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This collection of nine research papers concerning aspects of the economy of China were written by U.S. college and university professors who traveled to China as part of the Fulbright Hays Summer Seminars Abroad Program. The papers include: "The Impact of Economic Reforms on the Status of Women in China" (N. Eysenbach); "China's Agricultural Economy and Policies" (L. Fletcher); "China: Economic Reform and Social Welfare" (L. Geiger); "China's Foreign Trade" (A. W. Khandker); "China's Economic Development" (E. Kim); "Rural Township and Village Enterprises in China" (S. Park); "Joint Ventures in China" (J. Rassi); "Chinese Enterprises: Responses to Prepared Questions" (E. Ryan); and "Treasury Bonds in China" (K. Weir). (DB)
1990 FULBRIGHT SUMMER SEMINARS ABROAD PROGRAM

China's Economic Development

Research Essays

Compiled by the National Committee on U.S.-China Relations on behalf of the U.S. Department of Education in fulfillment of Fulbright Hays requirements.
Introduction

In 1990 the U.S. Department of Education expanded the Fulbright Hays Summer Seminars Abroad Program to China to include a group of university professors who would examine China's economic development. Traditionally, the Fulbright Summer Seminars Program in China has been specifically designed for primary and secondary school teachers and has focused on China's history, culture, and education system. The inclusion of this new group was a departure for the program.

The Economic Development group was composed of nine professors from mid-size colleges and universities who were interested in economic development. Their itinerary included Wuhan, Tianjin, Shanghai, and Beijing where they examined various components of the Chinese economy.

Whereas primary and secondary teachers are required to write curriculum projects upon their completion of the Fulbright program, the college and university professors were asked to write research papers instead. One of the main objectives of the Fulbright Summer Seminars Abroad Program is to share newly acquired knowledge with colleagues. Therefore, the research paper format is more appropriate not only to the background and training of the participants, but also to the future audience.

What follows is a collection of these research papers.
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Massive economic change, such as China has experienced since 1978 and is likely to continue experiencing in the next decades, do not affect all groups equally. Recognition of this fact has led to the large literature on "women in development" emerging from the feminist ghetto into mainline textbooks and reports. The impact of China's economic reforms on women, however, is simply not a concern of the Chinese economic bureaucracy today. Questions concerning women are cause for amused condescension: Why should any serious economist be interested in such questions?

At the State Commission for Restructuring the Economic System, the agency charged with planning reforms, I asked whether anyone there had considered the impact of the reforms on the relative economic status of women compared to men. The reply from the deputy office director and senior economist: "The question you mention is not within the scope of economic reform. But ours is a socialist economy and men and women are equal." (Liao, Beijing). So much for "seeking truth from facts."

The government's lack of interest is reflected at the universities. No one at Jiaotong's Human Resources Research Institute is interested in problems of women and work. Professors at Jiaotong and at Qinghua knew of no one studying the impact of the reforms on the relative status of women (Xu, Shanghai; Zhao or Li, Qinghua). And when I asked an official of the State Education Commission whether anyone was considering the question he looked baffled at the very thought; his responsibilities include the training of teachers to teach economics (Zha, Beijing).

On study of women's economic concerns, Ms. Ke, a recent graduate of Beijing Foreign Studies University, said "I have talked with very few people about this because it is not popular with men. Only among women friends. Many of my male classmates thought my thesis was a waste of time." Her topic: "The Employment Crisis Facing Chinese Women in the 1980's - with reference to American Women's Experience in the Post-War Era."

Male thinking is shown in the comment of one party member, "Before, there were no markets, and the world was like a closed room with nothing in it. Suddenly you open the window and everything is there -- women, cars, television, refrigerators, restaurants." (Delfs)

But the topic concerns half the population of China and ought to receive serious consideration. What follows is my contribution.

A MARKET FOR LABOR?

China's steps towards a market economy have included: (1) changes in agricultural property rights, decision-making, and prices; (2) greater enterprise freedom in production and sale of final goods; (3) the growth of
collective and private enterprises as alternatives to state-enterprises for urban employment; (4) tentative and limited steps towards factor markets in labor and capital.

Market prices are now used extensively in China to provide information and incentives to producers and consumers of final consumer goods and to a more limited extent for intermediate and capital goods. But for factors of production, both capital and labor, allocation by government directives still dominates. In this report I consider what a labor market might mean for the wages and employment of women. Such a market would affect the status of all women, married or not, since a woman's status within the family as well as in the larger society is better when she is seen to contribute to the family income. Unemployment, or relegation to housewifing, would mean loss of social as well as economic position (Davin p. 140-41).

Prior to reforms there was no market for labor. Workers were assigned to jobs by government offices and wages were established by the planners. Compared to international standards, differentiation in compensation by responsibility, skill, difficulty, location, or individual productivity was small.

Reforms have made some changes. Enterprises may now pay bonuses based on individual productivity but there is reluctance to do so and the firm's profits, which determine the potential for bonuses, are more dependent on bureaucratic decisions than on market conditions. Salary differences are still based on "education and seniority" in civil-service fashion, not on productivity. The renumeration of managers and technical people compared to that of ordinary workers is governed by rules. The wages joint ventures might pay relative to Chinese firms were regulated until 1986 and remain subject to substantial political pressures.

Managers, since the 1986 "open house" reforms, have increased discretion to select whichever they want to fill their authorized vacancies but labor is still allocated more by direction more than by choice. Young college graduates may now choose among three jobs - compared to no choice in the past. School leavers may search for a job or may wait until the state assigns one. For those already employed, changing jobs is difficult and generally requires the approval, even the compensation, of the existing employer. Job changing is done so seldom that questions about hiring practices universally received replies only in terms of new entrants to the labor force. Control of place of residence limits an individual's job choice although temporary migration of contract workers and moving without permission is increasing.

Compared to final goods markets few steps have been taken toward a labor market for reasons both ideological and practical. For Marxist the sale of labor services by workers who have no alternative is the distinguishing feature of capitalism and the source of "exploitation" of labor. Practically, reformers must deal with the public's expectation of job security and income equality and must provide a means of support for workers whose marginal productivity in China's labor-surplus economy is below subsistence.

But the parallel existence of two systems, two contradictory criteria for allocating resources, creates problems of its own, seen in extensive bribery to gain bureaucratic approval for what the market makes profitable, and in the waste of resources which reduces the size of the total "rice bowl". It seems
unlikely that the present configuration of market and non-market can continue to exist.

What if China were to abandon the regulation of wages and the direct assigning of labor along with continued freeing of goods markets? What if the supply of labor to a firm depended on individuals' choices, -- on that complex of socialization, education, training, and migration that leads individuals to choose particular occupations, market and non-market, -- and the demand for labor depended on market-oriented firms' search for profits, with the result that compensation depended on a worker's value as perceived by those hiring? What changes in relative wages might one expect? And how would those changes affect women?

First, one would expect an increase in the differentials by trade and skill level. While China is a labor-surplus economy overall, there are shortages of particular skills. At present human capital is underpriced (Becker and Yang p. 421). Likely to see increased wages are those skilled trades typically in short supply in a developing economy: managers, scientific and technical workers, and skilled crafts workers. Those named as in shortest supply by Beijing University professors were university graduates, especially in science and technology, graduates of vocational-technical schools, skills in electronics, mechanics, accounting and finance, foreign trade, foreign languages, and food processing.

Some of these effects can be seen in Shanghai where, since 1987, joint ventures have enjoyed the privilege of attracting already employed workers without a veto from the current employer. Foreign businessmen report difficulty in hiring managers, engineers and technicians while Chinese firms complain of losing skilled personnel and of not being allowed to offer higher pay to keep them (AmConGen, Shanghai; spokesman, Shanghai Heavy Machinery Plant, Shanghai). In Tianjin it is hard to get the best people to be teachers now that the open policy has created other opportunities (Wu, Tianjin).

Second, one would expect an increase in the pay of managers relative to workers as the task of managing becomes more demanding. Instead of simply carrying out orders from above, the market-oriented manager deals in a world of great uncertainty and is responsible for a myriad of decisions. Gone is the quiet life. Managers are noticing increased pressures even with the present limited market (Becker and Yang p. 425). "Before it was easy to be a manager of a state-owned enterprise" we were told at the State Commission for Restructuring the Economic System, "but now it is more difficult." Asked if managerial compensation was expected to rise as the job becomes harder, they laughed and said, "Yes, it has got to!" The ratio of managerial compensation to that of an ordinary worker has an official limit of 3:1 "but of course they will demand and get more."

The traditional socialist view was expressed by an old functionary at the Chinese Enterprise Management Association: "Very few managers get as much as three times an ordinary worker. Of course a few managers think they should get more and some take five times or even ten times but of course that's not really right." At 3:1 the relative compensation of managers is far lower than that elsewhere, including Japan which is one of the lowest, 15:1 according to one source (Levine p. 201). (Note: although my question asked about total compensation, it is possible the answer excluded the salaries based on "age
and seniority" and referred only to the bonuses: in this case the ratio of compensation in China is even lower than 3:1.)

Third, one would expect higher wages in non-competitive markets if workers share in the potential profits of the firm (as UAW members used to share in the monopoly rents of the U.S. automobile industry). If workers share in business profits, compensation would be higher in more highly capitalized heavy industries. Two other considerations: In less developed countries large foreign-owned firms often pay above the prevailing local wage, supposedly to earn political goodwill; state-owned firms commonly pay above-market rates even in primarily market-oriented economies.

HOW WOULD CHINESE WOMEN FARE IN A LABOR MARKET?

Women earn less than men in market economies for several, mutually supportive, reasons: conflicts between employment and home; less education, and education for less well-paid fields; discrimination in hiring, on-the-job training, and promotion; and occupational segregation into low-paying areas. On all these counts women in China are poorly placed to benefit from a freer labor market.

A. Conflicts between Employment and Home.

Women carry more responsibility for work in the home in China as in the U.S., and the double burden results in fewer hours of paid labor. For urban women, however, the size of the double burden should be decreasing with more one-child families, more basic home appliances, and more convenient shopping. And some changes in the division of work at home are occurring. Ms. Qin (Beijing) observed among her Beijing friends men help with shopping and cooking but thought the same was not true among less educated young people. Ms. Wong (Shanghai) said things were relatively good for women in Shanghai where men help with some of the labor, especially shopping, sometimes cooking, seldom cleaning, and laundry only if there is a machine.

The double burden can also result in less time devoted to career enhancement. Ms. Lee (TEDA, Tianjin), who described herself as "ambitious", believes many women lacked ambition because of their home interests, but agreed the apparent lack of ambition might reflect a realistic appraisal of their promotion chances in Chinese enterprises.

Migration to follow a husband moving to further his career has not been a common problem in China where residential registration has been tightly controlled and permanent employment in one place is standard. But Ms. Wong, who trained as an industrial designer, now works as an English-speaking guide after several job shifts to follow her husband. Do men ever follow their wives? "Never!" was her reply (Wong, Shanghai).

B. Less Education, and Education for Less Well-Paid Fields.

Differences in education explain part of the lower earnings of women in market economies. Women in China have less education than men and the gap may be increasing.

China claims that 97% of school-aged children are enrolled in primary
school (China p. 791) but newspapers report troubling dropout rates over the last decade. The value of child labor to parents has increased as the result of family farming in the countryside and private enterprises in the cities. (Wong, Shanghai; Wu, Tianjin; Wang, Beijing). The dropout rate is higher for girls than for boys.

Information from the State Education Commission (Mr. Wang) gives the 1989 dropout rate at 3.7% from primary school and 7.2% from secondary school, with 80% of the dropouts being female. The implications can be calculated: If girls are half the school population the numbers imply a 5.9% dropout rate for girls vs. a 1.5% rate for boys in primary school and an 11.5% vs. 2.9% rate in secondary school. Such rates continued over the six years of primary school yield a 74% completion rate for girls vs. 93% for boys and for six years of secondary school a 48% completion rate for girls vs. 84% for boys. Since girls are in fact less than half the school enrollment, the actual differences must be even larger.

Have economic reforms enlarged the educational difference between girls and boys? An AP dispatch of January 1989 implies so but I have no data to support it. Discrimination against girls in education is not new: the 1982 census found 70% of China's 200 million adult illiterates were female (Davin p. 144). Mosher had only seven girls in an 8th grade class of 33 in 1979 before the family responsibility system had come to his study village; girls in primary school were already heavily burdened by sex-typed family chores, a burden that increased in their teens and led to poor attendance, poor grades, and early drop outs (Mosher, p. 199-200). Croll writes that in the 1980s girls in particular were withdrawn from rural schools to earn income for the household (Croll 1988, p. 94) but her reference is to a report in China Reconstructs 1 March 1979.

A possible source of educational disadvantage attributable to the economic reforms is the increasing use of privately hired tutors to help children gain entrance to "key" middle schools with better facilities and teachers, which in turn enhances the chances of a university place. Mr. Wu (Tianjin) estimated 20% of families use such private coaching. Parental bias against investing in girls suggests that tutoring, and hence access to better education, will be biased against girls.

Regardless of the cause, girls are receiving less education than boys in China today. In a freer market with increased remuneration of human capital, women would be poorly placed. In an effort to decrease dropouts one town instituted the policy that only middle school graduates will be assigned jobs (Mr. Yu. Daouo). But, unless the policy prevents parents from withdrawing girls from school, the result will just worsen economic opportunities for women.

Women not only receive less education, they are also less likely to study in fields that would pay more in a freer labor market. Women were reported to be 41% of all students in secondary education and 33% of all students in higher education in 1987 (China p.793). However, the proportion of women is less in science, engineering, and technology, and in economics and business. Mr. Wang (Beijing) estimated that women were 50% of those in languages and literature, 30% in economics, and only 5% in engineering. The training school operated by Jiangnan Shipyards, Shanghai, had only 25% women students. On the positive side, Professor Wu said the number of women at Jiaotong, a technical
university, is increasing.

Casual estimates of women majoring in the economics and business were
given at 25-30% at Jiaotong and 33% at Qinhua but Professor Xiong at Nankai
put the figure at only 5%. I was told that about 20% of the Jiaotong
economics-business faculty were women, 25% at Wuhan, and 33% at Qinhua. Such
high numbers were not reflected in anything we actually saw: of all the
faculty we met at five universities not a single one was female: of all the
business managers and government officials we met on our visits only three
were women.

Questions concerning the reasons for the lower enrollment of women in
technical fields got the response that women were just not interested in
engineering. But I heard enough discriminatory assumptions about talents to
believe women may receive less encouragement to pursue sciences and may
realistically expect low rewards from degrees in technical fields. Jiaotong
faculty reported that many firms prefer to hire their male graduates, so much
so that the faculty initially excluded women from the foreign trade management
major.

Are any efforts being made to encourage women to enter non-traditional
fields? Ms. Lee (Tianjin) said officially there was supposed to be an effort
to hire women but at the actual hiring level firms and university departments
thought differently. Two graduates of the Beijing Foreign Studies University
cited specific preference given male candidates for admission to language
study ("10 points on the entrance examination"); neither had heard of any
preference given women in any educational or economic area. Jiaotong
professors said admissions to that technical university was strictly on the
basis of examination scores and at Nankai I heard the same with the added
comment that any possible government policies of an affirmative-action type
would not get much enforcement (Xu, Shanghai; Xiong, Tianjin).

C. Discrimination in Hiring, On-the-Job Training, and Promotion.

Sex discrimination in employment was a topic of discussion in the Chinese
press in 1988 and early 1989 but has since been dropped. But discrimination
has not gone away. Discriminatory attitudes were expressed in many
conversations and the effects of discrimination are evident - women are simply
not present in the upper levels of business and government.

Firms looking for university graduates want men (Xu and Geng, Shanghai). Ms. Ke
gave me an example: in 1989 her office had openings for three
translators; after hiring one woman they insisted the other two be men; in
1990 there was only one opening so hired a man. Mr. Qi, a male interpreter in
Wuhan, believes there is some preference for women in hiring translators
"since women have better language ability" which, if true, would be equally a
stereotypical hiring practice. For state enterprises the government sets
hiring quotas, according to the spokesman at the Jiangnan Shipyard, and for
heavy industry such as the shipyard the quota of women is low. Managers of
state enterprises have, since 1986, some discretion in hiring and "only about
5 percent of company heads favored hiring women" (AP dispatch, January 1989
citing a survey of the All-China Federation of Trade Unions).

At all levels men are generally hired first (Wong, Shanghai). In a
recession women face receive the less desirable jobs or no jobs at all (Ke,
In the 1989 retrenchments more women proportionately were laid off or put on short-time (Ke, Beijing; AP Dispatch). In 1990 even Jiaotong graduates had a hard time and 25% had to accept what they were assigned by the state education commission at the province and municipal level (Xu, Shanghai). The better jobs today can mean not only more congenial work and pleasant locations but also the chance for bigger bonuses or salaries with foreign firms. While all college graduates, regardless of field, receive the same base salary, bonuses vary by field. Bonuses can be up to ten times the base salary in foreign firms, three to four times in state firms, and are lowest in government jobs: "So men get the jobs with foreign enterprises," Ms. Ke said.

Firms claim that women employees are more expensive, citing differences in family leave and retirement policies, and that women are less productive because they are burdened with family responsibilities. (Yang and Xu, Shanghai; Qin and Ke, Beijing; Chen, Shanghai; Liao, Beijing). Current regulations require enterprises to provide six months paid leave for new mothers but only 15 days for new fathers (Wong, Shanghai). Women are eligible for retirement benefits paid by the firm five years earlier than men - at 50 compared to 55 for workers (Chen, Shanghai; Yu, Daquo). One justification offered is that it is hard to find work for older women since so many of them are illiterate (Yu, Daquo).

But are these claims of higher costs founded in fact? Maternity costs are hardly significant for one-child mothers. (In urban areas the one-child policy does seem to be working.) The difference in the present value of retirement benefits cannot be large when hiring young workers. The claims of higher costs are based on prejudiced beliefs, not current facts: No studies have been made of the time off and absenteeism of men compared to women, according to a professor of behavioral science in a school of management (Yang, Shanghai). In China, as in the U.S., attention is focussed only on those attributes causing higher costs in women and not on those differences in health and behaviour that cause higher costs in men (see Bergmann, p. 45). Women were working noticeably harder in several of the plants we visited and the reverse was not seen (Malu both plants, Tianjin carpet factory).

Once hired, women face unequal prospects for training and promotion. On-the-job training is even more male-oriented than general education since management decides who gets training. Malu Township has trained some individuals in Japan, but no women; Daquo sent 24 individuals for training at various institutes, but only four women (Wang, Shanghai; Yu, Tianjin). The men at CEMA (China Enterprise Management Association) simply laughed at the thought that women should be trained in management and estimated the number included in their programs at two to five percent.

Promotion in China is related to political attitude and seniority in grade rather than ability (Chen, Shanghai; Qin, Beijing; Haderer, Shanghai), and political attitude is discriminatorily evaluated (Ke, Beijing). Shanghai Foxboro's American manager made of point of saying the firm had recently promoted a lady (sic) but that such promotions had been rare in the past. His administrative assistant-interpreter he considers capable of doing his job, but she is not on that career ladder.

Women in management are said to face greater difficulties than men in the male world of Chinese enterprise (Xu, Shanghai). Certainly few women have made it to the upper levels in business or government offices. In the
management of TEDA, the Tianjin Economic-Technological Development Area, the six top management positions are all held by men, and of the 30 third-level positions only one is held by a woman, an older person who came up through the technical, not the business side (Lee, Tianjin).

One ray of hope: Jiaotong's School of Management initially excluded women from its foreign trade management major because it was presumed women would be disadvantaged as negotiators, but "that proved not to be the case" and women are now admitted (Xu, Shanghai).

D. Occupational Segregation.

Occupational segregation is fundamental to the lower earnings of women in societies with labor markets: restricting women to a few fields increases the supply of labor and lowers wages in those fields; it also allows firms to comply with laws requiring equal pay for the same work while in fact paying women less. Occupational segregation, with or without labor markets, reduces women's chances of being hired or promoted in most fields, creates the perceptions that women are failures in those fields, and so perpetuates existing prejudices.

The visitor to China can readily observe extensive occupational segregation in patterns not unfamiliar in the U.S. Most shop clerks are women, except in electrical and mechanical areas. Hotel and restaurants use waitresses, their supervisors are male. Taxi and truck drivers are male; local bus driving is integrated. Management is male, as is the political leadership of the country. Where women are in leadership roles they are usually in family-related areas such as health care.

Statistics on employment by industry do not reveal the extent of occupational segregation. Firms may be entirely segregated while the industry is not, and firms may hire both men and women but have them do different work. (Some examples from hotels in China: the floor clerks were all male in two hotels, both male and female in one; front desks appeared integrated, bellhops were all male despite the heavy labor Chinese women perform.) An additional complication in Chinese numbers is the inclusion of all the enterprise's activities: the spokesman for Wuhan Iron and Steel Works said 30 percent of the managerial staff was female, but added that most were in the hospital and other welfare units; no women managers were visible in their video of the steel complex. The same was true at the Shanghai Heavy Machinery firm.

In the workshops we visited men and women often were not in the same work area at all, or were doing different tasks. The workers on the Malu stroller assembly line were women while the men were packing up materials. In the mattress factory the men were assembling motors, the women assembling the mattresses; two men in the mattress assembly area were doing specialized tasks. At Parker-Hubei Seals the hand sorting operation was entirely female: some women were operating machines alone but where men and women were together as a team the men were operating the machine and the woman acting as helpers (one told me she knew how to run the machine). Greater integration was observed in some plants, for example, in the assembly area at Foxboro and on the line at the Wuhan Diesel Plant, two plants with the appearance of better management generally.

Of all the people we met at all our briefings - government, university,
and factory—only three women were not secretaries or serving tea. Of these three, one was not introduced to the group (Lee, TEDA, Tianjin) and one was repeatedly interrupted by her colleagues “providing” her with information, thus making this well-informed woman appear unknowledgable and incompetent (Fan, SITCC, Shanghai). The third was Ms. Wang, Foreign Affairs Assistant at Malu Township, Shanghai. Only one of these women was in a line management position; the others were in public relations.

The bases of discrimination and occupational segregation in China appear to include all three of the standard categories: employer discrimination, customer discrimination, and fellow-worker discrimination. The Jiaotong University’s exclusion of women from the foreign trade major is an example of a presumed customer preference. The hotel bellhops is possibly another. But since Chinese firms are still not very consumer-oriented this excuse for discriminatory hiring practices is probably less common than in the U.S.

Discrimination by fellow workers I had no opportunity to observe on the trip but it is evident in Gordon and Hinton’s video series “One Village in China.” Beliefs about appropriate roles are strongly expressed including male beliefs that women should not earn as much as the men do. And husbands should be better educated and have better jobs than their wives—a man receives social pressure from others even if he does not feel that way (Ke, Beijing).

Employer discrimination has been expressed in labor assignments which reflected bureaucrats’ beliefs about appropriate sex roles: “the proper ratio of men to women differs by industry” and so number of women assigned to a state enterprise depended on the type of work the enterprise did (Zhang, Shanghai; Xiao, Beijing). Women are assumed to be “naturally” more patient and careful than men and therefore good at boring, repetitive tasks (San Francisco Chronicle p. a14). No one suggested that past patterns might be the result of socialization and lack of alternatives.

Job assignments still have little effect on earnings in China but from what we saw the market differentials already disadvantage women. When a job paid less it was usually held by a woman: the sorters at Parker-Hubei earned less and were all women; the TVE workers at Beigang earn 51% to 70% as much as those in farming and fishing and are 70% female compared to 40% in the better paying work; the joint venture jobs are more likely to go to men as are managerial positions.

MARKET, PLAN, OR SOMETHING IN BETWEEN?

The ills that women experience in the Chinese economy today, poor jobs and unemployment, are attributed by many to the economic reforms of the last decade. But what alternatives do such people have in mind: a more planned economy or a fully market economy in China as it is, or either in a China without prejudice and patriarchy? In this section I consider a few impacts reforms have had on women so far and speculated about the preferred alternative for the future.

After decades of planners’ priority for heavy industry, the reformers have paid attention to consumer interests, expanding light industry and services. Women are a higher proportion of the labor force in light industry and in most services than in heavy industry so the market-driven growth has
increased relatively the demand for female labor (as well as increasing the
total demand for labor due to the higher employment per unit of investment in
light industries). Many young women (as well as young men) have migrated to
Guangdong and Hainan special economic zones in response job opportunities there
(Xue, Wuhan).

These jobs are important in China's labor-surplus economy. The fact that
they are not "good jobs" by American standards, that the working conditions
remind us more of the 19th and early 20th century than of today, should not
obscure that fact. It is true that the increase in sex-stereotypical jobs
does nothing to reduce such stereotyping, but the alternative to such jobs in
China is more likely to be still higher unemployment of women, not an
integrated society with women sharing "good jobs" equally with men.

Foreign trade has also altered the structure of Chinese industry. To
some extent there is the shift to tourism-related services and light industry
exports which parallels the shift in the domestic market, but some exports,
for example, petroleum, employ few women. One could use an input-output table
and data on the ratio of women employed by industry to estimate the effects
but that is beyond the scope of this piece (see Reynolds).

One other aspect of the openness policy should be noted: the greater
contact with foreigners and foreign ideas may begin to have some impact on the
traditional male chauvinist attitudes of Chinese managers. Of the shops we
visited the two with the most integrated workforces were Wuhan Diesel and
Shanghai-Foxboro, both of which had or had had western managers.

Along with more rapid growth, reforms have introduced cyclical swings in
the level of economic activity. Retrenchment since 1988 has hit particularly
hard the TVEs and collectives, disproportionately employers of women. But the
fact that they are disproportionately employers of women says something both
about the growth of jobs they have provided in the eighties and the
disadvantages of women in the state enterprises.

Meaningful employment is a critical problem for China, particularly with
the current bulge of young adults, and will continue to be so unless China
succeeds in reducing population. There is surplus labor both "waiting for
employment" and hidden in the over-staffed state enterprises. A group which
is discriminated against does particularly badly in a labor-surplus economy so
population control is critical to the economic status of women. (Improving
the economic status of women might relieve some of the pressure to have a son
and thus contribute to solving the population problem.)

A labor market, if introduced in China today, would probably result in
more open unemployment for many men and women (or disguised unemployment in
unwanted relegation to the home) as state enterprises shed their surplus
labor. Even worse for the employment of urban women would be a freeing of the
residence constraints and an inflow of population from the countryside. A
critical concern for women is the form of unemployment protection developed -
one that preserves some economic independence or one that subordinates them,
in the traditional family, to father, husband, and son.

A return to full state control might disguise female unemployment within
state enterprises but in the past the planned economy failed to provide jobs
for women equal to those of men and there is no reason to expect a change in
the future. A prejudiced bureaucracy as the only employer is worse than a competitive market. The development of alternative employment, whether in collectives or private enterprise, should benefit a disadvantage group. Women in China have taken advantage of these openings already, as seen in the numerous female entrepreneurs in free food markets and food vendors.

And worse than either of these alternatives may be the present situation: half a market. Controls on capital and intermediate goods to impede those entrepreneurs willing to hire the underutilized female labor force. Yet managers, with discretion to hire and fire, face no effective profits constraint from government or a competitive market. With hiring discretion in half-a-market they have been given a license to indulge their personal prejudices at no cost to the firm.

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11 15
REFERENCES - BOOKS AND ARTICLES


San Francisco Chronicle August 15, 1990
Introduction

The most populous country, China's challenge to support 22 percent of the world's population squeezed onto just 7 percent of the world's total arable land area is unprecedented. Moreover, at least 60 percent of China's 1.1 billion people still live in rural villages. The performance of China's rural economy, therefore, directly affects the majority of its population and indirectly dominates the country's overall economic growth and development.

China's post-Mao economic system reforms began in the agricultural sector and have been more pervasive there than in other parts of the economy. The nature of these reforms, their impacts on agricultural production and rural economic well-being, and their future course, are of great importance to the country and intense interest to other socialist countries seeking to improve the performance of their lagging agricultural sectors.

For these reasons China's reform of its agricultural policies, with emphasis on land rights and production organization, was selected as one area of study by the 1990 Fulbright Summer Seminar on China's Economic Development. Information for this report was obtained during visits to Chinese universities and central, provincial, township, and village governmental units in July. In addition, Chinese statistical sources and recent studies of China's rural economy were consulted.
China’s Economic and Agricultural Growth

While beginning at a low level, economic growth in the PRC since 1949 has been reasonably rapid. Official statistics on national income in constant prices show growth at an average annual rate of 6.0 percent between 1952 and 1978, or at 4.0 percent per capita. During the decade after the economic reforms begun in 1978, economic growth was spectacular. Official data show real national income rising from 1978 to 1984 at 8.3 percent per year overall and 7.1 percent per capita. It rose even faster between 1984 and 1987: 10.5 percent per year overall, 9.0 percent per capita. This rate was above any other country’s economic growth during those years and more than twice the usual estimates of China’s average per capita income growth from the 1950s to the 1970s.

With its dense population and rapid growth, China’s economy has been transforming itself structurally away from agriculture and toward industry (Table 1). Since 1949 the sectoral share of agriculture in net material product (NMP) has fallen by half (from two-thirds to one-third) while the share of industry has more than tripled to one-half or more. The share of services has remained about the same (although not all services are measured in NMP). China’s share of output from agriculture is now comparable to other large countries at similar levels of per capita income but its share of industry in total output is unusually high.

In terms of employment, in 1965 less than one in five Chinese workers was employed outside agriculture. After a steady decline in agriculture’s share of employment, by 1987 two in five workers had nonfarm jobs leaving 60 percent of the labor force in agriculture.
Table 1. Sectoral composition of net material product, China, 1949 to 1987

<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Industry</th>
<th>Services^a</th>
</tr>
</thead>
<tbody>
<tr>
<td>1949</td>
<td>68</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>1952</td>
<td>58</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>1957</td>
<td>47</td>
<td>28</td>
<td>25</td>
</tr>
<tr>
<td>1972</td>
<td>48</td>
<td>33</td>
<td>19</td>
</tr>
<tr>
<td>1967</td>
<td>47</td>
<td>34</td>
<td>19</td>
</tr>
<tr>
<td>1972</td>
<td>38</td>
<td>44</td>
<td>18</td>
</tr>
<tr>
<td>1978</td>
<td>33</td>
<td>49</td>
<td>18</td>
</tr>
<tr>
<td>1981</td>
<td>38</td>
<td>47</td>
<td>15</td>
</tr>
<tr>
<td>1984</td>
<td>40</td>
<td>45</td>
<td>15</td>
</tr>
<tr>
<td>1987</td>
<td>34</td>
<td>46</td>
<td>20</td>
</tr>
</tbody>
</table>

^aNet material product is not quite the same as gross domestic product in that some services are not included in the former. Also, agriculture includes some industrial production by farm households. The World Bank's estimates of the three sectors' contributions to gross domestic product in 1985 are 33, 47, and 20 percent.

Agriculture in the 1949-78 Period

The PRC government began distributing land to peasants in a reform completed in 1952. It also encouraged voluntary cooperatives and labor mobilization for irrigation improvement, flood control, and land reclamation. The result was a near doubling of agricultural output in the first decade of the PRC, albeit from a low base. This reform also created an unusually equal distribution of income.

By the late 1950s, however, agriculture was seen as a bottleneck to overall growth due to its failure to provide a sufficient surplus to feed the urban population and contribute to foreign exchange earnings. Unprepared to use scarce foreign exchange to import food, the government decided large-scale improvements in rural infrastructure was necessary for faster agricultural growth, and large-scale communes were chosen as the organizational means for mobilizing surplus labor needed for that purpose. In a short period in 1958, some 750,000 cooperatives were merged into 24,000 people's communes involving virtually all of China's 120 million rural households. The average commune consisted of 5,000 households farming 10,000 hectares of land. Participation was compulsory and production was organized collectively, although small private plots were permitted for sideline production for home use.

The effect of the formation of these large, compulsory communes was initially disastrous. Agricultural output fell 14 percent in 1959, a further 13 percent in 1960, and still 2.4 percent more in 1961 (Figure 1). Perhaps as many as 27 million people died from undernutrition and illness during that period. It took until 1965 and a major reallocation of government capital investment to regain the output level of 1958; agricultural output per capita did not rise above its 1958 level until the late 1970s.
Figure 1. INDEXES OF GROSS OUTPUT OF AGRICULTURE, LIGHT INDUSTRY AND HEAVY INDUSTRY, CHINA, 1949 TO 1987

(1952 = 100)

Weather has been the official reason given for the post-collectivization decline in production. Most analysts now attribute it and the subsequent slow growth more to the compulsory collectivization, problems of central planning of agriculture, and the disruptions of the cultural revolution. Incentive problems were addressed by successive shifts in operational emphasis first from communes to smaller brigades and then from brigades to still smaller production teams, but disincentive effects of collective production remained as a major cause of the low growth, low productivity agriculture.

**Agriculture Since 1978**

A major turning point in agricultural policy began in 1978. That was when experiments began (in Sichuan) to replace team management of production with a household contract responsibility system. Nationwide implementation of the household responsibility system took place in the early 1980s.

The major reforms in agriculture that began just over ten years ago have been associated with truly impressive increases in farm output (Figure 1). Beginning in 1979, annual grain output rose from around 300 million metric tons (MMT) to a record 1984 harvest of 407 MMT. After that, production fluctuated around 400 MMT until 1989 when it reached 407.5 MMT, slightly surpassing the 1984 harvest. Output of early grain was high in 1990 and summer prospects were reported as favorable, creating expectations for another yearly record harvest.

The total area of cultivated land has not expanded over time and is highly unlikely to do so in the future. Rather, conversion to urban uses has been gradually reducing the available acreage. Land reclamation projects have only been able to slow the decline in arable area.
This is not to say that areas of individual crops cannot be changed, but rather that allocating more land to one crop necessarily reduces the area available for other crops. The recent period in which relative prices for different crops have varied significantly shows that farmers do adjust their cropping pattern (Table 2). For example, an increase and then decrease in the relative price of cotton caused its area to increase by 50 percent between 1979 and 1984 and then retreat to its 1979 level two years later. Also, increases in relative prices of fruits and vegetables in the 1980s have led to a doubling of the area planted to these high-value products.

What is the relationship between the agricultural reforms and the sharp increases in production since 1978 displayed in Figure 1? It is useful to consider some of the particulars in attempting to answer this question.

1. The household contract responsibility system.

Land was leased to individual households, which contracted to deliver specified quantities of grain or other basic foods to the state at low fixed prices. Additional production could be sold to the state at higher above-quota prices or in free markets at going prices. After this system was widely (but not universally) applied, the effect was to create more than 100 million small farm units of an average size of less than 2 hectares.

Widespread use of lotteries to assign parcels to households has been reported, usually taking account of differences in land quality. In the visits we made, equal areas had been assigned to each adult rather than equal areas per household. This approach minimizes inequality of land holdings per person but introduces more inequality in holdings per household. At first leases were signed for only a few years. The lease period has now been extended to 15 years, and 20-year leases have also been reported.
<table>
<thead>
<tr>
<th>Year</th>
<th>Rice</th>
<th>Wheat</th>
<th>Corn</th>
<th>Other oil</th>
<th>Other</th>
<th>Crops</th>
<th>Sugar</th>
<th>Tubers</th>
<th>Vegetables</th>
<th>Fruits</th>
<th>Crops Total</th>
</tr>
</thead>
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<tr>
<td>1952</td>
<td>426</td>
<td>372</td>
<td>188</td>
<td>986 (47)</td>
<td>175</td>
<td>86</td>
<td>84</td>
<td>3</td>
<td>130</td>
<td>na</td>
<td>2,119</td>
</tr>
<tr>
<td>1957</td>
<td>484</td>
<td>413</td>
<td>224</td>
<td>1,121 (48)</td>
<td>191</td>
<td>104</td>
<td>87</td>
<td>6</td>
<td>157</td>
<td>na</td>
<td>2,359</td>
</tr>
<tr>
<td>1965</td>
<td>447</td>
<td>371</td>
<td>235</td>
<td>1,053 (49)</td>
<td>129</td>
<td>78</td>
<td>75</td>
<td>8</td>
<td>167</td>
<td>na</td>
<td>2,149</td>
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<tr>
<td>1970</td>
<td>485</td>
<td>382</td>
<td>237</td>
<td>1,104 (51)</td>
<td>120</td>
<td>68</td>
<td>75</td>
<td>9</td>
<td>161</td>
<td>na</td>
<td>2,152</td>
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<td>1978</td>
<td>516</td>
<td>438</td>
<td>299</td>
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<td>107</td>
<td>92</td>
<td>73</td>
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<td>56</td>
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<tr>
<td>1979</td>
<td>508</td>
<td>440</td>
<td>302</td>
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<td>109</td>
<td>106</td>
<td>68</td>
<td>14</td>
<td>164</td>
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<td>2,227</td>
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<tr>
<td>1980</td>
<td>508</td>
<td>438</td>
<td>306</td>
<td>1,220 (56)</td>
<td>109</td>
<td>119</td>
<td>74</td>
<td>15</td>
<td>152</td>
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<td>2,196</td>
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<tr>
<td>1981</td>
<td>499</td>
<td>425</td>
<td>291</td>
<td>1,215 (56)</td>
<td>120</td>
<td>137</td>
<td>78</td>
<td>15</td>
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<td>2,177</td>
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<tr>
<td>1982</td>
<td>496</td>
<td>419</td>
<td>278</td>
<td>1,193 (55)</td>
<td>126</td>
<td>140</td>
<td>87</td>
<td>17</td>
<td>141</td>
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<td>2,171</td>
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<td>1983</td>
<td>497</td>
<td>436</td>
<td>282</td>
<td>1,215 (56)</td>
<td>114</td>
<td>126</td>
<td>91</td>
<td>18</td>
<td>141</td>
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<td>2,160</td>
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<tr>
<td>1984</td>
<td>498</td>
<td>444</td>
<td>278</td>
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<td>1986</td>
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<td>444</td>
<td>287</td>
<td>1,215 (56)</td>
<td>124</td>
<td>171</td>
<td>65</td>
<td>22</td>
<td>130</td>
<td>80</td>
<td>2,163</td>
</tr>
<tr>
<td>1987</td>
<td>483</td>
<td>432</td>
<td>303</td>
<td>1,218 (56)</td>
<td>127</td>
<td>168</td>
<td>73</td>
<td>20</td>
<td>133</td>
<td>84</td>
<td>2,174</td>
</tr>
</tbody>
</table>

* Percentage share of rice, wheat and corn in the total crop area is shown in parentheses.

The contract responsibility system gave farm households more autonomy and higher incentives, thus rewarding those who produced more. Greater production autonomy in the presence of higher prices and free markets offered enormous scope for expanding output and productivity from limited land resources. The resulting incentives have been an important factor in recent agricultural growth, but one that is difficult to quantify and certainly not the only one.

(2) Fixed prices and free markets

After 1979, fixed state purchasing prices for basic grains and other products were raised. At the same time, farmers were paid even higher prices for above-quota quantities delivered to the state and were free to sell non-quota products at market prices, which rose rapidly for high-value fruits and vegetables. This system taxed the contracted quantities but created higher price incentives at the margin for above-quota output. Since prices of important farm inputs, such as irrigation water and fertilizer, remained subsidized and stable, increased output was associated with rapidly rising net farm income. Rural households responded with a surge of consumption of consumer durables and a wave of new housing construction, which transformed living standards in villages located in well-endowed production areas.

Our visits to free markets in several large cities raised some questions about how "free" these markets really are. Municipal authorities regularly monitor prices and post maximum prices daily in the markets. They also vigorously intervene to increase supplies when shortages cause prices to rise. This active intervention intensified as part of the anti-inflation campaign begun in 1988. Programs to increase fruit and vegetable production and improve distribution in the foodsheds of large cities have also been
implemented, sometimes resulting in seasonal surpluses and low prices for some of the products.

Basic foods for urban residents remain highly subsidized and rationed through state stores. Costs of these subsidies to the government rose rapidly in the 1980s as farm prices were increased more than urban prices, and remain a major item in the national budget.

The evolution of the domestic terms-of-trade between agriculture and industry could not be completely assessed from the information our group obtained. Some informants claimed the difference between prices of farm and industrial products has grown smaller. Others argued that domestic agricultural prices are still well below international equivalents, and that relative prices still favor industry over agriculture.

The policy implication of the latter view is that domestic agricultural prices could be raised to encourage more production and less consumption, and thereby possibly reverse the downward trend in China’s agricultural self-sufficiency. Since rising food prices in urban areas are extremely sensitive politically and contrary to the current inflation-control program, this option is difficult for the government to implement.

(3) Increased inputs and improved technology

With improved price incentives and greater production autonomy, the usage of chemical fertilizer has grown rapidly. This increase, in conjunction with improved crop varieties, has helped boost farm output.

(4) Infrastructure investment

Public agricultural investment in earlier periods, notably in irrigation and drainage, created capability for the takeoff in agricultural production in the 1980s. Paradoxically, and partly as a result of the high agricultural
growth rate, government investment was shifted to other sectors. At the same
time the organizational means for mobilizing group labor for collective work
projects was weakened by the household responsibility system. Furthermore,
private household investment in agriculture has failed to materialize at
expected levels, at least in part because households do not legally own the
land and were uncertain about the continuation of the lease system. These
factors were often suggested to our group as basic reasons for the sluggish
growth in agriculture in recent years.

(5) Township/village industry and rural labor

While all categories of farm output grew more rapidly in the early 1980s
than in the 1970s, the fastest increases were in cash (nongrain) crops and
livestock products (Table 3). But beginning in the early 1980s, industrial
production in villages began to dominate rural growth, contributing almost 60
percent of the increase during 1982-86 in what Chinese statistics define as
the "gross value of agricultural output." It appears that much of the
increase in household income flowed into investment in rural industry as well
as housing and durable goods. This rapid growth in village industry has
created jobs for one in four rural residents in some 17 million small-scale
workshops. Current anti-inflation policies that have reduced credit
availability and raised interest rates have adversely affected these rural
small-scale enterprises. Reductions in output and employment, and even plant
closures, have been reported.

(6) Urban and rural income levels and poverty

Available data permit comparisons of real per capita income levels of
urban and rural residents over the course of the reform period. As the
reforms got underway in the rural areas, average rural income per capita was
Table 3
Composition of agricultural\textsuperscript{a} output growth, China, 1971 to 1986
Based on 1980 constant prices

\begin{tabular}{lrrr}
 & 1971-78 & 1980-82 & 1982-86 \\
\hline
A. Output growth rate (\% p.a.) & & & \\
Crops & 0.7 & 5.6 & 4.2 \\
Grain & (2.9) & (3.9) & (2.5) \\
Non grain & (2.1) & (13.2) & (9.4) \\
Livestock products & 2.6 & 10.1 & 10.1 \\
Subsidiary output & 17.9 & 13.7 & 40.0 \\
Village industry & (23.5) & (14.8) & (43.1) \\
Total & 4.3 & 7.5 & 13.0 \\
\hline
B. Contribution to total output growth (\%) & & & \\
Crops & 46 & 49 & 18 \\
Grain & (40) & (27) & (8) \\
Non grain & (6) & (22) & (10) \\
Livestock products & 9 & 20 & 12 \\
Subsidiary output & 34 & 25 & 66 \\
Village industry & (27) & (20) & (59) \\
Forestry and fisheries & 11 & 6 & 4 \\
Total & 100 & 100 & 100 \\
\hline
\end{tabular}

\textsuperscript{a}The Chinese definition of agricultural output includes non-agricultural activities of farm families.

Source: Perkins (1988, table 1), based on State Statistical Bureau data.
about half of the income per person of urban persons (Tables 4 and 5). During the 1980s, real rural income per person rose absolutely and also relative to real average per capita urban income. By 1988, in real terms rural residents on the average received incomes 60 percent as large as those of urban residents. It appears, however, that most of these gains occurred before 1985, which is consistent with the lower growth in agricultural output that set in that year. Real income gains for urban residents were largest in 1984 and 1986, and have been very modest in recent years of rising inflation.

Our informants indicated that rural households now rely heavily on village industries, sideline production, and transportation services to increase their income. Widening income differences are reported between different households and different localities.

Official statistics for 1989 show that the number of rural residents below the government poverty line of 200 yuan had fallen to 40 million from 110 million in 1985. China’s rural population now totals more than 600 million, against an urban population of something less than 500 million. Most of the rural poverty is said to be confined to more disadvantaged and underdeveloped areas. The relative status of these areas is recognized to have declined recently since they have not participated fully in the agricultural and industrial growth of the better endowed rural areas.

Prospective Agricultural Growth and Policies

Future agricultural policies are the subject of a continuing debate in China. A major government concern is how to stimulate renewed growth in agricultural production and reverse the country’s falling self-sufficiency in food and fiber products (Table 6). Even though the country remains largely
Table 4
Real Income of Urban Residents (per capita)

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Income (RMB)</th>
<th>Price Index</th>
<th>Annual Real Income</th>
<th>Income Change 1981 = 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>458.04</td>
<td>1.180</td>
<td>388.21</td>
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<tr>
<td>1982</td>
<td>494.52</td>
<td>1.203</td>
<td>410.91</td>
<td>106</td>
</tr>
<tr>
<td>1983</td>
<td>525.96</td>
<td>1.228</td>
<td>428.46</td>
<td>110</td>
</tr>
<tr>
<td>1984</td>
<td>607.56</td>
<td>1.261</td>
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<td>1985</td>
<td>685.32</td>
<td>1.411</td>
<td>485.80</td>
<td>125</td>
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<tr>
<td>1986</td>
<td>827.88</td>
<td>1.509</td>
<td>548.46</td>
<td>141</td>
</tr>
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<td>1987</td>
<td>915.96</td>
<td>1.642</td>
<td>557.73</td>
<td>144</td>
</tr>
<tr>
<td>1988</td>
<td>1,119.36</td>
<td>1.982</td>
<td>546.69</td>
<td>146</td>
</tr>
</tbody>
</table>

Source: Statistical Yearbook of China, various issues.
Note: The deflator is the living expenditure price index for urban residents.

Table 5
Real Net Income of Rural Residents (per capita)

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Income (RMB)</th>
<th>Price Index</th>
<th>Annual Real Income</th>
<th>Income Change 1978 = 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>133.57</td>
<td>0.972</td>
<td>137.41</td>
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<td>1979</td>
<td>160.17</td>
<td>0.992</td>
<td>161.54</td>
<td>118</td>
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<td>1980</td>
<td>191.33</td>
<td>1.035</td>
<td>184.83</td>
<td>135</td>
</tr>
<tr>
<td>1981</td>
<td>223.44</td>
<td>1.057</td>
<td>211.41</td>
<td>154</td>
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<td>1982</td>
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<td>1988</td>
<td>544.94</td>
<td>1.567</td>
<td>347.79</td>
<td>253</td>
</tr>
</tbody>
</table>

Source: Statistical Yearbook of China, various issues.
Note: The deflator is the retail price index for rural area.
self-sufficient in food staples and cotton, the direction of change is towards
more import dependence.

**Future of the Household contract Responsibility System**

This system has been extended nationwide; its adoption is widespread but
not universal. In three township/village visits, our group saw no example in
which individual production by households was practiced. Moreover, we
observed teams working in vegetable fields around Shanghai rather than
individual household operations.

In one township, a former commune, land has been divided according to
the number of adults in each household. But basic production operations (land
preparation, planting, harvesting) are carried out by specialized households
using tractors and machinery. Other households do weeding and crop care part-
time and receive their grain consumption allotments from the output of their
plots. The working members of these households all hold jobs in rural
industries operated by the townships.

On another rural visit, we saw a village in which the land had not been
divided and production is carried out by specialized contract workers. In
1978, 1200 farm workers in this village produced 1.2 million kg of grain. By
1989, only 19 workers using machinery produced 2.5 million kg of grain and
also sold some machinery services to adjacent villages. Agricultural
production is handled as another enterprise managed by the village company,
which also runs several large and successful village industries. All of the
remainder of the 1600 workers in the village are employed in these nonfarm
enterprises.

In a third village, a former brigade, production is handled by groups,
### Table 6
Self sufficiency\(^a\) in agricultural products, China, 1961 to 1986

<table>
<thead>
<tr>
<th></th>
<th>Coarse Grain</th>
<th>Rice</th>
<th>Beef and Sheep</th>
<th>Pork and Poultry</th>
<th>Dairy Products</th>
<th>Sugar</th>
<th>Sub-Totals(^b)</th>
<th>Cotton</th>
<th>Wool</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961-64</td>
<td>80</td>
<td>97</td>
<td>104</td>
<td>100</td>
<td>101</td>
<td>100</td>
<td>48</td>
<td>98</td>
<td>92</td>
</tr>
<tr>
<td>1965-69</td>
<td>86</td>
<td>101</td>
<td>103</td>
<td>101</td>
<td>102</td>
<td>100</td>
<td>78</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>1970-74</td>
<td>93</td>
<td>104</td>
<td>105</td>
<td>101</td>
<td>102</td>
<td>100</td>
<td>96</td>
<td>102</td>
<td>98</td>
</tr>
<tr>
<td>1975-79</td>
<td>96</td>
<td>103</td>
<td>104</td>
<td>101</td>
<td>101</td>
<td>99</td>
<td>72</td>
<td>101</td>
<td>93</td>
</tr>
<tr>
<td>1980-84</td>
<td>86</td>
<td>100</td>
<td>101</td>
<td>103</td>
<td>101</td>
<td>99</td>
<td>76</td>
<td>98</td>
<td>111(^c)</td>
</tr>
<tr>
<td>1985-86</td>
<td>87</td>
<td>96</td>
<td>100</td>
<td>104</td>
<td>101</td>
<td>98</td>
<td>80</td>
<td>96</td>
<td>88(^c)</td>
</tr>
</tbody>
</table>

\(^a\) Production as a percentage of apparent consumption (production plus imports minus the change in stocks).

\(^b\) Weighed average based on domestic production of the food products shown valued in 1980-81 border prices.

\(^c\) The changes in cotton stocks in the 1980s were substantial; on average for the 1980-86 period China was just over 100 percent self sufficient in cotton.

similar to production teams. The "land" in this village turned out to be mostly fish farms, which are technically indivisible. The small amount of crop land is leased to households whose members privately produce and market vegetables in the nearby city. The village depends on subsidized grain for its basic food supply.

Counter to these observations, central authorities claim that nationwide 98 percent of land has been leased to households. Moreover, we were advised that the government now feels it would be desirable to regroup some of the smaller household plots into larger production units. This is said to be necessary for mechanization, which is becoming more economic where large numbers of agricultural workers have been absorbed in rural industries. It can also better provide for efficient water management and group labor for land improvement. Some production practices (e.g., pest and disease control) can be more effective when undertaken uniformly on an area basis. Experiments along this line have been carried out in villages located north of Beijing. Transfers of leases between households have been reported, especially where labor absorption in township and village industries has been most rapid, but no uniform national policy on transfers has been established.

Peasants are said to oppose the new policy direction in favor of group production. They apparently see it as a threat to their private access to land. On the other hand, lack of legal land ownership and uncertainty over the duration of leases have limited private investment in agriculture. How to encourage long-term investment and reconcile incentives from individual production with economies of coordinated larger-scale operations by groups is yet to be determined.
Public Investment in Agriculture

Government investment in agriculture will increase. The level announced for 1990 is an historical record high for state agricultural investment. It is uncertain how much this investment will actually expand total agricultural production capacity rather than just offset some of the loss of agricultural land and reduce growing environmental damage in the countryside.

Domestic Prices for Agricultural Products

As noted earlier, prices could be raised to encourage more domestic production and less domestic consumption. But while consumer prices remain low, the government cannot raise producer prices without increasing its budget outlays to subsidize the difference between producer and consumer prices. However, the government could reduce its quotas for low-price deliveries and raise the shares of their consumption urban buyers must purchase in free markets. The effect of this policy shift would be to raise weighted prices both to producers and consumers without the government having to announce higher prices, which might possibly reduce political resistance to the policy change. With a substantial decentralization of agricultural decision-making at the margin, farmers have demonstrated a considerable degree of price-responsiveness, thus creating the opportunity for a larger role for price policy in guiding resource use in agriculture.

Agricultural Technology and Support Services

In common with many other land-scarce countries, it is clear that future agricultural growth in China will depend almost entirely on increasing yields and yearly output per hectare. This intensification will require an improved
agricultural research system to provide new varieties and management practices. More inputs and irrigation infrastructure to expand the harvested area by multiple cropping are also needed. Effective systems for extending knowledge to farmers and supplying inputs and credit on a timely basis at reasonable cost must be developed. Agricultural marketing facilities and organizational arrangements are at present inadequate to handle increasing volumes of commodities, requiring improvements in processing, storage, handling, and distribution. The state retains full responsibility for generating and disseminating technology and providing all the needed support services. The allocations of public spending and effectiveness of the institutional framework for these purposes will be crucial in determining the growth of agricultural production during the next decade and into the next century.
References


REPORT

CHINA: ECONOMIC REFORM AND SOCIAL WELFARE

I. INTRODUCTION

A basic reason for the economic reforms was the government's concern about efficiency, and it appears that the reforms were successful in this regard in that there has been a significant increase in productivity in the 1980's. However, with incentives, more decentralized decision making and the increasing use of markets to allocate resources, there is a concern about the social welfare of the poorer segment of society. The government is moving away from the traditional concept that it will take care of everything for the people. Now, people not employed in the State sector need to be concerned about medical care, pension, housing, the risk of being without employment, etc. The purpose of this report is to investigate the effects of the economic reforms in China on the social welfare of the people, particularly the poorer segment of the society. While some of the information is obtained from secondary sources, most of the information comes from interviews with government and university economists, municipal and provincial officials and managers and administrators in joint ventures, State organizations, village and township enterprises and private operations, primarily in the Shanghai, Wuhan, Tianjin and Beijing areas. The information obtained from the interviews is anecdotal. No attempt is made to develop statistically significant conclusions.

II. CHANGES SINCE THE REFORM INFLUENCING INCOME INEQUALITY

The economic reforms which started in the late 1970's and continued throughout the eighties resulted in decentralized decision making so that many of the important economic decisions were made at the province level and even at the municipal and village levels. The reforms also encouraged greater flexibility, the use of incentives to foster increased productivity and the use of market prices to allocate resources, particularly in rural areas. It is assumed that these forces reduced income inequality between the urban and rural sectors and increased income inequality within the sectors. In this section we look at how the reforms affected incomes and income inequality.

A. JOINT VENTURES

China has been encouraging joint ventures between Chinese operations (State companies or collectives) and foreign firms and governments for the purpose of attracting external capital, foreign exchange and effecting technological transfer. To make the opportunity appealing to foreign investors, the laws have been
relaxed, and the joint ventures are normally permitted to pay wages up to 30% higher than the State firms and to allow workers to transfer to joint ventures even if the original work unit does not agree with the transfer. Our visits to joint ventures confirmed, without exception, the higher income. Tong Xuan-Ming, the Director of Tianjin Telecommunications Association, informed us that this high-tech joint venture paid their 65 employees from 220 to 660 yuan per month based on their productivity. This compares with an average income of approximately $40, or 190 yuan, per month. (4.7 yuan = 1 U.S. dollar) Edward Haderer, Director of Shanghai-Foxboro Company, LTD, confirmed the 30% differential between joint ventures and State organizations.

B. VILLAGE AND TOWNSHIP ENTERPRISES

The unparalleled increase in GNP in China is due primarily to the establishment of township and village enterprises, which have grown at a rate in excess of 15% per year since 1980, primarily in the rural areas. These businesses are rural collectives which theoretically are owned and operated by the workers at the village or township level, if not at the enterprise level. Although they are regulated by the State, their organizations and operations vary widely from location to location. In 1989 there were 18.7 million of these enterprises across the country which employed 93.7 million people and accounted for 24.3% of the nation's GNP. These organizations have enabled many peasants to increase their income dramatically and reduce the gap between rural and urban per capita income. On the other hand, the increased flexibility and incentives permitted by the reforms have resulted in some relatively high incomes and have increased the income inequality within the rural areas. An example of a loosely organized but very successful enterprise is the Wuxian Embroidery Factory in Suzhou, in Jiangsu Province, near Shanghai. When the Fulbright team visited Suzhou, we expected to see many beautiful gardens for which the oldest continuously inhabited town in China is famous. The gardens certainly lived up to their reputation, but what we didn't expect was a thriving, bustling city. The Wuxian factory takes advantage of the tens of thousands of Suzhou women, who have a justly deserved reputation for embroidery skill, by allowing them to take the material, usually silk, and the designs, sign a contract and do the work at home or provide space for the girls to work in. Many of the embroiderers, mostly young women, earn 300 Yuan a month, which is significantly more than the average government employees receive. Unfortunately, however, some of them decide to drop out of school because of this opportunity to make such a high income. Last year the Wuxian Embroidery Factory exported 65 million yuan ($14 million) and realized a net profit of 5.4 million yuan ($1.15 million).

Other more tightly organized and controlled village and
township enterprises also have provided opportunities for farmers to increase their income substantially since the reform. On July 4, we had the opportunity to visit Malu Township in the Northwestern Suburb of Shanghai and hear Ms WANG AI-LING, Foreign Affairs Assistant, describe the changes in this very successful township during the past 10 years. The agriculture sector has become considerably more efficient with the addition of 135 tractors and 75 combines. Sideline production has enabled the township to provide large quantities of grapes, fruit, fish, mushrooms & vegetables for the free markets in the city. However, the most dramatic change involved the growth of an industrial sector in the township. There are currently 124 enterprises, including Shanghai Sanhe, a medical instrument factory which is a joint venture with the Japanese, and other firms producing gourmet powder (MSG), textiles, candles and toys. One enterprise alone, the Red Flower Baby Carriage, employs 650 workers and generates 42 million yuan revenue. By 1989, the industrial sector accounted for 93% of the value added, and the value of fixed assets increased from 18.5 million yuan in 1978 to 310 million yuan in 1989. Everyone in the township benefited. The average income of the farmers increased from 369 yuan/year ($78.34) to 2336 yuan/year ($495.96). One hundred percent of the households had running water, a medical plan was provided and the elderly people received a welfare benefit of 400 yuan/yr. Because of the incentive plans there was considerable variation in income. In the Baby Carriage firm alone, where the pay was based on piece work, the average worker earned 2,500 yuan/yr, while the manager’s income was 3,800 yuan/yr and the most productive woman earned 4,000 yuan/yr. On the other hand, the average joint venture worker received 4,140 yuan/yr.

A visit to Beigang Cun, a village on the outskirts of Wuhan, provided an example of a cooperative that took advantage of the reform changes but continued to focus primarily on production in the agriculture sector. This village consists of 1,055 people, 610 workers & 250 households, with 1,800 mu of cultivated land (1 hectare = 15 mu). Products are primarily vegetables, fish (36 contract units) and the output of three village enterprises (plastics, hardware, chemicals). Each person receives 1 mu of land plus 1/10 of a mu of land for sideline production. All of the land is used for vegetable production which is sold to the free market. The gross output of the village has increased over ten times from 1979 to a total of 5.95 million Yuan in 1989. The average income increased from 831 yuan/yr in 1979 to 2,909 yuan/yr in 1989, with the workers in the fish ponds making the most and the workers in industry receiving the least. The village leadership provides extensive services and tightly controls the operations. Nine people are elected to the Village Committee (3 year terms) and make the basic decisions regarding where the people work (industry, agriculture or fishing). Health insurance is provided which covers 100% of all the students’ expenses and 60% of the medical treatment for adults. Each person pays 100 yuan rent per year to the village for the land.

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The most remarkable transformation involved the DaQuo Village, in the suburbs of Tianjin, which, according to the village leader, went from the poorest village in the county in 1978 to one of the richest villages in the country by 1989. We met with the village leader, Yu Shao Tong, who provided us with the following summary of the spectacular changes which occurred in this village:

### ECONOMIC

<table>
<thead>
<tr>
<th>1978</th>
<th>1989</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Output</td>
<td>400,000Y/yr (11,000Y/yr)</td>
</tr>
</tbody>
</table>

### AGROULTURAL PRODUCTION

<table>
<thead>
<tr>
<th>1978</th>
<th>1989</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain Output</td>
<td>1.2 million kg</td>
</tr>
<tr>
<td>Labor Force</td>
<td>1,200</td>
</tr>
</tbody>
</table>

### LIVING STANDARDS

<table>
<thead>
<tr>
<th>1978</th>
<th>1989</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>Small clay houses</td>
</tr>
<tr>
<td>Money</td>
<td>Usually barter</td>
</tr>
<tr>
<td>Elect Appliances</td>
<td>None - no radio</td>
</tr>
<tr>
<td>Total Savings</td>
<td>None</td>
</tr>
<tr>
<td>Retirement benefits</td>
<td>Most people</td>
</tr>
<tr>
<td>Education</td>
<td>Illiterate - did not attend school</td>
</tr>
</tbody>
</table>

The spark which led to this unique success story was the first enterprise, which, with an initial investment of 120,000 yuan (30,000 savings from the collective, 50,000 from the bank and contributions from the workers over a 3 month period), and a manager who had an excellent grasp of the business and the technical aspects of the production of rollers for the mining industry, was so successful that it provided the investment for other factories. The success continued, and there are now 164 factories producing primarily electrical machinery, printing machinery and iron and steel products. No plots are available for sideline production. The production of vegetables and fish farms is done collectively. Because of the manufacturing activity, over 4,000 people from other areas are temporarily working in the village which has a population of slightly less than 4,000 and 1,100 households. The villagers are averaging 300 to 400 yuan/month with the most productive worker making 900 yuan/month. Large homes, enclosed by a wall, that look like they belong in a wealthy Dallas suburb, are being built for the village leaders and managers of the large factories.

While it is likely that the Fulbright Committee was directed to some of the most successful township and village enterprises, there is no doubt that the changes resulting from the reforms (e.g.}
the sideline production, incentive pay, the freedom to sell vegetables, fruit, fish, etc to the free market at higher prices, the opportunity to invest resources in industrial enterprises) have helped to reduce the gap between urban and rural incomes and have made a number of peasants very wealthy by Chinese standards.

C. STATE ORGANIZATIONS

Because of incentive pay, compensation in state organizations also appears to have increase significantly since the reform, although the range of income within most state organizations is probably less than the joint venture and village enterprises. The Wuhan Diesel Engine Works, a large State-owned organization with a capacity for manufacturing 60,000 engines per year, and a major exporter, primarily to companies in South East Asia, has done well during the past ten years. They have a floating wage system where the wage is related to profits, and this system has resulted in income of 30 yuan per month more than the governments fixed wage system. Other benefits have also improved e.g. the average living space per worker has increased from 4 square meters to 6 square meters. Another example is the Wuhan Iron & Steel Corporation, one of the largest companies in China, with 120,000 workers, 2 hospitals, 3 technical schools, a primary and secondary school and housing for the workers. Wages have increased 4.5%/year for the past ten years and the current average income is 2,900 yuan/year, which includes the bonus and subsidy. They also have a floating wage system where the wage is related to profit. The workers receive free medical treatment, and family members have 50% of their medical expenses covered. Housing has improved and is relatively inexpensive e.g. a worker with 40 sq. meters pays 3 yuan/month.

D. MIGRATION

During the past ten years, because of greater opportunities, higher wages, lower taxes and greater job mobility in the coastal areas, approximately 2.5 million people have migrated to the coast from the rural areas around Wuhan, in Hubei Province. Before reform, long term migration was extremely difficult. Professor Lee at Wuhan University, whose discipline is population trends and demographics, estimated that usually approval from about ten different authorities was required before reform. Permission from the work unit was essential to move, housing had to be assigned in the new area and stamps were required for food purchases. After reform, moving about was not a significant problem as long as money was available to purchase food and pay rent. The most attractive coastal area for migration has been Guangdong Province in the South, near Hong Kong. This province, which has been growing rapidly, has benefited substantially from the reforms because of many resources from the Central Government and significant foreign capital primarily as the result of joint ventures. A recent example of the migration occurred in 1989 when approximately 200,000 people
moved from inland areas to Hainan Island in the most southern extreme of Guangdong Province because of relatively high pay and the numerous job opportunities in light industries. Li Yueguo, on the State Commission of Economic Structural Reform in Beijing, confirmed that there are no significant restrictions to move to the coastal areas.

The vast majority of the migrants during the eighties have been young people, and many have been women. The marginal cost to the rural areas in the inland provinces would be close to zero, as was evidenced by the fact that agriculture production increased substantially during the past ten years even though approximately one seventh of the people in the rural areas in China shifted to producing goods in township and village enterprises. Prior to the reform, because of more rigid central government controls, people would not have been able to take advantage of opportunities to improve their income.

As in other developing countries, because of better work opportunities and superior education and medical services, there is also significant migration from the rural to the urban areas in China. Prior to 1990, 4.8 million people a year from the countryside were allowed to move their household registrations to urban areas. Part of the reason for this change is that workers have been given more freedom to find their own jobs. Labor markets have been established in a number of cities to help in recruitment and placement. In Tianjin, many people migrate to the city for babysitting/house cleaning positions and construction work. They come as individuals or in groups, normally for a short term, but then the migrants tend to stay year after year. (Apparently official permanent migration is still difficult.) The demand for "baby-sitters" in Tianjin has increased as is evidenced by the compensation, which has risen from 25 yuan to 40 yuan, and currently to 60 yuan/month, plus free housing, food and clothing. Medical services are available for a fee. Dr. Jiahe Zhao, of Tsinghua University, estimated that during this past year, millions of rural people have moved to the large cities, looking for temporary work. Considerable social problems are caused by this urban migration.

E. PRIVATE ENTERPRISES

(1) FREE MARKETS

The free market, or the open market system, which has grown steadily since the beginning of the reforms in the late 1970's, and particularly during the last half of the 1980's, provides opportunities for people to make incomes considerably higher than the average per capita GNP. These markets consist of a group of entrepreneurs selling primarily vegetables and fruits, but also meats, fish, clothing, pastry and rolls, furniture, live chickens, crickets, toys, food (i.e. restaurants) etc. on many of the
secondary streets of the villages, towns and cities throughout China. Each business seems to handle a limited number of products. In Shanghai, there are four to six free markets in each of 12 Districts, with each market covering an area of one to three blocks. In Tianjin, over 100 free market areas were estimated. There are also State Stores which sell the same products throughout the city, plus some rationed goods which are not available in the free markets. These government stores, which were the only stores that existed in the neighborhoods prior to the reforms, are normally inside buildings, while the free market stalls are on the sidewalks or in the streets.

Actually the markets are not entirely free, in that they come under the supervision of a government agency (in Shanghai, this agency is called the "Industrial and Business Administration Bureau") which controls the licensing of the entrepreneurs, checks the cleanliness and sanitation of the areas and provides marketing advice such as the best locations and the most attractive arrangement of the product in the stalls. An important function of the Bureau is also to check on whether the entrepreneurs have licenses - it is not uncommon for people to set up an operation without going through the formality of obtaining a license. Small temporary illegal operations were common in Tianjin and, I suspect in most other large urban areas. In some cities the prices of the free market goods are controlled. For example, in Shanghai, the city Government sets the prices, or a range of prices, for many of the products, and 'price guidelines' are often provided for the consumer on television. In Tianjin, the price ranges are also occasionally noted on TV. However, it is clear that the trend is in the direction of less restrictions and more flexibility for the open market, because China has made such great progress in the production of vegetables and non-staple food over the past years. Currently Guangzhou, Chengdu, Chongqing, Shenyang, Wuhan and Tangshan provinces often sell non-staple foods at market prices, and the number will probably increase in the future. There is a larger variety of fresh vegetables now, and there is less of a gap in the supply of vegetables between the peak periods and the off seasons. At a conference of mayors from 68 large and medium sized cities in Beijing in July 1990, the State Council announced that a greater variety of non-staple food would be put on the open market at flexible prices during the next five years."

Because the prices in the free markets are usually higher than the prices in the State Stores, the highest quality products are available on the free market. Even where prices are controlled the system is very sensitive to consumer demand, in that new stalls will appear, and the markets will expand in response to consumer needs. If the products are not popular or are not needed, the inventories will increase, and the entrepreneur will quickly shift to other items. Most consumers purchase perishable goods like vegetables and fruits from the open market because of the greater freshness, higher quality, the larger variety and the greater availability of goods - which reflects high demand sensitivity of
these markets. On the other hand, non-perishable goods, like clothing, are purchased primarily from State stores.

The distribution system for getting the vegetables to the free market is interesting in that it often involves the extended family, with the rural component producing the vegetables on their private plots, another member transporting the goods to the city and the urban relatives selling the product in the city. The farmers can grow whatever kinds of vegetables they wish on their private plots for the free market as long as they fulfill the State quota of "basic vegetables."

Success in these ventures involves hard work, but the rewards are substantial, particularly for people living in less developed countries. Usually these business people must obtain their products and set up the stands before 6:00 a.m., and they will work more or less continuously until 5:00 or 6:00 p.m. - often the clothing stalls and fruit stands are busy until 8 or 9 in the evening - and many of them work seven days a week!! The summers on the streets are hot, and the winter days can be quite cold in the northern provinces. However, a large number of these entrepreneurs will earn ten times the average per capita income of $350/year. The high income was confirmed by everyone we talked with in all the towns we visited. One lecturer at a University in Tianjin reported that there was a recent survey which indicated that the minimum savings for a business person working in the free market for a number of years was 10,000Y. He talked with considerable jealousy about the many free market businessmen who have new motorbikes, which cost 6,000Y, parked behind their stalls. Following are income estimates from some of the faculty, staff and wives at Jiao Tong University in Shanghai and various people interviewed in Wuhan and Tianjin:

Table 1
Net Income Estimates of Entrepreneurs in Free Markets
By Type of Goods Sold

<table>
<thead>
<tr>
<th>High Income Free Market Goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing - 500 to 2,000 Yuan/month ($1,300 - $5,100/yr) S*</td>
</tr>
<tr>
<td>Clothing - 1,500 Yuan/month ($3,800/yr) S*</td>
</tr>
<tr>
<td>Clothing - (&quot;high&quot; - no specific estimate) TW*</td>
</tr>
<tr>
<td>Fish - 1,000 Yuan/month ($2,500/yr) S*</td>
</tr>
<tr>
<td>Fish (no specific estimate) T*</td>
</tr>
<tr>
<td>Fish (no specific estimate) TW*</td>
</tr>
<tr>
<td>Hairdressers (no specific estimate) T*</td>
</tr>
<tr>
<td>Restaurants (no specific estimates) T*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Middle Income Free Market Goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREPORT1.CH Lin Geiger 45</td>
</tr>
</tbody>
</table>
Fruit - 700 to 1,000 Yuan/month ($1,800 - $2,500/yr) S#
Restaurants - 800 to 1,000 Yuan/mn ($2,000 - $2,500/yr) S#

Lower Income Free Market Goods (high relative to average GNP)
Toys (no specific estimate) T#
Vegetables - 400 to 500 Yuan/month ($1,000 - $1,300) S#
Vegetables (no specific estimate) T#
Vegetables (no specific estimate) W#

KEY
* S = Shanghai
T = Tianjin
W = Wuhan

In Wuhan, some of the Hubei Province officials reported that because so many of these entrepreneurs make large profits, the government is attempting to reduce the inequality effects by taxation - an Income Tax and/or a "Re-adjustment Tax." This is difficult to do, however, because the accounting and the record keeping is so poor that no one is able to determine the correct tax. The tax is estimated, but the prevailing belief is that there are many entrepreneurs who are making large after-tax profits.

(2) OTHER PRIVATE ENTERPRISES

In addition to the entrepreneurs in the free market, private enterprises tend to concentrate in small service oriented businesses e.g. taxi drivers, bicycle repairs, ferry boat operations, barbers, hairdressers, doctors, individuals providing transportation of all kinds, particularly on bicycles, small bus and truck repair operations. Chen ZhiCheng, Deputy Director of the Tianjin Municipal mentioned that private doctors can be licensed and that there are quite a few of them in both urban and rural areas, involved primarily in traditional Chinese medicine including acupuncture and massage. Also, doctors practicing Western style medicine can organize into clinics and generate higher income than doctors working for the State. There are also small manufacturing businesses in the private sector. e.g. from the bus window, we observed a two-person shirt manufacturing and sales operation on a street in Wuhan. These entrepreneurs take advantage of needs that are not met by the State organizations and cooperatives. An interesting example of this occurred when I realized that I needed additional calling cards for a subsequent trip to Hong Kong and Singapore after the Fulbright seminar was completed. The larger State printing shops would not consider printing cards in less than a week. However, a private businessman with a small one room operation was delighted to print 100 cards within a day and actually ended up printing 200 when a 2nd member of our group realized that his calling card inventory also was low. The printer earned 120 yuan within a short period of time - a windfall by his
standards.

As was noted in the section on the free market, the general impression is that many of these people make a very high income relative to the rest of the economy. An encounter by members of our group with the owner of a ferry operation across the East Lake in Wuchang, one of the three municipalities in Wuhan, provided some additional information concerning income of private entrepreneurs. As we were going across this picturesque lake, the owner informed us that two families financed the small ferry operation from fishing profits. During our trip which lasted twenty minutes, she collected 35 Yuan (1 Yuan per person). Assuming that for nine months she would average ten trips per day, with 30 tourists per trip, and that for two months her activity would be reduced to five trips per day, her annual revenue would be over 100,000 Yuan ($21,000). After expenses, the income of the two families would still be considerably more than that realized by the vast majority of the population. She complained about the 3,000 Yuan tax which she said she was paying per year. I suspect, however, that she probably understated her profits not only to pay smaller taxes, but also because of a concern about the egalitarian orientation of the Chinese i.e. there is considerable resentment when people hear that someone is making a large amount of money.

On another occasion, four members of our group, when taking a taxi from the Wuhan airport to the hotel, determined that the owner was a private businessman. He had given up his job as a truck driver, which paid 120 Yuan/month plus a bonus, to buy a taxi for 17,000 Yuan. He obtained a license and is now operating as an independent businessman, making a net income of 700-800 Yuan/month. He works hard, approximately fifteen hours a day, but seems to be very pleased with his decision and recently built his own home on his wife's property in a nearby village - this could not have occurred fifteen years ago. He estimated that 70% of the taxis in the Wuhan area are privately owned.

If the very high income estimates for the free market entrepreneur and the private businessman are correct, why isn't the market mechanism working - why isn't the income of these successful private businessmen falling? The income differential between the State and the private sector appears to be too great. I believe that the large difference is caused by an imperfect market and a very high risk premium. The major market imperfection is the lack of information and the presence of inaccurate information. The record keeping is poor, and even the government has problems knowing what to tax. The risk is high because of the government's frequent statements about the evils of high profits and capitalistic tendencies and the government's track record of frequently changing policies. The price (and wages) will fall if the State has patience and the wisdom to remove the bottlenecks to entry and to encourage competition. Time will tell whether this country with such a strong marxist orientation will be able to do this.
II FACTORS IN ADDITION TO INCOME AFFECTING SOCIAL WELFARE

A. EDUCATION

Education is an important variable to include when considering social welfare. The education system in China involves pre-school education, primary education (5 or 6 years), secondary education which includes 3 years in junior middle school and 3 years in senior middle school plus higher education. In addition, vocational and technical education is provided, and in recent years an adult education program has been developed. Theoretically, primary and junior middle school education are compulsory, but in general the quality of education is poor and much of the rural population is not reached. In 1987 the illiteracy rate was still above 25%. Primary percentage enrollment data is not a good proxy for education, because students are included in the data even if they attend just one day, so the percentages tend to be misleadingly high. For that reason, secondary school data is used for the social welfare function, and the records clearly show that this enrollment is less in the middle-eighties than in the mid-seventies. The employment opportunities resulting from the growth of township and village enterprises in the rural areas, and the increased freedom to move from one area to another where the pay is higher and the opportunity to obtain a job is better, are difficult for poor young people to resist. This was confirmed by many people, e.g. Professor Lee, the demographer at Wuhan University, the Suzhou embroiderers, and CHEN ZICHENG, Deputy Director, Tianjin Municipal Commission on Education & Public Health and WU SHANMOU, Director, Tianjin Bureau of Higher Education.

As income varies more widely since the reform, tutoring also becomes an issue when we consider the social welfare of the people since the wealthy have a distinct advantage in being able to provide additional assistance for their children. Some of the faculty at Jiao Tong University sacrificially spend a substantial portion of their monthly income for tutoring their children. A student's ability to score well in the examinations determines the opportunities to attend quality schools, advance to higher levels of education and ultimately to obtain important positions in the government bureaucracy or in the State organizations. If tutoring can make a difference and if money is available, parents would be inclined to invest their income in this manner, particularly since they have so few children. The problem, of course, is that many of the poorer families cannot afford tutors. Wu Shanmou, Tianjin Director of Higher Education, claimed that the number of students receiving extra tutoring is quite large. Chen Zhicheng, the Deputy Director of the Tianjin Municipal Commission of Education and Public Health, advised that tutoring begins even before primary school, and he estimates that about 20% of students at middle
school level receive tutoring. There is less outside tutoring in high school because the schools provide their own in-house tutoring since the school receives more recognition if their students score higher in the national examinations.

Quality of education is also an important issue to investigate when considering the effects of the reform. There is a great need to improve materials used in classes and to improve teachers' skills. The Central Government is concerned about the low salaries for teachers and claims that they will improve the status and pay of teachers. However, there has not been a significant increase in the share of resources allocated to education during the past fifteen years. This problem is particularly acute in the country. Teachers' competence and facilities in the rural areas are not satisfactory with the result that the majority of the children in the country receive substandard education relative to the urban areas.

3. MEDICAL SERVICES

Since the reforms there has been a reduction in medical services in the countryside. During the 1970s, most of the needs of the people in rural China were handled by millions of "barefoot doctors" - primarily non-professional urban educated young people who received minimal training and provided first-aid services and primary health care services to rural patients. In the eighties, however, these "barefoot doctors" disappeared, and unfortunately were not adequately replaced by doctors, nurses or other kinds of medical workers. Because of inadequate equipment and harsh working conditions many of the rural medical workers have moved to the cities. In the cities there are more than 6 doctors per 1,000 residents, as compared with only 2 doctors per 1,000 residents in the rural areas, where 80% of the population lives. The quality of medical service at all levels is poorer in the country. In township hospitals, 63% of the workers have never received regular professional education. The problem is further complicated by the fact that over 80% of urban residents enjoy free medical care because they work for State organizations who provide these services, while most of the farmers have to pay for their own medical expenses.

C. INFLATION AND UNEMPLOYMENT

An unwanted result of the reform has been inflation. With the easing of credit, prices have started to rise, particularly during the last half of the eighties. Unfortunately, the effects of inflation have varied unevenly throughout the society. The people in China who have been hurt the most have been those on salaries in the service sector like teachers, professors and nurses. The workers with State Companies or collectives receive special assistance, often their wages are indexed to inflation. Farmers do not receive special assistance, but the prices of the products
sold at market prices increase so that farmers producing on private plots, and selling in or to the free market, will not feel the full brunt of the inflation. Farmers producing grains and other products where the prices are closely controlled, however, will tend to be hurt.

Another undesirable by-product of reform has been unemployment. Because the government is highly sensitive to price increases, credit will be tightened when there are signs of inflation, as occurred in 1989 and 1990, and this reduction in credit will result in a contraction in the economy. Because of the primitive nature of the country's financial institutions, tight credit and macroeconomic policy will likely produce significant unemployment. The CIA, in its annual report on the China economy, estimated that two-thirds of the urban factories were closed or operating below capacity at the end of 1989, and that many of the workers received only 70% of their expected wages and no bonuses, which during the eighties had accounted for one-third of their income. The economists at the American Embassy in Beijing estimate that unemployment partially idled at least 35 million workers and that rural surplus labor is increasing because of the failing village and township enterprises. (The Embassy's December 1989 Labor Report estimated that underemployment partially idled at least 175 million workers!) Chinese Government figures indicated that township enterprises declined by 195,000 in 1989 and that employment in these enterprises decreased by 1.8 million. John J. North, Economic Advisor for the American Consulate in Shanghai, confirmed that many of the firms in Shanghai have shut down and the workers are receiving 75% of their normal income. He pointed out that township enterprises have been hurt the most because the Government tended to give preference to the State Organizations when allocating the limited amount of credit which was available. The lack of work is a difficult adjustment for the Chinese who, not too many years ago, considered lifetime employment as a right.

Lin Geiger
ENDNOTES


3. My thanks to XUE HUAI ZHONG from the Hubei Provincial System Reform Commission in Wuhan for providing much of this information.


5. Our thanks to JIANG CHUN, translator and lecturer at TIANJIN UNIVERSITY for most of this information.

6. Article in UCINSIGHT, magazine of the UCI Graduate School of Management/Spring 1990.


8. Some of the best memories of the trip to Shanghai occurred during the three-mile walks before breakfast, where from 5:30 to 7:00 a.m. we watched the city wake up. While many of the early morning risers were practicing T'ai chi alone or in large groups and some of the residents, who were sleeping in folding chairs on the sidewalk to avoid the heat in their one room homes, were beginning to open their eyes, the free market entrepreneurs were scurrying about setting up their stalls, arranging the vegetables, cleaning the meat — doing the many things that were necessary to get ready for business.


10. Most of the following information is from A SURVEY OF EDUCATION IN CHINA published by the State Education Commission of the People's Republic of China.


"Before 1979, we had been pursuing 'self-reliance' policy. We still encourage self reliance, but too much of it led us to a state of inefficiency," said a Beijing University professor. This seems to be one of the main reasons why, after the ouster of the Gang of Four in late 1976, China's new leadership made an extensive assessment of the country's economic situation. In December, 1978, the Chinese Communist Party called for an economic readjustment to achieve rapid, sustained growth and to increase efficiency in resource use. Chinese leaders realized that efficiency could be increased by introducing foreign competition in the domestic market. Increasing efficiency through 'free market' is still viewed as 'can't live with it and can't live without it' because of the ideological differences.

China also wanted to modernize her agriculture, industry, transportation and communication for which she needed advanced technology and capital goods. Since she failed to generate it from within, Chinese leaders decided to allow external economic contacts and import those under an open-door economic policy. This would benefit China by introducing new products, technology, managerial and marketing skills, and ideas. The leaders expected that the foreign exchange needed could be generated from exports.

This was the main target of the sixth Five-year Plan that covered 1981-85. China's foreign trade in that period included primary product and textile exports to industrial countries in exchange for machinery, transport equipment and other manufactured goods and services. However, her export commodities were characterized by low quality, unsophisticated technology, and low added value. The proportion of exports accounted for minerals, light industrial and textile products, and farm and sideline products are 40%, 40%, and 20% respectively. As a result, export earnings were not sufficient enough to pay for the advanced technologies and capital goods.

Since the primary product prices had been falling in real terms for the past fifty years, Chinese leaders decided to shift emphasis from the export of primary products in the form of raw materials to that of manufactured industrial goods and export of roughly manufactured goods to that of finely processed items. This transformation also needed advanced technology and capital goods. In the seventh Five-year Plan that covered 1986-90, the main purpose of imports of plants, products, and techniques are to make China less dependent of foreign suppliers. Her import policy is designed to save foreign exchange and avoid balance of payments problems while insuring the inflow of technology needed
for modernization. Priority is given to acquiring know-how and
improving manufacturing capability rather than importing final
product. "The process should not replace the labor force, rather
it should target full employment," said a government official in
Shanghai. Since the import of new technology requires substantial
amount of foreign currency, China wants to increase her export
earnings by improving quality, packaging, marketing techniques,
and competitiveness. Under the current policy, priority is given
to projects that require less foreign exchange, offer a faster
payback on investment, and generate higher export earnings.

Another way to increase export earnings is to attract foreign
investment in export-oriented industries. China created special
economic zones (SEZs) on a trial basis in the cities of Shenzhen,
Zhuhai, Shantou and Xiamen in 1979. This was a great success and
a few years later, Hainan Island was opened and became the
largest SEZ in the country. Since then China has opened 14 more
coastal cities, 3 deltas (Zhujiang, Yangtze, and Minnan), and 2
peninsulas (Shandong and Liaodong). Cash trade, clearing account
trade, barter trade, processing and assembling with supplied
materials, compensative trade, border trade, and futures trade
are employed in these areas. The Chinese leaders learned that
foreign investment not only brings in foreign exchange and
advanced technology, but also demonstrates the effects of modern
management techniques. Joint-ventures help domestic enterprises
to identify weaknesses in management, material supply, product
design, service quality, and induce them to make changes they
might otherwise never consider.

In this process of the domestic reform, import of complete
sets of equipment gradually changed to the import of
manufacturing techniques and managerial expertise through
licensing trade, joint-venture, consulting and technical
services. The decentralization decision in 1984 gave impetus to
the export, and import substitution industries' development in
the SEZs attracting foreign manufacturers to take advantage of
the lower land costs and wages. China's domestic reforms
increased export incentives as the Ministry of Foreign Economic
Relations and Trade (MOFERT) lost full control over exports and
local governments' retention rates from most exports increased.
Some commodities under provincial control were decentralized to
municipal or county control, and hundreds of factories were
allowed to export directly. Foreign exchange retention rates were
raised and new companies were allowed to engage in foreign trade.
Manufacturers in some SEZs were allowed to export directly
without a foreign trade intermediary. Importers, working directly
with factories, could also hold suppliers to more accurate
specifications, ensure timely shipments and correct some
anomalies. However, the leaders were also very much concerned
about the helplessness of the domestic infant and the key
industries which could survive only after a period of learning.
Inflation, business fluctuations together with world demand,
inequities, undesirable trade imbalances and unwanted flow of
capital were some of the problems that the Chinese leaders faced
for the first time.

A wide variety of tools are used to achieve the goals of
modernization. In an effort to combine free market for the export sector and closed economy for the domestic market, China adopts a complex system of market and administrative control. Higher trade restrictions were imposed since September, 1988, following a balance of payments deficit in the past consecutive four years. Some of the restrictions are tariffs, import-export licensing, foreign exchange allocations and import substitution regulations.

**Customs Tariffs**

China's customs tariffs are of two categories: A general tariff rate for countries with trade treaties and reciprocal favorable tariff treatments with a minimum tariff rate. Tariffs are among the highest in the world for automobiles and consumption goods ranging from 3 to 200 percent. The U.S. Embassy in Shanghai reported that from January, 1988, to September, 1989, China adjusted tariffs on 10 occasions. She increased tariffs on 79 items including coffee, syrup, vacuum cleaners, electronic games, cosmetics and soaps, and decreasing tariffs on 25 items. A temporary regulatory tax has been in effect since 1985 on more than 20 kinds of products over and above the published tariff rates. Exceptions are given to most foreign investors for imported machinery equipment. Spare parts are provided as capital contributions and for raw materials, components etc. used in making products for exports. Because of insufficient data and experience, the government uses trial and error methods for policy adjustments. Tariff rates are changed arbitrarily without notice. New rates are not sometimes publicly announced and obtaining information about new rates is a difficult and sometimes impossible task. Tariffs, however, are not China's main weapon to control imports. The government relies instead on direct administrative controls which have less ambiguous effects.

**Quota Licensing**

Quota licensing is one of China's major instruments to control the volume of imports and exports to fulfill her plan. It prevents sharp price drops for exports in overseas markets and price hikes for domestic markets and avoids economic losses. Nearly 50 percent of imports (by value), including consumers goods, raw materials, and production equipment, is covered by licensing. Approval of several government agencies are required to obtain an import license. Similarly, the exporter must first obtain an export license from MOFERT in order to export a licensed item. To create better conditions for expansion of foreign trade, the quota licensing system will play an increasingly growing role in China's foreign trade.

**Quantitative Restrictions**

Approximately 80 types of consumer goods, raw materials, and production equipment including computer hardware, TVs, electronic components, VCRs, certain product assembly lines, printed circuit boards, fiber optic cables, etc. are banned from import. Timber imports were cut by 40 percent in March 1989. Selected national trading companies have exclusive rights to trade in the 'strategic commodities' which make up 50 percent of China's exports and over 30 percent of her imports. Currently, a growing proportion of China's foreign trade is decentralized to a provincial or municipal government or directly to a manufacturer.
Import Substitution

If a product has to be imported for a long period of time or China needs it urgently, Beijing may approve the product as an import substitute. If it is a joint-venture product, they can sell it in the domestic market and be paid in part with foreign exchange. However, enterprises were told, in 1989, to rely more on Chinese-produced alternatives. MOFERT maintains a list of products for which domestic supplies are available and it is impossible to get an authorization to import those commodities on the list.

Since May 1990, quality licensing on imports is in effect on 9 machinery and electronic products: automobiles, motorcycles and engines, refrigerators, TV sets, and kinescopes. Exporters of these items are required to provide product samples and pay for their testing to receive a license. Currently 481 commodities are inspected for import -- an increase of 30% over past years.

Foreign Exchange Control

Central control of foreign exchange expenditures is an effective regulator of imports. Currently, the control is relaxed a little bit and the People’s Bank of China is the premier but no longer the only institution dealing in foreign exchange. Foreign banks located outside the SEZs are not permitted to lend, open letters of credit or open accounts on behalf of Chinese customers. A few foreign bank branches in China’s SEZs, however, have the permission to do so.

Export Subsidies

Subsidies are given to the exporting factories to compensate for high state-set domestic prices and for losses taken when goods are sold at the lower international prices. “Sometimes they also make profits!”, commented one state-owned factory manager. The government also provides preferential credit and tax rebates for exporters and duty exemptions on imported inputs for export products. However, if a company has a shortage of foreign exchange because of difficulty in exporting its product, the company can buy it at the market rate that involves the payment of a 25 percent premium which affects the profitability of the firm. This premium was 50 to 70 percent before RMB devaluation which came in response to the continuous balance of trade deficits since 1985.

Devaluation

The positive effects of devaluation and effective control on imports were felt in 1989 when the total value of export reached US$43.28 billion, a rise of 6.5% compared with 1988 and the value of import was US$38.27 billion, down by 3.8%. This trade surplus of US$5 billion increased the country’s foreign exchange reserve by a bigger margin. Devaluation increased the cost of imports. Approximately ten to twenty percent of the productive and export capacity in the industrial sector is backed by imports. This causes export commodity prices to rise. The government officials reported that the RMB will be devalued to its market value when the labor productivity increases to the international level. The rest of the country is skeptical about the possibility of one exchange rate in any foreseeable future.

Conclusions
MOFERT reported that China's total import and export volume in 1988 stood at US$80.49 billion or 3.9 times that of 1978. The average annual rate of increase in trade volume from 1979 to 1988 was 14.6%. Exports in 1988 reached US$40.64 billion an average annual increase rate of 15.4% or 4 times that of 1978. Imports reached US$39.85 billion at an average annual increase of 13.8% or 3.6 times that of 1978. Over the past decade, China imported 3530 technology related items valued at US$20.5 billion and exported 306 technology related items worth US$500 million. US$33 billion of foreign loans and US$14.7 billion of direct investment have already been committed. US$390 million of aid from UN has been used. The composition of foreign trade also improved. Industrial manufactured goods increased to 71.6% in the proportion of export while the primary product decreased. In the imports, the proportion of key equipment and goods increased while the import of high grade consumer goods came down by 20.3% compared with the previous year. The trade with Hong Kong and Macao remained the same while the trade with Japan decreased. The trade with U.S., European, Latin American, Asian countries and with Soviet Union increased to some extent. The imports from African countries increased. The export by foreign enterprises reached US$3.59 billion. The contracts for import of technology is 18% less than those of 1988 due to the economic sanctions on China. Technology exports developed quickly. In 1989, 168 contracts of technology export were signed for US$879 billion, a 26% increase over the previous year.

In my opinion, China needs to take the following measures in the near future to succeed in the international arena:

1) Expanding exports to bolster the importation of more necessary items. Export mix should be readjusted further in the same direction.

2) China seems to lack the awareness of the importance of quality control and assurance practices. Sometimes inadequate technology is responsible for lower quality. Chinese workers seem to have little incentive to maintain quality and little willingness to accept responsibility for mistakes. Foreign advice and technology is crucial in this respect. If China has to become more competitive in the international market, she must educate her work force, from management levels on down, to integrate quality at all stages of production. Institutions like China Enterprise Management Association (CEMA) can contribute significantly in this respect.

3) The '39 point plan' calls for recentralization of raw material distribution in favor of large state enterprises with a substantial reduction in southern provincial autonomy in new project approval, domestic finance and foreign exchange retention. This will work against the export oriented southern enterprises. It is important that Beijing understand the importance of southern autonomy and initiative to China's exports.

4) Joint-Ventures should be given the right to run their businesses according to international practice. "We need the China market, but it can be reached in so many other efficient ways", said one frustrated joint-venture manager. The
government should help them solve their production and management problems in whatever way they can. Laws and regulations should be perfected to create a sound investment climate.

5) Disputes over the quality of Chinese exports led MOFERT to take tougher measures on quality control. Improvements can be observed but one American importer remarked that there is still room for improvement.

The expansion of machinery and electrical products export is an important aspect in changing the structure of China's export commodities. She is determined to achieve that goal. She is expected to increase her exports of these products by US$1.5 to 2 billion annually in the next two years. The machine building and electronic industry registered US$8 billion worth of exports in 1989, up 30% over 1988. Exports of these products are likely to enjoy some increase. Domestic demand for import substitutes is also increasing. However, efforts should be made to develop products that sell well on the world market, especially hi-tech and tech-intensive products such as optical equipment, computers, and software. Production of import substitutes is expected to rise by 15 to 20% in 1990 and 1991. Marketing networks and after sale services must be improved. MOFERT seems to be determined to improve the foreign investment climate for the export oriented enterprises to solve the problems arising out of production and to acquire the badly needed foreign exchange.
<table>
<thead>
<tr>
<th>Year</th>
<th>Total Value of Imports and Exports</th>
<th>Commodity Composition of Imports and Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Exports</td>
</tr>
<tr>
<td>1988</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep</td>
<td>89.7</td>
<td>40.1</td>
</tr>
<tr>
<td>Oct</td>
<td>89.7</td>
<td>42.6</td>
</tr>
<tr>
<td>Nov</td>
<td>95.8</td>
<td>40.0</td>
</tr>
<tr>
<td>Dec</td>
<td>152.6</td>
<td>65.0</td>
</tr>
<tr>
<td>1989</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan</td>
<td>57.3</td>
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</tr>
<tr>
<td>Feb</td>
<td>65.6</td>
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</tr>
<tr>
<td>Mar</td>
<td>89.4</td>
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</tr>
<tr>
<td>Apr</td>
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</tr>
<tr>
<td>May</td>
<td>97.4</td>
<td>44.3</td>
</tr>
<tr>
<td>Jun</td>
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</tr>
<tr>
<td>Jul</td>
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<td>Aug</td>
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</tr>
<tr>
<td>Sep</td>
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Source: China's Foreign Trade, February 1990
# Major Export Commodities in Volume

<table>
<thead>
<tr>
<th>Year</th>
<th>Hog (10 thousand heads)</th>
<th>Pork fresh and frozen (ton)</th>
<th>Aquatic products (ton)</th>
<th>Rice (10 thousand tons)</th>
<th>Vegetables (10 thousand tons)</th>
<th>Canned food (10 thousand tons)</th>
<th>Shelled peanut (ton)</th>
<th>Raw silk (ton)</th>
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<tbody>
<tr>
<td>1988</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Sep</td>
<td>26.7</td>
<td>8,060</td>
<td>16,120</td>
<td>54,881</td>
<td>61,497</td>
<td>4.7</td>
<td>10,626</td>
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<td>Oct</td>
<td>25.7</td>
<td>7,089</td>
<td>24,016</td>
<td>67,248</td>
<td>82,753</td>
<td>3.8</td>
<td>4,018</td>
<td>560</td>
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<td>1,867</td>
<td>29,311</td>
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<td>3,680</td>
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<td>42,374</td>
<td>71,953</td>
<td>104,410</td>
<td>7.1</td>
<td>6,272</td>
<td>1,843</td>
</tr>
<tr>
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<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Jan</td>
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<td>16,754</td>
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<td>36,712</td>
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<td>22,844</td>
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<td>146.7</td>
<td>118.4</td>
<td>61.9</td>
<td>118.5</td>
<td>100.0</td>
<td>55.6</td>
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<table>
<thead>
<tr>
<th>Year</th>
<th>Tea (10 thousand tons)</th>
<th>Rabbit hair (ton)</th>
<th>Medicinal materials (ton)</th>
<th>Coal (10 thousand tons)</th>
<th>Crude oil (10 thousand tons)</th>
<th>Cotton yarn (ton)</th>
<th>Cotton cloth (100 million metres)</th>
<th>Clothing (US$ 10 thousand)</th>
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<tbody>
<tr>
<td>1988</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Sep</td>
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<td>10,325</td>
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<td>258.5</td>
<td>17,156</td>
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<td>88.9</td>
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Source: China's Foreign Trade, February 1990
### SELECTED COUNTRIES’ FOREIGN TRADE WITH CHINA, 1984-88

<table>
<thead>
<tr>
<th>Country</th>
<th>1984 (millions $)</th>
<th>1985 (millions $)</th>
<th>1986 (millions $)</th>
<th>1987 (millions $)</th>
<th>1988 (millions $)</th>
<th>% of total China trade</th>
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<tr>
<td>Hong Kong/Macao</td>
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<td>4058</td>
<td>5690</td>
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<tr>
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<tr>
<td>% of total China trade</td>
<td>19.7</td>
<td>17.7</td>
<td>31.0</td>
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<td>38.8</td>
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<td>10190</td>
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<tr>
<td>% of total China trade</td>
<td>8.7</td>
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<tr>
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<td>1138</td>
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<td>900</td>
<td>562</td>
<td>+0.17</td>
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Source: China Economic News, China Economic Information, State Statistical Bureau

### CHINA’S TRADE BALANCE WITH SELECTED COUNTRIES, 1988

Billion $

- **China’s Imports**
- **China’s Exports**
- **Surplus**
- **Deficit**

- **Hong Kong**
- **Japan**
- **US**
- **FRG**
- **USSR**
- **Italy**
- **UK**
- **Canada**

Source: The China Business Review/May-June 1989
Chin's Economic Development

Summary Report

Eugene C. Kim

California State University - Sacramento
EDUCATION IN CHINA

1. School Situation in China:

Prior to the Cultural Revolution, over 80% of the Chinese population (total of 1,001,882,600) were illiterate, and only about 20% of the school age children attended school. The 1987 statistics issued by the State Education Commission of China show that 78% of the school age children are now in school. The total number of students is 202,592,000; the total number of teachers, 9,746,200; the ratio, 42:1 (A Survey of Education in China, The State Education Commission of the People's Republic of China, p. 12, Beijing, 1987).

An education official from the Commission indicated that the statistics shown above are in gross approximation, and the teacher ratio varies considerably depending on the provinces, autonomous regions, and municipalities, total of which is 29.

A typical student spends 6 years in primary, 3 years in junior middle, 3 years in senior middle, 4-5 years in undergraduate and/or professional training. At the present time, compulsory education is practiced through junior middle school (equivalent to junior high school in America's 9th grade). These figures are theoretical on my part, implying that there are some parents in the rural areas who cannot send their children to school due to financial hardships (China Daily news, Beijing, China, 7-11-90).
2. **Guiding Principles and Aims of Educational Reform:**

The 1982 Constitution of the People's Republic of China (hereafter abbreviated as P.R.C.) is the basis for all phases of education in China which stipulates, "The state develops educational facilities in order to eliminate illiteracy and provide political, scientific, technical, and professional education as well as general education for workers, parents, state functionaries, and other working people" ("A Nation at School -- China Today," *Beijing Review*, Special Feature Services, Beijing, 1983).

Since 1978, the central government reinforced the importance of education for "Socialist Modernization Drive" (part of the Great Leap Forward movement) with ardent love for the socialist motherland and the socialist cause ("Study Marxism," *China Daily News*, Beijing, 7-16-90).

Marxism is also inherent at every level of government, and school is no exception. An official, quoted in the newspaper, stated that "Marxism is the theoretical basis guiding the thinking of Chinese people and Marxism is suited to China's conditions, and the Chinese revolution would not have succeeded without the guidance of Marxism" ("Study Marxism," Ibid.).

The ways in which the political education centers around Marxism can also be seen in the approximately 383 clock hours a year (2hrs average a day) required of every student for "political studies", beginning the first year of junior middle school and continuing through the college/university ("military training" is
separate from political studies). China has about 210,000 full time political studies instructors ("Full-time Teachers by Subjects," Basic Education of China, Educational Publishers, Beijing, P.R.C., 1989).

"Moral Education" is a component of political education in the primary school. Promulgated in 1988, the State Education Commission aims "to give the pupils ideological and political education and it is the ground work for socialist construction of spiritual civilization" (Basic Education in China, Ibid.). For moral education, China has 81,500 full-time teachers. The contents of Moral Education, for example, are axiomatic: "Be always prepared for the cause of Communism," "Remembering revolutionary martyrs," "Love for the country, for the people, science, and socialism," etc. (Basic Education in China, Ibid.).

The political and moral education of Chinese children is not only incorporated into the school curriculum; it is also practiced through extra curricular activities. For instance, the Chinese Young Pioneers is open to primary school; the communist Youth League and the Student Union are organized around the secondary schools. These student organizations serve as a link between the school whose task is to accept and reinforce the constitution of the student organizations which is essentially an extension of the political ideologies of Chinese socialism.

The students who have earned memberships after the rigorous selections wear red scarves which signify their political status within the group. There is an expression called "Red and Expert," "Red" referring to political orientation and "Expert" signifying
the knowledge one professes which leads to hardwork for the good of the country (Nation at School and China Today, Ibid.).

3. Teacher Education:

China considers education strategically important for the socialist reconstruction of the country. Public schools recruit their teachers from three sources: (1) colleges/universities, (2) normal universities, and (3) professional teacher's colleges. In China, there is no teaching credential to speak of. Any one who has an undergraduate degree is eligible to teach. While the schools attempt to hire teachers either from normal universities or the teacher's colleges, they have not always been successful in getting them because the number of prospective candidates has steadily declined due to inferior social status and low salary (at the conference with officials from the Division of Higher Education, Tinjian, China, 7-20-90). To upgrade the social status and the awareness for the teacher's importance, the Sixth National People's Congress proclaimed September 10th each year as "Teacher's Day."

The teachers who have not graduated from the normal universities or from the teacher's colleges have not received any training in pedagogics, such as educational psychology, educational history, curriculum and methods of teaching in one's own specialty subject. They seem to rely solely on their college/
university education for their subject matter and methodology, often unaware of the professional/pedagogical disciplines in the art and science of teaching.

The normal universities and teacher's colleges, however, pay attention to the pedagogical considerations. For instance, numerous courses are offered in the area of professional education, e.g. teaching methods, comparative education, etc. A considerable number of politically oriented courses are offered as well, e.g. "History of Political Ideology," "The History of the Chinese Communist Party" etc. (A Survey of Education in China, p. 89, Ibid.).


The schools in the township villages seem to vary considerably. For example, the Wuhann township village, which is considered to be a model village, does not have its own school for youngsters; therefore, they are sent to the next township for consolidation. We visited an affluent township in the Tianjian area also considered by officials to be a model village (even though it was only an ordinary commune during the Cultural Revolution). They not only have their own schools, but they also hire their own teachers by administering their own test, offering lucrative salary bonuses, and providing luxurious accommodations (comparable to a plush American apartment). Since the applicants know of the affluence of this village, which has three
joint-venture components (agriculture-commerce-light-industry), the village gets enough applicants to fill their quota (at a conference with officials from Tinjian Township Village, Tinjian, 7-12-90).

4. Current Events of Educational Concerns:

"Less Political Education and Military Training"

This writer had numerous conversations with the native people during the trip on educational matters. When asked to describe the past and the present, they acknowledged that education in China has given more attention to academic knowledge and its application to students' career goals. This was not possible, they say, during the Cultural Revolution. Children and youth spent a majority of their school time on political education and on-site field work for what was called "socially constructive labor." When asked what they wished better for their children's education, all of them unanimously replied, "Less political education and military training" (conversation with Wong Jin, Shanghai, China, 6-30-90).

"More Talents Needed by Year 2,000"

According to a recent survey by the State Education Commission, China would need approximately 49 million highly
trained people in various fields by the year 2,000. The country has identified approximately 90 "key" universities and colleges ("key" referring to prestigious institutions, 5 of which the group visited). The entrance examination is extremely competitive. If we were to assume then that those key institutions had to produce 49 million highly trained workers in the next ten years, they would need to produce approximately 5,400 students a year which appears very ambitious.

It was noticed during the trip that the vocational training at the secondary level has also been emphasized (metallurgical school, locomotive engineer school, factory training schools, etc. While these schools may not be able to turn out top-notch trainees, they may have found one way to move toward the "Talents for Year 2,000." The State Education Commission also reported that the current educational institutions could turn out about 80% of the trained professionals. It is uncertain whether or not the statistics include secondary vocational schools. The report also pointed out that "the country's higher education institutions would gradually shift their emphasis from the training of pure science and technology to more students trained in management, science, and law" (China Daily News, 7-14-90).

During our discussions with the Chinese economists, they pointed out repeatedly the problem of management. That is, the Chinese managers at all levels have difficulty running the organization. To put it differently, the managers are "sandwiched," meaning that they have to follow directives from the
higher echelon in the central government, and at the same time they have to satisfy workers at the grassroots. Drawing new science and technology is no problem; however, the central government can perhaps relax the rules and regulations so that the managers can be more innovative in the overall operational outcomes (at the conference with Dr. Ziang et al at Jio Tang University, Shanghai, 6-30-90).

"Joint Ventures for Vocational Training"

In consonance with the Chinese economic reform, quite a few vigorous joint ventures with Taiwan, Hongkong, and overseas firms have taken place for hotels, restaurants, business, and industry, primarily in the coastal areas in China. However, this may be the first joint enterprise in education in China, so to speak. As a five year plan (1991-1995), West Germany and China have agreed upon a project to establish an institute for college level technical training which will be administered by the State Education Commission (China Daily News, 7-14-90).

Good news to meet the demand for the "Year 2,000"! It is hoped that the training program would not just concentrate on infrastructure-oriented programs but include agricultural programs as well, for China's vast agricultural resources especially in the interior of China must be updated to the level of industrial resources in China. It is said that the Chinese farmers are expressing complaints increasingly that the central government over-emphasizes the techno-industrial modernization but not enough.
of the agricultural (a conversation with Choi Hyun, Korea-China News, Beijing, 7-22-90).

"What's Happening to the Beijing University Graduates?"

It was reported in the newspaper that Beijing has about 85 colleges and universities, and approximately 31,000 students had graduated last year, which means that each institution in Beijing had produced about 387 graduates (China Daily News, 7-24-90).

Of the 31,000 graduates the statistics showed that 34% were assigned to work at government agencies, 26% to organizations engaged exclusively in economic reforms (including joint ventures), 8% to remote provinces such as Tibet or Mongolia, and 32% were employed by business-industrial organization.

A conversation with a university graduate who now works at a governmental agency revealed that most college graduates prefer to be employed by the governmental agencies because the job requirements there are not as stringent as those of private business/industrial organizations. There are some draw-backs however. One's promotion heavily depends upon political loyalty to the party. When an employee seeks an overseas opportunity for educational purposes, for example, it is almost unattainable, and therefore, one must quit.

There is a hierarchical system in which the top-notch students are assigned to the top level governmental agencies, on one hand, and the low academic students are assigned to remote inner areas where most graduates do not prefer to go, on the other
hand. At any rate, every graduate will have an employment invariably (a conversation with Mrs. Chci, a middle school teacher, Beijing, 7-4-90).

"Is It Truly a Compulsory Education?"

China claims that the nation has a compulsory education through 'junior middle school. According to the survey by China's Youth Development Foundation (CYDF) however, anywhere from 40-60% of the primary school children in the remote areas drop out because the family is too poor to send their children to school. (China News Daily, 7-24-90). So, where is the compulsory education and what does it mean?

Even though the school expenses are low to begin with, still 20% of the school expenses must be met by the parents, and they cannot afford to pay that either. "I will come back as soon as my parents make more money," a child said with tears but "most children seldom come back" (China Daily News, Ibid.).

The CYDF aims to help out those involuntary dropouts by soliciting donations from home and abroad.

"Population Education in High School Curriculum"

Anyone who knows anything about China talks about four things: big land, huge population, socialistic political hegemony, and the open market.
In order to combat the population explosion, China has implemented population education in the 10th grade curriculum as a prerequisite, which includes the need for birth control with broad implications for socio-economic impact for the future of China. What it boils down to is that China has 22% of the world's population on 7% of the world's arable land; the population explosion cannot continue considering China's production and living standards (China Daily News, 7-25-90).

Population control runs counter to Chinese tradition; for centuries, having a large family has been a Chinese virtue, following the proverb "the more children, the more prosperity."

China's population education in its 10th year now is jointly sponsored by the State Education Commission and the United Nations Population Fund (UNPF).

As a birth-control measure each married couple is allowed to have only one child in the urban areas. In the rural areas where it is not considered too populous, 2-3 children are permitted. In the urban situation in which there happens to be more than one child in the family, the couple must pay approximately $200 in fines and no birth-certificate is issued. The one child becomes a real family treasure, especially for grandparents. One father commented, "The only child thinks he/she is the king/queen in the family and is rotten spoiled" (a conversation with the traveller in the train, China, 7-24-90).

Rumor says that there is a strong undercurrent among the Chinese parents protesting birth-control policy. Rumor also has
it that some parents are willing to pay the fine to have another child. Birth certificate? Some parents may think it's just a piece of paper.

"Child Labor Outlawed"

Child labor originated in the coastal areas in China during 1987-88 and moved into the inner areas; the individual business and private investment firms had hired children of 16 and under most of whom were girls--some as young as ten (The Monthly Labor, Beijing, 7-13-90).

Some firms (cloth factories, e.g.) have exploited 15-25% of the child labor with the lowest wages possible. Now the government will take the measure against those inhumane practices by proclaiming directives which accompany any or all of the following: administrative discipline, fine, revoking business license, etc.

So here again, where is compulsory education? What kind of parents allow their children to go into the factory for such a low wage?
Post Script

I feel I just scratched the surface on Chinese education. Of course, no one should talk about education divorced of other socio-political and economic factors in society.

Having put together my thoughts in the foregoing, I discovered myself how little I knew about China prior to my trip. I cannot agree more with the old axiom, "Seeing is Believing."

Honestly, I feel that China has made tremendous overall progress since the Cultural Revolution. The Chinese attested to this openly by saying that they are much happier. I could see this on their faces and in their lifestyles—the food they eat, the clothes they wear, and the cameras they carry.

In the area of education, much more attention needs to be given when compared with the progress they made thus far in economic development, as education is the nucleus of human engineering for the future of this land once called the "Sleeping Giant".

As a Chinese philosopher/historian once put it:

Socialism is supposed to ensure that every citizen has the right to be educated, to develop his talents, and many other rights, but we see no trace of this in our lives. The only thing we can see is the dictatorship of the proletariat, and this new variation of the Russian-style despotism, which is now Chinese despotism.

Rural Township and Village Enterprises in China

Lynnae Far, Western Illinois University, Macomb, IL 61458

Rural Township and Village Enterprises are important in Chinese economy providing about one fourth of the country's economy. The purpose of this study is to evaluate the economic and political significance of rural township and village industries in Chinese economy. What is the relationship between government-industries and rural collective industries? Were the enterprises considered as menace to the governmental sector? What was the impact of retrenchment on township and village enterprise?

The development of rural township and village enterprises has been gradual and sporadic. The history of the township enterprises first discussed, followed by the characteristics of township enterprises in comparison with other industrial sectors.

History of Township and Village Enterprises

First major attempt of rural collective enterprises was during the Great Leap Forward. It was the time of great centralization of industries that some of the power of central government was given to local government. Many small-scale backyard furnaces were built throughout the country in place of large-scale steel mills. By 1961 the inefficiency of their management resulted in closing many less planned small-scale industries. In 1970-1976...
In political power was delegated to local government. But it was not until 1979 the township and village enterprises grew at an unprecedented rate and have given a major economic impact in the rural economy.

The reform of 1979 not only delegated some of the power of the central government to the local government, but also introduced the contract responsibility system. The reform abolished commune farms and the township governments replaced the role of the communes. In the early 1980s when the Chinese economy was plunged into a brief recession, township and village enterprises were blamed for competing with state-owned enterprises for funds and raw materials, thus triggering the inflation explosion (China Daily July 18, 1990). In September 1988, some of the township enterprises were forced to close as funds dwindled and the market became sluggish. In 1989 China had 1 million township enterprises, down 195,000 from the previous year. At the same time, 93.7 million people were employed, 1.8 million fewer workers from the 1988 level. In July 1990, a new regulation was established for the first time to provide guide lines and to protect and support collectively-owned township and village enterprises. Such regulations are available.

Nature of Township and Village Enterprises

Township and village enterprises are a part of rural collective that have gained a great economic importance in the 1980s. Industries of China today
can be divided at least five groups according to their ownership:

a) central control: Beijing-based industries. About industries are state-sector industries, with about 10 employees, and usually the sizes are not large. Some are small ones. State-owned industries are predominantly important than location, and mostly large-scale plants.

b) local level: Industries controlled and operated by government other than Beijing government belong in this category.

c) collective industries: Collective industries are operated by the entire community workers and shared the profit. As the definition blends with state-owned enterprises, it is regulated like government firms. According to location, collective industries can be further divided into urban and rural collectives. The main difference between owned and urban collectives is that urban collectives plans enter into state planning system. For instance, a bread factory, an urban collective as opposed to a steel

collectives can be further divided into county, township, and village enterprises. Township and village enterprises were former commune and brigade industries, the units that have access to surplus rural labor force. The reform of 1979 allowed more in the operation of rural collectives. Without the direct control residents of rural townships and villages can decide the management of village factories. Though most factories still
the profit by the entire village were carried away from sharing from the big rice bowl. This practice made the "piece work" the main source of income. A new practice is the "day labor contract." (b) Private Sector: The household may now start a private-owned enterprise with the collective enterprise. A group of individuals or persons can form an enterprise. Private household with extended family can also operate a jade carving factory. An example of privately owned enterprise is a jade carving factory. 

e) Joint Venture: The number of joint ventures with foreign companies grew steadily since the 1979 reform. However, their proportion in the Chinese economy is not very significant.

Table 1. Industrial Share By Ownership

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<th>Ownership</th>
<th>% in total capital</th>
<th>% in production</th>
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<td>56 - 70</td>
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<td>(central)</td>
<td>15 - 35</td>
<td>10 - 25</td>
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<tr>
<td>In China</td>
<td>50 - 50</td>
<td>10 - 25</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(private)</td>
<td>10 - 25</td>
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(Acted by author from interviews)

The 1979 reform prices of goods in China were the same as before. The central-planning council controlled production, distribution, and price of manufactured goods. After the reform, managers of the enterprises were authorized to decide and had some power in state-owned enterprises. However, the authority is not yet weakened. There has been a rapid change in management functions. Managers do not have sufficient functions to decide the design, production, and product prices.
After the reform of 1979, agriculture in China was improved in efficiency and productivity so that some 80 million farm workers were released from farming and absorbed by the township and village enterprises. In that sense, township enterprises provided cushion to relieve underemployed farm workers.

The economic impact of retrenchment in 1989 was felt different in all levels of Chinese economy. Manufacturers of consumer goods were affected less than the export-oriented industries. Local government provided favorable conditions to iron-steel, or electronics companies. After the political incidence of June 1989, according to unofficial record, even state-owned factories of Shanghai laid off 100,000 workers with 75 percent of their wages, primarily because factories had no work. By April of 1990 some of the factories brought back their workers for the tabulation of statistical record, but the majority of these factories still do not have work for their workers. Preferential credit was given to larger state-owned factories, and the shortage of capital was felt harder for township and village enterprises. Ministry of Agriculture provided funds for the larger rural collectives. Many small firms either closed or merged during the retrenchment period. According to unofficial record, 20-30 percent of township and village enterprises were closed in the Shanghai municipality. When questions were asked to government officials if there was any explicit government effort...
Close township and village industries, the answer was affirmative.

But the decline of industries was also due to the relative shrinkage and readjustment from the rapid growth of the previous years. By the state-owned industries that were not suspended from heavy industries experienced the economic hardship because of the higher material cost during the retirement.

Three rural villages were selected for detail studies of the changes that took place in the rural economy, especially manufacturing sectors. Townships and village enterprises in township in Shanghai region, Beigang township in Wuhan region, Daqung Village in Tianjin area were discussed. These are not by means the typical township; however, they portray the magnitude changes township industries brought to rural economy.

a. Malu Township

Located 28 kilometers from downtown Shanghai, Malu township, 17 villages with a population 32,000. Like many Chinese rural village, the area have large population and not enough farm land. Agriculture is the main crop area with vegetables and fruits. In 1978 agriculture was 20 percent production value while sideline production was 20 percent, 15 percent was industrial. In 1989, however, agricultural sector declined to only 4 percent, sideline to 3 percent, and industrial production has taken 93 percent of total output value. The income of farm household was increased from 389 yuan per adult worker per ye
...Emma:MC

Arlo

'2,337 yuan. There were 124 industries, 42 government sector (state and township owned and operated), and 82 township collective enterprises. Since the 1979 reform, some management of workers have taken place in Malu township. The carriage factory of 850 employees, workers were paid by the number of pieces of their product, rather than the same wage for everyone. The average workers were paid 2,500 yuan per year, but some women paid as much as 4,000 yuan while managers were paid 3,800 yuan. Consequently the productivity of the factory was increased. Half of the product was for export, more valuable foreign currency was earned by the collective industry. Workers from township village industries were paid more than the ones from state-owned factories. The township spokes-person said, "Our township and Village Enterprises have broken the big pot. The state-owned enterprises should break the big pot, too."

b. Beigang Village, in Hubei Province

Beigang is a small farming village of 1,055 people in Hubei Province. The farmland used to be mostly rice field, however, today the pond is the most dominant land use in the village. Before reform in 1979 average worker earned 831 yuan per year, and it increased to 2,981 yuan. There are five village enterprises: plastics, biochemical plant, metal foundry etc., where 210 people work. In Beigang, 70 percent of industrial workers are women, where average annual income from industries was 1,500 yuan, while vegetable farmers earn 2,100 yuan, and fishing brought 2,900 yuan. Beigang is a good example where the market economy has changed the farming...
practice from the traditional rice dominant monoculture. Also it is a good indicator how village enterprises have absorbed underwomen workers of the village to provide extra income.
c. Daquo Village in Tianjin Municipality

Daquo village is a "natural Quo family village" of 4,000 with 1,100 households. Until 1978 Daquo was the poorest village. Total production for the 30 years between 1949 and 1978 was 1 million yuan. In 1989 alone, however, the production was 600 million yuan in Daquo. The village has total of 164 collective enterprises which provide 90 percent of village income. Agriculture, fishing, and animal husbandry provide 6 million yuan a year. Unlike other collectively owned enterprises, Daquo enterprises have 184 sales offices in 24 provinces of China to purchase materials and sell products. Interviews with village officials and the factory managers indicated that Daquo is by far the most unique village in China with its success primarily due to the excellent management of village enterprises. The story goes that in 1978 a retired metal worker from a large state-owned factory in Tianjin, CCP established an iron roller processing factory primarily using scrap metal. The capital of the factory was collected by the villagers and some loan from agricultural bank. On 164 factories in 1990, the smallest factory hires 40 persons and total labor force of 1,600 are all hired by the village enterprises as well as 4,000 workers from the surrounding villages commute to Daquo. One can only move into the village by marriage. The village has excellent education, and social welfare programs, with
water, electricity, and central heating system. With the higher salary, minimum 400 yuan per month, the village attracts the best teachers from Tianjin. The salary varies according to teaching performance. When questions asked village officials said retrenchment did not affect their village. Production did slow yet, the industrial growth continued at the village level. The prosperity of the village is obviously visible everywhere. Factory manager owns a four-story home with 5-bedrooms conditioned, equipped with a entertainment room and a garage. This house style is not a typical north Chinese home, but rather southern California style.

5. Conclusion

Township and village enterprises have contributed greatly to the economic development of China not only in rural areas but in entire country. Since the reform of 1979 township and village enterprises grew at an exponential rate till 1988 when it reached over 19 million in numbers. In September 1988 government forced to close unplanned, duplicated, and polluting rural enterprises and the number of factories and workers shrunk. After June 1989 retrenchment was far harder on rural enterprises than state-owned factories and even more township enterprises were forced to shut down. However, well-managed factories of Daquo and Malu villages were not affected by the retrenchment. Some Chinese economists viewed that the closures of township enterprises positively as the natural selection process. They mentioned that some of these factories apply low technologies.
wasteful of resources, cost-inefficient, poor quality products, quite polluting, while others have management problems. The ones we visited were showcases where such problem did not exist. In other words, good management can avoid problems that many rural enterprises faced and affected by the retrenchment.

Another contribution of township and village enterprises to the Chinese economy is the introduction of market economy in the planned economy. The success of Daquo village was in their marketing effort and good management. Also, there are over 10,000 individually operated rural enterprises and the number is still growing. A newly adopted regulation of July 1990 will provide a guideline establishing the environmentally sound and better managed township and village enterprises in the future.
All eyes are on China. It is considered a developing country with vast resources and tremendous opportunities. China’s attitude toward trade and contact with the rest of the world has changed radically in recent years. However, a great deal of experience and understanding are necessary to do business successfully in China. If the homework is not done properly, joint ventures could easily become joint adventures.

**Definition of Joint Ventures**

A Chinese joint venture or an equity joint venture is one of the major means by which China can absorb direct foreign investment. This arrangement is similar to licensing except that the domestic firm (Chinese Government) acquires an equity interest in the foreign business. Set up within China with the approval of the Chinese government, it is an enterprise jointly invested in and managed by a foreign firm, enterprise or other economic organization; and a Chinese company, enterprise or other economic organization. Risks, profits, and losses are shared on the basis of equality and mutual benefit.

A joint venture is set up and registered in China in compliance with the Law of the People’s Republic of China on Joint Ventures. Using Chinese and Foreign Investment, the venture takes on the status of a legal person subject to the jurisdiction and protection of Chinese laws. It is a limited liability company. Of the registered capital of a joint venture, the share of the foreign partner(s) in general should not be less than 25%. Profits or losses are shared according to the proportion of investment contributed by each partner. Investment may take the form of cash, factory buildings, machinery equipment or other materials as well as industrial property rights, special technology and land-use rights. During the cooperation period, no partner in a joint venture is allowed to withdraw its invested sum of capital.

The management of a joint venture takes the form of a general manager
assuming full responsibility under the leadership of the board of directors, which being the highest form of power of the joint venture, decides all the major matters of the business. A joint venture can adopt diverse forms of management and operation, although it is subject state plans.

**History and Scope of Joint Ventures**

Foreign investment acquired legal status in China when the National People's Congress passed the Law in Chinese-Foreign Joint Ventures in July 1979. Last year (1989), this document was revised to address the composition of the board of directors, permit foreigners to serve as chairmen of joint ventures, extend the tax benefits to certain kinds of ventures, sub lease land over the 50 years maximum (i.e. 70), and ownership of the factory by a foreign person to just name a few.

The United States is China's second largest supplier of investment capital and ranks third behind Hong Kong and Japan in terms of the number of contracts. Countries and regions with the highest cumulative value of foreign investment in declining order are Hong Kong, United States, Taiwan, Japan, and Singapore. The formation of United States joint ventures in China started slowly then skyrocketed to 55 in 1984, 101 in 1985, and an estimated 1,400 by 1990. United States companies prefer equity joint ventures to contractual joint ventures by a 5 to 1 margin.

China initially only extended incentives to foreign investors in the four coastal special economic zones that were established in 1979. Gradually, the areas that offer incentives have expanded to include five special economic zones and 14 coastal cities. At the present time, numerous inland cities and practically every province in China offer some package of incentives to attract foreign investment. Specifically, the tax structure is 15% in the coastal providences and 35% in the inland areas. This tax structure is lower than the taxation for state enterprises.

It should be noted that by the latter part of the 1980's, a clear trend toward manufacturing had emerged in foreign investment in China. Although Beijing has consistently encouraged manufacturing ("productive") ventures, many foreign investments in the early to mid-1980's were service related (hotels, taxi companies, etc.). China subsequently developed incentives to encourage investment in manufacturing and
infrastructure. It also restricted approvals of new non-manufacturing projects. This trend has intensified under the retrenchment program, with the approval process becoming even more selective. In 1989, about 90 percent of newly approved investments in Beijing were "productive."

**Status of Joint Ventures in the 90's**

Opening to the outside world is China's consistent and long term state policy. With the progress of China's modernization drive, the world will see economic and trade relations with foreign countries improve in the future. In opening its door to the outside world, China is seeking to absorb capital, technology, and machinery to speed up the country's economic development. According to Christian Lansing, Second Secretary, Economic Section, United States Embassy, Beijing; China needs to expand joint ventures to increase foreign investment (capital), expand technology/management and promote export of China's products.

The *China Daily* reported there are more than 9,000 joint ventures in China with nearly half of them in full operation. Overseas investment in China rose in May and June after four months of steady decline, but the recovery was due to Taiwanese rather than Western interest. Taiwanese businessmen, faced with limited investment options at home, have invested in the mainland this year lured by promises of tax breaks and other preferential treatment. Many foreign companies and banks now say the newly reforming economies of Eastern Europe are drawing Western risk capital that in the past would have gone to China.

In the 1980's, China's economic policy was predicated on the implementation of a set of major predicated reform policies begun in 1978 to reduce inefficiencies in the economy, speed up development, and raise consumer living standards. The guiding principle was the Four Modernizations Policy, which seeks to revamp agriculture, industry, science and technology, and national defense.

In September 1988, China initiated an economic retrenchment policy to address pervasive economic problems of excessive growth and double-digit inflation. This has resulted in a significant slowing of the reform program. Under retrenchment, the government has attempted to regain control over macroeconomic decision making through greater
centralization of foreign trade, production and allocation of key commodities, fiscal authority, and credit issuance.

In summary, the retrenchment policy and uncertainty over China's future political and economic climates have cooled foreign investor and banking interest in China as well as tourism revenue. Since June 4, 1989, Tianannmen massacre or sometimes referenced as the Tiananmen accident, foreign investment in joint ventures has been depressed. Actually, Sino-United States economic ties continue to grow despite China's economic retrenchment and post-Tiananmen bilateral political strains. The recent presidential announcement of Most Favored Nation trade designation certainly will give more confidence to business interests.

Problems Associated with Joint Ventures

How are United States joint ventures doing? Most have just recently been established, less than half are operational. In terms of profitability, the picture is mixed. Some are turning a profit and meeting foreign exchange requirements. Most are profitable in RMB but unable to balance foreign exchange (i.e. Shanghai--Foxboro Company). Most of the business people and government officials concerned with joint ventures interviewed by the Fulbright Scholars were optimistic and expressed support in solving various problems. In other words, China does not want bad publicity during this "renewal" movement.

The following list/analysis must be prefaced by an important qualification: the joint venture operating experience varies significantly from venture to venture. The involvement of different parties, industries, locations, project sizes, and contract terms all combine to make the experience of each venture unique.

Problems Encountered while Negotiating the Establishment of a Joint Venture

1. Too many people and organizations involved in project negotiation and establishment--everything is politicized in China

2. Unfamiliarity with international practices.

3. Being afraid to take risks.
4. Attacks from all sides during negotiation.
5. Unrealistic goals and expectations.
6. Unavailability and unreliability of information.
7. Incomplete laws and regulations as well as constantly changing rules/decisions
8. Unqualified consultants.
10. Number and salary of local employees.
11. Formation of the Board of Directors and decisions on key problems.
12. Selling and pricing of exported products.
14. Technology transfer.

Problems Encountered while Operating a Joint Venture

1. Foreign employees' residential charges.
2. Labor force.
3. Raw material supply.
4. Financial situation/capital shortage.
5. Product quality.
6. Law system.
7. Connections and relations.

8. Import and export control.

9. Price control.

**Five Most Common Problems Acknowledged by Joint Ventures**

1. The inability to generate sufficient foreign exchange revenues to meet foreign exchange expenditures.

2. High production costs due to the inability to source materials and components in China.

3. Difficulty in competing with foreign manufacturers for sales in the domestic Chinese and international markets primarily due to the quality issue.

4. A shortage of managers, engineers, technicians, and other skilled labor.

5. Bureaucratic interference.

Why, if the operating environment is so problematic, are United States companies investing in China? The answer is simple—the lure of the China market. United States companies feel that investing is the best way to gain access to the China market, either now or in the long term, and are therefore willing to endure the current difficulties. In final analysis, the major motivation for an investment like a joint venture is the market opportunity for position and long term profit.

**Recommendations**

Based on the operating experience to date and the direction of China's investment environment, several factors make for a good joint venture investment. Interviews with public officials, United States Embassy personnel, and people directly associated with joint ventures stressed the following guidelines:

1. Investment in China's priority sectors to take advantage of the
government support and preferential treatment.

2. Solve the foreign exchange question at the feasibility and negotiation stage.

3. Thoroughly investigate costs and foreign exchange needs in the feasibility study, and in particular examine sources of production inputs.

4. Start small and expand gradually as experience and opportunities develop.

5. Be willing to commit company financial and human resources to the venture. Joint ventures can offer 30% higher wages than the state owned enterprises including more management incentives.

6. Do not begin with a product that requires a high import content and extensive personnel training.

7. Devote major resources and effort to marketing and service, including market research that demonstrates the product will be salable at a premium compared with domestic and/or foreign competition.

8. Although easier said than done, choose a "good" partner.

9. Negotiate a good, tight, and thorough contract, but do not expect a clause in a contract to change objective reality.

10. Lay the proper groundwork for a cooperative relationship by reaching agreement on the venture's purpose and by understanding each side's goals, motivations, and expectations.

11. Take an active role in the venture's management and have at least one expatriate on-site during the first stages of operation.

12. Ensure that the joint venture management (Chinese or foreign) devotes time and effort to production concerns and pays attention to detail in order to ensure quality control and good productivity.

13. Make a long-term effort to impart a sense of responsibility, pride, and quality within the workforce.
INTRODUCTION

Exploring whether a decentralized system exists in all or only part of Chinese enterprises, is crucial in determining the degree to which the free market system operates in the Chinese economy. Supposedly, Chinese enterprises now have control over their own business decisions and activities. This process of transition to a free market system appears feasible from the top down (on paper); however, integrating market mechanisms into Chinese business activities, may not be as easily attainable from the bottom up.

By analyzing the Chinese business environment and overall behavior during the past decade, one may begin to understand the dichotomy which exists within the system between central planning and the free market. An enterprise's level of control involving investment and production decisions is reflective of the degree to which the market system has been integrated into the Chinese economy.

The following questions served as guidelines to obtain uniform answers (from officials of Chinese enterprises) regarding the present decentralized business environment:

1. Did you expand your production capacity in 1989?
2. What about the funds you used to do this--what percentage came from bank loans--what percentage from the government budget? Other sources?
3. What bank did you borrow from? Do you always borrow from this bank? If so, why?
4. Approximately what interest rate did you pay?
5. Who decided how much to borrow? The enterprise? The bank? The enterprise's administrative leaders?
6. When they made that decision, did they take into account the level of the interest rate?

Answers to many of these questions were unclear and contradictory.

Overview

An overview of Chinese Business Behavior will provide a better understanding of the mechanisms within the system. Over the last decade the Chinese business environment has had to deal with the following issues:

1. the integration of the central planning system and the market mechanism within the Chinese economy;
2. a monopolistic versus a competitive market structure;
3. the rationalization of Industrial Structure to improve the performance of an enterprise (by acquiring advanced technology and foreign exchange).

Chinese businesses have always focused on short-run performance rather than long-run performance because of the contract system and also historical reasoning. Long-term planning is developed by the central government; thus, few Chinese firms are familiar with risk-taking to eventually make a fortune. Mostly all businesses are state owned. Thus, government assistance to increase an enterprise's capacity and/or purchase new technology is funded by the state or banks. Such registered capital is quite
limited for private service enterprises, they are unable to receive capital from banks.

Overall the entrenchment has recently caused government to focus more attention on large firms after June 1989; whereas, the government previously focused on small businesses to move the economy.

Today's Forms of Ownership and Industrial Capital in China

Seventy-five percent (75%) of total is state owned and consists of the following:

a. central government (30-45% of the 75%) consists of 7-10,000 centrally controlled businesses;
b. local government--locally controlled/owned consists of 60-100,000 provincial, municipally controlled enterprises.

Ten to twenty-five percent (10-25%) of total are collective urban versus rurally owned and operated by their workers, but in practice this definition blends with state.

When anything gets large in China it is regulated by government. So as collectives grow the government becomes involved and regulates wages, distribution of profits and capital involved.
CHINESE ENTERPRISES
RESPONSES AS RELATED TO PREPLANNED QUESTIONS
STATE OWNED/COLLECTIVE/JOINT VENTURE
According to Mr. Wang, Director of the Economic Structure Commission in Wuhan, enterprises are affected by central policy decisions, which are carried out by the city government. The city government has made large subsidies to industry.

During the first 5-year plan government regarded Wuhan as a large industrial base. Before 1984 Wuhan did not have a direct account with the central government. Instead it went through the provincial, city and state government. Since 1984 Wuhan received special capital status from the central government known as the One Line Item Plan. Having direct relations with the state council, Wuhan does not have to go through the provincial government in order to promote economic growth.

There are 4000 small and large enterprises in Wuhan. Before 1988 the economy in China overheated because process industries were developing too quickly and there was a raw material shortage. Wuhan having mainly a processing industry, has been affected in 1989.

Although the market was sluggish in 1989, there was much confidence in the structure and readjustment which had started in 1989. There has been a 12.5% increase in industrial output during 1989. June 1990 production is also increasing.

Overall, investment decisions for enterprises in Wuhan are based upon a planned target. The city government is carrying out central government policy according to micro control targets. Targets are set for both Industrial and Agricultural output. For
example, the 1991 target is decided April 1990 and received from the state planning commission. (Additional information may be drawn from Industry.)

Two of the micro control targets include the following:

1. stable prices - a price indicator of 13.8% in Wuhan compared to the economic indicator of 12.8% in China. City government has made large subsidies to Wuhan's Iron and Steel Plant, Boiler Factory, and Electricity Network. Profits are expected by the state;

2. demand and supply - fixed investment is controlled by the city government for these important intermediary products.

As of 1989 Wuhan has fulfilled its short-term goals. Inflation is solved only on the surface of the economy, but underlying problems involving industry structure and quality of products still remain.

The economy is planned, the market is not given consideration; wanting a combination of planned and economic forces--herein lies the difficulty.
Parker-Hubei Seals Co. Ltd.--Joint Venture

Established in 1983 with a 50% American and 50% Chinese investment. In 1988 both sides invested $340,000 equally. Thus the total investment since 1983 in the firm is $1.34 million.

The initial investment was to buy machinery. Most products are for the domestic market, however, raw materials and equipment are imported from the U.S. Thus, a problem of imbalance of foreign exchanges. As of 1989 an attempt to substitute raw materials from China with the support from Parker Co.

According to a source, the 1988/50% investment from the U.S. partner was obtained from company profits and by exchanging RMB to U.S. dollars. However, a bank could have been an important credit source because the company is recognized as being very efficient. The interest rate that the bank would charge would definitely be an important factor. The matter of utilizing retained profits will be decided on by the joint venture's board of directors. On the Chinese side, the Chinese manager can decide if further investment is needed for equipment and machinery but nothing else, due to government regulations.
Visit to Country Side—North Park Village

Population in the village of 1055 with 670 able women and men.

The impact of last year's retrenchment was felt by the township. There was a shortage of funds, thus difficulty in obtaining a loan from the Bank of Agriculture. Because of the retrenchment, 10% of total output decreased.

Unlike factories, the township can only receive loans from the Agricultural Bank. In order to obtain a loan the township must open an account with the bank. The account is gained by obtaining a certificate with the bank.

The interest rate did not seem to be an extremely relevant factor in determining the amount borrowed from the bank. Most loan amounts are determined in part by the bank. For example, a loan for biochemicals resulted in the lending of ¥30,000 compared to the ¥40,000 originally applied for.
Malan Steel Factory—Diesel Engines (main products)

Financing the Steel Factory's Production

Every five years the government provides a certain amount of money for technical investment renovations. A report must be submitted by the factory in order to qualify.

The sources of capital are according to a five-year plan. Wuhan Steel Factory can apply to the Ministry of Mechanical Technology (One Line Item) through the municipality. Investment borrowing only for technical investment.

Overall financing involves the following dimensions:

1. 20-30% comes from the central government with an interest rate of 4-6% (× 12) annually;
2. 30% from the Industrial and Commercial Banks which require consent from the municipality, with an interest rate of 8-9% (× 12) annually;
3. remaining percentage of funds comes from the profits of the factory;
4. short-term loans are borrowed from a credit cooperative with a 13% annual interest rate.

Productivity has been negatively affected by the recent retrenchment. The figures below reflect changes in production.

<table>
<thead>
<tr>
<th>Year</th>
<th>Products produced yearly</th>
<th>Exports of products</th>
</tr>
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<tbody>
<tr>
<td>1986</td>
<td>40,000</td>
<td>1100</td>
</tr>
<tr>
<td>1987</td>
<td>50,000</td>
<td>1300</td>
</tr>
<tr>
<td>1988</td>
<td>45,000</td>
<td>5000</td>
</tr>
<tr>
<td>1989</td>
<td></td>
<td>4000</td>
</tr>
</tbody>
</table>
NOTE: Occasionally borrowing from the Bank of Communications. Exports of ¥1.2 million are shipped every year to South East Asia (Indonesia, Burma, Pakistan). Every year 200 of the diesel engines go to the U.S.

The company has the ability to increase trade. The company has the right to decide since they deal directly with customers. It is a special privilege enjoyed by the Wuhan Steel Factory; however, both provincial and municipal government is involved. Usually a foreign trade corporation within the province signs the trade contracts. The Electrical Machinery Building Co. of Hubei Province acts as agent.
Wuhan Iron and Steel Corporation

The Wuhan Iron and Steel Corporation plays an important role in the national economy. With an output goal of five million tons for 1990 it acts according to the 13th Congress of the Communist Party. Over the years production capacity has increased. From 1958 to 1960 1.5 million tons were produced. As mentioned above the 1990 output goal is five million tons and for 1995 a projected 6 million tons are to be achieved as a goal.

The government provides advantages for this company by granting the use of foreign funds. The Ministry of Foreign Trade gives permission and the state council decides upon what to borrow and the amount. Overall, sources of funds are from the government, profits and foreign companies.

Presently negotiations are being carried out with the Spanish government. The importation of machinery through export credit. A repayment term of 20 years includes a gross interest rate of 4%. This method of borrowing is preferred by the company versus borrowing from the Bank of China because foreign countries provide equipment and favorable exchange rates.

Overall, production capacity does not seem to be affected by the retrenchment in 1989. The domestic production is a concern for not only the company, but for the country.
Malu Township--People's Government
Jiading County -- Shanghai, Municipality

A collective economy - the collective takes care of the land and the peasant will go to work in the factory. In 1989 there was a contraction of credit for township enterprises. However, the average labor power income did not reflect a contraction as a result of the retrenchment. For 1990 the average labor power per individual was reported as ¥2337 per month. Recently the Minister of Agriculture retired or lost his job. He was a supporter of credit to townships. To overcome the contraction of credit, managers of the township enterprises have asked workers to raise funds from their own savings.

To develop your own business the following guidelines apply:

1. 30% of your own investment is raised from surplus from township enterprise and savings from the Bank of China;
2. 70% can ask for a loan from banks which include the Bank of China, Agricultural Bank and/or the Credit Union. The credit unions were under the leadership of township government; in recent years the Agricultural Bank operates within the township.

Only professionals, for example, a pig raiser specialized in agriculture, can borrow as individuals. The rule 30-70 does not apply to individual enterprises.
The plant productivity has not been slowed by the retrenchment because the plant producers are servicing China's infrastructure. These are key national projects. Work tasks are dictated by the central government. Work orders are signed contracts reported to the state, then the state supervises and evaluates the contract. Investments were originally the only source of money from the state government. However, now the plant can obtain funds through loans.

Pricing is set for products, usually by using a previously similar product's price. Also, it is determined if the price is acceptable to the society. The government will provide a subsidy for the year for a specific product.
The village owns its own factories and it was stated that 90% of local income of the township was derived from the 164 factories—a total income of ¥6 million. The investment process to develop Daqou Village's enterprises involved the following:

1. The first factory investment for iron rolling was ¥150,000. The village decided on this type of collectively owned factory because a retired worker of the state-owned factory in Tianjin lived in the village, thus influencing the village's decision to open the same type of factory. The ¥150,000 supposedly came from the income of the township. (A considerable amount of questioning helped to reveal the township's sources of funding.)

Sources of ¥150,000—oil field workers' team salary (commune)

- collective savings of ¥30,000
- workers' salaries
- Agricultural Bank funded ¥50,000/7% annual rate. A creditor of the village helped obtain the loan. The vice party secretary of the county government promised repayment if there was default.
In addition to the initial investment in developing the enterprise, factory profits were used investing back into the business. Apparently in 1981 there was a reinvestment of 60% of factory profits.
CONCLUSION

According to Professor Thong, China still practices a planned economy. A centrally planned economy decides the funds allotted to each sector and thus to individual enterprises, supplemented by a small aspect of market economy.

There are two types of business classes known as first and second class. These are still centrally planned businesses. The first and second class businesses play a key role in China's national economic development, thus growth is within a fixed target. A third business class is less regulated. However, it still needs government approval and/or application.

Thong suggests that enterprises have control over their own investment only to the extent allowed by administrative organizations in charge of the enterprises. Enterprises and banks together investigate an organization's productiveness, credit worthiness and product's marketability. Banks decide whether they will offer the loan based on the data obtained. The most important element in a loan depends on production efficiency—thus loans operate as economic leverage. The interest rate of all banks are about the same.

According to the 8th 5-year plan, the major concerns for enterprises are investment and importation of technology. If a business wants a loan from the bank, it will not be able to receive one just on its ability to repay the loan. Instead, the purpose for the loan must conform to governmental wants and must be within the national interest. Also taken into consideration is the matter
of whether or not the goods produced will sell. Regulations on the amount of money a bank can loan every year and the bank's solvency are also important factors affecting investment and production decisions.

Overall, the pattern of responses confirmed that the type of enterprise, the size of the enterprise and the overall political or governmental plan for the enterprise presently determines the enterprise's degree of autonomy and ability to control their own investment and production decisions. Forces are at work reshaping the theme of decentralization according to an economic plan.
TREASURY BONDS IN CHINA

by Kristi Weir

In 1981 China issued its first treasury bonds in more than twenty years. These bonds were used to finance growing deficits which accompanied the economic reforms set into motion in 1979. This paper will discuss the reasons for the emergence of treasury bonds, the structure of the treasury bond issues and method of primary sales, the recent experiment with a secondary market, and finally the impact of the recent retrenchment on the use of treasury bonds.

REFORMS OF 1979 AND BUDGET DEFICITS

In 1978 before reforms were initiated, the state budget was near balance, but by the end of 1980 the deficit had risen to over 3% of GNP per year. The rate of growth slowed somewhat until 1985 when it rose again. It is currently estimated that the deficit is 2-2.5% of GNP. Although the intent of reform was to reduce the role of the state over the economy, its impact on the state budget was uneven. State revenues as a percent of GNP fell faster than state expenditures.

State revenues declined from 34% of GNP in 1978 to less than 20% of GNP in 1989. This was in part due to the decentralization process in which enterprises and local taxing authorities were allowed to keep more of retained earnings, thus reducing the funds under the purview of the state. Another factor was the decline in profits of the state enterprises as they faced rising input prices but were unable to push costs on as they had to sell most output.
at state controlled prices, which lagged behind cost increases.

On the expenditure side, the reforms were intended to make state enterprises more responsible for financing (use their retained profits, for example) and rely less on the state budget. However, in fact, the state found its cost of subsidizing failing enterprises rising as enterprises found it difficult to pass on cost increases. There was also the added expense of new consumer food subsidies to help offset the rising prices paid to farmers. In Tianjin food subsidies started in 1983 and went from 10 yuan per month for some workers in 1983 to 17 yuan presently.

Thus, the government turned to Treasury bonds as one way to finance these new deficits.

TREASURY BONDS: TERMS AND METHOD OF ISSUANCE

The amount of treasury bonds to be issued is incorporated in the state plan each year. The plan sets out what proportion is to be held by individuals and by units (state enterprises and collectives). Generally 50% of the yearly issue is held by individuals and 50% by units. These national totals are then disaggregated and local quotas are assigned or filled in various ways. For example a university may be assigned a quota to be filled by individuals. The university may determine that everyone must buy bonds worth 10% of one's salary, or everyone must buy at least "X" amount, or the work unit may decide to buy the bonds for the workers. The bond issues are announced in July of each year and are to be subscribed by December. It was reported in Shanghai that some faculty's salaries were reduced by 50% in December of 1989 to
ensure that the unit would satisfy its commitment toward the bond purchase. While some individuals voluntarily buy the bonds, clearly most purchases are a form of forced saving or compulsory investment but the euphemism used officially is that individuals buy for patriotic reasons. Most individual purchases are in small denominations of 10, 20, or 50 yuan ($2-$10 U.S) and many stash the certificates away unclear as to when and how they will be redeemed.

Units (enterprises and collectives) must also purchase assigned quotas of treasury bonds to be held by the units. The interest rates on the bonds sold to units are generally lower than to individuals, and units are not to trade their bonds directly on the newly emerging secondary market. Table 1 details the amount of treasury bonds issued by year and Table 2 gives the conditions of issue.

**TABLE 1: TREASURY BONDS ISSUES (RMB)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
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</thead>
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<td>4.38 B</td>
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<td>1983</td>
<td>4.1 B</td>
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<td>1984</td>
<td>4.2 B</td>
</tr>
<tr>
<td>1985</td>
<td>6.06 B</td>
</tr>
<tr>
<td>1986</td>
<td>6.25 B</td>
</tr>
<tr>
<td>1987</td>
<td>6.22 B</td>
</tr>
<tr>
<td>1988</td>
<td>9.22 B</td>
</tr>
<tr>
<td>1989</td>
<td>11.5 B regular bonds</td>
</tr>
<tr>
<td></td>
<td>12.5 in value preserving bonds</td>
</tr>
</tbody>
</table>
### TABLE 2: TERMS OF ISSUE

<table>
<thead>
<tr>
<th>Year</th>
<th>Maturity</th>
<th>Interest Rate</th>
<th>To Whom Issued</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>10 yrs.</td>
<td>4%</td>
<td>Individuals</td>
<td>Units</td>
</tr>
<tr>
<td>1982-84</td>
<td>10 yrs.</td>
<td>8%</td>
<td>Individuals</td>
<td>Units</td>
</tr>
<tr>
<td>1985</td>
<td>5 yrs.</td>
<td>9%</td>
<td>Individuals</td>
<td>Units</td>
</tr>
<tr>
<td>1985-87</td>
<td>5 yrs.</td>
<td>10%</td>
<td>Individuals</td>
<td>Units</td>
</tr>
<tr>
<td>1988</td>
<td>3 yrs.</td>
<td>10%</td>
<td>Individuals</td>
<td>Units</td>
</tr>
<tr>
<td>1989</td>
<td>3 yrs.</td>
<td>14%</td>
<td>Individuals</td>
<td>Units</td>
</tr>
</tbody>
</table>

The interest paid is simple interest and is NOT paid until the bonds are redeemed. Table 2 does not include the terms of issue of the value preserving bonds issued in 1989. These are redeemable after 3 years and are to pay 1% over the bank three-year certificate rate with an additional adjustment to bring the rate up to equal the rate of inflation if the price index exceeds the bank rate on the date bonds are redeemed.

The Ministry of Finance also issued additional bonds for special construction projects in addition to the bonds listed on the above tables. Bonds are also issued by banks and certain
enterprises, but the Ministry of Finance is not responsible for these.

RECENT EXPERIMENT TO DEVELOP A SECONDARY TREASURY BOND MARKET

On April 1, 1988, the 1985 and 1986 Treasury bonds were openly traded on an experimental basis in five cities and now over 90 cities have securities counters. In addition to the treasury bonds, enterprises and bank bonds, as well as a few approved enterprise stock, have been issued and are traded. Shanghai has the largest secondary market with three securities firms acting as brokers and traders. The three Shanghai firms are Hai Tong (a subsidiary of the Bank of Communications also known as Jiaotong Bank), Shanghai International Securities Corporation (Sisco), and Zheng Xing. By the end of 1988 the volume of 1985 and 1986 treasuries traded was 2.5 B yuan out of the initial subscription by individuals of 10 B yuan. (Bonds held by units are not to be traded on the secondary market.) Bond prices fluctuate with demand and supply factors. After June 1989, prices fell as there was heavy selling.

The development of a secondary market was to achieve two purposes. First, the government hoped to wipe out the active black market in treasury bonds which had developed. As the economic activity outside the plan accelerated, the demand for cash correspondingly increased. Cash-starved enterprises and collectives, as well as individuals, sold treasury bonds on the black market to satisfy their need for liquidity. Bonds were sold generally at a steep discount, especially as inflation accelerated. It was reported that in some rural areas treasury bonds circulated
as cash but at a discount. Despite the development of an official secondary market, the black market is still very active. It is used by units who are prohibited from dealing in the official secondary market. It is also used to sell bonds not yet approved for the secondary market. Others prefer the black market because it is anonymous and more convenient. Also many are unaware of the official secondary markets that now exist.

A second and longer term objective of the development of a secondary market was to enhance treasury bonds as an investment vehicle. This was part of the overall drive toward financial reform, which would entail a complete securities market so that equity and investment decisions would be made on a market value approach. More particularly, if treasury bonds could be made more attractive, this would provide a channel through which the government could tap the growing volume of voluntary savings. It was acknowledged that creating the institutions and culture for an active securities market would take many years.

**IMPACT OF RECENT RETRENCHMENT AND READJUSTMENT ON TREASURY BONDS**

The gallant but ill-managed push toward price reform in the summer of 1988 generated a sharp increase in inflation as panic buying drove prices up. This acceleration in inflation was politically unacceptable and the government decided that the short term goal of price stability had priority over the longer term goal of price reform. Hence, the government slowed the economy down mainly through a series of administrative actions. The resulting recession or slowdown has increased the budget deficit and the need
to issue bonds. Interest rates on the bonds have increased to make them more acceptable in light of the higher inflation and competition from inflation adjusted bank certificates now available.

In 1989 the government had a special additional treasury bond offering, called the value-preserving bond, whose yield was to be adjusted in some manner for inflation. It is not clear if this special issue was in response to the need to finance the growing deficit or to soak up purchasing power to slow the economy down. Despite the "value-preserving" feature, this additional forced or required purchase of treasury bonds was quite unpopular. There may be more negative fall out from this issue when the public realizes the inflation adjustment may not necessarily guarantee a positive rate of return. For example, assume a three year 14% nominal yield value-preserving bond. If inflation is 18% the first year, and 27% the second year, and 4% the last year, there may be no adjustment for inflation at all. This is because the adjustment occurs only if the rate of inflation is above the nominal interest rate ON THE DAY THE BOND IS REDEEMED. By manipulating the date of adjustment the government has the possibility of saving millions in interest adjustments but at the same time may deny bondholders a positive rate of return. Retrenchment has not only increased the amount of treasury bonds to which units and individuals are presssed to subscribe but also introduced the new complication of value-preserving bonds.
The events since summer of 1988 have also seriously hampered the experiment with the development of a securities market as a means to finance deficits or channel idle funds. Since November 1988 there has appeared to be a change in attitude toward the direction and speed of reform itself. There is less talk of pressing forward with experiments in different types of ownership, earlier considered vital in making firms financially accountable. It appears the experiment in developing the treasury bond market in Shanghai will continue, however.

In July of 1990 the first five-year bonds came due. While the bonds held by the public are being redeemed, the units are being quietly asked to continue to hold their bonds. If this becomes a common way to deal with redemption dates, this will further undermine the government’s credibility. The government also faces the problem of financing the redemption (capital plus interest) of three different issues (1981, 1985, and 1988) coming due soon.

The high inflation of 1988 and 1989 and subsequent tightening of the economy have increased the required purchases of bonds, which in general have been unpopular being viewed as taxes rather than investments. The events of June 1989 have increased the skepticism and uncertainty by the public regarding the value of holding treasury bonds. In June of 1989, the price of treasuries fell dramatically on the Shanghai secondary market. The change in leadership has also slowed the development of a securities market.
SUMMARY

Currently the main role of treasury bonds in China today is to finance deficits. The purchase of bonds is based on pressure from the center to fill bond quotas. Many bondholders do not consider bonds as investments but as "dead money" or a form of a tax. While there has been a thrust to develop a securities market and hence the potential of using treasury bonds as a macro tool to soak up idle funds or to alter the level of aggregate demand, this experiment has failed to gain much momentum beyond the Shanghai market in the past two years. Yet, in the long run, it is likely that treasury bonds will play a larger role in the macro-management of the Chinese economy.