

# Intergenerational co-residence during later life in Europe and China

Tom Emery<sup>1</sup>, Pearl A. Dykstra<sup>2</sup> and Maja Djundeva<sup>2</sup>

Chinese Journal of Sociology

2019, Vol. 5(2) 241–259

© The Author(s) 2019

Article reuse guidelines:

[sagepub.com/journals-permissions](http://sagepub.com/journals-permissions)

DOI: 10.1177/2057150X19838031

[journals.sagepub.com/home/chs](http://journals.sagepub.com/home/chs)

## Abstract

Individuals in China are much more likely than Europeans to live with their adult children during later life. In this paper, we examine the extent to which this holds true across the diverse contexts and circumstances faced by Europeans and Chinese. We use comparative data from the Survey for Health, Ageing and Retirement in Europe and the China Family Panel Studies to examine cross-national differences in whom adults in later life choose to live with. We find that in rural China and among urban migrants there is a tendency to live with higher-educated children, whilst among urban Chinese and Europeans, individuals live with those with lower education levels. We also find that in Europe there is only a small preference for living with male adult children, whilst across China this preference is much stronger. However, we also note that this preference is weakest in urban China. These findings indicate strong differences in co-residence patterns between China and Europe, but also some similarities between specific subpopulations. We explain these differences and similarities using a social policy framework.

## Keywords

Co-residence, intergenerational, China, Europe, CFPS

---

<sup>1</sup>Netherlands Interdisciplinary Demographic Institute, Den Haag, The Netherlands

<sup>2</sup>Department of Sociology, Erasmus School of Social and Behavioural Sciences (ESSB), Erasmus University Rotterdam, Rotterdam, The Netherlands

## Corresponding author:

Tom Emery, NIDI, Postbus 11650, 2502 AR Den Haag, The Netherlands.

Email: [emery@nidi.nl](mailto:emery@nidi.nl)

## Introduction

One of the most marked differences in family dynamics between China and Europe is the prevalence of intergenerational co-residence. A high proportion of individuals live with their adult children during later life in China compared with their European counterparts (Ruggles, 2014). Familialism and filial piety are regularly cited as causes of the fundamentally distinct co-residence patterns found in Europe and China (Chu et al., 2011; Hamilton, 1990; Whyte, 1997; Whyte and Xu, 2003; Yasuda et al., 2011). Similarly, southern Europeans and northern Europeans are often demarcated in terms of their familial values and the resulting prevalence of intergenerational co-residence (Reher, 1998). However, these cultural explanations are challenged by research findings from both Europe and China, which place emphasis on individuals' needs and capacities (Chen, 2005; Chu et al., 2011; Isengard and Szydlik, 2012; Kalmijn and Saraceno, 2008; Sun, 2002).

We attempt to integrate findings from Europe and China in this paper. We argue that the fundamental differences in contemporary co-residence levels are attributable to welfare-state arrangements and the degree to which they shape the needs and capacities of both parents and children (Szydlik, 2008). This position follows the tradition of European Comparative Welfare State literature by placing micro-level dynamics within the context of welfare-state support mechanisms (Albertini and Kohli, 2013). In doing so, it brings together the findings from existing micro-level findings on intergenerational co-residence in both China and Europe with macro-level structural factors that differ between China and Europe.

We provide evidence in support of this by examining patterns of co-residence between parents and their adult children in Europe and China. We analyze parent-child dyads from the Survey for Health, Ageing and Retirement in Europe (SHARE) alongside data from the China Family Panel Studies (CFPS) in a multi-level framework that encapsulates dynamics at the family level and subregional level. Our findings demonstrate the role of welfare institutions in shaping co-residence patterns both within and between Europe and China. In Europe, our results are consistent with existing findings which suggest that welfare-state institutions shape need and capacity structures at the micro-level, resulting in differences in co-residence levels between educational levels and genders. In China, welfare arrangements for individuals with different household registration (*hukou*) status lead to distinct patterns of intergenerational co-residence that are not consistent with modernization theories (Ruggles, 2007; Slater and Goode, 1964). The results demonstrate the interaction between macro- and micro-level processes in determining co-residence patterns and the value of comparative research in family dynamics.

## Existing research

In this paper, we extend European theories of co-residence to the context of Chinese society in order to explore and examine intergenerational co-residence in China and Europe. The predominant difference between European and Chinese research on intergenerational co-residence has been the emphasis placed on the

welfare state. The comparative nature of research in Europe has allowed for considerable study of the macro, institutional factors that shape individual living arrangements. The comparative emphasis in this research tradition makes it an ideal basis for reflecting on differences in intergenerational co-residence.

In conservative welfare states, there remains the primacy of the wage earner and strong familialization tendencies by which family members, and women in particular, are implicitly assumed to adopt caring roles (Kohli, 2007). This has softened in recent years in certain countries, with the extension of policies such as childcare subsidies, but the core dynamics of highly gendered caregiving remain (Pelikh and Tyndik, 2014; Ray et al., 2010). In such instances, the role of the welfare state is to support rather than replace the caregiving role of women (Keck and Saraceno, 2013; Saraceno and Keck, 2008). These welfare-state arrangements are typically attributed to countries of western and central Europe, such as Germany, the Netherlands, and Austria. But the tradition of familialization is even more intense in southern and eastern Europe, where public care provision is very limited and state support for care-providers in the form of well-paid leave is also weaker (Albertini and Kohli, 2013).

In Nordic countries, welfare-state arrangements adopt a contrasting logic, by which the wage-earning role of all individuals is supported. This is referred to as de-familialization, in that the care of both children and elderly relatives is largely individualized through the welfare state. These welfare-state arrangements are marked by short but well-paid leave for both mothers and fathers, extensive and accessible childcare provision, a generous state pension, and extensive and high-quality care provision for elderly people in need of care (Esping-Andersen, 2010). This high level of support and de-commodification allows familial support to be concentrated on tasks in which individuals are best placed to help, rather than undertaking all tasks in the absence of alternatives (Igel et al., 2009). There is a large body of evidence, however, that European welfare-state constellations have a substantial effect on the configuration of intergenerational relationships, including co-residence (Albertini et al., 2007).

These welfare-state theories have been extended to East Asian societies including China. In particular, on numerous occasions East Asian welfare states have been identified as productivist welfare states with strong familialistic tendencies (Gough, 2001; Holliday, 2000). Within such welfare states, the primary aim is economic and political stability rather than the protection of individual rights. So, whilst European welfare states have aimed to ensure that individuals receive care and support either through the family (familialization) or through public provision (de-familialization), East Asian welfare states have been primarily concerned with the stabilizing effects of the welfare state in political and economic terms. Their active support of family values has been limited to ensuring that familial obligations are supported by legal obligations (Saraceno, 2016).

In practice, this has limited the creation of welfare arrangements primarily to sectors identified as being of specific economic or political concern. For example, state employees have access to relatively generous pension arrangements to ensure

a degree of political stability (Kim, 2015). Similarly, certain sectors have specific social security arrangements to insulate the economy from large economic shocks such as the Asian Financial Crisis of 1997 or the Global Economic Crisis of 2008 (Aspalter, 2006). The result is a sharp ‘insider-outsider’ dynamic by which some sectors of society are able to access state-supported pension arrangements and facilities and others are not. In China, this arrangement also encompasses the *hukou* household registration system, which effectively demarcates the urban population into ‘urban residents’ and ‘migrant workers’, with the latter group receiving different, and almost always worse, welfare arrangements (Afridi et al., 2015; Liu, 2005; Whalley and Zhang, 2004; Wu and Treiman, 2007). This system ensures that urban governments and their welfare systems are not overwhelmed by the demand brought about by an influx of migrants, but they can still benefit from the increase in labor supply.

The result of productivist welfare-state policies is that ‘urban residents’, ‘migrants’, and ‘rural residents’ face very different welfare arrangements and, subsequently, different family dynamics with regards to care provision. Urban Chinese have access to public facilities that their compatriots do not, in particular to childcare, schools, hospitals, and care facilities (Fu and Ren, 2010; Nelson, 2016). The growing middle class within China has led to increasing demands for improved childcare facilities, and the result has been a relative explosion in the number of such facilities in urban areas over the past 20 years (Qi and Melhuish, 2017). Similarly, pension provision among urban Chinese is far more established and developed, which reduces dependency in old age (Cai and Cheng, 2014; Liu and Sun, 2016; Wang, 2016). Nevertheless, urban Chinese are not better off in every way, and care-related leave remains limited.

The situation of migrants is distinct from that of urban residents despite their geographic proximity. Not only are they regularly denied the access to schools, childcare, hospitals, and care facilities that is available to urban residents, they are also excluded from public programs that can help negate the need for care; programs such as public-housing and adequate pension schemes (Fu and Ren, 2010; Huang et al., 2014, 2017; Nelson, 2016). Yet the primary rationale for migration is to seek better wage employment, and thus there is a strong emphasis on full employment within migrant households (Cheng et al., 2014). Strong gender roles would undermine this rationale, and this leaves a care deficit within migrant families, as neither the state nor women are able or willing to provide care. Therefore, despite being dislocated from their rural roots, migrants have been found to be highly dependent on their families for welfare support, either by having them co-reside in the urban area or through complex care arrangements which span their physical divide, such as children residing with their rural grandparents (Goh, 2009; Silverstein et al., 2006).

In rural areas, public provisions are also exceptionally limited in terms of both public facilities and broader social policies such as pensions, parental-leave arrangements, and public housing. The family unit is, however, far more active and central in care provision (Silverstein et al., 2006). Around 320 million Chinese

are still involved in agricultural production. Care provision, therefore, is a more integral part of the household economy in rural areas, as is the case in more traditional societies (Zhang and Kanbur, 2005). The result is that all welfare needs are met by the family within a single household (Cong and Silverstein, 2015). These three circumstances for urban residents, migrants, and rural residents in China lead to differing family dynamics in terms of care provision and co-residence, and it is this situation that provides the hypotheses for this paper.

Research on urban China, and on urban migrants specifically, has examined the way in which migrants' lives are shaped by institutional and policy contexts (Zhang, 2004). They leave intergenerational co-residences in rural areas to pursue economic opportunities in urban areas, maintaining intergenerational relations through remittances to elderly parents rather than co-residence (Chen et al., 2017). However, the pull of economic opportunity and modernity are not always detrimental to filial piety and intergenerational support (Whyte, 1997). Intergenerational co-residence is seen to be associated with female labor supply rather than counter to it (Goh, 2009; Shen et al., 2016), and co-residing parents often elect to live with the most-educated child rather than the least-educated so as to facilitate labor market participation (Wen and Hanley, 2015). The child's needs appear to require co-residence for economic success rather than it be an impingement of it.

These findings indicate a complex interaction between the needs and capacities of both parent and child that potentially undermines the rationale that modernization is counter to intergenerational co-residence. Instead, it is argued that economic development and social change shift the needs and capacities of both parent and child and, subsequently, the co-residence patterns we observe (Xu et al., 2014). For example, it has been shown that the child's needs tend to override parental needs in determining whether a child co-resides with his or her parent in urban China (Gruijters and Ermisch, 2018; Zhu and Xie, 2017). This appears to contradict studies conducted in more rural, traditional parts of China (Gruijters and Ermisch, 2018; Logan and Bian, 1999; Zhang, 2004). Following this line of argument suggests that explaining differences between European and Chinese intergenerational co-residence requires an understanding of how needs and capacities are shaped by structural, macro-level context.

## **Theory and hypothesis**

We supplement these welfare-state theories with a basic rational choice perspective on intergenerational relations, which sees intergenerational support as being shaped by the needs and capacities of individuals (Altonji et al., 1997; Szydluk, 2008). From this we suggest that, in the absence of public provision of welfare, parents choose to co-reside with those they think will be best able to support them in later life. This means that they are more likely to co-reside with sons, as they believe that sons will be better placed to take care of them later in life regarding housing and income. The less public support there is, the greater the incentive for investing in an adult son's family unit during the formative years of later life. Parents will also invest more

heavily in those who are high achievers. The better a child's labor market returns are, the more likely that the child will be in a position to support his or her parents in later life. Given this, we suggest that parents without access to welfare-state arrangements, such as pensions, housing, and care facilities, will engage in exchange-based behavior by which they co-reside with whichever child they believe will be best placed to care for them, providing support to that child so as to both maximize his or her success and develop a reciprocal obligation with the child. Based on this theory, we therefore anticipate that:

*H1a: Parents in southern and eastern Europe will be more likely to co-reside with a child than central and western European and Scandinavian parents.*

We assert that the base level of co-residence in Scandinavia and central and western Europe is lower than in southern and eastern Europe, given that both pension provision and the public-care sector are more developed in the former than in the latter. This leads to greater dependency in later life and an increased tendency to co-reside.

*H1b: Migrant parents in China will be more likely to co-reside with a child than urban and rural parents.*

In China, we believe that the base level of co-residence will be highest among migrant populations, somewhat lower among rural populations, and lowest in urban areas. This is because pension policy among migrant populations is exceptionally low and individuals fall between rural and urban welfare arrangements, leading to provision that ranges from low to non-existent. In rural areas, there are limited and relatively recent pension provisions that somewhat alleviate the dependency of older Chinese, and we thus expect co-residence to be somewhat lower. However, among the urban population, both public care facilities and pensions reduce dependency among elderly populations.

*H2a: Migrant and rural parents in China will be more likely to co-reside with their higher-educated children than with their lower-educated children.*

In the absence of adequate pension provision and policy support, we anticipate that parents will choose to co-reside with the highest-educated child. This is because they anticipate that this child will have the highest economic returns from the labor market and will be the most likely to provide support in the future. The parent's co-residence not only strengthens the relationship and interdependency with this child, but also potentially increases labor market productivity through the provision of grandparental care and general household production.

*H2b: Parents in Europe and urban China will be as likely to co-reside with their lower-educated children as with their higher-educated children.*

With the provision of pensions, dependence on children is lower in later life. Instead, welfare-state provision should level the playing field between children and we would not expect to see an educational gradient in the co-residence of parents with their adult children.

*H3: Parents in China and Europe are more likely to reside with their sons than with their daughters.*

From a gender perspective we anticipate that co-residence will be predominantly with sons, given that in both China and Europe, men's lifetime earnings are greater than women's. Parents will therefore look to co-reside with their sons, as they are more likely to be in a strong economic position when the parent enters later life.

*H4a: Parents in central, southern, and eastern Europe will be relatively more likely to co-reside with their sons than western Europeans and Scandinavians.*

The incentive to invest in the male over the female is, however, dependent on the degree to which the labor market is favorable towards women. In countries where women are able to combine work and family life and maintain contact with the labor market, the differences in co-residence between men and women will be less. Based on the existing literature we would therefore expect the gender differential in co-residence to be lowest in Scandinavia and western Europe.

*H4b: Parents in rural China and migrant parents will be relatively more likely to co-reside with their sons than urban Chinese parents.*

With regards to China, the gender differential will be most pronounced among rural and migrant populations. This is because, according to existing findings, the labor market outcomes in these populations remain highly gendered, and men are therefore a more stable prospect for co-residence and dependency in later life. In urban China, where women are better able to maintain labor market activity, we would expect a diminished differential in gender preference of co-residence. This hypothesis is key in differentiating welfare state and rational choice theories from theories of cultural practice. If elderly Chinese have adapted their practices in response to the improved prospects of women in the labor market, this would suggest that it was a rational choice decision rather than cultural inertia that was leading to the previously observed preference for living with sons.

## **Data and methods**

The data used in our analysis is from SHARE and CFPS. The data from SHARE is taken from the fifth wave, with fieldwork completed in 2012, and the data from the CFPS is taken from the first wave, which was fielded in 2010. The data from both countries was then restricted to respondents aged over 60 at the time of interview,



as the CFPS questions used for the analysis were only fielded to this subpopulation. In both surveys, respondents were asked a series of questions about each of their living children. These responses were then used to reshape the data into a file of parent-child dyads. Throughout the analysis we adopt a multi-level framework with these dyads (Level 1) nested within individual respondents (Level 2). To this end, childless respondents are excluded from the analysis.

The main dependent variable is a dichotomous indicator of whether the respondent co-resides with the specific child to which the dyad corresponds at the time of the interview. Co-residence was taken to be inclusive of parents and children who lived in the same physical building but excluded 'financial households' as defined in the CFPS, in which family members shared financial arrangements but lived in physically separate spaces. A set of controls in the form of age, sex, marital status, and education level were then created for both parent and child. The total number of children of the respondent was also included as a control at the parental level and birth order at the dyadic level. Education was coded based on ISCED classifications, in which anything below completion of secondary education (ISCED 0, 1, 2) is considered 'Low Education', the completion of secondary education is considered 'Medium Education' (ISCED 3 and 4), and completion of any education beyond secondary education is considered 'High Education' (ISCED 5, 6, 7). This scale was maintained for the parental generation in the CFPS despite the distribution being wholly uneven and dominated by the 'Low Educated' (59.32%).

In addition to these, indicators of two vectors of intergenerational care and exchange were included: The giving of grandparental childcare and the receipt of personal care. These indicators are constructed differently across the two surveys. In SHARE the indicator is a composite of *SP005\_* and *SP021d\_*, which measure care received from individuals outside the household and care received from individuals inside the household respectively. If a respondent indicated that he or she either received care from these individuals at least once a month or was co-resident with someone the respondent identified as a caregiver, then he or she was coded as being in receipt of care. The distinction between residents and non-residents does not exist for the variables regarding care for grandchildren, and thus variable *SP016\_* was used. For the CFPS, the variable *qf3\_s\_41 - qf3\_s\_60* were used and enabled respondents to simply indicate whether they had received personal care from a specific child in the past six months or not, and whether they had provided childcare to the children of this child in the last six months.

There are serious issues regarding whether these indicators are directly comparable, and given the difference in wording and construction, we are skeptical as to whether they measure precisely the same concepts of care and childcare. However, we decided to include these indicators for the following reasons.

1. First, the two datasets are analyzed separately with distinct coefficients and thus do not contribute to the same statistical estimates.



2. Second, we use caregiving only as a control which allows for a better understanding of some of the underlying dynamics of co-residence rather than as the main independent variable.

Nevertheless, it is important to note the differences between these variables in order to dissuade direct comparisons between these indicators in the models.

In order to capture the key concept of welfare-state variations, we adopted differing strategies in Europe and China which reflect common research practices and traditions. In Europe, we split the sample into welfare regimes representing the aforementioned clustering of social policies around specific typologies. Austria, Germany, and Switzerland are considered central European; France, the Netherlands, and Belgium are considered western European; Denmark and Sweden represent Scandinavia; Italy, Greece, Spain, and Portugal represent southern Europe; and Croatia, the Czech Republic, Hungary, Slovenia, Poland, and Estonia represent eastern Europe. Israel and Ireland are omitted from the analysis as they fit into welfare-state typologies that are not part of our analysis. In China, the population is segregated not geographically but by their *hukou* status. Those respondents who were residing in a rural area were considered rural, those with a rural *hukou* but living in an urban area were considered migrants, and those with an urban *hukou* were considered as urban residents distinct from migrants. These categories broadly reflect the position of respondents relative to welfare services available to them.

After removing observations with missing values and the aforementioned sample constraints, we were left with a workable sample of 5020 in China and 33,879 in Europe, with 14,089 and 81,169 parent–child dyads respectively. Calibrated cross-sectional design weights were applied to both samples to ensure national representativeness. In the Chinese data, it should be noted that only 30 of 36 provinces were covered by the sampling due to logistical and political constraints, but this still covers more than 95% of the Chinese population. In order to examine co-residence dynamics in China and Europe, three separate iterations of a multi-level logistic regression model were constructed for both the SHARE and CFPS data. The first models represent a basic model of co-residence between parent and children, with the key independent variables of the child's gender and education included. The second and third models are then interacted with welfare regime categorization in SHARE and the respondent's *hukou* status in the CFPS in order to test the remaining hypotheses.

## Results

The initial results of our analysis are very supportive of what is found in the existing literature from both Europe and China. This is best illustrated by the findings regarding our first hypothesis, which suggests that parents in Scandinavia and central and western Europe are less likely to co-reside with a child than in southern and eastern Europe. The findings show that 4.5% of parents over 60 in Scandinavia, 7.5% of those in central Europe and 6.4% of those in

**Table 1.** Multi-level logit models of co-residence in Europe and China.

	Europe		China	
	1	2	3	4
<b>Parent</b>				
Age	1.063*** (0.007)	1.063*** (0.007)	1.087*** (0.009)	1.084*** (0.009)
Number of children	0.826*** (0.020)	0.832*** (0.020)	0.515*** (0.015)	0.519*** (0.015)
<b>Education</b>				
Low	1.000 (.)	1.000 (.)	1.000 (.)	1.000 (.)
Medium	0.732*** (0.058)	0.724*** (0.057)	0.889 (0.068)	0.900 (0.068)
High	0.663*** (0.058)	0.659*** (0.057)	0.514** (0.115)	0.565* (0.128)
<b>Gender</b>				
Male	1.000 (.)	1.000 (.)	1.000 (.)	1.000 (.)
Female	1.720*** (0.109)	1.719*** (0.108)	1.211** (0.087)	1.213** (0.087)
<b>Marital status</b>				
Married	1.000 (.)	1.000 (.)	1.000 (.)	1.000 (.)
Not married	3.884*** (0.271)	3.87*** (0.268)	2.066*** (0.177)	2.041*** (0.172)
<b>Child</b>				
Age	0.861*** (0.005)	0.863*** (0.005)	0.92*** (0.006)	0.923*** (0.006)
<b>Education</b>				
Low	1.000 (.)	1.000 (.)	1.000 (.)	1.000 (.)
Medium	0.762*** (0.055)	0.973 (0.122)	0.875 (0.086)	0.927 (0.100)
High	0.304*** (0.026)	0.412*** (0.057)	0.57*** (0.082)	1.595 (0.535)
<b>Gender</b>				
Male	1.000 (.)	1.000 (.)	1.000 (.)	1.000 (.)
Female	0.725*** (0.071)	0.628*** (0.033)	0.063*** (0.009)	0.122*** (0.011)

(continued)

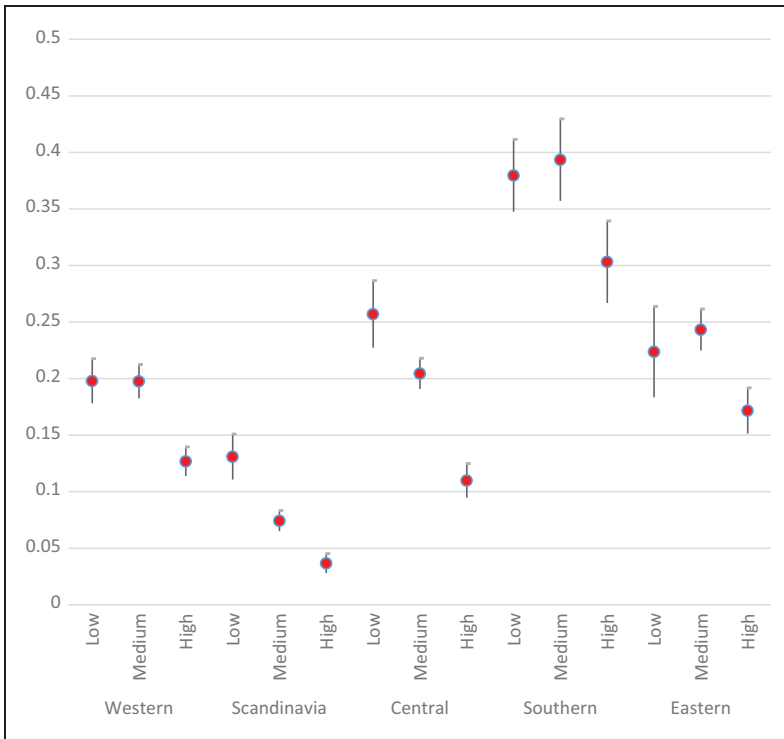
**Table 1.** Continued

	Europe		China	
	1	2	3	4
Marital status				
Married	1.000 (.)	1.000 (.)	1.000 (.)	1.000 (.)
Not married	0.163*** (0.013)	0.166*** (0.013)	9.304*** (0.973)	9.485*** (0.989)
Welfare regime				
Western	1.000(.)	1.000(.)		
Scandinavian	0.259*** (0.031)	0.55*** (0.096)		
Central	1.431*** (0.152)	1.921*** (0.331)		
Southern	4.31*** (0.596)	3.997*** (0.676)		
Eastern	3.277*** (0.394)	2.591*** (0.587)		
Hukou status				
Rural			1.000 (.)	1.000 (.)
Migrant			1.226* (0.127)	0.864 (0.228)
Urban			0.411*** (0.039)	1.347 (0.407)
Constant	0.586 (0.179)	0.475* (0.148)	0.184*** (0.087)	0.151*** (0.071)
ln( $\sigma^2$ )	10.502*** (2.209)	9.847*** (2.038)	3.105*** (0.581)	2.853*** (0.514)
N	23,927	23,927	13,631	13,631
Log Likelihood	-7800.69	-7782.86	-4727.64	-4735.4
AIC	15,647.37	15,619.72	9493.286	9512.799

Note: Interaction effects are not shown and can be seen in Figures 1–4.

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

western Europe reside with their children. This contrasts strongly, however, with the 13.8% of parents in southern Europe who choose to co-reside with their adult children. In China, we see that 26.0% of migrant parents over 60 are living with their adult children. This is higher than both the 21.3% of rural parents and the 17.1% of urban parents who do so, supporting the assertion of Hypothesis 1b, and indicating that the levels of co-residence are not uniform across China.



**Figure 1.** Co-residence and child's education level in European welfare-state regimes.

In Figures 1 and 2, we see the interaction between child's educational level and the welfare regime or *hukou* status. Among rural and migrant parents in China, we can see that in support of Hypothesis 2a, parents do tend to co-reside with higher-educated children. There is a clear and distinct positive gradient in these two subpopulations that contrasts strongly with the urban population. However, among the urban Chinese population, we do not see a null gradient of the child's educational level but instead a clear and consistent negative gradient, which would appear to indicate that parents are opting to co-reside with lower-educated children. However, whilst this is not in line with the hypothesis, it is worth noting that it is consistent across Europe and urban China, suggesting a potential commonality in co-residence dynamics.

In Model 3, we see the interaction between child's gender and welfare regime or *hukou* status. The results from Model 1 had indicated that Hypothesis 3 was indeed correct in the preference for co-residence with sons being universal. However, as Figures 3 and 4 indicate, there is a great deal of variation in the differential across the various subpopulations. In Europe, the gradient is significantly larger in the central and southern regions than elsewhere. However, this is not the case for eastern Europe. Hypothesis 4a is therefore partially supported in that two of the

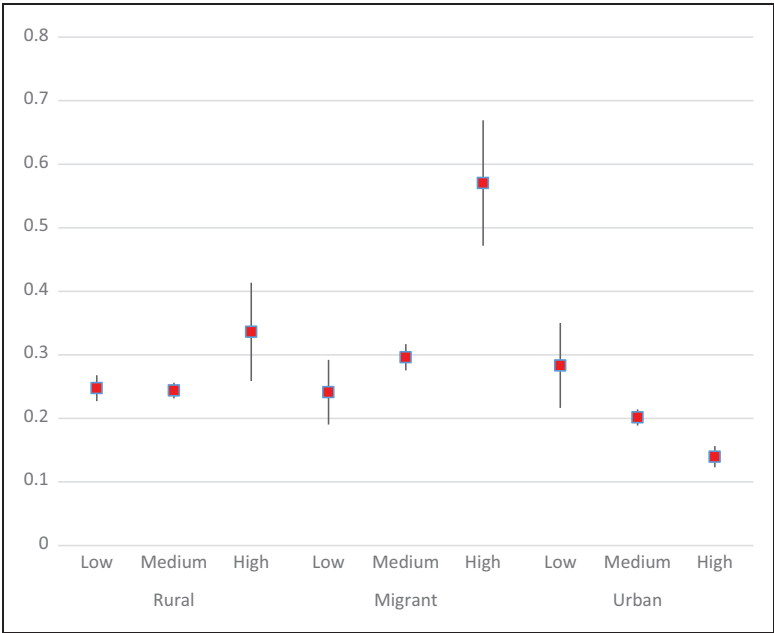


Figure 2. Co-residence and child's education level among Chinese elderly.

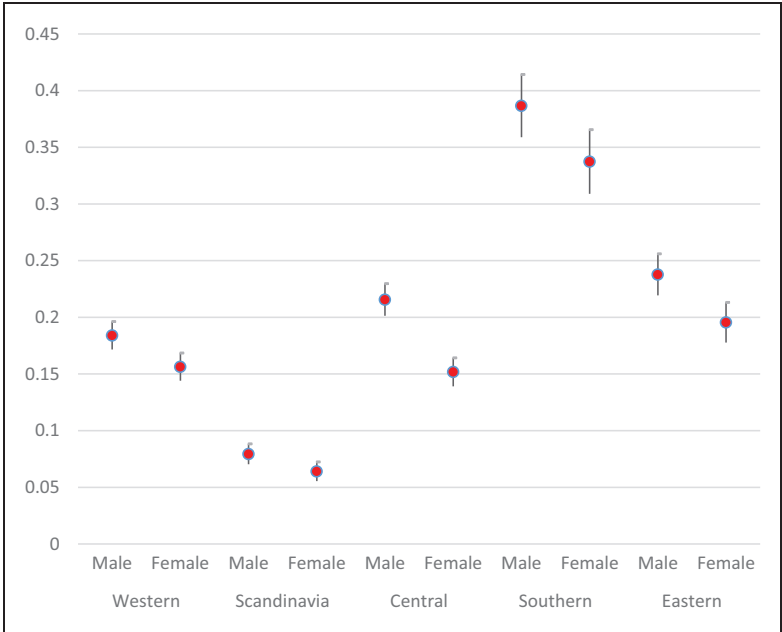
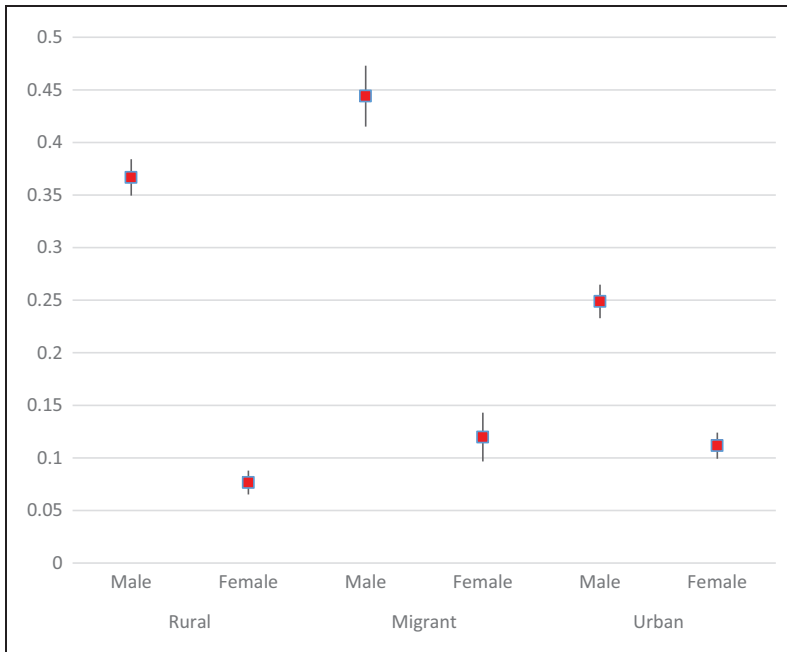


Figure 3. Co-residence and child's gender in European welfare regimes.



**Figure 4.** Co-residence and child's gender among Chinese elderly.

three most genderized welfare states had the highest gender differentials in co-residence. In China, we see from Figure 4 that there is a very large gender differential in co-residence, as is found in the existing literature. However, this gender differential is significantly smaller in urban China, and thus we find strong evidence in support of Hypothesis 4b.

## Discussion and conclusions

Our results provide strong support for our hypotheses, with two notable exceptions. First, the gender differential for co-residence in eastern Europe is not statistically significantly different from that observed in western Europe. This could indicate that our conceptualizations of either eastern Europe as a gender inequalitarian labor market or western Europe as a gender egalitarian labor market are wrong. Indeed, part of the legacy of socialism in eastern Europe is that there is a degree of gender equality in labor market outcomes that is not found in more conservative parts of Europe, such as the center and south. Similarly, gender egalitarianism in western Europe is still short of that in the Nordic welfare state. For example, in the Netherlands, female employment is largely driven by part-time employment (Plantenga, 2002), and maternal employment remains relatively low in France (Gornick et al., 1997). Conversely, it could simply be that there are

other factors beyond labor market gender inequality driving the preference for sons. For example, cultural values are highly associated with but lagged from welfare-state arrangements, and it is highly plausible that the welfare state is only one vector through which these cultural values shape the co-residence patterns of Europeans. However, we find similar patterns in China, and they appear to suggest that areas where there is greater support for female employment have lower preferences for son co-residence.

The second exception is the observation that the educational gradient of co-residence is, in fact, negative and not nil in Europe and urban China. This is somewhat perplexing as it is unclear why parents may opt to live with the least-educated child. The obvious answer is that these children have fewer resources and, therefore, greater needs than their more educated siblings. This suggests that the intergenerational dynamics switch from being a case of exchange and intergenerational exchange to one of altruism and downward support, as the welfare state develops to provide for those in later life. One potential complication to this theory is that the development of a welfare state usually occurs across policy areas, and thus increases in pension provision are usually coupled with increases in support for younger generations, such as employment insurance, social housing, and health insurance, which would serve to alleviate the need for co-residence. We remain unconvinced by the evidence that we have looked at given the limited information on the child within the data. Future research could investigate this further by examining such co-residence from a child perspective.

Beyond these two exceptions, we found strong evidence for welfare states shaping the co-residence patterns of Chinese and European parents aged over 60. The results not only support welfare state-based theories but also indicate that alternatives are unlikely to explain the findings equally well. For example, we found that not only is there a gender preference for residing with sons in China, but that this preference weakened among elderly parents and was highest among migrants. Cultural theories of co-residence which suggest that this is driven by norms of filial piety are poor in explaining why those Chinese who move to cities might be more inclined to follow such norms when compared with those in rural areas. This pattern is therefore supportive of a welfare-state narrative rather than a cultural description, as migrant populations become trapped between urban and rural welfare arrangements. Furthermore, if cultural norms are driving the preference for sons, then this mechanism should be assumed to be weak, as the preference is much smaller among urban populations.

In Europe, we also see complex patterning that is not supported by simple cultural narratives. Welfare-state theories suggest that pension and care provisions for the elderly within a country should drive the base level of co-residence, whereas gender inequality in the labor market drives the gender differential. This is supported by what we find in central Europe when compared with western Europe. In both we have strong pensions and thus see a low level of co-residence with adult children. However, in central Europe, the labor market is less gender egalitarian and thus we see a more pronounced gender differential in co-residence, as parents



tend to opt for living with a son when they do look to co-reside with children. Theories of economic development and modernization would similarly indicate that co-residence among urban individuals would be lower than among those in rural areas, but these fail to account for the unique position of migrants in China. Cultural norms or theories of economic development, to the best of our knowledge, cannot explain both the similar base level of co-residence and the contrasting gender differentials for these areas.

We therefore conclude that the difference in co-residence rates between China and Europe is not largely cultural or economic but instead is driven by differing welfare-state contexts, as has been argued in the existing European literature. Indeed, when we look at urban China, where the Chinese welfare state is most developed, we see strong parallels with European societies and comparable rates of co-residence. We would therefore anticipate that recent reforms in China which soften the boundaries between urban and rural *hukou* and increase welfare provisions in rural areas will lead to further convergence in rates of co-residence. This has serious implications in a country that is ageing rapidly and will soon have a population structure similar to that in Europe, as it should not be assumed that intergenerational co-residence will remain the norm.

To further test this proposition, we invite further research on the role of policy in shaping intergenerational family dynamics in China. A large number of natural experiments can be observed in China as municipal authorities loosen the restrictions on migrants accessing urban services. In addition, there is a keen and prescient demand for understanding how policy shapes family relations in China, given the rapid developments in the composition of the population and the policy environment in which Chinese families find themselves. However, researchers assessing the role of policy in China can look to a rich and established field of research in Europe, where the role of welfare policies has been conceptualized and examined in considerable detail.

### **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### **Funding**

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research received funding from the Netherlands Research Council NWO, award number: 467-14-152.

### **References**

- Afridi F, Li SX and Ren YF (2015) Social identity and inequality: The impact of China's *hukou* system. *Journal of Public Economics* 123(6417): 17–29.
- Albertini M, Kohli M and Vogel C (2007) Intergenerational transfers of time and money in European families: Common patterns – different regimes? *Journal of European Social Policy* 17(4): 319–334.

- Albertini M and Kohli M (2013) The generational contract in the family: An analysis of transfer regimes in Europe. *European Sociological Review* 29(4): 828–840.
- Altonji JG, Hayashi F and Kotlikoff LJ (1997) Parental altruism and inter vivos transfers: Theory and evidence. *Journal of Political Economy* 105(6): 1121–1166.
- Aspalter C (2006) The East Asian welfare model. *International Journal of Social Welfare* 15(4): 290–301.
- Cai Y and Cheng Y (2014) Pension reform in China: Challenges and opportunities. *Journal of Economic Surveys* 28(4): 636–651.
- Chen FN (2005) Residential patterns of parents and their married children in contemporary China: A life course approach. *Population Research and Policy Review* 24(2): 125–148.
- Chen TC, Leeson GW and Liu CP (2017) Living arrangements and intergenerational monetary transfers of older Chinese. *Ageing and Society* 37(9): 1798–1823.
- Cheng ZM, Nielsen I and Smyth R (2014) Access to social insurance in urban China: A comparative study of rural-urban and urban-urban migrants in Beijing. *Habitat International* 41: 243–252.
- Chu CYC, Xie Y and Yu RR (2011) Coresidence with elderly parents: A comparative study of southeast China and Taiwan. *Journal of Marriage and Family* 73(1): 120–135.
- Cong Z and Silverstein M (2015) End-of-life co-residence of older parents and their sons in rural China. *Canadian Journal on Aging* 34(3): 331–341.
- Esping-Andersen G (2009) *Incomplete Revolution: Adapting Welfare States to Women's New Roles*. Cambridge, UK: Polity Press.
- Fu Q and Ren Q (2010) Educational inequality under China's rural-urban divide: The *hukou* system and return to education. *Environment and Planning A* 42(3): 592–610.
- Goh ECL (2009) Grandparents as childcare providers: An in-depth analysis of the case of Xiamen, China. *Journal of Aging Studies* 23(1): 60–68.
- Gornick JC, Meyers MK and Ross KE (1997) Supporting the employment of mothers: Policy variation across fourteen welfare states. *Journal of European Social Policy* 7(1): 45–70.
- Gough I (2001) Globalization and regional welfare regimes. *Global Social Policy* 1(2): 163–189.
- Grujters RJ and Ermisch J (2018) Patrilocal, matrilocal, or neolocal? Intergenerational proximity of married couples in China. *Journal of Marriage and Family* Epub ahead of print 08 October 2012. DOI: <http://doi.wiley.com/10.1111/jomf.12538>.
- Hamilton GG (1990) Patriarchy, patrimonialism, and filial piety: A comparison of China and Western Europe. *The British Journal of Sociology* 41(1): 77–104.
- Holliday I (2000) Productivist welfare capitalism: Social policy in East Asia. *Political Studies* 48(4): 706–723.
- Huang X, Dijst M, Van Weesep J, et al. (2014) Residential mobility in China: Home ownership among rural–urban migrants after reform of the *hukou* registration system. *Journal of Housing and the Built Environment* 29(4): 615–636.
- Huang X, Dijst M, Van Weesep J, et al. (2017) Residential choice among rural–urban migrants after *hukou* reform: Evidence from Suzhou, China. *Population, Space and Place* 23(4): e2035.
- Igel C, Brandt M, Haberkern K and Szydlik M (2009) Specialization between family and state intergenerational time transfers in Western Europe. *Journal of Comparative Family Studies* 40(2): 203–226.

- Isengard B and Szydlik M (2012) Living apart (or) together? Coresidence of elderly parents and their adult children in Europe. *Research on Aging* 34(4): 449–474.
- Kalmijn M and Saraceno C (2008) A comparative perspective on intergenerational support: Responsiveness to parental needs in individualistic and familialistic countries. *European Societies* 10(3): 479–508.
- Keck W and Saraceno C (2013) The impact of different social-policy frameworks on social inequalities among women in the European Union: The labour-market participation of mothers. *Social Politics: International Studies in Gender, State & Society* 20(3): 297–328.
- Kim MMS (2015) *Comparative Welfare Capitalism in East Asia: Productivist Models of Social Policy*. New York: Palgrave Macmillan.
- Kohli M (2007) The institutionalization of the life course: Looking back to look ahead. *Research in Human Development* 4(3–4): 253–271.
- Liu T and Sun L (2016) Pension reform in China. *Journal of Aging & Social Policy* 28(1): 15–28.
- Liu ZQ (2005) Institution and inequality: The *hukou* system in China. *Journal of Comparative Economics* 33(1): 133–157.
- Logan JR and Bian FQ (1999) Family values and coresidence with married children in urban China. *Social Forces* 77(4): 1253–1282.
- Nelson AUC (2016) An appraisal of the ethics of genetic modification of embryos and its implications on the dignity of human species. *Medicine and Law* 35(4): 509–524.
- Pelikh A and Tyndik A (2014) Preschool services for children: Cross-national analysis of factors affecting use. *International Social Work* 57(5): 470–485.
- Plantenga J (2002) Combining work and care in the polder model: An assessment of the Dutch part-time strategy. *Critical Social Policy* 22(1): 53–71.
- Qi XF and Melhuish EC (2017) Early childhood education and care in China: History, current trends and challenges. *Early Years* 37(3): 268–284.
- Ray R, Gornick JC and Schmitt J (2010) Who cares? Assessing generosity and gender equality in parental leave policy designs in 21 countries. *Journal of European Social Policy* 20(3): 196–216.
- Reher DS (1998) Family ties in Western Europe: Persistent contrasts. *Population and Development Review* 24(2): 203–234.
- Ruggles S (2007) The decline of intergenerational coresidence in the United States, 1850 to 2000. *American Sociological Review* 72(6): 964–989.
- Ruggles S (2014) Stem families and joint families in comparative historical perspective. *Population and Development Review* 36(3): 563–577.
- Saraceno C (2016) Varieties of familialism: Comparing four Southern European and East Asian welfare regimes. *Journal of European Social Policy* 26(4): 314–326.
- Saraceno C and Keck W (2008) The institutional framework of intergenerational family obligations in Europe: A conceptual and methodological overview. Wissenschaftszentrum Berlin für Sozialforschung (Social Science Research Center Berlin), multilinks project funded by the European Commission under the seventh framework programme. Available at: [http://www.multilinks-project.eu/wp-content/uploads/2009/04/Report\\_Saraceno\\_Keck\\_Nov081.pdf](http://www.multilinks-project.eu/wp-content/uploads/2009/04/Report_Saraceno_Keck_Nov081.pdf) (accessed 2 March 2017).
- Shen K, Yan P and Zeng Y (2016) Coresidence with elderly parents and female labor supply in China. *Demographic Research* 35(1): 645–670.

- Silverstein M, Cong Z and Li S (2006) Intergenerational transfers and living arrangements of older people in rural China: Consequences for psychological well-being. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 61(5): S256–266.
- Slater PE and Goode WJ (1964) *World Revolution and Family Patterns*. Oxford: Free Press.
- Sun RJ (2002) Old age support in contemporary urban China from both parents' and children's perspectives. *Research on Aging* 24(3): 337–359.
- Szydlik M (2008) Intergenerational solidarity and conflict. *Journal of Comparative Family Studies* 39(1): 97–114.
- Wang Y (2016) Understanding the implementation gap of China's urban pension scheme at the level of rural-urban migrant workers. PhD Thesis, School of Nursing, Midwifery and Social Work, The University of Queensland, Australia. Available at: <https://espace.library.uq.edu.au/view/UQ:411037> (accessed 23 June 2017).
- Wen Y and Hanley J (2015) Rural-to-urban migration, family resilience, and policy framework for social support in China. *Asian Social Work and Policy Review* 9(1): 18–28.
- Whalley J and Zhang S (2004) Inequality change in China and (*Hukou*) labour mobility restrictions. National Bureau of Economic Research, Working Paper Series No. 10683. Available at: <http://www.nber.org/papers/w10683> (accessed 23 June 2017).
- Whyte MK (1997) The fate of filial obligations in urban China. *China Journal* 38: 1–31.
- Whyte MK and Xu Q (2003) Support for aging parents from daughters versus sons. In: Whyte MK (ed.) *China's Revolutions and Intergenerational Relations*. Ann Arbor: Center for Chinese Studies, University of Michigan, 167–196.
- Wu XG and Treiman DJ (2007) Inequality and equality under Chinese socialism: The *hukou* system and intergenerational occupational mobility. *American Journal of Sociology* 113(2): 415–445.
- Xu Q, Li JX and Yu XJ (2014) Continuity and change in Chinese marriage and the family: Evidence from the CFPS. *Chinese Sociological Review* 47(1): 30–56.
- Yasuda T, Iwai N, Yi C-C, et al. (2011) Intergenerational coresidence in China, Japan, South Korea and Taiwan: Comparative analyses based on the East Asian social survey 2006. *Journal of Comparative Family Studies* 42(5): 703–722.
- Zhang QF (2004) Economic transition and new patterns of parent-adult child coresidence in urban China. *Journal of Marriage and Family* 66(5): 1231–1245.
- Zhang XB and Kanbur R (2005) Spatial inequality in education and health care in China. *China Economic Review* 16(2): 189–204.
- Zhu HY and Xie Y (2017) Buying out of familial obligation: The tradeoff between financially supporting versus living with elderly parents in urban China. *Chinese Journal of Sociology* 3(1): 56–73.