

A Speculative Analysis of Socio-economic Influences on the Fertility Transition in China

*Attempts to assess the achievements
in fertility decline must take into
account not only the effects of programmes
but also the direct and indirect effects of
various socio-economic changes*

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The dramatic changes in fertility that occurred in China during the past few decades are well known. The 1982 One-per-Thousand Fertility Sampling Survey of China reveals that the total fertility rate fell from 5.81 at the beginning of 1950 to 2.63 in 1981. ^{1/}

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The factors fostering the fertility transition in China are a matter of debate among demographers. Quite a few demographers have attributed this demographic phenomenon to the family planning programme implemented by the Chinese Government.^{2/} It is, however, very interesting to ask whether fertility in China would have declined without government support of family planning services. One may also ask why China's fertility patterns and trends differ in urban and rural areas in spite of a uniform intensification of population policies throughout the country, and whether these differences could have resulted from differences in socio-economic conditions. We argue that before and since the intensification of population planning activities, policies that have explicitly attempted to influence fertility change in accordance with official objectives have been affected by implicit or unintentional socio-economic forces.

The 1982 population census seems to support the hypothesis. The fertility transition in China started as early as the mid-1950s. After a "baby boom" between 1949 and 1954, fertility began to decline after 1955, but its progress was interrupted by both the three-year famine that followed the "Great Leap Forward" between 1959 and 1961 and the "Cultural Revolution" that started in 1966. In 1968, fertility once again began to decline and, since the 1970s, it has declined precipitously from year to year.^{3/}

This article attempts to examine a broad spectrum of causes related to institutional and socio-economic developments beyond the Government's population policies and family planning programmes. It seems likely that most of those factors, though implicit or unintentional, are either highly conducive to the spread of birth control or tend to facilitate the Government's efforts to make information, supplies and services accessible to the population.

The study engages in a "speculative discussion" of the likely impacts of these recent great changes on fertility trends. It focuses on the following changes: (a) the emancipation of women, (b) the socialization of agriculture and industry, (c) social security and other welfare benefits, (d) public health care, (e) the expansion of education, (f) changes in female labour force participation, (g) the rise in urban residence and (h) the so-called "sending-down" campaigns.

It is hoped that the article will contribute to the study of the effect of different development paths on the transition. If China's fertility transition reflects its past population policy decisions, then considerations of demographic development must be broadened to include the issues of societal development strategy so important in China's experience.

The 1950 Marriage Law and emancipation of women

As a revolutionary regime, uprooting many age-old cultural values, the Chinese Communist Party realized from the very beginning that if it was to succeed in a socialist setting it would have to storm the very bulwark of the oldest institution -- the traditional family. Since a family is formed upon marriage, any transformation of this institution must begin with a reform of the marriage law. Thus, one of the first significant laws promulgated by the regime after its rise to power was the 1950 Marriage Law.

The 1950 Marriage Law called for sweeping changes in many areas of family life. It forbade any "arbitrary and compulsory" form of marriage that would be based on the superiority of men and would ignore women's interests. The new democratic marriage system was based on the free choice of couples, monogamy, equal rights for both sexes, and the protection of the lawful interests of women. It abolished the begetting of male offspring as the principal purpose of marriage and weakened kinship ties which reduced the pressure on women to bear many children, especially sons. With arranged marriages prohibited, young women could choose their own marriage partners, share the financial cost of setting up a new household, and have equal status in household and family decision-making. The Government then initiated an extensive campaign of marriage-law education, working jointly with the Communist Party, women's federations, trade unions, the armed forces, schools and other organizations.

Although the 1950 Marriage Law was instituted for reasons that had nothing to do with demography, the campaign turned out to have unintended demographic consequences.^{4/} Once the role of marital postponement in fertility limitation was recognized in the 1950s, a diversity of opinion emerged concerning the advisability of raising still further the age requirements for marriage. Later, during the third phase of population control, Chinese couples were strongly encouraged to delay marriage until age 25 in urban areas and 23 in rural areas.

One important political campaign was the drive to criticize Confucius, which has been prominent since early in the 1950s and which reached a fever pitch during the Cultural Revolution. The movement attacked superstitious restrictions on the activities of women and emphasized the equality of the sexes. The downfall of Confucian teachings was linked directly to the promotion of birth and population control. The campaign reported that young women were successfully resisting such abuses as arranged marriages. The pressure on women to produce a son at all costs was another ancient convention scorned both as part of the Confucian heritage and as a

hindrance to effective birth control. For the sake of orderly economic development, the argument went, population planning must replace “complete anarchy in mankind’s reproduction”. The anti-Confucius campaign lashed out at early marriage, failure to plan pregnancies and defiance of the Communist Party’s policy on marriage and its function.

It is impossible to calculate the impact that attacks on Confucius have had on individual women. However, one thing is certain: since the Chinese Communist Party came to power in 1949, no other drive would seem to carry such potentially immediate and drastic implications for population growth.

Socialization of the economy

In agricultural countries, virtually all children of a household except infants contribute some labour both to productive activities and to household chores. Under such conditions, where the cost of raising children is marginal and the children’s contribution to the family’s welfare increases proportionally as they grow up, there is every incentive to bear many children, especially when the survival ratio is low. Therefore, private ownership of the means of production (including land) may be viewed as fostering high fertility. As long as the internal relations of the familial mode of production remain intact, marital fertility will not be restricted for the purposes of limiting family size”.^{5/}

However, the factors that tend to sustain high fertility when the means of production are in private hands are greatly weakened by the socialization of production, which happened in China with the collectivization of agriculture in 1955, the socialist transformation of industry and commerce in 1955/56, and the formation of people’s communes in 1958. The socialization of state enterprises took modern organizational forms in which the means of production are owned and controlled by individuals in exchange for monetary compensation. First, these forms entail a fundamental separation between family and economy that decreases opportunities for the productive employment of children: the family is no longer a production unit, and labour contracts are with state-run firms or collectivized production teams rather than families.

Second, the place of work is no longer the place of residence, so that there is a differentiation between child care and the supervision of child labour. This is at least partly true even in rural China, where the structure of collective production introduces both traditional and modern elements.

Where both parents are engaged in field work for the production team, they cannot also supervise the domestic work of children.

Third, when agriculture is collectivized, the earnings of extra sons can no longer be used to buy larger land-holdings. Without the control of land, parents and grandparents lose some of their economic authority and their ability to pressure their grown children to have more offspring. Furthermore, an adult son or daughter no longer remains economically active in the parents' household. In the pre-1949 scheme, a son laboured on the family farm after marrying until it became his own farm through inheritance or the father's retirement. Land reform and collectivization in the 1950s have curtailed the economic authority of the father and his power and desire to keep sons together under his rule.

Fourth, the institutional effects of the new forms on child labour have been complemented by the effects of the shifts in technology, mechanization, specialization, and required skill levels. One may speculate that specialization and increased skill levels not only made possible the impressive increases in rice yields, but also reduced opportunities for the productive employment of children, at least on collective land.^{6/}

Fifth, one of the economic functions of the traditional family, the support of an aged parent by grown-up children as a relieving agency in case of distress, has been taken over by the collective welfare fund, which funds, among other things, aid to members who are ill, retired, or unable to work. The family is no longer the only source of help. The collective also subsidizes the rural cooperative medical system and provides relief to members who are in financial difficulty.

Social security and other welfare benefits

In traditional Chinese society, there were very substantial benefits from a large family, since the flow of services tended to be from the younger to the older generation.^{7/} At the same time, there were few alternative means by which the household could cushion itself against the insecurities of life. The value of children to their parents as a source of economic support in old age thus constituted a powerful motivational force in favour of high fertility.

The post-liberation years have witnessed dramatic changes in these conditions. There have emerged many more substantial opportunities for households to provide for themselves in other ways. Savings, the accumulation of secure assets, and participation in institutionalized pension and in-

insurance schemes have brought more security to the large majority of Chinese families.^{8/}

Other forms of social insurance are widely available, especially in the non-agricultural sector: civil service pensions, military pensions, industrial pensions and “family planning insurance” that makes payments to one-child parents whose children have died or may die.

Social security and welfare benefits are admittedly more favourable in urban than in rural areas. After the campaign to socialize the urban economy in 1955/56, there were two kinds of enterprises: state and collective. Workers in state enterprises are paid according to fixed wage-scales that are centrally determined and enjoy a wide range of fringe benefits (health insurance, disability pay, paid maternity leave, subsidized pre-school care, retirement pension etc.). In collective enterprises, some people are paid by the day, and others by the piece or according to some other incentive device. Some workers in collective enterprises enjoy partial medical benefits, disability insurance, maternity leave, or pensions. Some collective enterprises provide no benefits at all, but are very profitable and can therefore pay their employees wages higher than those offered by similar state enterprises.^{9/}

Both state and collective enterprises have shared to a considerable degree in a distinctive Chinese version of permanent employment. Once one is employed, it becomes almost impossible to be laid off. As a result, employed persons have a reasonable degree of job security.

Normally, in state work units, men retire at age 60 and women at 50 or 55; they work 15 to 20 years for a full pension, three years for full disability benefits, and so on. Those with fewer than 20 years' employment are entitled to a smaller percentage of the last wage, but in no case does the pension fall below 20 yuan per month (\$US1.00 = about ¥5). In addition, all retired people continue to receive free medical care and benefits from the general food subsidies.

In the rural sector, a rudimentary social security system has also been introduced.^{10/} Since the introduction of collective farming in the mid-1950s, the means of production have been progressively socialized, turning virtually every peasant into a *de facto* wage earner. The peasant still retains nominal title to the land allocated to him by the land reform. Everyone is assured of a basic grain and cloth allocation and some degree of social security, cash income varies with total work-points and hence with the amount of labour in a household.

For the childless elderly, the collective provides “five guarantees”: food, clothing, shelter, medical care and burial. Recipients of five-guarantee support are given a set amount of grain, oil, cotton, fish and whatever other goods are distributed by their team. The grain allocations they receive are equal to those distributed to other non-working elderly people in the team. In addition to these goods, they are given two or three yuan a month in cash, depending on the wealth of the production team.

Apart from the five-guarantees system, the collective has other support mechanisms, operating most commonly through indirect channels or loans. An old man in a poor family or without any children is requested to oversee water levels in paddy fields or raise buffaloes for a few points a day. If all else fails, poor families can always go into debt, overdrawing their collective accounts while still eating -- at least in the majority of teams that distribute part of the peasants’ earnings in the form of “basic grain”.

In a commune (or production brigade, depending upon the period and area), before the total income is distributed among the members, a specific percentage is set aside as the public welfare fund, earmarked for taking care of childless elderly people.

It is worth noting that some of the most prosperous communes have introduced pensions for their members. Such locally funded retirement schemes provide either cash or in-kind payments worth up to 50 per cent of average income. In 1981, 426,000 elderly peasants were regularly collecting monthly pensions from their brigade welfare funds.^{11/}

Homes for the elderly, another alternative to the traditional reliance on adult children, have increased in number since 1949, although they remain statistically insignificant. By December 1982, there were over 8,800 rural homes for the elderly, housing a total of 138,000 people, with plans to expand these to house 20 per cent of the elderly population by 1985.^{12/} According to the 1987 One-per-Hundred Sample Survey of China, there were over 28,014 rural homes for the old, housing a total 281,058 people.^{13/}

In general, the economic growth of the period after 1949 has brought with it a decline in the value of children as sources of economic security. These developments have weakened the motivation for larger families.

Public health care

As in social security and welfare benefits, China has made a major commitment to improve health care and has made efforts to make medical

care facilities more widely available in the country as a whole, but especially in rural areas. Advances in health care and gains in life expectancy have somewhat altered traditional strategies for ensuring physical well-being in old age, and with them the traditional motivation for larger families.

Up to 1949, China had only a few trained medical personnel, no adequate hospital facilities, and no nationwide public health network. In the three decades since, medical education hospitals and public health efforts have all expanded rapidly. By the 1970s, the various kinds of doctors and medical facilities were typically organized in a three-tier system in the country as a whole. Since then, in urban China, at the lowest level, small clinics have been set up and maintained in urban neighbourhoods. They tend to be staffed by secondary-school trained Western-style and Chinese doctors, and sometimes only by minimally trained paramedics or by nurses. At the middle level, hospitals are spread throughout the city, accepting patients from neighbourhoods and work units within their assigned areas. At the highest level are city or provincial general and specialized (e.g., maternity, mental) hospitals, staffed by the highly trained doctors. In a large city, there may be several of these, some general hospitals, and some facilities designated to handle referrals from surrounding rural areas or from smaller towns that have only middle-level hospitals.^{16/}

In the countryside, at the highest level of the rural health care system is the country people's hospital, staffed mostly by graduate physicians trained in either Western or traditional herbal medicine. Most are equipped with an operating room, x-ray and laboratory facilities, and some in-patient beds. Such hospitals also operate continuing in-service training for the commune health staff. The commune health centre is financed by county and provincial subsidies, user fees and contributions. Medical workers employed by the commune health centre include graduates of middle-level medical schools and practitioners of traditional herbal medicine. They supervise the "barefoot doctors", organize continuing in-service training for the treatment of complex cases, and perform sterilizations and abortions. At the lowest level of this three-tier primary health care system is the production brigade health station, which is staffed by two to three barefoot doctors whose responsibilities include sanitation, immunization and vaccination, maternal and child health, and family planning.

Early in the 1960s, however, medical care was largely unavailable to the majority of the rural population, which made up about 80 per cent of the total population. Against this background it becomes easy to understand why Chairman Mao Zedong issued his now famous 26 June 1965 directive calling for a mass migration of medical personnel to the rural villages:

In medicine and public health, put the stress on the rural areas -- Urban hospitals should retain some doctors who graduated only one or two years ago and who are not very experienced. All the others should go to the countryside.^{15/}

Following that directive, urban medical hospitals dispatched one-third of their personnel to villages as mobile medical teams on a rotating basis, the usual period of service lasting one year or so. With the advent of the Cultural Revolution, this programme was intensified and resulted in a mass migration of doctors from urban and county hospitals to the countryside: some even took up more or less permanent residence there, and a new network of paramedics -- barefoot doctors -- was created.

The mobile medical teams were directed to train four or five doctors for each health clinic in a commune, one or two barefoot doctors for each production brigade, and one or two midwives and one or two volunteer health workers to handle emergencies within each production team. Under this new system, each production brigade was to have a health station with at least a barefoot doctor and a trained midwife (and sometimes other personnel, such as a traditional herbalist). Below the brigade level there might also be team-level health workers to look after emergency first-aid and health education.

By the early 1980s, every county had a hospital and the majority of them had a county station set up to prevent the outbreak of epidemics as well as a specialized maternal and child health care hospital. Over 50,000 communes had their own commune health centres, while over 90 per cent of the country's production brigades had their own cooperative health stations or similar health facilities, staffed by a total of 1.48 million barefoot doctors.^{16/}

Decentralized health care options have served China's purposes fairly effectively. Thanks to the development of low-cost, effective public health techniques and the expansion of public health networks, mortality, especially infant mortality, has declined significantly. For instance, the death rate, especially the infant mortality rate, in China in 1982 was substantially lower (7 and 67 per thousand, respectively) than the corresponding rates in India (13 and 94 per thousand), Bangladesh (17 and 133 per thousand) and Indonesia (13 and 102 per thousand).^{17/}

In China, old age has the same connotations of illness as it has in all countries, and people have the same worries about how they will cope with their reduced abilities and increased need for physical care. In the decades

immediately before 1949, Chinese parents traditionally relied on close ties with male children. Aphorisms such as “the more children the better” and “bearing sons to guard against old age” convey the importance attached to child-bearing. A relatively high infant mortality rate reinforced parents’ motivation to bear many children on the assumption that some would not survive.^{18/} Recent advances in public health and social welfare, together with gains in life expectancy, have somewhat altered traditional strategies for coping with dependency in old age. The change in infant mortality has also motivated parents to bear fewer children because they can feel assured that the children they do bear will survive into adulthood.

Educational development

Since 1949, educational opportunities in China have expanded very rapidly. The literacy rate in China in 1981 was 69 per cent, compared with 36 per cent in India, 24 per cent in Pakistan, 26 per cent in Bangladesh and 40 per cent in the “average” middle-income country.^{19/}

China’s progress in women’s education has also been remarkable. In pre-revolutionary China, more than 90 per cent of women were illiterate. Before 1949, women accounted for only one quarter of primary school pupils, 20 per cent of middle-school students, and just 18 per cent of college students. Educational levels among married women have been rising since that time. Illiteracy and semi-illiteracy decrease rapidly with age cohort, i.e. from 76 per cent among women aged 45-49 years to 14 per cent among women aged 15-19. The proportion of women who have attended secondary school varies inversely with age, from 3.4 percent among women aged 45-49 to 41 per cent among women aged 15-19.^{20/}

Although China’s intentions in educating its population have been economic rather than explicitly demographic, education is an actual or potential determinant of fertility reduction. First, educational development has had a substantial effect on the ages at which women marry, both because they stay in school longer and because education widens their employment opportunities outside the agricultural sector. Second, from the standpoint of the parental household, higher school enrolment rates have substantially raised the investment costs of children, especially for parents who wish to ensure good career prospects for their children. Third, education promotes a rational view of family formation and the acceptance of contraception for either the spacing or limitation of children.

Fertility within marriage is significantly lower at higher educational levels. The 1982 One-per-Thousand Fertility Sampling Survey shows that,

with one exception, the total fertility rate declined sequentially for five groups of married women classified by education, even when age was held constant. The potency of higher level school exposure for this purpose is apparent in almost all age groups.^{21/}

If education operates indirectly to control fertility, we might expect that would have a measurable influence on the direct variables of greatest interest to programme planners: contraception and one-child certificate holding. In Beijing, for example, among women with higher education, 89 per cent are practising contraception. By comparison, 82 per cent of middle-school educated women and 57 per cent of those with primary education are using contraception. The impact of education on one-child certificate holding shows similar trends.^{22/}

Changes in women's workforce participation

In China, working people are defined as those who derive an income from their labour, including persons engaged in household production as a sideline, those working at temporary jobs, retired persons who continue to work for additional income, and self-employed persons, as well as those holding regular jobs. The 1982 population census counted 521.4 million employed workers, of whom 227.8 million were women aged 15-54.^{23/}

During the 1950s, the general trend was towards a much greater involvement of women in the labour force, and real efforts were made to encourage women to stand up and take part in decision making, both within the family and in the wider context of society. There was an upsurge in the number of working women during the Cultural Revolution. The change in attitudes to women's roles was intensified, and the slogan widely associated with the questioning of Confucian attitudes, "women hold up half the sky" was taken increasingly seriously.

As previously mentioned, during the late 1940s there was a massive attempt to widen the basis of medical care by creating vast numbers of barefoot doctors, low-level medical stations and other facilities. This in turn led to a considerable increase in the number of women employed in, or working part-time with, the health services. On the rural communes, all women, except old women, were working outside the home. In 1971, 90 per cent of all Chinese women, including those in the countryside, worked outside the home.^{24/}

Demographers have noted that separation of place of work from place of residence appears to be a key consideration in identifying the impact of

employment upon fertility. The work status of women in China has affected perceptions of the value of children, husband-wife communication and decision making, and desired and actual fertility: (a) women working in the formal sector begin practising contraception earlier in their marriage than women working in the informal sector; (b) women in the formal sector are less likely to want children for traditional reasons, such as continuing the family name or enhancing their own status through the motherhood role, and they are also less concerned than those in the informal sector about the sex composition of their family; (c) women in the formal sector are usually better educated and tend not only to differ from other women in their opinions concerning the ideal age at marriage but also to delay their marriage in practice; (d) female employment is associated with postponement of child-bearing and wider spacing of births.^{25/} Therefore, married women who have been economically active tend to have fewer births than economically inactive women with the same duration of marriage.

The impact of occupational factors upon the fertility level is fairly stable, in the countryside as well as in the cities. The numbers of children ever born are substantially higher in the informal sector at all ages.^{26/} The percentage of one-child-certificate-holding is still higher in the formal sector among cadres and workers, and lower in the informal sector among agricultural workers.^{27/}

Urban residence

It has long been recognized that residence is an important determinant of fertility, and urban areas are characterized by factors thought to be conducive to lower fertility.^{28/}

After the Great Leap Forward in the 1950s, the opportunities facing school-leavers became dark. Urban jobs became increasingly scarce, and many youths faced the prospect of being sent to the countryside to receive low starting pay, with little prospect for raises that would enable them to plan for a wedding and to support a family early. This situation lasted nearly two decades until the beginning of the 1980s.

Problems with mate choice trigger the postponement of marriage.^{29/} There has been an official policy at least since the late 1950s that young people still in school should not pair off, and marriage is strictly forbidden. This ban makes it difficult for youths attracted to each other to communicate their feelings and develop a romantic relationship.

Once one is promoted to a secure job as a regular employee it still may not be an easy matter to find a partner. There is, for example, a considerable amount of occupational segregation by sex (for instance, women tend to work as textile workers or nursery-school teachers, while men work as coal miners and the like). Also, men and women are often assigned to different kinds of jobs even within the same enterprise. There are undoubtedly few prospects close at hand for those who are thus segregated, while the absence of the facilities of a dating culture, such as dance halls (these have developed only after the Mao era), drive-in movies and all the rest, means that individuals lack opportunities to meet eligible partners outside on their own.

Housing became a serious problem as urban living space became increasingly tight and as a dominant share of housing came under the control of the authorities. In 1949, the average per capita living space in urban China stood at 6.25 square metres. As the urban population more than doubled during the 1950s, this figure had shrunk to around three sq. metres by 1962.^{30/} This housing crunch meant that, if neither set of parents had extra room, the new couple would have to apply to their work units or to city housing offices for an apartment. They might have to wait for several years before an apartment would be assigned to them.

Falls in mortality levels and concomitant increases in life expectancy have contributed to the problem of crowding so that several generations may have to live together under the same roof. Lack of housing investment from the Government has gone hand in hand with the well-known population growth, and has been complicated by the cohorts from earlier baby booms coming to marriage age. In these circumstances, grandparents' traditional yearning for grandchildren around their feet may well be muted.^{31/}

The costs of marriage and of establishing a household are now generally the responsibility of young couples, rather than of the parents, as had previously been the case. Higher disposable incomes and the general availability of consumer goods brought about by the economic reforms of recent years have generated increasing requests for the "big four items" or the "three rounds and one sound" (bicycle, sewing machine, wrist watch and radio), as well as for the "thirty legs" (of the bed, table, chairs and other furniture). Many young couples prefer to postpone marriage and even child-bearing in order to enjoy the luxury of being able to spend more of their combined salaries.^{32/} The groom may be expected to pay out approximately 2,000 yuan on furniture, even if his salary is only 50 or 60 yuan a month.

Since 1970, the feast or banquet customary at weddings has again begun to flourish, especially in recent years in urban areas.^{33/} Holding a feast of 8-10 tables nowadays costs 2,000 yuan or even more -- certainly an expense that couples would have to plan for over a long period of time. But in order to maintain reputation and "prevent others from laughing", many urban brides and grooms postpone their marriage in order to build up savings to finance such expensive feasts. Some families go into debt by borrowing from kin and friends in order to meet these expenses. As a result, they are left in financial difficulties that delay child-bearing.

Life is arduous both inside and outside the home. In cities, both husband and wife work six days a week, eight hours a day, plus one or two hours of travelling back and forth for those who live far from their work units. On their day off, they must wash, clean, queue for shopping, cook etc. Life for the couple is tiring, and will be more so if they have more children. Waking up at night to feed the baby, more washing, education and many other activities all consume time and energy.

A 1983 survey of the off-duty activities of Shanghai workers found that commuting and household chores such as cooking and washing took an average of six hours and forty-five minutes a day.^{34/} Croll's survey^{32/}, on the other hand, found that in urban Shanghai and Beijing, average daily shopping took over three-quarters of an hour and half an hour, respectively. Cooking took an hour and three-quarters in Shanghai, and an hour and twelve minutes in Beijing. Where the household does not have a resident grandmother, shopping and cooking add appreciably to the length of the working day (35-45 per cent of the working women had to undertake these tasks).^{35/}

The value of children has declined drastically in urban China.^{36/} The evidence of this is plentiful. Family firms were eliminated by 1956, for example, and there are few jobs to which child labour can be applied. Education is compulsory but not free, so that parents' financial burden increases with the number of their children. In the cities, the relatively clear delineation of career paths affects the desire for children. These prospects were greatly dimmed by a sudden scaling down of both white-collar and blue-collar opportunities after the early 1960s. The Government's response to this politically explosive situation has been to send school-leavers to rural jobs. Since the value placed on children appears to be directly proportional to their chances of horizontal mobility, it seems doubtful whether, under these circumstances, family members will continue to find value in numerous children.

The decline in the value of children has been reinforced by the cost of rearing them in urban China. The 1979 estimates indicate that rearing a child to age 16 costs much more in large cities and towns than in rural villages. The total average family expenditure on a child to age 16 in large cities (4,689 yuan) is nearly four times the average in rural areas (1,196 yuan).^{37/} Bringing up children involves more economic difficulties for people living in the cities, where salaries are universally low. During the First Five-year Plan (1953-1957), nominal and real wages improved slightly, but after 1957 wages were held practically stable for two decades. In spite of marked improvement in recent years, Chinese wages still allow only a modest living standard. Moreover, wage increases have been dwarfed by inflation. The rate of inflation between 1979 and 1982 has been given officially at approximately 15 per cent.^{38/}

Obviously, under such circumstances, when young people start thinking of having a child, they must be prepared for a lower living standard than previously and another child will mean yet a further decline in the living standard of the family.

“Sending-down” campaigns

China’s fertility decline owes much to the large-scale rustication campaigns of the past decades. These steps have included the “sending down” (*xia-fang*), both temporary and permanent, of urban cadres, the resettlement of entire urban families in villages and in frontier areas such as Xinjiang province, the assignment of university graduates to rural posts, the dispatch of urban medical workers to rural areas, and especially the transfer of urban secondary school graduates to rural villages and to frontier settlements (*shang shan xia xiang*), or “up to the mountains and down to the villages”.^{39/}

Severe over-urbanization and the imbalance of the national economy brought about by the Great Leap Forward in the 1950s demanded drastic action. As a result, the majority of urban residents were summarily ejected from their cities. The quite extraordinary reduction in China’s total urban size was caused by the mass deportations of the early 1960s and of the years after 1968.

From 1961 to 1964, about 30 million people were mobilized to go back to the countryside. The implied net migration loss in 1961 and 1962 was almost 20 million, around 14 million of which took place in 1962 alone. Additionally, the Socialist Education Movement of 1963-1964 removed millions of people from the cities, most of them temporarily, but some for good.^{40/}

Between 1966 and 1976, 17 million young people set out to the villages and small towns. The transfer was intensified in response to Mao's call of 23 December 1968, for young students to go to the country and be "re-educated" by poor and lower-middle class peasants.

The aforementioned numbers are greatly increased if one takes into account the downward transfer of officials (*ganbu xiafang*), the dispatch of urban medical workers starting before 1965, and the various dispersals of enterprises and their staff, skilled labourers, and criminal elements since 1949.^{41/}

This massive migration is intimately connected with both increasing age at marriage and declining fertility. Millions of urban educated youths who were sent to the countryside at about 17 or 18 years of age remained unmarried in the villages until 10 years later, in hopes of returning to the city. Of the 17 million rusticated youths, just 900,000 had married by 1978. Thus, millions of young people returning in the late 1970s were nearly all unmarried, even though they were of marriageable age.

Those who managed to transfer back to urban areas after 1979 had to start at the bottom of a work unit, often as apprentices, several years after they had finished school, and therefore required several more years before they could establish themselves well enough to contemplate marriage.^{42/}

While the campaign lasted, it obstructed what Caldwell has identified as the flow of wealth from the younger to the older generation. Rusticated urban youths not only did not return wealth to their parents, but also imposed a heavy burden on their parents by continuing to need financial support as long as they stayed in the countryside, where life was bitterly difficult. In addition, the exemption of one-child families from being resettled in the countryside also helped to erode the dominance of large families.

The Government's vigorous efforts to bridge cultural, educational and health-care gaps by the *xiafang* system and rustication of urban intellectuals and educated youths have had the unintended -- or perhaps intended -- consequence of assisting it to inculcate the small family norm and to make birth control knowledge, means and technical services accessible to the broad masses in China's vast rural areas.^{43/}

It is worth stressing that a most important role in the drive to limit fertility was played by mobile medical personnel who, after 26 June 1965, were required to spend a certain part of the year attending to the medical needs of the rural population. They publicized the meaning of planned parenthood among the peasants, disseminated knowledge about birth con-

trol, conducted propaganda meetings, set up exhibitions, showed movies and organized “personal testimony” meetings featuring peasant women who were using IUDs or other types of contraceptives.

The fertility decline may also perhaps reflect the marital separation of a great number of cadres and members of the intelligentsia, who were removed from the cities during the Socialist Education Movement of 1963-1964 or the Cultural Revolution, and had no sexual relations for a long time. Some of these people in fact stopped having marital intercourse as long ago as the late 1950s, after the advent of the anti-rightist movement in 1957. As Caldwell points out, “The Cultural Revolution certainly separated many couples”.^{45/}

Discussion and conclusions

The literature on the fertility transition in China is replete with references the 1982 population census of China and fertility survey information. The fact that some reduction in both urban and rural fertility preceded the intensification of organized family planning efforts during the 1970s indicates that it is difficult to assess the programme’s effects on fertility net of socio-economic and institutional factors that encourage people to accept and practise effective contraception. The causes of the fertility decline in China are very complex, The explanation probably lies in various socio-economic changes. As a result, increasing numbers of people have become aware of alternatives to their traditional life styles and aspire to something different.^{45/}

Fundamental socio-economic changes in China, unlike the changes brought about by the family planning programme, have been gradual and strenuous. Transformations in family structure and functions and changes in the status of women have established a new relationship between the individual and society, giving individuals, especially women, a new decision-making power in forming their families.

The virtual elimination of the private sector has reduced the utility of children as a source of labour in family enterprises, while the mitigation of the economic uncertainties with which the poor had to cope before 1949 has reduced the value of children as a form of risk aversion. In China, as in other socialist states, employment, or at least a minimum income, is virtually guaranteed; health services are provided free of charge or at a very low cost; savings, the accumulation of secure assets, and institutionalized pension and insurance schemes have brought a greater degree of security to the large majority of Chinese families.

Consequently, the economic function of the traditional family, i.e. the support of elderly parents by children, is no longer crucial, and has been partly taken over by the collective, or the State, or institutions. All these profound cultural and institutional changes have the effect, intended or otherwise, of removing or undermining many of the forces that in the past tended to encourage and sustain the traditional way of life, with the high fertility norms and practices characteristic of virtually all agrarian pre-modernized societies.

China is undoubtedly in the midst of a massive cycle of extraordinary socio-economic change. Women especially are benefitting from this change. They are now moderately or fully freed from the constraints of the previous feudal marriage system. Their general levels of education are rising, and their employment is expanding year by year. Furthermore, recent studies have proven that these changes are taking place in rural areas as rapidly as electrification and road construction permit. Married women have more alternatives to marriage and child-bearing than had been the case and, as more women become educated and employed, they join categories that have been associated with reduced fertility -- either through postponement of marriage or through deliberately limited child-bearing.

All of the socio-economic factors usually associated with rising affluence have accompanied both urbanization and a radical change in urban settings, although still within a Chinese cultural context. Under modern urban conditions, marriage requires a willing mate, funds to pay for a wedding and the expenses of equipping the new household, access to housing, and an income, or the prospect of earning an income, that can support a family. As most of these resources became increasingly scarce, marriage and child-bearing were inevitably delayed. The delay was particularly marked for those millions of urban educated youths who were sent to the countryside.

Our study suggests that all these dynamic factors of the fertility transition were essentially interactive and accumulative processes, in which all the factors tended to develop concomitantly and the efficient functioning of any one of the factors tended to require the efficient functioning of all the others. That is, in the absence of other development concomitants, significant fertility change is most unlikely. None of these processes can be understood properly in isolation. It is the interaction among these factors, all operating within China's unique context conducive to reproductive change, that produced the rapid and extensive decline in fertility.

The rapid fertility decline during the 1970s has, for instance, coincided not only with the intensification of the family planning programme, but also

with the development of all these subsets of socio-economic factors and processes. The 1970s marked a culmination of various socio-economic changes in China that had been developing for several decades: the repeated rustication campaigns that had been taking place since the mid-1950s and peaked in 1968, the growth of education, changes in occupational opportunities, the rise in the status of women, changes in the costs and benefits of children, housing shortages in the urban areas, land shortages in the rural areas, changes in the family and marriage system, the rising age at marriage and increasing proportion of women entering into late marriage, the decline in mortality (especially infant mortality) and so on.

The fertility transition in the 1970s should therefore be regarded as an emergent phenomenon, not only of the general transition of Chinese society in the 1970s, but also of the transformations that began during the 1950s and continued during the 1960s. Thus, it would be naive to think that a changing demand for children, involving new perceptions of their economic and non-economic benefits and costs, would emerge suddenly in a simultaneous flash of mass insight. It is more logical that all these socio-economic changes in China would provide a latent motive for limiting children which would be crystallized over time.

In short, there are three points worth concluding. First, although the implementation of family planning programmes and their resulting effects on reproductive behaviour have certainly been influential, it is our contention that attempts to assess the achievements of China in fertility decline in the past three-odd decades must take into account not only the programmes but also the direct and indirect effects of various socio-economic changes on fertility.

Second, the experience of Western countries that have completed their demographic transitions is no reliable guide to what has taken place in China, which has experienced several distinct phenomena that are in sharp contrast with corresponding phenomena in the developed countries, and even with those in developing countries. China has undergone many specific changes that are unique in the world which we have delineated above. No such socio-economic changes have occurred either in the developed countries or in those now developing.

Third, many of the socio-economic forces are not unique to China, but have operated in varying degrees throughout the world. Given the commonalities, it is interesting to consider the extent to which the dynamics of China's fertility transition are relevant to reproductive transitions elsewhere

– that is, how far the factors underlying these dynamics are mediated through a cultural, social and political setting unique to China.

The preceding examination of the factors triggering China's fertility decline is by no means exhaustive. Some of the forces which lie behind the fertility transition are doubtless unknown to us, a fact that it behooves us to remember.

Footnotes

1. *Zhongguo Renkou Ziliao Shouce* (Handbook of Chinese Population Statistics), (Beijing, China Population Information Centre, 1983), p. 335, and *Global Estimates and Projections of Population by Sex and Age: 1988 Revision* (New York, United Nations, 1989).
2. Bongaarts, J. and S. Greenhalgh (1982). "An Alternative to the One-child Policy in China", *Population and Development Review*, vol. 11, No. 4, pp. 585-617; Chen, Shenli (1984). "Fertility of Women during the 42 Year Period from 1940-1981", In: *Analysis on China's National One-per-Thousand Fertility Sampling Survey*, (Beijing, China Population Information Centre); Coale, A.J. (1984). *Rapid Population Change in China, 1952-1982*, Committee on Population, (Washington D.C., National Academy Press); Mauldin, W.P. (1982). "The Determinants of Fertility Decline in Developing Countries: An Overview of the Available Empirical Evidence", *International Family Planning Perspectives*, vol. 8, No. 3, pp. 116-121; Wolf, A.P. (1986). "The Preeminent Role of Government Intervention in China's Family Revolution", *Population and Development Review*, vols. 12, No. 1, pp. 101-116.
3. *Zhongguo Renkou Ziliao Shouce. op. cit.*, pp. 244-246.
4. Tien, H. Yuan (1984). "Induced Fertility Transition: Impact of Population Planning and Socioeconomic Change in the People's Republic of China", *Population Studies*, vol. 38, No. 3, pp. 385-400.
5. Caldwell, J.C. (1978). "A Theory of Fertility From High Plateau to Destabilization", *Population and Development Review*, vol. 4, No. 4, pp. 554-555.
6. Potter, J.E. "Effects of Societal and Community Institutions on Fertility", In: R.A. Bulatao *et al.* (eds.) *Determinants of Fertility in Developing Countries*, (New York, Academic Press), pp. 627-665.
7. Caldwell, J.C. (1976). "Toward a Restatement of Demographic Transition Theory", *Population and Development Review*, vol. 2, No. 3/4, pp. 332-366.
8. Parish, W.L. and M.K. Whyte (1978). *Village and Family in Contemporary China*, (Chicago, University of Chicago Press) pp. 73-95.
9. Whyte, M.K. and W.L. Parish (1984). *Urban Life in Contemporary China* (Chicago, University of Chicago Press), p. 28-29.

10. Parish, W.L., and M.K. Whyte (1978). *op. cit.*, pp. 74-78.
11. Liu, Zheng (1981). "Population Planning and Demographic Theory, In: Liu Zheng, Song Jian *et al.* (eds.) *China's Population: Problems and Prospectives*, (Beijing, New World Press), p. 23.
12. *Renming Ribao* (People's Daily), 11 November 1982, Beijing.
13. *Zhongguo Renkou Ziliao Shouce*. (Handbook of Chinese Population Statistics), (Beijing, China Population Information and Research Centre, 1988) p. 265.
14. Chen, Pichao (1985). "Birth Control Methods and Organization in China", In: E. Croll *et al.* (eds.) *China's One-Child Family Policy*, (New York, St. Martin's Press), pp. 136-138.
15. Chen, Pichao (1973). "Population Planning Policy Evolution and Action Programs", In: M.E. Wegman, Tsungyi Lin and E.F. Purcell (eds.) *Public Health in the People's Republic of China*, (New York, The Josiah Macy, Jr. Foundation).
16. Chen, Pichao (1985). "Birth Control Methods and Organization in China", In: *China's One-Child Family Policy*, *op. cit.*, p. 137.
17. *Zhongguo Baike Nianjian* (Encyclopedia Yearbook of China), (1980). (Beijing, Chinese Encyclopedia Press), p. 559.
18. Chu, Leonard L., (1977). Planned Birth Campaigns in China 1949-1976, Case Study No. 5, (Honolulu, The East-West Communication Institute), p. 74.
19. World Bank (1984). World Development Report, (New York, Oxford University Press), p. 266.
20. Zhao, Jianmin and Jingjua Sun (1983). "Educational and Fertility Level of Women of Reproductive Age", *Population and Economics Special Issue*, pp. 80-82.
21. *Zhongguo Renkou Ziliao Shouce. op. cit.*, p. 85.
22. Li, Jieping and Wei Zhao (1983). "One-Child Certificate Holding Rates", *Population and Economics Special Issue*, pp. 137-140.
23. State Statistical Bureau (1985). *1982 Population Census of China*, (Beijing, Statistical Publishing House), pp. 390-391.
24. Salatt, J.W. (1972). *Women and Childcare in China*, Penguin Books, p. 65.
25. Li, Xinhuan and Zehong Zhang (1983). "Reproductive Women and Their Fertility Level", *Population and Economics Special Issue*, pp. 83-85.
26. *Ibid.*
27. Li, Jieping and Zhao Wei (1983). "One-child Certificate Holding Rates", *Population and Economics Special Issue*, pp. 137-140.
28. Singh, S. and J. Casterline (1985). "The Socio-economic Determinants of Fertility", In: J. Cleland *et al.* (eds.) *Reproductive Change in Developing Countries*, (New York, Oxford University Press), pp. 199-222.
29. Whyte, M.R. and W.L. Parish (1984). *Urban Life in Contemporary China, op. cit.*, pp. 116-124.

30. *Zhongguo Tongji Nianjian* (Statistical Yearbook of China), (Beijing, State Statistical Bureau, 1983), p. 345.
31. Kane, P. (1985). "The Single-child Family Policy in the Cities", In: *China's One-Child Family Policy*, *op. cit.*, p. 94.
32. Croll, E. (1981). *The Politics of Marriage in Cotemporary China*, (Cambridge, Cambridge University Press), p. 123.
33. *Ibid.*, p. 124
34. Xinhua News Agency, 1 May 1982, Beijing.
35. Kane, P. (1985). "The Single-child Family Policy in the Cities", *op. cit.*, p. 103.
36. Salatt, J.W. (1973). "Institutionalized Motivation for Fertility Limitation", In: B.Y. Marilyn (ed.) *Women in China*, (Ann Arbor, The University of Michigan Press), pp. 93-136.
37. Liu, Zheg (1981). *Population Statistics*, (Beijing, Chinese People's University Press), p. 147.
38. Cheng, Chaoze (1987). *Fertility Transition in China*, unpublished MA thesis, Geography Department, University of Colorado, Boulder.
39. Bernstein, T.P. (1977). *Up to the Mountains and Down to the Villages*, (New York, Vail-Ballon Press), p. 5.
40. Kirby, R.J.R. (1985). *Urbanization in China: Town and Country in a Developing Economy 1949-2000 A.D.*, (New York, Columbia University Press), p. 231.
41. Ebanks, G. Edward and Cheng Chaoze (1990). "China: A Unique Urbanization Model", *Asia-Pacific Population Journal*, vol. 5, No. 3, p. 39.
42. Whyte, M.K. and W.L. Parish (1984). *Urban Life in Contemporary China*, *op. cit.*, p. 116.
43. Cell, C.P. (1983). "Communication in China's Mass Mobilization Campaigns", In: G.C. Chu and F.L.K. Hsu (eds.) *China's New Social Fabric*, (London, Kagan Paul) pp. 25-46.
44. Caldwell, J.C. (1984). "New Data on Nuptiality and Fertility in China", *Population and Development Review*, vol. 10, No. 1, p. 77.
45. Freedman, R. (1979). "Theories of Fertility Decline: A Reappraisal", In: P.M. Hanser (ed.) *World Population and Development*, (New York, Syracuse University Press), pp. 63-79.