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The family support system for the elderly in rural China

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University of Hawaii, 1989



# THE FAMILY SUPPORT SYSTEM FOR THE ELDERLY IN RURAL CHINA

# A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAII IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

# DOCTOR OF PHILOSOPHY

IN SOCIOLOGY

May 1989

By

Haiou Yang

Dissertation Committee

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# **ABSTRACT**

This research focuses on the elderly in rural China. A detailed survey of a systematic sample of 158 elderly in two villages in southern China was combined with in-depth interviews of 30 to identify the number and proximity of their relatives, their expectations of support and the actual support they received.

In addition, a microsimulation was conducted to forecast the demographic capacity of the family support system of the elderly in 2010 and 2040 in rural China.

The research attempts to show the impact of the structural and demographic forces on the elderly and their families. The research approaches the concern that the "One-Child" policy will adversely impact the family support system of the elderly in the future. This project describes and analyzes both the potential and actual support relations of the elderly and their families in two rural villages which have been decollectivized during the past decade. It argues that the impact of the rural economic reform on support for the elderly should not be overlooked in studies of the elderly.

The findings of the survey data are that a significant proportion of the elderly live alone, and that this is not associated with the number of sons they have.

However, their sons do provide the major sources of support. Daughters, siblings, and other relatives do not routinely provide support, however when conflict creates a break in the sons' support, daughters usually play an important role. This study also speculates that the reason that some of the elderly are under-supported is due to the interlocking of relative poverty and rising aspirations of the younger generation which has been created by rural economic reform.

The results of the simulations show that the demographic capacity of the family will not decline significantly before the year 2040, even under the extreme

assumption that the "One-Child" policy is fully effective. More realistic fertility assumptions show that the elderly will have more sons in the higher age groups than in the present. In addition, an increased proportion of spouses and siblings among the elderly create the possibility of a different structure of elderly support in the future.

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# CHAPTER ONE INTRODUCTION

Support for the elderly is a world-wide issue. In many developed countries, the erosion of the role of the family and the expansion of the role of the state in supporting the aged has become a prevalent phenomenon. In developing countries, the family is still the backbone in the support system for the elderly. Nevertheless, many developing countries today have begun to undergo rapid demographic and socioeconomic transformations which may undermine the capacity of the family in supporting the elderly. China represents a prime case with additional complexities.

This dissertation research focuses on the family support system for the elderly in rural China. The two specific objectives of this research are: (1) to describe the pattern of the family support system for the elderly in two villages under the rural economic reform, and to explore the links between types of family and the socioeconomic support of the elderly, and (2) to predict the effects of demographic changes, especially the rapid fertility decline in the past decades, on the demographic capacity of the family support system for the elderly based on possible scenarios of future fertility changes.

The methods utilized in this dissertation research are both sociological and demographic. Sociological survey research and analysis methods are used in collecting and analyzing information on the elderly people in two villages in tural China. A demographic micro simulation model is applied in projecting the family structure of the rural elderly in China.

This chapter will first introduce the background of this dissertation research. Secondly, it will then review the relevant literature and present the theoretical framework guiding this research. Thirdly, it will present the major questions for this research and fourthly, it will discuss the potential contribution. Lastly, it will outline the organization of this dissertation.

### Background of the research

China has been experiencing a sharp fertility decline since the beginning of the 1970s. At the macro level, this fertility decline will result in an aging population unprecedented in China's history. At the micro level, this fertility decline will lead to a reduction in the number of family and kin caregivers for the elderly and a potential weakening in the family support system for the elderly. In addition to the impact of the fertility reduction on the number of family and kin caregivers for the elderly, there is another aspect of impacts to the family support system for the elderly which is often neglected. That is, the impact of the recent rural development in China. Socioeconomic transformations, such as the recent rural economic reform, at the broader scale may lead to an increasing intergenerational income gap, changes in the traditional norms of supporting the elderly, and residential segregation of the elderly. These rapid socioeconomic and demographic transformations form the background of this research.

This section will review the background for this research from two aspects. The first aspect is the fertility decline in the past decade, and the second one is the recent rural economic reform.

# Fertility decline and the family support system

The trend of fertility decline in China

China has been experiencing a dramatic fertility decline since the beginning of the 1970s and a sharp mortality reduction since the 1950s. Figure 1.1 shows the trend of total fertility rate<sup>1</sup> for China as a whole, urban China, and rural China from 1949 to 1982. The total fertility rate fell from 5.8 in 1970 to 2.6 in 1982. During the same period, the total fertility rate in urban China dropped from 3.2 to 1.5, much lower than the

<sup>1.</sup> The total fertility rate is a synthetic measure indicating the number of children a woman can give birth to during her reproductive period according to the fertility rate of a particular time period.

replacement level of about 2.1. In rural China, it declined from 6.3 to 2.9, dropping more than 50 percent in a decade time (Coale and Chen, 1984). Such a rapid fertility decline is unprecedented among all human populations of significant size (Bongaarts and Greenhalgh, 1985). Accompanying this rapid fertility decline is the prolongation of life. The life expectancy at birth for the Chinese population increased from around 35 in the 1940s to 67 in 1982 (Coale, 1984).

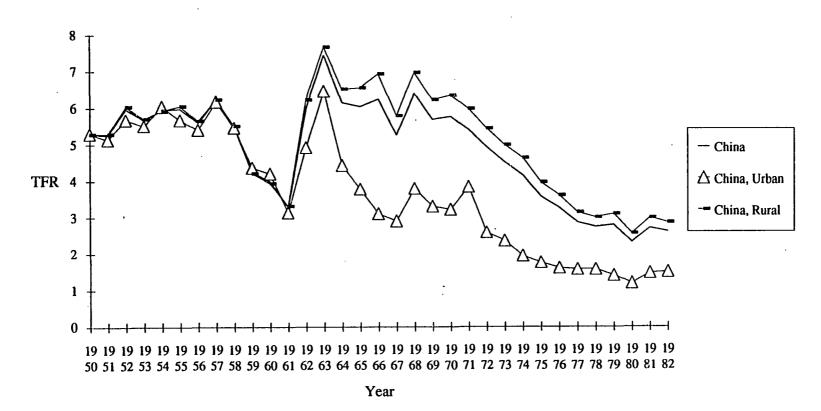
## Evolution of population control policy

This dramatic fertility decline since the 1970s has been closely related with the evolution of population control policy in China. Compared with other developing countries, population policies have particular profound impacts on people's reproductive behaviors in China due to China's centralized planned economic system.

The population control policy in China can be traced back to the beginning of the 1950s. Rapid population growth and high population density revealed by the 1953 census first drew the attention of the policy-makers in China. Some scholars suggested that the government encourage family planning. In 1953, restriction on abortion was relaxed and in 1956, various contraceptives were encouraged, especially in densely populated areas. However, family planning programs were interrupted in the period from the end of 1950s through the beginning of the 1960s. Because of the political environment at the end of the 1950s, suggestions of birth control were considered a part of the broad reform proposal aiming at attacking the government. Population control, thus, became a sensitive issue. Moreover, the urgency of population control was disguised by the large scale famine in the period which caused a tremendous fertility decline and a sharp mortality increase.

In the beginning of the 1970s, a period after a high tide of the Cultural Revolution, the attitude of the government towards the population issue started to change. In 1973, population control became a part of the national economic plan for the first time.

Figure 1.1 Total Fertility Rates for China, Total, Urban, and Rural



This population control policy was summarized with three Chinese characters: Wan, Xi, Shao, meaning late marriage, longer birth interval and fewer births. Although this family planning campaign was first carried out in urban areas, it was soon spread to rural areas since fertility in urban area had declined substantially. The health care system in the rural area has largely facilitated the distribution of contraceptives.

After Mao's death and the subsequent downfall of "the Gang of Four" (the group of leftists in the central government) at the end of the 1978, China has shifted her road to modernization. Under these circumstances, population control became a top priority for the government for the first time. The goal of the new leadership was to achieve per capita income of 1,000 U.S dollars (later changed to 800 U.S dollars) by the year 2000, and one way to achieve this goal was to reduce the total population size. In 1978, there was a set of new goals for population control: reaching a natural population growth rate of five per thousand in 1985 and zero population growth rate by the year 2000. In 1980, the Central Committee of the Chinese Communist Party sent out a public letter urging that each couple have only one child. This marked the official beginning of the famous One-Child-Per-Couple Campaign.

However, this One-Child-Per-Couple Campaign has confronted difficulties especially in rural areas, and this policy has never been perfectly implemented (Whyte and Gu, 1986). Recent surveys in China reveal that the total fertility rate after the initiation of the One-Child policy has been higher than 2, which means a substantial proportion of couples still give birth to their second and even third child. According to the One Percent Population Sample Survey in 1986, the total fertility in 1986 is 2.36.

47.5 percent of the births in 1986 are second and higher parity for the whole the country and there are over 50 percent in the rural areas (China Statistics Bureau, 1988).

Macro consequences of the fertility decline

Without doubt, an aging population in China will be a concomitant of the demographic transition, a process from high fertility and low mortality to low fertility

and low mortality. This population aging phenomenon has already occurred to many developed countries and is in process in many developing countries (Siegel, 1980).

According to the U.S Bureau of the Census, the world's elderly population is growing at a rate of 2.4 percent per year, which is considerably faster than the growth rate of the global population. Moreover, the growth rate of the elderly people in developing countries is expected to average 3 to 4 percent annually in numerous countries from 1985 to 2025 and it is and will be considerably higher than that of developed countries (U.S. Bureau of Census, 1987). China is a country that has and will continue to have the largest elderly population of any country in the world (see Table 1.1).

Table 1.2 and Figure 1.2 show the trend of aging in the coming decades based on the results of the population projection that I have constructed.<sup>2</sup> As Table 1.2 indicates, during the period between 1982 to 2052, the proportion of population aged 65 and over will increase from 4.9 to 14.8 percent, reaching the peak of 15.6 percent at 2042. In other words, there will be a 'gerontic boom' in 2042 as a result of the baby boom that occurred in the late 1950s through the beginning of the mid 1960s. By contrast, the proportion of the younger population (age 0-14) will decline from 33.6 percent to 19.1 percent.

<sup>2.</sup> Numerous projections in Chinese population have been constructed, and these projections have suggested various population aging tendencies for China's future (Keyfitz, 1984; Liang et al, 1985; Song et ai, 1985). Some projections indicate China could age fastest of all countries in 21st century (U.S. Bureau of the Census, 1987). Because these projections often employed relatively unrealistic fertility assumptions (normally too low) and were based on rather limited data, I have constructed an alternative population projection with assumptions about the fertility trend which I consider to be more realistic.

The following assumptions are used in my projection: 1) a population age structure obtained from the 1982 census, which is considered very accurate; 2) the total fertility pattern in the years to come will follow the actual fertility pattern obtained from the 1982 One-Per-Thousand Fertility Survey in China; 3) the total fertility rate is assumed to maintain at 2.5 from 1982 to 2001. The total fertility rate will decrease to 2.3 by 2002, and further reduced to 2.1 after 2012, the total fertility rate will be maintained at 2.0 after 2022; 4) for mortality, using Coale-Demeny life table, and using the life expectancy of 66.4 years for male and 69.4 years for female as the initial life expectancy, and assuming that the life expectancy for male will rise to 70.00 years and female to 72.00 years at the end of the projection period (2052).

Table 1.1 Ten Countries with Largest Elderly Population in 1985 and 2025 (numbers in 1000)

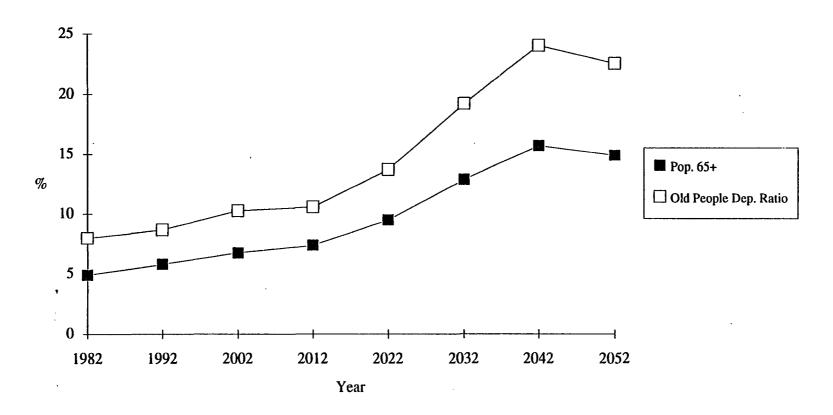
Country	1985	Country	2025
China	52,889	China	178,150
India	32,698	India	118,968
United States	28,609	United States	58,771
Soviet Union	25,976	Soviet Union	54,641
Japan	12,125	Japan	26,842
Germany (Fed.Rep)	8,812	Indonesia	23,663
United Kingdom	8,466	Brazil	22,844
Italy	7,433	Germany	12,017
France	6,748	Mexico	11,849
Indonesia	5,901	France	11,273

Source: U.S. Bureau of Census: An Aging World. International Population Reports Series P-95, No. 78. 1987

Table 1.2 Projected Population Age Structure (%) and Dependency Ratios for China, 1982-2052

· · · · · · · · · · · · · · · · · · ·					Year			
	1982	1992	2002	2012	2022	2032	2042	2052
Age Groups					•			
0 - 14	33.60	27.30	27.79	22.79	21.07	20.37	18.98	19.07
15 - 64	61.49	66.89	65.49	69.84	69.44	66.83	65.38	66.09
65 & above	4.91	5.81	6.72	7.37	9.49	12.80	15.67	14.84
80 & above	0.50	0.68	0.86	1.07	1.23	1.63	2.02	3.23
Total Dependency Ratio	62.63	49.50	52.70	43.18	44.01	49.63	52.95	51.31
Old People Dependency Ratio	7.99	8.69	10.26	10.55	13.67	19.15	23.92	22.45

Figure 1.2 Population Aging Trend in China, 1982-2052



However, the proportion of population aged 15-65 will change very little, remaining at around 65 percent from year 1982 to 2052.

Figure 1.2 shows that the total dependency ratio will only decline slightly, since the proportion of labor force population will remain basically the same and the proportion of the younger and the older age group will change along two opposite directions. However, the aged dependency ratio will increase dramatically, from 7.99 percent in 1982 to 23.9 percent in 2042.

This pattern of change will be unprecedented in Chinese history. For a society as a whole, the increased demand for elderly support may require a dramatic shift in social expenditures from the young to the old, namely, from child-care and education to old-age support, such as pensions, health-care, and welfare provision to the aged. According to many economists, supporting the elderly could be more expensive than supporting the young (Clark and Spengler, 1980). However, in dealing with an aging population, the level of economic development in China is far behind that of many developed countries and the social structure in China is completely different from that of many developed countries. It is unlikely that the economic development in China in the next few decades, even with the recent high growth rate, can raise the standard of living in China to a level as high as it is now in the most developed countries. The current political and economic reforms, on the other hand, has been encouraging individuals and families, rather than the government, to assume more and more responsibility in their own personal well-being. The family support to the elderly, therefore, will become more and more important in the future.

Micro consequences of the One Child population policy

This rapid fertility decline in China will also affect the potential support to the elderly from the family. As many have pointed out, the foremost among a number of undesirable consequences of China's One Child policy is the social and economic costs imposed on the family support system for the elderly. If the One Child family policy is

successfully implemented, the ability of the family to support the elderly will be totally threatened (Freedman, 1986; Bongaarts and Greenhalgh, 1985; Liang et al., 1985; Goldstein and Goldstein, 1985).

The current fertility decline will cut down the potential number of caregivers for the elderly, and a higher life expectancy will increase the number of the elderly at the older age groups who may need more intensive home care and medical treatment. This situation is creating a two-edged sword threatening the family support system for the elderly in China.

In addition, considering the urban/rural population distribution and the level of economic development in China, the family support system for the elderly plays an even more crucial role for Chinese rural elderly. China is overwhelmingly rural (about 80 percent of the population lives in rural area) and underdeveloped. Moreover, the elderly who live in rural areas are excluded from the public pension plan of the state (Davis-Friedmann, 1984; Liang et al. 1985).

## Rural development and the family support system for the elderly

### The Rural Economic Reform

Parallel to the demographic transition process, China, as many other developing countries, has been also experiencing rapid socioeconomic transformations.

Great changes have taken place in China in the past decade. Mao's death and the downfall of 'the Gang of Four' in the late 1970s led to a dramatic shift in state policies on all fronts. On the economic front, China, adopting the Economic Reform strategy, has changed her road to modernization. In rural China, a self-responsibility system has replaced the collective system. The major purpose of this rural economic reform is to stimulate productivity and to boost the income level for peasants.

By allocating the responsibility to smaller units (households) and by linking income to effort, this rural economic reform has produced a significant shift in both

decision-making power and income level. Formerly, a peasant's income was considered the lowest among all social groups. Several years after the economic reform, many peasants can now make as much as 10,000 yuan annual net income per year. After a long-term low wage egalitarian socialist system, this amount of income makes peasants seem like 'millionaires'. Table 1.3 shows the increasing trend of income from 1978 to 1987 in rural China. The average income per person in 1987 was 462.55 yuan, which is three times as high as that of 1978. The proportion of households which belongs to the highest income group (above 500 yuan) jumped from 1.6 percent in 1980 to 35.7 percent in 1987. The proportion of households which belongs to the lowest income group dropped from 33.3 percent in 1987 to 0.87 percent in 1987.

This tremendous increase of income for rural Chinese people has been associated with the diversification of the rural economy. Table 1.4 shows the changes in composition of total output of rural economy from 1980 to 1987 for the whole country. The proportion of agriculture output decreased from 68.9 percent in 1980 to 49.6 percent in 1987, while rural industrial output increased from 19.5 percent in 1980 to 34 percent in 1987.

A review of evolution of the commune system in rural China

This rural economic reform is also characterized by a major shift in the administrative structure in rural China. This shift may generate a profound impact on the rural elderly in China. It is important to review the commune system and the old-age support under this system to understand the impacts of recent changes.

In 1953, three years after the new China was founded, the land reform was carried out throughout the country. As a result, the feudal land system which had lasted for

Table 1.3 Distribution of Household Income (%) in Rural China, and Average Income Per person, 1978-1987

Household Income (Yuan)	1978	1980	1983	1984	1985	1986	1987
Above 500	. *	1.6	11.9	18.2	22.3	28.7	35.7
400 - 500	2.4	2.9	11.6	14.1	15.8	16.5	17.21
300 - 400	*	8.6	22.9	24.5	24	21.7	21.34
200 - 300	15	25.3	32.9	29.2	25.6	21.8	17.57
150 - 200	17.6	27.1	13.1	9.4	7.9	7	4.99
100 - 150	31.7	24.7	6.2	3.8	3.4	3.2	2.38
Below 150	33.3	9.8	1.4	0.8	1	1.1	0.87
Total	100	100	100	100	100	. 100	100
Average Income per person (yuan)	133.57	191.33	309.77	355.33	397.6	423.76	462.55

Note: \* No data available.

Sources: 1988 Statistics Yearbook, p822, China State Statistics Bureau, China Statistics Press, 1988, Beijing.

Table 1.4 Composition (%) of the Total Output of Rural Economy in China, 1980-1987

Year	Total output	Agriculture output	Rural Industrial output	Construction output	Transportation output	Commercial output
1980	100	68.9	19.5	6.4	1.7	3.5
1983	100	66.7	20	7.8	2	3.5
1984	100	63.2	23.1	7.4	2.6	3.7
1985	100	57.1	27.6	8.1	3	4.2
1986	100	53.1	31.5	7.8	3.3	4.3
1987	100	49.6	34.8	7.7	3.5	4.4

Souces: China Statistics Yearbook, 1988, p 214, China State Statistics Bureau, China Statistics Press, 1989

more than two thousand years was ended. At the beginning of this socialist agricultural transformation, individual peasants were organized in a variety of forms, such as mutual-aid teams, elementary and advanced cooperatives. By 1956, the system of the People's Commune which combined government administration with economic management was established when the socialist transformation was completed. Structurally, this system was characterized by "three-levels of administration by the commune, the production brigade and the production team with the production team as the basic accounting unit." Theoretically, this commune system was modeled upon the collective farm system in the Soviet Union (Luo,1985).

By the end of the 1970s, more and more serious problems with this commune system were recognized: low productivity, corruption, hidden unemployment and disappointingly low level of income in many areas. A decision was made to reform this commune system and to introduce the responsibility system at the Third Plenary Session of the Eleventh Central Committee of the Chinese Communist Party in 1978. Beginning from setting quotas to contracting of production tasks to individual households, a form of management consisting mainly of a household contract system has been gradually shaped (Watson, 1985; Wang et al. 1985).

### A review of old-age support under the commune system

This commune system was not able to provides retirement pensions for its elderly people because of the low productivity. And the state pension plan did not provide coverage for them either. As a socialist country, the Chinese government intended to provide all the elderly, no matter whether in the urban area or in the rural area, with social welfare. However, this egalitarian ideology was hindered by scare resource and the national priority given to developing heavy industry in the beginning years when the country was founded.

With this commune system, there was no clear cut retirement age for the rural elderly since the rural population was not covered by the state pension plan. Usually,

rural elderly people moved to less taxing work and unpaid housework as their physical strength declined and they become totally dependent upon their families, especially their sons in their advanced age.

However, this collective agriculture system provided noticeable economy security for elderly people. Although older peasants earned only 30 to 50 percent of what younger peasant earn, their jobs were guaranteed by the collectivization. Furthermore, the elderly could make a valuable contribution to the family by working outside of the collective labor force, such as by raising pigs and eggs.<sup>3</sup>

For those who were childless and who had totally lost the ability to work, the production team provided them with the Five-Guarantee program supported by the collective social welfare fund.4

The profound impacts of the rural economic reform on the elderly

However, it is too simplistic to conclude that the self-responsibility system is much superior to the commune system. Observers have noticed that the switch to the responsibility system from the collective system has brought social problems, such as the weakening social welfare, health, and education infrastructures, and the possible widening of intra-village inequality and inter-generational inequality (Parish, 1985). A further question raised then is: whether the support to the elderly provided by the family

<sup>&</sup>lt;sup>3</sup> Income from collective grain harvest was much lower than return for other side lines under this commune system due to the long-term low grain price system of the planned economy and the strategy that takes grain production as the key line. In order to guarantee grain production, all the best abled-peasants were required work full time in the collective grain fields and only were allowed to use their leisure time to work on their private side lines. However, the elderly are usually an exception to this rule.

<sup>4</sup> A comprehensive system of social welfare program was begun in 1956. In the "Draft of Program for Development of Cooperative Agriculture" by the central committee, the Party proposed that each co-op (the earlier form of the commune) support all their members who are totally bereft of kin and weak or disable to work. Later in the program for Development of National Agriculture," five items (food, fuel, clothing, education and burial) were emphasized to be provided to those people including the orphaned, the disabled and the childless elderly. Thus, the recipients is known as a "five guarantee household," and gradually "five guarantee" become a synonymous with rural social welfare program.

will be undermined under rural economic reform, regardless of the changes in the family structure for the elderly?

It is important to learn from the experiences of many developing countries that have been going through a similar process of development. A number of authors have already indicated that the traditional family support systems for the elderly in many developing countries are disintegrating (Kinsella, 1988; Martin, 1986). The developmental process in many developing countries has created better opportunities for younger generations, has resulted in the abandonment of traditional outlooks, and has increased rural-urban migration. The status of elderly people in the society has also subsequently declined. For example, one study on rural India revealed that for old-age security, economic assets, mainly land, are more important than an abundance of sons (Vlassoff and Vlassoff, 1980).

The rural economic reform in China which aims at raising productivity and rural people's living standard will in turn generate a profound impact on the rural elderly. First, the rural economic reform has brought about a major shift in the administrative structure in rural China. Since structurally the collective funds for the childless elderly may disappear, the issue of social support for the childless elderly would be raised. The barefoot doctor system which once provided peasants with minimum health insurance and basic health care has also disappeared. The rural economic reform which diversifies the rural economy offers better opportunities for the younger generation which may result in a widening of the intergenerational income gap. The status of the elderly in the family may be lowered subsequently. This economic reform is also leading the younger generation to have rising aspirations for better jobs and better living conditions. The interplay of increasingly high aspirations and relative low living standards may also contribute to the decline of the family support for the elderly.

By looking at the unprecedented fertility decline in the past decade in China, observers foresee the bankruptcy of the family support system for the elderly. However,

sociologically, the impact of the rural economic reform on the rural elderly may also be profound. Both of them are equally urgent subjects which cannot be neglected.

# Literature review and the proposed conceptual framework

There has been a substantial growth of academic interests during the past two decades in the relationship between the family support system and the aged (Treas, 1979; Bengtson and Schrader, 1985) and the relationship between the process of modernization and aging (Cowgill, 1972). In the case of China, there have also been a few studies on the social support system for the elderly in the past decade (Davis-Friedmann, 1983; Goldstein and Goldstein, 1984; Liang et al., 1985). In the past decade, the emergence of the demography of aging has attracted a great attention from both demographers and gerontologists (Siegel, 1980 and Myers, 1985). In this literature, three major distinctive perspectives can be found: the demographic perspective, the modernization perspective, and the lineage perspective.

### The demographic perspective

The demography of aging comes from the theory of population structure and growth. This theory views population aging as a concomitant of the demographic transition. Most Western countries have experienced this transition, and many developing countries are in the process of this demographic transition. Moreover, this perspective stresses that in the process of population aging, except for unusual circumstances, fertility decline tends to play a primary role, overshadowing the effects of mortality and that of net migration (Siegel, 1980).

With a holistic approach, demographers treat elderly people as a subgroup of the total population. In general, demographers in the field of aging are interested in the following four areas: (1) comparing similarities and differences between aged population and other subgroups; (2) studying the size, proportion, and composition of population at older age groups in the past and their likely futures; (3) investigating the determinants of

the process of aging; (4) speculating on the consequences of the process of aging (Myers, 1985).

By describing and projecting basic characteristics of the aged population, such as age, labor force status, health status, marital and family status, education and occupation, demographers can provide significant reference to policy makers on housing, pension programs, and health services.

China's unprecedented fertility decline in the 1970s has attracted much attention from academic communities, especially demographers. Many demographers have speculated about the macro consequences of the fertility decline based on conventional population projections (Keyfitz, 1984; and Liang et al. 1985). Many authors conclude that the foremost undesirable consequence of the fertility decline is the socioeconomic costs imposed on the family support system to the elderly. If the One Child policy is successfully implemented, there will be the absence of siblings, the subsequent loss of inlaws, uncles and aunts and the diminishing of the extended kinship networks (Freedman, 1986; Bongaarts and Greenhalgh, 1985; Liang et al., 1985; Goldstein and Goldstein, 1985). However, one problem that many of these previous works share is the limitations in the methodology that has been used. The conventional population projection which has been commonly used cannot provide results at the micro level. The conventional population projection method is technically unable to answer the question: "to what degree will the family support system for the elderly in China be jeopardized by the rapid fertility decline?" Obviously, more studies on the kinship arena of the elderly in China is needed.

In the past decade, more attention has been paid to the kinship arena of the elderly, and a considerable number of models in describing and projecting the kin universe of the elderly have been constructed (Hammel et al, 1976 and Smith, 1987).

Understanding the kinship arena of the elderly has a particular importance in the context of developing countries like China, since the state pension plan only covers a minority of

the population, and the majority of the old people largely depend on the family and kin for support.

These kin simulation methods can predict for each age group the expected number of children, the probability of having a living spouse, the expected number of siblings and the number of other relatives, and so on. Measuring the future family structure can define the kinship universe for the aged and thus can demonstrate the possible capacity of the family support system for the aged.

The findings of kin simulation could contribute in two aspects to policy making. First, it could provide a reference for policy makers in planning and designing appropriate formal social support programs and public services for the elderly, especially for those rural elderly who have no family members to depend upon. Second, it could explore various degrees in aging in the family structure for the elderly by using different assumptions of fertility (high, medium and low) and assist family planning policy makers in deciding the 'target population' or 'planned fertility rates.' However, very little research on the kinship arena in the developing countries has been done.

In sum, the most distinctive advantage of the demographic perspective is its capacity to provide a quantitative profile of an aging population and to enable us to investigate what is likely to happen in the future. By describing and projecting the characteristics of elderly populations, demographers can inform policy-makers on housing and pension programs, health facilities, and services. The recent developments in the kinship arena of the elderly will enable us to examine the impact of the fertility decline on the family structure and to further our studies on the family support system for the elderly, but the application of the new techniques of population analysis in developing countries like China is still lacking.

Compared with other perspectives, however, a major limitation of studies based on this perspective has been the relative paucity of analysis of other social and economic variables at a broader scale and of micro analysis of the family support system for the

elderly. However, this could be overcome by incorporating the modernization perspective and the lineage perspective which will be discussed below.

# The modernization perspective

From the modernization perspective, Cowgill (1980) argues that the characteristics of modernization which have increased the proportion of the aged in the society have simultaneously led to a reduction of their status. An inter-generational competition spurs an impetus for developing the retirement program, and thereby, limits participation of the older people in the labor force. Rapid improvement in technology again results in older workers being bypassed. The growth of mass education has undercut the role of the elderly as transmitters of customs and skills. Urbanization which features the migration of the young to the city for better opportunities has led to breaking down of the extended family and to residential segregation of the elderly. Consequently, the aged in modern society have lost their wealth, power, and prestige.

What has happened to the status of the elderly in the case of China where a rapid socialist transformation has occurred in the last four decades? Most of the authors maintain that elderly people in traditional China generally enjoy a high status because of the persistence of the values represented by Confucianism. The status of the elderly, however, has become equalized with other age groups due to the socialist revolution since 1949, and a further reduction in the status of the elderly is expected when China undergoes the process of modernization (Yin and Kwok, 1983; Treas, 1983; Baker, 1984).

Previous studies have frequently focused on the impact of the policies since 1949 on the status of the elderly and on parental authority. The control of family wealth, especially land, used to be a power resource for parents in traditional China. The land reform soon after the 1949 socialist revolution by and large eliminated private property and produced a negative impact on parental authority. The new marriage law enacted in 1950 also legally reenforced the mutual responsibility between parents and children

(parent were to rear children, and children should support parents). Moreover, the state emphasizes patriotism over the filial piety (C.K. Yang, 1959).

Davis-Friedmann's book entitled Long Lives: Chinese Elderly and the Communist Revolution (1983) is one of the few studies from a historical and structural approach that focused on the elderly people since 1949. She does not simply apply the modernization perspective to the situation in China. Rather, she notices that the context of observation obtained by modernization theorists is normally that the society where land and capital are privately owned. China's situation is different, since there is the public ownership of the means of production, an egalitarian distribution policy, and the collective responsibility for material welfare.

Davis-Friedmann makes an important contribution to the field by identifying the distinctive urban-rural dichotomy in the pattern of support for the elderly in China due to the socialist ideology and material scarcities: regardless of age, urban elderly people are covered by the state pension plan, enjoying a higher degree of reward; while the majority of the elderly, rural elderly, are outside of the state safety nets, accepting inferior standard of living. Her discussion of the distinctive urban-rural dichotomy in the pattern of support for the elderly in China calls special attention to the study of specificities in the family support system of rural elderly people.

In Davis-Friedmann's book, she concludes that the Chinese elderly continue to enjoy a high degree of respect and she identifies the interaction between socialist ideology, material scarcities, and traditional values as the key security for the Chinese elderly (Davis-Friedmann, 1983:109).

However, with Mao's death in 1976, China has changed her road to modernization, emphasizing development instead of ideology. Thus, some of these elements shaping the support system for the elderly pointed out by Davis-Friedmann have been changed. In rural China, these changes are marked by the introduction of the rural economic reform. One would ask, after the introduction of the rural economic

reform, whether the status of the elderly in rural China would be lowered as Cowgill's modernization perspective hypothesizes? Although there has been an enormous amount of literature on the elderly in China in recent years, research utilizing the modernization perspective is seldom found. Moreover, most of the literature by both Chinese and foreign scholars has been overwhelmingly focused on the urban elderly. Obviously, there is a research gap which needs to be filled.

#### The lineage perspective

Many Western and Chinese social science pioneers have conducted many historical studies on the family, marriage and village life in China (Baker, 1979; M. C. Yang, 1945). Issues concerning the family support system for the elderly are often discussed. These issues are the traditional age and sex hierarchy pattern in the family, familial relations especially relationships between parents and children, status of the elderly and norms for supporting the elderly. But methodologically, many of these pioneer studies are often limited to descriptive analysis. Moreover, analysis emphasizing the family support system for the rural elderly is seldom found in this literature. In the few studies which focus on the family and household in general, however, the concept of household is used interchangeablely with the concept of the family due to the complexity in measuring the concept of the family (Ma, 1984). These studies are of little relevance for us seeking to understand the family support system for the rural elderly. Many of them mostly compare the average household size over time or across different geographical areas.

The Shanghai Elderly Survey and the Five City Household Survey are two examples of lager scale surveys concerning the elderly and family recently conducted by Chinese scholars. The Shanghai Elderly Survey conducted in 1984 is exploratory in nature, and it covers not only the demographic and socioeconomic characteristics of the urban elderly in China, but also their physical and physiologically status and leisure actives (Yuan, 1984). A lager scale survey which has been going on since 1987 basically

follows the structure of this survey. Five City Household Survey conducted in 1982 which aims at studying the linkage between fertility and household and marriage patterns does not focuses on the family of the elderly specifically (Liu, 1987; Peng, 1987).

In the areas of gerontology and demography of aging, the 'living arrangement' (with whom the elderly live) is a concept which is more frequently used. However, if we want to further understand the family support system for the elderly in China, we have to go beyond the concept of the living arrangement and we need to ask: who is available as resources for an elderly person? What is the relationship? Where do these potential supporters live? Answers to these questions are crucial in investigating the potential for mobilizing the family as an interpersonal support system for the elderly.

Bengtson and Schrader (1985) present a conceptual framework termed 'lineage perspective' which focuses on the association, interaction and conflict between the elderly parents and their family members, especially their adult children. It is originally derived from Durkheim's analysis of mechanical solidarity and organic solidarity, enriched by conceptualizations and empirical findings of solidarity within the areas of the small group and the family including studies done by social psychologists, clinicians and family sociologists (McChesney and Bengtson, 1988).

In order to study the family support system for the elderly systematically, Bengtson and Schrader (1985) identify six interrelated dimensions: (1) family structure: measured by the number of living lineage members, the geographic proximity of these members and the composition of the household containing these members; (2) association solidarity: the degree to which members of a lineage are in contact with one another and interact in common activities; (3) affectual solidarity: the degree of positive sentiment present in the inter-generational relationship; (4) consensual solidarity: the degree of consensus or conflict in beliefs or orientations external to the family; (5) functional solidarity: the degree to which financial assistance and service exchanges occur among the family members; and (6) normative solidarity: norms of familism held

by members of the family, and the extent to which the adult children are expected to support their aged parents.

The strength of the lineage perspective is its capability to in spell out the different dimensions of the family support system at a micro level.

#### The proposed conceptual framework

In sum, conceptual frameworks discussed above have their distinctive characteristics, each of them asks questions from a different perspective, and they can complement each other. The merit of the demographic perspective lies in its capacity for examining the dynamics of demographic factors (mainly fertility and mortality) that have shaped the aging process in the past and that are likely to operate in the future. The modernization perspective calls our attention to study the impacts of socioeconomic changes such as the current economic reform in the case of China) on the family support system for the elderly in a broader context. The lineage perspective systematically categorizes different aspects of the family support system for the elderly.

The conceptual framework of this study is developed on the basis of integrating the demographic, the modernization, and the lineage approaches discussed above. This conceptual framework will enable us to look at both the present and the future of the family support system for the elderly. Within this conceptual framework, the first step in studying the current situation of the family support system for the elderly is to examine the family structure for the elderly, the potential resources for the elderly. In studying the current situation of the family support system for the elderly, the second step is to explore the linkage between the family structure for the elderly and the economic support provided to the elderly by their family members in the context of the current rural economic reform. Within this conceptual framework, the strategy in studying the future situation of the family support system for the elderly is to predict the impacts of demographic changes, mainly fertility decline, on the family size for the elderly for the coming decades.

The goal here is not only to document the pattern of the family support system in rural China, but also to explore why particular patterns of the family support system for the elderly are formed. This study will not only focus on the present family support system for the elderly but also on the future family support system for the elderly in rural China.

# Major research questions

Guided by the conceptual framework outlined above, this study will focus on two major research questions:

First, this study intends to describe the relationship between family structure and the family support for the elderly under the current economic reform.

Secondly, this study intends to explore the impacts of the fertility and mortality decline on the potential capacity of the family support system for the elderly in the coming decades.

There are two groups of sub-questions that can be raised along with the themes of these two major research questions. The first group is related to the first research question:

- (1) What is the current pattern of family structure around the rural elderly? What are the patterns of the availability of kin, geographic proximity of kin for the elderly, and the pattern of living arrangement for the elderly? And, what are the major determinants of the pattern of living arrangement of the elderly?
- (2) What are the major types of socioeconomic support for the elderly under the rural economic reform?
- (3) For different types of socioeconomic support, who are the dominant supporters for the rural elderly, sons or daughters? Are sons or daughters more important for supporting the aged?
  - (4) Are the elderly better supported with more sons?

(5) What are the relationships between the basic characteristics of the rural elderly and the family support for the elderly? In other words, will the basic characteristics of the rural elderly such as age, sex, work ability and availability of cash income also have effects on the pattern of the family support for the elderly?

The second group of sub-questions is connected with the second research question:

- (1) If the total fertility rate were to drop to 1.1 from 1982, which is if the situation that the One-Child family planning policy were perfectly implemented, what would be the average size of different types of kin, such as the average numbers of sons and daughters, for the elderly?
- (2) If fertility were to maintain at the present (1982) level till 2010, and were to reduce to the replacement level of 2.2 from 2010, what would be the average size of different types of kin for the elderly?
- (3) If fertility were to maintain at the present (1982) level throughout the coming decades, what would be the average size of different types of kin for the elderly?

## Contribution of the study

The potential contributions of this dissertation research can be considered from the following three aspects: first, this study will add to the under developed literature on the family support system for the elderly in rural China. Secondly, this study will reinforce the utility of bridging quantitative and qualitative data. Thirdly, it can contribute to policy making by providing empirical reference for policy-formulation on programs and services for supporting the old, especially for those rural elderly without families.

#### Organization of the dissertation

Chapters Two, Three and Four will focus on the current family support system for the elderly in rural China with the data of a small scale survey of the elderly in two villages in south China conducted in 1987. Chapter Two will describe the research site, methods and the population studied for the analyses in Chapters Three and Four. Chapter Three will document the current pattern of family structure for the elderly in the two villages studied and explore the factors affecting the pattern of living arrangement for the elderly. Chapter Four will examine the types of family socioeconomic support for the elderly in the context of the rural economic reform and explore the relationships between the number of children, especially the number of sons, and the family socioeconomic support for the elderly.

Chapter Five will explore the possible outcomes of fertility decline and mortality decline on the demographic capacity of the family support for the elderly in the coming decades. It will first develop three scenarios of fertility assumptions, low, medium and high, and apply these three scenarios of fertility assumptions to the kin simulation model, ann then compare the kin universe for the elderly under these different scenarios.

Chapter Three and Four will aim at exploring answers to the first research question raised above and Chapter Five will aim at exploring answers to the second major research question. Chapter Six will summarize and discuss findings in this dissertation research.

#### CHAPTER TWO

# RESEARCH SITE, CHARACTERISTICS OF THE POPULATION STUDIED, AND METHODS

#### Introduction

This chapter will describe the research site, basic characteristics of the population studied, methods of data collection, and methods of data analyses to be employed in Chapter Three and Four.

The objectives of this research are twofold: the first one is to describe the impacts of the economic reform on the family support system and to explore the linkage between family size, composition, and the family socioeconomic support for the elderly, and the second objective is to predict the effects of demographic changes in the past decades on family size and composition for the elderly. Therefore, there are two major approaches for the analyses of this research: one is sociological and the other is demographic. This chapter will focus sociological one, and the demographic one, microsimulation, will be presented in Chapter Five.

#### Research site

The data utilized for chapters three and four are from a small scale survey of the elderly which conducted in two villages in South China during the summer of 1987.1

There have been a few surveys conducted in the areas of aging and family in the recent years in China, but many of these surveys cannot meet the specific needs of this study. Past surveys in China have not been able to collect information on the

<sup>1.</sup> The Sociology Group at Hangzhou University in China provided enormous support for this survey. A survey team was organized with two teachers who had experience in conducting surveys of elderly people, and five students who had basic training in sociological research. I trained the interviewers before we left for the field and also conducted a pre-test before the survey started.

socioeconomic well-being of the elderly and the family structure and family support to the elderly in a single survey. Rather, the surveys of the elderly conducted by Chinese scholars tend to collect only information on the well-being of the elderly and the surveys of family and household structure do not ask questions specifically about the elderly. The Shanghai Elderly Survey and Five City Household Survey described in Chapter One are two examples. Foreign scholars in this field, on the other hand, often run into the problem of 'getting permission' from appropriate Chinese authorities. As a consequence, studies of the Chinese elderly by non-Chinese scholars have to rely on second-hand and indirect information. For example, Davis-Friedmann's study on the Chinese elderly in 1982 was based on mainly informal briefing with elderly people on streets and other second-hand materials (Davis-Friedmann, 1983). Moreover, most of the previous studies have been focused on mostly the urban elderly and neglected the rural elderly.

In order to obtain a more desirable data set on the rural Chinese elderly people, I returned to China in the summer of 1987 to collect my own data set. With the assistance from the Sociology Group at Hangzhou University, I was able to complete a small-scale survey in two rural villages in south China.

The two rural villages, Quantang and Qiaoxia, were selected from Zhuji County of Zhejiang province, which is located on the East Coast of China. Zhejiang province is a relatively well developed area in the country in terms of people's living standard. Table 2.1 gives the average income per person for rural China and for rural Zhejiang. In the period between 1980 to 1987, the level of the average income per person in Zhejiang province has been well above that of rural China as a whole.

The fertility level in this province has also been lower than the average level in the country. Figure 2.1 shows the trends of fertility between 1949 to 1982.

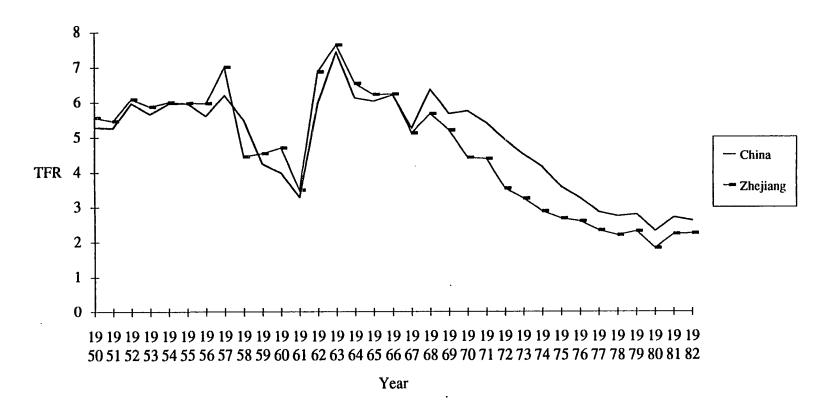
Table 2.1 Comparison of Average Income Per Person, Rural China and Zhejiang, 1978-1987

	Average Income Per person (Yuan)					
Year	Rural China	Rural Zhejiang				
1978	133.6	*				
1980	191.33	219.18				
1981	233.4	279.66				
1983	309.77	358.86				
1984	355.33	446.37				
1985	397.6	548.6				
1986	423.76	609.31				
1987	462.55	725.31				

Note: \*No data available

Sources: 1988 Statistics Yearbook, p826, China State Statistics Bureau, China Statistics Press, 1988

Figure 2.1 Comparison of Total Fertility Rates, China and Zhejiang Province, 1950-1982



The two villages in which I have conducted my survey are located 30 kilometers from the county town, and 330 kilometers from Hangzhou, the provincial capital. The land in these two villages are well-irrigated and fertile, and the area has a mild climate. Main crops in this area are rice, sweet potatoes and wheat. There are also cash crops, such as tea and silkworms.

My first impression of the two villages was the improvement of the housing situation in the recent years. Many new houses, both completed and under construction, with some small vegetable plots in between radiate from the core of the two villages and they form a new periphery for the two villages. The cores of the two villages, by contrary, were packed with mostly old houses and mixed with a few new houses.

The interviews with the township cadres later provided me with more information on the basic demographic and socioeconomic characteristics of these two villages. The demographic characteristics of these two villages had maintained basically the same for 1982 and 1986. However, the average income per person and the total village industrial output had increased tremendously within this period.

Table 2.2 shows the information on the general characteristics of these two villages in 1982 and 1986. This information was provided by the township cadres. The reason for using data from these two years is because that according to the township leaders, the year 1982 was the year when the responsibility system was formerly introduced and the year 1986 was the year before this survey was conducted.

According to the statistics provided by the township cadres, the total population in 1986 in these two villages was 2462 and the total number of households was 758. The average number of persons per household was 3.25. The average income per person in Qiaoxia increased from 130 in 1982 to 483 Yuan in 1986; the average income per person in Quantang increased from 182 in 1982 to 508 Yuan in 1986. During this period, seven factories had been established in these two villages. Four of them are privately owned

Table 2.2 Basic Characteristics of Qiaoxia and Quantang, 1982 and 1986

Basic Characteristics	Qia	noxia	Quar	ntang
	1982	1986	1982	1986
Total population	1212	1227	1184	1235
Total number of households	349	388	333	370
Average household size	3.47	3.16	3.56	3.34
Average income per person (yuan)*	130	483	182	508
Total grain output (kg)	629912	523950	817812	822126
Total tea output (kg)	9675	6000	15341.5	9500
Total number of pigs raised	770	1300	467	1600
Total silkworm cocoon output (kg)	3700	1200	7863.5	6292.8
Total industrial output (1000 Yuan)	0	1424	0	244

Note: \* 1 yuan = 0.387 U. S. dollars

and three are collectively owned. The total value of industrial output was zero in 1980 in these two villages. But in 1986, the total value of industrial output jumped to 1,424,000 Yuan in Qiaoxia, and it increased to 244,000 Yuan for Quantang.

#### Methods of data collection

The data collected from these two villages include statistics and other information on the general characteristics of these two villages as presented above. It also included information on the family support for the elderly at the micro level by personal interviews of the elderly. The interviewing methods utilized were both structured and semi-structured.

## The sampling method

The reason to select two villages for this survey was not for the purpose of comparisons between the two but for obtaining a large enough sample size of the elderly persons (about 150) for the quantitative analysis. Geographically, these two villages are very close to each other. As a matter of fact, they look like one large village divided by a small river. Economically, these two villages also share many similarities. I was informed that, before the commune system was implemented in the 1950s, these two villages were a single village and it was divided into two production brigades for management purposes when the communization occurred.

The sampling frame used for this survey was the vital registration records of the two villages provided by the township leaders. A systematic sampling method was utilized for the survey.

One difficulty we ran into in selecting the respondents, however, was to match the names on the vital registration record and the actual persons in the villages. Many elderly people in these two villages were addressed according to their husband's or sons' names, such as the wife of so and so or someone's mother, and these names they were normally referred to were completely different from what was listed in the registration

booklet. This problem was solved by copying down the elderly's husband's or sons' names from the vital registration list and using these names along with the elderly's formal name to consult with a learned person and the former accountant of the villages. The other difficulty we ran into at the later stage of the interview was that it was very hard to find enough eligible respondents on the sampling list, partly because the harvest season was about to start at that time. At the harvest season of the year, elderly people who do no live with their adult children would usually go to their adult children's house to help with cooking or other light work such as drying rice. Thus, in order to guarantee a sufficient sample, we listed almost all the eligible respondents, the old people, in these two villages and tried to interview as many as we could locate. Altogether, 158 elderly people in these two villages were interviewed.<sup>2</sup>

#### Two phases of the data collection

The data collection process was divided into two phases: the first one consists of a macro study of these two villages. The objective during the first phase is to understand contextual factors affecting the family support system for the elderly with special focuses on periods before and after the rural economic reform. The township leaders provided enormous cooperation for this survey. Township cadres who were in charge of agriculture, industry, education, health, woman affairs and social welfare were interviewed individually. In addition, statistical materials of social, economic, and demographic information of the township (including these two villages) were allowed to be studied.

The second phase of data collection was the actual face-to face interviews of the elderly in these two villages. Assistance was also obtained from the township leaders in this phase. The cadres from the two villages were formally informed by the township

<sup>&</sup>lt;sup>2</sup> The total number of elderly interviewed is 158. There was no single elderly person refused the interview. There were about a dozen respondents selected from the sampling frame were not able to contact, but the number of respondents selected from the sampling frame (181) was actually bigger than the number of respondents actually interviewed.

leaders about the survey and one woman village leader from each village was requested to assist the survey. Additionally, one township cadre was sent to the field with the survey team.

In order to understand fully the family support system for the elderly in these two villages, the interviews in the second phase of the data collection included getting information of the following seven aspects.<sup>3</sup> These seven aspects are: (1) basic characteristics of the elderly; (2) family structure; (3) frequency of interaction between the elderly and their family members engaging in common activities; (4) exchange of assistance between the elderly and their family members; (5) closeness of the relationship between the elderly and their family members; (6) degree of family conflicts and types of conflict resolution; and (7) perception of norms of supporting the aged.

In order to understand those elderly people of special characteristics, such as the childless elderly and elderly persons who were seriously abused by their children, indepth interviews of these elderly persons with special outlines were conducted.

In addition, in order to further understand older people's everyday life, I stayed with a family which had an elderly couple for the entire study period in Quantang which was about a month. Other interviewers also stayed with a family with old people in Qiaoxia.4

In the process of interviewing and observing older people in Quantang and Qiaoxia, we were being provided with information beyond what was asked in the planned outline and questionnaire--information about the dynamics of intergenerational relations. Majority of the elderly people were easy to approach and they usually showed great enthusiasm for the interview. Some of them even considered the survey team as being

<sup>3.</sup> For more details please see the questionnaire of this survey in Appendix.

<sup>4.</sup> Before I went to the field I familiarized myself with the local dialect by staying with an old woman who was from the county where the survey was conducted. With the assistance of a respected old man in the village, I was able to catch the subtleness of the conversations with the respondents and other villagers. All my interviewers were from the neighboring counties where the survey was conducted, so they did not have any problem in understanding the dialect either.

sent by the provincial government and they felt that they were paid great attention for the first time. In many cases of the semi-structured interviews, elderly people spontaneously provided us with rich information, such as stories of their life history, family associations, family disputes, and family income. This type of information sometimes is very difficult to elicit by direct questioning.

# The basic characteristics of the population studied

There were 158 elderly persons that were interviewed. Table 2.3 shows the distribution of the elderly by age and sex. There were 45 percent of the elderly interviewed were male, 55 percent female. There were 56 percent of the elderly belonged to the 'young-old,' 60 to 69 years old, and 30 percent were 'middle-old,' aged 70 to 79 years, and 14 percent belonged to the 'old-old', aged above 80.

#### The age definition of the elderly

The population studied consist people aged 60 and above. This age cut off point of the elderly was based on the general perception of 'old age' in China. In urban China, retirement age for males is 60, and for females, it is 55. The retirement age in the city often marks the onset of old age. However, there is no legislated retirement age in rural China since rural population have been excluded from the state pension plan.

Traditionally, the arrival of grandchildren is closely connected with the onset of old age, since this family event usually coincides with the people's withdrawal from labor force when they enter their late fifties and pass their prime earning years as farmers. However, those whose grandparenthood starts as early as late thirties or early forties would not be considered as old. Generally, 60 is a more commonly accepted a cut off point for entering into the older generation (Davis-Friedmann, 1983). I was informed that there was a local custom in this area that people held a special celebration for their

Table 2.3 Distribution of the Elderly by Age and Sex, Qiaoxia and Quantang

		Age Group		
Sex	60-69	70-79	80+	Total
Male	69.01%	21.13%	9.86%	44.94%
	49	15	7	71
Female	45.98%	36.78%	17.24%	55.06%
	40	32	15	87
Total	56.33%	29.75%	13.92%	100.00%
	89	47	22	158

sixty-third birthdays. Sixty-three was considered as a significant point of being old and being respected, and people who were celebrating their sixty-third birthday would be treated by their daughters with a bowlful of stewed pork, which contained exactly sixty-three pieces of pork! For the purpose of comparison with other studies on the Chinese elderly, I used age 60 and above to operationally define the elderly in this survey.

#### General characteristics of the elderly by age and sex

#### Marital status

Table 2.4 shows the marital status of the elderly by age and sex in the two villages studied. Marital status of the elderly appeared to be closely related to their age and sex. In the two villages studied, the proportion for the never married elderly was as low as 9 percent, and the proportion of the never married female elderly was lower than that of male elderly. The proportion of currently married elderly persons was 41 percent. With the exception of the 'old-old,' the proportion of currently married elderly persons was higher for male than for female, which reflects the fact that the female life expectancy is longer than that of the male's. The higher the age, the higher the proportion of widows. The proportion of the widowed elderly was higher for females than for males across all age groups of the elderly. Divorce and separation were uncommon for the elderly in the two villages studied. The proportion of divorced and separated elderly persons was slim. There was only two elderly persons out of 158 reported themselves as divorced and they were both male.

#### Work ability

It is important to study the work ability of the elderly in rural China. There is no clear age cut off point for the elderly to withdraw from the labor force in rural China, since the majority the elderly are not covered by any pension plan as reviewed in Chapter

Table 2.4 Marital Status of the Elderly by Age Group and Sex

		60- 69			70- 79			<del>80+</del>		
Marital Status	Male	Female	Total	Male	Female	Total	Male	Female	Total	Total
Never married	89%	11%	100%	100%	0%	100%	100%	0%	100%	9%
	8	1	9	3	0	3	2	0	2	14
Married	62%	38%	100%	100%	0%	100%	25%	75%	100%	41%
	32	20	52	9	0	9.	1	3	4	65
Separated	50%	50%	100%	0%	100%	100%	100%	0%	i00%	4%
•	1	1	2	0	3	3	1	0	1	6
Widowed	25%	75%	100%	9%	91%	100%	20%	80%	100%	45%
	6	18	24	3	29	32	3	12	. 15	71
Divorced	100%	0%	100%	0%	0%	0%	0%	0%	0%	1%
	2	0	2	0	0	0	0	0	0	2

One. Whether or not the elderly have to rely totally on the family for economic support largely depends on their own work ability.

Table 2.5 shows the work ability of the elderly by age and sex. The work ability of the elderly also appears to be related to both the age and the sex of the elderly. The definitions of 'full labor' and 'half labor' and 'having no ability to work' were borrowed from the old classification scheme of labor force under the commune system which was still familiar to people in the villages. A person who belongs to the group of 'full labor' means that this person is able to do heavy labor, especially working in the paddy field. A person who is classified as a 'half labor' implies that this person is only able to do less heavy work, such as working in the sweet potato field. The person who identified himself or herself as 'having no ability to work' generally means that this person is not involved in work in the field, but mostly stays at home. However, some of the elderly who reported having no ability to work could still contribute to the family by doing household chores, even raising pigs and watering vegetable plots.

There was 24 percent of the elderly identified themselves as 'full labor,' 48 percent as 'half labor' and 28 percent as 'having no ability to work.' The proportion of the elderly who identify themselves as 'full labor' was higher for male than for female elderly persons.

The proportion of the male elderly who belong to 'full labor' in the 'young-old' group was much higher than that of the female. In other words, the female elderly seemed to withdraw from labor force earlier than the male elderly. Overall age 70 appears to be the age beyond which few men and no women are engaged in heavy duty labor.

## Education

Table 2.6 shows the education status of the elderly by age and sex in the two villages studied. In general, the education level of the elderly interviewed was low.

There was over half of the elderly who were illiterate. The proportions of the elderly

Table 2.5 Labor Status of the Elderly by Age Group and Sex

		60- 69			70- 79	<del></del>	-	<del>80+</del>		
Labor status	Male	Female	Total	Male	Female	Total	Male	Female	Total	Total
Full labor	86%	14%	100%	100%	0%	100%	0%	0%	0%	24%
	30	5	35	3	0	3	0	0	0	38
Half labor	34%	66%	100%	29%	71%	100%	44%	56%	100%	48%
	13	25	38	8	20	28	4	5	9	75
No ability to work	33%	67%	100%	25%	75%	100%	23%	77%	100%	28%
-	5	10	15	4	12	16	3	10	13	44

Table 2.6 Education Status of the Elderly by Age Group and Sex

		60- 69			70- 79			<del>80+</del>		
Education	Male	Female	Total	Male	Female	Total	Male	Female	Total	Total
Illiterate	28%	72%	100%	17%	83%	100%	7%	93%	100%	54%
	10	26	36	6	29	35	1	13	14	85
Semi-illiterate	75%	25%	100%	67%	33%	100%	0%	0%	0%	12%
	12	4	16	2	1	3	0	0	0	19
Primary school	72%	28%	100%	75%	25%	100%	0%	0%	0%	28%
•	21	8	29	6	2	8	5	2	7	44
Middle school	80%	20%	100%	100%	0%	100%	0%	0%	0%	4%
	4	1	5	1	0	1	0	0	0	6
High school	100%	0%	100%	0%	0%	0%	0%	0%	0%	1%
	1	0	1	1	0	1	0	0	0	2
Above high school	100%	0%	100%	0%	0%	0%	100%	0%	100%	1%
J	1	0	1	0	0	0	1	0	1	2

who reported having education level above primary school were slim. A significant sex difference in education level can also be observed. The proportion of the illiterate elderly was higher for female than for male for all age groups. The proportions of the elderly with educational level of semi-illiterate, primary school, middle school, high school and above high school were all higher for male than for females.

# Functional, visual, and hearing ability

Table 2.7 shows the functional, visual and hearing ability of the elderly by age group and sex in the two villages studied. For functional ability of the elderly, 'very good' means that the elderly is able to take care of himself, such as being able to wash his own clothes; 'not very good' means that the elderly is semi-able to take care of himself; 'bad' means that the elderly is not able to take care of himself and requires intensive care. There was 91 percent of the elderly reported that they were able to take care of themselves. There was a tiny minority of the elderly needed care or intensive care from others. As one would expect, the proportion of the elderly who reported 'very good' at taking care of themselves was higher for the young-old than for the old-old. A sex difference in functional ability for the elderly can also be observed. The proportion of the elderly who reported 'very good' at taking care of themselves is higher for female than for male elderly persons across all age groups.

The majority of the elderly, 70 percent, reported that their visual ability was very good. An age difference in visual ability can be found. It appears that the younger the elderly the better their visual ability. A similar pattern in hearing ability for the elderly can also be observed.

## Daily activities

Table 2.8 shows the distribution of daily activities reported by sex. There was 30.1 percent of the elderly reported 'working in the field' as one of their daily activities.

Table 2.7 Functional, Visual and Hearing Ability of the Elderly by Age Group and Sex

		60- 69			70- 79			80+		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Total
Functional Ability			***************************************							
Very good	<b>-</b> 55%	45%	100%	28%	73%	100%	39%	61%	100%	91%
	47	38	85	11	29	<b>40</b> .	7	11	18	143.00
Not very good	100%	0%	100%	57%	43%	100%	0%	100%	100%	8%
	2	0	2	· 4	3	7	0	4	4	13.00
Bad	0%	100%	100%	0%	0%	0%	0%	0%	100%	1%
	0	1	1	0	0	0	0	0	1	2.00
Visual Ability										
Very good	<b>-</b> 57%	43%	100%	38%	62%	100%	25%	75%	100%	70%
,	39	30	69	11	18	29	3	9	12	110.00
Not very good	47%	53%	100%	27%	73%	100%	60%	40%	100%	22.%
	7	8	15	4	11	15	3	2	5	35
Bad	60%	40%	100%	0%	100%	100%	20%	80%	100%	8%
	3	2	5	0	3	3	1	4	5	13.00
Hearing Ability										
Very good	<b>-</b> 55%	45%	100%	24%	76%	100%	29%	<b>71%</b> .	100%	79%
	42	35	77	8	26	34	4	10	14	125.00
Not very good	<b>55</b> %	45%	100%	54%	46%	100%	43%	57%	100%	20%
	6	5	11	7	6	13	3	4	7	31
Bad	100%	0%	100%	0%	0%	0%	0%	100%	100%	1%
	1	0	1	0	0	0	0	1	1	2.00

Table 2.8 Daily Activities for the Elderly by Sex

	Male	Female	Total
Working in the field	44.8%	12.7%	30.4%
Engaging other economic activities	39.1%	53.5%	45.6%
Doing household chores	43.7%	97.2%	67.7%
Baby-sitting	3.4%	26.8%	13.9%
Chatting, playing	19.6%	19.7%	19.6%
Reading	9.2%	1.4%	5.7%
Watching TV	44.8%	47.9%	46.2%
Getting up early in the morning	40.9%	59.7%	49.4%
Taking a nap in the afternoon	49.1%	77.9%	62.0%
Going to bed early in the evening	39.7%	67.6%	52.2%
Number of cases	87	71	158

However, there is a marked sex difference. For those who reported working in the field, 81.2 percent of them was male, and only 18.8 percent was female. There were 67.7 percent of the elderly reported 'doing household chores' as one of their daily activities and 13.9 percent reported 'baby sitting' as one of their daily activities. However, the proportions of the elderly reported 'doing household chores' and 'baby sitting' as their daily activities were higher for the female than for the male.

#### Self-identified living standard

Table 2.9 shows the self-identified living standard and the distribution of personal income in the last year (the year before the survey was conducted). There were 4.4 percent of the elderly identified their living standard as very high, 18.4 percent high, 50.0 percent medium, 19.6 percent low, and 7.6 percent very low. There were 29.1 percent of the elderly interviewed reported that they had no personal income at all, 23.4 percent of the elderly reported that their cash income was under 500 yuan, 24.7 percent over 500 yuan. But, there were about 22.8 percent of the elderly interviewed had no idea about their personal income.

## Data analysis and the presentation of findings

Due to the small sample size in this study and the method of data collection used, data analyses will be both descriptive and analytical in nature. The analyses will begin with the examination of the uni-variate table. After the distribution of each variable is reviewed, the analysis will move to case studies. Log-linear and logit analysis will also be utilized for further studying the relationships between the number of children, especially number of sons and the pattern of family support for the elderly.

The reason for using the studies method is because of the data collection method and small sample size. The interviews of the elderly in the two villages are both structured and semi-structured (in-depth) in nature. The data from semi-structured interviews (in-depth interviews) can enrich the pictures derived from the data of

Table 2.9 Self-Identified Living Standard and Personal Income Distribution of the Elderly

Self-indentifie	d Living Standard	Income of Last year*				
Very high	4.40%	No income	29.10%			
High	18.40%	Under 500 yuan	23.40%			
Medium	50.00%	Over 500 yuan	24.70%			
Low	19.60%	Don't know	22.80%			
Very low	7.60%	·				
Number of cases=158						

Note: \* Pension is also included in the income reported here.

structured interviews. In other words, both qualitative and quantitative data are equally important for the analyses in this research, since they can complement each other.

The reasons I select log-linear and logit analysis in addition to simple cross tabulation and case studies are because of the two distinctive merits of these methods. First of all, log-linear and logit analysis have their merits of handling small sample size (Knoke and Burke, 1980), and this is appropriate for my survey data set since it has only 158 cases. Secondly, log-linear and logit analysis are powerful tools in revealing relationship between categorical variables. This is also important, since most of my major dependent and independent variables are categorical. The reason to use both log-linear and logit analysis is that log-linear analysis can only point out whether there is a relationship between the variables, and it can only apply to situations when all the variables are categorical. Log-linear models are particularly useful in selecting the most appropriate and parsimonious models. In contrast, logit analysis can reveal the degree and the direction of the association between variables. In addition, it can handle both categorical and interval independent variables.

# CHAPTER THREE THE FAMILY OF THE ELDERLY

#### Introduction

This chapter will document the patterns of the family structure for the elderly based on the survey data. It will also explain factors associated with a particular pattern of the household composition for the elderly (living arrangement) by using log-linear and logit methods.

In the survey on the family support system in Quantang and Qiaoxia, the elderly persons were asked the following two questions: (1) who are their family members, their names (in order to keep track in the interview), relationship with the respondent, age, occupation, and where they live, and (2) any other relatives, and their names, relationship with the respondent, age, their occupation, and where they live

As reviewed in Chapter One, the current fertility decline in China may lead to a reduction in the number of children for the elderly in the coming decades. People, thus, are worried about the fate of the family support system for the elderly in rural China. However, very little is known about the present family structure of the rural elderly in China.

Characteristics of the family structure for the elderly can provide important information about potential resources that can be mobilized for old-age support. In lineage perspective reviewed in Chapter One, the family structure is viewed as having three important dimensions. These three dimensions are: (1) availability of kin: spouse, number of children, grandchildren, siblings, and so on; (2) geographic proximity: the geographic distance of these family members from the elderly, and (3) living arrangement, or household composition for the elderly (Bengtson and Schrader, 1985). These three dimensions are relevant in understanding the family structure for the elderly.

The first and the second dimensions of the lineage perspective are important in studying the family support system for the elderly. Elderly people do not only associate with and depend upon the family members with whom they live but also associate with those family members who do not live under the same roof. Additionally, the association between the elderly and the family members is also dependent on geographic proximity, since the geographic distance to relatives constitutes a physical barrier to extensive visiting. Previous literature in family studies has only emphasized the living arrangement, the third dimension of the lineage perspective, and neglected the first and the second dimensions.

#### Availability of kin for the elderly

Availability of kin, according to the lineage approach, is an essential dimension in understanding the family for the elderly, since, to some degree, variations in availability of kin affect patterns of living arrangement, geographic proximity, association and economic support.

The term 'lineage' in traditional Chinese cultural usually implies:

"A group of males all descended from one common ancestor, all living together in one settlement, owning some property in common, and normally under the leadership of the man most senior in Generation and Age. Together with these males were, of course, their wives and unmarried daughters (Baker, 1979:49)."

The concept of lineage was loosely applied in the study of elderly people in Quantang and Qiaoxia for the purpose of studying the family structure for the elderly and the potential resources that can be mobilized for old-age support. In this survey, an attempt was made to have a relatively thorough understanding of elderly people's family structure. Thus, the information of 'lineage' in the restricted sense of the Baker's definition, was gathered, and so was information on married daughters, relatives from the spouse's side and other distant relatives. In addition, the information on lineage was not restricted to those family members who live together in a single settlement.

Kinship structure for the elderly is a difficult subject to study. It usually contains enormous details, and requires great energy, patience, and concentration in both data collection and data analysis.

Of course, it is almost impossible to know the 'true' availability of kin for the elderly in the survey, due to elderly people's memory problems and their selectivity in answering the questions. Older people tend to report those with whom they are more closely and effectively associated. They tend to omit those family members with whom they rarely associate. However, the fact that the elderly identify and report about those people as their kinsmen itself may indicate that these are the people whom the elderly consider they can possibly turn to in the case of need. A 'true' demographically possible kinship structure can only be obtained through conducting a kinship universe simulation based on the data of fertility, mortality and nuptiality. In this research, the subjective kinship structure which the respondent reported will be treated as if it were a 'true' one.

# A general picture

The data from the survey of two villages studied show that the elderly generally had a very strong consciousness about their kinsmen. In addition to members of the immediate family, such as spouse, children, children in-law, and grandchildren, the elderly interviewed were also able to report their distant relatives, such as great grandchildren, cousins, nephews, and nieces and so on. The average number of distant relatives reported was as high as 3.4 and the maximum number reported was 15.

Moreover, every elderly person interviewed was able to report the name, age (including animal year) and the occupation of each distant relative they mentioned.

The average number of kin for the elderly reported in the two villages studied was 15.6 (S.D.=6.568). The maximum number of kin reported was 32, and only a tiny minority of the elderly interviewed who had no kin (No.=2). Table 3.1 presents the

Table 3.1 Distribution of the Elderly by Number of Kin

Number of Kin	Percent of the Elderly	Number of the Elderly
0	1.27%	2
1 5	2.53%	4
6 10	17.09%	27
1115	35.44%	56
16 20	21.52%	34
21 32	22.15%	35
Total	100.00%	158

distribution of number of kinsmen for the elderly reported in the two village studied. There was 2.4 percent of the elderly reported that they had 1-5 kinsmen, 17.1 percent of them had 6-10 kinsmen, 35.4 percent of them had 11-15 kinsmen, 21.5 percent of them had 16-20 kinsmen, and 22.2 percent had 21-32 kinsmen.

The kin structure for the elderly deserves close attention in studying the family structure for the rural elderly. The traditional culture in China defines the 'distance' or 'closeness' of kinsmen in the kinship networks (C.K. Yang, 1959). The 'distance' or 'closeness' of different types of kinsmen with the elderly usually would have different implications in supporting the elderly. Table 3.2 shows the average number of different types of kinsmen for the elderly in the two villages studied. The numbers in this table highlight the kin structure for the elderly. The kin structure of the elderly will be discussed from the following aspects: availability of spouse, children, grandchildren, great grandchildren, siblings and other relatives.

# Availability of spouse

Many elderly persons interviewed expressed the primary role of the spouse in the old-age support. Two local sayings were frequently heard in the survey: "Having children sitting all over one's sickbed is not as good as having a wife from one's second marriage." "Eating husband's rice, one can stand up, but eating son's rice, one has to kneel down." However, a contrary point of view was also expressed. Many elderly persons interviewed considered children as the ultimate resources of old-age support, and that the strength of spouse was limited after all.

The data from the survey show that 48.1 percent of the elderly had a spouse, but sex and age differences in the availability of spouse were marked. In other words, female elderly persons were less likely to have their spouses, and the higher the age group, the less likely for the elderly to have his or her spouse.

Table 3.2 Average Number of Different Types of Kin Reported by the Elderly

Type of Kin	Mean Kin Size	Standard Deviation	Maximum Kin Number
Spouse	0.48	0.5	1
Children	3.39	1.81	8
Sons Daughters	1.78 1.61	1.19 1.21	6 5
Son-in-laws	1.4	1.11	4
Daughter-in laws	1.43	1.09	5
Grand sons	2.92	2.13	9
Grand daughters	2.43	2.05	. 9
Other relatives	3.95	3.96	19
Great grand children	0.19	0.78	7
Adopted children	0.076	0.37	2
Parents	0.05	0.22	1
Siblings	1.24	1.42	6
Spouse's relatives	0.17	0.66	6
Other distant relatives	2.27	2.86	9

# Availability of children

Children are always the focus in studying the family support system for rural China elderly in previous literature (Davis-Friedmann, 1983; C.K. Yang 1959). The impact of the rural economic reform on the younger generation is dramatic and multi-dimensional and changes of the younger generation under the rural economic reform will probably in turn affect family support for the elderly in a significant way.

The data from the two villages studied show that the average number of living children for the elderly interviewed was 3.39 (S.D.=1.8), and the maximum was 8.0. The vast majority of respondents reported having living children, with only 5.7 percent (No.=9) reporting being childless.

In studying the availability of children of the elderly, it is useful to make two distinctions: married and never married, sons and daughters. Children of different sex and marital status may have different functions in supporting the elderly. Table 3.3 shows this distribution for the elderly with different types of children. The proportion of the elderly interviewed who had never married children was small: 26.6 percent of the elderly had one to two never married sons (No.=42), and 9.5 percent of the elderly (No.=15) had one to two never married daughters. The majority of the elderly had married children: 93.7 percent of the elderly had one to seven married children; 80.4 percent of the elderly had one to five married sons, and 77 percent of the elderly had married daughters. There was only 13.9 percent of the elderly who had no sons (No.=22) and 20.3 percent of the elderly had no daughters (No.=32).

Complaints about married sons were frequently encountered in the survey: "My son was nice to me before he got married. After he got married, however, he changed, he pays a little attention to me, and only listens to his wife." Talking about the importance of daughters, a large proportion of the elderly said: "After all she is a person who belongs to other's family." Those who had strained relations with their sons, however, said "My

Table 3.3 Distribution of the Elderly by the Number and Type of Their Children

ldren		Туј	e of Children	<del></del>	<del></del>			
Both marri	ed and nev	ver married	-	Married		Never Married		
Children	Sons	Daughters	Children	Sons	Daughters	Children	Sons	Daughters
5.70%	13.92%	20.25%	6.33%	19.62%	22.15%	66.46%	72.78%	89.24%
27.22%	59.49%	56.96%	36.71%	62.03%	60.13%	32.91%	27.22%	10.76%
39.24%	25.95%	22.15%	39.87%	17.72%	17.72%	0.63%	0.00%	0.00%
27.85%	0.63%	0.63%	17.09%	0.63%	0.00%	0.00%	0.00%	0.00%
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	Both marri Children 5.70% 27.22% 39.24% 27.85%	Both married and new         Children       Sons         5.70%       13.92%         27.22%       59.49%         39.24%       25.95%         27.85%       0.63%	Both married and never married         Children       Sons       Daughters         5.70%       13.92%       20.25%         27.22%       59.49%       56.96%         39.24%       25.95%       22.15%         27.85%       0.63%       0.63%	Both married and never married           Children         Sons         Daughters         Children           5.70%         13.92%         20.25%         6.33%           27.22%         59.49%         56.96%         36.71%           39.24%         25.95%         22.15%         39.87%           27.85%         0.63%         0.63%         17.09%	Both married and never married         Married           Children         Sons         Daughters         Children         Sons           5.70%         13.92%         20.25%         6.33%         19.62%           27.22%         59.49%         56.96%         36.71%         62.03%           39.24%         25.95%         22.15%         39.87%         17.72%           27.85%         0.63%         0.63%         17.09%         0.63%	Both married and never married         Married           Children         Sons         Daughters         Children         Sons         Daughters           5,70%         13.92%         20.25%         6.33%         19.62%         22.15%           27.22%         59.49%         56.96%         36.71%         62.03%         60.13%           39.24%         25.95%         22.15%         39.87%         17.72%         17.72%           27.85%         0.63%         0.63%         17.09%         0.63%         0.00%	Both married and never married         Married           Children         Sons         Daughters         Children         Sons         Daughters         Children           5.70%         13.92%         20.25%         6.33%         19.62%         22.15%         66.46%           27.22%         59.49%         56.96%         36.71%         62.03%         60.13%         32.91%           39.24%         25.95%         22.15%         39.87%         17.72%         17.72%         0.63%           27.85%         0.63%         0.63%         17.09%         0.63%         0.00%         0.00%	Both married and never married         Married         Never Married           Children         Sons         Daughters         Children         Sons         Daughters         Children         Sons           5.70%         13.92%         20.25%         6.33%         19.62%         22.15%         66.46%         72.78%           27.22%         59.49%         56.96%         36.71%         62.03%         60.13%         32.91%         27.22%           39.24%         25.95%         22.15%         39.87%         17.72%         17.72%         0.63%         0.00%           27.85%         0.63%         0.63%         17.09%         0.63%         0.00%         0.00%         0.00%

(Number of cases = 158)

daughter is the one who cares the most about me." Economic support provided by different types of family members will be further discussed in the following chapter.

# Adoption

According to a traditional value in China, having a son to carry the family name and to provide support when one gets old is extremely important. Thus, the people who have no children, especially no sons, would usually adopt a boy as a substitute son (Davis-Friedmann, 1983).

From the data of two villages studied, it is hard to conclude that the elderly who have no son will have an adopted son, since the information of number and sex of children ever born was not inquired in the survey. In the two villages studied, there were 7 cases of adoption. However, there was only one case that fitted in the typical circumstance described by Davis-Friedmann. The elderly person was never married and he adopted a son from his brother when the boy was two years old. Although his adopted son had returned to his biological father's city for better job opportunity, he still maintained close contact with this elderly person and sent him a remittance every month. There was another case that the elderly person who had a daughter and had an adopted son. His daughter had already married out to the neighboring village and he lives with his adopted son's family.

As described in the previous literature, the elderly who are childless would normally adopt a son (but not a daughter) at a very young age from his/her brother who has many children. However, a contrary example was also found: there was a childless elderly person who planned to adopt a daughter from his brother who could take better care of him, instead of adopting a son to carry on the family name.

The data from two villages studied show that there was also another type of adoption. There were several elderly persons who had several children, both sons and daughters, had adopted children. An elderly woman who had two daughters and three

sons reported that she also had adopted a daughter who cared about her so much. She said that she adopted this daughter because the girl was an abandoned child.

#### Availability of grandchildren

In traditional China, having a grandchild was the goal for all middle-aged persons, and holding a grandchild provides the greatest pleasure for an old man or old woman (M.C.Yang, 1945). This tradition can still be observed today. The in-depth interview information from the two villages indicated that the relationship between a grandparent and a grandchild was the most loving one among all the relationships between the elderly and their other family members, and especially contrasted with the relationship between the elderly and their married sons. The average number of grandchildren for the elderly was 5.4, and the maximum number was 18. The average number of grandsons was 2.9, and the maximum number was 9. Table 3.4 shows the distribution of the elderly by number of grandsons, and grand daughters. There were 12.7 percent of the elderly had no grandsons and there were 20.3 percent of the elderly had no grand daughters. There were 34.8 percent of the elderly reported they had 1-2 grandsons, there were 34.2 percent of the elderly reported that they had 1-2 grand daughters.

Traditionally, grandsons carry family names and they are thus more important than grand daughters. Interestingly, another function of grandsons for the elderly is observed in the two villages studied. There were two sonless elderly persons interviewed treated their adult grandson as their substitute son to live with and to depend upon.

Table 3.4 Distribution of the Elderly by Number of Grandchildren and Great Grandchildren (number of cases = 158)

Number	Grand sons	Grand Daughters	Great Grandchildren
0	12.66%	20.25%	91.14%
1- 2	34.81%	34.18%	6.96%
3- 4	34.18%	31.01%	1.27%
5- 6	12.03%	10.13%	0.63%
7+	6.33%	4.43%	0.00%
Total	100.00%	100.00%	100.00%

#### Availability of great grandchildren

The average number of great grandchildren was only 0.19, and the maximum one was 7.1 As table 3.4 shows there were 91.1 percent of the elderly had no great grandchildren. Having great grandchildren would give the elderly a strong feeling of continuation of life and great satisfaction. Of course, it is problematic for the elderly to expect their great grandchildren to support them, since their great grandchildren are far too young to be able to support them.

#### Availability of sibling

The average number of siblings was 1.24. There were 57 percent of the elderly claimed that they had siblings, 49.4 percent of them had 1-3 living siblings, and 9.6 percent of them had 4-6 living siblings.<sup>2</sup> I observed that the importance of siblings in supporting the elderly varied among different elderly persons. First, it depended on the availability of children. Support from siblings was extremely important for those widowed and childless elderly. Secondly, it depended on the geographic proximity, usually the shorter the distance between the elderly and their siblings, the closer the relationship between them.

#### Availability of distant relatives

Data from the two villages studied indicate that distant relatives are particularly important for the elderly who have no living children, especially no living sons. It was

<sup>1.</sup> It is important to point out that many of the great grandchildren were omitted by the elderly in the interview, especially in the case for those great grandchildren of their grand daughters who married out, and in the case for those elderly who had so many grandchildren that he or she would lose track easily.

<sup>2</sup> There is one point about the data needs to be clarified about the definition of 'sibling' in this analysis: brother-in-laws and sister-in-laws were coded as sibling, since there was only a small percentage of elderly reported their brother-in-laws and sister-in-laws, while a large proportion of the elderly tend not to report their brother-in-laws and sister-in-laws.

also important to have distant relatives for the elderly whose children, especially sons, lived far away. The average number of distant relatives reported is 2.27. The concept of distant relatives here includes cousins, nephews and so on but not relatives from the spouse's side. But, the concept of other relatives used in the later analysis includes siblings, adopted children, grand children, parents, distant relatives, and spouse's relatives.

#### Availability of parents

The availability of parents for the elderly also needs to be explored, in terms of the support the elderly need to provide but not in terms of support the elderly can mobilize. Parents of the young-old elderly are usually extremely old and frail and require intensive care. Under the current economic regime, supporting an old-old parent is a great economic burden for a young-old elderly person who has not much income. Supporting both elderly parents and grand parents would be a even greater burden for the younger generation. Fortunately, supporting the old-old was not yet a pressing problem, since the proportion of the elderly with parents was still small. There were only 5.1 percent of the elderly in the two villages studied reported having parents, and the average number of children for the elderly was still large.

However, this situation might change in the coming decades. The childhood status of elderly persons will last longer as life expectancy increases, and number of the caregivers, adult children, will decrease as the results of the recent fertility decline.

# Geographic proximity of kin for the elderly

Exploring geographic proximity is indispensable for studying the family of the elderly. Focusing only on the availability of kinsman for the elderly is not enough, since rural China is not a highly mobile society, and geographic distance can constitute physical barriers for interaction between the elderly and their family members. Focusing only on the household composition of the elderly is also limited, since the elderly usually

not only associate with those family members who live with them but also associate with those family members who do not live with them. Although some elderly persons in the two villages studied lived separately from their adult children, they maintained 'intimacy at a distance' with their adult children.

However, geographic proximity is seldom measured in previous studies, except for a little incomplete description. Measuring geographic proximity for the elderly in a village setting is not easy, since the education level of the elderly in rural areas is generally low, and their perceptions of distance are often unclear and hard to record.

This section will first describe geographic proximity of major types of relatives: spouse, never married children, married sons and married daughters. It will then explore relationships between geographic proximity and the interaction between the elderly and their family members.

#### A general picture

A set of rough indicators for measuring geographic proximity was constructed. This set of indicators uses a hierarchy of administrative units to substitute for geographical distance: 1) same village, 2) same township but not in the same village, 3) same county but not in the same township, 4) the same province but not in the same county, and 5) other provinces. Table 3.5 shows the average number of relatives living at different geographic distance from the elderly. The average number of relatives reported in the same village with the elderly (not including those relatives who live under the same roof with the elderly) was 4.3 and the maximum number reported was 17. The average number of relatives who were not in the same village but in the same township with the elderly was 1.56, the maximum number was 10. These figures indicate that most of the relatives of the elderly live near by the elderly in the villages studied. In other words, if we treat the elderly as the center, the average number of the relatives around the elderly decreases as the geographic distance from the elderly increases. Table 3.6 show the distribution of geographic proximity of kin for the elderly.

Table 3.5 Average Number of Kin by Geographical Proximity Reported by the Elderly

	Geographic Proximity							
	Same Village	Same Township	Same County	Same Province	Other Provinces			
Mean	4.34	1.56	2.86	1.48	1.23			
Standard Deviation	3.78	2.2	3.87	2.2	2.03			
Maximum	17	10	16	13	9			
Minimum	0	0	0	0	0			
No. of cases	158	158	158	158	158			

# Geographic proximity of spouse

In the two villages studied, the absolute majority, 97.1 percent of the elderly's spouses lived with the elderly interviewed, and only a tiny minority did not live with the elderly interviewed. Reasons the elderly's spouses did not live with them varied. Two elderly who lived separately with their spouses explained that he and his wife had not talk to each other for years. The other elderly person who lived separately from his spouse was because two of that person's sons divided the responsibility in supporting their parents and thus the father lived with the elder son, the mother lived with the second son.

#### Geographical proximity of never married children

Traditionally, never married children tend to live together with their parents (Davis-Friedmann,1983). However, The data of the two villages shows that there were only 57.1 percent of the elderly's never married children lived with their elderly parents. There were 22.4 percent of never married sons reported to be living in the same province but not with the elderly. This, to some extent, indicates that since the economic reform, rural young people have increasingly been more mobile and seeking for better opportunities, such as finding a job in the county factory or joining going a construction team to work in Hangzhou, the capital city of the province, or even going farther away from home to work as a carpenter.

# Geographical proximity of married sons

Traditionally, the elderly usually live with married sons, however, a division of the extended family household occurs when the family is too big or there are other problems which make the elderly live separately from the married son (Davis-Friedmann,1983). The data from the two villages studied indicated that this trend was still somehow maintained: 25.0 percent of the married sons and daughter-in-laws lived with the elderly and 52.1 percent of them live in the same village with the elderly.

Table 3.6 Distribution of Geographical Proximity of Kin for the Elderly (%)

Type of Kin	Living Together	Same Village	Same Township	Same County	Same Province	Other Province	Overseas	Total
Spouse	97.1	2.9	0.0	0.0	0.0	0.0	0.0	100.0
Never Married Children	57.1	10.2	0.0	6.1	22.4	4.2	0.0	100.0
Married Sons and Daughter-in-laws	25.8	52.1	1.1	5.4	9.0	4.1	2.5	100.0
Married Daughters and Son-in-laws	3.9	23.3	24.5	29.5	12.2	5.9	0.7	100.0
Grandchildren	14.4	36.6	10.5	19.0	10.8	7.4	1.3	100.0
Great grand- children	37.5	45.8	12.5	0.0	0.0	4.2	0.0	100.0
Parents	55.6	22.2	11.1	11.1	0.0	0.0	0.0	100.0
Adopted- children	0.0	58.3	0.0	33.3	8.4	0.0	0.0	100.0
Siblings	0.6	16.3	22.3	24.4	17.3	15.3	3.8	100.0
Other Relatives	3.5	28.4	13.7	20.9	17.8	12.2	3.5	100.0
Total	16.8	33.8	11.9	17.6	11.6	6.7	1.6	100.0

# Geographical proximity of married daughters

It is a tradition that daughters usually marry out to other villages, while sons remain in their natal villages to be responsible for supporting their elderly parents (Davis-Friedmann,1983). The data from the two villages studied show a different picture of residential pattern of rural women which is probably determined by the marriage pattern: 23.3 percent of the married daughters remain to live in their natal village with their parents. This relatively high percentage of daughters who lived in the same village with their parents will have implications for supporting the elderly. A daughter who lived close by may have a substitution function for son in supporting the elderly for those sonless elderly and those who had strained relationship with their sons. This relatively high percentage of daughters who lived in the same village with their parents may indirectly indicate an increasing freedom of mate selection.

### Geographic proximity and the interactions between the elderly and their family members

A set of rough indicators for measuring the interaction frequency between the elderly and their family members was constructed. These indicators of interaction frequency are the following: the first type of interaction is the frequent drop in which means that the elderly's family members come to visit the elderly or the elderly go to visit their family members at least a couple times a week. The second type of interaction is to visit at least once a year. The third type is to visit once every few years. The last type is writing once every few month which means the elderly and their family members only exchange letters but no visits.

As Table 3.7 shows, the average number of relatives who drop in the elderly's house was 4.3 and the maximum number was 17. The average number of relatives who visit the elderly a least once a year was 4.1. The average number of relatives who visit the elderly once every few years was 0.59 and the average number of relatives who write to the elderly once every few months was 0.48.

Table 3.7 Average Number of Various Frequency of Interaction Between the Elderly and their Relatives

	Fr	equency of Interac	etion	
Statistics	Frequent Drop in	Visit at least Once a year	Visit once every few years	Write once every few months
Mean	4.33	4.11	0.59	0.48
Standard Deviation	4.18	4.09	1.94	1.23
Maximum	17	20	16	. 7
Minimum	0	0	0	0
Percent of the elderly having interaction	73.42	75.95	18.99	19.62
No of cases	158	158	158	158

Moreover, the geographic proximity and interaction frequency are highly correlated. Relatives who lived in the same village with the elderly were more likely to visit the elderly frequently (with a pearson correlation coefficient of 0.681). Relatives who did not live in the same village but in the same township were more likely to come to join the new year gathering with the elderly only. For example, an elderly person's son who lived in the same village would come to visit his parents once every couple of days; an elderly person's daughter who lived in the same county with the elderly would come back to visit the parents only in the new year season, i.e. once a year; an elderly person's son who lived in another provinces or even farther away would come back to visit once every few years, or write back once every few months.

#### Living arrangement of the elderly

Previous literature in the field of Chinese family has presented a picture of elderly people as being usually surrounded by children and grand children; only the extraordinary deviant live alone (Davis-Friedmann, 1983). What is the pattern of living arrangement for rural elderly people under the rural economic reform?

Moreover, there has been a definition problem in previous studies. The term 'family' (jia), which usually refers to an unit that organized by people related by blood, marriage or adoption and bounded by a common cooking stove and budget, is often used inter-changeably with the term 'household' (hu) which may include people who are not related by blood, marriage or adoption (Croll, 1985:3). As a matter of fact, what is usually measured is the concept of 'household' instead of the concept of 'family' due to the complexity in measuring the concept of family.

This section will first present the average household size of the elderly and the types of the living arrangement for the elderly. It will then explore the factors affecting the pattern of the living arrangement of the elderly.

#### The average household size for the elderly

In the two villages studied, the average size of the household with elderly persons was 3.43 (S.D.=2.31). This was about the same as the average household size for all the households in the two villages as indicated in Chapter Two. Table 3.8 shows the distribution of the elderly by size of households. There were 22.8 percent of the elderly's households had only one person, 18.4 percent of the elderly's households had two persons, 13.39 percent of the elderly's households had three persons, 16.5 percent of the elderly's households had four persons, and 16.5 percent of the elderly's households had five persons. The proportion of big family household was small. There were only 11.36 percent of the elderly's household had 6-9 persons, and 1.8 percent (two elderly persons) had 10-17 persons.

The average size of households with elderly persons in the two rural villages was smaller than the average size of an ordinary household in the country as a whole. As Table 3.10 shows, the average household size for rural China has been slightly over 5 since 1985 (China State Statistics Bureau, 1988).

# The household composition for the elderly (living arrangement)

The classification scheme of the household composition for the elderly employed here is adopted from Hammel and Laslett (1974) and Lavely (1985), with some modification.

The rationale for the modification concerns the nature of the data as well as the general focus of the study. The data set utilized is small in size, so it would be meaningless to divide it into too many categories of household types, since the number in each category would be too small. Additionally, since the focus of this study is on elderly people, it is very important to document the proportion of the elderly living alone, the proportion of the elderly living with never married children, the proportion of the

Table 3.8 Distribution of Household Size Reported by the Elderly

Household Size	Percent	Number	
1	22.78	36	
2	18.35	29	
3	13.29	21	
4	16.46	26	
5	16.46	26	
6 - 9	11.39	18	
10 - 17	1.27	. 2	
Total	100	158	

elderly living with married sons, the proportion of the elderly living with married daughters, and the proportion of the elderly living with other relatives only.

The definitions of each of the categories are the following: (1) solitaries (living alone: one elderly person living alone, or living with spouse only); (2) simple family household (an elderly couple living with never married children, or a single elderly living with never married children); (3) extended family household: patrilocal stem (an elderly couple living with a married son and his family, or a single elderly person living with a married son and his family) and uxorilocal stem (an elderly couple living with a married daughter and her family, or a single elderly living with a married daughter and her family household); (4) multiple family (an elderly couple or a single elderly live with more than two married children) and (5) no family (with other relatives only). Table 3.9 shows different types of the living arrangement of the elderly.

As Table 3.9 shows, the proportions of simple and multiple family households were relatively low: 13 percent were simple family household and 7.6 percent multiple family household. There were 36.7 percent extended family household for the elderly. The proportion of solitaries household for the elderly were also high, there were 34.2 percent of the elderly living alone.

The picture of the living arrangement for the elderly obtained form this survey is drastically different from the general picture people perceive. Compared with a 1983 survey in Jilin province which found that 73 percent of the elderly persons were living with their children (Qu, 1984), the data from the two villages studied show a significantly higher proportion of the elderly living alone. This difference in the living arrangement of the elderly may reflect the regional differences in socioeconomic and cultural patterns between the North and South China. Compared with their urban counterparts in the cities, however, the proportion of elderly who live alone in the two villages studied was smaller than the data from the 1982 Shanghai Elderly Survey in which 51.8 percent of the elderly were reported to be living alone (Yuan et al., 1984). Furthermore, the living

Table 3.9 Distribution of the Elderly by Types of Living Arrangement

Types	of living Arrangement	Percent	Number
Solita	ries	34.18	54
Simpl House	e family shold	13.92	22
Extend House	ded family shold	36.71	58
	Living with Sons	32.28	51
	Living with Daughters	4.43	7
Multip House	ole family shold	7.59	12
No far	nily	7.59	12
Total		100.00	158

arrangement data obtained from the two village studied also showed a dramatic difference with that of other Asian counterparts, where three quarters of the elderly persons live with their children (Martin, 1988).

Why is the proportion of the elderly living alone higher than that of most of their rural counterparts mentioned above? The direction of answers to this question seems to be related to the latent effects of the current economic reform which has largely increased rural people's income, and may have gradually changed people's traditional outlook.

## Factors associated with the pattern of the living arrangement for the elderly

High building cost, government restrictions on rural-urban migration and the economic efficiency of multigeneration living used to be considered three main factors that discourage the formation of one generation household and limit the housing choice of the elderly in rural China. The lack of sons and a son's rejection of his parents are two factors that cause the elderly to live alone (Davis-Friedmann, 1983). The data collected in this study seems to show that these factors affecting the elderly living alone in the past have changed to some degree under the responsibility system. In exploring the factors affecting the pattern of the living arrangement for the elderly, this section will go beyond simple cross-tabulation and use log-linear and logit methods. Log-linear and logit methods are desirable for small sample size and advantageous in revealing relationships among categorical variables.

#### The lack of sons or voluntarily living alone?

Let's start from the question that whether the reason those elderly living alone is because it is demographically impossible for them, namely having no surviving son, or they voluntarily choose to live alone? In other words, Do elderly persons who live alone because they have no sons to live with or because their sons refuse to live with them? In the two villages studied, there were 86.1 percent of the elderly had sons. In other words, it was demographically possible for 86.1 percent of the elderly to live with their sons. However, for those elderly who had sons, one third of them were living alone.

But, for those elderly who live alone, is it true that they simply select to do so? In this survey, a question concerning the desired pattern of the living arrangement for the elderly was asked: whether or not it is a good idea for the elderly to live with their own children? The picture obtained from the data of the two villages is a mixed one. There was 46.2 percent, a little less then half (No.=55) of the elderly interviewed disagreed with the statement that it is a good idea to live with children. There was little over half of the elderly, 53.8 percent (No.=64) agreed with the statement that it is a good idea to live with children.

## Freedom and dispute avoidance

One of the reasons the elderly gave for preferring to live separately was that they could have more freedom. There were 31 elderly persons respondents who expressed a similar outlook on a manifested intergeneration gap that causes an increasingly high proportion of the elderly to live alone: "We old folks like food well-done, but young people prefer their food under-cooked; we old folks like to have a quiet environment, but young people like to listen to a tape-recorder, to play cards, and to watch TV. If we stay together with young people we will for sure have disputes." A few respondents even said "It is a good idea to divide an extended family household before the old folk has a quarrel with his married son". There were 13 elderly persons who pointed out a problematic situation of staying with a married son: "It is OK to stay with your son before he gets married." "It depends on whether your son is nice or not, if he is nice it is OK to stay with him. But, most of the young people tend to neglect their elderly parents and they treat their wives better after they get married." Several elderly persons also talked about the decline in the status of the elderly in the family: "Young people nowadays tend to look down upon our old folks, it is very hard to deal with young people nowadays, you

have to be nice to them; you can not be garrulous in front of them." "I cannot treat my daughter-in-law in the way my mother-in-law treated me in the old days. In those old days, I always returned my mother-in-law's scolding with a smiling face. It is different now, if I scold my daughter-in-law with only one sentence, she would return with ten scolding sentences."

# Rejections

Nine respondents expressed their wish to live with their children but complained about their children's rejection: "I would prefer to live with my son, since I can help with household chores while they work outside. However, they do not want to live with me". There were also three elderly persons who expressed their wish to live with their sons but demographically it was impossible for them.

One of the main reasons that the elderly gave for preferring living together was that the elderly and their children could take care of each other. A number of respondents also indicated that an extended family household could save living expenses. For example, one elderly person said that "Living together can save a lot of firewood." A few elderly said that it was more lively to stay with children and grand children.

# A log-linear and logit analysis

In further exploring why the elderly choose to live alone, I conducted a log-linear analysis. First, I used the availability of living sons (having no sons or having more than one son) and the attitude towards "the ideal pattern of living arrangement" (agree or disagree with the statement that "it is a good idea for elderly people to live with their children") as two independent variables, and whether or not the elderly was living alone as the dependent variable. The null hypothesis here is: the elderly live alone is not affected either by the availability of their living sons or their attitude towards 'ideal pattern of living arrangement for the elderly.' In order to construct meaningful models, I

limited the number of the variables in the model because the sample size is small for this survey.

Testing hypothesis with log-linear analysis can be treated as comparisons between various non-saturated models with the saturated model which can perfectly reproduce the observed data. Having no parsimony is one of the characteristics for a saturated model, and more simple models can be constructed to solve this problem by assuming a particular variable has no effect on the dependent variable. The smaller the value of log likelihood ratio with relative degree of freedom, the better fit the model will be to the observed data, since the log likelihood ratio for the saturated model equals zero and it has no degree of freedom.

By comparing a series of models listed in Table 3.10, we can identify whether there is a association between the dependent and independent variables. Compared with the saturated model, model 1, which assumes the effect of both independent variables have no effect on the dependent variable, should be rejected. In other words, we can conclude that whether or not the elderly live alone must relate to at least one of the two independent variables. Compared with model 1, model 2 dose not reduce the log likelihood ratio with loss of one degree of freedom. Thus we reject model 2 and conclude that the proportion of the elderly who live alone is not related to the availability of sons. Compared with model 2, model 3 significantly reduces log likelihood ratio. Substantially, model 3 implies that the variable attitude towards 'the ideal pattern' of living arrangement for the elderly is closely related to whether or no the elderly will live alone. But we should point out that the significant test of this model is suspect (more then one-fifth of the cells are smaller that five), because of the small sample size of this survey. Model 4, compared with model 3, dose not significantly reduce the log likelihood ratio and thus should be rejected.

Table 3.10 Loglinear Analyses of Factors Associated with Living Alone of the Elderly

	Model	Degree of Freedom	Log likeligood Ratio	Probability
1	(1,2) (3)	3	10.39	0.016
2	(1,2) (2, 3)	2	9.59	0.008
3	(1,2) (1, 3)	. 2	0.29	0.864
4	(1,2) (2, 3) (1, 3)	2	0	0.98

Where

1 = Attitude toward ideal pattern of living arrangement

2 = Number of living son

3 = Living alone

	Model	Degree of Freedom	Log likeligood Ratio	Probability
5	(1, 2) (3)	5	30.99	0
6	(1, 2) (1, 3)	4	21.47	0
7	(1, 2) (2, 3)	3	19.8	0
8	(1, 2) (1, 3) (2, 3)	2	5.02	0.081

Where

1 = Attitude toward ideal pattern of living arrangement

2 = Age group (59 - 69, 70 - 79, 80+)

3 = Living alone

In sum, based on above comparison, we should reject the hypothesis that neither the availability of sons nor the attitude towards 'the ideal pattern of the living arrangement for the elderly' is associated with whether the elderly would live alone. In other words, we conclude that the attitude towards 'the ideal pattern of the living arrangement for the elderly' is related to whether the elderly would live alone, but the availability of sons is not related to whether the elderly lived alone.

However, are there any other variables, such as the basic characteristics of the elderly, beside their attitudes, affect whether the elderly would live alone? In answering this question, I proceeded with another log-linear analysis. The hypothesis here is whether the elderly will live alone is not only related to their attitude but also related to their age. In this log-linear analysis, I still maintain the independent variable attitude towards 'the ideal pattern of living arrangement for the elderly' from the previous log-linear analysis and add another independent variable, which is age group (59-69, 70-79, and 80+). The dependent variable is the type of the living arrangement (living alone or not living alone).

Both model 6, which takes the attitude as the independent variable, and model 7, which takes age group as the independent variable, can reduce the log likelihood ratio with the loss of one degree of freedom. Compared with both of these two models, model 8 takes both independent variables into consideration. This model provides a much better fit to the data. Thus, we conclude that whether the elderly live alone is associated with both their attitude towards 'the ideal pattern of the living arrangement for the elderly' and their age.

The logit analysis using the same set of the variables shows that controlling for age group of the elderly, the elderly who disagree with the statement that living with children is an 'ideal type of the living arrangement for the elderly,' are more likely to live alone. This logit analysis also shows that controlling for the variable of attitude, the elderly in the younger-old age group (59-60), compared with the elderly in the extremely

old age group, are less likely to live alone. Indirectly, this result may imply that the availability of never married children is a factor that prevents the elderly from living alone, since never married children traditionally stay at home with parents, and the younger the elderly, the more likely the elderly have never married children.

This also calls for a new approach in studying family and household structure for the elderly, the family and household life cycle approach. As Bongaarts points out, it is necessary to take a longitudinal approach in order to reveal the underlying patterns that determine how a household or a family arrives at a given structure (1983). Kantrow (1976) identifies a set of family or household cycle phases:

- -- Commencement: from marriage to the birth of first child;
- -- Expansion: from the birth of last child to last child;
- --Stability: from the birth of last child to the marriage of first child;
- -- Contraction: from the departure of first child to the departure of last child;
- -- Empty nest: from the departure of last child to the death of first spouse;
- -- Dissolution: from the death of first spouse to the death of last spouse.

Social changes at the larger scale will affect elderly people 's norm on traditional family and also affect the norm of the younger generation and these changes in turn will affect the timing and duration of the family or household life cycle. In studying the pattern of living arrangement, we can concentrate on the last three phases of the family or household life cycle.

# Housing constraint

Among three factors mentioned above, the availability of son, housing constraint and rejection by children, housing constraints used to be considered as the foremost one. William Parish estimated that it normally took ten years in the late 1960s and 1970 for families in both South and North China to accumulate the funds necessary to build a new house (Parish, 1975). However, housing conditions for rural people have been tremendously improved since the rural economic reform due to the freedom in utilizing

Table 3.11 Logit Analysis of the Factors Affecting Living Alone of the Elderly

Parameter	·	Estimate	
	Model 1	Model 2	
Constant	-1.846 ·	-1.501	
	0.462*	0.633	
	- 3.991**	-2.372	
Number of Son	0.164		
	0.186		
	0.881		
Age Group 1		-1.321	
•		0.711	
		-1.858	
Age Group 2		0.792	
-		0.699	•
		1.132	
Attitude Toward			
Living Alone	1.216	1.903	
-	0.443	0.521	
	2.748	3.653	
(-)2 times log likelihood rati	io		
Chi squared	10.873	27.488	
Degree of freedom	2	3	

<sup>\*:</sup> The number below the estimated coeffcient is the standard error

<sup>\*\*:</sup> This is the t-statistic

land for building new houses, higher income and a better supply of building materials. Table 3. 12 indicates the average number of new rooms built per household and the improving housing situation in recent years in rural China.

In the two villages studied there were 45.6 percent of the elderly reported that their families had built a new house since 1980. Among these families with new houses, there were 33.3 percent of the elderly reported that their families had added 1-2 rooms, and 50.0 percent of the elderly reported that they had added 3-4 new rooms, and 16.7 percent of the elderly reported that their families had added more than five rooms. One elderly person indicated that his family had built a 13 room new house last year, another said that her family was building a 18 room house.

It was interesting to observe that the pattern of geographic distribution of houses in Quantang and Qiaoxia: highly concentrated old houses mixed with a few new houses formed the core of the village. Many two-storey or even three-storey new houses and a couple of houses in the process of building formed the periphery of the village in a scattered fashion.

Pointing at those new houses in front of the center of the village, one of my informants was very happy to tell me that this place used to consist of private vegetable plots about four years ago. Most of the new houses had been built on this piece of land since the rural economic reform. Since the rural economic reform, land had been distributed to each family so that each family could have the freedom to use some of the land to build new houses.

The economic reform had also opened more channels in accumulating money for building new houses. For example, many people in these two villages had adopted carpentry and bricklaying as new occupations. Some of them went as far as to Tibet or Yunan, thousands of miles away from home, for their business. These people could bring back home as much as five to eight thousand Yuan a year which is considered a huge amount of income in a farmer's eyes.

Table 3, 12 Housing Situation of Rural China, 1957-1987

	<del></del>	••	Year			
Housing Situation	1957	1967	1980	1985	1986	1987
Average household size	4.85	5.75	5.54	5.12	5.07	5.01
Average number of new rooms built per household	0.08	0.11	0.23	0.3	0.29	0.27
Average number of rooms per houshold at the end of the year	3.98	3.64	4.06	5.11	5.27	5.36
Average number of square meters of housing per person	11.3	3.64	11.59	17.34	18.1	18.88

Sources: 1988 Statistics Yearbook, p825, China State Statistics Bureau, China Statistics Press, 1988

In addition, the economic reform also has created new markets of building materials, and building materials now are no longer in severe shortage. I was told that it was much easier to buy bricks now than a few years ago, although bricks are more expensive now.

Another reason that had made the improvement in housing conditions in these two villages possible in a such short period of time was the characteristics of the local social organization and kinship ties. I was informed that it was a normal practice that when a family built a new house, relatives even distant relatives and close friends in the same village and in the neighboring villages would offer help for free. In addition, close relatives would provide baskets of good food such as fresh fish, geese, ducks and chickens for the family which is building a new house to treat people who came to help. This practice made the labor cost for house building almost free. I was also informed that it was not a shame to borrow around from relatives and friends when people had a shortage of money for buying materials like bricks. Of course, there was no free help and gifts even from friends and relatives, all the help and gifts were actually obtained on a exchanged basis.

Even though the housing situation for rural people had greatly improved since the rural economic reform, young people were more likely than the elderly to be able to build new houses due to their better opportunities brought by the rural economic reform. Most elderly people could not afford new houses, and those who could afford to build new houses were not to build the new house for themselves, but for their sons who were going to get married. Evidence seemed to show that elderly people did not have a choice for better housing, but only had freedom to stay in their shabby old houses. I observed that in general, the housing conditions for the elderly was below the average level in the villages studied, although there were a few cases that elderly persons stayed with their adult children in their new houses. During the survey, I was frequently informed that providing a new house for newly weds was becoming a local custom in recent years,

while a few years ago, things like new furniture, bicycles, watches and sewing machines were sufficient as betrothal gifts. Many elderly persons complained that nowadays the bride would refuse a wedding unless a new house was built by the groom's family. The newly weds often prefer to live separately from their parents.

#### Discussion and conclusion

This chapter has documented the patterns of the family structure for the elderly according to the three dimensions of the family in Bengtson's framework and examined factors associated with a particular pattern of the living arrangement for the elderly: whether the elderly lived alone.

In summary, the discussion of the availability of kin indicates the following two points: first, in the two villages studied, elderly people had a strong consciousness of their kinsmen whom they could mobilize in the case of need. Second, demographically it was possible for the elderly to depend on the family, since the absolute majority of the elderly have kinsmen, especially children. The average number of children for each elderly person interviewed was 3.39, and only 5.7 percent of the elderly had no children.

Geographic proximity and living arrangement are the other two dimensions of the family structure. They are not totally demographically determined and they are sensitive to social changes on a large scale, such as the ongoing rural economic reform. Changes in geographic proximity would have impacts on the pattern of family support system for the elderly. For example, an increasing proportion of elderly people's adult children live far away from home for better job opportunities which may on the one hand indicate that these adult children are able to provide their elderly parents with more financial support. On the other hand, an increasing proportion of elderly people's adult children live far away from home for better job opportunities which may imply that elderly parents will enjoy less services these children used to provide when their children stayed at home and did farming work.

The data on the living arrangement reveals two findings. First, the average size of households with elderly persons in these two rural villages was quite small and it doesn't differ much from the average size of all households in the two villages. The average household size in these two villages with elderly persons, however, was much smaller than the average household size for all rural households in the country as a whole. The survey data shows that the average size of households with elderly persons was only 3.4 (with a standard deviation of 2.33). Secondly, the survey indicates more than one-third of the elderly were living alone or live with their spouse only.

It is demographically possible for 86.1 percent of the elderly to live with their own sons, but one-third of them live alone. The analyses using log-linear and logit methods show that whether the elderly are living alone or living with their spouse only, is not closely related to the availability of sons. Whether or not the elderly live alone is more closely associated with their attitude towards the traditional pattern of living arrangement for the elderly.

In the two villages, nearly half of the elderly expressed disagreement with the traditional norm. Evidence seems to show that many of the elderly who live alone not because they had been rejected by their sons, but because they were voluntarily living alone. This high proportion of the elderly rejecting the traditional norm together with the close association between the attitude and the actual living arrangement explains why the average household size was so small for the elderly in these villages. This may also imply that the traditional norm of ideal family of multi-generations living together under the same roof has gradually changed. However, contrary evidence was also visible. Several elderly persons reported that they wished to live with their son's family, but their son did want to live with them.

In addition, the log-linear and logit analyses indicate that whether or not the elderly live alone is not only associated with their attitude towards the traditional pattern of the living arrangement for the elderly and but also associated with their age.

Compared with the young-old, the old-old are less likely to live alone. This may call for a new approach in studying household transformation for the elderly, that is the family and household life cycle approach. Social changes at the larger scale will affect people 's norm on the traditional pattern of the living arrangement this change would in turn affect the timing and duration of the household life cycle for the elderly.

The data from the two villages also show that the improvement in housing brought by the economic reform seems to have provided physical conditions permitting the elderly to live alone. Or, looking from a different angle, the improvement of the housing situation resulting from the current economic reform provides physical conditions permitting the younger generation who have benefited more from the economic reform to move away from their elderly parents.

The discussion of availability of kin in this chapter also leads to a question people often ask: will the current fertility decline and mortality decline lead to a substantial reduction in the number of children for the rural elderly in future? Family and kin simulation models provide a powerful tool in exploring this question. Further discussion of the impact of the current fertility decline on the family for the elderly will be seen in Chapter Five.

Demographically, we know the current situation of the family for the elderly and we may find out the pattern of the family for the elderly in the future with the help of the simulation model. However, another deeper question can also be raised from a sociological point of view: is the size and composition of the family related to the socioeconomic well-being of the elderly? To answer this question we need to go beyond the demographic perspective, and to explore the actual pattern of support provided by the family members of elderly people. This will be further discussed in the following chapter.

#### CHAPTER FOUR

#### THE PATTERN OF FAMILY SUPPORT FOR THE ELDERLY

#### Introduction

The study of the family structure in Chapter Three has provided us with a picture of the demographic basis of potential family support for the elderly. Linking this picture with the fertility decline in the past decade, one can easily be preoccupied by the threat of the reduction of the number of children for the support of the elderly in the future. However, the actual process of interaction between the elderly and their family members at the micro level is much more complex than what one would see on the surface. Whether the elderly are well supported may not be directly related to the availability of children, especially sons.

This chapter will examine patterns of socioeconomic support actually provided by the family for the elderly in the context of the current rural economic reform. It is based on data collected from two villages in South China in 1987. The pattern of socioeconomic support provided for the elderly by their family members studied here follows the concept of functional solidarity of Bengtson's lineage approach. The discussion in this chapter will center on the following four major areas of socioeconomic support: food grain, monetary support, medical expenses and sick care, and new year gifts. These four areas of supports provided to the elderly by their family members will be viewed from different types of family structure and from other socioeconomic

<sup>1</sup> By functional support, he means both the economic and the non-economic support that are essential to the elderly.

<sup>&</sup>lt;sup>2</sup> The in-depth interview information in the two villages studied show that there are various types of economic support from the family to the elderly, food grain, pocket money, medical expenses, sick care and new year gifts are four major types of economic support from the family to the elderly.

characteristics of the elderly. Among the family members who are likely to be supporters for the elderly, this chapter will center the discussion on the support provided by the immediate family members, mainly spouse, sons, and daughters.

This chapter will focus on the following research questions raised in Chapter One:

(1) What are the major types of socioeconomic support for the elderly under the rural economic reform? (2) For different types of socioeconomic support, who are the dominant supporters for the rural elderly? (3) Is it true that the more sons, the better-off the elderly? and (4) What are the relationships between the basic characteristics of the rural elderly and the family support for the elderly?

This chapter will use both qualitative and quantitative methods. It will first utilize descriptive methods such as simple cross tabulation and case studies and then turn to quantitative methods such as log-linear and logit analysis for further discussion. Both qualitative and quantitative data are equally important for the analyses in this research, since they can complement each other.

The quantitative analysis by using log-linear and logit methods have two distinctive merits: one is the capability in handling small sample size and another is revealing relationships between categorical variables. These are important for this study, since the sample size of the survey is relatively small and most of the major dependent and independent variables are categorical.

# Food grain support

In rural China which is relatively underdeveloped, food grain is the main subsistence for people. It is more crucial to focus on food grain sources for the elderly with different social, economic and demographic characteristics, although other aspects of the family support, such as perceived closeness between the elderly and their family members and types of formal and informal social activities shared by the elderly and their family members are important.

# Food grain for the elderly before economic reform

Before the rural economic reform, all the main production activities and the distribution of income were arranged by the production team, and so was the distribution of food grain. The amount of food grain each person could get was basically the same, but the level varied each year depending whether the year was short in output or was a good harvest year.

In the two villages studied, paddy rice had been a main type of food grain. There were basically two sources of food grain for elderly people in the rural areas under the commune system: the first was distributed by the production team with the cost of food grain deducted from the work points if the elderly person could still work in the production team. The second was also through the production team, but the cost of the food grain was deducted from the work points of the elderly's family members if the elderly were not able to work in the production team. If the family was too poor to pay for the food grain they needed, the charge would be carried over to the next year or until the time when they were able to repay.

This kind of situation usually happened to households composed of either elderly persons or many young children, or both who could not work as a full labor in the production team. This type of families was usually called 'household with difficulties,' which had too many mouths to feed and too few hands to work. Under these circumstances, the elderly who could not afford the food grain would not be starving, since the debts of food grain could be carried over from year to year and could be canceled when the elderly dies. The third type of food grain source for the elderly was the food grain provided free of charge by the production team for those who had lost the ability to work and were childless at the same time.<sup>3</sup>

<sup>3.</sup> The information on the food grain arrangement for the elderly before the rural economic reform here is based on previous literature (Davis-Friedmann, 1983) and my past experiences in the rural areas.

### Food grain for the elderly after the reform

The recent rural economic reform has altered the picture of the pattern of food grain source for the elderly under the commune system.

After the rural economic reform, land for food grain production is redistributed to each individual. In the two villages studied, each individual was distributed with 0.6-0.7 'mu'<sup>4</sup> of land which was called the 'responsibility land,' meaning each individual will be responsible for it.

Table 4.1 shows the pattern of food grain arrangement for the elderly in the two villages studied. Near half of the elderly, 48.7 percent, reported that their food grain was provided by their sons and 22.8 percent of the elderly reported that their food grain was provided either by themselves or by their spouse. A tiny minority, 2.5 percent, reported that their food grain was provided by their daughters.

Although sources and the amount of food grain were different among the elderly interviewed, I did not find a single elderly person who suffered from not having food grain to maintain the most subsistent life.

The in-depth interviews with elderly persons in two villages studied provided more substance on the picture of food grain arrangements for the elderly. The data indicated that there were generally four kinds of situations: 1) Food grain provided by the elderly themselves, 2) Food grain provided by children 3) Food grain from the rent, and 4) Food grain from the village public land and the government.

Food grain provided by the elderly themselves

If the elderly could still work in the field, the amount of food grain yielded from the responsibility land was usually enough for their own consumption with a little surplus

<sup>4</sup> A plot of land approximately equals 23 square yards, or 0.040-0.047 hectares.

Table 4. 1 Distribution of Food Grain Arrangement for the Elderly\*

Primary Provider	Percent	Number
1101101	7 010011	114111001
Sons	48.73	77
Self or Spouse	22.78	36
Government and		
Collective	10.76	17
Rent from Land	10.13	. 16
Other Relatives	5.06	8
Danahaana	2.52	4
Daughters	2.53	4
Total	100.00	158

<sup>\*:</sup> The numbers in this table are the first-mentioned providers of food grain.

in a year of normal harvest. The case of Changsong was typical of how elderly persons provided themselves with food grain:

Changsong was a 62 year old and very healthy, strong man. He still considered himself as a full-labor. He lived with his wife who was 61 year old and who was able to work both inside and outside of the home. All of his children were married and living close by. His eldest son and daughter's families were in the same village with him and the youngest daughter had recently married to the neighboring village. With help provided by his wife, he did all the work in the paddy field and in the tea field. He also fed pigs at home. Sometimes, he even helped his children with their paddy fields when they were busy. He was very proud of his physical strength in terms of his age and of being independent from his children's support. He was very happy about this rural economic reform, since he did not have enough food grain to eat under the commune system even though he worked very hard.

As Table 4.1 indicates, there was less than a quarter of the elderly reported that their food grain was provided by themselves or their spouse. However, there was a few of those elderly persons who were much older than Cangshong and did not enjoy good health at all, but they had to work in the paddy field and provided food grain for themselves. Arxiang was a typical case in illustrating this situation. She was frequently mentioned by many respondents in the interviews. Many elderly persons in the two villages studied liked to compare their own situation with hers.

Arxiang was a 65 years old woman who married to a man who was 20 years older than she was. She had such a terrible tension with their only son and daughter-in-law that her only son and daughter-in-law had refused to help Arxiang and her husband with their food grain production. According to the gossip in the village, her daughter-in-law was considered the most ferocious daughter-in-law in the village. Arxiang's only grand son who was brought up by her became very rude to her as well. Arxiang's husband, a 80 years old man, had to work in the field himself. Their daughter and son-in-law who lived in the neighboring village came to help them in the harvest season. But her daughter was not able to provide much monetary support since she was not that rich. However, every time when Arxiang's daughter came to help, she was scolded by her brother. About half month ago, Arxiang's husband fell down and broke his arm when he was collecting firewood on the hill. Under this circumstance, Arxiang's son reluctantly agreed to give a hand in the paddy field. However, her son and daughter-in-law still refused to talk with Arxiang. Her son even hit her once when she begged for help from him.

Of course, it is important to point out the rarity of Arxiang's case in the two villages studied. I will further discuss why this kind of extreme situation would happen to elderly people like Arxiang in the later section.

## Food grain provided by children

For the elderly who have adult children, especially sons, around but had lost the ability to work or decided not to work, they would then ask for help from their adult children, or give their responsibility land to their children to take care of and then collect food grain from them. Under this circumstance, according to my informants, a normal practice in the village was that the elderly parents would obtain a large proportion of the food grain output free of charge, usually ranging from 250 to 300 kilograms. When the elderly had a couple of sons in the village, a normal practice was to distribute the land evenly to work with and the food grain to collect from among their sons. A tiny minority (2.5 percent) reported that their food grain was provided by their daughters. These kind of cases usually happened to those elderly persons who had no sons.

I observed that, however, whether or not a family had this type of food grain arrangement for the elderly was usually not only dependent on the elderly's physical strength to work in the field but also largely dependent on the relationship between the elderly and their children, and the early socialization of the children. The case of Fuzhen illustrates the importance of a good relationship between the elderly and their children in obtaining food grain from their adult children:

Fuzhen was a 63 years old woman with three married sons living close by in the same village. She married to this family when she was 18 years old. She had worked hard to serve her parent-in-laws and to raise three sons and one daughter. She worked from morning till night. She used to save all the better food for the old and the young and for her husband. She surely suffered a lot in the past but she never complained. Now that her parent-in-laws had passed away, and she had become a grand mother. However, she was still such a giving person that she tried her best to help her sons and asked nothing for return, even though all of her sons had separated their 'stove' from the big family. Her husband, a retired cadre, always criticized her for spoiling her sons and her grand children too much. Her husband often told them that how much she had contributed to this family and how hard it was for her in the past.

Although Fuzhen had some problems in dealing with two of her daughter-in-laws who lived next door, she always tried to be forbearing and conciliatory. Luckily, all her children had been so nice to her. A couple of years ago, her husband and sons asked her to stay at home and not to participate in heavy labor in the production team anymore. After the rural economic reform, her sons had decided to take care of the food grain she needed. They divided her responsibility land evenly to take care of and each of them gave his mother around 100 kilograms of paddy rice each year, which was all the output they were able to get from that piece of land.

In the two villages studied, I found that there were several cases that adult children would not give all the food grain output from the elderly's responsibility land as Fuzhen's children did, and moreover, the quality of food grain elderly parents got was below the ordinary standard. A similar story was repeatedly heard in my field study:

"My son was nice to me before he married. After my daughter-inlaw stepped in this door, she started to fight with my son over the problem of supporting me, and she even forced my son to divide the extended family household. My son gradually has become a different person, he is not nice to me anymore and the only person he obeys is my daughter-inlaw. They consider me as a great burden for them. They only gave me 200 kilograms of paddy last year, it was not enough for me at all! I know that I am old and I am useless for them, since I am not able to do anything for them now. However, there were poor old folks like Arxiang whose situation is even worse than mine in the village."

#### Food grain from the rent

The third kind of arrangement of food grain was to rent the responsibility land for food grain out to somebody else in the village. Table 4.1 indicates that there was 10.1 percent of the elderly interviewed reported that their food grain was from the rent of their responsibility land. This usually happened when the elderly had lost the ability to work and had no adult children at all or when the elderly's adult children were far away from home or busy with other sidelines and business and had no time to work in the field. According to my informants, around 100 kilograms of paddy was the normal rent level in the villages studied.

However, this amount of food grain was usually not enough, since it was lower than the average amount of food grain each person consumes in each year, which was

around 250 kilograms paddy. Thus, the elderly had to use money to buy additional food grain. Many adult children who worked outside the village and had better paid jobs would usually provide the money for the elderly to buy the additional food grain. As the process of the rural economic development further diversifies the rural employment structure and increases rural people's income, one can predict that there will be more younger people who have higher income jobs have the income potential to support their elderly parents at home.

Food grain from the village public land and the government

The village would provide 300 kilogram of food grain free of charge to those who were not able to work and who were childless at the same time. The village had a certain amount of public land reserved which was used for this purpose.

Beside this group of elderly persons, there was another group of the elderly whose food grain was provided by the government. This group of elderly persons were retirees from the state-owned enterprises. Table 4.1 indicates that there was about 10.8 percent of the elderly's food grain arrangement belong to these two groups, with the village and government as food grain providers. There will be more discussion about this group of people in the following section.

#### **Monetary Support**

In the every day life of the village, having cash money is becoming increasingly important. Rural life in the 1980s has been gradually penetrated by the commodity economy, and a rural village is no longer a closed, self sufficient world. People in the village need money to shop for salt, oil, special foods and meats which they do not normally produce themselves in the market, and they also need money to buy clothes made of new materials to keep up with the fashion in the city, since home-made cotton cloth is unpopular nowadays in China. Rural people also need money to see doctors

when they were seriously sick. Having only food grain, fire wood and home-grown vegetables were no longer enough for a normal and decent village life.

## A general picture.

Table 4.2 presents the information on monetary support from the family members to the elderly. Over all, there were 79.9 percent of the elderly reported that they received regular monetary support from their family members. Among three types of family members, 43.0 percent elderly persons interviewed obtained regular monetary support from their sons. Sons were still the main providers of monetary support for the elderly.

The in-depth information provides richer information on the pattern of the monetary support for the elderly and the factors associated with the pattern. Several kinds of arrangements of monetary support can be identified. The first type can be called 'the perfect arrangement.' The elderly who had children worked in both farming and non-farming sectors considered themselves having 'the perfect arrangement,' since the son who stayed at home or lived near by could help with the paddy field while the son or daughters who worked in the non-farming sectors could send a remittance home. The second type can be called the 'low expectation'. Many elderly people simply had low expectations for monetary support from their children even if they needed that support. The third and the fourth types are the elderly people who had personal cash income. According to the in-depth interview information, one could be named as 'the self-sufficient,' the other could be named as 'the luckiest minority.' The last type of the arrangement could be called 'the most destitute' who are the elderly who had lost the ability to work and had no children at all. These five types of arrangements will be discussed in the following section.

Table 4.2 Distribution of Monetary Support Provided by the Family Members to the Elderly

Amount		Providers of Mon	Providers of Monetary Support	
Provided	_		Other	
Per Month (yuan)	Sons.	Daughters	Relatives	Total
< 10	14.6%	8.9%	7.0%	30.5%
11 - 30	17.7%	7.6%	5.7%	31.0%
31 - 50	5.1%	1.9%	0.6%	7.6%
50+	7.0%	2.5%	1.3%	10.8%
Total	44.4%	20.9%	14.6%	79.9%

## 'The perfect arrangement'

For those elderly persons whose children had jobs in urban areas or those who had their own business in the local area, their children were often more generous in providing their parents with monetary support. Several elderly persons referred having sons with non-farming jobs and sons with farming jobs as a 'perfect arrangement' for old-age support. Haidin was typical in illustrating this kind of situation.

Haidin was a 64 years old man. One of his sons worked in the big city of Shanghai and sent him 25 yuan remittance every month. The other son lived near by and helped him with the paddy field and provided him with fire wood. When he talked about the monetary support, he said with a smile, "'I have a 'perfect arrangement,' since one of my sons is in and the other is out."

Along with the process of rural development and urbanization, one can expect changes in employment structure for rural people. In other words, more and more rural people will find employment opportunities in the cities and they would be able to send more money home for their elderly parents.

#### The elderly with low expectation

However, contrary evidence was much more visible. In many cases, adult sons were just not willing or not able to provide their elderly parents with much monetary support, since they either needed to accumulate money for building a new house, or they were still heavily in debt from the wedding. Fongning is a typical elderly person with low expectation for monetary support from her sons.

Fongning was 65 years old. Her husband died more than 20 years ago. Now she lived all by herself. Her son had been married and was living in the same village. Her son provided her with 250 kilograms of paddy every year, but her son had not given her any pocket money for months, and she had hoped that her son would have given her some.

However, she had seldom asked any money from her son, since she knew her son's budget was tight because of the large debt from the wedding.5

Yurong's case further expresses how little support can be obtained from a never married son and how heavy a psychological and economic burden a never married son could be to an elderly person who did not have much income.

Yurong was a 65 years old woman. Her second husband died at about 10 years ago. Her eldest son from her first marriage did not care for her very much. The only person she could depend on was her youngest son from her second marriage. However, he was also a great psychological and economic burden for her at the same time, since he had not got married yet. He was a carpenter. He went to Guangxi province which was very far away from home for better income opportunities. He only came back home twice a year. Every time when he came home he gave Yurong a couple of hundred yuan, but she only used very small proportion of it and saved most of it for her son's wedding (although her son was only 22 years old, and did not even have a girl friend yet). She was so afraid that her family could not afford to have a daughter-in-law and her son would stay single for his whole life. This would be a great shame for the family.

The anxiety among the elderly to see their sons to get married and their wishes for their offspring to have a better life has led the elderly to have a low expectation for monetary support from their adult children, especially from their sons. The low sufficiency of the monetary support for the elderly could also be attributed to the interplay of the increasingly high aspiration and relative poverty of the people under th rural economic reform. I will further discuss this in the later section.

## The self-sufficient

For those who could still work, normally, their cash income were obtained by selling pigs, or tea or from other side lines. Changsong's case illustrated above in the

<sup>5</sup> The typical post-marital residential arrangement for the newly wed in these two villages follows that of the general situation in China. After the wedding, the bride moves in with her husband's family. The groom's side is expected to prepare most of the material conditions for the newly wed. In the two villages studied, I was frequently informed that a bride price usually include a new house, a set of new furniture, electric appliances, and a large feast at the time of the wedding. Among these, a new house appears to be the most important. Several elderly persons complained: "the bride would not even come for the wedding unless you have a new house ready for your son."

section on food grain is a typical example that an elderly person who was a strong laborer could be self-sufficient. However, the level of cash income for this group of older people was lower than that of the younger generation, since the rural economic reform had offered better opportunities for the younger generation.

## The luckiest minority

There was a tiny minority of the elderly who had some sort of pension in the two villages studied. These people were considered to be the luckiest minority in terms of cash income. There has been no pension system in most areas of rural China. But, where does this group of retired people with pensions come from?

I found out that although people in this group were considered as the luckiest, many of them had a painful personal history. The fate of this small group of people had been closely connected to changes in the social and political climates in China. These people were purged in various political campaigns and were sent back to their home villages from the jobs they previously held in cities. Many of them were announced their rehabilitation after the Cultural Revolution.<sup>6</sup>

<sup>6</sup> Zhunxian's case is a good illustration:

Zhunxian is a 65 years old, well respected man in the village. When people talked about 'the five guarantee system for the elderly', a social welfare system for the elderly established under the commune system, he always says with smile: "I am 'five guaranteed' by the state government." He had a very unusual personal history. He was involved with revolutionary activities in the 1940s, but he joined the Peasant-Worker Democratic Party instead of the Communist Party, which he considered the same in saving the old China. After the 1949 revolution, he became an official of the Peasant-Worker Democratic Party in Zhejiang province because of his ability and talent. However, he was soon sent back to his home village to be reformed in the Anti-rightist Movement, since he was frank and honest in criticizing problems associated with the Communist Party in 1957. Twenty-five years later, he was announced his rehabilitation. But he was too old. He could only considered a retired cadre and was provided with pension according to his formal position.

# Support from daughters

Although it was a local custom that supporting elderly parents was a married son's duty, I observed that married daughters did provide economic support for elderly parents under three types of special circumstances.

First, I observed in a few cases that adult daughters performed a substitute function of sons for those elderly who had no sons and no ability to work.

The second type of situation happened to those elderly who had no personal cash income, and had married daughters who had a job in urban areas. These married daughters would send a remittance home for the elderly parents.

The third situation happens to those clderly who could not support themselves and had a very poor relationship with their married sons and daughter-in-laws. Caifong was a typical case in illustrating how married daughters stepped in to help the elderly parent when their sons refused to support them.

Caifong was 71 years old and her husband died 25 years ago. She had two sons and three daughters and they were all married. Her eldest son left her to Shanghai when he was young. Thus, the relationship between her eldest son and her had become estranged and her eldest son only sent her money occasionally around the new year time. She saved all her money for her youngest son's wedding in 1982, all together about 500 yuan. By contrary, she spent not even a single penny for her daughters' weddings. When her younger son just got married, she lived with them. She was kind to her son and daughter-in-law, hoping that she could depend on them for old age support. But her daughter-in-law appeared to be so lazy that Caifong had to do all the house chores. When her daughter-in-law gave birth, Caifong helped to take care of the baby. Even though she worked so hard to help with the household chores, her daughter-in-law was still not pleased. Her daughter-in-law just wanted to drive her away. Her daughter-in-law quarreled with her son about the problems of supporting her from time to time. The couple finally decided to force her to live separately from them. One thing that really hurts her was that her younger son was always on his wife's side. They only provided her with 250 kilograms of paddy each year after the economic reform, which was barely enough for her. Moreover, they provided her with no pocket money each month. She always said that if she had no daughters she would be in a destitute situation. Her daughters, by contrast, had been very dear to her. Her youngest daughter who lived in the same village with her is relatively poor. However, she tries her best to help her mother. Her youngest daughter stopped by almost every day, she either came with a bunch of vegetables from her vegetable plot or came to do house chores for her mother. The other two married daughters who lived in a town 60 kilometers away were comparatively better-off. Each

of them sent her 10 yuan remittance each month and invited Caifong to visit them two or three times a year, and each time, she stayed there for two or three months. The daughters always comforted Caifong that if her sons would not take of her, they would. Caifong concluded that daughters were the ones who were truly nice to her when she got old, and it was no use to have too many sons.

#### The most destitute

For those who have lost the ability to work and who were childless at the same time, the village provided them with three yuan a month. This amount of money is far from being enough. Three yuan could only buy about less than a kilogram of pork at the time of the survey, not mentioning the inflation since the reform. Apparently, these elderly needed to use this three yuan for other necessities of life as well. The only people they could depend on were neighbors or friends who had vegetables to spare and money to lend when they needed some. These people were the most destitute compared with those who had kinsmen to depend upon.

The funding for these people comes from three sources. The first one was from the yield in the village public land. The second one was from the donations of private enterprises in the township which is highly irregular. The third one was from a special fund provided by the state which also arrives irregularly. With the advancement of the rural economic reform and the development of rural industries, one could expect the funding from the donations of local private enterprises to increase.

According to the interview of cadres in the township who were in charge of social welfare, there had not been a 'house of respect for the elderly' in the township studied.

This evidence indicates that it is not true that every township has a 'house of respect for the elderly,' as usually described in the previous literature.

The reason that the township government had not been able to build a house of respect for the elderly' as many other rural areas was because of the lack of local collective funding. I was informed that the township government was planning to build a old people's home.

### Medical expenses and sick care

Before economic reform, rural people used to obtain primary health care from 'the barefoot doctor' system. Local villagers with a few months health care training became the 'barefoot doctors', who brought immunization, sanitation and elementary medical treatment to peasants. This system which developed under the commune system provided people in the rural areas with minimum health 'insurance', and it was once considered an outstanding example of proving primary health care in the developing world. This 'barefoot doctor' system, which used to provide cheap medical care in the village under the collective economy, changed after the economic reform.

After the economic reform, such collective social welfare funding no longer exists. I was informed that the barefoot doctor clinic had been contracted to the individual. Driven by the chance of getting rich as everybody is in the village, the village doctor now charged much more for doctor visit, medicines and medical treatment than before. However, the village doctor was also providing better services for the people than before. What were the implications of these changes in the barefoot doctor system for the elderly?

#### Two different cases

For those elderly who had to totally depend on their children for economic support, they had a more difficult time paying their medical expenses when they got sick. Chailiang was a 68 old man with poor health. He and his wife live with his son's family and depended on their only son for economic support. More over, Chailiang had a mother of 92 who was sick in bed and needs to be taken care of. The only thing Chailiang can contribute in the family was to do some house work. He said:

"If I do not feel well, I just stay in bed and I do not ask my son to take me to see the doctor. You know, I do not want to add more burden to my son, unless the situation deteriorates. For example, if I am so sick that I faint away, my son will be scared and he will carry me to the hospital immediately."

However, economic reform had increased people's income levels, especially younger people's income level that they were more likely to afford to support their elderly parents with medical expenses. The case of Suya was typical in illustrating the situation when an elderly was sick in a big family.

Suya was a 67 years old woman who had suffered from coronary heart disease and rheumatism for seven years. She had been staying in bed for the past seven years, and has spent more than three thousand yuan for her medical bill. Fortunately, she had a rich and big family. Her family was specialized in making bamboo steamers and had become one of the richest families in the village. She had three sons and one daughter. Her two married sons do not live with her under one roof but they still lived in the same village with her. The youngest who was not married still stays with her and her husband. Her husband was often outside to sell bamboo steamer, but he helps with cooking when he comes back. All of her sons were so nice to her that whenever they see her medical bills they reimbursed them immediately. They also took care of her responsibility land and provided with her all the food grain output. Her daughter who lived in a neighboring township came back 4 to 5 times a week to take care of her. Although her daughter was not as rich as her sons, every time she comes back, she stayed with her mother for 3 to 4 days to take care of all the house chores. She brought tonic for her mother almost every time when she came back. She also made clothes for her. By contrary, her two daughter-in-laws helped less frequently, they came to help when she asked for. Her two daughter-in-laws also buy tonic medicine and fruits once in a while. Her two brothers and her one sister were also very kind to her and they came to visit her several times a year. They even gave her money in the new year season.

Suya's case suggests that when a big family had a successful family business, the family members had more economic strength together in taking care of an extremely ill elderly person. However, not every family with an elderly person has such a business like Suya's family. Most of the elderly who were still able to work have no skills in doing business to make big money. The only skill they had was to work in the field. Many of these elderly persons who were still able to work and are healthy, were afraid of being sick.

#### A general picture of support of medical expenses and sick care

Table 4.3 shows the pattern of economic support on medical expenses provided by the family members of the elderly. Compared with the pattern of food grain

Table 4.3 Proportion of the Elderly by Sources of Medical Expense Providers and Caregivers\*

Medical Expenses	Percent		Percent
Providers	Reported	Caregivers	Reported
Spouse and Self-	29.7	Spouse	32.9
Sons	44.3	Sons	42.4
Daughters	13.9	Daughters	43.0
Other relatives	7.0	Other relatives	16.5
Government	11.4	Friends and neighbo	rs 5.1
No expenses ever	13.9		
		(Number of cases=1	58)

<sup>\*:</sup> The numbers in this table include both the first-mentioned and second-mentioned responses.

arrangement and the pattern of monetary support, one can find that sons are still the main supporters for the elderly for their medical expenses. There were 44.3 percent of the respondents reported that their sons provided their medical expenses, 29.7 reported the elderly themselves and their spouse provided their own medical expenses, 13.9 percent reported their daughters paid for their medical expenses, and 7 percent of the elderly reported that their relatives provided their medical expenses. In addition, there was 11.4 percent of the elderly reported that their medical expenses were provided and this group of people were retired workers of state own enterprises. There was also 13.9 percent of the elderly said that they had been so healthy that they had no medical expenses ever.

In terms of sources of medical expenses, the in-depth interview information reveals that there seems to be a local practice that if the amount of medical bill is below 10 yuan, the elderly will have to take care of it by themselves, if the bill exceeds 10 yuan, support of adult children is needed, and in the case that the elderly have more than one son in the family, the bill would be evenly divided among sons.

However, one can find dissimilarities in the pattern of sick care providers compared with the pattern of medical expenses, food grain arrangement and the pattern of monetary support. The proportion of daughters as care-giver for the elderly was as high as the proportion of sons as care-givers. The in-depth interview information also shows that in most of cases when the elderly were seriously sick for long time, spouse and daughters were the persons in the family who frequently provided most sick care to the elderly.

## New year gifts: new year foods and tonic medicine

Chinese new year is the most important occasion in a year. Usually, most of adult children will take this opportunity to express their filial piety to their parents by providing the elderly parent with some new year presents.

In the two villages studied, there were two different types of new year presents. One was foods which generally include pork, fish, candy, and cookies. Another was tonic medicine which usually are products made of ginseng concentrate, king-bee honey, or special Chinese herbs. As advertised, this type of products has a special function for building up one's health and for prolonging one's life. In the past two years, this type of products have been very popular in both urban and rural China and can be found in almost every local store.

Table 4.4 shows the distribution of the elderly by sources of new year gifts.

Overall, the absolute majority of the elderly obtain new year food and tonic medicine from their family members, such as from their sons, daughters, other relatives, or all of above. The proportion of the elderly who reported their sons provided them with new year foods and tonic medicine was about the same compared with other types of support provided by sons. However, the proportion of the elderly who reported their daughters provided them with new year foods and tonic medicine was much higher than other types of support provided by daughters, such as food grain, monetary support and medical expenses.

Tonic medicine is an important type of new year present for the elderly, which has special symbolic and sentimental value of filial piety from their children. Therefore, whether or not the elderly receive tonic medicine form the children becomes a very good indicator to measure the relationship between adult children and their elderly parents. The survey data revealed that above half of the elderly who had sons obtained tonic medicine from their sons. A large proportion of them were provided with tonic medicine by their sons in addition to monetary and food grain support and even many elderly who were not provided with food grain and monetary support also received tonic medicine from their sons. For those elderly who were not provided with monetary support

Table 4.4 Proportion of the Elderly by Sources of New Year Gifts: New Year Foods and Tonic Medicine\*

Percent	Tonic	Percent
Reported	Medicine	Reported
43.7	Sons	53.2
<b>50.0</b>		10 =
69.0	Daughters	48.7
39.9	Other relatives	26.6
ceived	The Edlerly who re	eceived ·
4.4	No Gifts	7.6
		•
	(Number of cases :	= 158)
	43.7 69.0 39.9	Reported Medicine  43.7 Sons  69.0 Daughters  39.9 Other relatives  ceived The Edlerly who re 4.4 No Gifts

<sup>\*:</sup> The numbers in this table include both the first and second-mentioned responses.

by their sons, 39.7 percent received tonic medicine from their sons. For those who were not provided with food grain support by their sons, 58 percent received tonic medicine from their sons. For those elderly people who had daughters, 60.6 percent of them reported that their daughters provided them with tonic medicine. For those elderly people who were not provided with monetary support, 81.1 percent of them reported that their daughters provided them with tonic medicine

Sending a new year greeting with tonic medicines or special foods was a means for married daughters to maintain relationships with their elderly parents. The data from two villages studied show married daughters who lived in the same township or even those who are not in the same township but in a same county usually came back with their children and husbands to visit their elderly parents at the second day of the new year day. There were 85 percent of the elderly who reported that their daughters gave them new year foods. For those elderly people who were not provided with monetary support, 60 percent of them reported that their daughters provided them with new year foods. In the two villages studied, having tonic medicines and special new year foods from daughters seemed to be the only function of married daughters for some elderly people who had very plain life. A couple of elderly persons said: "it is not bad to have many daughters, since they can bring you lots of goodies in the new year."

## Some speculation: why are the elderly under-supported?

During the survey, elderly people's complaints of being under-supported on food grain, monetary support and medical expenses by their family members were frequently found and cases of mistreatment of the elderly by their sons were also visible.

#### Early socialization of children

Of course, it is important to point out the rarity of mistreatment in the two villages studied, such as Arxiang's case (discussed in the food grain section). However, why this kind of extreme situation could happen to elderly people like Arxiang was certainly very

puzzling to me. I went back to interview Arxiang and her husband. I also asked many villagers whom I chatted with about Arxiang's stories. I found that elderly people like Arxiang who had been treated so poorly by their adult children has something to do with their personal traits: their life history and work experience, and the characteristics of their way of socializing with their children. I gradually found out more about Arxiang:

Like quite a few women in the village, Arxiang went to the big city of Shanghai to be a housekeeper more than ten years ago. For all those years when she was in Shanghai as a housekeeper, her son was taken care of by her relatives at home. She sent a little money home occasionally, since her wage was low. She seldom came home to visit her son and her husband because of her job. Consequently, her son had become less and less close to her. When she was 60 years old, she 'retired' from her work and returned home to depend on her son.... Arxiang cried whenever she mentioned about the way that her son and her daughter-in-law treated her and her husband. However, people in the village said that she and her son used to do the same thing to her husband who was 20 years older than she was. Ironically, her son now followed her footstep, and in the future her grandson would probably do the same thing to his parents as well.

# Enormous wedding expenses

On the other hand, the reason why elderly people like Arxiang who were maltreated by their adult children may also due to structural reasons at a macro level. It may be attributed to the latent effect of the rural economic reform.

The current economic reform has significantly raised younger generations' aspirations for a higher living standard, but the speed of the actual improvement of their living standard appears to be lagging behind their rising aspirations. Under these circumstances, supporting the elderly becomes a great burden for those young people who were aiming at a higher and higher living standard. In other words, the interplay of the factors of rising aspirations and relative poverty may lead to the change of the traditional norm of supporting the elderly.

The current rural economic reform opens a window on the outside world for rural young people. Young people have been increasingly influenced by life styles in cities.

More rural young people have opportunities to work in the cities where they pick up the

way of urban life very easily. More people in the village could afford TV, because the income level has increased since the rural economic reform. For those who had no TV at home, they could watch the public big screen color TV.7 People in the villages told me that the contents of TV program had become more liberal and westernized since the economic reform in China.<sup>8</sup> In other words, rural young people were also influenced by western cultures. I also frequently saw calenders with pictures of movie stars and high fashion clothes for exports in many people's houses. However, the actual living standard of young people in the villages is far behind their high aspiration.

I observed that, as a matter of fact, many elderly people usually did not expect much monetary support from their adult children, especially never married sons, or married sons who were building new houses, since the elderly clearly knew that a great amount of money needed to be accumulated for their wedding.

A son's wedding is not an individual life event but an important family event in rural China, thus both parents and adult children make a great effort together to save enough money. In Chinese society, the elderly parents have strong anxiety to see their sons get married. M.C. Yang described a vivid picture that how rural people work hard and live thriftily to save money for their wildren: 'They feel guilty when unusually good food is eaten or extra money is spent, not because they cannot afford these things, but because they want to have something to leave to their descendents' (M.C.Yang, 1945:45-46). I observed that many elderly parents still retained this mentality.

In the two villages studied, a wedding usually would cost about 5,000 yuan in the recent years. According to the villagers, there was also the concern of losing 'face' if one lacked sufficient funds for the wedding. Sometimes, the elderly even had to borrow

<sup>7</sup> There were four such public TV sets in two villages studied. They were donated by overseas relatives of several villagers, since the economic reform had opened a welcome door for overseas Chinese to come home to visit and invest.

<sup>8</sup> A soap opera TV series from Western world was shown every evening during the period when the survey was conducted.

money from relatives and friends for their son's wedding since most of the elderly did not accumulate much under the commune system in the past. When the elderly had little savings to contribute to the son's wedding, the debt could be as high as 5,000 yuan. It was obviously impossible for an elderly person to repay the debt. The debt was usually passed on to the young couple. I observed that this situation usually became a source for family conflicts and the reason for the division of the extended family household. Even though the elderly tried hard to enable their son to get properly married, life for them became worse instead. Facing the heavy debt from the wedding, the bride's illusion of an ideal life style no longer existed. This extreme disappointment then led to frequent quarrels over the issues of support to the elderly between the elderly's son and the daughter-in-law. This may be why there were cases in which the elderly complained about their sons and daughters-in-law for only giving them the minimum amount of food grain or money.

# Expenses of building new houses

According to my informants, having a new house was the fashion not only for the newly wed, but also for those who already got married. However, building a new house was an enormous cost when compared with the income level of the people there. The case of Ganggang illustrates how the high aspiration for a better material life was actually far beyond these young people's financial ability.

The young couple I happened to stay with during my field work, Ganggang and his wife, had a two-story house and the construction of the house had not been completed. Ganggang told me that it had been three years since they started to build this house, and for building this house they had borrowed money from both close and distance relatives and friends, altogether about 5,000 yuan. He was a carpenter and his wife was a worker in a township factory. They earned about 1600 yuan a year and were considered well-to-do in the village. But, they had not gotten enough money to complete the construction. He got four bed rooms in an about seventy-year-old house from his parents when the extended family was divided. His father was strongly against him for building this new house. But, he said "If I had not made up my mind for building this new house, I would have to live in that depressing and shabby old house forever and be left behind by everybody in the village." Talking about the

monetary support for his parents, he said "How can I have money for them, I still have this huge amount of debt to return."

Houses under construction were frequently seen in the two villages studied. I asked Ganggang and several other people why they started to build new houses before they had enough financial ability. One reason they gave was that it was easy to obtain a 'permit' to build a house in one's vegetable plot in the past few years. The increasingly high aspirations for better life for the young people since the rural economic reform, however, had played an important role. In order to keep up with the increasingly high living standard in the village, people had to borrow so much money from relatives and friends to build a new house that, at the same time, they could only provide very little support for their elderly parents.

### Gender-differential in providing support

I observed that although the relationship between the elderly parents and their sons appeared to be changing under the rural economic reform, the traditional sondominant pattern of family support for the elderly still maintained.

A question could then be raised here: why does the traditional pattern of family support, depending on sons instead of daughters still persist in a society which is undergoing rapid socioeconomic transformations?

I observed that this son-daughter differential pattern in supporting the elderly is, to some degree, associated with the pattern of the parental support for their children. Bride price was the major support the elderly provided for their children, even though the financial ability of the elderly was limited as discussed above. A large gender gap in supporting children for their wedding was observed in the two villages studied. Many elderly told me that they spent almost no money on their daughter's wedding before the economic reform. Although a higher income level elevated the level of the wedding presents provided by the elderly parents to their adult children since the economic reform, daughters were still in a relatively unfavored situation, compared with what sons

can obtain from their elderly parents after the rural economic reform. Wedding presents a daughter gets are generally far less valuable than a son gets from their parents.

According to the local custom, wedding presents for daughters usually included new clothes, beds and at most one or two pieces of old furniture which were not worth much. Even when an extended family was divided, a daughter, unlike her brothers, was not entitled to obtain a share from her parents. However, a typical answer to the question why daughters could not get inheritance was frequently heard: "It is fair, since she will get her share from her husband's family."

# Further exploration of the socioeconomic support for the elderly: a quantitative analysis

The above section has identified the major types of socioeconomic support for the elderly, the dominant supporters for each type of socioeconomic support, and explored the relationship between the pattern of socioeconomic support and the demographic and socioeconomic characteristics of the elderly.

This section will further examine the factors affecting the socioeconomic support for the elderly, focusing on food grain and monetary support, by using log-linear and logit analyses. Log-linear and logit analysis have merits of handling small sample size, and thus it is appropriate for this survey data set since it has only 158 cases. Moreover, log-linear and logit analyses are powerful tools in revealing relationships between categorical variables. This is also important, since most of the major dependent and independent variables are categorical. The reason to use both log-linear and logit analyses is that log-linear analysis can only point out whether there is a relationship between variables, and it can only apply to situations when all the variables are categorical. log-linear model is usually used for selecting the most appropriate and parsimonious model. By contrast, logit analysis can reveal the degree and the direction of the association between variables. In addition, it can handle both categorical and interval independent variables.

This section will focus on the forth and the fifth sub-questions of the first major studied question raised in Chapter One. These two major research questions are: Is it true that the more sons, the better supported the elderly? and, what are the relationships between the basic characteristics of the elderly and the family support?

## A further analysis of food grain support

In exploring factors determining whether the elderly obtain food grain from their sons, I conducted log-linear and logit analyses.

In overcoming the disadvantage of the small sample size of this survey and obtaining a more desired model, I selected more relevant variables and limited the number of independent variables at the same time. Since age, sex and work ability are highly inter-related as Chapter Two shows, I selected work ability of the elderly (self-identified labor status, full labor, half labor and no labor ability) as a main independent variable beside the number of sons. The hypothesis here is that whether the elderly obtain food grain from their son is not only determined by the number of living sons of the elderly but also by the other basic characteristics of the elderly, such as work ability.

In log-linear analysis, hypotheses could be understood as explicit comparisons between alternative models fitted to the same data (Knoke and Burke, 1980). In other words, the process of log-linear analysis is the search for an acceptable model--the most parsimonious yet a meaningful model for a multidimensional table. Table 4.5 lists various models for comparison.

Comparing model 1 with the saturated model (not shown, since it has no degree of freedom and zero value of log likelihood ratio chi-square), the difference in the log likelihood ratio chi-square is 29.5 with 5 degrees of freedom. Thus we must reject model 1 and conclude that whether or not the elderly are provided with food grain by their sons is related either to the number of son of the elderly or to their work ability (self identified labor status), or related to both. Compared with model 1, model 2 fails to reduce

Table 4.5 Log-linear Analysis of the Factors Affecting Sons' Provison of Food Grain

	Model	Degree of Freedom	Loglikelihood Ratio	Probability
1	(1, 2) (3)*	5	29.52	. 0
2	(1, 2) (1,3)	4 .	25.34	0
3	(1, 2) (2,3)	3	4.06	0.255
4	(1, 2) (1, 3) (2, 3)	2	0.59	0.743
	•			

Note:

<sup>\*</sup> 1 = Number of sons (1-2, 3+)

<sup>2 =</sup> Ability to work (full labor, half labor, no ability)

<sup>3 =</sup> Food grain provided by sons

significantly in log likelihood ratio with the cost of 1 degree of freedom. Thus we conclude that whether or not the elderly person are provided with food grain by their sons is not related to the number of sons the elderly have. Both model 3 and 4 substantially reduce the log likelihood ratio chi-square at the cost of degree of freedom. However, the probability level of model 4 is higher than the acceptable range (.10-.35) which means it is 'too good to fit,' and it may imply an unnecessary parameter is involved. Thus, we conclude that model 3 which implies work ability of the elderly is associated with whether or not the elderly will obtain food grain from their son, gives a satisfactory fit to the data.

However, log-linear analysis can only tell us whether there is a relationship between and among variables, but cannot tell us the degree and the direction of the association. In further exploring the factors determining whether or not the elderly will be able to obtain food grain from their sons, I conducted a logit analysis which can overcome the drawback of log-linear analysis. Table 4.6 shows the result of the logit models.

Controlling for the work ability of the elderly, compared with the elderly who have more than two sons, the elderly who have one to two sons are not less likely to obtain food grain from his sons. However, this relationship is weak, since it is only statistically significant at 0.10 level. Controlling for the number of sons, compared with the elderly who have no work ability, the elderly who are full labor are less likely to be provided with food grain. However, there is no difference between the elderly who belong to the group of half labor and the group of the elderly who have no work ability in obtaining food grain from their sons.

<sup>9</sup> see Knoke and Kurke, p. 31

Table 4.6 Logit Analysis of Factors Associated with Food Grain Support from Sons

Parameter	Estimate	Standard error	t-Statistic
		_	
Constant	1.537	0.505	3.04
With 1-2 sons	-0.793	0.436	-1.82
Full labor	-2.446	0.595	-4.11
Half labor	-3.343	0.459	-0.749
<del>-</del>	(-2) Log-likelihood ratio (chi squared)		58
Degree of freedon	Degree of freedom 3		

# A further analysis of monetary support

In exploring the relationship between the availability of monetary support for the elderly and their demographic and social economic characteristics, I conducted a log-linear analysis. The strategy here again is to include limited number of variables and more relevant variables in the analysis, since the sample size of the survey is rather small. The first hypothesis is that the availability of monetary support for the elderly is not only related to the number of sons but also related to number of sons with non-farming jobs. The rural economic reform has created non-farming job opportunities for the rural young people. Compared with their counterparts who have farming jobs, people with non-farming jobs and with higher cash income would more likely be able to provide their elderly parents with monetary support. The second hypothesis is that the elderly who have cash income are less likely to obtain monetary support from their sons.

Table 4.7 shows the log-linear analysis of the factors affecting sons' provision of monetary support. Compared model 1 with the saturated model, we conclude that whether or not an elderly person is provided with monetary support is related either to the number of sons or to the number of sons with non-farming jobs, or both of these variables. Model 2 which takes the number of sons as an independent variable does not show a significant reduction in log likelihood ratio with the loss of one degree of freedom. Thus, we reject model 2 and conclude that whether or not the elderly will be able to obtain monetary support is not related to number of sons the elderly have. Compared with model 2, both model 3 which treats availability of non-farming sons as an independent variable and model 4 which treats both the number of sons and the availability of sons with non-farming jobs as independent variables show significant reductions in log likelihood ratio with relative degree of freedom. However, model 3 appears to be the most parsimonious yet meaningful model. In other words, model 3 shows that whether the elderly will obtain monetary support is significantly related to availability of sons with non-farming jobs.

A further question can be raised here: Is there any basic characteristic of the elderly associated with the availability of son monetary support, beside the availability of sons with non-farming jobs which is significantly associated with the availability of son monetary support for the elderly? There is 29.1 percent of the elderly reported that they have no income at all.

In testing hypothesis two, another set of log-linear models are constructed. As Table 4.7 shows, model 5 fails to improve significantly log likelihood ratio with the cost of three degrees of freedom. Therefore, we reject model 5. Model 6, which takes the availability of cash income of the elderly as an independent variable, does not further reduce the log likelihood ratio with the loss of one degree of freedom, thus we reject model 6. Model 7 which takes the availability of sons as an independent variable significantly reduces the log likelihood ratio with the same degree of freedom. The value of log likelihood ratio with relative degree of freedom in model 8 is about the same as that of model 7. Thus model 7 is treated as the best fitted model. This indicates that the variable of the availability of cash income for the elderly is not associated with the availability of son monetary support, while availability of sons with non-farming jobs is associated with the availability of son monetary support.

In furthering this analysis, I conducted a logit analysis. In the logit models in table 4.8, the number of sons with non-farming jobs is treated as a continuous variable, the variable availability of personal income is changed from a dummy variable to a categorical variable with three categories: 1) personal income>499 yuan last year, 2) personal income>0<500 yuan last year, and 3) personal income=0.

As Table 4.8 shows, controlling the level of personal income, the number of sons with non-farming jobs is significantly associated with availability of son monetary support. In other words, the elderly who have sons with non-farming jobs are more likely to obtain monetary support from their sons. Although the relationship between the level

Table 4.7 Log-linear Analysis of the Factors Affecting Sons'
Provision of Monetary Support

Freedom	Ratio	Probability
3	17.4	0.001
2	2.21	0.331
2	13.93	0.001
1	0.16	0.689
	2	<ul><li>2 2.21</li><li>2 13.93</li></ul>

Note:

- \* 1 = Number of sons (1-2, 3+)
  - 2 = Having son with non-farming job (0, 1)
  - 3 = Having monetary support from son (0, 1)

Model	Degree of Freedom	Loglikelihood Ratio	Probability
5 (1, 2) (3)*	3	34.27	0
6 (1, 2) (2,3)	2	33.5	0
7 (1, 2) (1,3)	2	2.28	0.32
8 (1, 2) (1, 3) (2, 3)	1	1	0.318

Note:

<sup>\*1 =</sup> Having son with non-farming job (0, 1)

<sup>2 =</sup> Having cash income

<sup>3 =</sup> Having monetary support from son (0, 1)

Table 4.8 Logit Analysis of Factors Associated with Monetary Support from Sons

Parameter	Estimate	Standard error	t-Statistic	
Model A			· · · · · · · · · · · · · · · · · · ·	
Constant	-0.829	0.473	-1.755	
Number of Sons	-0.215	0.423	-0.509	
Son with Non-farming Job	0.871	0.228	3.821	
(-2) Log-likelihood ratio (chi squared)		20.643		
Degree of freedom		2		
Model B				
Constant	-1.391	0.415	-3.349	
Elderly w/ Personal income >500	-0.915	0.536	-1.706	
Personal income < 500	-0.128	0.533	-0.241	
Son with Non-farming Job	1.336	0.272	4.915	
(-2) Log-likelihood ratio (chi squared)		36.89	93	
Degree of freedom		3		

of personal income and availability of son monetary support is still weak, the directions of the parameters are meaningful. In other words, compared with the group of the elderly who have no income, the group of the elderly who have over 500 yuan income last year are less likely to obtain monetary support. However, there is no relationship statistically significant between the variable of personal income less than 500 and the availability of son monetary support.

#### Discussion and conclusion

This chapter has examined the pattern of family socioeconomic support for the elderly in the context of rural economic reform in the two villages in South China.

The major types of the family support for the elderly include food grain, monetary support, medical expenses, sick care and new year presents. In the setting of rural China which is economically under-developed, food grain arrangements stand out as the most essential indicator for the family economic support for the elderly.

#### Food grain support

Changes in food grain production and the distribution system in the rural area after the rural economic reform have important implications for food grain arrangements for elderly people. First, these changes have provided more autonomy for the elderly. Like every young adult in the villages, each elderly person could also have a piece of food grain land, thus the elderly do not have to depend on their family totally even if he or she was not able to work. Moreover, the total amount of food grain for each person, no matter old or young, after the rural economic reform was greater than people used to get under the commune system. In the two villages studied, there was not a single elderly person who reported not having enough food to eat, although sources of food grain and degree of sufficiency vary.

### Monetary support

Impacts of economic reform on the monetary support for the elderly are very complex. First, monetary support for the elderly is becoming increasingly important, since a rural village under the rural economic reform is no longer a closed and self sufficient community.

Secondly, the economic reform has enabled the younger generation to provide more monetary support for the elderly. As we know, the rural economic reform has created job opportunities in the non-agricultural sectors for the younger generations in the rural area. For example, in the county where the two villages are located, there has been a construction team composed of 3,000 young males contracting construction projects in cities of Hangzhou and Shanghai and many young males from the two villages studied have joined this construction team. Moreover, as described in Chapter Two, seven factories had been established which absorbed hundreds of people from purely farming jobs since the rural economic reform. Before there were virtually no factories in these two villages. As a consequence, the intergenerational income gap has enlarged, and the living standard of many old folks has been lagging behind.

Instead of taking home extremely low cash income at the end of the year from the production team before the economic reform, young people who have non-farming jobs now can have regular monthly salaries. Therefore, these young people are more likely to provide their parents with monetary support. The log-linear and logit analyses in this chapter indicate that whether or not the elderly can obtain monetary support from their sons is not related to the number of sons they have, but related to the number of sons with non-farming jobs.

#### The latent effect of recent economic reform

Young people's aspiration for more and better consumer goods seems to have soared since the rural economic reform. Although the economic reform has largely improved the income level of rural people, especially younger people, the income level

cannot keep up with the speed of the growing aspiration for consumer goods. Under these circumstances, on the one hand, the increasingly high demand of the bride for wedding gifts has created a great psychological stress and economic burden for the elderly who are eager to see their children to get married. On the other hand, supporting elderly parents has also become an enormous burden for many young people, especially for those who have relatively low income but overly high aspiration. The inter-locking of relative poverty and the risen aspiration for better consumption goods of the younger generation has created inter-generational conflicts concerning the support of the elderly

Economic reform has also brought changes in collective medical care system, namely 'the barefoot doctor system.' It is more expensive for the elderly to obtain the most basic medical care now.

## Gender-differential in providing support

The data from the survey show that sons are the main providers of food grain, monetary support, medical expenses, and new year gifts for the elderly. However, whether or not the elderly is provided with food grain by their sons is only weakly related to the number of sons they have. Moreover, whether or not the elderly can obtain monetary support from their sons is not related to the number of sons their have but related to the availability of sons with non-farming jobs. This indirectly indicates that for the elderly to provide monetary support, having sons with non-farming jobs is more important than having more sons who only work in the field and earn very low cash income.

Although we cannot conclude from the data that "the more sons the merrier" the elderly become in terms of various types of support, the elderly who are childless and have no ability to work are the most destitute. Economic support for this group of the elderly come from the yield of the public land in the village and the donation of the township factories and irregular funds from the state government. Beside food grain, the monetary support is highly irregular and the amount is far from enough to maintain a

lower-middle living standard in the villages studied. Thus, based on the current economic development in the local area, we have to conclude that children are important for old-age support. However, optimistically, one can also expect this situation to change along with the development of local economy. In other words, when the local economy is more developed, more money could be donated as social welfare funds for the childless elderly people.

The two main types of support that daughters, especially married daughters, provide are sick care and new year gifts. To many rural elderly, the only utility in having daughters seems to be as a source of some special new year foods to eat. However, for those elderly persons who have no sons, daughters often play a son-substituting function in supporting their elderly parents. Moreover, daughters also provide important support to their elderly parents in the case of need, especially when the elderly person has an strained relationship with both his or her son and daughter-in-laws.

Why is there this particular son dominant pattern of the family support for the elderly? To answer this question, it is important to study the son-daughter differential in aid provided by elderly parents. The data from two villages studied reveals that a large gender-difference in wealth flow and aid from elderly parents to adult children still present. Compared with daughters, sons always obtain most of the property and services from the elderly parents. Evidence from the survey also shows daughters were providing support to their elderly parents, especially in the case of absence of sons and the presence of a bad relationship between the elderly parents and the son.

#### Number of sons and support

Besides the demographic factors, such as the number of sons, social economic characteristics of the elderly are also related to the pattern of family support for the elderly. The log-linear and logit analyses show that the elderly who are identified as half labor or no ability to work are more likely to be provided with food grain, controlling for the number of sons the elderly have. In addition, log-linear and logit analyses also

indicate that availability of monetary support for the elderly is also related to the social economic characteristics of the elderly, namely the availability of cash income, or pension for the elderly and their spouse. Controlling for the number of sons with non-farming jobs, the elderly who have no cash income are more likely to be provided with monetary support by their sons. In other words, the elderly with cash income have less need for the monetary support from their family members.

These findings indicate that the elderly attempt to support themselves whenever they are able to. Many are very proud of being independent from their son's economic support. Indirectly, these findings also show the weakening of the traditional norms on the relationship between the elderly and their children which is characterized by intergenerational interdependence.

In sum, the implications of the rural economic reform for the family support system are multi-dimensional. Surprisingly, the well-being of the elderly seems not to be closely related to the number of sons the elderly have.

#### CHAPTER FIVE

### DEMOGRAPHIC CAPACITY OF THE FAMILY SUPPORT IN THE FUTURE

### Introduction

This chapter will forecast the demographic basis of family support for the elderly in rural China. The approach and the scale of analysis used in this chapter is different from that of previous chapters. A computer simulation program will be used to explore the potential consequences of recent demographic changes on the capacity of the family support system for the elderly. The scale of the analysis will also change from two small villages to the elderly and their families in rural China as a whole.

Rapid socioeconomic and demographic transformation is occurring in rural China. The current rural economic reform will probably alter inter-generational relationships and affect the status of the elderly. The demographic transition, especially the rapid fertility decline in the past decade, will lead to a substantial reduction in the number of children.

The current demographic basis of the family support for the elderly was discussed in Chapter Three. The actual pattern of the family support for the elderly under the current rural economic reform was described in Chapter Four. The analysis in this chapter raises questions such as: what impact will fertility and mortality decline have on the average number of sons available for the rural elderly in the coming decades?

One of the central concerns about the consequences of recent family planning campaigns in China, especially the famous One-Child policy, is the extent to which the demographic basis of support for the elderly will be undermined. In order to answer such a question, a computer program will be used to carry out a series of simulations of the possible consequences of the demographic changes on the family support system for the

elderly. Computer simulation method is an indispensable tool to study the future demographic capacity of the family support system for the elderly.

In this chapter, the differences between macro population projection, the conventional population projection method, and micro population projection method will be discussed. Second, the mechanism of the particular program used in this study, SOCSIM, will be briefly introduced. Third, the Chinese data inputs for this study will be explained, followed by an explanation of the output. Finally, the implications of the results will be discussed.

# Difference between conventional population projection and microsimulation

The simulation method is indispensable in exploring answers to questions such as to what extent will the demographic capacity of the family support system for the elderly be undermined by the recent fertility decline?

Numerous projections for the population of China have been constructed in the past decade. They have suggested various aging tendencies for China's future. Some of them indicate China would age fastest among all countries in the 21th century (U.S Bureau of Census, 1987). Based on these results, some observers predict that the family support system for the elderly would go bankrupt (Goldstein and Goldstein, 1985). However, this kind of conclusion is problematic in two ways. First, many of the fertility assumptions adopted in these projections, which form the most important input element for demographic projection, are unrealistically low. Secondly, these demographic projections only predict aging trends at the macro level and thus they are technically unable to predict the impact of fertility decline on the family structure at the micro level.

Microsimulation methods developed by family demographers are particularly useful in the context of studying the family support system for the elderly. These models provide a quantitative description of the relationships between demographic determinants, such as fertility and mortality, and selected characteristics of family or

household (Bongaarts, 1984). The micro simulation program, SOCSIM, developed by Hammel and others is an outstanding example.

Micro simulation methods can predict for each age group the expected number of children, the probability of having a living spouse, expected number of siblings, and expected number of other relatives and so on. Measuring the future family structure can define the kinship universe for the aged and thus can demonstrate the possible degree of the family support for the aged. The results of these micro simulations also have strong policy implications. They can provide a quantitative basis for planners and policymakers in estimating the need and in designing formal support programs and social services for those elderly people who are without potential family support.

# **SOCSIM** computer program

The specific micro simulation program used in this study is the SOCSIM program developed by Hammel et al. at the University of California at Berkeley. The SOCSIM (stands for Social Simulation) is a computer model that can be used for exploring family pattern or household structure based on assumptions of individual social behaviors. Hammel and others first developed it in the mid 1960s, made it publicly available in the mid 1970s, and have further improved it in the past two years.1

A major advantage of SOCSIM is that it can generate complex information about the family or household, and it can be realistic in terms of specifying input rates.

Another advantage of SOCSIM is that in presenting its output, it provides not only central tendency but also variability which macro models cannot yield.

A disadvantage of SOCSIM, however, is that it suffers from a sampling error compared with macro simulation models. This error can be made smaller by increasing the number of computer runs which adds to the computer cost. It is also expensive in terms of model specification, since extensive computer programming is often required for

<sup>1.</sup> For more details please see Hammel et al, 1988.

obtaining complex and realistic results. In order to minimize the sampling error in this study, the computer has simulated for 23 times, generating 23 different stable populations, based on the same set of the specified rates. The final product presented is the average of these 23 sets of simulations.

SOCSIM takes an initial group of population (about a couple of hundred) with certain age and sex composition to step through time month by month. It executes the scheduled event for each individual in a random order. These scheduled events can be death, marriage, or (if married) divorce and giving birth. Events are scheduled by an event competition. In competing events, a mathematical model is used to compute random waiting times.

When a person is born, the computer places him or her at the end of the list and records the person's identity which links the person with his parents, siblings and other kin members as well. When a person dies, the computer automatically dates the event on the list. Thus, at any point in time, a census can be taken in obtaining data on kinship networks or specified kinsmen, or even an ancestor list.

## Inputs for this study

The input rates for SOCSIM include age and marital specific fertility, age and sex specific mortality and nuptiality. However, all the rates are monthly instead of the yearly rates that are used in conventional demographic projections.

The analysis in this chapter aims at forecasting the future. However, for the comparative purposes, the simulation analysis carried out here also covers both the pre-1949 high fertility and high mortality "traditional" demographic regime, and the post-1949 declining fertility and mortality "transitional" period.

In order to obtain the simulated information of the family system of the traditional period, a set of demographic rates that are representative of the traditional demographic regime of China is applied to a starting population.

After this initial period, ending 1949, the population is simulated through rate sets of five successive periods respectively. Each rate set of a different period is characterized by empirical rates. These rate sets with their corresponding time periods are shown in Table 5.1.

## Input rates and sources

The 1850-1949 period (period I) is the pre-demographic transition period with high mortality and high fertility. Due to the limited availability of data for this period, Buck's 1929-31 land utilization survey in China is treated as a major data source. The fertility is taken from Barclay et al.'s readjustment of Buck's data (Barclay et al., 1976). Based on the life expectancy suggested by Barclay, I take the mortality from the Coale-Demeny Model Life Table, East, Level 3.

During the 1950-82 period, China has experienced rapid socioeconomic and demographic transformations. The demographic rates, especially fertility, in this period of time are characterized by fluctuations. Based on the pattern of fertility fluctuations recorded by the 1982 China's One-Per-Thousand Fertility Survey, I have divided this 32 year period into five sub-periods: 1950-58, 1959-61, 1962-71, 1972-1976, and 1976-82.

During the first sub-period, 1950 to 1958, fertility remained at the high level of in the previous period and mortality started to decline due to the improvement in living standard brought by the 1949 new socialist system. During the second sub-period, 1959 to 1961, mortality soared and fertility dropped due to a widely spread famine. During the third sub-period, 1962-1971, mortality declined but fertility soared as a result of the condensational effect after the catastrophe. During the forth sub-period, 1972-76, fertility started to decline largely due to the family planning policy of later marriage, longer spacing and fewer births. During the last sub-period, 1976-82, the fertility was further reduced due to the implementation of the One-Child-Per-Couple policy.

Table 5.1 Simulation Time Periods and Corresponding Inputs

Simulation time period	Empirical Rates from Time Period		
	Fertility	Mortality	Marriage
1850- 1949	1929- 1931	1929-1931	1929-1931
1950- 1958	1950- 1958	1953- 1964	1963
1959- 1961	1959- 1961	1953- 1964	1963
1962- 1971	1964	1964- 1982	1963
1972- 1976	1974	1964- 1982	1979
1977-1982	1981	1981	1979

The fertility data for each of these periods are taken from China's 1982 One-Per-Thousand Fertility Survey which provides rich and accurate demographic information. The nuptiality data are calculated based on the first marriage rate and proportion of women married, which are taken from the same survey. Compared with the availability of fertility data, mortality data for China's population are rather limited except for data from the three census periods: 1953, 1962 and 1982. From Coale's estimation of the 1953-64 and the 1965-1982 life expectancy, I obtain further detailed mortality information for these periods (Coale, 1984).

#### Future scenarios

In order to examine the impact of fertility decline on potential family support for the elderly in rural China in the future, I have specified three demographic scenarios for the period after 1982.

The first scenario uses the 1982 fertility, mortality and nuptiality rates and assumes these demographic rates would stay at the same level.

The second one assumes a modest fertility decline and life expectancy improvement. The total fertility is assumed to maintain at the current level till the year 2010, and then to reduce to the replacement level of 2.1 and to stay at this level through 2040. This scenario assumes that the life expectancy would increase to 75 years for females, and 71.2 for males by 2010, which is the current level of mortality in urban China. Life expectancy would stay at this level through 2040.

The third scenario assesses the effect of the One-Child policy. The total fertility rate is assumed to drop to 1.1 beginning from 1980, and this low fertility level would last till the end of the simulation period (2040). Mortality for this scenario is assumed to decline slightly as for the second scenario.

In summary, the first scenario simulates with a relatively high fertility assumption, but certainly not as high as the traditional level. The second scenario simulates a medium fertility assumption which is more realistic. The last scenario

simulates the situation in which the One-Child policy is perfectly implemented and it assumes extremely low fertility. Although this situation may be extremely unlikely to occur, it will be interesting to observe the hypothetical consequence of the One-Child policy on the family for the elderly in rural China.

#### Results

The results will be examined under three different scenarios as described above. Results will be presented and examined primarily at two points. The first one is 2010, and the second one is 2040. In other words 'two censuses' of the kin universe for the elderly will be taken. Two additional censuses will be taken in 1953 and 1982 for comparative purposes. The results from the 1953 census could be treated as the traditional demographic regime, and be used as a reference group in comparing with results from 2010 and 2040. The results from the 1982 census could be treated as the present demographic regime, and be used as a reference group in comparing with results from 2010 and 2040. Before discussing the simulation results, I will first briefly examine the quality of these simulation data.

# A brief note on the quality of the simulation results

One way to examine the quality of the simulation result is to check the fit of the age structure generated by the simulation and the age structure from a empirical census. SOCSIM has a special function in taking a 'census' in certain point of time during the process of a specified simulation period, just like taking a snap shot of a dynamic population in a long period of time. Information of these censuses could include age structure or certain types of kin members. Two censuses are taken for obtaining age structure information of the simulated population, one is in 1953, and the other is in 1982, since there are two empirical censuses corresponding in these two years.

Figure 5.1 shows the comparison of the age structures generated by the simulation and obtained from the empirical census data in 1953 and Figure 5.2 shows the age

structures generated by the simulation and obtained from the empirical census data in 1982. The comparison of the age structures indicates a high degree of correspondence between age structures obtained from the empirical censuses and generated from the simulations. These comparisons show that in terms of age structure, the simulated population is a close fit with the actual population, and therefore, the quality of the simulation results is satisfactory.

## Availability of children in 2010

The availability of children for the elderly is a function of both fertility and mortality. In determining the number of children available to support the elderly, fertility usually plays a primary role for the elderly, overshadowing the effect of mortality. Thus, in predicting the future demographic basis of the family support system for the elderly, it is important to examine the availability of children under relatively high, medium and low fertility assumptions.

The availability of children for the elderly for the coming decades will be examined mainly in terms of the following two indicators, one is the average number of sons and the average number of daughters, and the other is proportion of the elderly without sons and the proportion of the elderly without daughters.

The average numbers of sons for the elderly in 2010 for the three scenarios appear to be about the same, and they are all around 1.86. The average number of daughters for the elderly in 2010 for the three scenarios also appear to be about the same, and they are all around 1.73. From these simulation results we can figure out the approximate average number of children, which would be around 3.5.

Figure 5.3 and Figure 5.4 show the distribution of average number of sons and the average number of daughters by the age of the elderly in 2010.

Figure 5.1 Comparison of Age Structures generated from the Census and from Simulation, 1953

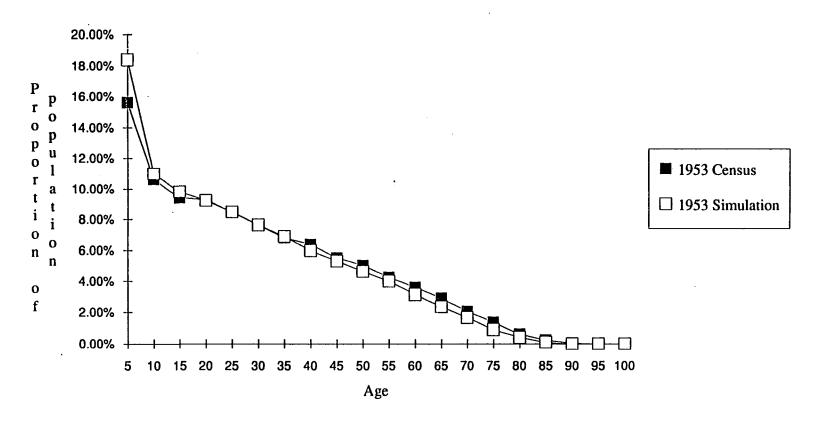


Figure 5.2 Comparison of Age Structure generated from Census and Simulation, 1982

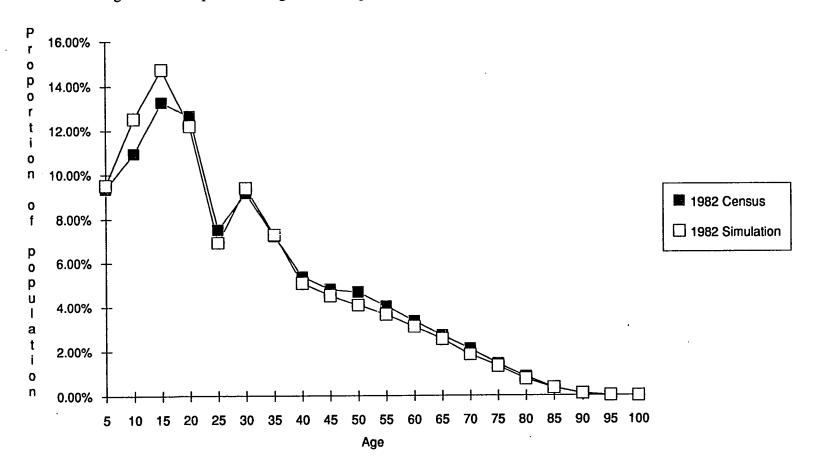


Figure 5.3 Average Number of Sons for the Elderly in Rural China, 2010, Three Scenarios

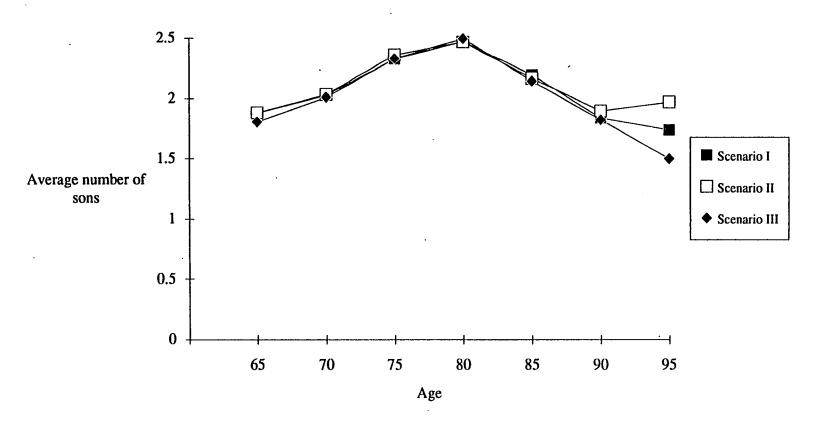
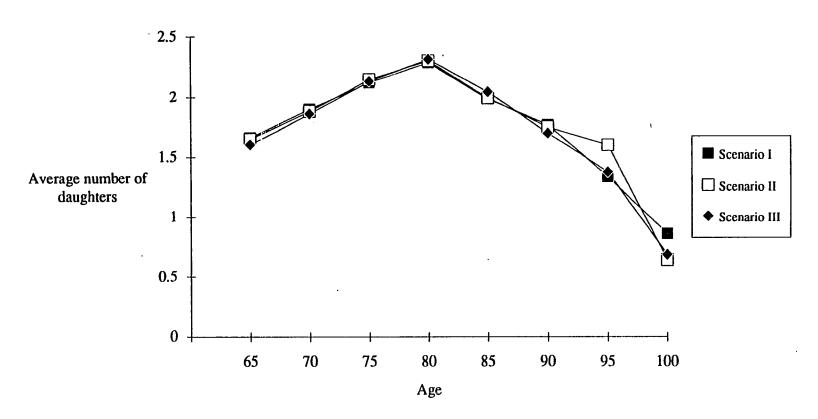


Figure 5.4 Average Number of Daughters for the Elderly in Rural China, 2010, Three Scenarios



The reason why the curve of average number of sons and daughters for the elderly by age for the three scenarios are so close to each other is due to the population momentum.<sup>2</sup> In other words, even though the fertility in scenario III is dropped from the present level to 1.1 starting from the early 1980s, a situation which assumes that the One-Child policy is perfectly implemented, this drop in fertility will have not effect on the average number of the children for people who are 65 and above in 2010. Most of the children of these elderly were born before the 1980s.

Thus, the number of children for the elderly for scenario III in 2010 will be still as large as it is for scenarios I and II. The slight divergence at the end of the curves of the average number of sons for three scenarios in Figure 5.3 is due to randomness resulted from a relatively small sample size (often only a couple of dozens left) in the extremely old age groups.

# Availability of children in 2040

In 2040, however, when the impact of the fertility change on the family for the elderly manifests itself, the average number of children for the elderly will change under all scenarios. Under the One-Child regime, which is scenario III, the average number of sons for the elderly would be 0.6 and the average number of daughters would be 0.53 in 2040. Under the replacement fertility regime, which is scenario II, the average number of sons would be 1.06 and the average number of daughters would be 0.98 in 2040. If the present fertility pattern continues, the average number of sons would be 1.09, and the average number of daughters would be 1.09, and the average number of daughters would be 1.06 in 2040.

Figures 5.5 and 5.6 show the distribution of the average number of sons and daughters by the elderly's age in 2040 for three scenarios. Under the One-Child regime, for the elderly who are from age 60 to 75, the average number of sons and daughters

<sup>2.</sup> Momentum is a population growth property in which populations change their growth rates in a relatively smooth fashion. It occurs because growth rates are generated by the interaction of fertility and mortality patterns with the age structure and the age structure cannot be modified quickly. Cohort effect is a synonymous with population momentum.

Figure 5.5 Average Number of Sons for the Elderly in Rural China, 2040, Three Scenarios

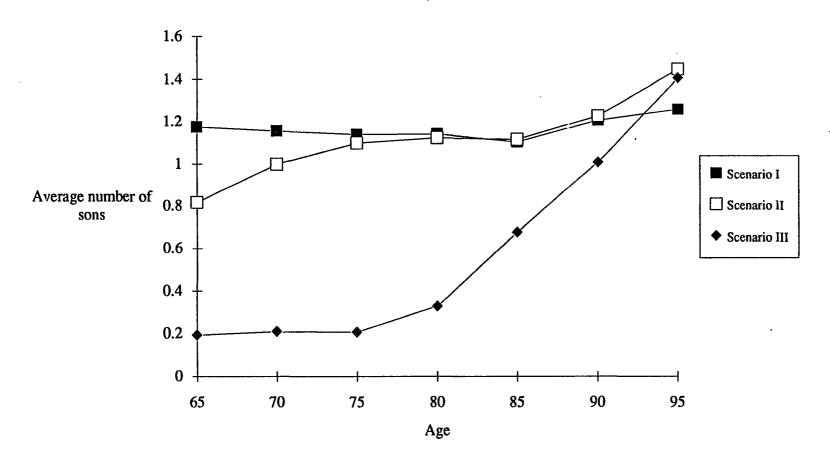
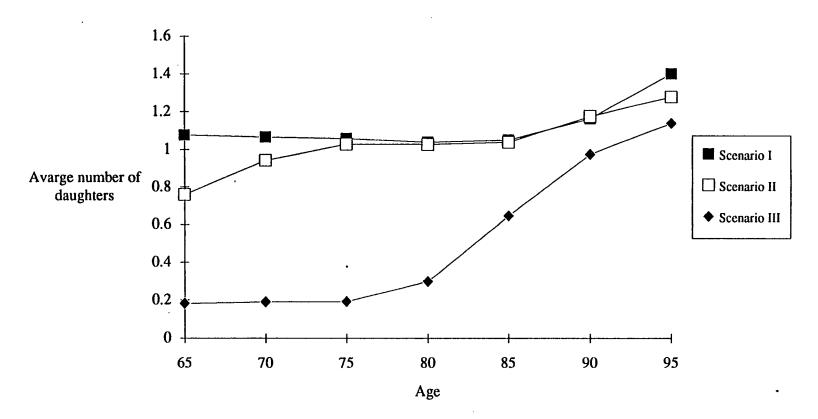


Figure 5.6 Avarage Number of Daughters for the Elderly in Rural China, 2040, Three Scenarios

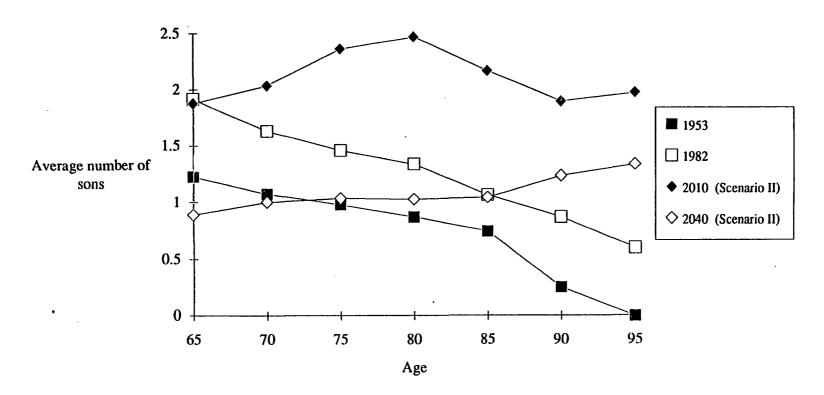


would be around 0.2. For the elderly who are aged at 80 and above, the average number of sons and daughters would gradually increase with age due to the effect of population momentum. For scenario II, the average number of sons and daughters for the young-old would start to decline slightly since the fertility in this scenario is reduced from the present level to the replacement level from 2010. Presumably, when the impact of this fertility reduction on the average number of children for the elderly manifests in a few decades, the average number of children would be further reduced for the older age groups.

Figure 5.7 displays the comparison of the average number of sons for the elderly by age in 1953, in 1982 and in 2040 under scenario II. Interestingly, the average number of sons for the elderly in 1982 appears to be constantly higher than that of 1953 which is a product of the a high fertility and high mortality regime. This difference is mostly due to the impact of a tremendous improvement in life expectancy since 1949. The average number of sons for the elderly in 1953 could be treated as the picture of the average number of sons in the traditional demographic regime, or the situation under the predemographic transition period. This picture implies that traditional patterns of large family support for the elderly may be an ideal support pattern for the elderly, since the average number of sons is relatively small under this traditional demographic regime. The average number of sons for the elderly aged 70 and over is less than one in pretransition period because of the high fertility and high mortality.

Compared with the average number of sons for the elderly in 1982, the average number of sons for the elderly in 2040 under scenario II would be smaller for the young-old but larger for the old-old, and the average number of sons stays relatively constant at around one. The average number of sons available to potentially support the elderly in

Figur 5.7 Average Number of Sons for the Elderly in Rural China, 1953, 1982, 2010 (Scenario II) and 2040 (Scenario II)



2040 does not decline substantially if the fertility stays at a replacement level or slightly higher.

Figure 5.8 shows the proportion of the elderly without sons by age in 2040 under three scenarios. If fertility follows the pattern of scenario III, the One-Child policy regime, the proportion of the elderly who are between age 60 to age 75 and without sons would be above 80 percent. If fertility follows the pattern of scenario I, the present demographic regime, the proportion of the elderly without sons would be around 30 percent. If fertility follows the pattern of scenario II, the replacement demographic regime, the proportion of the elderly without sons would be slightly higher than that of scenario I.

## Availability of spouse<sup>3</sup>

Figures 5.9 and 5.10 display the proportion of the elderly without a spouse in 2010 and 2040 for three scenarios. The proportion of the elderly without a spouse in 2010 and 2040 for three scenarios show a similar pattern. For both the male and the female elderly, the proportion of the elderly without a spouse in 2010 and 2040 for three scenarios increases as the elderly age. However, a sex difference in all scenarios is marked. The proportion of the female elderly without a spouse is much higher than that of the male elderly across all the age groups for three scenarios, due to differential mortality (higher female life expectancy in the old age). The proportion of the female elderly without a spouse in 2040 appears to be lower than that of 2010 due to the improvement in life expectancy.

Figure 5.11 compares the proportion of the female elderly with a spouse by age in 1953, 1982 and 2040 (scenario II). The proportion of female elderly with a spouse in

<sup>3.</sup> Spouse in the simulation is defined as the spouse from the first marriage.

Figure 5.8 Proporption of the Elderly without Sons in Rural China, 2040, Three Scenarios

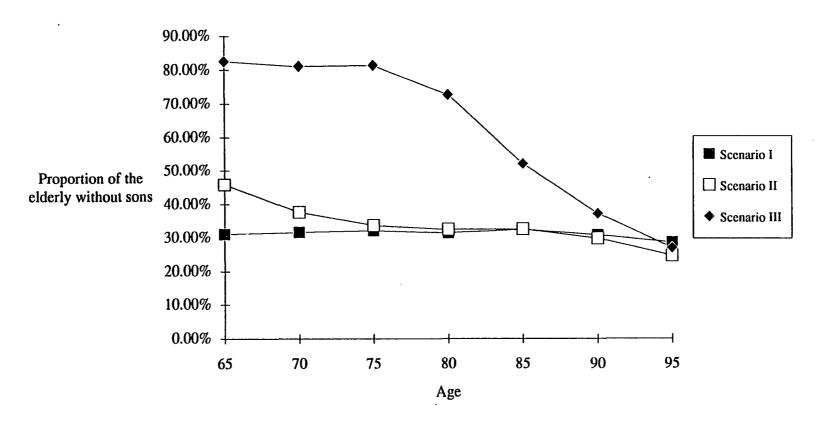


Figure 5.9 Proportion of the Elderly without a Spouse by Sex and Age in Rural China, 2010, Three Scenarios

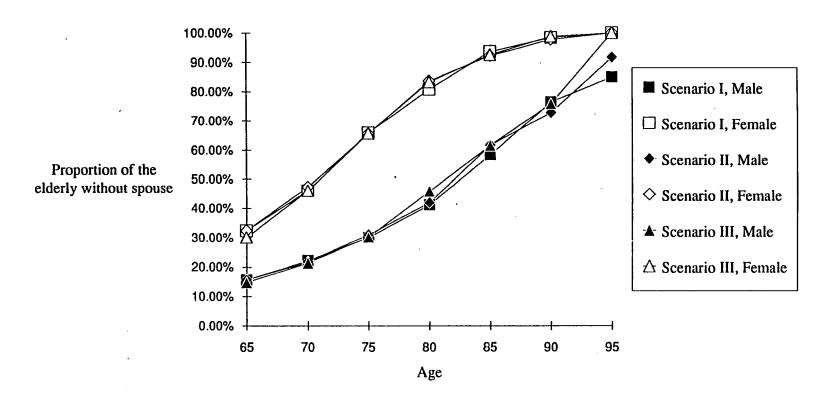


Figure 5.10 Proportion of the Elderly without Spouse by Sex and Age in Rural China, 2040, Three Scenarios

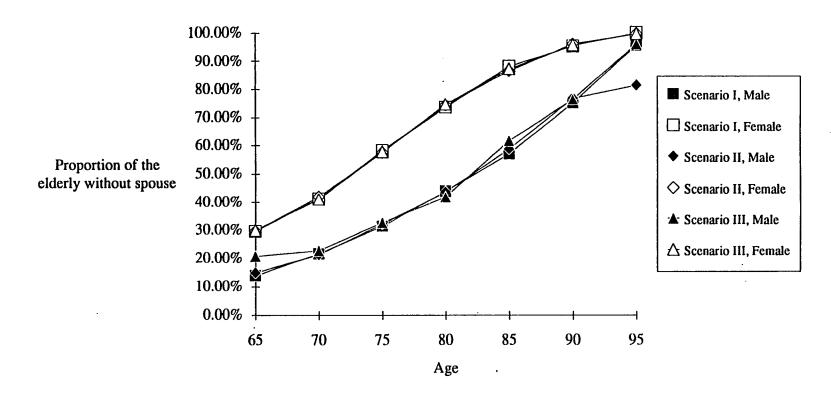
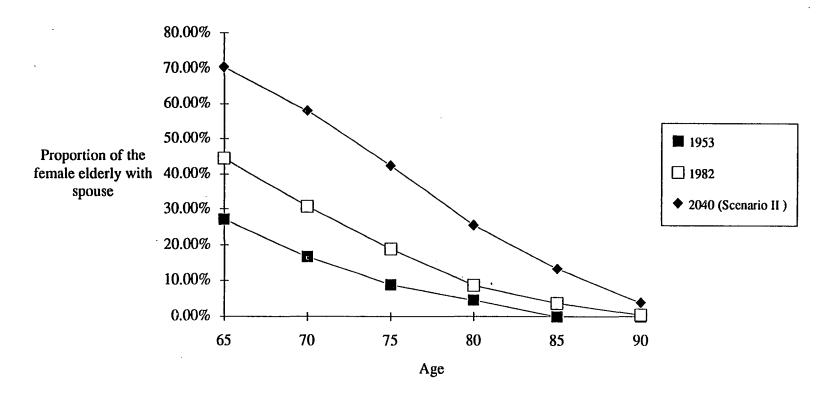


Figure 5.11 Proportion of the Female Elderly with a Spouse in Rural China, 1953, 1982 and 2040



1953 is the lowest compared with that in 1982 and in 2040. The proportion of the female elderly with a spouse in 1953 declines gradually from around 30 percent for the young-old to virtually zero for the old-old. This may indirectly explain why the traditional family support system emphasized children-parent interdependency instead of husband-wife interdependency. The proportion of the female elderly with a spouse will be significantly higher than that of both 1953 and 1982 due to the tremendous improvement in life expectancy. This may imply that as the life expectancy further improves, a potential pattern of family support system for the elderly which will be characterized by spousal interdependency may emerge in the future, especially when the number of children for the elderly decreases.

# Availability of siblings

Figure 5.12 and Figure 5.13 show the average number of brothers and sisters for the elderly by age in 2040 for three scenarios. The curves of the average number of brothers and sisters for the elderly by age under three scenarios seem to follow a similar pattern due the population momentum. Even for scenario III, in which the total fertility rate is assumed to drop to 1.1, the average number of brothers and sisters for the elderly in 2040 is still about the same as that in the other two scenarios. Although the number of children for the elderly will be drastically reduced if fertility follows the pattern of scenario III, which is very unlikely, or the number of children for the elderly will be reduced slightly if the fertility follows the pattern of scenario II, the average number of brothers and sisters for the elderly will maintain basically the same in the next six decades. The reason for the similarity among the three scenarios is obvious. It is because the people aged 60 and above in 2040 have already been born before the 1980s, and they are not affected by the fertility assumptions here.

Figure 5.12 Average Number of Brothers for the Elderly in Rural China, 2040, Three Scenarios

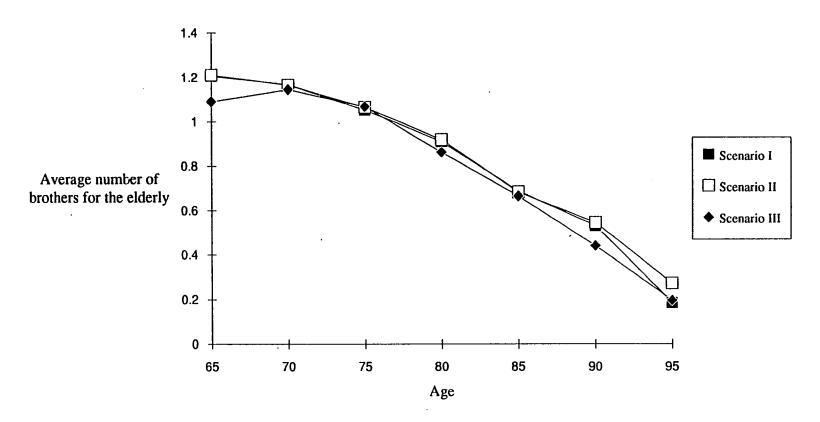
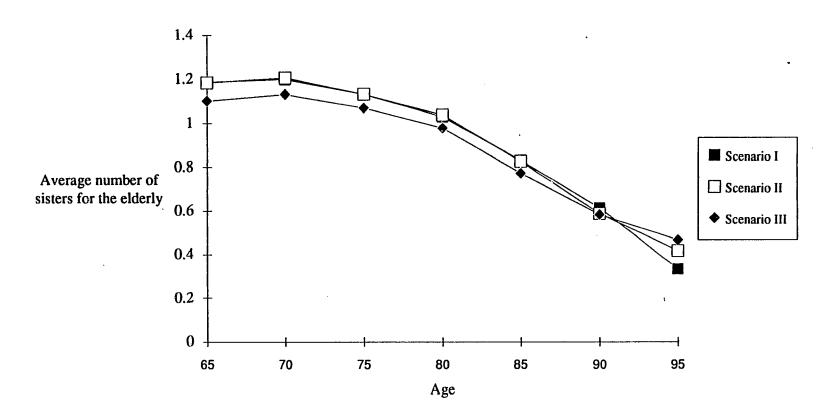


Figure 5.13 Average Number of Sisters for the Elderly in Rural China, 2040, Three Scenarios



It is, nevertheless, interesting to compare the availability of siblings in 2040 with the situation under the old demographic regimes. Figure 5.14 shows the average number of brothers for the elderly under Scenario II in 2040, in 1953 and 1982. Taking the average number of brothers for the elderly under Scenario II in 2040 and comparing this to 1953 and 1982, we can see that the average number of brothers for the elderly in the coming decades would be larger than that of both the present and the past.

The implication of these simulation results here is that in the coming decades, the elderly will be able to depend more on their siblings, which will average above 2.

Siblings can be treated as a potential resource for the old-age support. If interdependence between parent and child is termed as a vertical one, and the interdependency between siblings is termed as a horizontal one, then the vertical interdependency will be weaken since the number of children will be reduced, but the horizontal interdependency could be strengthened since the average number of siblings will be higher than any other time.

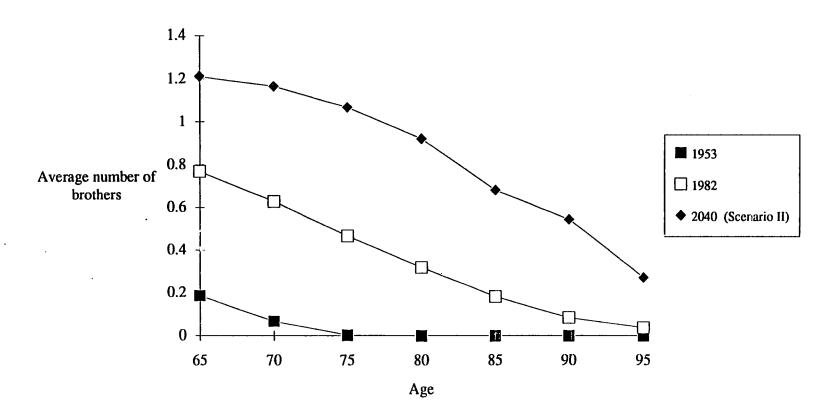
### Discussion and conclusion

Using the computer microsimulation tools, this chapter has sketched out a picture of the future demographic basis of the family support system for the elderly in rural China according to three different scenarios.

The first scenario is assumed to be a continuation of the present demographic regime. The second scenario is characterized by a replacement level fertility which is considered to be more realistic.<sup>4</sup> Under this scenario, fertility in rural China is assumed to maintain at the present level from 1982 to 2010, and to converge to the level of urban fertility of 2.1 by 2010. The last scenario is assumed to be a highly hypothetical

<sup>4.</sup> In spite of the government initiated One-Child-Per-Couple campaign during the past decade in China, surveys in China have repeatedly shown a two-children norm among Chinese couples (see, for example, Whyte and Gu, 1987).

Figure 5.14 Average Number of Borthers for the Elderly in Rural China, 1953, 1982, 2040



situation, it is featured by the One-Child regime. The reason that this scenario is termed as highly hypothetical is that the One-Child policy has never been fully implemented in rural China, as described in Chapter One. It would be extremely interesting, however, to display the consequences of this One-Child policy on the demographic basis of the family support system for the elderly.

For each of these three sets of projections, I have had two censuses of the kin members of the elderly taken, once in 2010 and the other in 2040.

Analyses of the survey data in Chapter Four reveal that children especially sons are the dominant supporters for the elderly. Thus, it is interesting to explore answers to questions such as, what would be the average number of sons in the coming decades and what would be the proportion of the elderly with no sons in future?

# Availability of children

Simulation results for the three scenarios show similar results in 2010 due to the cohort effect: in the coming three decades, the average number of sons for the elderly would be around 1.87 and average number of daughters for the elderly would be around 1.72. The average number of sons and daughters by 2010 would not be reduced compared with the situation in 1982. In the two villages that I have carried out my indepth field research, the average number of sons for the elderly is 1.78 and the average number of daughter is 1.61, which are fairly close to what the simulation reveals. The small discrepancy between the survey results and the simulation results can easily be attributed to the sample variation or the misreporting by the elderly.

By 2040, however, the situation would be quite different. If the fertility follows the pattern of scenario II, the replacement level, the average number of sons for the elderly by 2040 will be around one across all the age groups of the elderly (Figure 5.7). In a few decades after 2040, the average number of sons would probably further decline to around 0.8.

However, if the One-Child policy were perfectly implemented, a dramatic change in the number of sons would start to occur in 2040. In other words, when the people who had spent their reproductive lives under the One-Child regime enter their 60s and 70s, the proportion of these people without sons would be as high as 80 percent in 2040. But, the proportion of the elderly without sons for the old-old, say 85 and above is much lower than that of the young-old, due to the population momentum of earlier higher fertility. The consequence of the One-Child family policy had not yet fully manifested due to the effect of population momentum in 2040, and in a few decades after 2040, the over all proportion of the elderly without sons would be probably much higher.

Although the One-Child regime is just a highly hypothetical case, from this hypothetical case we can learn that the reduction in the number of children as caregivers for the elderly will not happen suddenly and completely in the next two to three decades due to the population momentum. This would allow us to be prepared ahead of time. Changes in the number of children for the elderly will happen gradually in a process of a few decades even if there is a sudden fertility fluctuation.

The analyses in Chapter Four reveal that children, especially sons are the dominant supporters for the elderly in the two villages studied. This pattern of the family support system for the elderly would have to alter if the fertility had perfectly followed the pattern of scenario III. However, this situation may be unlikely to happen. Even it would happen, it would be more appropriate to conclude that the family support system for the elderly will gradually change instead of being completely bankrupted, since the kin universe which could be mobilized for old age support is not only limited to the number of children, especially the number of sons the elderly have.

# Availability of spouses and siblings

Comparing the proportion of the elderly without a spouse in 2010 with that in 2040 for all three scenarios, the change would not be as marked as the changes we see in the proportion of the elderly without sons, since availability of spouse for the elderly is a

function of the mortality and nuptiality instead of the fertility. The proportion of the female elderly with a spouse in 2040 would be much higher than that of 1953 and 1982.

The average number of siblings for the elderly in 2040 would be basically the same for all three scenarios due to the cohort effect,<sup>5</sup> no matter how the fertility fluctuates, and they would all be much higher than that of 1953 and 1982 because siblings of the elderly is not a function of the future fertility but rather a function of the past fertility and a function of mortality.

Although siblings were potential resources in the family for old-age support in the villages studied, as described in Chapter Three and Four, siblings of the elderly were only mobilized in limited cases in the two villages studied, such as when the elderly was seriously abused by the son or the elderly was childless. This picture of loose interdependence among siblings could probably change in the coming decades when the number of children reduces.

If the interdependence between parents and children is termed as vertical, and the interdependency between the elderly and their spouse and siblings is termed as horizontal, then the vertical interdependency would be weakened due to the reduction in the number of children. The horizontal interdependency, however, may be strengthened, since the proportion of the elderly with a spouse and the average number of siblings for the elderly will be increasing. At the macro level, under this circumstances, when the proportion of caregivers in the younger generations for the elderly decreases, the younger and healthier elderly could be mobilized to take care of the older and the frail.

<sup>5.</sup> See Footnote 2.

# CHAPTER SIX CONCLUSION

This research has studied both the present and the future of family support for the elderly in rural China. In the present, the pattern of potential and actual family support to the rural elderly is studied via the survey data in two villages of South China. The future is forecasted with three simulation scenarios of fertility changes and their impact on the number and type of family relatives of the elderly in rural China.

This research also integrates demographic and sociological perspectives. With the demographic perspective, the existing family structure for the elderly in the two villages is documented and the family patterns of the elderly are forecasted. With the sociological perspective, this research has studied the actual pattern of family support for the elderly and has explored the relationship between the number of children and the economic well-being of the elderly, using both empirical data collected from the two villages of South China. This research has benefited by using both qualitative and qualitative methods.

The family support system under rapid demographic and socioeconomic transformations

#### Fertility and mortality decline

China has been experiencing a dramatic fertility decline since the beginning of the 1970s and a sharp mortality reduction since the 1950s. The total fertility rate fell from 5.8 in 1970 to 2.6 in 1982 for the whole country. During the same period, the total fertility declined from 6.3 to 2.9 in rural China, more than halved in a decade time (Coale and Chen, 1987). Accompanying this rapid fertility decline is the prolongation of life. The life expectancy at birth for Chinese population increased from around 35 in the 1940s to 67 in 1982 (Coale, 1984). Such a rapid fertility decline within such a short time

period is unprecedented among all human populations of significant size (Bongaarts and Greenhalgh, 1985). This rapid fertility decline is largely due to the impact of a series of birth control campaigns, such as the Late (marriage) Fewer (births) and Longer (child-spacing) and the One-Child campaign (Wolf, 1986; Chen and Kols 1982).

# The One-Child policy and the elderly

The unrivalled One-Child policy and the unprecedented fertility decline in the past decade in China has attracted great attention in the academic world. A major consequence of this policy pointed out by many researchers is the socioeconomic costs imposed on the family support system for the elderly, since this rapid fertility decline would reduce the number of caregivers for the elderly in the traditional family. A question is thus raised: what would happen to the family of the elderly in the coming decades?

However, very little is reliably known about the present situation of family support for the elderly in rural China. There is a research gap which this research attempts to fill. Previous research conducted by foreign scholars has been overwhelmingly focused on the social welfare system in urban China (Davis-Friedmann, 1983 and Sher, 1984). Studies carried out by Chinese scholars have rarely explored the link between the number and sex of the children and the socioeconomic well-being of the elderly in rural China.

#### The rural economic reform

Paralleling the fertility decline, rural China has been undergoing a large scale socioeconomic transformation, the recent economic reform. The major purpose of this reform is to stimulate productivity and to boost the income level. In rural China, the self-responsibility system has replaced the collective system (Watson, 1985; Wang et al. 1985). By allocating the responsibility to smaller units (households), this rural economic

reform has produced a significant shift in both administrative structure and income levels (Wang et al. 1985).

Although this setting is far different from the so-called 'modernization' which presumably would lead to a reduction in the status of the elderly, this rural economic reform which is featured by a transformation from a collective rural economic system to an individual responsibility system is generating profound impacts on the family support for the elderly. A further question raised then is: What impact does rural economic reform have on the pattern of family support to the elderly?

A number of authors have already indicated that the traditional family support systems for the elderly in many developing countries are disintegrating, and even in the most remote rural third world setting, modernization can adversely affect the status of the elderly (Kinsella, 1988; Martin, 1986). Studies on rural India and rural Nepal reveal that for old-age security, economic assets, mainly land holding, are more important than an abundance of sons (Vlassoff and Vlassoff, 1980; Goldstein and Beall, 1982). This research can also be considered as an effort to examine the effect of the demographic and socioeconomic changes on the family support system for the elderly in general, using China as the particular setting.

### Demographic analyses: Will there be a crisis?

In summarizing the major findings of this research, the order of presentation will be reversed: first the future and then the present.

Will the fertility decline of the past decades have a serious impact on the future family support of the elderly? Three future scenarios were used to explore this question. Scenario I is characterized by a continuation of the present demographic regime.

Scenario II is featured by a replacement fertility level and this scenario is considered to be more realistic. Under this scenario, fertility in rural China is assumed to maintain the present level from 1982 to 2010, and then converge to the level of urban fertility of 2.1 in

1982. Scenario III assumes a highly hypothetical situation, featured by the One-Child regime.

Although this situation is unlikely to happen because the One-Child policy has encountered resistance and has never been fully implemented in rural China (Whyte and Gu, 1987; Greenhalgh, 1986; Peng, 1986), it is still interesting to display the consequences of this One-Child policy for the demographic basis of the family support system for the elderly.

The main findings of this simulation can be summarized as follows:

The 'crisis' of the family support system for the elderly in rural China anticipated by many researchers is very unlikely to happen within the near future (before 2010) due to the population momentum of past high fertility, even if the One-Child policy was fully implemented as in scenario III. Thus there will be no crisis due to the lack of the available relatives to support the elderly in the near future. Simulation results for the three scenarios show similar patterns in 2010. In the next two decades, the average number of sons for the elderly will be around 1.87 and average number of daughters for the elderly will be around 1.72.

However, the picture of the family for the elderly would start to alter in 2040.

If the fertility trend follows the pattern of scenario II, the replacement level, which is relatively realistic, the average number of sons and daughters the elderly would have until 2040 would be similar to the present situation. The average number of sons for the elderly would be around one across all age groups of the elderly in 2040.

If the fertility trend follows the One-Child regime, as hypothesized in scenario III, in 2040, a tremendous reduction in the number of sons or daughters would occur. In 2040, however, the consequences of the One-Child policy would not be fully manifested yet due to the effect of population momentum. A few decades after 2040, the overall proportion of the elderly without sons would be much higher than that in 2040.

Even if the One-Child policy were perfectly implemented, it would also be inappropriate to conclude that the family support system for the elderly would be bankrupted, since a family support system for the elderly involving different relatives could emerge.

When people talk about the traditional family support system for the elderly, they usually refer to the children-oriented family support system. This children-oriented family support system itself was a result of the demographic constraints of the predemographic transition period. Under this pre-demographic transition regime which was characterized by high fertility and high mortality, the proportion of the elderly with a spouse was comparatively low, especially for the female elderly, and the average number of siblings was also relatively small. Under these circumstances, people could only count on their children for old-age support.

However, the family support system for the elderly with a different feature would probably emerge when the demographic conditions have changed. The simulation results presented in Chapter Five have shown that, assuming a moderate further improvement in life expectancy, the proportion of the female elderly with a husband in 2040 will be more than doubled the proportion in the pre-demographic transition regime, and it will also be much higher than the proportion under the current situation (Table 5-11). Assuming a moderate improvement in life expectancy, the average number of brothers or sisters for the elderly in rural China in 2040 would also be much larger than that under the pre-demographic transition regime and than it was in 1982. Under the pre-demographic regime, due to the high mortality, the average number of siblings for the elderly was virtually zero, whereas even though with a much lower fertility, the current demographic regime would result in a situation in which the average number of siblings for the elderly could be more than two.

If the interdependence between parents and children is termed as vertical, and the interdependency between the elderly and their spouse and siblings is termed as

horizontal, then the vertical interdependency would be weakened due to the reduction in the number of children in the future. The horizontal interdependency, however, may be strengthened, since the proportion of the elderly with spouse and the average number of siblings for the elderly will be increasing significantly. Elderly persons in the same family would enable to support each other because of age difference due to hypergamy and heterogeneity in health and economic status between husband and wife and among siblings. Of course, the co-existence of several elderly persons in one family sometimes may create difficulties in care giving and economic support.

In the two villages studied in south China, even though most elderly people have sons and daughters around as the result of the past high fertility demographic regime, more elderly reported spouses as more dependable than children.

## Sociological analyses: How important is the family?

The microsimulation method applied here can help us to predict the demographic capacity of the family support system for the elderly in the future. However, this microsimulation is not omnipotent, it cannot predict socioeconomic aspects of the family support system.

Turning from the demographic perspective to the sociological perspective, however, the problem of family support for the elderly in the future will be much more complicated, since the demographic basis only serves as the potential basis for providing old age support. Even though the average number of sons for the elderly will be around one across all age groups of the elderly (60+) in 2040, if the fertility follows the pattern of scenario II, we cannot conclude that the elderly will be well supported simply because they will have sons.

Although scholars often question the future of family support for the elderly, they know very little about the family support system for the elderly under the rural economic reform today. In a sense, the socioeconomic changes that have been undergoing in rural

China may also produce a strong impact on the family support to the elderly. A further examination of the present situation from a sociological perspective may provide us with new insights in studying the future family support system for the elderly.

## The importance of the family

The study of the present situation of the family support system for the elderly is based on a small-scale survey of the elderly in two villages of South China.

In the previous studies on the family and the elderly, the household (the living arrangement) is normally the key concept. However, in studying the family support system for the elderly in a rural setting, it is crucial to focus on the availability of kin for the elderly. Elderly people do not only associate with and depend upon the family members with whom they live but also associate with and depend upon those family members who do not live in the same household.

The village survey asked about potential demographic resources that the elderly can depend upon in the family. The elderly people responded with a strong consciousness of their kinsmen whom they could mobilize in case of need.

In the villages studied, most elderly persons could still depend on the family, since the absolute majority of the elderly had kinsmen, especially children. The average number of children for the elderly persons interviewed was 3.4, and the average number of sons was 1.8 and the average number of daughter 1.6.

## Changing pattern of living arrangement

Previous literature in the field of the Chinese family has presented a picture in which the elderly people are usually surrounded by children and grandchildren, only the extraordinary deviant or the pitiful live alone (Davis-Friedmann, 1983). What is the pattern of living arrangement for rural elderly people today? In the two villages studied, the average size of the households with elderly persons was much smaller than the average household size for all rural households in the country as a whole. The survey

data shows that the average household size with elderly persons was only 3.4 and more than one-third of the elderly were living alone or living with their spouses only. Why the proportion of the elderly living alone in these two villages was so high? Is it because the elderly have no kinsmen to live with them, for example they had no surviving sons, or because the elderly choose to live alone?

The data from the two villages studied show that although it was demographically possible for 86.1 percent of the elderly to live with their own sons, there were only about two-thirds of the elderly were living with their children, about one-third of the elderly were living alone. The analyses using log-linear and logit methods show that whether the elderly were living alone or living with their spouse only, was not closely related to the availability of sons. Whether or not the elderly lived alone was more closely associated with their attitude towards the traditional pattern of living arrangement for the elderly. In the two villages, nearly half of the elderly expressed disagreement with the traditional norm of preferring the multi-generational living arrangement. Many of the elderly who lived alone not because they had been rejected by their sons, but because they wanted to live alone. This implies that the traditional norm of ideal family of multi-generations living together under the same roof has changed. However, contrary evidence was also visible. There were several elderly persons reported that they wished to live with their son's family, but their sons did not want to live with them.

The housing shortage has been another main determinant for the multigenerational living arrangement for the elderly in the past. However, I observed that
housing conditions for rural people had been tremendously improved since the rural
economic reform due to the freedom in utilizing certain land for building new houses,
higher incomes and a better supply of building materials. The data from the two villages
show that the improvement in housing brought by the economic reform provided the
physical means for the elderly to live alone.

## Family support to the elderly

In the two villages studied, the major types of family support for the elderly were food grain, monetary support, medical expenses, sick care and new year presents. In the area studied which is economically under-developed, the food grain arrangement stood out as the most essential factor for the family economic support for the elderly.

Monetary support for the elderly was also becoming increasingly important, since a rural village under the rural economic reform was no longer a closed and self sufficient world.

The data from the survey show that sons were the main providers of food grain, monetary support, medical expenses, and new year gifts for the elderly. However, log-linear and logit analyses show that whether or not the elderly were provided with food grain by their sons was only weakly related to the number of sons they had. Moreover, whether or not the elderly could obtain monetary support from their sons was not related to the number of sons they had but related to the availability of sons with non-farming jobs. This indirectly indicates that, for the elderly to have monetary support, having sons with non-farming jobs was more important than having more sons who only worked in the field and earned very low cash income. This could be largely attributed to the income improvement brought by the rural economic reform. Instead of taking home extremely low cash income at the end of the year from the production team before the economic reform, young people who had non-farming jobs now could have a regular monthly salary.

#### The more sons, the merrier?

One stunning point, however, I observed during this empirical study was that the traditional son preference appears to be changing, although sons was still the dominant supporters for the elderly. Traditionally, Chinese people have a very strong preference for sons, since sons not only usually provide more support for elderly parents but also can carry on the family names. A number of studies of reproductive behavior and contraceptive use of Chinese woman have shown that people, especially rural people,

continue to have son preference since 1949 (Arnold and Liu, 1986). However, do people, especially the elderly people, in rural areas who particularly need support still have such strong son preference under conditions of rapid rural development? Is it still true that for the elderly "the more sons, the merrier?

In this survey, one question about the importance of having many sons was asked. The question was: do you agree with the traditional saying that the more sons, the merrier? There were 73.4 percent (No.=116) of the elderly who gave a negative answer. In explaining why they do not agree the tradition saying "the more sons, the merrier," 43.1 percent of the elderly (No.=50) said that it depended on the dutifulness of the sons. There were 19.8 percent of the elderly (No.=23) who expressed injured feelings such as being evaded by several sons and the unpleasantness of the disputes concerning supporting them among their sons. There were 9.5 percent of the elderly in the survey (No.=11) who complained about the hardship in bringing up many sons and the enormous burden in getting them married. In addition, a number of the elderly persons pointed out the fact that there were quite a few elderly people in the villages who had many children, but they are not happy, and some of them were even mistreated by their adult children.

Besides the demographic factors, such as the number of sons, social economic characteristics of the elderly were also related to the pattern of family support for the elderly. The log-linear and logit analyses show that the elderly who are identified as half labor or no ability to work are more likely to be provided with food grain, controlling for the number of sons the elderly have. In addition, log-linear and logit analyses also indicate that availability of monetary support for the elderly is also related to the social economic characteristics of the elderly, namely the availability of cash income, or pension for the elderly and their spouse. Controlling for the number of sons with non-farming jobs, the elderly who have no cash income are more likely to be provided with

monetary support by their sons. In other words, the elderly with cash income have less need for the monetary support from their family members.

These findings indicate that the elderly attempted to support themselves whenever they were able to. Many elderly persons were very proud of being independent from their son's economic support. Indirectly, these findings may also show the weakening of the traditional norms on the relationship between the elderly and their children which is characterized by intergenerational interdependence.

## The role of daughters and siblings

The data of this survey show that daughters only played a minor role in supporting their elderly parents. The two main types of support that daughters, especially married daughters, provided were sick care and new year gifts. To many rural elderly persons, especially those who had a plain life, the only utility of their daughters seemed to be to provide them with some special new year foods. However, for those elderly persons who had no sons, daughters often played a son-substituting function in supporting their elderly parents. Moreover, daughters also provided important support to their elderly parents in the case of need, especially when the elderly person had a strained relationship with both sons and daughter-in-laws.

Why is there this particular son-dominant pattern of the family support system for the elderly? To answer this question, it is important to study the son-daughter differential in aid provided by elderly parents. The data from two villages studied reveals that a large gender-inequality heavily favoring sons in wealth flow and aid from elderly parents to adult children was still present. Compared with daughters, sons always obtained most of the property and services from the elderly parents.

Looking into the future, compared with the average number of children for the elderly now, no matter which scenario the fertility trend follows, the average number of children would be smaller. The present son-dominant family support pattern for the elderly will have to change since the proportion of the elderly without sons will be

increasing in the coming four to five decades and the elderly parents will have less chance to "choose" between sons and daughters.

Although siblings constitute a type of potential resources in the family for old-age support, siblings of the elderly were only mobilized in limited cases in the two villages studied, such as when the elderly was seriously abused by the son or the elderly was childless. This picture would be altered in coming decades when the number of children reduces.

#### The most destitute

Although I could not conclude from the data that "the more sons the merrier", the elderly who were childless and were unable to work are the most destitute. Economic support for this group of the elderly were from the yield of the public land in the village and the donation of the township factories and irregular funds from the state government. Beside food grain, the monetary support was highly irregular and the amount was far from being enough to maintain a lower-middle living standard in the villages studied. From the destitute situation of the childless, one could only conclude that children are important for old-age support.

# Latent effects of the socioeconomic change on the family support system in rural China: some speculations

The current rural economic reform in rural China is a far-reaching socioeconomic transformation. Its impacts on the family support system for the elderly are multi-dimensional. Even though the rural economic reform has largely improved people's income level, the latent effects of this economic reform on the family support system for the elderly should not be overlooked. Although the setting in rural China is by no means modernized, the rural economic reform has opened a window for people to see the outside world. The 'negative' impacts of this socioeconomic transformation on the

family support system for the elderly may be as great as, if not greater than, the impacts of the demographic transition.

The most striking impression I obtained from the two villages studied is that the inter-locking of relative poverty and the rising aspirations for better consumer goods of the younger generation, which creates inter-generational conflicts concerning the support of the elderly.

In the two villages studied, aspirations for higher living standard, hopes for better job opportunities and desires for more independence from the control of traditional family seemed to be prevalent among the younger people. Although the economic reform has largely improved the income level of the rural people, especially younger people, the income increase seems not to be able to keep up with the rapid growth of these aspirations. Under these circumstances, on the one hand, supporting elderly parents has also become an enormous burden for the younger generation, especially for those who had relatively low incomes but soaring aspirations. Thus, in the two villages studied, the elderly's complaints about the irresponsibility of the sons were frequently heard and even a few cases mistreatment of the elderly were visible. On the other hand, an increasing aspiration for better living condition and a soaring demand of the bride price had created a great psychological stress and economic burdens for the elderly who were eager to see their children get married, but were unable to accumulate much money in the past collective farming years. Consequently, many of the elderly, especially those who were not able to work, were in a relatively deprived situation.

Even with the inter-generational income gap enlarging with the recent socioeconomic changes in the two villages studied, the elderly persons were still heavily burdened by the persistence of the tradition. The elderly still could not retain their own wealth since they had to pass almost all the major property to children at the occasions of sons' weddings or upon the division of the extended family. Thus, life for many of the elderly in their early fifties became deteriorated. This pattern of inheritance created an

unfavorable situation for the elderly, in which the elderly become dependent on others relatively early in their life cycles.

The declining status of the rural elderly along with rural development in China and the change in the norms about the value of sons will also have implications for further fertility decline in China. Many have noticed the negative effect of the rural economic reform on the implementation of the government family planning programs in China and worried that the fertility in rural areas would rebound to a very high level. This view may be too pessimistic. As it is shown above, the parents may soon realize the declining value of sons in providing old-age support in the context of rapid socioeconomic transformation in rural China, and therefore may decide to have fewer but more 'dutiful' children.

Perhaps in no other country in the world would we have seen the dramatic demographic and socioeconomic transformations as the ones in China in the past decade. After more than three decades of socialist revolution which shifted the center of social and economic life away from the family to the state and the collective, China took a sharp turn after the death of Mao in 1976. The family has again become the central unit of economic and social life in China, especially in its vast rural areas, and it has again become the backbone for old age support for the majority of the Chinese elderly. It is true that the recent fertility decline will reduce the number of children who have been so far the main supporters to the elderly. However, a family support system for the elderly with new features may also emerge under the new demographic regime. Most importantly, however, the well-being of the Chinese elderly in the decades to come may not depend as much as on th demographic factors and it may on the directions of current and future socioeconomic transformations.

# **APPENDIX**

# QUESTIONNAIRE USED IN QUANTANG AND QIAOXIA ELDERLY PEOPLE SURVEY

ID Address		Date of interview
Length of interview (m	inutes)	
Presence of other people while interviewing		
Other people answer for the respondent 1=yes, 2=no		
(Q. 1) Basic characteristics:		
1) Date of birth	Age	Animal year
2) Sex		
3) Marital status:	1=never married 2=married 3=separated 4=widow/widower 5=divorced	·
	Number of years of w	ridowhood
4) Self evaluation of health co	ondition 1=healthy 2=heart disease 3=cerebrovascular dis 4=tumor, cancer 5=respiratory disease tuberculosis) 6=rheumatism 7=intestinal infectious 8=neurosis 9=injury	(pneumonia,
5) Self evaluation of sense of	hearing 1=good 2=not very good 3=bad	
6) Self evaluation of visual al	bility 1=good 2=not very good 3≃bad	
7) Self evaluation of function		clothes, etc) king care

8) Education attainment

1=illiterate
2=semi-illiterate
3=primary school
4=middle school
5=high school
6=above high school

9) Self evaluation of ability to work

1=full time 2=part-time 3=no ability 9=retired worker

10) Type of work

1=do not work 2=housework

3=farming and other economic activities

4=housework+economic activities

11) Types of economic activities

1= growing tea 2= rice field 3= sweet potato

4= carpentry/bricklayer

5= growing vegetable, raising pigs

6= others (small business)

12) Daily activities (1/0)

1= working in the field

2= engaging other economic activities

3= doing household chores

4= chatting, playing

5= reading newspaper, books

6= baby-sitting

7= taking a nap at noon

8= sleeping early in the evening 9= watching TV in the evening 10= getting up early in the morning

11= others

## (Q. 2) Family structure

1) living arrangement (persons with whom living together)

1= spouse

2= never married sons

3= never married daughters

4= married sons

5= married daughters

6= daughter-in-laws

7= son-in-laws

8= grand daughters

9= grand sons

10= great grand children

11= mother

12= father

13= adopted children

14= brothers and sisters

15= relatives from spouse's side

16= distant relatives

17= other people

18= living alone

- 2) Availability of kin and characteristics of kin (1-20)
- a) relationship with the elderly

1=spouse

2=never married sons

3=never married daughters

4=married sons

5=married daughters

6=daughter-in-laws

7=son-in-laws

8=grand daughters

9=grand sons

10=great grand children

11=mother

12=father

13=adopted children

14=brothers and sisters

15=relatives from spouse's side

16=distant relatives

- b) age of the kinsman
- c) sex of the kinsman
- d) occupation of the kinsman

1=children before school years

2=student

3=farmer

4=worker at township factory 5=worker at state-owned factory

6=small business man

7=carpenter/bricklayer

8=cadre

9=teacher

10=doctor

11=technician

12=retired worker

13=old farmer

14=housewife

15=others

e) geographical proximity of the kinsman

1=the same village
2=neighboring villages
3=the same township
4=neighboring townships
5=the same county
6=neighboring counties
7=the same province
8=neighboring province
9=other province
10=Hong Kong or Taiwan

## f) family association

1=every day dinning
2= frequent dropping in
3= greeting and gathering in new year and other festivals
4=visiting once every few years
5= writing letter
6=discussing things important to life

## 2) Number of kin mentioned

1=spouse 2=never married sons 3=never married daughters 4=married sons 5=married daughters 6=daughter-in-laws 7=son-in-laws 8=grand daughters 9=grand sons 10=great grand children 11=mother 12=father 13=adopted children 14=brothers and sisters 15=relatives from spouse's side 16=distant relatives

- (Q. 4) Types of assistance the elderly person provides to his/her kin
- 1) Giving advise to important things
  - sons
  - daughters
  - other relatives
- 2) Baby-setting, including the past
  - sons
  - daughters
  - other relatives

3) Cooking

- sons

- daughters
- other relatives
- 4) Other household chores
- sons
- daughters
- other relatives
- 5) Sending special gifts, like tea, to relatives far away
  - sons
  - daughters
  - other relatives
- 6) Providing money, or lending for wedding or building new house
  - sons
  - daughters
  - other relatives
- 7) Helping in special occasions, such as childbirth and sickness
  - sons
  - daughters
  - other relatives
- 8) Doing farm work or other hard work
  - sons
  - daughters
  - other relatives
- 9) Giving new year gift, such as Hongbao
  - sons
  - daughters
  - other relatives
- (Q. 5) Type of assistance the elderly's kin provides to him/her
- 1) Providing food grain

1=sons

2=daughters

3=other relatives

4=government

5=self-providing

6=spouse

7=rent from land

2). Providing firewood

1=sons

2=daughters

3=other relatives

4=government

5=self-providing

6=spouse

7=neighbors and friends

3) Providing vegetables, eggs and other daily foods

1=sons 2=daughters 3=other relatives

3=other relatives 4=self-providing

5=spouse

7=neighbors and friends

4) Providing medical expenses

1=sons

2=daughters

3=other relatives

4=government

5=self-providing

6=spouse

7=no expense, very healthy,

8=cannot afford

5) Sewing or buying clothes

1=sons

2=daughters

3=other relatives

4=daughter-in-laws

5=son-in-laws

6=spouse

7=self-providing

8=cannot afford

6) Helping with household chores

1=sons

2=daughters

3=other relatives

4=daughter-in-laws

5=son-in-laws

6=spouse

7=self-managing

8=neighbors and friends

7) Giving tonic medicine, such as tonic medicine made of ginseng for longevity

1=sons

2=daughters

3=other relatives

4=nobody provide

8) Helping with work in the field

1=sons

2=daughters

3=other relatives

4=daughter-in-laws

5=son-in-laws

6=spouse

7=self-managing

9) Giving wines, fruits, cigarettes and cookies during holiday seasons

1=sons
2=daughters
3=other relatives
4=daughter-in-laws
5=son-in-laws
6=self-managing

10) Taking care of, and sending to the hospital when sick

1=sons
2=daughters
3=other relatives
4=daughter-in-laws
5=son-in-laws
6=spouse
7=self-caring

8=neighbors and friends

11) Providing intensive care when the elderly could not take care of himself or herself

1=sons
2=daughters
3=other relatives
4=daughter-in-laws
5=son-in-laws
6=spouse
7=nebody to take car

7=nobody to take care of 8=neighbors and friends

9=N.a

12) Providing under 10 yuan pocket money every month)

1= sons 2= daughters 3= other relatives

13) Providing 11-20 yuan living allowance every month elderly's kin provides to him/her

1= sons 2= daughters 3= other relatives

14) Giving 21-50 yuan living allowance every month

1= sons 2= daughters 3= other relatives

15) Giving over 50 yuan living allowance every month)

1= sons 2= daughters 3= other relatives

16) Giving money upon request)

1= sons 2= daughters 3= other relatives

(Q. 6) How close do you feel toward your adult children?

1=very close
2=close
3=neutral
4=not very close
5=not close
9=N.A.

(Q. 7) People say that the younger generation and the older generation are very different, they always have conflicts in general values, such as morals and politics. Do you have conflicts on the above mentioned aspects?

1 =very big 2 =very little 3 =no 9 =N.A.

(Q. 8) In almost every family, there is conflict between elderly parents and their adult children on family matters. Do you have any disputes with your family, especially adult children on the following aspects?

1= arranging production or business in the family.
2= consumption expenditure in the family
3= daughter-in-law and mother-in-law
problem
4= marriage of children
5= children's study and work
6= childbearing of adult children
(family size preference and sex preference)
7= discipline of the grandchildren
8= others (we do not live together)

9= no conflicts

(O. 9) How do you solve above disputes?

1= relatives mediating
2= neighbor mediating
3= village cadre mediating
4= court
5= making concession each other
6= refusing to budge
7= others
8= N.A
9= N.a (no conflict)

(Q. 10) Except for disputes in general values and family matters, older people and younger people also have conflicts on personal habits, such as:

1= smoking,
2= alcoholism,
3= personal hygiene,
4= clothe styles
5= spending money wastefully,
6= getting up late in the morning,
7= talking too loud
8= others
9= don't care
10= N.A.

(Q. 11) What are the things that children are supposed to do for their parents?

1= being solicitous with elderly parents' health

2= providing food grain, firewood and

vegetable

3= helping with household chores

4= helping to pay medical bill

5= taking care of when sick

6= preparing coffin, having a funeral

7= procession and holding a memorial

ceremony in Qingming

8= others

(Q. 12) What are the things that the elderly parents should do for their adult children?

1= bringing them up

2= letting them go to school

3= preparing betrothal gifts and a new house for sons'

wedding

4= preparing dowry/trousseau for daughters wedding

5= helping to take care of grandchildren

6= giving son heritage

7= others

(Q. 13) Some people say that the elderly should be independent, and should not be depended upon their adult children

1= strongly agree

2= agree

3= neither agree nor disagree

4= disagree

5= strongly disagree

6 = N.A.

- 1) Reasons for agreement on being independent
- 2) Reasons for disagreement on being independent.
- (Q. 14) Do you agree with the statement that "Filial piety is the most important thing a parent can teach to a child"?

1= strongly agree

2= agree

3= neither agree nor disagree

4= disagree

5= strongly disagree

9 = N.A.

- 1) Reasons for agreement on the most important thing a parent can teach a child is filial piety.
- 2) Reasons for disagreement on the most important thing a parent can teach a child is filial piety.

(Q. 15) Some people say that it is better for the elderly to live with their adult children in the same household.

1= strongly agree

2= agree

3= neither agree nor disagree

4= disagree

5= strongly disagree

9 = N.A.

- 1) Reasons for agreement on the idea that elderly people living with their adult children.
- 2) Reasons for disagreement on the idea that elderly people living with their adult children.
- (Q. 16) Some people say that having nobody to support in the old age is the most unfortunate thing.

1= strongly agree

2= agree

3= neither agree nor disagree

4= disagree

5= strongly disagree

9 = N.A.

- 1) Reasons for agreement on having nobody to support in the old age is the most unfortunate thing.
- 2) Reasons for disagreement on having nobody to support in the old age is the most unfortunate thing.
- (O. 17) Some people say that "the more sons, the merrier"

1= strongly agree

2= agree

3= neither agree nor disagree

4= disagree

5= strongly disagree

9 = N.A.

- 1) Reasons for agreement on "the more sons, the merrier"
- 2) Reasons for disagreement on "the more sons, the merrier"
- (Q. 18) some people say that "the more daughters, the merrier"

1= strongly agree

2= agree

3= neither agree nor disagree

4= disagree

5= strongly disagree

9 = N.A.

- 1) Reasons for agreement on "the more daughters, the merrier"
- 2) Reasons for disagreement on "the more daughters, the merrier"

(O. 19) Some people feel that spouse is more dependable

1= strongly agree

2= agree

3= neither agree nor disagree

4= disagree

5= strongly disagree

9 = N.A.

- 1) Reasons for agreement on that "spouse is more dependable"
- 2) Reasons for disagreement on that "spouse is more dependable
- (Q. 20) Have you purchased any consumer durable listed in the following before the responsibility system?

watch (0-9)

bicycle

sawing machine

tape recorder

black and white TV

color TV

washing machine

refrigerator

electric fan

(Q. 21) Have you purchased any consumer durable after the responsibility system?

watch (0-9)

bicycle

sawing machine

tape recorder

black and white TV

color TV

washing machine

refrigerator

electric fan

(Q. 22) Have you built any new house in the recent years?

1=yes

0=no

- 1) When was the new house built
- 2) How many room in that new house
- 3) How much money spent (unit: 100 yuan)
- (Q. 23) what kind of production/business do you have:

1= growing rice, sweet potato,tea

2= raising rabbits, silk worm, raising pigs, chickens,

and ducks

3= small business

4= sidelines:carpentry, bricklaying

5= being a worker at village factory and at state-owned factory

6= growing vegetable

7= sidelines

8= others

9 = N.A.

## (Q. 24) Income

Personal income (including spouse) from work last year (unit: 100 yuan):

Pension last year:

Financial support from kin last year:

Household income (including adult children) last year:

Total income last year:

(Q. 25) What do you think of your income level in the village?

1= very high

2= high

3= middle

4 = low

5= very low

9 = N.A.

(Q. 26) What is your position in managing expenditure in the family before the responsibility system

1= total control of the family expenditure

2= partially control of the family expenditure

3= only control of personal expenditure

4= have no right to control any expenditure

9 = N.A

(Q. 27) What is your position in managing expenditure in the family after the responsibility system

(Same as Q. 26)

(Q. 28) What is your main living resources

1= income from work

2= pension

3= resources from children

4= rent

5= selling

6= resources from relatives

7= interest from bank

8= resources from the collective, "five guarantee"

9=others

(Q. 29) What is your secondary living resources

1= income from work

2= pension 3= resources from children

3= resources from children
4= rent
5= selling
6= resources from relatives
7= interest from bank
8= resources from the collective, "five-guarantee"
9=others

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