foreign China expert. Information must be pieced together, its accuracy must be assessed, and the effect of known developments on different parts of the economy must be estimated. As a result, individual scholars often arrive at different quantitative measurements of the performance of the Chinese economy.

Basic to almost any analysis of capabilities or performance of the economy as a whole, for example, is the problem of measuring popu-

[5] Hearings, pp. 100-101.
[6] Hearings, p. 143.

lation. The Government of China has not published an official population figure since 1957. The only later information has come from speeches of the leaders, and the Chinese leaders, themselves, are apparently uncertain about the size of the population. In late 1964, Mao Tse-tung told the American journalist, Edgar Snow, that he thought the estimates received by the central Government were too high. It appeared that he felt that the peasants and local leaders were overestimating population to increase their food allotment.[7] It is entirely possible, as a matter of fact, that estimates made by experienced American demographers may be closer to the truth than the guesses used in Peking.

Going one step further, consider the problems of translating this uncertain population figure into an estimate of per capita daily caloric consumption. This necessitates still another estimate—that of food production. Here the analysts must piece together information available on the soils and cropping practices in the various districts of China, adjusted for knowledge about changing weather conditions. Other experts, fearful that this type of estimate may be recording past performance and missing new secular trends, undertake more theoretical adjustments, allowing for improvements in production techniques through what is known of advances in irrigation and fertilizers.

Efforts to calculate agricultural output, other than that of major field crops, is perhaps even more difficult. Political gyrations, for example, have reportedly affected the production of pigs, eggs, and the like, as private ownership and communal ownership of peasant plots have alternately been accepted or abolished by the central regime. These difficulties of estimating caloric intake are cited merely as a example further explaining the complexity and divergence in quantitative estimates by different experts.

In spite of these difficulties of making satisfying and reliable estimates and, granting the frequent discrepancies in the estimates made by various China experts, it is still fair to conclude that we know quite a bit about Communist China. While there are relatively few so-called China watchers available, they are, perhaps for this very reason, inspired to vast diligence, study, and cross analysis.

As one observer concluded, "the sources on Communist China that are available in the United States are quite representative, quite adequate, but still most frustrating." [8] It is not unreasonable to think that, in part, we feel frustrated because of not being able to understand what is going on and to predict the direction in which it is leading. Although the inadequacy of data is real, there is a greater challenge given our Western points of view of trying to rationalize the behavior of the Chinese leadership.

Impact of Ideology on Economic Performance

One of the most striking features marking the performance of the Chinese economy under the leadership of the Communists has been its unevenness. Leaving aside the period from 1949 to 1952, devoted largely to bringing economic law and order to the war-torn mainland, most of the experts appearing before the committee estimated that

[7] Hearings, p. 113.
[8] Hearings, p. 234.

the average growth rate for the period 1952–66 was in the neighborhood of 4 to 5 percent. Yet the deviations from the average were enormous. While the economy grew at an estimated 8 percent annual rate between 1952 and 1959, gross national product declined very markedly, perhaps by as much as 20 percent, between 1959 and 1962. Since 1962 there has been a rapid recovery, and by 1966 the GNP is believed to have at least regained the peak of the late 1950's. This tremendous variation in performance can only be explained by the impact on the economy of shifting ideological emphasis.

The shifting emphasis has been characterized as an ideology-versus-rationality pendulum. A witness who had observed industrial management in China at first hand during 1966 undertook to explain the lack of consistent objective in this way:

> It seems, historically, since the Communists came to power, that they have followed an oscillation theory of industrial management, with the pendulum swinging between ideological extremism, and managerial, technical, and economic rationality. * * * After several years of fairly favorable economic performance, * * * the regime gets concerned about revisionism in ideology, and has * * * an intensive ideological campaign * * * which results in * * * economic crisis * * * and therefore they have to sacrifice much of their pure ideology, and bring back practices conducive to greater managerial, technical, and economic rationality.[9]

In broad terms, this formulation fits the actual performance pattern of the Chinese economy in recent years. The 5 years from 1952 to 1957 were marked by economic rationality and relatively little ideological interference in the operation of the economy. During this period, the Chinese relied heavily upon Soviet aid and assistance, and looked upon the Soviet economy as a model. Like the Soviets, they used material work incentives extensively, and emphasized the role of the expert and the technician. This period witnessed very rapid economic growth.

However, the Chinese leaders, apparently hoping to spur the rate of economic progress even more, were, at the same time, unhappy over the degree of materialism which had intruded at the core of the Soviet approach. As a result, in 1958 the regime undertook a new push for greater ideological purity which became known as the Great Leap Forward. During this period, Mao and his followers rejected, for China, the so-called Soviet Revisionism—the pursuance of material objectives at the expense of ideological purism. They believed that by capitalizing on revolutionary fervor, workers and peasants would produce far more and the society would be returned to true Communist ideals. After an initial spurt in economic performance through mass action on the part of workers and peasants, the movement foundered over such things as peasant resistance to communal farming and the paralysis of decisionmaking, especially at middle-management levels. The economic price simply turned out to be too high for the political goals. The resultant economic disaster has been dubbed the "Great Leap Backward."

By 1962 the regime found it necessary to return to more rational economic policies. Economic management in the allocation of resources was once again relied upon more heavily than Communistic techniques.

[9] Hearings, p. 50.

Once freed from the constraints imposed by the ideological fervor of the Great Leap, economic performance improved substantially.

Recent months appear to have brought still another swing in policy with the introduction of the Cultural Revolution and a return to an extreme emphasis on ideology. There is evidence that the policies of the Cultural Revolution are currently meeting fierce opposition from many Chinese who vividly recall the Great Leap disaster. It is too early to determine the extent or length of the current campaign, but in the opinion of many, it could lead to an economic crisis similar to the experience of the early 1960's.

Ideological shifts have affected industrial management in four main ways.[10] Each of these elements has tended to shift together when there was a swing toward economic rationality or, alternatively, toward ideological purism. The first point relates to the question of who makes the decisions in the factory—the "Reds versus experts" dilemma. When ideological extremism is in the ascendency, Party functionaries gain increasing control; when economic practicality has the forefront, the experts or technicians have the larger voice.

The second aspect of the ideology versus rationality pendulum concerns methods of motivating workers. In periods of ideological fervor the emphasis turns to moral stimuli, altruism, and revolutionary enthusiasm. Material incentives and economic self-interest are more heavily relied upon during periods in which the pace of economic development is emphasized. Material incentives at such swings of the pendulum have included piece rate systems, bonuses, and significant pay scale differentials.

The third point of ideological impact relates to the concept of class struggle and elimination of class distinctions. During periods when the leadership has emphasized ideological purism, there has been a major effort to eliminate class distinctions. The aim has then been to reduce differences between managers and workers, leaders and followers, experts and nonexperts, intellectuals and the poorly educated, and mental and physical labor. To this end, the regime has reportedly gone so far as to require management personnel to spend 1 or 2 days a week in physical labor and has promoted worker participation in management decisions.[11]

The fourth aspect of the ideological impact on the economy involves the amount of time spent on the job in political education and ideological indoctrination. During an ideological campaign, increasing amounts of what would normally be worktime are devoted to "political education"—propaganda—either in meetings or in sessions on the factory floor. In other periods when ideology has not been in the ascendancy, political meetings have been scheduled in the evening after work hours.[12]

Large shifts in agricultural production have also contributed to the tremendous variations in economic performance as a whole. Here a similar pendulum in ideological-technological emphasis seems to parallel that observed in industry. During the first 5-year plan, agricultural production was spurred largely by stimulating peasant productivity through traditional material incentives. Peasants retained their private plots and rural markets were allowed to operate freely.

[10] Hearings, p. 52.
[11] Hearings, pp. 53, 54.
[12] Hearings, p. 54.

During the Great Leap Forward, Mao and the party leaders, determined to achieve a major breakthrough, attempted to revolutionize the traditional agricultural economy. Peasant plots and free markets were eliminated and, in an effort to reorganize, reallocate, and revitalize manpower in the countryside, a widespread commune movement was undertaken.

> Reorganization and reallocation were to be achieved by fiat of commune and lower level cadres; increased peasant labor input was to be stimulated by ideological and political exhortation and reliance on emulative contests and mass involvement in decisionmaking, self-criticism, and the like.[13]

The tremendous dislocation resulting from the commune experiment brought disastrous results. Subsidiary farm output, such as pigs, eggs, milk, and vegetables which had come primarily from the peasant plots suffered seriously. The experiment in revolutionary farming inflicted serious losses in the numbers and work capacities of large (draft) animals as well as "mining" the limited arable farmland. In a matter of months, the regime, threatened with the prospect of a serious food shortage and possible famine, was forced to retreat from the program. Material incentives and private plots were reintroduced. Agricultural prices were allowed to rise and the peasants received more income from the commune and their private plots.

The onset of the current Cultural Revolution seems likely to witness a renewal of similar agricultural problems. Recent reports from China indicate serious disruptions already in the countryside, and it is believed that troops have been deployed in the fields to restore order. How far this new try at a Great Leap will be pushed, or how severe the effect on agricultural production will be, is, of course, unforeseeable at this time. However, there is reason to believe that the central government may have considerable difficulty in convincing the provincial leaders that another try at revolution in agriculture is desirable. Interference by the Red Guards and central government is clearly meeting with local and regional resistance.

On this point it is significant also that the autonomy of the local leaders in economic matters has greatly increased during and since the Great Leap. This has brought more and more into question the central regime's ability to effectuate major changes in policy.

While political interference has at times had an adverse effect on economic performance, several witnesses cautioned against the conclusion that all political interference has been detrimental. Many considerable accomplishments in the area of human investment have indeed been an inevitable byproduct of the effort to create a more egalitarian society. And, of course, investment in human resources has and will contribute substantially to economic growth.

Such practices as having management perform physical labor, having workers make managerial decisions, and minimizing pay differentials has raised morale and productivity when carried out on a limited basis. Even the time lost from work in political activities in a society with an excess of labor such as China does not create a serious economic loss. Time taken from work may indeed contribute more in education and future productivity than it detracts from current output.

[13] Hearings, pp. 118-119.

Used in moderation, Maoist-Marxist ideological teaching and principles, when applied in the special context and conditions of Communist China, have helped provide a more equal distribution of income, have led to the disappearance of a distinct highly privileged economic class, and have placed strong emphasis on noneconomic incentives. All of this has in a variety of ways tended to give China a more productive labor force and a more manageable economy than that of some of its neighbors.

The trouble has been that after a few years of substantial economic progress, the pendulum swings and reversions to ideological extremism have been disruptive. The results on industrial and agricultural production have been disastrous, and any initial benefits from ideology have been lost in the chaos which has followed.

It would be an error, however, to blame the economic failure of the early 1960's completely upon ideological excesses. During 3 years of this period, China had the worst weather that it has had in a century. These years of poor harvests seriously contributed to frustration of the plans which called for the diversion of resources from agriculture to industry. The pullout of substantial Soviet aid and technical support in 1960 left Chinese managers in charge who had far less technical expertise than their Russian counterparts. These factors have undoubtedly contributed to the difficulties of these years.

As a concluding observation on the relationship between ideology and economic performance, it is interesting to turn the tables and to consider the proposition that future economic growth may have an eroding effect on ideological extremism. As the Chinese economy grows and becomes more complex, it is quite possible that many of the Maoist-Marxist beliefs may be undermined. A thesis supporting the possibility would run in these terms:

> Operating a modern industrial economy is possible only so long as planners and managers cater to the requirements of technology, complicated relationships between inputs and outputs and between various levels of management, and much else. These problems have little to do with Marxist and even less with Maoist ideology. Operating Chinese heavy industry has far more in common with the management of General Motors than with the running of a guerrilla war, the latter being one of the principal sources of Mao's ideological maxims. * * * The more successful are "pragmatic" economic policies in bringing about economic growth, the more likely it is that this process of ideological decline will continue.[14]

The Soviet example would lend support to this thesis. But however we conclude this question, it serves to underscore the complex relationship between ideology and economic performance.

Food and Agriculture

Agricultural production and food available per capita in China are areas in which statistical information is particularly conflicting, but taking the estimates together, supplemented by repeated eyewitness and refugee reports, the image projected over the last 2 or 3 years is

[14] Hearings, pp. 169–170.

one of a reasonably satisfactory food situation with no indication of food stringency.[15] Looking at the 17-year period since the Communist takeover, they seem to have avoided famine; some malnutrition and some increase in diseases associated with low diet, yes, but no authentic reports of starvation of the kind one once associated with this vast country.[16]

If this is so, it must be taken as a tribute to the industry of a hard-working people, since China, with nearly 25 percent of the world's population, contains within its borders only 7.8 percent of the world's cultivated land. In comparative terms, this means that the supply of arable land per inhabitant is less than one-fifth that of the United States. One must hasten to add, however, that the domestic food production in China has on occasion had to be supplemented by sizable grain imports, particularly of Canadian wheat.

From the standpoint of China's leadership, the agricultural sector has, however, not been without problems. As one witness phrased it, "Communists have really a brown thumb when it comes to agriculture. Almost everywhere Communists have managed either to reduce agricultural production or at least to keep it from growing as it might otherwise have done." [17] In spite of the tolerable food situation, agriculture has, indeed, been one of the most serious frustrations, in part because 80 percent of the population derive their livelihood from farming, and in part because disappointments or shortfalls here affect everything else. Having had to pay for imports of food and fertilizer they have, for example, not had the ability to import industrial machinery the way they had hoped to. Accordingly, the whole industrial program has suffered.[17]

The Chinese Communists have, the committee was told, apparently attempted to maintain a level of approximately 2,000 calories per day per capita as a level sufficient to support an individual's work effort.[18] Just how well they have met this target is one of the points on which the statistical information is at variance. After the close of the hearings, the committee obtained an official U.S. Government comment on the significance of the estimates derived by different estimating techniques. The comment concluded that "one can be confident that per capita daily calorie intake was in 1965 in a range of 2,000 to 2,100 calories" rather than 1,800 to 1,900, or even less as implied by other writers.[19] Calories are, of course, not everything. Whereas these estimates relying on a common denominator for food sufficiency tend to stress per capita grain supplies, there are said to have been very large gains in the supplies of eggs, vegetables, fruit, poultry, and meat.

The economic planners of China, hard pressed at all times to conserve investment resources, have been confronted by two alternatives in their drive to expand agricultural production. Both choices are high in cost. An increase in total farm output gained by extending the cultivated areas has proven to be expensive because much of the Western two-thirds of the country, where the additional acreage is to be found, is characterized by rugged terrain as well as by unfavorable soil and climate conditions. The alternative approach, seeking to

[15] Hearings, p. 239.
[16] Hearings, pp. 160, 186.
[17] Hearings, p. 15.
[18] Hearings, p. 144.
[19] Hearings, p. 236.

raise the yield of the acreage now in use by application of modern intensive farming methods, can likewise be pursued only at the added cost of expensive production inputs.

Faced with this dilemma, the policy of the central government in the last few years appears to have favored, in such matters as the allocation of fertilizer, those agricultural areas which are already most productive, most fertile, and best served by transport systems—the "areas of high and stable yield," as they are called. This is in contrast to the policy followed at one time of giving production grants to the poorest and most needy areas. In part, this changed policy may simply be good economics, but it was suggested also as a consequence of the growth in provincial autonomy.[20]

Investment in Human Resources

In addition to poverty and famine, China has been plagued for decades, indeed for centuries, with disease and illiteracy. The Committee was told that no meaningful survey of recent economic performance in China dare neglect reference to the remarkable gains that she has made in education, medicine, public health, and scientific research.

There has reportedly been a major breakthrough in education. The number of children and young adults in full-time educational institutions today is five to seven times the school enrollment in 1949. The number in primary schools has jumped to over 100 million, including almost all urban children and a great majority of rural children. Students in higher education now total about 1 million, compared to only a handful 17 years ago. If the word "school" is extended to include part-time education, spare-time education, study groups organized in the communes, factories, the army and other organizations, one would have to say that "there are schools everywhere in China; that China may be said to be just one great big school."[21]

In pre-Communist China, only the favored elite and especially capable people were exposed to literary, artistic, and even political activities. In recent years, education has been directed not merely at learning to read and write. Scientific education, especially, has been encouraged, in the first instance at dispelling foolish actions based on myths and superstitions, but with the longer run objective of turning out graduates in science and engineering—estimated at about 1 million since 1949. The Communists have also extensively trained and utilized women in scientific fields and they now comprise about one quarter of all scientific personnel.[22]

Statistics on the number of students involved in the educational process do not tell us very much, of course, without some assessment of the quality and substance of the educational activity. While it is difficult, if not impossible, for the outside observer to evaluate the teaching being given, it stands to reason that any authoritarian regime will see to it that great emphasis is placed on propagating its own ideology and system of values. Scientific and nonideological education may very well be presented accurately and with a measure of academic freedom. But we do know that neither Chinese business enterprise nor

[20] Hearings, p. 107.
[21] Hearings, p. 187.
[22] Hearings, p. 187.

the Chinese schools are viewed purely as economic, or efficiency oriented units without politicosocial programs.

In the spring of 1966, an observer, while noting that the Chinese industrial enterprise was a place where illiterate workers learn how to read and write, and all types of employees trained to improve their work skills, noted also that it was a place where workers were propagandized with the new culture. We may be sure, for example, that the sayings and teachings of Mao Tse-tung are assured of a prominent place in the educational system, giving to it a large measure of relatively sterile ideological indoctrination—at least, as judged by the Western mind.

China's gain in medical and related public health fields has also been attested by many recent visitors to China. A member of the U.S. Public Health Service is said to have stated a few years ago that the prevention and control of infectious and parasitic diseases which had ravished the country for generations was "a most startling accomplishment" and that the improvement of general environmental sanitation both in the cities and rural areas was "phenomenal." [23]

A Canadian doctor who has recently visited China's medical colleges, hospitals, and research institutions reported that he had found good equipment, high medical standards, excellent medical care—"almost all comparable to Canadian standards." [24]

Those whose image of Mainland China is that of a country plagued by large and frequent epidemics have evidently not been aware or taken account of the progress that has reportedly been made through intensive radio propaganda enlightening the entire population in a mass program of health and sanitation consciousness.[25]

Relationship Between the Economy and Military Capabilities

With her present and prospective economic capabilities, Mainland China has a very large capacity for nuclear weapon development within the limits of her not inconsiderable and expanding technical know-how. Despite this rather impressive capability, it will take time before China can hope to approach a position of parity with the United States or the Soviet Union, either in numbers or sophistication of nuclear weapons. In terms of more conventional military power, China can support a major involvement in a border war, unless she is faced with an internal breakdown. However, this is not to say, that she can fight a guerrilla-type war serving as proxy for, say, the guerrilla forces in Vietnam. She can supply them, but should she elect to send in a large number of troops the entire character of the war would be changed into a more conventional conflict. In this event, the contest would turn upon relative firepower with the advantage going to the industrially stronger adversary. The expert witnesses at our hearings were in general agreement upon these several propositions.[26]

Development of a nuclear missile program admittedly is and will continue to be costly to China. But, as one of our witnesses pointed out, China's population is large, and while per capita product is low by any standard, a very small slice out of the consumption of everybody can provide a very large pie in terms of the purchasing power of

[23] Hearings, p. 188.
[24] Hearings, p. 187.
[25] Hearings, p. 188.
[26] Hearings, pp. 190, 198.

local resources.[27] Given China's political and geographical position in the world today, which by and large is characterized by mutual distrust, if not hostility, she is not likely to be deterred by considerations of cost.[28] So long as current technical bottlenecks persist, even a doubling of the present $1 or $2 billion a year expenditures would probably not greatly increase the pace of nuclear development. Perhaps the best evidence of this is that it is not now being done, although the international political rewards, through prestige or blackmail, of a nuclear force are certainly appealing to the leadership of China, as they are to other nuclear power aspirants.

As to capabilities for conventional warfare, it is unlikely that lack of adequate manpower can be a serious problem. Such an assumption scarcely needs statistical demonstration in a country of over 700 million persons with the present armed forces estimated at about 2 million people.[29] But this does not mean, of course, that a conventional war with its demands for ordnance, transportation, and all the things a field army needs would not impose a strain on China's economy.

No matter what a country's rate of economic growth, armed forces and military expansion reduce resources that could otherwise go into investment or civilian consumption. Obviously, the competition for resources would become less tight under a 6-percent rate of economic growth than under a 3-percent rate of growth. China now spends an estimated 10 percent of gross national product on her military budget and there is little reason to assume that military expenditures would not be increased at least proportionately with any growth in national product providing additional economic elbow room.[30] Given China's present ideology and world posture, it would appear that her leadership would, in that case, elect to maintain or increase military expenditures.

There is, however, one other aspect of China's war capabilities that was brought out at our hearings. This is the sheer problem of finance. We were told that the central government does not draw directly on the total taxable capacity of the country; its ability to mobilize the total resources are, therefore, less than the country's economic aggregates would suggest. The expansion of central government revenues and, hence, military expenditures, is limited by the relations between the central government and the provinces. This depends largely upon cooperation and negotiations since only in an extreme situation can the central government afford to use crude force to secure increased levies. This limitation on the ability of China to field an army and maintain a modern-type military campaign for any length of time becomes expecially important in situations like the present when the central government's relations with the many provinces are very delicate and it is far from sure of their loyalty in the face of separatist tendencies of certain areas.[31]

A final question on the military side must take into account possible motivations prompting the use of military force. Under what conditions would China want to devote a larger share of its present or future national product to military usages, pursuing a policy of territorial expansion as a means of solving economic problems?

[27] Hearings, pp. 105, 160.
[28] Hearings, p. 191.
[29] Hearings, p. 108.
[30] Hearings, p. 39.
[31] Hearings, p. 110.

Outsiders see the population hordes of China and, impressed with the task of feeding them, assume that the authorities in power must inevitably cast envious eyes upon the rice surpluses in other parts of Southeast Asia. The temptation to invade neighboring territories for economic reasons would seem hard to put aside. A committee member tried to elicit information on this point by inquiring whether a "lean and hungry China" would be more likely than a somewhat more satisfied China to undertake a revolutionary expansionist policy, moving out to acquire lands or influence throughout the Asian continent.[32] While the witnesses thought that China's ideology would keep her in a militant mood for some time to come, and that she would continue to promote her brand of revolution wherever she can, they did not envision any effort toward expansion by force. Even an aggressive leadership could hardly be oblivious to the point which one witness expressed that "it would be very foolish for China to attempt to solve her agricultural problem and try to gain rice surpluses by invading neighboring territories. One way of not getting rice at all would be to invade the areas of Southeast Asia." [33] The Chinese have had plenty of problems with their own peasantry; these difficulties would certainly only be compounded in dealing with a conquered peasantry. It would thus be a highly inefficient way of solving China's agricultural problems to undertake by invasion to get something that can be gotten far more efficiently by trade. Our witnesses seemed agreed that "the economics are against Chinese expansionism by force rather than trade. And, unless China is really cornered, it is unlikely that she would take the course of force versus trade." [34]

None of these considerations involving capabilities, finance, or economics preclude the possibility that noneconomic nationalistic or ideological reasons may not conspire to encourage military aggression. During the time that internal ideological struggles have been a part of China's way of life, a border attack has, indeed, been made on India. Significantly, however, this was not followed up by going down onto the plains of India. There was at the time apparently nothing to prevent the Chinese from having gone on except the realization that the costs of an effective offensive in this case might have been something that China could not, or did not want to, afford, being satisfied with success in limited objectives.

From all that has been said, it would seem reasonable to summarize by saying that, on the basis of the testimony presented, economic limits appear to be quite secondary when compared with political and ideological considerations in determining the strength of China's military powers and the uses which she may elect to make of international force.

Put more concretely, all members of the panel discussing the implications for the United States of China's economic development agreed that China's aid to Vietnam, however much it may be, is not prompted or limited by her economic capacity. Rather, it is based upon and is motivated by the theory that security is enhanced by having as many buffer states as possible and by proselyting when possible to convert them to Communism.

[32] Hearings, p. 196.
[33] Hearings, p. 198.
[34] Hearings, p. 197.

Mainland China's Participation in International Trade

Since its inception as a Communist state, Mainland China has been actively involved in the exchange of commodities with other national economies. As would be expected in a Communist-oriented economy, trade is a state monopoly and all transactions are carried out through government trading corporations. During the first decade of the Communist regime, the pattern of China's trade closely resembled that of any other underdeveloped country, consisting in the main of the export of domestic agricultural and mineral products, supplemented by some finished textiles. These were, in effect, exchanged for machinery and specific types of raw materials, unavailable at home, and required for processing by the domestic industrial plant.

While the commodity composition of its trade at that point in history was motivated by economic need, the choice of trading partners and geographic direction of trade was governed by distinctly ideological preferences. This was the case throughout the period when Mao's clearly expressed lean-to-one-side policy was strictly enforced. The countries of the Communist world, primarily the U.S.S.R., were China's principal trade partners, accounting for two-thirds of its total external trade. Imports of machinery from the Soviet Union during the late 1950's ran as high as $500–$600 million a year.

During the present decade, the pattern of China's trade has changed dramatically. The collapse of the Great Leap in 1958–60 has altered the commodity composition of the country's foreign trade. The failure of the Great Leap reduced the domestic food supply to a point where the importation of grain from abroad became a matter of prime necessity for national survival. Other types of food products, chiefly high-value commodities such as rice, vegetables, processed foods, and meat products continue to be exported, running in recent years roughly equal to the money value of the country's annual grain imports. Textiles, followed by these special-type foodstuff exports, remain a dependable earner of foreign exchange, while exports of minerals and metals, once a prime source of purchasing power in the world market, have fallen behind earlier years.

Even more drastic than the change in commodity composition of China's foreign trade has been the geographic orientation of that trade. The quarrel with Russia reduced rather sharply the level of trade between the two countries, and along with it the trade with Eastern Europe in general. Imports of machinery from the Soviet Union declined abruptly, reaching a low figure of $77 million in 1965. The orientation of China's foreign commerce has been reversed completely with the result that non-Communist countries now account for 70 percent of the foreign trade of Mainland China. Japan and Hong Kong have emerged as China's leading trade partners. Trade with the countries of the industrial West doubled between 1962 and 1965, rising during this 3-year period from about $700 million to $1.4 billion, which is an annual growth rate of 25 percent.

Most conspicuous at present are China's growing imports of advanced types of production equipment from the West, including complete "turn-key" plants embodying new technology. The industries for which such plants have recently been purchased in the West included, among others, such lines of production as the following: oil refining, synthetic ammonia, urea, industrial alcohol, synthetic fibers,

acetylene, wiredrawing, tubes and pipes, glass, and a cold-strip steel-rolling mill. The importation of these plants is often accompanied by the arrival of Western technicians who help with the installation and testing of the purchased equipment.

In the past decade China, on balance, has been a net exporter of capital, at least in the sense of having repaid earlier Russian loans and having accumulated and maintained at least $300 million (valued in U.S. dollars) foreign exchange reserves.[35]

It is a fair assumption that the commitment of the Chinese Government to the rapid expansion of its industrial plant will provide a favorable environment for the further importation of a wide variety of equipment from the more developed regions like Japan and Western Europe. The level of imports of industrial equipment will depend, to a considerable extent, on the ability of China's agriculture to regain its self-sufficiency in grain. However, even if imports of grain have to be continued for the near term, the need of extensive modernization in such areas as metallurgy, chemical production, machine building, and transportation will make China an expanding market for production equipment and technical know-how from the West.

The hopeful outcome of this situation may be the basis for a number of developments having important favorable implications in the sphere of economic relations, as well as in the political attitudes of the Chinese leaders toward the outside world. "Trade with the outside world," the committee was told, "is probably the most promising way by which the Chinese will in time come to realize the actualities of the world around them and accept the inevitability of peaceful coexistence with the rest of us on a live-and-let-live basis." [36] The implications of this view to current U.S. trade policy vis-a-vis Mainland China are discussed in the following section.

Effect of the U.S. Trade Embargo on China's Economy

The United States has maintained an embargo on trade with Mainland China since late 1950 when the armed forces of that country intervened on a mass scale in the undeclared war initiated by Communist North Korea. Since then, a state of continuing distrust, bordering on passive hostility, has festered between the United States and China. In large part, this has been over the issue of Taiwan and lately of Vietnam. Whatever its roots, it has tended to rule out any easy change in the state of our bilateral political relations and, hence, in our official trade policy toward that country.

On a number of occasions during the hearings, various witnesses expressed themselves with notable conviction on the implication of current and prospective trade of China with nations outside the Communist area, particularly with our allies in the East and West. That Mainland China today is a relatively minor factor in the world market seemed generally agreed. With a current turnover of about $4 billion per year, China's trade, for example, amounts to not more than a quarter of the foreign trade of neighboring Japan. "This," it was noted, "gives Mainland China little economic leverage on countries it might wish to influence." [37] The kind of expensive foodstuffs, edible

[35] Hearings, pp. 145, 171.
[36] Hearings, pp. 5, 6.
[37] Hearings, p. 4.

and nonedible fish products and cheap textiles which China exports at present have no particular appeal to other less developed countries. They are more often than not competitive with exports of these other developing countries. At the other end of the spectrum, China, in dealing with the more developed countries, is just too small a trader to generate any great political influence. The low relative impact of Chinese trade is illustrated by such evidence as that "while Japan is China's largest trade partner, absorbing 15 percent of its total trade, China accounts for only about 3.5 percent of Japan's foreign trade." [38] It is not surprising, therefore, that "when Peking tried, in 1958, to use the sudden stoppage of trade with Japan as a political weapon, the strategy backfired." [39]

The witnesses agreed, however, that China's present leading trade partners in the non-Communist world, most of whom are principal political allies and trading partners of the United States, are strongly interested in this market as an outlet for industrial machinery. The witnesses also indicated that, if requested, the Western nations would probably be ready to extend long-term credit to help make these exports. Any attempt by the United States to inhibit either the movement of these exports or the extension of such credit is likely, in the opinion of the witnesses, to prove ineffective.

By the same token, they reasoned, the unilateral trade embargo applied by the United States against Chinese trade does not serve as an effective trade deterrent. The availability of West European and Japanese alternatives has made trade with the United States unnecessary to China. In summary, it was suggested that no possible unilateral trade or credit restriction by the United States would be likely to prevent the expected further development of China's foreign trade with non-Communist countries, and that the effect of the embargo is purely psychological.

While the points that follow are, preponderantly, the language of one particular witness, there seemed to be an overwhelming consensus among the experts heard that (1) "the American embargo on nonstrategic trade with China is not only ineffective, as many acknowledge, but actually detrimental to the long-term interests of the United States"; [40] (2) any modest increase in the rate of growth of her economy that might result from an increase in trade with us would not materially raise China's capacity for either military or political warfare; (3) "economic development and the increasing complexity of life that goes with it, will gradually erode many of the simpler ideological components of the Chinese world view"; [41] and (4) the long-term interests of the United States would, in fact, be best served by the development of closer trade and credit relations between China and the major industrial nations outside the Communist Bloc. Such a development "could very significantly contribute to integrating China—however slowly and gradually—into the world international system." [42]

Response to a specific question by the Chairman as to the possibility of detaching China still further from Russia by way of increased trade, prompted the view "that relaxation on our part with regard to trade, travel, and other things may, over a long period of time, draw

[38] Hearings, p. 4.
[39] Hearings, p. 5.
[40] Hearings, p. 168.
[41] Hearings, p. 168.
[42] Hearings, p. 176.

China closer to the United States. However, it would seem that China would continue her quarrel with the Soviet Union with or without such an alternative."[43]

As far as foreign trade in general is concerned, we were reminded by the witnesses on several occasions that it is primarily through a "thaw" in the trade sector that the hopes lie for bringing Mainland China into closer contact with the Western World. It has been, as in the case of the Soviet Union, a major channel for the inflow of new technology, new products, and new processes of production and has therefore served as a stimulant to economic growth. Foreign trade is "one of the few areas in which at least some economic leverage can be exerted on China—either through pressures or inducements—by the non-Communist world." [44] Given this premise, it was suggested that the situation calls for a new approach on our part.

Such an approach could begin with a reevaluation of our total embargo policy which the rest of the world regards as "a symbol of our policy to isolate China." [45] In the present circumstances, when internal struggles in China have weakened the regime, any steps taken toward the "relaxation of the embargo on our part * * * could not possibly be interpreted as concessions extracted by China from the United States, or as measures taken by us under duress and in order to appease China." [46]

Such a step, however modest, in the view of several witnesses, might effectively encourage those elements within the Chinese leadership which would welcome reduction in tensions with the West. One of the first practical things that could be done, in the view of some witnesses, should be to seek a policy determination by the United States that it will no longer regard it as unfriendly for other nations to deal with Communist China in nonstrategic goods. As a practical matter, most witnesses tended to agree, this is probably as far as we can go in the immediate future by way of modifying our trade policy toward China. All agreed that it was extremely unlikely in any case that promptings toward significant mutual trade will come from either side so long as we continue to maintain a large military presence in Asia, especially in Vietnam.

[43] Hearings, p. 195.
[44] Hearings, p. 173.
[45] Hearings, pp. 174, 175.
[46] Hearings, p. 174.

SUPPLEMENTARY VIEWS OF MR. CURTIS

While I commend and have joined in the committee's excellent report, I wish to suggest several additional lines of inquiry which I believe are important for a comprehensive view of the Chinese economy.

In an economy whose aggregate economic statistics are as unreliable as those of China, it is difficult to judge with any precision the real progress being made. There are, however, several important tests which can be applied to the so-called infrastructure of an economy in order to judge its growth.

They include electrical power facilities (production and transmission lines, both thermal and hydroelectric); the transportation system (railroads, pipelines, waterways, air facilities and highways, including farm-to-market roads); the communications system (postal, telegraph, telephone, radio, television and business-leased lines); and the educational system (if the bulk of the school-age children is in rural areas, then the development of farm-to-market roads and rural electrification becomes as important as construction of school buildings in determining how much education is effectively going on).

Because progress in many of these sectors is difficult to conceal by its very nature, further study of these areas may, in fact, offer more knowledge and insight than can be obtained from a study of aggregate economic data alone. I was pleased to note that these subjects had been treated to some extent in the committee's compendium of papers on Mainland China.

Another important area for further inquiry is the status, the loyalties, and economic ties of the vast overseas Chinese population residing throughout Asia. The overseas Chinese are usually the leading businessmen in the countries in which they live and tend to maintain their separate cultural identity. For these reasons, they are often regarded with hostility and suspicion by the indigenous population of these countries. One of the important roles served by the Chinese Government on Taiwan is that it offers the overseas Chinese an alternative to Mainland China toward which to direct their loyalties. The ties of the overseas Chinese to Taiwan and to Mainland China, including the extent to which they are suppliers of foreign exchange to Red China, would offer an interesting area for further exploration.

Finally, more work needs to be done on the differences between the economy of urban and rural China. It would be interesting to know how far the development of farm-to-market roads has progressed. It would also be significant to give further study to the differences between the educational systems in the agricultural and urban areas. One of the committee's study papers suggested that educational progress in the rural areas was far behind that in the Chinese cities. It is obvious that since the vast majority of Chinese still live in the rural areas, the successes of the Chinese educational system cannot be judged by the quality of the urban schools alone.

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