Special Issue

Changes and Current Issues on Families in East Asia: Toward the East Asian Social Survey 2016

Women and Family in Transitional China: Family Structure and Elderly Support

Guihua Xie, Yangyang Zhang and Xincheng Li

Abstract

During the last 30 years, China has experienced quick industrialization, urbanization and economic development. At the same time, Chinese society becomes more and more open to outside world, especially toward the Western society (and its value). Social and economic change, combined with the government's Single-child Policy, pushed Chinese families and women in the families to change as well. On one hand, family size gets smaller and family structures are more diversified. On the other hand, although more aged people choose to live alone instead of with children, the tradition that depends on family for elderly support remains. Children are still the main caregivers for the elderly. In addition, daughters start to take more responsibility in fulfilling parents' expectations such as educational attainment and eldercare. In sum, this article will focus on how macro social change affects family life as well as women inside the family, and discusses the interaction between family life and women's role.

Key words: family structure, elderly support, gender role

2017, *Japanese Journal of Family Sociology*, 29(2): 165–179

Since China started market reform and opened to the outside world in 1978, Chinese society has gone through quick industrialization, urbanization and economic development. In less than 40 years, China has finished the transition from one of the poorest countries to the second largest economic entity in the world (Barboza 2010). The dramatic and tremendous social changes, together with the state's family planning policy, pushed the Chinese family into transition as well.

In this article we will give a brief review on changes that Chinese families have experienced during the reform period. Since the traditional Chinese family plac-

es value on a large family with multi-generations living together (usually three generations stem-family), son's full responsibility in eldercare and intergenerational mutual support (Huang 2011), our review will mainly focus on the transitions, which occurred in family structure, elderly support and women's (daughters) role inside family.

I. Social Forces behind Family Transition

Chinese family planning policy was initiated in the mid 1950s. In the beginning it was not mandatory. Through mass media and by providing birth control

Guihua Xie: Associate professor at Department of Sociology, Renmin University of China

E-mail (the corresponding author): gxie@ruc.edu.cn

Yangyang Zhang: Ph.D student at Department of Sociology, Peking University

Xincheng Li: Student of 2012 class, Department of Sociology, Renmin University of China.

tools, the government encouraged couples to have fewer children (*shao* 少) at a relatively later age (*wan* 晚), and with a longer birth interval (*xi* 稀) (Liang 2009). However, the relatively flexible birth control policy was proved not to be very effective. As Chinese population reached more than 800 million in 1970 and almost 1000 million around 1980, the policy was tightened up. One-child policy was issued in 1980. It regulated that, in principle, each urban couple can only have one child. However, the number of children that rural couples can have varied by provinces, ranged from one (in most coast provinces) to two children, including so-called 1.5 child⁽¹⁾ (Attané 2002). Although Chinese government relaxed the family planning policy in 2015 by allowing two children for each couple, there is no doubt that family planning policy in recent 30 years has directly changed the patterns of Chinese families (Wang Y. 2006).

The other essential social forces behind the transi-

tion of Chinese family include, but are not limited to, industrialization and urbanization. China has thousands of years of history as an agriculture society, and its social tradition, including family structure and inter-generational relationship etc., was developed based on agriculture production (Fei 1992). However, economic reform and opening to foreign investment accelerated industrialization and urbanization, leading to changes in family structures and living arrangements.

Table 1 shows that in 1952, three years after the establishment of People's Republic of China, agriculture sector accounted for about 51% of total national GDP. The proportion of agricultural sector significantly dropped to about 28% in the year of the reform in 1978, and to less than 9% after almost 40 years of the reform in 2015.

Another even stronger influence of industrialization in recent 30 years is the change of employment structures. Under the socialist planned economy, the Chinese government preferred capital-intensive heavy industry to labor-intensive light industry, and ignored developing the tertiary industry.⁽²⁾ In 1978, while the proportion of non-agricultural industries increased to about 72% of total value of national GDP, non-agricultural workers only accounted for less than 30% of total employment (Table 2). Industrialization before the reform did not provide comparable amount of employment opportunities. In fact, there were still more than

Table 1. Compositions of National GDP (%)

Year	Agriculture	Industry	Tertiary	Total (%)
1952	50.5	20.8	28.7	100.0
1978	27.7	47.7	24.6	100.0
1990	26.6	41.0	32.4	100.0
2000	14.7	45.5	39.8	100.0
2008	10.3	46.9	42.8	100.0
2010	9.5	46.4	44.1	100.0
2015	8.8	40.9	50.2	100.0

Source: <http://www.stats.gov.cn/> (accessed on 06-30-2017)

Table 2. Employment Structure & Urbanization Rate

Year	Total employment (million)	Employment composition (%)			Urbanization rate (%)	Total population (million)
		Agriculture	Industry	Tertiary		
1952	207.29	83.5	7.4	9.1	12.5	574.82
1978	401.52	70.5	17.3	12.2	17.9	962.59
1990	647.49	60.1	21.4	18.5	26.4	1143.33
2000	720.85	50.0	22.5	27.5	36.2	1267.43
2008	755.64	39.6	27.2	33.2	47.0	1328.02
2010	761.05	36.7	28.7	34.6	50.0	1340.91
2015	774.51	28.3	29.3	42.4	56.1	1374.62

Source: <http://www.stats.gov.cn/> (accessed on 06-30-2017)

70% of laborers working in agriculture. However, employment structure quickly changed after the reform. Nowadays almost 72% of Chinese laborers work in non-agriculture sectors, more than twice as high as the percentage of agricultural laborers (28%). China is no longer a society of peasants.

As industrialization changed the occupation structures and converted many peasants into non-agricultural workers, urbanization along with industrialization moved these former peasants into cities, and transformed some of their residential villages to urban neighborhood. In 2015, there were about 277 million rural residents worked at non-agricultural jobs; about 169 million of them had jobs out of their hometown, and mostly in large or medium-sized cities (SSB 2016). Starting from 2011, the total number of people living in cities outnumbered those in villages (Table 2). As more and more people live in cities and work at non-agriculture jobs, China is moving to an urbanized society.

However, there is a very unique system in China that might affect people's choice during the urbanization, the Household Registration System, or so-called Hukou system. During 1950s, Hukou system was set up to restore social order after Chinese Civil War and to establish socialist management. Each adult, based on their occupations, was assigned either agricultural (rural) Hukou or non-agricultural (urban) Hukou. Children usually inherited mother's Hukou status and registered at the same address with mother. Later on Hukou system gradually became an institute to control, and in a large degree, to block migration from rural to urban areas (Cheng and Selden 1994; Davies and Ramia 2008). People had to live where their Hukou were registered, and worked as peasants if they had rural Hukou. There was no freedom of migration for ordinary people. All social services were provided according to a person's Hukou status, and for people with local Hukou.

Hukou system has been under reform since the 1980s. Currently, although people's lives are still affected by Hukou system, in general they are no longer bound to where their Hukou registered. They have gained the right to move almost everywhere they intend to, including cities that need a large number of cheap, young and hardworking laborers. Therefore, a large number of rural residents left hometown for urban employment without changing their Hukou status or Hukou registration places. Those who work in cities with rural Hukou are usually called peasant/migrant workers.

The above social change and social policies interwound have very broad effects on demographic structure and family patterns. For example, economic development improved people's living condition and extended life expectancy to 76.34 (73.64 for male and 79.43 for female) in 2015, compared to 67.66 in 1982 (66.28 for male and 69.27 for female). As old people live longer and birthrate keeps dropping, China is becoming aging society. The proportion of people who are aged 65 or over increased from 4.91% in 1982 to 6.96% in 2000, and 10.47% in 2015.⁽³⁾ Families in China now face serious challenges in elderly support.

Second, the family planning policy directly changed the average family size, and also changed the roles women played inside and outside family. Since urban couples can only have one child and rural couples can have at most two children, daughters, especially those in cities, gained much more parental attention, care, and investment compared to daughters in any previous historical period. Furthermore, women as mothers were relieved from continuing childbirth and child-raising, and could spend more time and energy for personal interest and development. In addition, under the influence of industrialization and urbanization, a large number of rural residents, including rural women, changed both occupations and residential locations. The rural women, once they got jobs in cities,

were able to get rid of the pressure from traditional gender roles and has become more independent. It was estimated that, because migrated women were less likely to commit suicide, the general suicide rate dropped dramatically in China (The Economist 2014).⁽⁴⁾

In sum, the transition of Chinese family can be observed from many perspectives; for example the transformation of family structure (Wang Y. 2006, 2013; Yang and He 2014; Peng and Hu 2015), the changes of marriage matching patterns (Xu 2000; Li Y. 2008, 2011; Qi and Niu 2012), the variations of first marriage and divorce (Wei et al. 2013; Yu and Xie 2013; Xu et al. 2015), housework division (Yang 2014; Liu et al. 2015; Tong and Liu 2015; Yu 2014) and inter-generational co-residence (Wang and Li 2007; Shen et al. 2012; Chen and Chen 2016; Song and Huang 2011). In this article, we will explore the change of the Chinese family from three perspectives: the changes in family structures, the current challenge in elderly support and women's role inside family, in order to understand the evolution of the core family value reflected by the strong-ties between generations (Huang 2011), during the process of modernization.

II. Changes in Family Structures

The Confucianism emphasized filial piety of children toward parents; children have responsibility and obligation to respect, be obedient to, and take care of, their parents. A large family with several-generations living together was highly regarded in Chinese culture. It represents richness, prosperity (of descendants) and harmony of the family. In addition, since traditional agricultural production preferred male for their muscular and patrilocal residential culture required women to move into husband family. Sons were preferred for their value in farming, elderly support and family inheritance etc. More sons and male-descendants meant more blessing and happiness (Guo W. 2006).

Daughters usually had relatively lower status inside

the family because once they got married, they were supposed to leave for husband's home, and take care of husband's parents and other family members. As a well-known old saying puts, a married daughter is just like spilled water, because she is valueless for her natal family. Therefore, daughters obtained less investment for their future (e.g. education & career) and also did not have inheritance right (Fei 1947: 24; Li YH. 1994: 121; Attané 2009; Ebenstein and Leung 2010).

However, no matter how much Chinese used to value the large family with multi-generations living together, it was difficult to have high proportion of a large family, considering the limited life expectancy then.⁽⁵⁾ As Chinese people came to live longer than before, did a large family with multi-generations living together become more widespread? The statistics say no.

Actually, instead of becoming larger, the size of family reduced, mainly because of the family planning policy (Guo Z. 2008). Table 3 shows that, the average family size started to become smaller from 1982 when the family planning policy became strict. Having been influenced by the policy for 30 years, the average family size dropped from 5.5 in 1982 to 3.9 in 2012 in rural areas, and from 4.1 to 2.9 during the same period in cities.

The main change in family structure (Table 4) is nei-

Table 3. Average Family Size in China

Year	Urban	Rural	Total
1953	—	—	4.33
1964	—	—	4.43
1982	4.1	5.5	4.41
1990	3.5	4.8	3.96
2000	3.1	4.2	3.44
2005	3.0	4.1	3.13
2010	2.9	4.0	3.10
2012	2.9	3.9	3.02
2015	—	—	3.10

Source: Data of 1953, 1964, 1982, 1990, 2000, and 2010 came from census. Data of other years came from 1% Population Sampling Survey (<http://www.stats.gov.cn/>).

Table 4. Family Structure (Census 1982, 1990, 2000, 2010) (%)

Family structure	1982	1990	2000	2010
Single	7.98	6.34	8.57	13.67
Couples only	4.79	6.49	12.93	18.46
Nuclear family	55.12	57.55	49.90	36.41
Stem family (Three or more generations)	16.98	17.12	17.26	17.18
Two generations (Parents with married children)	3.82	3.29	2.35	3.03
Grandparents and grandchildren	0.95	0.91	2.11	2.78
Single-parent family	4.55	3.58	2.92	2.7
Other types	5.84	4.72	3.96	5.77
Total	100.03	100.00	100.00	100.00

Source: Based on Table 3 from Wang Y. (2013: 65), with revision.

ther the increasing proportion of multi-generation family, reflected by the proportion of stem-family, nor the increasing proportion of nuclear family, as what happened in other East Asian countries that used to be under the influence of Confucianism too (Schroder et al. 2015; Peng 2011). Actually, contrary to some sociologists' anticipation that the main family structure would change to nuclear family after modernization (Goode 1982), the proportion of nuclear family in China decreased, from about more than 55% in 1982 to about 36% in 2010. Meanwhile, partly as some scholars estimated that Chinese family is able to (or should) maintain its uniqueness during the modernization (Huang 2011), the proportion of stem-family almost unchanged, or even increased a little—from 16.98% in 1982 to 17.18% in 2010 (Table 4).

The significant change that occurred to Chinese family, similar to other western countries (Henderson 2014), is the increasing independence of families reflected by the dramatically increased proportion of single-person family and couples-only family (Table 4). The proportion of former type of family increased almost twice as much in less than 30 years, from 7.98% in 1982 to 13.67% in 2010, while the proportion of latter type increased more than three times, from 4.79% to 18.46% during the same period. It might be mainly due to economic development which improved living conditions of majority of Chinese and/or extended the

life expectancy. On one hand, some of the old couples (or the widowed elderly) were able to have some spare years after their children got married and/or grandchildren grew up (currently generations of elderly have fewer grandchildren to take care due to family planning policy), and prefer to live by themselves, at least for certain period of their life. On the other hand, real estate market was set up during marketization and developed quickly. Compared to other countries, the home ownership rate is very high in China, especially among young people (HSBC 2017).⁽⁶⁾ A number of young couples are able to move out from their parents' house into their own apartment (Pan et al. 1997).⁽⁷⁾ Both the young and old couples' choice of living independently pushed up the proportion of couples-only family.

Although Chinese families became smaller in size, and more people chose to live alone or only with spouse, it does not mean that the intergenerational ties become weaker. On one hand, similar to what happened in other countries, modernization makes people more independent so that more people choose to live in a smaller family. On the other hand, small families still maintain strong ties between each other, and form a family network for mutual care and support (Wang Y. 2010). Small families can support each other to maintain functions as stem families whenever needed. It seems like family gets its own life course. It means, un-

married children usually live with their parents if they are in the same city (Wang Y. 2016; Song and Huang 2011). When children get married, the young couples are more likely than previous generations to set up an independent family by moving out of parents' house, forming two couples-only families. However, when the young couples give birth to babies, many of them would ask help from their parents for childcare. During the childcare period, either the couple's parents join them, or vice versa, forming a stem family.⁽⁸⁾ Once grandchildren grow up, the stem family usually would separate again into two smaller families: the nuclear family for couples and their children, and couples-only family for the parents. When the grandparents become too old to take care of themselves, the two generations would live together again, forming a two-generation family (Wang Y. 2011).

Meanwhile, Chinese rural families collected a lot of attention during the reform period. Because of Hukou system, some rural families are facing the problem of family separation (Wang Y. 2013). Since social service (e.g. education) and welfare (e.g. eldercare, public housing etc.) are limited mostly only for people with local Hukou, especially in large cities like Beijing and Shanghai, it is difficult for migrant workers and their families to receive basic services. Additionally, considering the living cost in cities and the maintenance of the house and farming land in home villages, many migrant workers leave their old parents (and/or young children) behind in home-villages, causing problems of children's education and eldercare (Zeng and Wang 2010; The Economist 2014).

III. Elderly Support

According to Chinese tradition, children, most cases it means sons, have full responsibility to take care of old parents. Family care is the main, or almost the only way, for eldercare. Therefore, one of the most important reasons for having children and parents' preference to

have a son over a daughter, is due to son/children's role in eldercare. It is said in a Chinese old saying: the purpose for having children/sons is for old age.

However, although it is the sons' responsibility to take care of parents, it does not mean that sons are the main or only caregivers for their old parents. Because of the traditional gender roles in housework division for men being breadwinners and women being housekeepers, daughters-in-law also play very important role in daily care of elderly (Zhang 2001; Huang et al. 2003).

However, as family size became smaller, and many couples no longer had sons for their eldercare. What happened to the living arrangement for the elderly population? Did daughters start to play a more and more important role in elderly support? Table 5 shows changes in elderly residential patterns from 1982 to 2010. It shows that although the majority of the elderly still live with children/grandchildren (57.2% in 2010), the proportion of the elderly living with children (including grandchildren) dropped by about 16%. Meanwhile, the proportion of the elderly living with spouse increased almost 16%. This latter increasing offsets the former decreasing. At the same time, the proportion of other living arrangements (live alone or other types) had only slight change. It means that the elderly, when both couple are alive, are more likely than before to choose living by themselves (empty-nested family). It is one of the main reasons for the increasing proportion of couples-only family in recent 30 years (Table 4). However, once the elderly become widowed, they might choose to live with children instead of living alone. Therefore, although it looks like lower percentage of the elderly live with children, the mutual-support relationship between family members did not change during recent years.

Another survey on elderly aged 60 and over showed that in Beijing (Table 6), the co-residential rate with sons dropped quickly in 10 years (2000–2010), from about 36% to 22% in urban areas and from about 45%

Table 5. Living Arrangement of the Elderly 65 or over (Census 1982, 1990, 2000, 2010) (%)

	1982	1990	2000	2010
Live alone	12.2	9.6	9.6	12.5
Live with spouse only	13.7	17.1	23.9	29.2
Live with children/grandchildren	73.2	72.7	62.2	57.2
Other living arrangement	0.9	0.6	4.3	1.1

Source: Based on Table 3 from Hu and Peng (2014: 162), with revision.

Table 6. Living Arrangement of the Elderly aged 60 or over in Beijing (%)

	Living arrangement	2000	2006	2010
Urban area	Living alone	7.6	9.4	10.3
	With spouse	28.6	34.9	47.8
	With son	36.4	29.4	22.3
	With daughter	14.6	13.8	10.4
	Other arrangement	12.8	12.6	9.3
	Total	100.0	100.0	100.0
Rural area	Living alone	12.0	17.2	14.3
	With spouse	33.6	37.0	44.4
	With son	45.0	34.6	30.7
	With daughter	3.7	4.1	3.2
	Other arrangement	5.7	7.0	7.5
	Total	100.0	100.0	100.0

Sources: Based on Table 3 from Liu, Lei and Chen (2014: 81), with revision.

Note: Data from Survey of the Elders' Living Status in Rural and Urban China 2000, 2006, 2010.

to 31% in rural areas. During the same period, the proportion living with daughters, although not very high in 2000 (or very low in rural Beijing), also dropped. Therefore, not living with sons does not mean that the elderly would choose to live with daughters. In addition, the statistics does show that the urban elderly population are more likely to live with daughters than the rural elderly. The proportion living with their daughters in urban areas is more than three times higher than that in rural Beijing (10.4% vs. 3.2% in 2010). Maybe it reflects the potential tendency that urbanization and/or fewer children will bring more el-

Table 7. Distribution of Caregivers for the Elderly aged 80 and over (%)

	Urban area	Rural area	Total
Spouse	5.2	4.8	5.0
Son	28.1	35.2	32.0
Daughter-in-law	19.3	33.5	27.1
Daughter	21.6	12.5	16.6
Son-in-law	1.4	0.3	0.8
Other relatives (grandchildren etc.)	12.6	12.2	12.3
Hired caregivers	10.7	1.2	5.4
Other non-relatives	1.2	0.3	0.8
Total	100.0	100.0	100.0
N	1537	1879	3416

Source: Based on Table 2 from Ding (2011: 105), with revision.

Note: Data from Chinese Longitudinal Healthy Longevity Survey (CLHLS), 2007.

derly people to live with their daughters.

Although the change of residential patterns shows that fewer elderly people live with children, it does not mean that the role of children in elder caring is weakened. Table 7 shows that, family is still the most important or, dominant, source for eldercare. For the oldest old (aged 80 or over), many of them need additional care from other people (many people aged around 65 are still able to take full care of themselves), almost 95% of them depend on family members, mostly children, for care. About 77% of them depend on children (or children-in-law) for care. Therefore, family members, especially children, still play the most important role in eldercare. The traditional strong intergenerational ties, reflected by elder caring, did not get weaker even if the co-residential rate dropped a lot. During the transition, the Chinese family becomes more independent and in the meantime, maintains being close between intergeneration.

In contrast, rural families, relative to urban areas, maintain being more traditional. Rural sons still played the most important role in caregiving (Table 7). About 69% of the rural elderly were cared by sons' family

(sons or daughters-in-law), compared to about 13% by daughters' family (daughters or sons-in-law). Especially, the role of daughters-in-law was almost as important as sons as caregivers in rural areas. While in urban areas, the sons' role in caregiving was weakened a lot. Compared to rural old parents, urban parents are more likely to depend on daughters, and less likely to depend on sons, for caregiving. The gap between the proportion of sons (including daughters-in-law) and daughters (including sons-in-law) in caregiving is much narrower in urban areas (47.4% vs. 23.0%) than that in rural areas (68.7% vs. 12.8%).

Also, contrary to rural parents, more urban parents depend on daughters instead of daughters-in-law for their aging care. The difference between urban and rural areas might reveal the more and more important roles of daughters in caregiving under the effects of urbanization and non-agriculturalization. Urban parents in general have fewer children and in general, less likely to have sons and are more tended to gender equality, including the equality in providing elderly support. However, it might be worth more attention to explore how women adjust their double roles as both daughters and daughters-in-law in caregiving. As parents have fewer children (or even have just one child), daughters are taking more responsibility in taking care of their own parents. Whether they will quit their traditional role of taking care of parents-in-law is not very clear. But we found some clue in urban China which shows more urban parents depend on daughters instead of daughters-in-law for eldercare.

In addition, there is research showing that, the elderly whose main caregivers are daughters (including sons-in-law) are more satisfied with the care they obtained than the elderly whose main caregivers are sons (including daughters-in-law). Although rural parents might obtain more economic support from sons than daughters, they are more likely to obtain higher-quality of emotional support and daily care from daughters/

sons-in-law than from sons/daughters-in-law (Zeng 2007).

Another difference between urban elderly and rural elderly in caregiving patterns is that urban elderly are more likely to depend on caregivers outside the family. Hired caregivers and other non-relatives (including seniors home) accounted for almost 12% of all caregivers in Beijing 2007, much higher than that in rural areas (1.5%). Considering the facts that, on one hand, as people live much longer, they might need much longer-term and more professional caring than before; on the other hand, only 44% of the oldest old felt satisfied about the care they got (Ding 2011), the traditional eldercare pattern depending on family support might be not enough with the coming of aging society. The aging care later on might get involved in multi-agencies such as babysitters, community service and seniors home etc., just as the data in Beijing showed.

IV. The Changing Role of Women inside and outside the Family

One of the unexpected outcomes of family planning policy might be the empowerment of daughters (Fong 2002; Tsui and Rich 2002), especially for urban daughters. As the only child, urban daughters have no siblings to compete for family resources. Also, parents who only have daughters have no choice but relying on daughters to carry on family responsibilities, e.g., aging care when they get old. Research even finds that parents with daughters-as-only-children invested more in children's education than parents with sons-as-only-children (Tsui and Rich 2002).

Daughters' status is also improved for rural families. Under the family planning policy, most of rural families can have at most two children. It means, rural daughters in general have fewer competitors for family resource than before. As family has more resource (for economic development) and fewer children, rural daughter also gained unprecedented opportunity to

Table 8. Education Distribution of Male and Female Aged between 20 to 35 (%)

	National			Urban areas			Rural areas		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1990									
No schooling	3.8	13.4	8.4	1.3	4.0	2.6	4.8	17.3	10.9
Primary school	26.7	35.8	31.1	11.9	15.5	13.6	33.1	44.2	38.5
Junior Mid. Sch.	46.2	34.4	40.5	43.8	41.6	42.7	47.3	31.4	39.5
Highs Sch.	19.9	14.5	17.3	32.9	33.0	33.0	14.2	6.9	10.7
College	3.4	1.8	2.7	10.1	5.9	8.1	0.5	0.2	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2015									
No schooling	0.6	0.8	0.7	0.3	0.4	0.3	1.1	1.7	1.4
Primary school	4.8	5.9	5.3	2.8	3.2	3.0	8.4	10.5	9.4
Junior Mid. Sch.	41.9	42.1	42.0	32.1	31.7	31.9	59.0	60.1	59.6
Highs Sch.	23.4	20.6	22.0	25.4	22.8	24.1	20.0	16.7	18.4
College	29.3	30.6	29.9	39.4	41.9	40.7	11.5	11.0	11.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Data: Census 1990, National 1% Population Sampling Survey 2015.

Table 9. Higher Education: Percentage of Female Students Enrolled (%)

Year	Junior & senior College	Master program	Ph.D. program	Graduate school (Master+PhD)
1990	33.7			
1995	33.5	32.6	15.5	27.6
2000	33.8	36.2	24.0	33.6
2005	47.1	46.0	32.6	43.4
2010	50.9	50.4	35.5	47.9
2015	52.4	52.2	37.9	49.7

Data: Educational Statistical Yearbook of China, 1990–2015.

develop for their future (Zhang 2005).

The improved status of daughters can be proved by their educational attainment (Table 8).⁽⁹⁾ Comparing the educational attainment by gender in 1990 and 2015, we can find that the gender gap in education almost disappeared in 2015. Both in urban and rural areas in 1990, men were less likely to be excluded from schooling and more likely to obtain college education. However, in 2015 the proportion of women in getting college education not just caught up with, but even surpassed, that of men in urban areas. Meanwhile, the educational gap between rural men and women also shrank.

Another even stronger evidence is reflected by the

enrollment of higher education (Table 9). From 1990 to 2015, the percentage of female students in higher education quickly caught up. Currently there are more female students than male students studying in three- or four-year colleges (junior or senior colleges) and master programs in graduate school. Although the number of female Ph.D. students is still less than that of male Ph.D. students, the percentage of female Ph.D. students has increased more than twice between 1995–2015. Considering the outnumbering of male over female in the young cohorts because of the unbalanced sex ratio⁽¹⁰⁾ (Chen and Zhai 2007; Yuan 2007) as well as the outnumbering of female students in colleges and master programs, it might be able to conclude that

Table 10. Occupation Segregation: Distribution of Occupation Categories by Gender (%)

(N=172)	1982	1990	2000	2010
Male-dominated occupations	47.7	41.9	34.9	30.8
Gender-integrated occupations	40.1	45.9	57.6	64.0
Female-dominated occupations	12.2	12.2	7.6	5.2
Total	100.0	100.0	100.0	100.0

Source: Table 2 from Li and Xie (2015).

Data: Based on census 1982, 1990, 2000, 2010.

women in China have in general achieved educational equality.

Even in rural areas, women also gained higher status within their families. Industrialization and urbanization provided rural women, mostly young women, chances to pursue economic independence. The statistics show that in 1990, only 23.9% of women worked on non-agricultural jobs. The percentage reached 58.2% in 2015.⁽¹¹⁾ Urban or/and non-agricultural jobs provided women with personal income, and therefore economic independence and increasing bargaining power within their families. Research shows, female migrant workers, even after they got married, still showed strong filial piety toward their natal families (Shen 2016). It looks like the traditional saying that married daughter just like spilled water has been totally outdated in both rural and urban China.

Outside the family, the women equipped with better education are more capable of breaking the segregation in gendered labor market. Research has found that, the proportion of segregated occupations dropped from 60% in 1982 to 36% in 2010 (Table 10). However, on the other hand, Chinese women in urban labor market are facing very strong discrimination (Wu and Wu 2009; Liu and Niu 2000). Marketization led to the privatization of economy. Due to the lack of efficient policies to supervise labor market discrimination, women were subject to various kinds of discrimination in the labor market, from job seeking, wage-setting, to promotion and job-maintaining because the employers thought women were less efficient due to the time and

energy cost in pregnancy, baby birth and child rearing (Li C. 2009). Therefore, many women worry about the relaxation of family planning policy which allows most of urban women to have one more child would further worsen the gender discrimination in labor market (Zhang and Ru 2009). It seems like although women have gained certain equality within their families and in education, there is still a long way to go to gain the equality in the labor market and career development.

V. Conclusion

In the recent 30 or more years, China caught up in modernization, reflected by its quick industrialization, urbanization, economic development and opening to the world. There were two kinds of estimations on the transition of Chinese families during the modernization period. One is that like families in Western countries, Chinese families could not avoid the effect of modernization/individualization and would become smaller. The other is that Chinese families could and should maintain its specialty in stem-family and strong intergeneration ties (Huang 2011).

Our review shows that, under the effects of modernization, people in China do become more independent as the proportions of single-person and couples-only families increased substantially. However, the proportion of stem-family maintains stable without increasing or decreasing, showing that the traditional family pattern in China was able to be at least maintained.

Second, although the size of Chinese families become smaller and nuclear families would transit to

smaller families instead of forming larger families (e.g. stem-family),⁽¹²⁾ it does not mean that the small families would separate from each other and run independently. On one hand, small families can form supporting network to help each other when needed. On the other hand, family structure is flexible and can change at different life periods.

In addition, the traditional family relationship that emphasizes strong intergenerational ties and mutual support among family members did not significantly change. Most grandparents still get involved in taking care of grandchildren. Meanwhile, majority of elderly people (especially those widowed) still rely on their children for their care.

However, one of the obvious changes happened to Chinese families might be the role of daughters. As family size reduces and many families have at most two children, daughters become more valuable. They first achieved the equality in education. Currently among young cohort, women almost caught up with men in educational attainment. Secondly they have played more important roles than before in taking care of their old parents.

Comparison between urban and rural families might reveal the potential directions for family transition. The size of urban families is usually smaller than that of rural families. Urban elderly population is more likely to live by themselves instead of with their children, at least when they are still able to fully take care of themselves. Also, urban parents are less likely than rural parents to depend on their sons, and more likely to depend on their daughters, for eldercare. However, in general, urban parents are less likely to depend on their children, while they are more likely to depend on people/agencies outside their families for the care they need.

Therefore, as China goes further into modernization, the transition of Chinese families might be able to reveal answers for the following questions: whether

children will still be the main providers for elderly support, and among the children, who, sons or daughters, will be the main caregivers in elderly support. If the families role in eldercare was weakened, could Chinese family maintain the strong intergenerational ties based on mutual support? Furthermore, as the family planning policy relaxed to allow each couple to have two children, can daughters maintain the achievements they gained as the only-child, or whether preference to have sons will come back, at least for a certain degree, because many urban couples can choose to have one more child if the first is a daughter? In other words, since modernization began quite recently in China, it might still need longer time to determine whether Chinese families will be able to maintain its tradition in the future, and which part of the uniqueness will remain, stem-family as family structure, intergenerational ties, family care for elderly people, or son preference.

【Notes】

- (1) It means couples are allowed to have the second child if the first is a girl.
- (2) Table 1 shows that the percentage of the tertiary industry of the GDP actually decreased from 28.7% in 1952 to 24.6% in 1978.
- (3) From the State Statistical Bureau, <http://data.stats.gov.cn/index.htm> (accessed June 30, 2017).
- (4) The suicide rate dropped from about 23.2 per 100,000 people annually during 1995–1999 to about 9.8 per 100,000 annually for the years 2009–2011 (Phillips et al. 2002; Wang et al. 2014).
- (5) The life expectancy used to be about 35 years around 1949 and about 57 years in 1964 (Zhang 2016; Zhai 1987).
- (6) According to China Household Finance Survey conducted by Southwestern University of Finance and Economics in China, the household's homeownership rate in China almost reached 90% in 2011, one of the highest in the world (<http://money.sohu.com/s2012/jrdcbg2012/>, accessed June 30, 2017). Another survey conducted by HSBC in 9 countries showed that, the home ownership rate was as high as 75% for Chinese born in 1980–2000,

much higher than the same cohort in Mexico whose home ownership rate ranked the second (40%) among the 9 countries. The same survey revealed that the home ownership rate for the same cohort in the U.S. was 35%. The survey also showed that more than 40% of Chinese young people got economic support from their parents in home-purchasing (HSBC 2017).

- (7) Urban couples that are both only-child are less likely to live with their parents than couples that either or both are not the only-child (Song and Huang 2011; Feng 2006).
- (8) According to Chinese Longitudinal Healthy Longevity Survey 1998, about 59% of the interviewees aged between 60 to 69 years old were taking care of grandchildren (Guo Z. 2002).
- (9) We used age 35 because it is about the first cohort to be affected by the one-child policy (the policy was issued around 1980).
- (10) According to National 1% Population Sampling Survey, the sex ratio between age 18–29-years-old was 105.7 in 2015.
- (11) Based the 1990 census and National 1% Population Sampling Survey in 2015.
- (12) The percentage of nuclear families dropped more than 10% from 2000 to 2010 (Table 4).

[References]

- Attané, Isabelle, 2002, "China's Family Planning Policy: An Overview of Its Past and Future," *Studies in Family Planning*, 33(1): 103–13.
- , 2009, "The Determinants of Discrimination against Daughters in China: Evidence from a Provincial-Level Analysis," *Population Studies*, 63(1): 87–102.
- Barboza, David, 2010, "China Passes Japan as Second-Largest Economy," *The New York Times*, August 15, 2010, (Retrieved June 30, 2017, <http://www.nytimes.com/2010/08/16/business/global/16yuan.html?pagewanted=all>).
- Chen, Jieming and Chen Qi, 2016, "Parent–Child Socioeconomic Statuses and Co-Residence: An Analysis of Living Arrangements in China," *Sociological Studies*, (1): 73–97. [陈皆明, 陈奇, "代际社会经济地位与同住安排: 中国老年人居住方式分析", 《社会学研究》]
- Chen, Wei and Zhai Zhenwu, 2007, "Sex Ratio at Birth in China in the 1990s: How High Did It Really Climb?" *Population Research*, 31(5): 1–8. [陈卫, 翟振武, "1990年代中国出生性别比: 究竟有多高", 《人口研究》]
- Cheng, Tiejun and Mark Selden, 1994, "The Origins and Social Consequences of China's Hukou System," *The China Quarterly*, 139: 644–68.
- Davies, Gloria and Gaby Ramia, 2008, "Governance Reform towards 'Serving Migrant Workers': The Local Implementation of Central Government Regulations," *The China Quarterly*, 193: 140–9.
- Ding, Zhihong, 2011, "Distribution of Care Resources and Care Satisfaction of the Oldest Old in China," *Population Research*, 35(5): 102–10. [丁志宏, "我国高龄老人照料资源分布及照料满足感研究", 《人口研究》]
- Ebenstein, Avraham and Steven Leung, 2010, "Son Preference and Access to Social Insurance: Evidence from China's Rural Pension Program," *Population and Development Review*, 36(1): 47–70.
- Fei, Xiaotong, 1947, *The System of Family*, Beijing: The Commercial Press. [费孝通, 《生育制度》, 商务印书馆。]
- , 1992, *From the Soil, the Foundations of Chinese Society* (乡土中国), translated by Gary G. Hamilton and Wang Zheng, Berkeley: University of California Press.
- , 2006, "Living Arrangement after Marriage of the First-Generation Only Children," *Population Research*, 30(5): 57–63. [风笑天, "第一代独生子女婚后居住方式: 一项12城市的调查分析", 《人口研究》]
- Fong, Vanessa L., 2002, "China's One-Child Policy and the Empowerment of Urban Daughters," *American Anthropologist*, 104(4): 1098–109.
- Goode, William, 1982, *The Family*, Pearson.
- Guo, Weiming, 2006, "The Decisive Role of Cultural Factors in Gender Preference," *Population Journal*, (2): 8–12. [郭维明, "文化因素对性别偏好的决定作用", 《人口学刊》]
- Guo, Zhigang, 2002, "The Living Pattern of the Oldest Elderly and Factors Influencing It in China," *Population Research*, 26(1): 37–42. [郭志刚, "中国高龄老人的居住方式及其影响因素", 《人口研究》]
- , 2008, "Study on Changes of China Family Households in Recent Years," *Chinese Journal of Population Science*, (3): 2–10. [郭志刚, "关于中国家庭户变化的探讨与分析", 《中国人口科学》]
- Henderson, Tim, 2014, "More Americans Living Alone, Census Says," *The Washington Post*, September 28, 2014, (Retrieved June 30, 2017, https://www.washingtonpost.com/politics/more-americans-living-alone-census-says/2014/09/28/67e1d02e-473a-11e4-b72e-d60a9229cc10_story.html?utm_term=.660481acabb6).
- HSBC, 2017, "Beyond the Bricks: the Meaning of Home,"

- (Retrieved July 5, 2017, <http://www.hsbc.com/news-and-insight/media-resources/media-releases/2017/generation-buy>).
- Hu, Zhan and Peng Xizhe, 2014, "Analysis on the Trends of Changes in Contemporary Chinese Households: Based on Census Data," *Sociological Studies*, (3): 145-67. [胡湛, 彭希哲, "中国当代家庭户变动的趋势分析: 基于人口普查数据的考察", 《社会学研究》]
- Huang, Hemingxiong, Zhou Houping and Gong Shujuan, 2003, "Analysis on Different Roles of Different Genders in Taking Care of the Elderly: A Case Study of Hongkong," *Sociological Studies*, (1): 60-70. [黄何明雄, 周厚萍, 龚淑娟, "老年父母家庭照顾中的性别研究概观: 以香港的个案研究为例", 《社会学研究》]
- Huang, Zongzhi, 2011, "China's Modern Family: From the Perspective of Economic History and Legal History," *Open Times*, (5): 82-105. [黄宗智, "中国的现代家庭: 来自经济史和法律史的视角", 《开放时代》]
- Li, Chunling, 2009, "Analysis on the Current Situation of Gender Segregation and Its Changing Trend in China," *Jiangsu Social Sciences*, (3): 9-16. [李春玲, "中国性别隔离的现状及其变化趋势", 《江苏社会科学》]
- Li, Wangyang and Xie Yu, 2015, "Trends in Occupational Gender Segregation in China: 1982-2010," *Chinese Journal of Sociology*, 35(6): 153-77. [李汪洋, 谢宇, "中国职业性别隔离的趋势: 1982-2010", 《社会》]
- Li, Yinhe, 1994, *Family and Village Culture*, Beijing: China Social Science Press. [李银河: 《生育与村落文化》, 中国社会科学出版社]
- Li, Yu, 2008, "Trends in Educational Assortative Marriage: 1949-2000," *Chinese Journal of Population Science*, (3): 73-9. [李煜, "婚姻的教育匹配: 50年来的变迁", 《中国人口科学》]
- , 2011, "Trends of Status Homogamy in China: A Dual-Trait of Analysis," *Sociological Studies*, (4): 122-36. [李煜, "婚姻匹配的变迁: 社会开放性的视角", 《社会学研究》]
- Ling, Jimin, 2009, "Comprehensively and Accurately Understand the Chinese Family Planning Policy in the 1950s and 1960s," *Population Research*, 33(4): 10-21. [梁济民, "全面准确地认识20世纪五、六十年代的中国计划生育", 《人口研究》]
- Liu, Aiyu, Tong Xin and Fu Wei, 2015, "Household Division of Housework for Double-Income Family: Economic Dependence, Gender Ideologies, or Emotional Express," *Chinese Journal of Sociology*, 35(2): 109-36. [刘爱玉, 佟新, 付伟, "双薪家庭的家务性别分工: 经济依赖, 性别观念或情感表达", 《社会》]
- Liu, Dezhong and Niu Bianxiu, 2000, "Occupational Gender Segregation and Women's Employment," *Journal of Chinese Women's Studies*, (4): 18-20. [刘德中, 牛变秀, "中国的职业性别隔离与女性就业", 《妇女研究论丛》]
- Liu, Lan, Lei Lei and Chen Gong, 2014, "Trends of Living Arrangement of Beijing Old People," *Beijing Social Science*, (5): 79-84. [刘岚, 雷蕾, 陈功, "北京市老年人居住安排的变化趋势", 《北京社会科学》]
- Pan, Yunkang, Rogen John, Bian Fuqin, Bian Yanjie, Guan Ying and Lu Hanlong, 1997, "Housing and City Family Structures in China: Reflections on the Theory of Location," *Sociological Studies*, (6): 71-81. [潘允康, 约翰·罗根, 边馥琴, 边燕杰, 关颖, 卢汉龙, "住房与中国城市的家庭结构: 区位学理论思考", 《社会学研究》]
- Peng, Ito, 2011, "The Good, the Bad and the Confusing: The Political Economy of Social Care Expansion in South Korea," *Development and Change*, 42(4): 905-23.
- Peng, Xizhe and Hu Zhan, 2015, "The Contemporary Transition of the Chinese Family and the Reconstruction of Family Policy," *Social Science in China*, (12): 113-32. [彭希哲, 胡湛, "当代中国家庭变迁与家庭政策重构", 《中国社会科学》]
- Phillips, Michael R., Xianyun Li and Yanping Zhang, 2002, "Suicide Rates in China, 1995-99," *Lancet*, (359)9309: 835-40.
- Qi, Yaqiang and Niu Jianlin, 2012, "The Evolution of Assortative Mating Patterns in the Process of China's Modernization," *Sociological Studies*, (1): 106-29. [齐亚强, 牛建林, "新中国成立以来我国婚姻匹配模式的变迁", 《社会学研究》]
- Schroder, Carsten, K. Rehdanz, D. Narita and T. Okubo, 2015, "The Decline in Average Family Size and Its Implications for the Average Benefits of Within-Household Sharing," *Oxford Economic Papers*, 67(3): 760-80.
- Shen, Ke, Zhang Yuan and Yan Ping, 2012, "Family Structure and Female Labor Force Participation in China," *Population Research*, 36(5): 15-27. [沈可, 章元, 鄢萍, "中国女性劳动参与率下降的新解释: 家庭结构变迁的视角", 《人口研究》]
- Shen, Yang, 2016, "Filial Daughters? Agency and Subjectivity of Rural Migrant Women in Shanghai," *The China Quarterly*, (226): 519-37.
- Song, Jian and Huang Fei, 2011, "Intergenerational Relationship between Adult Only Child and Their Peers," *Population Research*, 35(3): 3-16. [宋健, 黄菲, "中国第一代独生子女与其父母的代际互动: 与非独生子女的比较研

- 究”,《人口研究》]
- State Statistical Bureau (SSB), 2016, “Report on Migrant Workers in 2015,” (Retrieved April 29, 2016, http://www.stats.gov.cn/tjsj/zxfb/201604/t20160428_1349713.html). [国家统计局,《2016农民工监测调查报告》]
- The Economist, 2014, “A Dramatic Decline in Suicides: Back from the Edge,” June 28, 2014, (Retrieved June 30, 2017, <https://www.economist.com/news/china/21605942-first-two-articles-chinas-suicide-rate-looks-effect-urbanisation-back>).
- Tong, Xin and Liu Aiyu, 2015, “A Model of Conjugal Cooperation in Housework for Urban Dual-Career Couples-Based on the Third Survey of Women’s Status in China,” *Social Science in China*, (6): 96–111. [佟新, 刘爱玉, “城镇双职工家庭夫妻合作型家务劳动模式——基于2010年中国第三期妇女地位调查”,《中国社会科学》]
- Tsui, Ming and Lynne Rich, 2002, “The Only Child and Educational Opportunity for Girls in Urban China,” *Gender and Society*, 16 (1): 74–92.
- Wang, Chong-Wen, C. L. Chan and P. S. Yip, 2014, “Suicide Rates in China from 2002 to 2011: An Update,” *Social Psychiatry Epidemiology*, (49): 929–41.
- Wang, Ping and Li Shuzhuo, 2007, “Study on Co-Residence Transition of the Elderly People and Children in Rural Area,” *Population Journal*, (1): 22–8. [王萍, 李树茁, “中国农村老人与子女同住的变动研究”,《人口学刊》]
- Wang, Yuesheng, 2006, “An Analysis of Family Structure in Contemporary China,” *Social Science in China*, (1): 97–108. [王跃生, “当代中国家庭结构分析”,《中国社会科学》]
- , 2010, “Analysis on Individual Family, Network Family and Kinship Circle Family: A Perspective of the Combination of History and Reality,” *Open Times*, (4): 93–9. [王跃生, “个体家庭, 网络家庭和亲属圈家庭分析: 历史与现实相结合的视角”,《开放时代》]
- , 2011, “Family Life Cycle, Couple Life History and Family Structure Change: Based on Data Collected in Hebei Rural Areas,” *Social Science Front*, (6): 176–90. [王跃生, “家庭生命周期, 夫妇生命历程与家庭结构变动: 以河北农村调查数据为基础的分析”,《社会科学战线》]
- , 2013, “An Analysis of the Changes in China’s Urban and Rural Family Structures: Based on 2010 Census Data,” *Social Science in China*, (12): 60–77. [王跃生, “中国城乡家庭结构变动分析: 基于2010年人口普查数据”,《中国社会科学》]
- , 2016, “Analysis on Living Arrangement of Parents and Children in the First-Generation of Only-Child Families in Urban Areas,” *Chinese Journal of Population Science*, (5): 49–65. [王跃生, “城市第一代独生子女家庭亲子居住方式分析”,《中国人口科学》]
- Wei, Yan, Dong Shuo and Jiang Quanbao, 2013, “The Transformation of China’s First Marriage Pattern: Analysis on Nuptiality Table,” *Population and Economics*, (2): 21–8. [韦艳, 董硕, 姜全保, “中国初婚模式变迁: 基于婚姻表的分析”,《人口与经济》]
- Wu, Yuxiao and Wu Xiaogang, 2009, “Occupation Gender Segregation and Gender Wage Gap in Urban China,” *Sociological Studies*, (4): 88–111. [吴愈晓, 吴晓刚, “城镇的职业性别隔离与收入分层”,《社会学研究》]
- Xu, Anqi, 2000, “Mate-Selection Preference: Fifty Years Change and Its Causes,” *Sociological Studies*, (6): 18–29. [徐安琪, “择偶标准: 五十年变迁及其原因分析”,《社会学研究》]
- Xu, Qi, Qiu Zeqi and Li Jianxin, 2015, “Does the “Seven Year Itch” Exist? A Study of the Divorce Pattern and Its Change in China,” *Sociological Studies*, (5): 216–41. [许琪, 邱泽奇, 李建新, “真的有“七年之痒”吗? 中国夫妻的离婚模式及其变迁趋势研究”,《社会学研究》]
- Yang, Juhua, 2014, “Continuity and Strategy: A Gender Pattern of Household Work Division in China between 1990–2010,” *Academic Research Journal*, (2): 31–40, 54. [杨菊华, “传统与策略: 1990–2010年中国家务分工的性别差异”,《学术研究》]
- Yang, Juhua and He Zhaoehua, 2014, “Continuity or Change? Chinese Family in Transitional Era,” *Population Research*, 38(2): 36–51. [杨菊华, 何绍华, “社会转型过程中家庭的变迁与延续”,《人口研究》]
- Yu, Jia, 2014, “Gender Ideology, Modernization, and Women’s Housework Time in China,” *Chinese Journal of Sociology*, (2): 166–92. [於嘉, “性别观念, 现代化与女性的家务劳动时间”,《社会》]
- Yu, Jia and Xie Yu, 2013, “Social Transformation and the Changes of Factors Influencing First Marriage,” *Sociological Studies*, (4): 1–25. [於嘉, 谢宇, “社会变迁与初婚影响因素的变化”,《社会学研究》]
- Yuan, Xin, 2007, “An Estimate of the Size of the Affected Population by Imbalanced Sex Ratios at Birth in China,” *Population Research*, 31(6): 3–7. [原新, “对我国出生性别比失衡人口规模的判断”,《人口研究》]
- Zeng, Yi, 2007, “Peking University Survey Shows that Raising Daughter Is Better than Raising Sons,” *Peasants Daily*, edition 3 (2007/08/01). [曾毅, “北京大学调查表明: 养女儿防老胜过养儿防老”,《农民日报》, 第三版]
- , 2010, *Study on the Elderly’s Family, Health and the*

- Cost of Care Demand*, Beijing: Science Press. [曾毅, 《老年人口家庭, 健康与照料需求成本研究》]
- Zeng, Yi and Wang Zhenglian, 2010, "Projection and Policy Analysis on Population and Households Aging in 21 Century in Eastern, Middle and Western Regions of China," *Population & Economics*, (2): 1-10. [曾毅, 王正联, "我国21世纪东, 中, 西部人口家庭老化预测和对策分析", 《人口与经济》]
- Zhai, Zhenwu, 1987, "Estimation of Life Table Functions in China from 1953 to 1964 and from 1964 to 1982," *Population Research*, 11(1): 22-9. [翟振武, "对我国1953~1964年, 1964~1982年生命表指标的估计", 《人口研究》]
- Zhang, Hong, 2005, "Bracing for an Uncertain Future: A Case Study of New Coping Strategies of Rural Parents under China's Birth Control Policy," *The China Journal*, 54: 53-76.
- Zhang, Xia and Ru Xue, 2016, "A Study on the Causes of the Dilemma of the Working Women in China: Taking the Two-Child Policy as the Background," *Guizhou Social Science*, (9): 150-4. [张霞, 茹雪, "中国职业女性生育困境原因探究——以“全面二孩”政策为背景", 《贵州社会科学》]
- Zhang, Youqin, 2001, "A Comparative Study of Social Support Network of the Elderly in Urban and Rural Areas: A Case Study of Xiamen," *Sociological Studies*, (4): 11-21. [张友琴, "老年人社会支持网的城乡比较研究: 厦门市个案研究", 《社会学研究》]
- Zhang, Zhen, 2016, "Trends in Life Disparity in China since the 1950s: An International Comparison," *Population Research*, 40(1): 8-21. [张震, "1950年代以来中国人口寿命不均等的变化历程", 《人口研究》]