

## OLD-AGE SUPPORT SYSTEM AND POLICY REFORM IN CHINA

SHENGZU GU, PH.D.

*Nong Zhu Institute of Population Research Wuhan University, Hubei, China*

NONG ZHU, PH.D.

*Wuhan University, China*

XINGUANG CHEN, PH.D.

*School of Public Health Tongji Medical University, Hubei, China*

JERSEY LIANG, PH.D.

*Institute of Gerontology, University of Michigan, Ann Arbor, Michigan, U.S.A.*

*With the on-going economic transition from the central planned system to a market-oriented system, the population aging process in China is also accelerating, and the support system for the elderly becomes an important issue demanding attention. With data from Chinese national statistics and a regional probability sampling survey in Wuhan Area, two supporting systems for the aged in China are examined in this paper. After a briefing of the population aging process in China, a detailed discussion of the two supporting systems, i.e. the formal and the informal support systems for the aged, including arrangement, operation and funding mechanisms of the systems, is made in terms of policy reform. Then follows an international comparison to highlight features and problems of the Chinese systems. Finally, solutions are proposed for the restructuring of China's pension systems.*

### POPULATION AGING IN CHINA

Among the 1.2 billion population (account for over 20 percent of the world population) in China, 5.58 percent are over age 65 in 1995. Although this percentage of the aged is not very high compared with those in developed countries, the total number of the aged in China is about 77 million, the largest in the world. Not only the aged population body is large, the aging process in China is also the fastest compared with other developed countries (see Table 1). It is estimated that the population aged 65 and over will reach 17 percent of the total population (or 285 million in absolute number) by the year 2050. At that time, the population aged 65 and over in China would be more than the current total population of the

**TABLE 1.** A COMPARISON OF SELECTED POPULATION AGING INDEXES AMONG FOUR COUNTRIES: FROM 2000 TO 2050

	China	U.S.A.	Japan	Korea
<u>The Year 2000:</u>				
Support Ratio				
Total	68	64	62	64
Youth	56	44	38	53
Elderly	12	20	24	11
Percent Elderly	7	12	15	6
Oldest Old	32	44	35	29
<u>The Year 2050:</u>				
Support Ratio				
Total	75	83	85	76
Youth	45	45	45	46
Elderly	30	38	40	30
Percent Elderly	17	20	21	17
Oldest Old	50	47	50	45

Sources: K.C.Zachariah and My T.Vu,1988,World population Projections 1987-88 Edition,The Johns Hopkins University Press, Baltimore and London.

United States. While France, Sweden, the United States and United Kingdom took from 45 to 130 years to double their percentage of the population aged 65 and over from 7 to 14 percent, China, by the estimation, would only take 27 years.

The high speed of population aging certainly will result in high support

**TABLE 2.** A COMPARISON OF YEAR WHEN THE ELDERLY AGED 65 AND OVER REACH 7 AND 14 PERCENT IN SELECTED COUNTRIES

country	Year when the percentage of population aged 65+ reached		Years needed to double the percentage
	7%	14%	
China	2000	2027	27
Japan	1970	1996	26
United States	1966	2012	46
Sweden	1890	1975	85
France	1865	1980	115
United Kingdom	1930	1975	45

Source: U.S.Bureau of the Census,center for International Research, International Data Base of Aging; UNDIESA, 1991. Japan Ministry of Health and welfare.1983, and other national statistical compendia.

(or dependent) ratio, especially the elderly support ratio (see Table 2). According to an estimation by Zachariah and Vu (1988), elderly support ratio in China would rise from 12 percent to 30 percent from the year 2000 to 2050, an 1.5 times increase, and close to that of Korea, but much greater than that of the United States and Japan. The oldest old in China would also increase from 32 percent to 50 percent, closer in level to the United States and Korea but faster in speed than all the countries compared.

Demographically, population aging is due to the declining fertility and increasing longevity. In all the developed countries, this dynamic population change is highly associated with their industrialization, urbanization and modernization processes, and seem to be occurring smoothly and gradually. In China, however, the aging process comes so fast that no sufficient preparations can be made in time to accommodate such a huge and sudden increase of the aged population, mainly due to its lower level of economic development and the man-made control of the population dynamic change. The government initiated health movements brought the population mortality from 30 per thousand in early 1950s to 10 per thousand in later 1980s while the planned birth control programs pulled the total fertility from 6 births per woman in 1970s to about 2 in the 1990s.

Population aging not only raises the support ratio, but also increases the

TABLE 3 NUMBER OF PENSIONERS IN CHINA:1952-2000 AND REGIONAL DIFFERENCE IN NO. OF PENSIONERS: 1993

Year	No. of Pensioners to workers	Ratio of retirees
1952	0.02	1 : 800
1978	3.14	1 : 30.3
1993	27.80	1 : 5.4
1995	30.10	1 : 5.2
2000	38.40	1 : 4.6
Regions(1993)		
Shanghai	1.74	1 : 2.8
Liaoning	2.31	1 : 4.4
Tianjin	0.70	1 : 4.2
Hunan	1.22	1 : 4.8
Henan	1.14	1 : 6.7
Inner Mongolia	0.53	1 : 7.4

Sources Chinese State Statistical Bureau. 1994. Statistical Yearbook of China 1994, China Statistical Publishing House, Beijing.

Notes: Ratio of retirees to workers by region is only for SOEs. Figures for 1995 and 2000 are projected.

TABLE 4. NATIONAL TREND OF PENSION EXPENDITURE IN CHINA (Chinese Yuan)

Year	Expenditure for pensions (in billion)	Pension as percentage of wag pensioner	Average annual pension per employees	Annual pensions for collective
1978	1.7	3.0	574(89)	333(66)
1985	14.9	10.8	1070(88)	687(70)
1993	91.3	18.6	3661(104)	2405(93)
1995	95.8	15.4	—	—
2000	187.7	14.0	—	—

Sources State Statistical Bureau(SSB),1994,Statistical Yearbook of China 1994, Beijing: China Statistical Publishing House.

Note: Figures in 1995 and 2000 are estimation and projection. Figures in the parenthesis are percentage of pension to wage before retiring.

ratio of retirees to active workers and increases the pension expenditure (see Table 3 and 4). The retired population in 1978, according to Chinese State Statistics Bureau (SSB), numbered more than 3 million. By 1993, it increased to 27.8 million, or 8.8 times increase and more than the national population of Austria. The ratio of retirees to active workers rose from 1:800 in 1952 to 1:5.4 in 1993. An estimation from World Bank on the same issue shows that the number of workers available to support population at retirement age would drop from about 5.4 now to 2.3 by the year 2030 (Silverman, 1995). The ratio of retirees to workers also varies with region (or economy). The more developed municipalities have a lower ratio than the less developed provinces.

The expenditure for pension plans increased from 1.7 billion Chinese yuan in 1978 to 95 billion in 1995, and is predict to increase to 187.7 billion by the year 2000 (Dai, 1994). The pension bill, as percentage of wage bill, climbed from 3 percent in 1978 to 18.6 percent in 1993 (SSB, 1994). However, this proportion decreased to 15.4 percent in 1995, and is predicted to decrease further to 14.0 percent by the year 2000 due to the rapid wage increase for the active working laborers. According to Chinese SSB data, the national social security outlay for 1990 reached 110.3 billion yuan and, if housing subsidies, employee trainings, food price subsidies, public welfare social services were included, as in foreign datakeeping, this figure would have topped 200 billion yuan to make up over 11 percent of China's GNP (Yang, 1994). From 1978 to 1993, the total pension expenditure increased about 52 times, but the average individual benefit only increased 5.3 times during the same period due to the growth in absolute number of the retired population.

## PUBLIC SUPPORT SYSTEMS FOR THE AGED IN CHINA

Generally, two broad categories of financial support system for the elderly can be identified in China: the formal or public support system and the informal or family support system. These two systems constitute the foundation of social security for the aged population in China, especially the informal ones which covers great majority of the aged population in rural China.

### *AN INTRODUCTION TO THE PUBLIC SUPPORT SYSTEMS: PENSION, SOCIAL ASSISTANCE AND HEALTH INSURANCE*

The public support or formal support system refers to those financial supports for the elderly provided by the State and enterprises through different social security programs. There are three distinguished public social security programs in China: a) Public Pension Program (PPP) for the retirees; b) Social Assistance (welfare) Program (SAP) for the poor or needy elderly; and c) Health Insurance Program (HIP) for the elderly. Among the three programs, the PPP system is the most developed one in terms of history, coverage and administration. It played a crucial role in the maintenance of welfare for all the employees both in enterprises and government agencies. A detailed description of the PPP program will be provided after an introduction to each of the three Programs above.

#### 1. Public Pension Program

The PPP program as a social security system for the aged was set up in early 1950s when China began its large scale national construction. The Program started with two regulations: Enterprise Labor Insurance (ELI) for workers in the state/collective-owned enterprises, and Government Insurance (GI) for employees working in government, political party organizations, cultural, educational, health, sports, sciences and other related institutions.

#### 2. Social Assistance Program

This program provides financial support and services to childless and needy elderly population, and is usually referred to as the Social Welfare Program. (It is worth noting that only those childless elderly without any family and/or relative supports are eligible for the SAP program. ) Usually, the eligible persons for SAP are institutionalized, and basic living conditions

TABLE 5. SOCIAL WELFARE PROGRAMS FOR THE CHILDLESS ELDERLY IN CHINA, 1992

	Number of institutions	Annual average spending (RMB)	Number of Elderly covered	Subsidized by Government (%)
Home for the Aged:				
By sponsors				
Government-run	1,185	2,969	35,669	90% <sup>a</sup>
Community-run	40,782	7,22	350,000	13%
By Geography				
Rural	26,472	583	329,298	—
Urban	15,495	—	56,371	—
Childless Elderly Covered by Welfare Plan in Communities				
Total	41,967	—	2,095,669	22%

Sources: State Statistical Bureau. 1993. Social Statistical Data in China State Statistical Publishing House, Beijing China.

Note a: This is an estimate.

are provided. In the rural area, this program is specifically called "Wu Bao" (Five Guarantees) Program, which covers food, clothing, medical care, housing, and burial expenses for the eligible person.

The SAP program is financed mainly by government and community through their Social Welfare and Relief Funds, therefore large disparity is observed between rural and urban in terms of the financial conditions of the program. Table 5 gives the distribution and performance of the SAP in China. In 1992, there were totally 41967 institutions established nationwide with 63 percent in the rural area, and 99 percent of them are run by local communities. The government-run 1185 institutions covered 35,669 persons accounting for more than 90 percent of the qualified persons, with a cost of 2969 yuan per person; while the community-run 40,782 institutions covered about 350 thousand persons accounting for only 13 percent of the total qualified persons, with a cost of only 722 yuan per person.

### 3. Health Insurance Program

This program for the aged is part of the retirement benefit package. Usually, a person can obtain health insurance from his/her original work unit up to the pre-retirement level depending on the duration of services and ranks when at work. Therefore, the program funds still come from the

original LEI or GI programs. Nowadays, certain better-off villages in the rural area provide health insurance for the old farmers. These kinds of farmer health insurances are usually set up by the local government and financed by patients and local communities.

### *THE OPERATION OF THE PUBLIC PENSION PROGRAM*

#### 1. The Financing and Management of the Public Pension Program

Under the state regulations, the funds for the GI Program come only from government revenue; while the funds for ELI Program are contributed by employers alone without direct contributions from their employees. There was neither a pooling arrangement nor an accumulative mechanism for the program funds during the pre-reform period. When the number of pensioners was small, the system seemed to work reasonably well. As the ratio of pensioners to active workers increases, it has become increasingly cumbersome.

The management of the PPP programs in China is rather decentralized. The GI Program is implemented by the government at each administrative level of the Chinese government system (the central, the provincial, the city, the county, and the township level), and the ELI programs are operated by individual enterprises rather than by the central government. An employer is both a sponsor and a manager of its ELI Program, and the management of pensions is entrusted entirely to each work unit. Therefore, each employer is responsible for keeping records of relevant parameters of each employee for the determination of his/her pension when he/she retires; for calculating and distributing pensions to the eligible retirees; and certainly for financing the program.

The bill for GI program is paid directly from the current government revenue based on the annual budget; while the payment of ELI is directly taken from the Social Welfare Funds of the enterprise. This is similar to the Pay-as-you-go system in the western countries. Another feature of the GI and ELI programs in China is that the program benefits are not automatically adjusted to inflation as in most of the developed countries where the payment is directly adjusted by the price index. However, the government in China gives supplemented pension payments by awarding pensioners "subsistence grants" according to inflation situation.

#### 2. Benefit Determination and Transformation

The benefits each qualified person can obtain vary by ownership category of the enterprise he/she worked with, type of pensions, sector of enterprises

and rank of government agencies. Generally, the retirement benefits in state-owned sectors are rated as the best, followed by programs in the collective sectors, and last, rural enterprises. The GI payment is higher than that of the ELI of the state/collective-owned enterprises; and the ELI of the state-owned enterprises is more generous than that of the collective-owned enterprises; the pension payment in the higher ranks of the government system is more than the pension payment in the lower ranks of the system.

The benefits from both GI and ELI programs are also related to the duration an employee serves in the unit before he/she retires. The minimum years of services to qualify for old-age benefits vary from 25 years of general services to 10 years of continuous services in the same enterprise. Prolonged work tenure is credited with increased benefits. Pensioners in the state-owned enterprises can receive a monthly benefit up to 60 percent of their last month's standard wages if they meet the minimum criteria of 10 years of continuous services. In addition, an earning-related supplement is added to the basic monthly pension for those who meet one of the following conditions: (1) if 15 or more years of continuous service, an extra 10 to 15 percent of their pre-retirement wage is added; (2) if participated in labor forces before the founding of the People's Republic of China, an extra 20 to 30 percent is added; and (3) if named as national model workers, or combat heroes, an extra 5 to 15 percent is added. Pensioners who choose to relocate can also receive a lump-sum payment of 150 yuan mainly for transportation, or receive a lump-sum of 300 yuan plus transportation costs if relocating from urban to rural area (Liang, 1986).

Retirement benefits for retirees in the collective enterprises are less than those in the state-owned enterprises. Benefits, which represent approximately 45-60 percent of the pre-retirement wage, are payable on retirement when they complete 20 years of work with eight years of continuous service (Liang, 1986).

Because the ELI program is administered under each individual enterprise, the program benefits can not be transferrable from the state-owned enterprises to the collective-owned enterprises. However, benefits can be transferred from one state-owned enterprise to another state-owned enterprise.

The benefit and security provided by the PPP programs are multi dimensional and comprehensive. An employee in any urban enterprises is entitled to many urban benefits (Kwok, 1990). As mentioned before, the securities an enterprise provided were not only pension payment and health insurance, but also subsidies for housing, inflation, transportation, and job opportunities for the pensioner's children. A pensioner can still live in the



same house where he/she lived before retiring without any increase in rent. The rental bill is about 1 to 2 percent of the total household income. A pensioner can also be entitled to receive price subsidies for daily necessities.

### 3. The Performance of the Public Pension Program

Table 6 presents total labor force in different sectors, and the corresponding ELI and GI coverage in 1978 and 1993 respectively. Total labor forces were 401 million in 1978, and 88.6 of them were covered by either GI or ELI program, implying a coverage rate of 22 percent. This percentage increased to 31 in 1993. Although there are some increase in the PPP coverage during the past 15 years in China, the percent covered is rather low when compared with those in other developed countries.

The lower percentage of the PPP coverage is mainly due to the lack of public social security programs for those 300 to 450 million farmers in the rural area of China. As can be seen from Table 6, all government and state-owned enterprise employees were covered by GI and ELI Programs; 86 percent of the collective-owned enterprise employees were covered by ELI Program; only 50 million farmers, accounting for 11 percent of the total

TABLE 6. PENSION COVERAGE RATE BY SECTOR, 1978 AND 1993

Sector	1978			1993		
	Total laborers	Number covered	Percent laborers	Total laborers	Number covered	Percent laborers
Urban Labor Forces:	95.14	88.85	93%	159.64	138.38	86.68%
A. Enterprise Labor Insurance(ELI):						
State	59.55	59.55	100%	76.42	76.42	100%
Collective	20.48	14.34	70%	33.93	29.18	86%
Private	0.15	none	—	11.16	—	—
Others	—	—	—	5.36	—	—
B. Government Insurance(GI):	14.96	14.9	100%	32.78	32.78	100%
Rural Labor Forces						
C. Rural Insurance(RI):	306.38	none	—	442.56	50.00	11.30%
Total Labor Forces	401.52	88.58	22%	602.20	188.38	31.28%

Sources: State Statistical Bureau. 1994. Statistical Yearbook of China 1994. China Statistical Publishing House, Beijing, China.

farmers, were covered by rural pension program by the end of 1993 (FBIS-CHI, 24 February) . Another problem worth noting is that the data did not show any social security coverage for the employees in private sector which now is one of the relatively active parts in the development of China's economy.

Figures in Table 6 further show that the PPP programs just covered the wage-earning employees in urban area, and left the vast majority of those who engaged in farming and fishing with little or no coverage at all during the pre-reform period. It seemed that the social security in rural areas took a form of means-tested social relief for the needy population and disaster relief. The rural labor offers were mainly "secured" by a piece of land which let individual farmers earn a living through farming rather than by social security. Even though, this does not sound like any security or insurance, the piece of land offers farmers a low and seemingly stable income, no risk of unemployment, and therefore the farmers are considered to have insurance. Another important security mechanism for farmers is family system, which will be discussed in detail in Section 4.

#### AN INTERNATIONAL COMPARISON OF PENSION PROGRAMS

For a better understanding of the Public Pension Programs in China, the main features of pension plans in China, Japan and the United States are compared, including pension coverage, administration, financing and so forth (see illustration 3.1 and 3.2 below).

##### *PENSION COVERAGE*

The pension coverage rate (defined as the ratio of workers covered by pension to the total labor forces) was 31 percent in China, 95 percent in the United States and 100 percent in Japan (see, Illustration 3.1). The extremely lower pension coverage in China suggests that the social security system is far from fully developed. Great efforts have to be devoted to promote development of the system so that basic human rights (survival and development) can be guaranteed for all Chinese residents. Currently, the security system in China is a dual system; the vast majority of working population have no formal social security support or supported only by their families (a primitive form of social support), while a small part of workers in government agencies and state/collective-owned enterprises in urban areas are covered by well-developed social security programs.

### *PENSION ADMINISTRATION*

The management of pension programs in China is also different from that in Japan. A decentralized management style is adopted in China to manage pension programs, even though China has a highly centralized government system; while a centralized style of management is used both in Japan and the United States where decentralized governing system is dominated. It is very hard to tell in what way the pension or social security programs can be better managed. However, it should be an interesting topic to search for answers to why the decentralized government uses the centralized policy and the centralized government uses the decentralized policy to govern their social security programs.

### *FINANCING MECHANISM OF PENSION PROGRAM*

The financing mechanism of pension program in China is also different from that in the United States and Japan. Government revenue and enterprisers' contributions are the only two sources of pension funds in China. Payroll taxes as on both employees and employers are the major sources in Japan and the United States, where half of contributions of the pension funds come from employees and half from employers. Although the employees in China now began to contribute some (2 or 3 percent of their income) to the pension funds as a trial of social security reform, the employers contribute much more.

There are two possible explanations why the employees in China contribute little to the pension funds. First, in China, the meaning of "payroll" to the employees of both government and enterprises is totally different from that in the US and Japan. When a person in China receives his/her pay roll, it is really a net pay because other public expenditures, with known or unknown reasons, are already deducted. Furthermore, the employees seldom know how much is deducted and why?. Second, the centralized administration and planned economy afford a Chinese government a package of power and duties including the provision of social security. The general public seldom knows that they have to contribute to the pension program. Everyone considers that he/she is a member of the country, works for the country, and naturally should be secured by the country.

### *BENEFIT PLANS OF PENSION PROGRAMS*

There is no radical difference in the benefits plan among the three

---

**ILLUSTRATION 3.1: A COMPARISON OF FEATURES OF PENSION PLANS IN CHINA, JAPAN AND THE UNITED STATES**


---

**Coverage Rate**

China 31 percent of workers are covered, and the rest are "covered" informally by family system.

Japan 100 percent of all the residents are covered.

U.S.A. 95 percent of workers are covered, the rest are covered by special government employees, program.

**Administration**

China Decentralized, the programs are administered by individual enterprises under the guidance of the central government.

Japan Central administration.

U.S.A. Central administration

**Benefits**

China The old-age benefit formula is earnings-related, and a pensioner who meets the minimum 10 years of continuous service can get a monthly benefit up to 60 percent of his/her last month's standard wage.

Japan A universal, flat-rated benefit for all with adjustment for age at retire (age 65: full; age 60: reduced). Earning-related benefits (starting at age 60) for private business and government employees.

U.S.A. Earning-related benefit based on indexed lifetime earnings. Full benefit if payment begins at age 65; reduced if at age 62 to 64.

**Financing**

China Entirely financed through employers' and government revenue. Normally, no contribution from employees.

Japan Directly financed through payroll tax of employees, employers, self-employed payment, and government revenue

U.S.A. Directly financed through payroll tax of both employees and employers.

**Cost-of-living Adjustment**

China Benefits are not automatically adjusted for inflation.

Japan Automatic adjustment for cost-of-living annually.

U.S.A. Automatic adjustment for cost-of-living annually.

---

**Sources:**

China: Tracy, Martin B. and Pampel, Fred C. 1987. *International Handbook on Old-Age Insurance*, New York, Greenwood Press.

Japan and U.S.A: Turner, John A. and Dailey, Lorna M. 1991. *Pension Policy: An International Perspective*, U.S. Government Printing Office, Washington, DC. Martin, Linda G. 1989. *The Graying of Japan*, the Population Reference Bureau. inc., Washington, DC.

countries in terms of benefit plans . The benefit plan of the pension program in China is basically an earning and year-of-service related plan, formally named a "defined benefit plan". This is similar to that in the United States. In Japan, the situation is a little bit different. Japan adopted a universal flat benefit plan with certain adjustments for the age at retirement and year of service.

Although China, Japan and the United States have similar benefit plans,

ILLUSTRATION 3.2: MAIN PROGRAM FEATURES OF OLD-AGE INSURANCE IN CHINA, JAPAN AND THE UNITED STATES OF AMERICA

	China	Japan	U.S.A
Contribution			
Rate	-	12.4%	15.3%
Employers	100%	50%	50%
Employees	-	50%	50%
Replacement rate	60-100%	69%	38-57%
Minimum years of services	*60% for 10 *10-15% for 10+ *20-30% more for employed before 1949 *5-15% more for national model workers.	20	10
Age for full benefits	Male: 60 Female: 55	Male: 60 Female: 55	Both sex: 65

Sources:

China: Tracy, Martin B. and Pampel, Fred C. 1987. *International Handbook on Old-Age Insurance*, New York, Greenwood Press.

Japan and U.S.A: Turner, John A. and Dailey, Lorna M. 1991. *Pension Policy: An International Perspective*, U.S. Government Printing Office, Washington, DC.. Martin, Linda G. 1989. *The Graying of Japan*, the Population Reference Bureau. inc., Washington, DC.

there is no automatic adjustment mechanism of the benefits to the cost-of-living in China. This is due to the strictly controlled price policy in the past which now reduces the benefits of the retirees when a market-oriented economy is in operation. In addition, the benefit plan in China is comprehensive and multi-dimensional, while in Japan and the United State, the benefit is mainly a piece of pay check, and the market does every thing for the pensioners.

Another benefit plan worth mentioning is the “defined contribution plan”, which is similar to a saving account. Money is periodically deposited into an individual’s account. The worker’s ultimate benefits depend on the investment performance of the account, where the beneficiary bears the investment risk. It would be a good supplementary as a means for China to develop its social security system.

## FAMILY SUPPORT SYSTEM: AN INFORMAL SOCIAL SECURITY FOR THE MAJORITY OF CHINESE PEOPLE

### *DATA SOURCES FOR THE INFORMAL SOCIAL SECURITY IN CHINA*

From 1991 to 1994, a longitudinal probability sample survey was jointly conducted in Wuhan Area by the Institute of Gerontology of the University of Michigan and Wuhan Bureau of Statistics on health and living status of the elderly. This Survey, with a three-staged stratified probability sampling, sampled more than 2000 persons aged 60 and over living in the Wuhan Area. With the 1990 National Census data as a sampling frame, individuals aged 60 and over and residing in Wuhan on July 1, 1990 are defined as the target population. The street committee in urban area and "Xiang", or town in the rural area are defined as a primary sampling unit (PSU), and neighborhood committee in city and village committee in countryside as the second sampling unit (SSU). Seven urban districts, two suburban districts and four rural counties were sampled with 90 PSUs and 180 SSUs selected proportionally to the population size of each sampling unit. Of the 3543 persons interviewed, 2943 persons responded (a response rate of 83 percent) in the first wave survey in 1991; while 2115 responded in the second survey in 1994.

In the survey, sources of support for the elderly were defined as possible coming from spouse, son, daughter, son-in-law, daughter-in-law and others; family support for the elderly was measured with six parameters: (1) confiding personal problems and emotions to someone, (2) loving and caring, (3) respect, (4) sick care, (5) finance and (6) everyday assistance. In addition, sources of income, health care expenditure and other related questions were included in the survey.

### *FROM WHOM THE AGED GET SECURITY SUPPORT IN THE FAMILY*

Table 7 shows the potential sources the aged persons could obtain family support for the six parameters examined. From Table 7 it can be seen that about 15 to 25 percent of the aged people have no possible sources of family support, the percentage varies with sex, age and rural/urban location. For example, the population aged 70+ have less chances of receiving support for personal and emotional problems than the younger ones; male elderly have more opportunity to get family support than females in many aspects; the elderly in urban area generally have less opportunity to get family support.

Who does the aged person actually get their support from in day-to-day

TABLE 7. SOCIAL SUPPORT FOR THE ELDERLY IN WUHAN AREA, 1994

Questions & Answers	Age		Sex		Residence		Total
	60-69	70+	Male	Female	Urban	Rural	
Do you have anyone close to you who is willing to listen to you concerning your personal problems and feeling? If yes, how willing is this person?							
No one available	24	29	26	26	18	34	26
Very willing	16	15	17	15	21	10	16
Willing	50	47	49	49	50	47	49
Average/not very willing	10	10	9	11	10	9	10
Do you have anyone close to you who cares about your well being? If yes, how much does this person care?							
No one available	17	15	15	16	8	23	16
Very much	31	30	33	28	41	21	30
Average	42	45	42	45	41	46	44
Not very much	10	11	9	11	11	10	10
Do you have anyone close to you who respects you? If yes, how much does this person respects you?							
No one available	22	21	20	22	11	31	22
Very respectful	23	24	26	22	31	16	23
Respectful	46	45	45	46	46	45	46
Average	10	10	9	10	11	8	10
Do you have anyone close to you who would take care of you when you are sick? If yes, how much can you depend on this?							
No one available	16	15	14	16	9	22	15
Very dependable	33	33	36	30	40	26	33
Dependable	41	42	40	42	40	43	41
Average/somewhat dependable	11	10	10	11	11	9	10
Do you have anyone close to you who can help you financially? If yes, how dependable is this person?							
No one available	16	14	20	11	18	13	15
Very dependable	26	28	24	30	31	24	27
Dependable	42	42	40	44	37	47	42
Average/somewhat dependable	16	15	16	15	14	17	15
Do you have anyone close to you who can help you with everyday affairs? If yes, how helpful is this person?							
No one available	19	18	19	18	12	25	18
Very helpful	26	28	28	25	35	18	27
Helpful	43	42	42	44	43	43	43
Average/not very helpful	12	12	11	13	10	14	12

Sources: The 1994 Wuhan Survey of Health and Living Status of the Elderly in Wuhan Area.

life? Table 8 provides some answers about it. From the six parameters surveyed it can be seen that the major supports for the aged are from spouses, sons and daughters. For example, 22 percent of the elderly population confide their problems and feeling in spouses, and 24 percent get love and care also from spouses, both are the highest parentage in these two categories. 22 percent of the elderly get respect, 34 percent get sick care, 35 percent get financial support, and 31 percent get day-to-day assistance from sons (the highest percentage of these four categories).

The first three important sources of family support of the six aspects for the elderly in Wuhan show some patterns. For confiding personal problems and feelings in someone, spouses, daughters and sons are (in order, and the same is true for the following) the first three; for loving and caring, spouses, sons and daughters are the first three; for respect, sons, daughters, and spouses are the first three; for financial support and daily assistance, sons, daughters and spouses are the first three.

Data from this survey show that daughters are not the number one source of family support to the elderly even for emotional, loving and caring support which is contradictory to the common knowledge. Another fact is that very few aged people report getting family support from 'in-laws', which needs further study. Probably this is due to the fact that most of the aged persons live with their own sons rather than in-laws, therefore the aged persons have more opportunities to get support from sons.

#### WHAT ARE THE MOST IMPORTANT FINANCIAL SOURCES FOR THE AGED

Table 9 shows that money from children, pensions, spouses and work are

TABLE 8. Self-Reported Sources of Support Among the Elderly in Wuhan, 1994

	confiding problems/ emotions	Loving/ caring	Respect	Sick care	Money care	Everyday assistance
Spouse	22.1	24.2	12.2	22.3	12.3	17.1
Son	16.8	22.1	22.4	33.7	34.8	30.7
Daughter	18.6	21.8	19.8	16.2	18.4	18.2
Daughter-in-law	1.0	1.0	0.8	0.8	0.4	1.8
Son-in-law	0.2	0.1	0.7	0.2	0.3	0.7
Other	8.8	5.8	8.5	2.9	2.3	4.8
NA	32.7	25.1	35.7	23.9	31.7	26.8
N = 1983						

Sources: The 1994 Wuhan Survey of Health and Living Status of the Elderly in Wuhan Area.



major financial sources for the elderly. Those aged 60-69 get more support from pensions; while those aged 70+ get more from children; 62 percent of the aged males get money from pension programs, while 68 of the females get money from children. About 78 percent of the urban elderly reported that a pension is their major income, whereas about 70 percent of the rural elderly reported receiving support from children as their income resources. 56 percent of those who are married get money from pensions whereas 70 percent of those not married receive money from children.

According to this survey, money from work after retirement is still an important source for farmers, retirees from non-state/collective owned enterprises. 97 percent of those engaged in agriculture reported receiving income from work after retirement; whereas less than 10 percent of those in non-agriculture reported receiving income from work. In addition, there are about 25 to 30 percent of the male elderly; the married elderly and the elderly aged 60-69 reported to earn income from work. This percentage is much

TABLE 9. PERCENTAGE DISTRIBUTION OF FINANCIAL SUPPORT FROM DIFFERENT SOURCES FOR THE ELDERLY IN WUHAN, 1994

	work	pension	spouse	children	social relief	saving	other
Age:							
60-69	28%	52%	28%	40%	4%	1%	3%
70+	11%	38%	14%	62%	4%	4%	6%
Sex:							
Male	31%	62%	16%	34%	4%	1%	3%
Female	12%	33%	24%	64%	3%	4%	5%
Residence:							
Urban	12%	78%	28%	30%	6%	2%	5%
Rural	27%	16%	14%	70%	1%	3%	3%
Occupation:							
Agriculture	97%	7%	14%	47%	0%	2%	2%
Non-agriculture	9%	51%	22%	51%	4%	3%	4%
Marital Status:							
Married	25%	56%	36%	37%	4%	1%	2%
Not in Marriage	12%	31%	-%	70%	4%	5%	7%
Ownership of Enterprise:							
State/Collective	10%	58%	22%	48%	4%	2%	3%
Other	50%	7%	18%	61%	4%	4%	7%

N = 2115

Sources: The 1994 Wuhan Survey of Health and Living Status of the Elderly in Wuhan Area.

**TABLE 10.** THE MOST IMPORTANT SOURCE OF INCOME FOR THE ELDERLY BY AGE, SEX, OCCUPATION, MARITAL STATUS AND BUSINESS OWNERSHIP IN WUHAN, 1994

	From Children	From Pension
Age		
60-69	20.0%	48.4%
70+	45.2%	35.1%
Sex		
Male	16.4%	58.7%
Female	44.5%	28.7%
Occupation		
Agriculture	70.0%	4.1%
Non-agriculture	35.5%	47.4%
Marital Status		
In Marriage	16.1%	51.1%
Not in Marriage	55.4%	28.8%
Ownership of Enterprise		
State-own & Collective	32.1%	54.1%
Other	31.7%	4.6%
Total	30.2%	42.1%
N=1983		

Sources: The 1994 Wuhan Survey of Health and Living Status of the Elderly in Wuhan Area.

higher than that of the non married female counterparts, and aged 70+.

Table 10 shows the most important income sources of the elderly in Wuhan. From the Table it can be seen that 59 percent of male respondents and 29 percent of female respondents report that the most important source of income is a "pension"; 54 percent of the respondents in the state-owned enterprises report that a "pension is their most important source of income", while only 5 percent of those in other types of enterprises report that a "pension is their most important source of income. Marital status is also a factor related to the rating of the important income sources. 51 percent of those married reported that a "pension is their most important income", whereas 55 percent of those not married reported that "money from children is their most important income source". In-depth research can be conducted to explore the underlying reasons why there are such large differences among different categories of the aged persons in rating most important income sources.

**TABLE 11.** PERCENTAGE DISTRIBUTION OF SUPPORTS PROVIDED TO YOUNG GENERATIONS BY AGE, SEX, OCCUPATION , MARITAL STATUS AND ENTERPRISE OWNERSHIP IN WUHAN, 1994

	Household chores	Finance necessities	Everyday business	Managing
Age				
60-69	68.1%	38.7%	37.9%	19.9%
70+	59.5	21.8	21.9	11.4%
Sex				
Male	57.3%	42.5%	38.8%	19.7%
Female	69.4%	21.1%	23.4%	12.7%
Occupation				
Agriculture	71.7%	28.3%	29.5%	48.8%
Non-agriculture	62.9%	30.9%	30.4%	11.2%
Marital Status				
In Marriage	64.4%	38.6%	37.8%	17.8%
Not In Marriage	63.4%	18.9%	19.2%	13.0%
Ownership of Enterprise				
State-own & Collective	64.5%	33.7%	32.3%	11.9%
Other	62.3%	21.1%	23.8%	28.0%
N=1983				

Sources: The 1994 Wuhan Survey of Health and Living Status of the Elderly in Wuhan Area.

### WHAT DO THE ELDERLY DO FOR THEIR FAMILIES IN RETURN

Usually, the aged persons do something in family to support their offsprings in return. There are four kinds of jobs the aged frequently do in home:

- (1) help out with household chores,
- (2) provid financial assistance,
- (3) furnish every day necessities, and
- (4) assist in managing business or farming.

Table 11 presents the family jobs the aged often do. From the Table it can be seen that the younger aged are more likely to help their young generations than the older aged. The male aged is more likely to provide support in finance, everyday necessities, and managing business or farming than is the female aged. Respondents engaged in agricultural activities are more likely to provide support in household chores and in managing business or farming.

TABLE 12. SOURCES OF THE HEALTH CARE EXPENSES FOR THE ELDERLY BY AGE, SEX, OCCUPATION RESIDENCE AND IN WUHAN, 1994

	By Their own	From relatives	work units	Others
Age:				
60-69	27.7	23.6	47.3	1.5
70+	19.7	44.6	34.0	1.6
Sex:				
Male	24.9	16.8	57.0	1.3
Female	22.9	47.2	28.1	1.8
Residence:				
Urban	18.9	9.5	71.4	0.2
Rural	28.2	56.2	12.8	2.8
Occupation:				
Agriculture	78.3	15.4	5.5	0.8
Non-agriculture	16.4	36.4	45.5	1.7

Sources: The 1994 Wuhan Survey of Health and Living Status of the Elderly in Wuhan Area.

### HEALTH INSURANCE OF THE ELDERLY

Health insurance is an important concern for the elderly. This survey shows that most of the respondents get medical and health insurances from their work units except for those in agricultural sector, 78 percent of which get insurance through themselves. Urban residents are more likely to be insured by the working units (see table 12).

There are certain sex difference in obtaining medical and health insurances. There are more aged males (57%) than females (only 28%) who get insurance from work units; whereas there are more aged females (47%) than the aged males (17%) who to obtain insurance from relatives.

It is interesting to note that 56 per cent of the rural residents get health insurance from their relatives. The mechanism of such insurance needs to be studied further.

### DIFFERENCES IN SUPPORTS FOR THE ELDERLY BETWEEN 1991-94

When the major findings from the 1991 and 1994 surveys are compared, the following conclusions can be drawn:

(1). As time goes by, less retired people receive income from work. This is true for the aged people with or without pension coverage. The underlining reasons for such a change need further exploration.

(2). Pensioners are less likely to support their children; meanwhile;

TABLE 13. COMPARISON OF SOCIAL SUPPORT FOR THE URBAN ELDERLY WITH AND WITHOUT PENSIONS IN WUHAN: 1991 AND 1994

Item	1994		1991		Total	
	With Pension	Without pension	With Total	Without Pension		
Most Important Income:						
work	3.5	3.6	3.5	4.2	12.3	5.9
pension	86.2	-	71.3	89.5	1.0	71.0
spouse	3.7	29.9	8.3	3.7	26.7	8.5
children	5.0	49.7	12.7	1.9	42.7	10.4
social relief	0.6	3.0	1.0	0.4	5.0	1.4
saving	0.1	3.6	0.7		2.7	0.6
other	0.9	10.2	2.5	0.3	9.6	2.3
Financial support:						
to children	45.7	10.8	39.7	48.3	6.3	16.2
Health care paid by work unit:	82.9	20.4	72.1	91.8	27.0	11.2
100% of health care paid by work units:	29.6	1.2	24.7	50.2	2.0	40.2

Sources: The 1991-1994 Wuhan Survey of Health and Living Status of the Elderly in Wuhan Area.

children are less likely to support the aged, which implies a weakening trend in family relation in terms of family social security system

(3). The health insurance paid by the work unit decreased and the aged self-pay increased, indicating an increased burden for the retired person with medical and health care. This is not a welcome event to the contributions of their health care expenses.

The changing of the major income sources, the weakening of the family security relation, and the increased medical and health burden the elderly are three important trends from 1991 to 1994. Further in-depth studies on such problems would be helpful in improving China's social security system.

## THE REFORM OF CHINA'S PENSION SYSTEM

### EXPERIMENT IN REFORMING CHINA'S PENSION SYSTEM SINCE MID-1980s

With the transition from a planned economy to a market economy, Public Pension Programs in China are undergoing great changes. Several

experimental reform plans, including reforms in contributory mechanism, resource pooling and cost sharing mechanism, coverage extension, supplement programs, and so forth are conducted. Large scale experiments have been launched in some provinces and cities. To highlight some of the new systems resulting from the security reform, a few experimental reform programs are presented in the following sections.

### 1. Contributory Programs

One experiment of the pension reform is called Contributory Program which is aimed at changing the former one-party contribution to a two-party contribution mechanism. In 1986, the government took the first step toward setting up a different pension system for the newly hired employees in the state-sector. The new policy requests that these newly hired persons (called "contract workers") pay up to 3 percent of their wages to the pension funds in order to be entitled for retirement benefits. The policy also requests that the contract workers pay about one percent of their wages to an unemployment insurance funds. This dual-tracked system includes two pension schemes: one is accumulative funds for contract workers themselves, and another is the Pay-as-you-go system for the lifetime benefits of the employees.

According to statistics from Chinese SSB, among the 143 million laborers of public enterprises in urban China, 31 million in 1993 are contract workers who will be covered through this program (SSB, 1994) . Since 1991, this reform also extended to the lifetime employees, and a new regulation requires that all workers contribute 3 percent of their wages to the pension funds.

Until the end of 1994, more than 60 million of the laborers participated in the Contributory Program (Yan, 1995). It seems that the dual-track system of pension programs in China is being gradually converted into a one-track system. Under this new system, individuals contribute 2 to 3 percent of their total wages to the pension funds, and enterprises contribute normally 13 to 18 percent.

### 2. Resource Pooling and Cost Sharing Program

An obvious problem of the traditional pension system in China is that the pension funds are entirely financed and administered by individual enterprises. Compared with the newly established enterprises with only a few retired workers, the old ones usually carry much more retired persons; therefore, more money is needed to pay off the pension bill. However, there is no such mechanism of resource pooling or cost sharing, to handle the

problem, even though it is known that the younger enterprises will become older sooner or later and will face the same problem.

To overcome the problem, many enterprises tried to establish compulsory resource pooling programs so that younger enterprises can share some of the overloaded retirement costs for those enterprises with long histories and high proportions of retired workers. Participants of these program are usually requested to contribute an average of 18 percent of their payroll to the pool in order to qualify. According to statistics provided by the Ministry of Labor, there were more than 200,000 enterprises with more than 60 million employees in the urban sectors participating in this resource pooling program in 1993 (Yan, 1995).

### 3. Development of Supplemental Pension Program

There are three pillars for the income security of the elderly in the west countries: social security for every retiree, private pension or enterprise-sponsored supplement pension for additional income, and savings/investment. However, there are only two pillars for the income security of the retirees in urban China: public pension and re-employment. According to our sampling survey in Wuhan, more than 20 percent of pensioners are re-employed for additional income.

During the social security reform period, a reform of the income security for retirees was proposed: divide the income security into two parts; one is basic pension with compulsory distribution, which provides minimum living standard for the pensioners, and the other is supplemental pension with voluntary enterprise's financing, which provides additional income for the retirees. By the year 1994, about 6000 enterprises set up their supplementary enterprise pension programs in China and covered about 2 million laborers (Yan, 1995).

### 4. Extension of Coverage to Rural Communities

With the development of the nonstate enterprises such as township and village industries, wage-earning 'farmer' workers are increasing in countryside. Accordingly, a number of rural communities established their own pension programs for the retired population. There are three types of such pension program currently being tried in the rural area, which covers about 50 million laborers according to the current statistics (FBIS-CHI-95-037).

1) Family planning-oriented pension plan. This plan, co-financed by the state, communities and participants, and administered by insurance companies, has been established in some villages in order to encourage

farmers with few children.

2) Flat-rated pension program for every retired villagers. Some prosperous communities with rural industry/business enterprises set up a flat-rated basic pension program with funds from their own surplus income. This program usually covers all the retired villagers.

3) Formal rural pension program. Some township enterprises have established pension programs for their retired workers following the regulations of the urban sectors. It represents the trend of social security in the rural area. As more and more rural communities become richer, more of such programs should appear there.

## 5. Experiments in Hainan and Shenzhen

Hainan, a newly established province in southern China, pronounced in December 1991 to establish a new social security system starting 1992, marked the beginning of official and large scale reform of social security system in China. There are several breakthrough points in the Hainan's new system:

1) Universal coverage. The program coverage is extended to employees of all urban enterprises.

2) Centralized administration. Instead of decentralized program management, a unified administration system at provincial level is established for the financing and distribution of the pension program.

3) Comprehensive program. The new social security system integrated pension, unemployment insurance, work injury insurance, and health insurance together to form a comprehensive plan.

The success of the new system in Hainan encouraged the neighborhood areas. In May 1992, a social security system similar to that of Hainan was established in Shenzhen. Since then, the Hainan-Shenzhen model has become a nick-name for the new social security system, and the model has been adopted wholly or partly by many other provinces (Krieg and Schiler, 1994).

## SOLUTIONS FOR RESTRUCTURING PENSION SYSTEM

### 1. Current Problems of Social Security System in China

From our analysis above, current problems of the social security system in China can be summarized as follows:

-Fragmentized and decentralized administrations. There are too many administrative divisions involved in the pooling arrangement of the social security program which are unfavorable for the establishment of the new



**ILLUSTRATION 5.1 THE CURRENT ADMINISTRATION SYSTEM OF INSURANCE POOLING ARRANGEMENT FOR SOCIAL SECURITY REFORM IN CHINA**

Department	Duties
Ministry of Labor:	for old-age pension in enterprises.
Ministry of Personnel:	for old-age pension in Institutions and organizations.
Ministry of Civil Affairs:	for old-age pension for peasants.
People's Insurance Company:	for pension program for individual laborers
Ministry of Public Health:	for health insurance reform.
Trades and industries authorized to offer insurances:.	railroad, posts and telecommunications, electric power, irrigation, construction, nonferrous metals, banking and so on.

system. For example, there are five agencies in charge of the old-age pension and health insurance reforms (Feng, 1994), and eleven trades and industry departments authorized to offer insurances including railroad, posts and telecommunications, electric power, irrigation, construction, nonferrous metals, [banks?] and so on (see Illustration 5.1).

The administration of social security is highly decentralized. The central and provincial governments only provide guidelines; while the enterprises and local governments are responsible for the actual administration of the pension programs (see the following illustration) . This kind of management model increase the administration and coordination costlimiting of the system's normal function.

There are several drawbacks to the fragmented administration of social security system. First, there is no mechanism for mutual assistance, which is critical for any security system. The mutual assistance helps redistribute funds and shares risk among different industries, institutions and regions; therefore, it makes the system stable and reliable. Second, the industry-based insurance hinders the labor mobility between industries because of the un-transferability of the security benefits. Third, organizational overlapping results in a waste of both human and financial sources. Fourth,

**ILLUSTRATION 5.2 ADMINISTRATIVE HIERARCHY OF SOCIAL INSURANCE**

Agency	Function
Central Government	Guidance
Provincial Government	Guidance
City or County Government	Pooling arrangement for PI & UI
Enterprise	
Pension:	Collection & distribution
Health:	Management of all affairs
Unemployment:	Collection

there is no uniformity in policy and continuation of the social security system.

-Small Pooling Arrangement. Although, there are 13 provinces and municipalities, including Fujian, Jiangxi, Jilin, Shanxi, Hebei, Beijing, Tianjin, Shanghai, participating in provincial pension pools during the social security reforming period, other pooling arrangements are limited to cities or counties which are small in pooling size. The limited pooling size is unfavorable to the security funds being redistributed among cities with different ratio of retirees to active workers, and enterprises with different [loss-making?], therefore, reducing the securing ability of the program.

-Varied Regulations. Because of no national social security legislative system in China, the implementation of pension policies is regulated by local policies. This not only results in a great policy variations, but also brings about large misappropriation of the insurance funds due to no effective control mechanisms. For instance, the joint-venture enterprises may be requested to contribute anywhere from 18 to 30 percent of worker's salaries to pension funds in different cities (Dai, 1994). A sharp gap in the contribution rate is also found in the different provinces, some as high as 39 percent; while others are as low as 15 percent, in spite that 18 percent of contribution rate suggested by the central government since 1986.

-Limited Financial Markets for Funds Utilization. To achieve the obligations of the pension insurance for the pensioners today as well as in the future, the established pension funds must keep their value and go beyond the earned profits from interests, at least equal to opportunity costs. Therefore, safe and profitable investment is essential for the insurance funds reserve. However, the extremely limited financial market and an immature insurance market make such a [value-keeping?] of the security funds rather difficult. The major obstacle confronting the policy-makers is the utilization and investment of insurance funds. If the return of the insurance funds is not beyond the interests of savings, it is very difficult to develop enterprise supplementary pension schemes.

## 2. Solutions for Restructuring China's Social Security System

From the analysis above, the following solutions are proposed for the restructuring of China's social security system.

1) Change the funds collecting system. The current mechanism of levying pension fees should be replaced by social security tax. The pension fee levying is operated by Labor Bureaus rather than the Taxation Bureaus which leads to a very low collection rate due to the lack of a legal control mechanism. For example, in Wuhan, a Capital city of Hubei province, only

60 percent of target fees can be collected each year.

If the social security tax is legalized, it will consolidate all aspects of social security programs including financing, so that a standardized system of duties and rights for collection, use, and management of funds can be established. In addition, the public awareness of the social security will also be provoked.

2) Expand pooling arrangement of social security programs. There are more than 2000 pension pools so far in China. The state/ collective-owned enterprises usually have separate pension pools. Because these pools are both small in size and separate in arrangement, no sharing can be established to redistribute revenues and share risks among cities predominant with new enterprises and cities predominant with old enterprises. To solve the problem, we suggest:

A national scheme of the pooling arrangement of the unemployment insurance should be set up in order to have a large sharing and redistribution mechanism across provinces. For pension schemes, the pooling arrangement should be raised from city or county level to provincial level with national regulations. The central government also should set up a special subsidies fund for pension programs of the old industrial base which have made substantial contributions to the country's construction in the past decades.

3) Open new sources for the Supplemental Old-Age Insurance. In many developed countries, income for the aged comes not only from unified social security, but also from supplemental pensions. For example, in the United States, 54 percent of the income for the elderly aged 75 and over comes from social security, 14 percent from private pension, and 32 percent from re-employment and other sources. In Japan, 50 percent of income for all the retirees comes from social security, 25 percent from private pension, and 25 percent from re-employment and other sources.

To restructure China's social security, we should begin at a low starting point with multiple channels to provide funds for the Old-Age Insurance. The social security reform has to be coordinated with commercial insurance development (Xiang, 1994), which means that the unified social security system provides only basic needs for retired elderly, and the work units should provide additional insurance to cover the needs of their previous employees. In fact, this work unit-sponsored supplemental insurance is both an insurance and an incentive mechanism. Some government officials proposed to try to re-adjust the income security of the basic pension from 86 percent to 60 percent of pre-retired wages (Zhang, 1995) and the rest are requested to be paid by the work unit.

4) Accelerate the comprehensive national legislation. So far, the social security reform in China is carried out with tried regulations, and there is no national legislation for local experimental reform. Many Chinese scholars suggest that special laws should be established so that the new social security can be operated and managed accordingly (Chen, 1994). The national social security legislative system should systematize the fragmented programs, raise the effectiveness and efficiency of the program operation, set application methods, detail rules, and regulations. This system should also have proper principles to clarify financial sources, management, coordination and utilization of the security funds to overcome the arbitrary decision-making in the social security administration.

5) Extend program coverage to cover both enterprise-employed and self-employed persons. As the transition from planned economy to market-oriented economy, self-employed labor forces increase substantially, and labor mobility become both urgent and necessary for structure change and economic development in China.

The labor movement in China now takes three forms: (1) rural-rural movement from poor areas to better-off areas, (2) rural-urban migration from villages to urban areas, and (3) intra-city migration from state-owned sectors to nonstate sectors. According to our estimation, there are about 30 to 40 million surplus laborers in urban public sectors which have the potential to move.

To accommodate such a mobility potential for the optimization and development of China's economy, a unified and transferable social security system across ownerships and even rural/urban sectors should be set up. With such a system plus governments policies, redundant laborers in any area can move without security concerns. For example, extra laborers in state-owned enterprises, could move to nonstate-owned ones, such as family business, private-owned firms, joint urban enterprises, foreign joint ventures, mixed ownership firms and suburb joint rural enterprise, and still carry their social security pensions.

## REFERENCES

- Chen, Yanbang, 1994, *The Basic Framework and Reform Thinking for China's Social Security System*, Beijing: Zhongguo Gaige (China Reform) in China, No. 10, 13 Oct. 1994.
- Dai, Xinhan, 1994, *Ministry Suggestions on Social Security Reform*, Beijing, Jingji Yanjiu (Economic Research) in Chinese, No 10 1994.
- FBIS-CHI-95-015 (Foreign Broadcast Information Service, Daily Report—China), 24 Feb. 1995, pp27 Ministry: More Farmers Adopted Pension System.

- Feng, Lanrui, 1994, Reform Social Security Management, Beijing: Zhongguo Gaige (China Reform)in Chinese No 10. 13 Oct.1994, pp28, 29.
- Krieg, Renate and Schdler, Monika, 1994, Social Security in the People's Republic of China, Hamburg: Zeitgemser Druck CALLING P.O.D..
- Kwok, R. Yin-Wang, Willian L. Parish and Anthony Gar-on Yeh, 1990, New York: M.E. Sharpe, Inc..
- Liang, Jersey, Tu, E. Jow-Ching and Chen, Xiangming, 1986, Population Aging in the People's Republic of China, Soc. Sci. Med. Vol.23, No.12, 1986.
- Silverman, Gary, 1995, Honor Thy Father, Hong Kong:Far Eastern Economic Review, March 2, 1995.
- State Statistical Bureau (SSB), 1994, Statistical Yearbook of China 1994, Beijing: China Statistical Publishing House.
- World Bank, 1992, China: Reform and the Role of the Plan in the 1990s, A World Bank Country Study, 1992, The World Bank, Washington, D.C..
- Xiang, Ling, 1994, Variable Insurance Policies for the Elderly Is a Way out for Old-Age Security, Beijing: Jingji Guanli (Economic Management) in Chinese, No.11, 5 Nov.1994.
- Yan, Qixiang, 1995, Interview With Labor Minister: on Issues of Concern in Society Today, Beijing Jidian Ribao in Chinese 9 March 95, p1.
- Yang Shiwang, 1994, Basic Thoughts on Perfecting China's Social Security System, Beijing: Jingji Guanli Yu Yanjiu (Research on Economics and Management) in Chinese, No. 6 1994.

*SHENGZU GU is Professor of Economics at Wuhan University, China. His research interests are population aging, economic reform, and structure changes.*

*NONG ZHU is Associate Professor of Demography at Wuhan University, China. His research interests are population aging, migration and urbanization.*

*XINGUANG CHEN is Associate professor of Statistics at Tongji Medical University, China. His research interests are population aging and urbanization.*

*JERSEY LIANG is Professor of Sociology at the University Michigan, the United States.His interests is comparative research on aging in East-west.*

