

# **GENERALIZED EXCHANGE AND INTERGENERATIONAL TRANSFERS IN TAIWANESE AND FILIPINO FAMILIES**

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## **ABSTRACT**

Family relations in Asia often embody systems of generalized exchange, where norms of trust and obligation encourage cooperation among family members. This study examines resource transfers between older parents and their adult children in the Philippines and Taiwan. Results show that older persons are not merely recipients of support. A substantial number are involved in both giving and receiving with their children, a form of generalized exchange where resources are redistributed from one family member to another. Multinomial logit models show that involvement in generalized exchange is related to wealth, coresidence with and age of children, and with rural residence.

*Keywords: Intergenerational Transfers, Aging, Philippines, Taiwan, Social Support.*

The family remains one of the main institutions within which emotional, physical, and financial support is exchanged. Prior research on family support has described the types and directions of flows between generations (Hermalin, et al., 1990; Hogan, Eggebeen and Clogg, 1993); the characteristics of the actors involved and how they are selected (Cooney and Uhlenberg, 1992); and the motivations behind intergenerational transfers (Hofferth, et al., 1994; McGarry and Schoeni, 1997). What unites most of this research is a conceptual framework that examines family transfers from a dyadic perspective; that is, evaluating transfers with regard to the characteristics of one donor and one recipient in a transfer. Recently there has been some attempt within demography and economics to expand these models by examining the effect of structural characteristics of the larger kin network such as total number of children or relative financial well-being among children on bequests or inter-vivos transfers (Tomes, 1981). Studies also have begun to assess the effects of shared, often unobserved, family characteristics on dyadic transfers (Henretta, et al., 1996; McGarry and Schoeni, 1997; Soldo and Wong, 1996; Wong, et al., 1995).

A dyadic perspective has been well suited for the analysis of intergenerational transfers in the United States, where families are smaller, coresidence with children is less prevalent, and extra-familial resources such as pensions, social security, and paid-provision of home health services are available (Spitze and Logan, 1992). In fact, the proportion of older adults involved in transfers is fairly low. The majority of older persons report that they are not engaged in the exchange of time or money help with their children (Hill, et al., 1993), and about one-half of middle-aged Americans report that they do not routinely engage in giving or receiving relationships with their parents (Hogan, Eggebeen and Clogg, 1993).

In contrast, in developing and newly industrialized economies, families are larger on average and alternative support sources, such as social security or private pensions, are uncommon (Kinsella and Gist, 1995). Family relations often embody systems of generalized exchange, where norms of trust and obligation encourage cooperation among members as “an investment in collective future welfare and prosperity” (Peterson, 1993:572). As a result, the focus on dyadic transfers neglects an important aspect of the family economy: how intergenerational transfers take place when resource pooling among

family members is the norm. Studies in developing countries on such varied topics as migration strategies (Lauby and Stark, 1988; Sando, 1986), children's schooling (Lloyd and Blanc, 1996; Shapiro, et al., 1995), and nutrition (Desai, 1992), place much importance on the role of resource flows from multiple family members for the support and investment in kin. A focus on family transfers beyond a parent-child dyad also sheds increasing light on how active a role the elderly play in the family economy (see Adamchak, et al., 1991; Cain, 1991), a role that is often far greater than usually assumed in studies that focus only on the degree to which older persons are supported by their adult children.

This paper addresses the following two questions: 1) How common are multiple transfers among older parents and their adult children? and 2) What individual and family characteristics are associated with the older parent's involvement in multiple flows of resources? In the next section of the paper we review theoretical trends in research on intergenerational transfers, discuss the limitations of dyadic perspectives and introduce the concept of generalized exchange. We then describe the data sources and measurement of intergenerational transfers. In the last section we examine the prevalence of multiple flows of resources between older persons and their adult children in the Philippines and Taiwan and the factors associated with generalized exchange.

## **APPROACHES TO THE STUDY OF INTERGENERATIONAL TRANSFERS**

### **Dyadic Perspectives**

In the past three decades, research on family support for the elderly has primarily been conducted in three distinct areas: demographers examining living arrangement choices; labor economists analyzing financial flows; and social gerontologists focusing on informal caregiving and social support.

Initially, *demographic research* focused primarily on living arrangements as an indicator of family support, driven mainly by the paucity of data on kin outside the household. The limitation of this approach is that it does not fully capture the family economy. Although the household provides the main location in which money and services are transferred the family economy often extends across household boundaries.

In Asian countries, in particular, coresidence by older persons and their adult children is far more common than in the United States, but families also live in compounds or other collective arrangements that function effectively as families across dwelling boundaries. Older parents and their children often do not share dwelling, eating, or cooking areas, but live in close proximity and perform what are normally considered household tasks for each other, such as shopping, cooking, cleaning, or child care (Casterline, et al., 1991; Hermalin, et al., 1990; Knodel, et al., 1992). The permeability of household boundaries makes an examination of *both* intra- and inter-household family exchanges an important consideration in research on exchanges.

Research that examines intergenerational transfers of money and goods has mainly been based on a *microeconomic perspective*. The focus of this research is on observed transfer behaviors between a pair of individuals from which motivation is inferred. The two microeconomic models of transfers are the altruism model and the exchange (or “wealth”) model. These models were developed specifically to explain the transfers of wealth from parents to adult children as a form of dissaving in old age. The altruism model assumes that transfers are made in response to the financial needs of the child, because the child’s well being is incorporated into the parent’s utility function. The exchange model assumes that financial transfers to children are made as payment for services rendered by the child. The amount of the investment, therefore, will vary according to the anticipated return from the child. Empirical tests of these models focus on the effects of a child’s economic well-being on the amount of the transfer as a way of distinguishing between these two alternatives without regard for other possible explanations of the observed patterns as part of a larger exchange system (Altonji, et al., 1992; Cox and Rank, 1992; Hill, et al., 1993; McGarry and Schoeni, 1997; Quisumbing, 1994; Secondi, 1996).

The provision of emotional support and personal care services to the elderly by their adult children is the domain of intergenerational transfers that has most interested *social gerontologists*. Cantor (1979) and Kahn and Antonucci (1981) have argued that support to older persons is most likely provided in order of closeness to the older person, with a preference for the spouse, or in the absence of a spouse, by the closest child, and so on through the helper network. The focus in these models is still dyadic in that they are

hierarchical--one caregiver is sought and, if the preferred helper is not available, the next closest person is enlisted. Other studies of living arrangements and caregiving also are dyadic in perspective, assuming that the choice of a child for caregiving or coresidence is a function of the desirability and availability of that child (Wolf and Soldo, 1988; Soldo, Wolf, and Agree, 1990). Although characteristics of the broader network such as number and gender of children, are often taken into account, the outcome of interest is still limited to a dyad: that is, how each child's characteristics affect their likelihood of being selected to provide the elderly parent with care.

Interest is beginning to grow among researchers in how aspects of larger kin networks affect dyadic transfers, but the approaches remain very limited. Most studies are restricted to cataloguing the number of specific types of kin available and their basic socio-demographic characteristics, such as marital status and sex. For example, Rindfuss and Raley (1996) examine patterns of coresidence and contact between parent-child pairs in Japan and the United States and incorporate kin networks as a count of the number of children, siblings, parents and parents-in-law. The total number of children and relative financial well-being among children (Tomes, 1981) also have been used in economic models to estimate the effect of the kin network on bequests or inter-vivos transfers. In addition, a few studies have assessed the effects of shared (potentially unobserved) family characteristics on dyadic exchange relationships (Henretta, et al., 1996; McGarry and Schoeni, 1997; Wong, et al., 1995).

A dyadic framework allows transfer behavior within families to be summarized in terms of the prevalence of in- and out-flows (e.g., the proportion of older persons who receive support from their children) and to test the individual motivations underlying transfers (e.g., are children giving to parents as repayment for previous investments?). However, this perspective is less useful for understanding transfer activity within the larger family network or how the transfers of one child are affected by transfers made by other children. A dyadic perspective simply does not provide the conceptual tools for formulating hypotheses about the strength or activity level of the family "safety net." Research on family support must begin to measure and account for the fact that the kin network is not simply the sum of its dyadic ties but instead embodies complex pathways through which resources flow. Theoretical perspectives that place more emphasis on

exchange networks are well-developed and deserve revisiting in light of these conceptual gaps.

### **Expanding the Frame of Reference**

Theoretical perspectives that examine exchanges more broadly include anthropological models of generalized and restricted exchange and sociological theories of social exchange. Most Anthropological perspectives on exchange derive from Levi-Strauss' (1949) study of the elementary forms of kinship and Marcel Mauss' (1950) essays on the principles of ceremonial exchange in Polynesia. Essential to both is the understanding of gift-giving as a mechanism by which solidarity in social groups is created and maintained. Although these theories were developed to explain transfers in pre-market societies, they have provided the basis for modern theories about the relations within informal networks, where solidarity is a central basis for interaction.

The sociological perspective most closely associated with the study of interpersonal exchange networks is social exchange theory. Although Homans' (1961) original formulation focused on dyadic exchanges as the building blocks of collective exchange relations, other schools of thought have developed that focus more broadly on exchange networks as systems that are greater than the sum of their dyadic parts. According to these theories, transfers are predicated upon the expectation of reciprocity (Douglas 1990). The nature of this reciprocity may be direct (from the individual who receives the transfer) or indirect (through norms that dictate giving within a social group). This distinction delineates systems of *restricted* and *generalized* exchange. Restricted exchange is based on the principle of mutual reciprocity and is dyadic in focus. Generalized exchange is based on the principle of indirect reciprocity and is governed by normative obligations among 'classes' of actors, such as children to parents or siblings and neighbors to each other (Ekeh, 1974).

Generalized exchange may be defined as a set of transfers in which resources are being redistributed from one member to another. The pattern defining generalized exchange is a unidirectional chain shown as  $A \rightarrow B \rightarrow C$  (see Gillmore 1987). When it is present, we have generalized exchange. When it is absent we may find multiple flows, but they are non-redistributive and therefore do not constitute generalized exchange. For

example, if a parent is engaged in a directly reciprocal relationship with one child ( $A \leftrightarrow B$  C), the parent is both giving and receiving but is not redistributing resources among family members. Alternately, where all flows are in one direction, either in support of the older parent ( $A \rightarrow B \leftarrow C$ ) or where a parent is supporting multiple children ( $A \leftarrow B \rightarrow C$ ) generalized exchange is not taking place.

The concept of generalized exchange embodies a broader network perspective on intergenerational transfers, thus allowing us to evaluate the extent to which older persons assume an active role in the family economy, redistributing resources from one family member to another rather than simply being passive recipients of support. The limited literature on generalized exchange and intergenerational transfers, which is mostly ethnographic in nature, suggests several testable hypotheses about the factors associated with generalized exchange.

First, the structure of the kin network defines, to a large extent, the opportunities for exchanges within families. Patterns of family support have been shown to be strongly influenced by the number and types of kin available for exchanges (van Tilburg, 1995; Soldo, Wolf, and Agree, 1990). We therefore expect that involvement in generalized exchange will be positively related to the number of living children. Another aspect of the kin network that is likely to influence an older person's involvement in generalized exchange are the ages of their children and the number of years between the youngest and oldest child. A broad age span across a group of siblings often means that the older children are enlisted to help the family support their younger siblings from relatively young ages. The eldest child may be expected to provide child care for younger siblings while they are still themselves living at home (Peterson, 1990; 1993) and later to become a financial provider, giving loans for a sibling's education or to help them establish a small business (Cicirelli, 1994). Such support is most often given through transfers to the parent while a younger sibling is being supported by parents and living at home. We therefore expect that the likelihood of an older parent being the broker in a generalized exchange among their children will decrease with the age of the youngest child but increase with the age span between the youngest and oldest child.

Second, ethnographic studies have shown persistent economic need to be strongly associated with engagement in generalized exchange (Peterson, 1993; Stack, 1974). A



poor person necessarily needs larger amounts of resources than they themselves possess in order to be able to make major resource outlays, such as investments in children's education, or to respond to an immediate need, such as hospitalization for an illness. Therefore persons in sustained poverty often engage in informal transfers of money, goods, and services in their social network. We might then expect that older persons with fewer economic resources would be more likely to be involved in generalized exchange. However, the lack of available resources also may reduce the *ability* of individuals to make transfers, particularly financial ones, to other family members (Hogan, Eggebeen and Clogg, 1993). Hence, it also is possible that greater wealth will be associated with greater involvement in generalized exchange.

Lastly, generalized exchange should be more common among those who have less access to non-familial sources of support or who live in areas lacking these types of resources. For example, sharing resources among family members should be more common where market substitutes such as savings and credit institutions are not available. Rural areas of both Taiwan and the Philippines generally provide fewer opportunities to purchase goods and services in the marketplace, and often require longer travel to get to those banks or shops that are present. Families in rural areas therefore more commonly pool resources both in order to meet short-term economic needs like medical care and for long-term investments such as buying seed and fertilizer for the start of a planting season or funding a child's higher education. In addition, receipt of independent income from pensions or other government social support programs would enable the older person to purchase goods and services that family members would otherwise need to provide. We therefore expect that older persons with less access to alternative resources would be more likely to be involved in familial exchanges, and particularly in generalized exchange.

## **THE STUDY SETTINGS**

The emerging literature on intergenerational transfers in Asia generally indicates that transfers among multiple family members commonly operate within families in this region. The Philippines and Taiwan are both characterized by strong norms of filial support (Domingo, 1995; Lopez, 1991; Thornton and Lin, 1995) that are expressed in

living arrangements (Casterline, et al., 1991) and expectations for old-age support (Biddlecom and Domingo, 1996; Chang and Ofstedal, 1991). Multiple children are likely to coreside with their older parents (Ofstedal, 1994; Casterline, et al., 1993); and most older persons receive more than one type of support from their adult children (Hermalin, Ofstedal, and Chang, 1992). The types and amount of support given to older persons also vary by the size and characteristics of the kin network (Hermalin, Ofstedal, and Chang, 1992; Hermalin, Ofstedal, and Li, 1992). Focus group data show that in Taiwan and in Singapore, older persons do participate in family decisions and that the larger the family, the more likely this is the case (Williams, Lin, and Mehta, 1994). The qualitative evidence also shows that older persons often work in order to contribute to their children's welfare (Domingo and Asis, 1995), and that even when older persons cannot provide material support to coresident children, they contribute services to the household (Knodel, et al., 1995).

However, the ways in which filial obligations are carried out differ between the two countries. Normative responsibility for parental support favors the eldest married son in Taiwan, while in the Philippines it is more gender-neutral. A number of studies have shown that siblings provide concrete aid to each other in the Philippines, often through the parents (Ciciirelli, 1994; Peterson, 1990). In Taiwan this is less often the case, particularly because of smaller family sizes on average. In addition, the process by which parent-child coresidence is determined differs substantially between the two countries: in the Chinese family, strong norms of coresidence with the eldest married son govern the living arrangements of the elderly in Taiwan (Hermalin, et al., 1992) while in the Philippines, older parents often rotate between their children's households and coresidence appears to be more of a negotiated commodity (Lopez, 1991).

The levels of extra-familial support in both countries are still relatively low: about a quarter of Taiwan's working age population is covered by social insurance compared to slightly more than half in the Philippines (compared to almost universal coverage of the labor force in the United States) (Kinsella and Gist, 1995). The structure of pension receipt in each country differs, however. In Taiwan, an increasing number of workers in both the government and private sectors have become participants in annuitized pension programs, while in the Philippines the most prevalent mechanism for pension distribution

is still a lump-sum payment upon retirement, most of which dissipates in a very short time, leaving older persons with no outside sources of income. Social security benefits and pension schemes in the Philippines currently cover less than one-tenth of older adults and virtually exclude those who farm (Domingo, et al., 1994).

## **DATA AND METHODS**

### **Data**

The data we use are from the 1989 Taiwan Survey of Health and Living Status of the Elderly and the 1984 Association of Southeast Asian Nations (ASEAN) survey of the older population in the Philippines. Both surveys provide detailed information on intergenerational transfers in the Asian setting. The Taiwan survey was conducted using a national probability sample while the Philippines survey was a probability sample within purposively selected areas representing major categories of the population by size of place and ethnicity. The samples used in this analysis represent persons 60 years of age or older with two or more living children. This includes the majority (more than 85 percent) of all respondents. The final analytic sample size for Taiwan is 3,491 persons and for the Philippines is 1,056 persons.

### **Measures of Intergenerational Transfers**

Conceptualization and measurement of inter- and intra-generational transfers within the family is, by its nature, complex. Simply characterizing the kin group is a multidimensional task. Measurement is particularly sensitive to the way that questions are asked (McGarry and Schoeni, 1994), and which member of the family is selected as the respondent (Roan, et al., 1995). Add to this the multi-directionality of flows, multiplicity of transfer currencies, and a dynamic perspective on measurement, and the number of dimensions to be accounted for increases rapidly.

For every type of transfer, quantifying the *amount* of that transfer can be difficult. Often respondents will not know the fair market value of property or be willing to accurately report financial transfers.. Services can be measured in terms of the frequency, periodicity, or intensity with which they are provided. Family members may share

household tasks (like cooking or laundry) while living apart, or reside under the same roof and hardly interact. The time frame for transfers can be measured over one week, one year, or over a lifetime. The greater the specificity in the measurement of transfers, the more information can be recombined in meaningful explanations of family relations. In all cases, the units by which transfers are measured must in some way be linked to measures of resources and needs.

Both surveys in this study collect information about *current* transfers between parents and children,<sup>1</sup> referring to transfers made within the past 12 months, and all intergenerational transfers were measured with respect to the older respondent (see appendix A for a detailed description of the survey content). Since we cannot examine transfers over the full family life course, this definition will yield a conservative estimate of the extent of generalized exchange within families. For the same reason, inferences about the intentions behind transfers (e.g., if the current transfer requires later compensation or is a repayment for past support) cannot be addressed with these data.

However, there were also differences between the two surveys in the way information was collected about intergenerational transfers. The Philippines survey asked only about intergenerational transfers between the older respondent and his/her children as a group, while the Taiwan survey collected information on transfers separately for each child. Another difference is that open-ended transfer questions in the Philippines survey were positioned right after questions about income sources and largely reflect financial transfers between parents and children. In Taiwan, questions were specifically phrased in terms of a variety of transfer currencies, not just financial. As a result, we interpret differences between the two countries cautiously.

Transfers are defined to consist of time or services, money, or material goods. In this study, it has been necessary to forego quantification of transfer flows in amounts. The 1989 Taiwan survey is rich in detail about the currency of transfers and the people involved, both within and between households, but limited in measurement of the volume or magnitude of flows. For example, detailed information on assistance with personal care (using bathing, dressing, and toileting as the three ADL limitations mentioned) and help with instrumental activities (IADLs), such as shopping, meal preparation, transportation and managing finances, are collected for both intra- and inter-household

care. Unfortunately, the 1989 Taiwan survey does not quantify time transfers but does identify the provider and recipient for every flow. The ASEAN survey data for the Philippines measure general participation in transfers but without the degree of specificity found in the Taiwan survey with regard to the people involved or the currency of the transfers.

### **Analysis of Parent-Child Transfer Patterns**

For both countries, the outcome of interest is involvement in transfers with children. Exchanges are defined to include all forms of direct transfers such as services, goods, or money given and received in the last year. Involvement is used as a simple indicator of the presence and direction of a flow because the amounts being exchanged cannot be quantified in these data.

Involvement in exchanges is coded as a four category outcome: 1) no exchanges with children; 2) giving to children only (not receiving any transfers from children); 3) receiving from children only (not making any transfers to children); and 4) both giving and receiving. Earlier we discussed the concept of generalized exchange as a unidirectional chain, where resources are transferred among 3 or more actors from person  $A \rightarrow B \rightarrow C$ , at the minimum. For the purpose of the present analysis, we classify involvement in both giving and receiving resources with adult children as generalized exchange, without specifying the exact pathways of transfers among the children. This broader definition is due to limitations in the data for the Philippines, where specific flows with each child are not specified. As we will see in the analysis, this assumption appears to be a reasonable one based on evidence from Taiwan.

We will first show the prevalence of different exchanges and then test hypotheses about factors associated with participation in generalized exchange with a set of multinomial logistic regression models. In these models, the probability that an older person will be involved in a particular type of exchange pattern ( $j$ ) out of  $J$  possible patterns (where  $j = 1 \dots 4$ ) can be expressed as:

$$P(Y=j) = \frac{\exp(\beta'_j x_i)}{\sum_{j=1}^J \exp(\beta'_j x_i)}$$

where  $Y$  represents involvement in exchanges with children, coded as a four category outcome (described above) and  $X_i$  represents a vector of exogenous variables including characteristics of the older person and their kin network.

### Independent Variables

The percentage distributions, definitions, and expected effect of the independent variables for the Philippines and Taiwan are presented in Table 1. Three sets of independent variables are included in the multivariate models. First, a set of variables representing basic demographic characteristics of the respondent is included. These are age, sex, self-reported health, and marital status. Increasing age, poor health, and being married are expected to have a negative effect on participation in generalized exchange, while being female is expected to be positively associated with generalized exchange. These demographic variables are retained in all models to control for basic variation in demographic effects. Second, variables that test the hypotheses described above will be entered sequentially into the models.

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### TABLE 1 ABOUT HERE

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Variables representing characteristics of the kin network include the number of living children, a variable representing an age span of 15 years or more between the oldest and youngest child, the age of the youngest child, and coresidence with children. The coresidence variable is entered into the models as a set of two dummy variables-- living with unmarried children only, and living with one or more married children. Living with no children is the reference group. We expect that a larger family size, a younger last born child, and an age gap between siblings of 15 years or more will be positively related to involvement in generalized exchange. Living with either unmarried or married children are both expected to increase the likelihood of involvement in generalized exchange.

The next set of variables represents current economic resources. Unfortunately, most indicators of wealth, such as current income, are endogenous to current transfer behavior. Therefore, we use level of education and pension receipt as exogenous indicators of the respondent's economic status. We also include a weighted index of the number of household possessions as an effort to assess more directly the wealth of the older person's household. If poverty drives involvement in generalized exchange, then we expect a negative relationship between each of these economic variables and participation. Alternately, if wealth effects dominate, we would expect to see a positive relationship between the amount of economic resources and participation in generalized exchange. Lastly, we use residence in a rural area as an indicator of access to non-familial resources. We expect rural residents to be more involved in generalized exchange.

## **RESULTS**

### **Prevalence of Generalized Exchange**

The prevalence of involvement in intergenerational exchanges with children is shown in Table 2 for all older persons with two or more children. Overall, the majority of older parents are currently engaged in some form of exchange with their children (93 percent in the Philippines and 83 percent in Taiwan). While it is true that a relatively small proportion in either sample reports that they are providing to their children and receiving nothing in return, about 17% of Filipino elderly are in the position of a provider to their children.

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**TABLE 2 ABOUT HERE**

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The more typical pattern assumed for intergenerational transfers is for older persons to be recipients of support from their children. If we were simply to look at the proportion who receive transfers from children, we would conclude that over three-quarters of the elderly in each country are being supported by their children. However, a substantial number of those who receive transfers from their children also report that they give back to their children either in money, goods or services. About 10% of Taiwanese report that they are both giving and receiving with their children. In the Philippines

sample the proportion is much higher—40% report that they are both receiving transfers from adult children and have also given children money, goods or services in the past year. These figures suggest that parents do not necessarily move into a dependent relationship with their children as they age. It is certainly true that a large proportion of each sample is receiving support from children, but older persons cannot simply be classified as dependents. A small but not insignificant proportion are actually providers to one or more adult children, and an additional number are actively engaged in both providing and receiving.

It is tempting to interpret these findings as reflecting differences in patterns of coresidence, but the sharing of a home only partially overlaps with other forms of resource transfer. In Taiwan, where there are data on transfers with each child, the majority those who live with an adult child report that they are recipients in one-way transfers with their coresident children (69%). Twelve percent report two-way exchanges with coresident children and, interestingly, 15 percent report no exchanges with coresident children. Although questions about transfers in the Philippines survey were not asked with respect to individual children, a question was asked of older respondents who received support from children whether those children were living with them. Of the 720 older persons living with at least one adult child *and* receiving support from children, 85 percent said they received support from a coresident child. This is quite high, but still leaves 15 percent who receive support only from non-coresident children. Unfortunately, we do not have the same information about those who gave support *to* their children. Of course, reported exchanges do not fully capture the extent of transfers that take place between the older persons and the children with whom they live. What this finding indicates, though, is that coresidence does not imply any one type of reported transfer pattern. We more closely examine the relationship of coresidence patterns to generalized exchange with the multivariate models discussed below.

In Taiwan, where we are able to measure transfers specific to each child, the majority of two-way transfers involve at least two or more adult children. This provides an indication that this behavior is not the result of older parents being involved in a strong reciprocal relationship with one child, but rather that they are actively participating in



exchange relationships with multiple children, and in many cases, they are helping to redistribute resources in the family.

A more precise indicator of redistribution is the degree to which an older person receives and gives money transfers. Money is the one currency, as opposed to services or material goods, which can be easily, accurately and consistently valued, and therefore may be considered equivalent across transfers. Among the older persons who are both giving and receiving with children, 51 percent in the Philippines and 20 percent in Taiwan are giving *and* receiving money transfers, indicating that these elders are likely redistributing resources—receiving money from one child and using it to help another.

It is important to remember that older persons also are embedded in larger social networks beyond the immediate family and often play important roles in redistributing resources *from* their children to persons more distantly related. In Taiwan, about one-third (32 percent) of the sample are engaged in both giving and receiving with others. In addition, about 6 percent act as redistributors to the larger network; that is, they are purely recipients of support from their children but they provide transfers to others.

### **Factors Associated with Generalized Exchange**

Table 3 shows results from the set of multinomial logit models of generalized exchange in the Philippines and Taiwan. The results are presented as odds ratios contrasting the effect of each independent variable on the likelihood of both giving and receiving with children compared to receiving from children only, net of the two other exchange patterns (not exchanging at all or giving only to children). We do not show odds ratios for the two other exchange patterns in the interest of simplicity and clarity of presentation; however, these results are available from the authors upon request.

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#### **TABLE 3 ABOUT HERE**

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The first panel of table 3 shows the effect of kin network characteristics on generalized exchange. The ways in which family structure affects exchange behavior are similar but distinct across the two countries. In the Philippines each additional child increases the likelihood of being involved in generalized exchange relative to receiving only. This effect is negative and not significant in Taiwan. It may be that the total number of children in Chinese culture is less important than their gender and marital

status, particularly in this sample, where everyone has at least two living children. Our expectations for effects of a large age gap between siblings were not borne out in the data. The age of the youngest child had a small negative effect on generalized exchange, but this effect was significant only in Taiwan. Lastly, coresidence with a child, especially an unmarried child, has a strong influence on involvement in generalized exchange in both the Philippines and Taiwan. Living with an unmarried child more than doubles the likelihood of involvement in generalized exchange in the Philippines and quadruples it in Taiwan. It seems likely that the strong effect of this variable is overriding the effects for the age of youngest child and the age span of siblings. Rather than the ages of the children, it may be the presence in the household of unmarried dependent children that drives the contributions of other siblings. While this is not particularly surprising, it is interesting that residence with at least one married child, a situation where older parents are assumed to be dependent on their children, makes it about twice as likely that an older parent will be involved in generalized exchange than receiving support only. This may reflect the efforts of older parents to reciprocate for the financial support and services that their married children provide, or reflect the contributions that other non-resident children provide to the parents in the household.

The second model presented incorporates the two indicators of economic status. Based on ethnographic studies, we expect that poverty should lead to a greater activation of the family exchange network and, hence, greater involvement in generalized exchange relative to receiving transfers only. Alternately, we also expect that the amount of economic resources available would be directly related to the ability to make transfers to the children. Both arguments are partially supported by the present results in table 2. The effects of education on generalized exchange are positive but not significant in either Taiwan or the Philippines. Pension receipt also increases the likelihood of being involved in generalized exchange by 50 to 100% when compared with receiving only, and net of other exchanges. These variables support the wealth argument that predicts that higher status individuals with greater economic resources would have the means to be able to make transfers to their children. The index of household possessions on the other hand, has a negative effect on generalized exchange, and is only significant in the Philippines. The sensitivity of the index to various poverty thresholds was tested and the

findings were robust regardless of the way in which the index was calculated. The negative effect of the index supports the poverty argument, indicating that fewer material goods are related to greater activation of the familial exchange network.

The reasons that these variables behave differently may be because they measure different aspects of economic resources. Education reflects the social and occupational status an individual is expected to have achieved in their lifetime. The extent to which such status may be translated into post-retirement earnings in the Philippines and Taiwan may be minimal once pension receipt is controlled for, leading to the non-significant effects. Pensions clearly represent cash income that is liquid and can be transferred easily to children, making it quite reasonable that pension receipt would increase the likelihood of generalized exchange. In addition, although the amount of the pension cannot be quantified, this variable is likely picking up the effect of being in the top economic stratum since it is the wealthiest in both countries that receive pensions. Conversely, household possessions are non-transferable economic resources not likely to be given by an older parent to their children. This index is therefore not measuring the increased ability to give, but more closely measures the level of economic need. Additionally, the lack of basic durable goods such as refrigerators or electric lighting may indicate a standard of living at the subsistence level, and thus better represents the effects of poverty. We should note that the variables available in these data are rough indicators of wealth and poverty. Any conclusive tests for these arguments would necessarily warrant better empirical measures.

The third panel in table 3 shows the effect of access to non-familial resources. In both the Philippines and Taiwan, rural residence increases the likelihood that an older parent is involved in generalized exchange versus receiving support only, though this effect is much stronger and is statistically significant only for the Philippines. This may reflect a greater difference in access to services between rural and urban areas in the Philippines than in Taiwan, given that Taiwan was more urbanized in 1989 than the Philippines was in 1984. Another aspect of rural residence that may affect the likelihood of being involved in generalized exchange is work on a family farm. A greater proportion of older persons are involved in agriculture in the Philippines than in Taiwan, and

therefore may be engaged in generalized exchange as part of activities involved in the family business.

The fourth panel presents odds ratios for the full model that includes all three sets of variables of interest. The improvement in model Chi-Square statistics indicate that the full model is a significant improvement over the three reduced models in both the Philippines and Taiwan data. In the full model, both kin network characteristics and access to non-family resources remain strong determinants of whether older persons make multiple transfers with children compared to receiving support only. Of the measures for economic status and resources, only pension receipt remains significant.

## **DISCUSSION AND CONCLUSION**

We have argued in this paper that research must push beyond a focus on dyadic pairs of parents and children toward analysis of the kin network if we are to understand fully when and how older persons are involved in family support. Many ethnographic studies in developing countries and in resource-poor communities in developed countries have shown that transfers across households and among adult family members constitute an important part of economic ‘survival strategies’ in these settings. Intergenerational transfers are often a part of these exchanges and involve multiple participants and multiple flows.

The aim of this study was to introduce the concept of generalized exchange and to examine the prevalence and determinants of older parents’ participation in this type of exchange pattern. We found that in the Philippines and Taiwan, older persons are not merely recipients of support, as is often assumed in studies of developing countries. Although the majority of transfers involving older persons and their children are indeed unilateral flows upward from children to parents, the proportion engaged in multi-directional transfers is by no means insignificant (10 percent in Taiwan and 41 percent in the Philippines), and the majority of these transfer patterns may be classified as “redistributive.” Results from the multivariate models suggest that characteristics of the kin network and access to non-familial resources are important determinants of an older parent’s involvement in generalized exchange versus receiving support only, net of other types of exchanges. Our measures of wealth and economic need lend some credence both

to “survival strategists” who propose that family support is most highly activated in situations of poverty, while at the same time reinforcing the relationship between the capacity to give and the availability of liquid assets.

The way that liquid and non-liquid assets are connected to transfer behavior has often been the focus of anthropological and sociological studies of the economic survival strategies of poor households. For example, one study of impoverished communities in Cairo, Egypt (Hoodfar 1997) found that many households practiced saving in the form of accumulating household possessions. Assets normally viewed as “luxury goods” such as televisions or washing machines were purchased by households as investments because they could be readily converted into cash in the case of an emergency. However, of most relevance to our present study, no one was expected to sell a major possession in order to provide a financial transfer to family or friends. In this way, it was possible for poor families to protect savings without endangering neighborly goodwill by converting liquid to non-liquid assets. In short, impoverished households tied up what little money they had by investing in durable goods in order to *avoid* having to transfer resources to others, something they would be obligated to do if their resources were in the form of liquid assets like cash.

Although this analysis has revealed many similarities across the two countries, there remain some important differences. In general, it seems that there is a much higher level of unilateral support from children in Taiwan, where almost three-quarters of the sample report that they currently receive transfers from children but give nothing in return. In the Philippines about as many receive transfers from their children (75%), but more than half of them report that they give something to children as well, compared with about 10% of the Taiwanese respondents. Perhaps this is due to differences in expectations of filial support. In Taiwan, most persons still say that they expect their children to support them in old age, and consider it most proper to report that their children live up to family ideals and support them. In fact, research has shown that older persons in Taiwan are likely to over-report the contributions that their children make and under-report their own transfers (Roan, Hermalin, and Ofstedal, 1995). In the Philippines, expectations of family support tend to be somewhat more symmetrical, and providing services to children is considered an important way of contributing to the

family economy, so they would be more likely to report both giving and receiving (Domingo and Asis, 1995).

These basic differences in expectations may mean that different models govern the activation of family exchange networks in each country. For example, in the multivariate models we have seen that the size of the sibling group is much more important in the Philippines than in Taiwan, suggesting more responsiveness to the number, rather than the characteristics, of children. Another effect that is stronger in the Philippines is that of pension receipt. Both of these effects are certainly consistent with the evidence from the Philippines about the way in which intergenerational exchanges are related to transfers involving coresidence. Lopez (1991) reports that “income or property held by an aging parent, the ability to contribute to household or farming chores, and the economic security of the household all enter into the negotiation of residence [with a child].” These negotiations are quite different from the specific cultural norms that still largely govern rules about coresidence and familial support in Taiwan.

Future research could advance this approach to understanding intergenerational transfers by investigating the construction of other, more detailed measures that describe the activity within family exchange networks. Standardized measures would provide an effective way to make cross-national comparisons on the operation of the family as an institution for resource redistribution. Generalized exchange appears to be reflective of both cultural ideals of family support and of past demographic regimes, and cross-national comparisons need to take both factors into account in analyses. In addition, generalized exchange may be more common in societies with higher poverty levels or where the lack of stable market alternatives make family and friends the main means by which social and economic support is provided across generations. Further investigation of such relationships requires more detailed information on economic assets. In any case, a focus solely on dyadic transfers between isolated pairs of parents and children cannot answer larger questions about what the family “safety net” actually looks like, the social changes or economic shocks that may weaken it, and the role the elderly play in the distribution of family resources.

While encouraging empirical research on the factors underlying generalized exchange, we also must acknowledge that the nature of intra-familial flows of support

will certainly change in the future in many countries. Changes in fertility, mortality, and education have altered the qualitative and behavioral aspects of family transfers. For example, today's older generation in Southeast Asia is relatively poorly educated and the gender differences in educational attainment are quite large (Christenson and Hermalin, 1991). In contrast, those who turn age 60 in the year 2020 will predominantly be literate and the gender gap in educational attainment will have narrowed considerably. A more negative development in a number of countries is the spread of AIDS which has left a growing number of orphans in its wake. This may force many older people to begin economically supporting grandchildren or other relatives. All of these changes will surely have repercussions both for the ability of the elderly to support themselves and the degree to which they will be asked to support their children and grandchildren or even their own elderly parents.

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**Table 1. Definitions, Hypothesized Effects, and Means of the Independent Variables  
Philippines (1984) and Taiwan (1989)**

Variable Name	Description	Expected Effect on generalized exchange	Means	
			Philippines	Taiwan
<i>Socio-Demographic Characteristics</i>				
Age	Coded as single years of age from 60-90+	-	68.2	68.1
Female	Dummy variable coded "1" if female	+	51.4	45.4
Poor or fair health	Dummy variable coded "1" if self-rated health is reported "fair" or "poor."	-	65.2	23.1
Married	Dummy variable coded "1" if married.	-	57.8	69.2
<i>Kin network</i>				
Number of living children	Total number of surviving children.	+	5.7	5.1
Age gap 15+ years	Dummy variable coded "1" if the number of years between the oldest and youngest living child is 15 or more	+	48.8	40.9
Age of youngest child	Coded as single years of age.	-	26.9	30.9
Coreidence with Children:	Set of two dummy variables:			
1+ unmarried co-resident children	"1" if lives with one or more unmarried children	+	41.3	21.7
1+ married co-resident children	"1" if lives with one or more married children	+	42.9	55.7
	Omitted group is living with no children			
<i>Economic Resources</i>				
Education	Set of two dummy variables:			
No school	"1" if received no formal schooling	+/-	25.6	50.6
Primary school	"1" if attended up to 6 years of school	+/-	54.0	30.7
	Omitted group is 7 years or more			
Pension	Dummy variable coded "1" if receives income from a pension.	+/-	13.5	16.1
Household possessions	Weighted index of the number of household possessions.	+/-	5.3	6.1
<i>Non-family resources</i>				
Rural residence	Dummy variable coded "1" if lives in a rural area.	+	49.5	35.2
Sample size			1,056	3,491

**Table 2 Distribution of current intergenerational exchange patterns among persons aged 60 years and older with 2 or more living children**

<b>Type of intergenerational exchange</b>	<b><i>Philippines</i></b>	<b><i>Taiwan</i></b>
No exchanges with children	7.3 %	17.4 %
Gives to children only	16.9	3.3
Receives from children only	35.1	68.9
Both gives and receives [two or more children involved]	40.7 [--]	10.4 [8.4]
Total (%)	100.0	100.0
Sample size	1,056	3,489

**Sources:** 1984 ASEAN Survey (the Philippines) and 1989 Taiwan Survey of Health and Living Status of the Elderly

**Note:** Totals may not add to 100.0 due to rounding.

**Table 3 Odds Ratios from the Multinomial logit models of giving and receiving transfers versus receiving only<sup>a</sup> among adults aged 60 or older with 2 or more living children: the Philippines (1984) and Taiwan (1989)**

Independent variables <sup>b</sup>	Philippines	Taiwan	Philippines	Taiwan	Philippines	Taiwan	Philippines	Taiwan
Age	0.94 ***	0.97 +	0.91 ***	0.93 ***	0.91 ***	0.93 ***	0.92 ***	0.97 +
Female	1.02	2.08 ***	0.94	1.67 ***	0.94	1.57 ***	1.19	2.25 ***
Poor or fair health	0.73 +	0.59 **	0.67 *	0.62 **	0.68 *	0.61 **	0.69 *	0.60 **
Married	1.50 *	0.77 +	1.73 ***	0.79 +	1.70 **	0.80 +	1.43 +	0.74 *
<b><i>Kin network</i></b>								
Number of living children	1.12 **	0.96					1.12 **	0.96
Age gap 15+ years	0.76	1.05					0.74	1.07
Age of youngest child	0.99	0.96 ***					0.99	0.96 ***
Co-resident unmarried kid	2.29 ***	4.01 ***					2.77 ***	4.13 ***
1+ co-resident married kid	1.85 *	1.80 **					2.43 ***	1.96 **
<b><i>Economic status</i></b>								
No school			1.33	0.82			0.77	0.76
Primary school			0.91	0.82			0.73	0.86
Pension			2.10 **	1.46 *			2.31 **	1.40 +
Household possessions			0.87 ***	0.99			0.96	0.99
<b><i>Non-family resources</i></b>								
Rural residence					2.69 ***	1.18	3.24 ***	1.31 *
N	1,056	3,491	1,056	3,491	1,056	3,491	1,056	3,491
Model $\chi^2$ (degrees of freedom)	309.40 (27)	774.72 (27)	228.87 (24)	550.61 (24)	220.09 (15)	417.03 (15)	420.75 (42)	900.47 (42)

<sup>a</sup> Other outcomes (coefficients not shown) are no transfers with children and giving transfers only to children.

<sup>b</sup> Reference categories for dummy variables are male, good/excellent health, not married, no child co-resident, junior high and higher, and urban residence.

\*\*\* p < .001    \*\* p < .01    \* p < .05    + p < .10

## **APPENDIX A -- DEFINITIONS OF TRANSFERS**

Questions about intergenerational transfers varied in the two country surveys by 1) specificity of the personnel involved, 2) whether the question directly asked about a type of person or left it as open-ended as to who was involved, 3) specificity of the kind of transfer (money, material, etc.), and 4) timing and frequency of the transfer(s). While the direction of flows and the characteristics of the participants were documented in some detail for both countries, little information was collected about the quantity of support flows (e.g., hours of time or specific amounts of money). The lack of systematic probes in the Philippines survey is likely to underestimate transfers. The exact survey questions on transfers used in this paper are described in detail below:

### **I. Taiwan [1989 Taiwan Survey of Health and Living Status of the Elderly]**

Taiwan had the broadest coverage in terms of identifying all the people involved in transfers with the elderly respondent. Children were individually identified and a number of characteristics were gathered about them. Parallel information was collected for both giving and receiving transfers with specific members of the family and social network. The transfer questions are as follows:

When the respondent gives support to any individual, for each main type of support (activities of daily living, instrumental activities of daily living, financial transfers and provision of material support) the elderly respondent was asked:

"Do you currently (provide assistance to anyone in the form of \_\_\_\_\_/give money to someone to help him or her/ provide material support on a regular basis or through special gifts of food or clothing to anyone)?"

If the answer is yes, they were then asked the following two questions:

"To whom do you (provide this assistance/give this money)? Anyone else?" and

"In the past year, who was helped most in this way?"

When any individual gives support to the respondent, for each main type of support (activities of daily living, instrumental activities of daily living and other services, financial, or material), the elderly respondent was asked:

"Is there anyone who (helps you with bathing, etc./ gives you money to help you now/ gives you food or clothing or other goods to help you now)?" or "Do you currently receive any assistance from any of these sources with daily activities such as household chores, etc.?"

If the answer is yes, they were then asked the following two questions:

"Who provides this (assistance/support) to you? Anyone else?" and

"In the past year, which person (or service) was most important in terms of (providing physical care assistance to you/ assisting you with your daily activities/ providing financial support to you/ providing material support to you)?"

## **II. Philippines [1984 Association of Southeast Asian Nations survey of the elderly]**

The Philippines asked only about intergenerational transfers between the elderly respondent and his/her children. Transfers were not collected separately by child as they were in Taiwan. Instead, global questions about receiving or giving support with any children were asked.

When the respondent gives support to any child, the respondent was asked:

"How about you (and your spouse)? Are you currently giving support to your children?"

If the answer is yes, they were then asked the following questions:

"What form of support?" (verbatim answers)

"Is this done regularly?"

"How long have you been giving this support?"

When any child gives support to the respondent, the respondent was asked:

"Do you receive support from your children?"

If the answer is yes, they were then asked the following questions:

"What form of support do you get from your children?" (verbatim answers)

"Is this done regularly?"

"Since when have you been receiving this support?"

"Are these children who are giving you support living with you in this household?"