Challenges for the Aging Family in the People's Republic of China

David R. Phillips¹ and Zhixin Feng²

RÉSUMÉ

La République populaire de Chine a la plus grande population de personnes âgées de tous les pays du monde. Il est une nation qui a subi d'énormes changements économiques, sociaux et démographiques au cours des dernières trois et demi-décennies. Traditionnellement, la famille a fourni le soutien social principal pour les personnes âgées; sous le socialisme précoce, cela a changé quelque peu, mais au cours des dernières années, l'importance du soutien de la famille a été réaffirmé. Cet article examine quatre questions essentielles (changements démographiques, le système du hukou, le réforme économique, et les caractéristiques générales entourant la modernisation) qui ont peu à peu changé la capacité des familles à fournir un soutien pour leur membres plus âgés. Domaines de recherche et orientations de politique publique sont considérés en vertu de lesquelles l'État pourrait prendre quelques responsabilités de la famille, soutenir la capacité des soins, et aussi améliorer la qualité et la quantité de l'aide pour les citoyens âgés.

ABSTRACT

The People's Republic of China has the largest population of older persons of any country in the world. It is a nation that has experienced enormous economic, social, and demographic changes over the past three and a half decades. Traditionally, the family was the main social support for older persons; this changed somewhat under early socialism, but in recent years, the importance of family support has been reasserted. However, over this time, the family's ability to support its older members has been considerably altered and arguably weakened. This article reviews four key issues (population change, the *hukou* system, economic reform, general features surrounding modernization) that have gradually changed families' capacity to provide support for older members. Research foci and public policy directions are considered under which the state might take some responsibilities from the family, support capacity to care, and improve the quality and quantity of support for older citizens.

¹ Department of Sociology and Social Policy, Lingnan University, Hong Kong

² Centre for Research on Ageing, Faculty of Social and Human Sciences, University of Southampton, UK

Manuscript received: / manuscrit reçu: 05/05/14 Manuscript accepted: / manuscrit accepté: 02/12/14

Mots clés: vieillissment, population vieillissante, la Chine, soutien familial, structure familiale

Keywords: aging, aging population, China, family structure, family support

Correspondence and requests for reprints should be sent to / La correspondance et les demandes de tirés-à-part doivent être adressées à:

David R. Phillips, Ph.D. Lingnan University – Sociology and Social Policy Tuen Mun Hong Kong (phillips@LN.edu.hk)

The People's Republic of China (the PRC) is recognized as having become an aging society since the last few years of the twentieth century. Due to the large size of its total population, at over 1,370 million persons, the PRC now has the largest population aged 60 and older of any country globally. In 2014, its population aged 60 or older was 201.3 million, accounting for about 14.4 per cent of the total population. This proportion is expected to reach 32.8 per cent by 2050 (Global AgeWatch Index, 2014). Over the past two decades,

life expectancy at birth has also increased substantially, from 68.55 years in 1990 to 74.83 years in 2010 and is expected to rise to 78.8 years by 2050 (National Bureau of Statistics, 2013; Zeng & George, 2002).

The PRC has aged demographically principally because of drastic fertility declines driven specifically by population policy and socioeconomic development over the past three decades. Mortality decline in the PRC has also played an important, though probably statistically lesser, role in this demographic aging. China particularly

Canadian Journal on Aging / La Revue canadienne du vieillissement 34 (3) : 290–304 (2015) doi:10.1017/S0714980815000203

exemplifies the adage of "developing countries growing old before they grow rich". Despite enormous economic development and increases especially over the past three decades, the PRC's per capita income is still only between one quarter to one sixth that of many Western industrialized countries (Feng & Mason, 2005; World Bank, 2014).

Perhaps more important socially, however, is that while rapid development has been felt by almost everyone, it has benefitted some groups far more than others. Income distribution in the PRC has become notably skewed, as in many rapidly developing economies. China has a relatively small number of rich people and a growing middle class, and although it has been noted that incomes have increased for both rich and poor groups, the rich have benefitted most in the past two decades. China's Gini coefficient (used as a measure of income inequality) steadily increased between the early 1980s and 2008. Since then it has slightly steadied but at a relatively high level, indicating considerable inequality. This index shows many households are still living in relative poverty. Inequalities are seen particularly in urban-rural differences in incomes, as per capita urban incomes were estimated as more than three times higher than for rural households in the early 2000s and even higher subsequently (Li, Sato, & Sicular, 2013; Sicular, 2013). Indeed, burgeoning inequality (and the fear of social disorder it could cause) has become an important policy concern, and it also has been found that income inequality affects the health of older people (Feng, Wang, Jones, &Li, 2012). Ironically, urban-rural income and social welfare differences are explained, at least in part by policy, in the hukou system as we will explain (Sicular, 2013).

These rural-urban differences are important for family and social care, as many older persons live in rural areas. A conflation of many factors combines to make China old but not wealthy socially, and these factors affect older persons and their families. Factors include (a) marked imbalances in overall development, which is focused mainly in coastal regions and in some inland cities/provinces (Zhang & Zou, 2012); (b) low coverage of pensions (particularly in rural areas) (Han & Wei, 2012); (c) high personal costs of medical expenses; and, sometimes, (d) the unavailability of medical services (Dong, 2009).

This article identifies and reviews four main factors impacting the capacity of families to provide old-age support in the PRC now and into the near future. It also aims to highlight a research agenda focusing on their consequences. The four main issues we have identified are as follows: (1) the impact of population change (population policy and social and economic development) and, especially, effects on demographic

structure; (2) the impacts of the continuing *hukou* system (household registration system); (3) the effects of economic reform ("open door" policy); and (4) the diverse effects of modernization.

Factors Affecting Family Care

Traditionally, the family has almost always been cited as the cornerstone of social support for older persons in China, which is also the case in many East and Southeast Asian countries (Mujahid, 2006; Phillips, 2000; Quah, 2015). The "family", which is the fundamental unit in social organization, refers here to a group of co-residential persons organized on the basis of marriage, blood, or adoption (Zeng, 1991). In recent years, the concept of family has not changed, but it has extended to recognize different living arrangements such as co-residence or living separately (in close proximity or at a distance). Especially in China, this concept acknowledges such changes, many of which are underpinned by economic necessity, decreasing family size, changing norms, and limited housing space, and that are enabled by land reform that allows family members to establish their own households more easily. A fundamental reason for these changes is economic necessity, resulting in work mobility and extensive labour migration, particularly for rural persons (Hu, 2012; Kam, 2013), and which has caused the "biggest migration in human history" (Miller, 2012).

A traditional Chinese family usually included at least two generations (parents and children), and it was also a normal phenomenon for several generations to be living in the same household (Baker, 1979; Chu & Yu, 2010). Multigenerational (or intergenerational) co-residence with older persons had been an historical basis for China's traditional family support system for elderly persons. The system ensured, or at least tried its best to ensure, that elderly persons received financial support, health care, and daily associations with their adult children or extended family members as an aspect of reciprocal or filial duty. Older Chinese family members are (or were) bestowed the highest respect from family members and society.

Filial piety, the code of intergenerational duty, has been identified as the "essential ingredient" that holds together the Chinese familial system of care (Phillips & Cheng, 2012; Zhan, Liu, Guan, & Bai, 2006). Love and respect for older generations intertwine with the responsibility of children to support and take care of their parents, recognizing the care and devotion received from the parents. Confucian teaching saw such mutual obligations as the fundamental philosophical underpinning of filial duties, which arose at all societal levels (Emperor to citizens; sons to fathers; husbands to wives, and, today, children to parents more broadly).

292

The typical family model in China is sometimes termed a "feedback model" as it involves reciprocal, rather than one-way, flows of filial duty, which can be expressed as $F1 \leftarrow \rightarrow F2 \leftarrow \rightarrow F3 \leftarrow \rightarrow Fn$ (F = generation). This model means that generation F1 fosters generation F2; generation F2 maintains and takes care of generation F1 when F1 is older; the same relations obtain between generations F2 and F3, and so on (Fei, 1983).

However, during Mao's era and especially since the more recent steep declines in fertility and the increased mobility of young adults, family care and care provision have changed greatly although perhaps not yet as substantially as they are likely to in the future. Previously, Chinese socialism – especially under Mao Zedong – stressed the crucial role of the state and Communist Party, and tended to de-emphasize the importance of families in all areas of care. This was especially the case in the "iron rice bowl" era of guaranteed jobs and pensions, particularly in the government sector and state-owned enterprises, when the state provided a cradle-to-grave service for (mainly) urban workers through an enterprise-based security system. Under that system, in rural areas, older persons could often obtain food as a form of economic security from their production brigade that could protect their basic standard of living in a collective-based social security system (Dixon, 1982; Wang, 2006; Zhang & Liu, 2000).

All these provisions, in range and availability, began to reduce substantially with the advent of Deng Xiao-ping's era of modernization and opening to the West, and the "responsibility" system in agriculture, which effectively ended the collective farms. After the late 1970s, many features of the iron rice bowl began to decline, and most had effectively disappeared by the early 2000s. Many of the worst-hit by this were older rural farmers without collective support and older urban workers who were unable to find a place in the new emerging economy (Bulard, 2006; Piquet, 2008).

Meanwhile, living arrangements may have also changed substantially in recent years, especially in urban areas, but families still remain an essential ingredient of and basis for old-age support in China. The basic functions of families are still stressed by the Chinese government (Du & Phillips, 2004), despite attempts to reduce this familial reliance in the Cultural Revolution era. Today, there is not a single model of filial piety in China or the Asia-Pacific region, and its practice can be maintained by self-interest including devotion, economic motivators, or even sanctions (Ikels, 2004).

Some studies have noted that in China (as elsewhere), some better-off older persons may now prefer to live independently from their children (Sereny, 2011). Independent living may also be forced upon some older persons, especially if their children migrate for

education and work, which may raise living standards for the children but reduce their proximity. Such a living arrangement could also be by choice, as some older persons may prefer to live away from, or even independently from, their children and may not wish to be a burden on them. The essential role of family support for elderly persons, however, has been formalised in a national law, the Law of the People's Republic of China on the Protection of Rights and Interests of the Aged. This legislation, initially enacted in 1996 and updated in 2012, requires adult children to ensure that their older parents' financial and emotional needs are met. How this will work after the latest update is as yet unclear, but the law does state that employers must permit home leave for visits to older parents as required by the regulations (FlorCruz, 2013).

An important feature is that today's substantially smaller families mean there are fewer potential extended family members to personally support their older adults through co-residence. As a result, the responsibility for informal care falls squarely on the individual and his or her immediate family, and where no children are available, the consequences can be serious. In addition, loss of a spouse (either through death or divorce) often results in older persons losing the support of their partner in old age. Meanwhile, formal social security provision from the state for elderly persons is underfunded and underdeveloped (Feng, Wang, & Jones, 2013). Pensions are very unevenly distributed between rural and urban areas; in general, rural older persons are much less likely to have a pension (or a meaningful one) than their urban counterparts (Han & Wei, 2012). These differences are exacerbated as, in terms of medical expenditure, people are suffering increasing and relatively high out-of-pocket costs, particularly in rural areas (Dai, Zhou, Mei, Wu, & Mao, 2011; Dong, 2009). Consequently, the formal benefits many elderly persons actually receive from the state are minimal. A confounding feature is that different welfare and pension systems and subsystems are emerging in the various provinces, and they vary especially among the large and more prosperous cities. A universal rural pension has been proposed by the State Council, although its value too is minimal (HelpAge International, 2013), and there are moves towards integration of urban and rural pensions (China Daily, 2014), although how and whether this will be implemented is yet to be seen.

Underlying the key challenges to China today of aging, both for the state and for families, are population dynamics and socioeconomic change. The increasing number of older people and the gradually rising life expectancy, coupled with socioeconomic trends, provide enormous challenges to the family's current and future ability to support their older members.

Current and Future Challenges for Family Support

Although the family still retains the main role, emotionally and practically, as the support provider, its ability to support its older members has almost certainly been considerably influenced by these factors.

Population Change, Fertility Decline, and Smaller Family Size

Before the establishment of the PRC in 1949, China's average annual population growth rate was only 2.5 individuals per thousand (Zeng, 1991), due to a combination of high birth and high death rates. This changed fairly rapidly after the mid-1950s as mortality decreased, though with some regression during the famines of the late 1950s and early 1960s, leading to an annual growth rate of about 0.6 per cent in 2013 according to the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP, 2013).

Figures 1 and 2 demonstrate population trends from 1949 to 2012 and Total Fertility Rate (TFR) from 1950 to 2010 in China. In terms of population trends, there were two baby booms before the onset of continuous fertility decline as a consequence of socioeconomic development and the strong one-child policy implemented in 1979. The first boom was during 1949 to 1957, with a fairly high birth rate (32–38 per thousand) and declining death rates; as a result, natural growth rates

were high, at around 16 per thousand. In the later part of this period, the PRC government started large-scale publicity campaigns and training of "birth-planning" personnel. With the Great Leap Forward of 1958 and the subsequent coalescing of natural disasters and food production mismanagement, in the ensuing three years, the death rate increased remarkably (to 25.4 per thousand). Consequently, China's natural growth rate of population fell to –4.57 per thousand from 1958 to 1961.

The second baby boom was from 1962 to 1970 when birth rates were again high (33.4–43.4 per thousand), and improving living conditions (especially after the Cultural Revolution) led to the death rate falling to 10 per thousand. The State Council in 1962 began a birthplanning campaign which included family planning measures that promoted contraception and late marriage. Unfortunately, just as this campaign was starting to yield results, the Cultural Revolution swept the nation beginning in 1966, disrupting this campaign along with almost all areas of education, health services, and social life in general. Birth planning was lifted in the Cultural Revolution, and the natural growth rates rose to around 25.5–33.3 per thousand (see Figure 1). At this time, the TFR remained high, at between 5.5 and 6 children per woman (see Figure 2).

When social conditions settled down again, between 1970 and 1979, the natural growth rate decreased as a result of the decreased birth rate, which reached

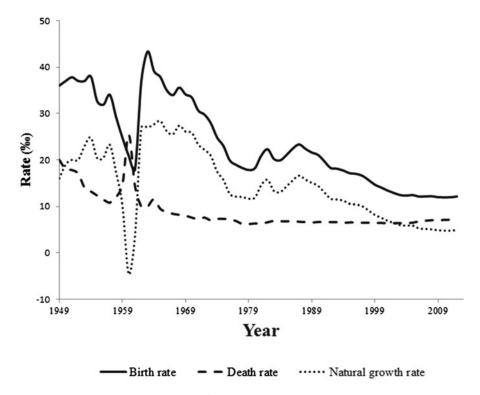


Figure 1: Birth rate, death rate, and natural growth rate of China's population, 1949–2012 (Source: National Bureau of Statistics, 1988; 2013)

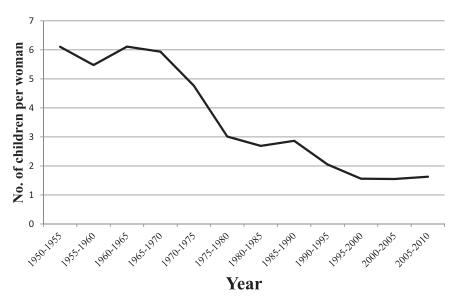


Figure 2: The evolution of China's total fertility rate (children per woman) (Source: United Nations, 2012)

around 11.6 per thousand in 1979 (see Figure 1). There was also an obvious, steady decline in the TFR during this period. China's TFR was six in 1970, falling to around three in 1980 (see Figure 2). The fertility decline was due to the combined effects of both increasingly strict family planning policies and improving social and economic development. The so-called Wan-Xi-Shao (usually called "late-spaced-small" families) policies were initiated in the period leading up to 1979 as a concerted family-planning campaign which made great impacts on reductions of the birth rate, and the natural growth rate. Wan refers to late marriage (mid-twenties for women, late twenties for men); Xi refers to long birth intervals/birth spacing (3-4 years); and Shao (literally, "small") means fewer children (no more than two children per couple in urban, and three in rural, areas).

From 1979 onwards, at the start of the implementation period of the so-called economic reforms and the one-child policy, the cohorts of children born in the 1950s and 1960s were beginning to reach marriageable age. The natural growth rate fluctuated in the first 10 years (1979–1987), and then decreased, falling to under 10 per thousand after 1997, a decade and a half into the one-child policy (see Figure 1). In terms of fertility, since 1979 the TFR has constantly decreased, dropping below 2.1 (so-called "replacement level") in the mid-1990s. By the end of the first decade of the twenty-first century, the TFR was estimated at around 1.6 children per woman (see Figure 2).

Population policies in the PRC have attracted considerable, ongoing criticism and debate. They have been justified by data indicating that, prior to 1978, even if each family had been limited to two children, the growth in population would still have been huge.

Policy makers estimated that resources would be overwhelmed. In mid-1978; therefore, the Chinese government decided on the infamous one-child policy, launched in early 1979 with the avowed aim of controlling population size. This policy allowed couples to have only one child; the main target was urban residents and government employees, both considered more "controllable" groups.

Some modifications to the policy's application have emerged over the past 35 years, including some variations between provinces. For example, couples in urban areas may be permitted to have a second child in certain cases: if there is at least a five-year gap between the first and second child; if the first child were physically or mentally challenged; if couples were divorcees or if both came from one-child families. The bigger variations have been between urban and rural areas, as rural folk, especially farmers, have been allowed to have a second child after five years if the first-born is a girl (Mamdani & Mamdani, 2006). The small percentages of Chinese minorities (ethnically non-Han citizens) in the PRC were generally outside the remit of the policy, and they could have several children. Social and economic development also played an important role in fertility decline in this period. Similar to the situation in many richer countries, social and economic development in China has been negatively associated with the fertility rate. Indeed, it has been found to have played a decisive role in the transition to below-replacement fertility in some provinces in China (Cai, 2010) and, particularly, has influenced a more general acceptance of fewer children.

Whatever the exact causes, it is clear that a steep fertility decline has resulted in fewer children in almost every family, which has greatly reduced family size and transformed traditional Chinese living arrangements. The average family household size was 4.4 individuals in 1982 and had decreased to 3.1 in 2010 (National Bureau of Statistics, 2013). This has inevitably had social impacts. Fewer children per household almost inevitably means fewer carers and less immediate family support for elderly members (Zhan, Feng, & Luo, 2008). Even with the relaxations of family planning policy, further relaxed in late 2013 so that couples of whom one is an only child can have two children, the TFR will hover above 1 for some time. Nonetheless, the often-cited 4-2-1 family structure seems to be emerging, meaning four grandparents, two parents, and one child. In this structure, a couple (two persons) could potentially be responsible both for the care of one child and up to four grandparents, and some may even have surviving greatgrandparents. This would also imply that the only child will eventually have to support two parents and possibly four grandparents, as well as being part of a smaller working generation contributing to production and taxes. Moreover, the child will have no siblings with whom to share filial responsibilities.

In combination with the absence of a meaningful universal old-age pension, China's considerable fertility decline therefore sets the scene for pressure on adult children to provide financial support, health care, and daily social care for older relatives in future. Whereas probability analysis of life tables, death rates of older persons, and a later child-bearing age in China have suggested that the impact on old-age support of the 4-2-1 structure may not be as severe as some have predicted (Jiang & Sánchez-Barricarte, 2011), the general trend is still a crucial consideration.

Moreover, and what is potentially even more serious, the one-child policy has also had the unintended consequence of seriously distorting the country's gender balance in the generations born since 1979. China, like several other Asian nations, has a long history of preferring sons and economic realities that favour sons in China (Ebenstein, 2010). For several decades, the number of registered male infant births has exceeded the number of female births. The sex ratio was 116.9 in 2000 (Goodkind, 2011), and it has been estimated that there are about 9.2 million "missing girls" among children aged 0–18 in the 2000 census (Ebenstein, 2010). The gender imbalance is estimated to have slightly increased by 2011, to around 117.8, but still significantly differs from the "normal" birth ratio of 105 males per 100 girls (Cheng, 2013).

The growing gender imbalance has been a cause of considerable concern among policy makers, academic researchers, and the media for over a decade. In general, it has been termed "the missing girls", a phenomenon

to be seen in India and elsewhere (McCracken & Phillips, 2012) but which is particularly marked in the PRC. It is regarded as particularly disadvantageous for the family care of rural elderly people if they have only a daughter, because the custom in China is patri-local residence which generally means daughters leave home to live with and care for their husband's family. Comparatively speaking, elderly people living in urban areas have perhaps been thought likely to have fewer problems than those living in rural areas, because for urbanites, custom and practice are changing, and son preference is probably less marked (Bartlett & Phillips, 1997). Nevertheless, an acknowledged and considerable gender imbalance has emerged over the past three decades. A previously underestimated but socially serious consequence is that, in a country like China, where marriage has been almost universal, official estimates suggest that by 2020, there could be 24 million males unable to find a marriage partner (Cheng, 2013). Although current data suggest the gender imbalance may be stabilizing or dropping off slightly, it is still likely to persist for a complex range of social and cultural reasons as well as from official attitudes on the topic (Eklund, 2011).

This gender imbalance is unprecedented, and its social, economic, and care consequences, especially for older parents with a single son, are therefore not only difficult to predict but likely to worsen over the next two or three decades. So, the phenomenon has considerable and unpredictable implications for social patterns and behaviour in the future. Problems are likely to be greater for parents with an unmarried son than for those whose sons are married. Specifically in terms of care for older parents, the unmarried future cohorts of males will have no spouse or female offspring to assist them.

Impacts of the Hukou System

The *hukou* (household registration) system is used to register the residence of all Chinese citizens and classifies (or divides) citizens as non-agricultural *hukou* (urban households) or agricultural *hukou* (rural households). The system has long been recognized as an "invisible wall" between the rural and urban sectors as place of residence gives access to certain levels and types of services and benefits. In recent years, urbanbiased policies and development, which have been concerned primarily with economic and political stability in urban areas, have exaggerated the gap between the urban and rural areas (Miller, 2012; Zhang & Zou, 2012).

The *hukou* system has at least two major impacts on the family's ability to be involved with an increasingly aging population. First, apart from the effect of population policy (one-child policy) on the rate of population

change, the population's hukou status also has a bearing on population change. In particular, it has been found that a higher percentage of agricultural hukou is associated with a higher TFR (Cai, 2010). Conversely, a higher percentage of non-agricultural hukou (urban households) is associated with a lower TFR which reflects the fact that rural-agricultural families are more likely to be permitted a second child (e.g., if the first child is a girl). In urban areas, the one-child policy has generally been far more stringently enforced and smaller families accepted, hence resulting in lower urban TFRs. So, fewer children are available in almost every urban family to support older persons than in rural families. This greater stringency in application of family planning for couples in urban and rural areas is very likely hastening the formation of the 4-2-1 family structure in urban areas.

The second impact of the hukou system is that urbanbiased policies have protected urban residents' welfare systems. Not only that, but rural residents have thereby been prevented from participating in the welfare system and benefits in urban areas if their hukou registration is elsewhere - that is, if their registration is rural. Urban elderly residents are now being fairly well covered by the social security system, including health care, pensions, and education (for children, freeing them from costs and responsibilities). By contrast, new migrant workers (many of whom are former agricultural workers and with rural hukou status) in urban areas are far less likely to be covered by the urban social security system or even given access to education for their children. This situation has been a long-recognized source of complaint, severe grievances, and dissatisfaction. The Chinese government has for some years been discussing reform or even abolition of the system and, while most commentators deem full liberalization rather unlikely, developments in late 2014, which we discuss below, may indicate more meaningful changes might be in the offing.

At the root of urban-biased policies, the *hukou* system aimed to restrict the movement of population, particularly of labour from rural to urban areas, to protect the urban welfare system. It initially resulted in surplus agricultural workers remaining in rural areas before the economic reforms (Wang, 2006). However, over the past decade or so, the demand for labour from burgeoning factories, especially in China's eastern seaboard provinces, has made wages so attractive that many rural hukou residents have migrated to urban areas and paid for their own health care and education when they could not get access to the state facilities. By contrast, urban residents have previously had the privilege of full employment, rising wages, and, formerly, comprehensive welfare cover often based on official employment (the iron rice bowl), employment in state-owned enterprises (Liu & Wu, 2006), or simply from their urban *hukou* giving access to health care, welfare, and education. Even though there was growing demand for labour after the first decade of economic reforms, the state still implemented a full employment policy to provide posts for workers in urban areas and steadfastly maintained the *hukou* system to prevent the sharing of jobs and benefits with rural migrants in the urban labour market until the 1990s (Liu & Wu, 2006).

Thereafter, the state somewhat loosened the hukou system to facilitate the movement of labour demanded by the ever-growing industrial development and the ever-increasing non-state private market. China's boom was giving annual economic growth rates of 10 per cent or more until 2008, which had settled by 2013 at a still high level of about 7.7 per cent (IndexMundi, 2014). Nevertheless, although rural migrant workers may work in areas classified as urban, they're still effectively treated as peasants by the hukou system, and receive unequal treatment in policies such as those relating to employment opportunities, welfare, and simply their right to live in urban areas (Wu, 2001). Because of the current extreme difficulty in transferring one's rural registration to an urban one (even though a person may have lived, worked, and paid taxes in an urban area for many years) and the concomitant difficulty, until 2010, in transferring one's pension across cities, most migrant workers are far more poorly covered by the pension scheme and consequently less willing to participate in the pension system (Wu, 2013). Hence, rural elderly people and rural migrants face a severe lack of economic security from the social support system, and they are more likely to rely on their families for economic support when they lose their physical ability to work (Cai, Giles, O'Keefe, & Wang, 2012).

In December 2014, the authorities announced another review of the *hukou* system to potentially grant urban status to rural migrants (Li, 2014). However, this may not be accepted by rural people as it could involve their giving up rights to their rural land even if they could then access urban welfare services. In addition, this review focuses only on current working-age rural migrants and may not cover returning or older migrants, those less willing or able to contribute for at least 10 years to the urban pension, so its effect could be limited.

At the moment, therefore, the system certainly increases the pressure on the family to provide financial support to their elderly members. By contrast, urban residents have been far more likely than rural residents to receive proper pensions when they retire, and they can, therefore, lead more secure and independent later lives with a reasonable standard of living (Du & Phillips, 2004). As discussed in the next section, a universal rural

pension has gradually been implemented since 2009, although its minimal value means it will have little real impact.

Impacts of Economic Reform (Open Door Policy)

Since 1978, China has effectively adopted a market-based economy rather than a fully planned economy. Initially, many of the effects of the open economic policy were focused on selected cities and several special economic zones principally on the eastern seaboard of China, such as Shenzhen (north of Hong Kong), Zhuhai (north of Macau), and Xiamen. Subsequently, the nation's socioeconomic system has radically altered. The government's "central task" as outlined by Deng Xiao-ping became to encourage people to get rich, inevitably allowing some people and some areas to become rich far earlier than others (Qian & Xu, 1993). For most Chinese people - whether urban, rural, coastal, or interior residents - politics, economic opportunities, and social norms have become fundamentally different over the past 35 years.

Economic reform has led to China's emergence as a modern-day economic miracle, with the World Bank predicting it may rank as the major global economy perhaps as early as 2015, though some suggest 2021 is more likely (Giles, 2014; The Economist, 2014). However, social changes have also been as great, or greater, even if political reform has lagged. One of the major social impacts of the economic changes has been on the family's ability to support their older members. This is evidenced in two notable areas. First, reforms of the old age security system (especially pensions) and health insurance/coverage mean large numbers of older people do not have sufficient pensions (and some still have none), and there is vastly reduced affordability of health care as well as frequent difficulty in accessing health services. In the second area of note, spatial/geographical disparities in economic development have grown and led to marked increases in family "splits" - that is, separations due to migration for work.

China's so-called economic reforms have been accompanied by enormous changes in social security for both working age and retired groups. Given the unequal institutional arrangements (e.g., urban/rural, private/state sectors) and unbalanced governmental expenditure on social security provision, many older people are not covered by a pension scheme. Han and Wei (2012) reported that in 2012 fewer than a quarter of the elderly population had a pension of any sort, ranging from two-thirds of urban older people to under five per cent of rural elderly residents. As we have noted, however, the new rural pension system will eventually give a small pension to most rural dwellers.

Prior to economic reform, most urban workers (notably civil servants, employees of institutional units, and employees of urban enterprises) received cradle-to-grave cover from an enterprise-based security system provided by enterprises or work units. Pensions were based on years of employment and wages before retirement. After 1978, only civil servants or employees in institutional units (a government agency) were still fully covered by the state budget for their pension scheme. All others were placed under the old-age insurance contributory pension scheme funded by employers and employees, or, increasingly, were left to fend for themselves.

Increasingly, the state has been unable to operate the numerous state-owned enterprises under central control and has delegated control to the enterprises' managers. However, many of these enterprises are inefficient and effectively bankrupt: they no longer meet the stateplanned production quotas and have had to face serious market competition from home and abroad for the first time. As many such enterprises have accumulated huge financial liabilities for the retirement pensions of their retired employees and other forms of social welfare for current workers, many have had to make workers redundant and radically transform their social welfare provision. Other of these enterprises have simply been unable to meet commitments and so have closed down, with many workers receiving only a delayed or bankrupt pension fund just before the closings (Jackson, Nakashima, & Howe, 2009). Although the State Council expanded old-age insurance to cover the employees of all types of enterprises in 1999, the system cannot cover laid-off workers from the bankrupt state-owned enterprises and private employees who retired before 1999. These elderly people who are now not covered by pensions are more likely to be thrown onto their families for financial support.

In rural areas, many people previously worked in people's communes (collectives) prior to the 1979 reforms of agriculture. Peasants had been encouraged to give up their land (their traditional source of security) and join the cooperatives through the promise of a welfare system that would provide security for the old, sick, widowed, orphaned, and handicapped by 1957 (Dixon, 1982). Cooperatives, which owned the land and other basic means of production, organized peasants to work together and underwrote responsibility for those in need of welfare support (Wang, 2006). In that period (1957–1978), welfare responsibility shifted from the family to the commune (Dixon, 1982). Although it was a low-level collective system, older rural people could obtain food from the commune that provided economic security and protected their basic standards of living (Zhang & Liu, 2000). After the post-1979 economic reforms and the introduction of a "household

responsibility" contract system, responsibility for social security for rural residents essentially shifted onto individual households, based on farmers' own resources.

Although there have been some pilot projects for establishing old-age insurance in rural areas since 1986, the percentage of farmers insured by these has been minimal due to poor management compounded by the government's institutional and policy changes (Wang, 2006). Only seven per cent of the rural population participated in the old-age insurance program in 2007 (Ministry of Labour and Social Security, 2008). Cai et al. (2012) found that 92 per cent of rural elderly people rely either on income from continued working or on their family for their primary source of financial support. Unsurprisingly, therefore, because of a reduced ability to work, older-old rural elderly persons are even more dependent on support from family members than are younger-old rural persons (Cai et al., 2012).

The increased dependence of older-old rural persons on family has become an important socio-political issue; for example, pension protection for rural residents was included in the 11th National Five-Year Plan (2006 to 2010). Most notably, the New Rural Old-Age Insurance System for Rural Residents program was introduced in late 2009. This program is similar to Old Age Insurance in urban areas. It has basic pensions and personal accounts. The basic pension is fully subsidized by the central government in poorer western provinces, the program is funded by both central and local governments in the richer eastern regions. The personal account must be funded by rural residents for at least 15 years. Participants can choose one of the options of the contribution scales from 100 to 500 Yuan per year. Because the vast majority of farmers will still receive only modest incomes from this old-age insurance program after they retied (55 Yuan in 2013), combination with the current financial affordability and lack of trust in this system which results in, they are more likely to choose the program's minimum option (Wu, 2013). Some traces of traditional rural support remain, but only rural older people who are childless or disabled are still promised the so-called "five guarantees" from the county civil affairs agency (food, clothing, medical care, fuel, and burial), as their sole form of social security. The implementation of the universal rural pension scheme for rural dwellers has accelerated since 2009, and it is hoped that complete coverage can be afforded to rural residents by 2020. On paper, this plan may somewhat reduce rural-urban inequalities among older persons, but as the value of the rural pension is only 55 RMB (approximately US\$8.80) per month (HelpAge International, 2013), it is effectively of minimal value in an increasingly expensive economy. In many ways, the amount provided by the New Rural Old Age Insurance

System for Rural Residents is therefore more symbolic than practical.

Health insurance has undergone similar radical reforms or changes since 1978. After that date, the health care of government and state institution employees was fully financed by central and local governments; everyone else was introduced either to a Basic Health Insurance Scheme (BHIS, a contributory health insurance scheme funded by employers and employees) if they were urban residents or to a New Cooperative Medical System (NCMS) if they were rural residents.

Meanwhile, the subsidies for public health from the government have also changed greatly since 1978. The state set low prices for health services before these reforms; thereafter, the state no longer set prices for health services and allowed health facilities to work on a for-profit basis for drugs or new and high-tech diagnostic services. There is – on paper – high health insurance coverage, with 68.4 per cent of the urban population covered by the BHIS, and 97.5 per cent of the rural population covered by the NCMS in 2011 (National Bureau of Statistics, 2013; National Health Services Survey, 2012).

Public health facilities, however, rarely offer services at the basic costs, and stories of excess charges and of the need to pay doctors separately for health care services are rife. This situation has stemmed from the limited government funding for public medical and health care and the "liberalization" of the system over the past few decades. The PRC subsidies for public medical and health care were only six per cent of national government revenue (National Bureau of Statistics, 2013); accordingly, medical expenditures are now the major barrier for people in accessing quality health care services, and some suffer from exorbitant out-of-pocket medical expenses (e.g., Dong, 2009).

These difficulties can particularly affect rural *hukou* people living in urban areas, who cannot access even the basic public facilities. Moreover, the Chinese media regularly report growing violence against health care staff by dissatisfied customers, indicative of deep frustration with the system (Huang, 2013). What's more, the theoretically high coverage of NCMS in rural areas has not led to improved access to formal medical care or to significant improvements in health conditions (Lei & Lin, 2009). Indeed, rural older persons in particular are more likely to report unmet needs for hospital services than are urban older persons as a result of two things: the limited protection offered by the NCMS, and rural elders' inability to pay extra for out-of-pocket expenses (Dai et al., 2011).

Impacts of Migration after the Economic Changes

The incremental economic reform was initiated in coastal provinces, and state policies were initially heavily

biased in favour of the coastal regions to attract foreign investment and export-oriented activities (Zhang & Zou, 2012). Although economic reform subsequently extended to some inland provinces during the 1990s, including efforts to attract investment to the far Western provinces, the coastal provinces have benefitted more than inland areas from the modernization phenomenon. Given their geographical advantages and more developed social and economic environments, the eastern seaboard provinces and towns have been far more attractive to foreign direct investment (Zhang & Zou, 2012). A major social consequence is that, ever since the implementation of the Open Door policy in 1978, China has been a nation of people "on the move". Migration, principally for work in the rapidly growing modern industrial areas, has led to enormous growth in such well-known cities as Beijing, Shanghai, Guangzhou, and Shenzhen. Additionally, many smaller towns have also benefitted, and urbanindustrial growth has spread extensively into surrounding areas on the eastern seaboard and which have effectively become urbanized. The migrants who have fuelled this huge growth of urban and industrial areas have come both from local and distant rural areas (i.e., Skeldon, 2012).

A second, related impact of economic reform on a family's ability to support their elderly members has thus resulted from the family splits caused by migration. These separations have resulted mainly from the increasing demand for labour in urban areas and coastal provinces. Given that the hukou system no longer restricted the migration of labour even if it did not allow the transfer of social welfare benefits, millions of young adults left their homes and have migrated from poorer rural areas to towns and rapid economic development areas. Moreover, many have gone overseas for education or to live, as a result of achieving greater incomes by following economic growth. This migration phenomenon has further diminished many families' ability to support their older members, especially in rural areas.

It has also been widely noted that rural-urban migrants are less likely to participate in the pension system as it is currently difficult to transfer one's pension between areas. Although the majority of rural-urban migrants are young, and will earn good incomes compared to their counterparts in rural areas, they are at high risk if they lose their jobs or lose the ability to work. Financial coverage for those who are either laid off or unable to work is minimal. This fact has caused concern, and the Chinese authorities are attempting gradually to improve social protection although it imposes extra costs and taxes on employers and is sometimes resisted by employers in the private sector.

The earlier reforms of the pension schemes mean that most rural residents do not have adequate pension protection and no longer enjoy the previous benefits from the collective farms. Many residents in rural areas have become what are called "left behind" persons, and many are already elderly or in middle age, which will inexorably increase the pressure for financial support from their families. Indeed, Xinhua News Agency (2011) reported as many as 40 million left-behind older persons in 2011. At present, such persons are often supported at least partly by remittances from their children who are away, working in the new economy.

While it is recognized that migrants often send remittances home for food, clothing, and living expenses, distance and the separated family means there is a distinct lack of physical and practical day-to-day care afforded to older parents. For example, having a nearby relative is crucial to assist when an older family member is hospitalized as there is often the need to provide food, bedclothes, and even personal nursing care in Chinese public hospitals, yet the availability of such a relative is often lacking. It is almost impossible for the children in split families to perform their practical filial duties in a traditional sense, so there is now some informal relaxation of expectations and growing popular belief that filial piety can be substituted for by cash remittances from the children.

There is an inherent tension for children, as mentioned earlier, since the law in China now expects children to care for and visit their parents. Unfortunately, however, even remittances may be under threat. Because of the higher living expenses in urban areas, and the hukou system restricting most rural residents from accessing the urban welfare system, some migrants must be cautious both about bringing family members with them and how much money they have available to send back home. Education costs have become a particular pressure point (Gao, 2013), as private school fees are much higher for the children of migrants in urban areas: typically, their children are not allowed to attend urban state schools. Health care is a similar issue. Therefore, migrants' school-age children often remain in their home villages with their care provided for by the grandparents. Gao (2013) noted estimates of 55 million children left behind in the care of relatives or neighbours. Many rural areas are effectively missing a generation of working-age people, and the areas are inhabited by older adults and children below university age.

It has become, therefore, very common for children to provide money for their older parents who, in turn, take care of their grandchildren. This intergenerational reciprocity not only ensures some financial stability for the family but also can improve the well-being of the older persons (Cong & Silverstein, 2008). On the other

hand, because of these financial obligations, many older persons find themselves effectively forced to care for grandchildren which may lead to both physical and emotional pressures (Wang, Zheng, Kurosawa, Inaba, & Kato, 2009). Self-support is nevertheless probably the most common economic resource for many rural leftbehind older persons, particularly given the limited or nonexistent support from local government or pensions (He & Ye, 2014). He and Ye also noted that rural-urban migration has degraded the well-being of some leftbehind elderly people. Although many such older persons are able currently to look after themselves, a growing danger is the aging of these cohorts who may be at risk when they lose the ability to work, especially those who do not receive remittances from migrant children. Their rural communities generally lack social support facilities, especially for those with chronic physical illnesses or degenerative conditions such as dementia.

Diverse Effects of Modernization

In addition to these specific issues discussed thus far that affect families' abilities to care for older members, a wide range of other factors have become evident in recent decades. Social attitudes are changing in China, as may be expected, and sometimes rapidly. Therefore, although residence with adult children has been a traditional and even expected living arrangement, in recent years, especially among older people of higher socioeconomic status, there seems to be some preference emerging for independent living (Sereny, 2011). Living alone or with only a spouse is becoming both acceptable and even, perhaps, more congenial to many older persons in China, especially in urban areas, who feel they can have their freedom and enjoy a better quality of life. It has for some time been noted that having a spouse is the greatest guarantee of support in old age (Chappell, 1991), even if caring for an ailing spouse can be a source of stress and increase morbidity (Umberson & Montez, 2010). A spouse may provide instrumental support, encourage a healthy lifestyle, and promote health and well-being (Umberson & Montez, 2010). However, for some, this support may be in jeopardy as divorce has become more common with China's rapid economic growth and modernization over the past three decades, and legal changes have made divorce easier. The crude divorce rate (per thousand population) increased from 0.33 in 1979 to 1.59 in 2007, and reached 2.29 in 2012 (Ministry of Civil Affairs of the People's Republic of China, 2013; Wang & Zhou, 2010). Divorce may lead to the loss of a spouse's support in old age and may also disadvantage children. Even worse, as daughters-in-law have traditionally been responsible for the care of their husband's parents, divorce often deprives some older people of a potential carer.

Remarriage, formerly rare, has also concomitantly increased in the PRC over the past three decades with the percentage of remarriages increasing from 3.05 per cent in 1985 to 10.24 per cent in 2007 (Wang & Zhou, 2010). However, it is still less common among older persons and especially for older persons who have lost their spouse. The Chinese census of 2010 found that 27 per cent of the elderly population are widowed. Yet, while a survey by the Chinese Academy of Social Sciences suggests that 80 per cent of widowed elderly people would like to remarry, fewer than 10 per cent of them actually register for marriage (Wang, 2013). This is thought to be because older people in China encounter enormous obstacles and objections from their children when seeking remarriage, due to expectations and concerns over allocation of family assets, as well as housing and care responsibilities. Attitudinal changes that encourage widows and widowers to remarry could be one aspect of modernization that may potentially help reduce the pressure of providing support from children while improving older persons' quality of life. Remarriage was once a taboo topic especially among older generations, but it seems that attitudes may be gradually changing in China as well as elsewhere in the region (Phillips & Cheng, 2012).

Social welfare institutions are growing as another option to assist older persons and support carers. The original objectives of old-age residential institutions in China were to accommodate what is commonly called the "three-no's" older people: those with little or no income, no living children, and no ability to work. After the economic reforms in 1978 onwards, Chinese policies in rural areas allowed only elderly people who had no close relatives to reside in government-subsidized institutions. In urban areas, however, there are increasing numbers of private old-age homes, with improved facilities, and institutional policies are relatively less restrictive. As a result, more older persons are living in institutional settings, a situation that was previously socially frowned on. By the late 1990s, many publicly owned nursing homes extended their services to older people who could pay, by themselves or via their children (Gu, Dupre, & Liu, 2007). This is also an important attitudinal and practical change, and one that appears to be accelerating. In 2012, the number of beds in elderly care institutions reached 21.48 per 1,000 senior citizens (National Bureau of Statistics, 2013). Such institutions still cause some social controversy, and residential care is also in need of improvement both quantitatively and qualitatively. It is, nevertheless, an area in which to expect major growth in the coming decade, and its growth may well affect dynamics of family care as has occurred in the West.

Conclusions

In this article we have reviewed four important and closely interlinked areas of challenge to the family's ability to engage with an aging population in China. Although the family's ability to support older persons is certainly weakening, families still remain the primary source of social support for the older persons. The quantity of support from the state is currently too limited to provide much support for older persons in general, and beneficiaries are relatively few. Traditionally, in China the family has been the cornerstone of social support for older persons. Moreover, its role and obligations have been legally defined and are increasingly emphasised by a state that recognizes the need but is not devoting the requisite resources to this age group.

Despite a continuing strong attachment to the concepts of family care and filial piety, many people of all ages now acknowledge it is time for the state to assume greater responsibility to relieve the burden, enhance the support for care when provided by the family, and improve the quality and quantity of public support for older persons. This leads to a major focus of future research based on the four areas discussed.

In particular, both the policy implications and means of implementing formal state care in a manner that supports family care must be investigated. The ways in which pensions and social care can be provided, extended, and sustained are also a key research area. Another area of concern is identifying practical means by which the state can abolish the unequal institutional arrangements and unbalanced governmental expenditure in social security provision, especially to reduce disparities between urban and rural areas. The practicalities of reforming or even abandoning the hukou system are already under discussion but implementation stubbornly remains, as yet, some way off. Therefore, in the interim, means by which to provide practical support for split families in the modern economic boom is a related research priority. The practicalities of extending government expenditures for rural residents' pension schemes, again to reduce rural-urban inequalities, is a further focus.

Finally, research and policies must address the growing disparities between rich and poor and between geographical areas, as these are socially divisive and undermine family cohesiveness, which the state is trying to reassert. Therefore, ways in which the benefits of China's economic miracle can be more fairly distributed across the whole country is a fundamental research focus that might help families and intergenerational relations. Could there, for example, be greater promotion of inland or less developed areas, including development of services and infrastructure, to attract foreign

direct investment? If successful, fewer young adults might be obliged to migrate for work or education. This could greatly benefit the nation as well as enhance intergenerational support among Chinese families.

References

- Baker, H. D. R. (1979). *Chinese family and kinship*. New York: Columbia University Press.
- Bartlett, H., & Phillips, D. R. (1997). Ageing and aged care in the People's Republic of China: National and local issues and perspectives. *Health and Place*, *3*, 149–159.
- Bulard, M. (2006). China breaks the iron rice bowl. An uncertain future for a two-tier society. *Le Monde Diplomatique*, January. Retrieved online 4 May 2014 from http://mondediplo.com/2006/01/04china.
- Cai, F., Giles, J., O'Keefe, P., & Wang, D. (2012). *The elderly and old age support in rural China: Challenges and prospects.* Washington, DC: The World Bank.
- Cai, Y. (2010). China's below-replacement fertility: Government policy or socioeconomic development? *Population and Development Review*, 36, 419–440.
- Chappell, N. (1991). Living arrangements and sources of caregiving. *Journal of Gerontology*, 46, S1–S8.
- China Daily. (2014). China integrates rural, urban pensions. *China Daily*, 14 February. Retrieved online 4 May 2014 from http://www.chinadaily.com.cn/business/2014-02/14/content_17282782.htm.
- Cheng, T. M. (2013). China must solve its daughter deficit. Hong Kong: South China Morning Post, 6 April. Retrieved online 4 May 2014 from http://www.scmp.com/comment/insight-opinion/article/1207870/china-must-solve-its-daughter-deficit.
- Chu, C. Y. C., & Yu, R. R. (2010). *Understanding Chinese families: A comparative study of Taiwan and Southeast China*. Oxford, UK: Oxford University Press.
- Cong, Z., & Silverstein, M. (2008). Intergenerational time-formoney exchanges in rural China: Does reciprocity reduce depressive symptoms of older grandparents? *Research in Human Development*, 5(1), 6–25.
- Dai, B., Zhou, J., Mei, Y., Wu, B., & Mao, Z. (2011). Can the New Cooperative Medical Scheme promote rural elders' access to health-care services? *Geriatrics and Gerontology International*, 11, 239–245.
- Dixon, J. (1982). The community-based rural welfare system in the People's Republic of China: 1949-1979. *Community Development Journal*, 17, 2–12.
- Dong, K. (2009). Medical insurance system evolution in China. *China Economic Review*, 20, 591–597.
- Du, P., & Phillips, D. R. (2004). Potential consequences of population ageing for social development in China. In P. Lloyd-Sherlock (Ed.), *Living longer* (pp. 97–116). London: Zed Books.

- Ebenstein, A. (2010). The "Missing Girls" of China and the unintended consequences of the One Child Policy. *Journal of Human Resources*, 45, 87–115.
- Eklund, L. (2011). *Rethinking son preference Gender, population dynamics and social change in the People's Republic of China*. PhD Thesis, Lund Dissertations in Sociology, Lund University. Retrieved online 4 May 2014 from http://www.lunduniversity.lu.se/o.o.i.s?id=12683&postid=1950819.
- Fei, X. (1983). Problem of providing for the senile in the changing family structure. *Journal of Peking University* (*Philosophy and Social Sciences*) (in Chinese), 3, 6–15.
- Feng, W., & Mason, A. (2005). Population aging in China: Challenges, opportunities, and institutions. In Z. Zhao & F. Guo (Ed.), *Transition and challenge: China's population at the beginning of the 21st century*. Oxford, UK: Oxford Scholarship Online. Retrieved online 4 May 2014 from http://www2.hawaii.edu/~amason/Research/Population%20Aging%20in%20China.pdf.
- Feng, Z., Wang, W., & Jones, K. (2013). A multilevel analysis of the role of the family and the state in self-rated health of elderly Chinese. *Health and Place*, 23, 148–156.
- Feng, Z., Wang, W., Jones, K., & Li, Y. (2012). An exploratory multilevel analysis of income, income inequality and self-rated health of the elderly in China. *Social Science & Medicine*, 75, 2481–2492.
- FlorCruz, M. (2013). Chinese law requires children to visit elderly parents. *International Business Times*, 2 January. Retrieved online 4 May 2014 from http://www.ibtimes.com/chinese-law-requires-children-visit-elderly-parents-987796.
- Gao, Y. (2013). The high cost of migration in China. *The New York Times*, 3 December. Retrieved online 4 May 2014 from http://www.nytimes.com/roomfordebate/2013/12/03/life-in-a-mobile-nation/the-high-cost-of-migration-in-china.
- Giles, G. (2014). China poised to pass US as world's leading economic power this year. *Financial Times*, 30 April. Retrieved online 4 May 2014 from http://www.ft.com/intl/cms/s/0/d79ffff8-cfb7-11e3-9b2b-00144feabdc0.html.
- Global AgeWatch Index (2014). *HelpAge International*. Retrieved online 4 May 2014 from http://www.helpage.org/globalagewatch/population-ageing-data/country-ageing-data/?country=China.
- Goodkind, D. (2011). Child underreporting, fertility, and sex ratio imbalance in China. *Demography*, 48, 291–316.
- Gu, D., Dupre, M., & Liu, G. (2007). Characteristics of the institutionalized and community-residing oldest-old in China. *Social Science & Medicine*, 64, 871–883.
- Han, Y., & Wei, M. (2012). Only twenty percent of the elderly rely on pension for daily living. *The Beijing News* (p. 1). Retrieved online 4 May 2014 from http://epaper.bjnews.com.cn/html/2012-10/23/content_382215. htm?div=-1.

- He, C., & Ye, J. (2014). Lonely sunsets: Impacts of rural-urban migration on the left-behind elderly in rural China. *Population, Space and Place, 20, 352–369*.
- HelpAge International (2013). *Pension Watch*. Briefing no 11. London: HAI. Retrieved online 4 May 2014 from http://www.refworld.org/pdfid/5301df5d4.pdf.
- Hu, X. C. (2012). China's young rural-to-urban migrants: In search of fortune, happiness, and independence. Migration Information Source, Migration Policy Institute, Washington, DC. 4 January. Retrieved online 4 May 2014 from http://www.migrationpolicy.org/article/chinas-young-rural-urban-migrants-search-fortune-happiness-and-independence.
- Huang, Y. H. (2013). China's doctors are under attack. *The Atlantic*, 3 December. Retrieved online 4 May 2014 from http://www.theatlantic.com/china/archive/2013/12/chinas-doctors-are-under-attack/282002/.
- Ikels, C. (Ed.) (2004). Filial piety: Practice and discourse in contemporary East Asia. Stanford, CA: Stanford University Press.
- IndexMundi (2014). China's GDP real growth rate. *Index-Mundi*, 26 September 2014. Retrieved online 4 May 2014 from http://www.indexmundi.com/china/gdp_real_growth_rate.html.
- Jackson, R., Nakashima, K., & Howe, N. (2009). China's long march to retirement reform. Washington, D.C.: Center for Strategic and International Studies (CSIS), and The Prudential Foundation. Retrieved online 4 May 2014 from http://csis.org/files/media/csis/pubs/090422_gai_ chinareport_en.pdf.
- Jiang, Q. B., & Sánchez-Barricarte, J. J. (2011). The 4-2-1 family structure in China: A survival analysis based on life tables. *European Journal of Ageing*, 8(2), 119–127.
- Kam, W. C. (2013). China: internal migration. In I. Ness (Ed.), The encyclopedia of global human migration (15 pp.). London: Blackwell.
- Lei, X., & Lin, W. (2009). The New Cooperative Medical Scheme in rural China: Does more coverage mean more service and better health? *Health Economics*, 18, S25–S46.
- Li, J. (2014). Migrant rights plan 'critical'. Hong Kong: *South China Morning Post*, 6 December, p. A3.
- Li, S., Sato, H., & Sicular, T. (Eds.) (2013). *Rising inequality in China: Challenges to a harmonious society*. New York: Cambridge University Press.
- Liu, Y., & Wu, F. (2006). The state, institutional transition and the creation of new urban poverty in China. *Social Policy and Administration*, 40, 121–137.
- McCracken, K., & Phillips, D. R. (2012). *Global health: An introduction to current and future trends*. Abingdon, UK: Routledge.
- Mamdani, B., & Mamdani, M. (2006). The impact of China's one-child policy. *Indian Journal of Medical Ethics*, 2, 106–108.

- Miller, T. (2012). China's urban billion: the story behind the biggest migration in human history. London: Zed Books.
- Ministry of Civil Affairs of the People's Republic of China (PRC) (2013). *China civil affairs' statistical yearbook*. Beijing: China Statistics Press.
- Ministry of Labour and Social Security (2008). *China labour* and social security yearbook, 2008. Beijing: Chinese Ministry of Labour and Social Security Press.
- Mujahid, G. (2006). Population ageing in East and South-east Asia: Current situation and emerging challenges. Papers in Population Ageing no 1. Bangkok: UNFPA Country Technical Services Team for East and South-east Asia.
- National Bureau of Statistics (1988). *Chinese statistical yearbook*. Beijing: Chinese Statistics Press.
- National Bureau of Statistics (2013). *Chinese statistical yearbook*. Beijing: Chinese Statistics Press.
- National Health Services Survey (2012). An analysis report of National Health Services survey in China. Beijing: Center for Health Statistics and Information.
- Phillips, D. R. (Ed.) (2000). *Ageing in the Asia-Pacific region: Issues, policies and future trends*. London: Routledge.
- Phillips, D. R., & Cheng, K. (2012). The impact of changing value systems on social inclusion: An Asia-Pacific perspective. In T. Scharf & N. C. Keating (Eds.) From exclusion to inclusion in old age: A global challenge (pp. 109–124). Bristol, UK: Policy Press.
- Piquet, H. (2008). Chinese labor law in retrospect: Efficiency and flexibility legitimized. In A. Laliberté & M. Lanteigne (Eds.) *The Chinese party-state in the 21st century* (pp. 39–57). Abingdon, UK: Routledge.
- Qian, Y., & Xu, C. (1993). Why China's economic reforms differ: the m-form hierarchy and entry/expansion of the non-state sector. *Economics of Transition*, 1, 135–170.
- Quah, S. R. (Ed.) (2015). Routledge handbook of families in Asia. Abingdon, Oxon. and New York: Routledge.
- Sereny, M. (2011). Living arrangements of older adults in China: The interplay among preferences, realities, and health. *Research on Aging*, *33*, 172–204.
- Sicular, T. (2013). *The challenge of high inequality in China. World Bank Inequality in Focus*, 2, 2, 1-5. Retrieved online 4 May 2014 from http://www.worldbank.org/content/dam/Worldbank/document/Poverty%20documents/Inequality-In-Focus-0813.pdf.
- Skeldon, R. (2012). Migration and Asia: Reflections on continuities and change. *Asia-Pacific Population Journal*, 27(1), 103–118.
- The Economist (2014). Catching the Eagle. *The Economist*, 22 August. Retrieved online 4 May 2014 from http://www.

- economist.com/blogs/graphicdetail/2014/08/chinese-and-american-gdpforecasts.
- Umberson, D., & Montez, J. K. (2010). Social relationships and health: A flashpoint for health policy. *Journal of Health & Social Behavior*, 51(S), S54–S66.
- United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). (2013). 2013 ESCAP population data sheet. Bangkok: United Nations ESCAP. Retrieved online 4 May 2014 from http://www.unescapsdd.org/files/documents/PUB_Datasheet-2013. pdf.
- United Nations. (2012). World Population Prospects: The 2012 Revision. Retrieved online 4 May 2014 from http://esa.un.org/wpp/.
- Wang, D. (2006). China's urban and rural old age security system: Challenges and options. China and World Economy, 14(1), 102–116.
- Wang, D., Zheng, J., Kurosawa, M., Inaba, Y., & Kato, N. (2009). Changes in activities of daily living (ADL) among elderly Chinese by marital status, living arrangement, and availability of healthcare over a 3-year period. Environmental Health and Preventive Medicine, 14, 128–141.
- Wang, Q., & Zhou, Q. (2010). China's divorce and remarriage rates: Trends and regional disparities. *Journal of Divorce* & *Remarriage*, 51, 257–267.
- Wang, Y. (2013). Less than 10 % widowed elderly actually register for marriage. Retrieved online 4 May 2014 from http://paper.people.com.cn/smsb/html/2013-01/25/content_1190602.htm.
- World Bank. (2014). *GNI per capita ranking, Atlas method and PPP based*. World Bank Data, Washington, DC: World Bank Group. Retrieved online 4 May 2014 from http://data.worldbank.org/data-catalog/GNI-per-capita-Atlas-and-PPP-table.
- Wu, L. (2013). Inequality of pension arrangements among different segments of the labor force in China. *Journal of Aging & Social Policy*, 25, 181–196.
- Wu, X. (2001). A rural community in urban areas: The study on the settlements of the floating population. *City Planning Review* (in Chinese), 25, 25–29.
- Xinhua News Agency. (2011). The left-behind elderly reached more than 40 million. *Xinhua News Agency*. Retrieved online 4 May 2014 from http://news.qq.com/a/20111005/000104.htm.
- Zeng, Y. (1991). *Family dynamics in China: A life table analysis*. Wisconsin: The University of Wisconsin Press.
- Zeng, Y., & George, L. (2002). Extremely rapid ageing and the living arrangements of the elderly: The case of China. In *Living Arrangements of Older Persons*, Population Bulletin of the United Nations, Special Issue Nos. 42/43, New York: United Nations.

- Zhan, H. J., Feng, X. T., & Luo, B. Z. (2008). Placing elderly parents in institutions in urban China A reinterpretation of filial piety. *Research on Aging*, 30, 543–571.
- Zhan, H. J., Liu, G., Guan, X., & Bai, H. (2006). Recent developments in institutional elder care in China: changing concepts and attitudes. *Journal of Aging and Social Policy*, *18*, 85–108.
- Zhang, Q., & Zou, H. (2012). Regional inequality in contemporary China. *Annals of Economics and Finance*, 13, 113–137.
- Zhang, S., & Liu, L. (2000). China rural elderly social security system in historical flux: Traits and reasons. *Population Journal*, *5*, 35–39.