

Intergenerational Transfers and Family Structure: Evidence from Thailand

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Abstract This study examines the level and patterns of elderly parent and adult child resource transfer and the relationship between family structure and the direction of resource transfer. A sample of 657 elderly parents was chosen from the 2009 baseline panel survey and study on Health, Aging, and Retirement in Thailand (HART). The main results show that about 60 % of Thai elderly parents receive financial support from their adult children, whereas about 14 % of Thai elderly parents neither give nor receive financial support to or from their adult children. The annual median value of support received by elderly parents is 22,250 baht (about US\$740). There is no significant difference in familial intergenerational transfers between urban and rural areas. While controlling for elderly demographic and socioeconomic characteristics, the family structure is significantly associated with parent–child resource transfer.

Keywords Intergenerational transfer · Family structure · Family relations · Resource transfer · Asia · Thailand

Introduction

Societies use three approaches to transfer resources to the elderly. They are government, family, and personal savings. With the limited availability of government institutional support and small personal savings, the role played by familial informal support becomes very important for the well-being of the elderly. In Thailand, the pension system covers only 13.8 % of the population over 60 years old (National Statistical Office 2008). Although quite a few elderly have income from various sources and the portion received from those sources varies with age, family members, especially adult children, are cited as the main source of income in the 1994 and 2007 Surveys of Older Persons in Thailand (56 % and 55 %, respectively). Furthermore, over 80 % reported receiving some income from their adult children in the prior year

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(Knodel and Chayovan 2008). However, monetary transfer is only one form of support; providing food, materials, and time to the elderly is also important. Therefore, elderly support involves both formal and informal support.

All types of support can flow in either direction between parents and children. Elderly parents may exchange support and services with their family. The growing importance of informal support across generations is well recognized, especially in the context of modernized settings (Eggebeen 1992; Bengtson 2001). This familial transfer is usually imbalanced (Schwarz et al. 2010). Despite a considerable body of evidence that examined patterns and levels of exchanges of resources and services within families, there is still a lack of consensus as to who benefits most from such exchanges. Gomes (2007) showed that such transfers between generations depend on the availability of resources and other types of support as well as the availability of parents and children.

In recent decades, Thailand experienced a decline in fertility rates and increase in life expectancy. This demographic transition and socioeconomic development affects family and household structures. These changes shape the living arrangements of both the elderly parents and their adult children, which in turn will influence the availability of familial support. It is unclear how the nature and patterns of intergenerational transfers may be affected by the changes in living arrangement patterns and family structures.

The purposes of this study are to examine the levels and patterns of receiving and giving support between elderly parents and adult children and to explore their family and household structures using data from the 2009 survey and the study on Health, Aging, and Retirement in Thailand (HART). Details of the survey will be provided subsequently. It then aims to develop an understanding of the linkage between family structure and intergenerational transfers in the Thai context with recent demographic and socioeconomic changes. To place our findings in perspective, we present the aging Thai population first.

An Aging Thai Population

According to the demographic transition theory, Thailand had already gone through various stages in changing its birth and death rates (Population Reference Bureau 2004). Consequently, the structure of the Thai population has transformed from a young population to an elderly population, which means that the proportion as well as the absolute number of elderly individuals has risen rapidly (Table 1). Table 1 also shows the elderly dependency ratio and median age, which are indicators of the Thai age structure from 1960 to 2050. The elderly dependency ratio is the number of persons aged 60 years and older for every hundred people of working age (15–59 years). A high ratio means those of working age face a greater burden in supporting the aging population. Since 1960, a substantial increase was found, with 10 dependent older persons per 100 working-age people to 17 and 47 per 100 working-age people in 2010 and 2050, respectively. There will be only two workers to support every person aged 60 years or older within the next 40 years. In addition, the median age of the Thai population was below 20 years before 1980. In 2005, the median age had risen above 30 years and it is expected to reach 41 years in 2050. Therefore, the evidence indicates the Thai population recently experienced an accelerated aging process.

Table 1 Number and percentage of population over 60 years old, dependency ratio, and median age, Thailand 1960–2050

Year	Number aged over 60 years old (in millions)	Percentage aged over 60 years old	Dependency ratio	Median age
1960	1.4	5.1	10.0	18.4
1965	1.7	5.2	10.5	17.8
1970	2.0	5.4	10.7	17.7
1975	2.3	5.6	10.7	18.4
1980	2.7	5.8	10.5	19.5
1985	3.3	6.3	10.6	22.1
1990	4.2	7.4	11.8	24.6
1995	5.1	8.5	13.3	26.4
2000	6.0	9.6	14.8	28.7
2005	6.8	10.2	15.3	31.2
2010	7.9	11.5	17.2	33.2
2015	9.6	13.7	20.9	34.7
2020	11.7	16.4	25.8	36.2
2025	13.9	19.1	31.1	37.5
2030	15.8	21.6	36.0	38.8
2035	17.3	23.4	40.0	39.8
2040	18.2	24.7	42.8	40.5
2045	18.9	25.6	45.0	41.0
2050	19.3	26.4	46.8	41.4

Source: United Nations 2009b (medium variant)

Changes in population age structure follow changes in family age structure, which leads to elderly parents still alive while their children reach their 40s or 50s, increasing years of shared life. Combined with increases in divorce rates and widowhood, the proportion of people living alone or without a partner, with or without children, will be on the rise. At the same time, Bengtson (2001) also hypothesized that multigenerational living arrangements will increase. These changes have profound effects on not only family structure and functions, but also chances and nature of family support networks.

Theoretical Framework and Research on Intergenerational Relations

One of the few long-term efforts in family sociology to provide a theoretical framework for familial support, especially between elderly parents and their adult children, is the solidarity model (Bengtson and Roberts 1991; Bengtson 2001). Bengtson and colleagues describe six dimensions of intergenerational solidarity. This family cohesion comprises affective (emotional closeness), consensual (shared opinion), normative (value pertaining to obligation), functional (exchange of assistance), associational (frequency of contact), and structural (co-residence or geographic proximity) solidarity (Silverstein and Bengtson 1997). These dimensions of solidarity represent the core

social elements of family life and can be used to assess the quality of intergenerational relationships.

Silverstein and Bengtson (1997) further divided the six dimensions of intergenerational solidarity into two forms: latent and manifest solidarity. Latent solidarity represents the cognitive–emotional side of the intergenerational cohesion, which can be activated at times of need. Manifest solidarity is characterized by behavioral aspects of family life concerning parent–child interactions such as intergenerational support and living arrangements. The two domains of family solidarity are equally important because they determine the extent of available resources, opportunities of individuals in the supporting network, and the direction of the flow of assistance. However, this study focuses only on manifest solidarity, particularly the association between the structural and the functional dimensions of intergenerational solidarity.

Functional solidarity is the extent of family assistance in relationships, including tangible as well as intangible exchanges. However, most empirical research in this area usually emphasizes tangibles such as money, gifts, services, or advice to family members, which is referred to as ‘resource transfer.’ In the generational relations context, there are generally two related research themes. The first theme focuses on the motivation for intergenerational transfer. Various models or hypothesis were tested empirically, for example, the altruism model (Becker 1974), the exchange model (Cox 1987), the old age security model (Willis 1980), the bank model, and the insurance model. Additionally, studies in developing countries usually emphasized the effect of filial norms on intergenerational assistance (Knodel et al. 1998; Logan and Bian 2003; Silverstein et al. 2006). Another theme concerns the natures and patterns of intergenerational support with particular interest on the flow direction of family resources.

For the latter area of studies, which mostly concentrate on parent–child relationships, a frequent research question is who benefits from whom (Park et al. 2005). The answer depends on whether we look at the lifetime net flow of resources or at a particular stage in one’s life. Both perspectives are equally important to consider in terms of policy formulation to improve the well-being of society. Although a net intergenerational resource flow is characterized by a number of studies as reciprocal rather than one-way provision of care or assistance, the support is obviously imbalanced or asymmetrical (Schwarz et al. 2010). More importantly, such a support transfer is cyclical and diversifies. Because the long-term perspective needs longitudinal data, the present study explores the diversified nature of resource transfer patterns by focusing on the interplay between family structure (structural solidarity) and resource transfer between elderly parents and their adult children (functional solidarity).

In his wealth flows theory, Caldwell (1976) proposes that in traditional societies where extended family prevails, wealth (defined as ‘all money, goods, services, and guarantees’) tends to flow from the younger to the older generations. The wealth flow will reverse its direction when families become nuclearized, both emotionally and economically, which characterizes modern societies. This argument demonstrates that one of the most important sources of variation in the resource-transfer direction is the family structure and living arrangements.

There are at least two reasons to expect that exchanges of support between elderly parents and their adult children will differ by types of family and living arrangements. The first reason relates to the quantity of family interactions. This viewpoint is based on regular and frequent contact between family members in a cohabiting living

arrangement and close geographic proximity, which is important for exchanging support (Eggebeen 1992). It is unclear whether changes in the types of family structure over recent decades constrains or enhances the interaction between family members, especially elderly parents and their adult children. After a demographic transition, the ‘bean-pole’ family structure, which comprises multigenerational members living in the same household, becomes more evident. However, at the same time, traditional patterns of co-residence are declining in many countries. Previous studies tend to suggest that family structure relates to the form of intergenerational support. Assistance with household tasks appear to be more affected by distance than financial, material, or even emotional support (Litwak and Kullis 1987; Hogan et al. 1993).

Another reason for differences in support exchanges concerns the quality of the parent–child relationship. In the global trend, there is increasing evidence that the formation of a family is more complex and is likely to lead to strain familial relationships. The incidence of divorce and remarriage in parents or adult children affect the quality of the relationship between both parties (Lawton 1991). Such fragmented families, including not only divorced parents or children, but also widowed parents, tend to introduce familial instability, which affects intergenerational bonds in turn. Hence, changes in family structure coincide with changes in its function. However, we do not know the specific impact of these changes on the direction and amount of assistance exchanged between generations. Therefore, the present study aims to examine this issue.

Methods

Data

The data are drawn from HART, conducted in 2009. The survey was funded by the National Research Commission of Thailand as a pilot project in preparation for a biannual panel database. It is a multidisciplinary survey on the health, employment, socioeconomic status, social and financial supports within family networks of individuals aged 45 years or older. A stratified random sampling of 1,400 households was selected from Bangkok and its vicinity and Khon-Khaen province. Details of sampling and interview procedures of this survey are available in Anantanasuwong and colleagues (Anantanasuwong et al. 2011). However, the present study is restricted to Thai individuals who are over 60 years old and have at least one living child older than 18 years old, which gives a sample of 657 elderly persons. Our analysis examines family resource transfers from the elderly parents’ perspective.

The main limitation of this study is that the 2009 pilot HART covers only Bangkok and its vicinity and Khon-Khaen province. To date, the publicly available national surveys of elderly in Thailand have been conducted by the National Statistical Office. Nevertheless, the surveys—the 1994, 2002, and 2007 National Survey of Older Persons—do not gather detailed information on the dyadic elderly parent–adult child resource transfers, which is the key aspect relevant to the purpose of this study. However, the distribution of important demographic and social characteristics of this sample is comparable to those from the 2007 National Survey of Older Persons (See Table 11 in the Appendix). Hence, to a certain extent, the results of this study reflect the

national standard for the relationship between family structure and the intergenerational resource transfer.

Measures

Intergenerational Transfer

The dependent variable, intergenerational transfer, was measured by responses to the question asking a respondent (father or mother) in a sampled household whether in the year prior to the interview he/she received money, materials, or services (other than for shared housing and food) from or gives such support to each individual living child. From this information, the variable is categorized into four groups as follows: (1) no transfer, (2) transfer from children to parents, (3) transfer from parents to children, and (4) two-way transfer.

Family Structure

Five independent variables were chosen to capture the extent of family and the household structure of the elderly parents: number of children, family status, whether parents cohabit with adult children, family type, and number of generations in the household. Elderly parents (respondents) were asked about their status in the household. The answer categories were 1=head of household, 2=not head of household, but own the dwelling, and 3=others. Co-residence with adult children was classified as 1=yes and 0=no. Family type and number of generations living in the elderly parents' household were constructed by using information from household rosters. Family type is represented by four categories: 1=fragmentary/no conjugal unit, 2=one conjugal unit, 3=two or more conjugal units, and 4=one conjugal with others (not respondents' children) co-residing with family unit. Finally, the measure of number of generations is coded as 1=one generation, 2=two generations, and 3=three or more generations.

Control Variables

The control variables are the personal characteristics of elderly parents, which are age, sex, marital status, health status, education, and work status. These characteristics were measured as follows: age in years; sex dichotomized as 1=male, 0=female; marital status trichotomized as health status measured on a 5-point scale ranging from 1=very poor to 5=very good; education measured by highest level attained: 1=no formal education, 2=primary, 3=secondary, 4=higher; and work status measured by two categories of 1=working, 0=not working.

Results

The first issue we address is the levels and patterns of giving and receiving support between elderly parents and their adult children in Thailand. Table 2 shows the frequency and percentage distribution of different types of transfer directions classified by the parents' area of residency. Almost 60 % of parents report a one-way transfer

Table 2 Percent of respondents by intergenerational transfer direction and area of residence

Transfer direction	Total (n=657)	Urban (n=316)	Rural (n=341)
One-way transfer	66.2	64.8	67.5
1. Children to parents	59.4	60.1	58.7
2. Parents to children	6.8	4.7	8.8
Two-way transfer	19.5	18.7	20.2
No transfer	14.3	16.5	12.3
Total	100.0	100.0	100.0

from their children, whereas about 6 % of parents report a one-way transfer from parents to adult children. About 20 % of elderly are involved in reciprocal exchange with their children while about 14 % neither give nor receive. When there is family support, it is predominantly monetary transfer (Table 3). With respect to the area of residency, family intergenerational transfers are common in both urban and rural areas and follow the overall pattern. This shows a largely upward financial flow from adult children to elderly parents. It should be noted that in urban areas, the proportion of parents making no exchanges at all with children is higher than in the rural areas. Moreover, twice as many elderly rural residents give money to children compared with the urban elderly. Therefore, urban elderly parents interchange resources with adult children slightly less often than their rural counterparts.

Furthermore, unlike in US or European countries (Bengtson 2001), Table 3 shows that urban and rural Thai adult children provided financial support more often than nonmonetary support. Similarly, Sun (2002) studied intergenerational transfers to the elderly among urban Chinese families and found that adult children focus more on financial and material support than on helping with household chores. These findings obviously suggest that unless economic needs are met, the elderly's nonfinancial and nonmaterial demands such as time and emotional support are rarely considered. Results from the HART data confirm this contention. About 8 out of 10 elderly persons receive support from their adult children, with 6.3, 0.5, and 1.4 elderly parents receiving financial only, nonfinancial only, and both types of transfers, respectively. This evidence suggests that the psychological well-being of the Asian elderly, including Thai elderly, is almost totally ignored by their adult children.

Regarding the dominant resource transfer from children to their elderly parents, Table 4 shows details of such upward flow, especially the contribution of each individual child. There is no question of which child participating in the transfers for a one-child family. For the elderly with two to four living adult children, it is noticeable that the participation pattern of the upward transfers is quite similar regardless of the child's birth order. However, the elderly with five or more children tend to receive regular allowances or living expenses from the higher parity children, i.e. 4 and 5 (for five living children) than from the lower counterparts. It should also be added that the elderly are more likely to receive non-regular financial support than regular support from their adult children, except the elderly with the only living child.

The chance of receiving support for each parent (from their children) is higher than for each adult child receiving support from his/her parents. This is due to the fact that

Table 3 Percent distribution of respondents by type of support, intergenerational transfer direction, and area of residence

Type of support	Children to parents	Parents to children
Total (<i>N</i> =660)		
Financial only	62.7	20.5
Non-Financial only	4.8	5.2
Both	11.4	0.8
No transfer	21.1	73.5
Total	100.0	100.0
Urban (<i>N</i> =317)		
Financial only	61.5	17.5
Non-Financial only	6.0	5.5
Both	11.4	0.3
No transfer	21.1	76.7
Total	100.0	100.0
Rural (<i>N</i> =343)		
Financial only	63.8	23.0
Non-Financial only	3.8	5.0
Both	11.4	1.5
No transfer	21.0	70.6
Total	100.0	100.0

each parent is involved with at least one child, which increases the chance of receiving support whereas each child is involved with only one parent. Therefore, the results so far indicate that the proportion of one-way resource transfers from children to parents significantly exceeded that from parents to children. As shown in Table 5, almost 55 % of elderly parents in the year prior to the interview were supported by all of their children while only 15 % of those parents gave support to all of their children. The majority of elderly parents (about 70 %) are supported by at least half of their children. Generally, both urban and rural counterparts follow the same pattern with slight differences in the proportions of participating children, especially when the flow of support goes from children to elderly parents.

According to the mean proportions of adult children assisting their own elderly parents, about two-thirds of adult children in a family support their aged parents. Contrarily, the reverse flow from parents to children involves only about one-fifth of adult children in a family. The average proportion of children being supported by elderly parents is 1.7 and 2.3 in every 10 adult children in urban and rural areas, respectively.

One major advantage of the HART data for analysis of financial transfers is the opportunity to estimate the volume of monetary transfer between parents and their adult children. In the previous study by Knodel and Chayovan (2008), which used the 2007 Survey of Older Persons in Thailand, the researchers found that about 21 % and 34 % of parents received at least 10,000 baht during the past year for exchanges with cohabiting and noncohabiting children, respectively. Based on the present study, the

Table 4 Percentage distribution of respondents by type of received support (from children), number of living children, and birth order

Number of living children/Type of received support	Birth order (of children)							
	1	2	3	4	5	6	7	8
One child								
Regular financial help	39.0							
Non-regular financial help	15.6							
Non-financial help	7.8							
No help	37.7							
Two children								
Regular financial help	27.6	27.6						
Non-regular financial help	34.1	30.9						
Non-financial help	8.1	11.4						
No help	30.1	30.1						
Three children								
Regular financial help	30.2	29.6	25.8					
Non-regular financial help	32.1	33.3	32.7					
Non-financial help	7.5	5.7	6.9					
No help	30.2	31.4	34.0					
Four children								
Regular financial help	24.2	23.4	26.6	25.8				
Non-regular financial help	36.3	32.3	33.1	31.5				
Non-financial help	6.5	10.5	8.1	10.5				
No help	33.1	33.9	32.3	32.3				
Five children								
Regular financial help	18.1	20.2	16.0	23.4	24.5			
Non-regular financial help	39.4	38.3	37.2	31.9	37.2			
Non-financial help	6.4	8.5	11.7	7.4	6.4			
No help	36.2	33.0	35.1	37.2	30.9			
More than five children								
Regular financial help	19.0	11.9	19.0	19.0	26.2	26.2	21.1	18.2
Non-regular financial help	42.9	47.6	44.0	41.7	41.7	35.7	47.4	27.3
Non-financial help	6.0	8.3	10.7	10.7	8.3	9.5	5.3	18.2
No help	32.1	32.1	26.2	28.6	23.8	28.6	26.3	36.4

estimated annual median values of support received by elderly parents from HART are shown in Tables 6, 7 and 8 for the total, urban, and rural samples, respectively. As shown in Table 6, overall, elderly parents received 22,250 baht (about US\$740) from all of their adult children in the prior year. The magnitude of this upward transfer is slightly above the 2009 country's poverty line, which is 19,032 baht (Office of the National Economic and Social Development Board 2011). Even though the urban parents are somewhat less likely to receive financial support from their adult children than their rural counterparts, the former receive a substantially larger amount of money

Table 5 Percent distribution of respondents by proportion of children who provided support, intergenerational transfer direction, and area of residence

Proportion of children who provided support to their parents	Children to parents	Parents to children
Total (N=660)		
All	54.7	15.0
More than half (0.51 – 0.99)	11.7	3.2
Exact half (0.50)	5.0	2.7
Less than half (0.01 – 0.49)	7.6	5.6
No transfer	21.1	73.5
Mean proportion of children	0.68	0.20
Urban (N=317)		
All	50.2	12.0
More than half (0.51 – 0.99)	14.2	3.2
Exact half (0.50)	6.0	2.8
Less than half (0.01 – 0.49)	8.5	5.4
No transfer	21.1	76.7
Mean proportion of children	0.66	0.17
Rural (N=343)		
All	58.9	17.8
More than half (0.51 – 0.99)	9.3	3.2
Exact half (0.50)	4.1	2.6
Less than half (0.01 – 0.49)	6.7	5.8
No transfer	21.0	70.6
Mean proportion of children	0.70	0.23

than the latter. As shown in Tables 7 and 8, the median money transfer from children to urban parents is 30,000 baht (about US\$1,000), which is almost double compared with 17,500 baht (about US\$583) for the rural parents. However, such amounts of money are slightly overestimated owing to the higher proportion of female elderly persons in the HART sample than in the national represented survey (elderly mothers tend to be receivers more than elderly fathers).

When compared with other Asian countries, except Hong Kong (US\$2,460), the transfer from Thai children to their parents is relatively large. For example, they were US\$496 in Malaysia in 1988, US\$286 in Indonesia in 1993, and US\$120 in China in 1987 (Lillard and Willis 1997, 2002; Logan and Bian 2003; Chou 2008). Nevertheless, if there is no other source of income or personal saving, it is difficult for the Thai elderly, particularly those in poor health, to have a decent quality of life on only about 60 baht (US\$2) per day.

The amount of money transfer to elderly parents and the adult child's order of birth are associated positively to some extent. In the urban area, the first two children provide more to their elderly parents than their younger siblings do whereas in the rural area, only the eldest child contributes the largest amount of money. This finding suggests that the eldest child, particularly, feels more responsibility for supporting their parents than

Table 6 Median amount of money (baht) elderly parents received from adult children per year by number of living children and adult child's birth order: overall

Birth order	Number of living adult children					Total	Number of children
	1	2	3	4	5 and over		
1	27,500	7,950	12,500	7,500	5,000	7,500 ^a	324 ^a
2		12,500	8,750	6,000	2,500	7,500	313
3			7,500	6,000	2,500	6,000	241
4				7,500	2,500	6,000	156
5					2,500	2,500	96
6					2,500	2,500	38
7 and over					2,500	2,500	25
Total	27,500	20,500	22,500	24,250	19,500	22,250	
Minimum	1,000	2,000	2,000	1,400	400	400	
Maximum	66,000	84,000	292,000	480,000	1,093,000	1,093,000	
Number of parents	39	79	112	86	132	448	
Proportion of parents	0.51	0.65	0.70	0.68	0.74	0.68	
Number of children providing money	0.51	1.12	1.65	2.08	2.99	1.87	

1 US dollar is equivalent to about 30 Baht

^a Not include number of living adult children=1

the younger siblings. In addition, it may be that the older child is in a more advanced stage in their life and has more income than their younger siblings.

We now examine the family structure of the elderly. Table 9 presents the distribution of elderly parents by the percentages of their important family characteristics. There are slight differences in the family profile between urban and rural areas. Regarding status in the family, the Thai elderly assume an important role because a large majority of the sample, about four out of five, is either the household head or house owner. About 65 % of elderly parents cohabit with at least one child, with a slightly higher proportion of the urban elderly compared with the rural elderly. Regarding family type, 75 % of elderly persons live in the fragmentary family type because there is no conjugal unit in the household, whereas the remainder has at least one conjugal unit. Examples of the fragmentary family type are the elderly living alone, an elderly either father or mother living with at least one unmarried child, and an elderly person living with his/her sibling(s) whose marital status is single or divorce or widow. In addition, one conjugal family refers to elderly couples living together or both elderly parents are still alive and living in the same household. The elderly in rural areas are more likely to be in fragmentary family-type dwellings than their urban counterparts are. About 60 % of the elderly reside in a two-generation family and 20 % have only one generation in the household. The predominance of co-residence with children combined with a fragmentary family type as illustrated above leads us to conclude that such co-residence is with unmarried children.

Another question to address is whether family structure and selected socioeconomic characteristics and the health status of the elderly affect the intergenerational transfers.

Table 7 Median amount of money (baht) elderly parents received from adult children per year by number of living children and adult child's birth order: urban

Birth order	Number of living children					Total	Number of children
	1	2	3	4	5 and over		
1	30,000	18,000	17,500	7,500	7,500	12,000 ^a	149 ^a
2		15,000	18,000	12,500	6,000	12,500	141
3			12,000	7,500	6,000	7,500	101
4				12,500	7,500	7,500	62
5					6,000	6,000	39
6					2,500	2,500	14
7 and over					2,500	2,500	12
Total	30,000	27,500	31,250	33,500	30,000	30,000	
Minimum	2,500	2,500	2,000	2,500	400	400	
Maximum	66,000	84,000	292,000	480,000	1,093,000	1,093,000	
Number of parents	25	45	54	36	56	216	
Proportion received	0.59	0.67	0.70	0.65	0.74	0.68	
Number of children providing money	0.59	1.12	1.53	1.82	2.96	1.71	

1 US dollars is equivalent to about 30 baht

^a Not include number of living adult children=1

Because there is no substantial difference in the transfer pattern between urban and rural areas, we investigate only the overall sample. Multinomial logistic regression was conducted to examine the relationship between 10 independent variables and the parent–child resource transfers during the past 12 months. The analysis compares each category of the transfer (children to parents only, parents to children only, and two-way transfer) with the “no transfer” category. The estimated coefficients for the log odds (B) as well as the odds ratio ($\text{Exp}(B)$) are presented.

As expected, the results from Table 10 show that the odds of resource transfer from adult children to elderly parents increase significantly with family size. When compared with the no parent–child transfer category, parents with more children are more likely to be receivers. This confirms the evidence discussed previously that the proportion of the elderly as receivers as well as the mean number of children giving support increase with the number of adult children. In addition, the elderly's level of educational attainment, which indicates economic status, affects the receiving role of the elderly, that is, lower educated elderly parents are more likely to receive monetary support from adult children than no transfer between them. According to family composition, family type and number of generations in the elderly household have a significant effect on support received from adult children when compared with no support between them. In the family with two or more generations, the odds of upward transfer for the elderly living in a fragmentary setting is about twice of those living in a conjugated or extended family. Moreover, life in a one-generation family (fragmentary

Table 8 Median amount of money (baht) elderly parents received from adult children per year by number of living children and adult child's birth order: rural

Birth order	Number of living children					Total	Number of children
	1	2	3	4	5 and over		
1	18,000	6,000	7,500	6,500	2,500	6,000 ^a	175 ^a
2		7,500	7,500	2,500	2,500	2,500	172
3			7,500	6,000	2,500	3,250	140
4				7,500	2,500	4,000	94
5					2,500	2,500	57
6					2,500	2,500	24
7 and over					2,500	2,500	13
Total	18,000	12,000	18,000	21,250	17,500	17,500	
Minimum	1,000	2,000	2,500	1,400	2000	1000	
Maximum	66,000	84,000	258,000	216,000	186,000	258,000	
Number of parents	14	34	58	50	76	232	
Proportion received	0.41	0.63	0.71	0.70	0.74	0.68	
Number of children providing money	0.41	1.11	1.77	2.28	3.01	2.01	

1 US dollars is equivalent to about 30 baht

^a Not include number of living adult children=1

Table 9 Percent of respondents by important family structures and area of residence

Family characteristics	Total	Urban	Rural
Family status			
Head of household	36.9	40.6	33.5
House owner	41.6	36.1	46.6
Others	21.5	23.3	19.9
Co-residence with children			
Yes	65.9	68.8	63.4
No	34.1	31.3	36.6
Family type			
Fragmentary	75.3	69.4	80.8
One conjugal	17.9	20.2	17.9
Multiple conjugal	2.3	3.5	1.2
Extended	4.5	6.6	2.6
Number of generations			
One generation	20.2	17.4	22.7
Two generations	62.0	62.7	61.2
Three generations or more	17.9	19.9	16.0
Total	100.0	100.0	100.0

Table 10 Multinomial logistic regression on the intergenerational transfer between parents and children: total (with “no transfer” as the reference category) (N=610)

Predictors	Children to parents		Parents to children		Two-way transfer	
	B	Exp(B)	B	Exp(B)	B	Exp(B)
Age	-0.005	0.995	-0.004	0.996	0.004	1.004
Number of children	0.165*	1.179	-0.080	0.923	0.014	1.014
Health status	-0.154	0.857	0.217	1.242	0.022	1.022
Sex						
Male	-0.070	0.933	0.277	1.319	-0.203	0.816
Female	-	1.000	-	1.000	-	1.000
Education						
No formal education or primary	0.564*	1.758	-0.143	0.867	0.162	1.176
High school or higher	-	1.000	-	1.000	-	1.000
Marital status						
Currently married	0.141	1.152	0.443	1.558	0.058	1.059
Not currently married	-	1.000	-	1.000	-	1.000
Work status						
Working	0.096	1.101	0.884**	2.422	0.831**	2.295
Not working	-	1.000	-	1.000	-	1.000
Family status						
Head of household	-0.543	0.581	-0.244	0.784	-0.654	0.520
House owner	0.103	1.109	-0.570	0.566	0.035	1.036
Others	-	1.000	-	1.000	-	1.000
Co-residence with children						
Yes	0.080	1.083	1.427***	4.166	0.337	1.400
No	-	1.000	-	1.000	-	1.000
Family type * generation						
Fragmentary & 1 generation	-0.198	0.821	0.763	2.145	-0.444	0.642
Fragmentary & ≥2 generations	0.686**	1.986	0.797	2.219	0.876**	2.402
Conjugal & 1 generation	-0.458	0.633	0.955	2.597	-1.558	0.211
Conjugal/extended & ≥2 generations	-	1.000	-	1.000	-	1.000
Constant	0.186		-1.482		-0.481	
N	366	42	122			
Model chi-square(df)	91.989***(39)					
R ² (Cox and Snell)	0.140					

* $p < 0.10$ ** $p < 0.05$ *** $p < 0.01$

or conjugal households) tends to decrease the odds of parents receiving support from their adult children from about 20 % to 40 %.

Work status and co-residence with children are significantly associated with the transfer of support from parents to children. Working elderly parents are 2.4 times more likely than nonworking parents to be in the “parents to children only” than “no-transfer” categories. This suggests that some elderly parents remain economically active

not only for themselves, but also for their needy adult children. This notion contrasts with stereotypes of the elderly as being burdensome to the family members. In fact, most of them are owners or heads of their households. According to the Indonesian study, parents assume parenting responsibilities for their children will continue well into adulthood and are extended even to their grandchildren (Schroder-Butterfill Schroder-Butterfill 2003).

The HART data on co-residence appears to show that adult children are more likely to live with their parents in their parents' home, not vice versa. A number of adult children return to the parental home when they have a life crisis such as economic or marital problems (Goldscheider and Goldscheider 1994). In Mexico, Gomes (2007) reported that of all adult children who cohabit with their parents, 77 % of them have previously left their family and then returned, and most likely with their children. Adult children, especially those who are married, who cannot afford a separate residence, tend to be unsuccessful in work. The results from Table 9 indicate that the odds of support transference to children (and perhaps their children's family) increase slightly over fourfold if the elderly resides with their adult children. This finding is consistent with Agree et al. (2002) who concluded that Taiwanese and Philippine parents are more likely to transfer resources to their cohabiting children than to those of their noncohabiting children. Although different combinations of family types and number of generations in the elderly household are not significantly associated with the direction of giving support from elderly parents to adult children, elderly parents who are both alive and live in the same household are more likely than other types of households to give support to their adult children.

In the two-way transfer between parents and adult children, elderly parents are significantly differentiated by work status, interaction between family type, and number of generations in the family. Working elderly parents are more likely to reciprocate support with their adult children than to provide no support. The current results show that the parent–children transfer, whether one- or two-way exchanges, is only possible if parents have work income. The question becomes what makes parents givers only or both givers and receivers of support. The answer tends to be related to family living arrangements. While there is no significant difference among various family structure types related to the elderly supporting their adult children, this is not true for reciprocal transfers. The results show that the elderly with fragmentary family types (living without spouse) and having at least two generations in their living arrangement are more than twice as likely to receive and give as to engage in no transfer of support.

Discussion

This study has examined the direction of intergenerational support between elderly parents and their adult children. The directions are children to parents, parents to children, reciprocal exchanges, and no transfer. A majority of elderly parents reported either a one- or two-way transfer with their children in the prior year. More than half of the elderly match the elderly security norm where children support their parents in later life. Only about 14 % of parents reported no exchange with their adult children. Therefore, this study confirms the expectation that the traditional family-based support

for the elderly still persists in Thailand, in urban as well as rural areas, despite major changes toward westernization. Children are still a source of old age security in Thailand.

Financial support is more frequently given by adult children to their elderly parents than nonmonetary support such as caregiving or going shopping. Thai elders are likely to rely on their children for financial support, but not for emotional support. The upward flow of support to parents continues, but the focus shifts from kin- to cash-based support systems. This result raises some questions about the psychological well-being of the elderly, even although about two-thirds of parents live with their adult children. According to the Mental Health Department, Ministry of Public Health, the overall suicide rates of the Thai population have declined substantially over the past 15 years. Contrarily, the percentage of suicide deaths by people aged 60 years and older doubled from 7.3 % in 1997 to 15.3 % in 2010 (Mental Health Department Department of Mental Health and Ministry of Public Health 2011). This trend is due to the increasing proportion of the elderly in the total population as well as the shifting of family relationships to a cash-based system. Treerutkuarkul (2005) claimed that depression and vulnerability as a result of family negligence are responsible for a high risk of elderly suicide. However, further investigation is recommended for a complete exploration of this issue.

This study found consistency in the direction and type of resource transfers with previous studies done in Thailand using data from national surveys. From the 1994 and 2007 Surveys of Older Persons in Thailand, Knodel and Chayovan (2009) found that 88 % and 87 % of parents aged 60 years and older received money in the prior year from their children, respectively. This consistency suggests not only the validity of the HART data, but also the persistence of the level and types of family intergenerational transfers. The pervasiveness of financial support to elderly parents is also evident in other eastern and southeastern Asian countries that recently experienced modernization (Lillard and Willis 1997; Knodel et al. 1998; Frankenberg et al. 2002; Logan and Bian 2003; Glaser et al. 2006). Contrarily, family resource transfers are generally in the opposite direction in Western countries, that is, from elderly parents to their children. These findings imply that although westernization and urbanization changed many aspects of family life, especially toward nuclearization, filial obligation is still prevalent in Asia. This may be mainly because there is no secured old-age pension for the elderly, not even from their personal savings, in eastern countries other than from the family. As a result, the Asian elderly, including the Thai elderly, have to rely on family financial support, especially from adult children. Surveys have reported that a large proportion of the Thai elderly cited their children as their main source of income (Knodel and Chayovan 2009). Therefore, the Thai and other Asian elderly are largely supported informally, privately, and voluntarily.

The amount of money received by elderly parents according to the number of living children suggests an interesting pattern of intergenerational financial transfer between elderly parents and their adult children. According to the median values, overall elderly parents with only one living child received the largest income while those with five or more living children received the smallest income. Furthermore, there are slight differences in the amount of monetary support provided to the elderly with two to four living adult children. These findings allow us to gain some insight into the quality of the relationship between the number of adult children and the number of children

currently providing money found in the present study (shown in the last row of Tables 5, 6 and 7) as well as in previous studies (Knodel et al. 1998; Knodel and Chayovan 2002). Although parents with only one child are noticeably less likely to receive financial support from their adult children than those with more than one child, the amount of money received is surprisingly as large as or even larger than for other groups. There is not much difference in the total amount of money received by elderly parents with different numbers of adult children. This indicates that children tend to coordinate the amount of money transfer so that their parents will be supported to a given level, except in cases of two adult children. Unlike families with three or more children, it is unclear whether the two siblings in a two-child family coordinate to support their parents. If they do, the number of siblings contributing support is too small, which means the total amount of support is not as large as for the elderly with three or more children. An alternative argument is that the two siblings may assume for any reason that one will or must take a major share of responsibility and the other can be a minor or supplement supporter. However, fertility reduction seems to pose no threat to old-age security because the intensity of support to elderly parents appears not to be linearly related to the number of living adult children.

Results from multinomial logistic regression indicate that controlling for other demographics, health, socioeconomic characteristics, and work status of elderly parents, the family structure variables of number of children, whether cohabiting with adult children, and the interaction between family types and number of generations are significantly associated with the direction of intergenerational resource transfer. The number of children is related positively to the likelihood of elderly parents receiving support from children. Among other characteristics of family structures that exert an effect on intergenerational resource transfer patterns, co-residence with adult children remains strongly associated with elderly parents supporting their adult children.

The empirical evidence provides support for the association between the structural and the functional characteristics of intergenerational family relations. The results clearly show that there are important differences in family types and number of generations in the support system. These two characteristics relate to the marital status of aging parents and of their adult children, reflecting the competing needs of individual family members. The relationship for upward transfers (from adult children to elderly parents) is more complex than that for downward transfers (from elderly parents to adult children). The downward transfer of support is more likely to occur in any family structure type, as long as the elderly cohabiting with their children. On the contrary for the upward transfers, the strength of the intergenerational social bond becomes evident when a family structure has changed from a “conjugation” to a “fragmented beanpoles”. In other words, the transition from “marriage” to “widowhood/separation/divorce” roles of elderly parents intensifies the upward resource flows. From the parent’s perspective, spouses and children are the main caregivers for the elders. The absence of one’s spouse may cause the other, especially a frail parent to shared living arrangement with their children. It can be seen that structural intergenerational solidarity reflects the parental dependency which then stimulate the emergence of functional solidarity. Despite the eroding role of family in traditional intergenerational support, when in need it is still functioning in Thailand. This clearly indicates the underlying

mechanisms of family support to the Thai elderly. In general, these findings suggest that family structures enable an opportunity for exchanging instrumental and financial assistance between adult children and their elderly parents.

The results clearly show that there are important differences in family types and number of generations in the support system. These two characteristics mainly reflect the marital status of aging parents and of their adult children who live in the same household. However, the role of the latter seems to be more important in determining the direction of support than the former. The transfer patterns depend largely on the marital status and needs of adult children. Elderly who live in a fragmentary family type with two or more generations in the household, that is, the widowed, separated, or divorced elderly father or mother cohabits with their unmarried children, tend to be involved in either the upward transfer from or the reciprocal transfer of support with their adult children. However, the downward transfer of support from elderly parents to adult children is more likely to occur in any family structure type, but more importantly for the elderly cohabiting with their children. As mentioned previously, this co-residence is a response to the children's need. It is evident that there are two categories of adult children who cohabit with their elderly parents: those who are unmarried and those who are unsuccessful in life.

According to the present study, adult children can either cohabit, not cohabit, or both because the present study examines resource transfers with all children, not only cohabiting children. For the flow of resources from adult children to elderly parents, previous studies done in Asian countries including Thailand found that elderly parents receive support from cohabiting as well as noncohabiting children (Knodel and Chayovan 2008; Yi and Lin 2009). However, cohabiting children usually have a stronger perception of filial obligations (Yi and Lin 2009). Contrarily, for elderly parents who provide for their adult children, multinomial logistic regression results led us to presume that this type of transaction is mostly with cohabiting children. Yi and Lin (2009) compared intergenerational relations between cohabiting and noncohabiting children in Taiwan and found that elderly parents engage more actively in resource transfer with cohabiting children than noncohabiting children.

A closer look at the amounts and types of reciprocal exchanges is probably more complex. Previous studies in Asia indicate that although resource transfer flows in both directions, it is predominantly from children to parents (Knodel et al. 1992; Lillard and Willis 1997; Chen and Silverstein 2000). As mentioned previously, this is largely because parents can receive resources from several children. However, it is unclear whether the reciprocity is an equal or asymmetrical exchange in terms of the dyadic parent–child relationship, especially between parents and cohabiting children. The present study finds that even for a reciprocal exchange of support, elderly parents mainly provide financial support (the provided money derived at least in part, if not all, from the elderly work income) to adult children instead of emotional support or assistance in household daily activities, which is often hypothesized by most theorists. Resource-transfer behavior from elderly parents to adult children has been largely ignored by researchers in this field (Schroder-Butterfill Schroder-Butterfill 2003). Nevertheless, HART data show that a significant change in Thai family values is in the importance of money. Because the majority of family resource transfers are cash

based, the elderly's role as family providers depends on having a work income. In family economies over the past several decades, there has been shift from the "single male breadwinner" to the "two-earner" models in general society (Eggebeen 1992). This study suggests that a new phase, the "elderly breadwinner," may emerge in the near future.

One final note is that we could not tell whether there is a portion of money received by parents from one child (either cohabiting or noncohabiting), which is transferred to another child (either cohabiting or noncohabiting) who is currently unsuccessful or in need. Previous studies have shown that parents appear to redistribute resources within the family by giving greater support to the less well-off children (McGarry and Schoeni 1995). However, the data available to this study do not permit us to investigate this interesting issue.

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Appendix

Table 11 Percentage distribution of selected personal characteristics of the studied sample (the 2009 Pilot HART) and the 2007 National Survey of Older Persons

Personal characteristics	HART	National survey
Age		
60–69	57.6	58.8
70–79	32.9	31.7
≥80	9.5	9.5
Sex		
Male	36.2	44.6
Female	63.8	55.4
Marital status		
Married	56.0	64.2
Widowed/divorced/separated	44.0	35.8
Educational attainment		
No formal education	7.4	16.4
Elementary	75.4	71.6
Secondary	14.1	9.1
Bachelor degree or higher	3.1	2.9
Physical health		
Poor	20.9	24.1
Fair	37.5	32.9
Good	41.5	43.0
Total	100.0	100.0

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