

**Extended Abstract**

**THE EFFECTS OF FERTILITY DECLINE ON FAMILY STRUCTURE AND  
SUPPORT FOR OLDER PERSONS IN LATIN AMERICA AND ASIA**

Karen Glaser<sup>1</sup>, Emily M. Agree<sup>2</sup>, Elizabeth Costenbader<sup>3</sup>, Antonio Camargo<sup>4</sup> and Belkis Trench<sup>5</sup>.

Global population aging has led to considerable interest in the family support systems of older people. In particular, concerns have been raised that the fertility declines responsible for these changes in age structure may lead to the erosion of family support to the elderly in societies with little or no government institutional protection for older people (Palloni, 2001). It is especially critical to investigate the determinants of support and well-being at older ages in developing societies where current cohorts of older people are the survivors of undernourishment, multiple diseases in early life, and have accumulated few savings (Palloni, 2001). Despite considerable population aging in Latin America, there has been little research there, especially when compared with the attention this issue has received in other developing countries such as those from East and Southeast Asia (see Hermalin 2003 for overviews of this research.) Essential to understanding the intergenerational support system and the potential demand for services among older people is a clear picture of the number, types and location of kin (Hermalin et al., 1992). In this paper, we compare family structures and support for older persons in two Asian (Taiwan, The Philippines) and six Latin American countries (Argentina, Brazil, Cuba, Chile, Mexico and Uruguay).

Caldwell's (1976) theory of intergenerational wealth flows would lead one to expect a shift in patterns of intergenerational support in the course of development. Caldwell argues that in high fertility pre-transitional societies the predominant direction of wealth flows (i.e., money, goods, and services) is from children to parents (Caldwell, 1976). In post-transitional societies, characterized by low fertility levels, wealth flows are reversed and net transfers are from parents to children (Caldwell, 1976). Kaplan criticized Caldwell's theory of intergenerational wealth flows arguing that even among primitive hunter-gatherers net transfers were downward, from older to younger generations in accordance '...with models of fertility and parental investment derived from evolutionary biology...' (Kaplan, 1994). In addition to shifts from high to low fertility levels, differences in pension and health care systems are likely to result in considerable variations in patterns of old-age support across societies. Few studies have directly investigated the relationship between family structure and social support in later life, though the availability of children has been shown to influence living arrangements and types of support provided (see Saad, in press for a review of recent evidence). The eight countries can be classified according to the timing of their

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<sup>1</sup> Institute of Gerontology, King's College London, Franklin-Wilkins Bldg., Waterloo Bridge Wing, Waterloo Road, London SE1 9NN, Tel.: +44 (0) 207 848-3238, E-mail: [karen.glaser@kcl.ac.uk](mailto:karen.glaser@kcl.ac.uk).

<sup>2</sup> Department of Population and Family Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA, Tel.: +1 410 955-4605, E-mail address: [eagree@jhsph.edu](mailto:eagree@jhsph.edu).

<sup>3</sup> Department of Population and Family Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA, E-mail address: [ecostenb@jhsph.edu](mailto:ecostenb@jhsph.edu).

<sup>4</sup> Fundação Sistema Estadual de Análise de Dados – SEADE, Avenida Casper Libero, 464, 01033-000 São Paulo – SP Brazil, Tel.: +11 3224 16 93 , E-mail address: [acamargo@seade.gov.br](mailto:acamargo@seade.gov.br).

<sup>5</sup> Instituto de Saúde, 590 Santo Antonio Street, CEP 01314-000, São Paulo, Brazil, Tel.: 55 11 3105 9047 extension 209, E-mail address: [belkis@usp.br](mailto:belkis@usp.br).

fertility transition: Argentina & Uruguay (very advanced); Cuba, Chile and Taiwan (advanced) and Brazil, Mexico and the Philippines (progressing). We use these typologies to explore variations across countries in family structure (i.e. number, types, and characteristics of children, parents, & siblings) and transfers of support.

### **Data**

We compare newly available data from the 2001 PAHO surveys on Salud, Bienestar y Envejecimiento en América Latina y el Caribe (SABE) undertaken in the principal urban areas of Argentina, Brazil, Cuba, Chile, Mexico and Uruguay with data from the 2000 Philippine Survey of the Near Elderly and Elderly, and the 1999 Survey of Health and Living Status of the Elderly (TES) in Taiwan to investigate variations across countries in family structure (e.g. number and types of kin) according to the timing of their fertility transition, and to examine the relationship of family structure to support in later life (e.g. type of support received, who provides support, and variations in support received by selected characteristics).

### **Preliminary Results**

Table 1 shows the general characteristics of the samples, confirming wide variation both within and across regions. For example, the proportions of the 60+ samples currently married are generally higher in the Asian countries than in Latin America, where levels of divorce are much higher. On the other hand, as would be expected, a lower proportion of older persons report working in the more advanced transition countries, regardless of region.

Preliminary analyses also show that differences in family structure are consistent with hypotheses about the timing of fertility transition. The cohorts in this analysis were born in the 1940s or earlier and would have formed their families through the 1960s, a time of peak fertility in most of the Latin American countries, and in the Philippines, but after the transition in Taiwan, Argentina, and Uruguay. Differences in the timing of the fertility transition are reflected in variations in the mean number of children across countries (Table 2) with higher fertility overall in Latin America, though the percentage in this region with step-children included also is higher.

In the Latin American countries older persons are more likely to report a mother still alive (Table 3), but equivalent proportions report living fathers and one or more siblings. This finding may reflect earlier marriage and the beginning of childbearing among women in the SABE countries compared to Taiwan and the Philippines (i.e. the mean age of mothers of the older Latin Americans is likely to be younger and therefore they are more likely to be alive), as well as a differential gender gap in mortality across countries.

By and large, in Latin America, the proportion living alone or only with a spouse follows the timing of the demographic transition, with the highest proportions in the most advanced countries, and the same is true in Asia, but the proportions in both countries living in these arrangements is much lower for both countries (Table 4). In general, the prevalence of multigenerational households appears to be higher in the Asian region. There appears to be a somewhat curvilinear relationship of transition stage to living arrangements, with those with the most recent changes having the highest likelihood of living with unmarried children (e.g. Brazil, Mexico, and the Philippines), while those countries in the middle category appear to be replacing that arrangement with one that includes a married child. This likely reflects differences in the timing and level in fertility that mean fewer older adults are responsible for young unmarried children living at home as dependents. At the most advanced level of demographic change, it is the option of living

independently that appears to substitute for living with children of either type, a transition associated with greater health and ability to purchase privacy in old age.

Table 5 shows that high proportions of older persons in each sample report support (especially financial) by both coresident and non-coresident children. In addition, other relatives appear to play the most pronounced role in Chile, Cuba, and the Philippines, while in the other countries support is more concentrated among spouses and children. The provision of support by formal services or community groups is generally low, as would be expected across all of these countries, but surprisingly low across the Latin American cities, for IADL and ADL care, a finding which merits further investigation.

## References

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**Table 1: General Characteristics of the Samples (60+)**

	Country and Stage of Demographic Transition							
	Latin America						Asia	
	Very Advanced		Advanced		Progressing		Advanced	Progressing
	Argentina	Uruguay	Chile	Cuba	Brazil	Mexico	Taiwan	Philippines
<b>Marital Status</b>								
Never-married	5.6	3.6	7.4	3.4	4.8	4.0	3.3	3.6
Currently Married	37.8	45.0	37.1	31.4	47.7	48.8	61.6	49.7
Cohabiting	5.3	3.5	6.6	6.0	4.6	5.3	NA	NA
Divorced/Separated *	9.5	11.2	13.4	24.1	7.4	10.0	2.9	4.1
Widowed	41.8	36.7	35.5	35.0	35.5	31.9	32.2	42.6
<b>Age</b>								
60-69	47.2	47.0	47.5	46.5	37.6	55.6	33.7	54.6
70-79	39.6	39.5	34.5	31.8	37.7	31.0	51.3	35.8
80+	13.3	13.5	18.0	21.7	24.7	13.5	15	9.6
<b>Employment Status</b>								
Working	25.4	16.7	24.4	20.4	20.4	32.4	14.4	38.2
Not working	74.6	83.3	75.6	79.6	79.6	67.6	85.4	61.8
<b>Health Measure</b>								
% reporting difficulty with at least one ADL	18.6	16.8	22.3	20.5	23.7	19.4	11.4	14.9
<b>Urban</b>								
% Urban	NA	NA	NA	NA	NA	NA	36.4	45.6
Base Sample Size	1039	1444	1300	1905	2143	1247	3530	469

\* includes informally separated

Sources: Salud, Bienestar y Envejecimiento en América Latina y el Caribe (SABE); 2000 Philippine Survey of Near Elderly and Elderly; 1999 Taiwan Survey of Health and Living Status of the Elderly (TES);

NOTE: SABE and Taiwan data are unweighted

**Table 2: Fertility and Children's Characteristics: Persons aged 60 and over for selected countries by timing of their fertility transitions**

		Country and Stage of Demographic Transition							
		Latin America					Asia		
		Very Advanced		Advanced		Progressing		Advanced	Progressing
		Argentina	Uruguay	Chile	Cuba	Brazil	Mexico	Taiwan	Philippines
<b>All persons</b>	% Childless*	12.8	10.6	9.3	13.4	10.0	5.5	4.2	5.8
	Mean number of children	2.5	2.9	4.1	2.8	3.9	5.7	4.3	5.1
	(Range)*	(0 - 22)	(0 - 18)	(0 - 18)	(0 - 27)	(0 - 22)	(0 - 22)	(0 - 12)	(0 - 15)
<b>Those with one or more children</b>	Mean Age at First Birth (range)**	27.4 (10-59)	27.5 (12-58)	25.8 (10-66)	26.3 (12-66)	26.5 (11-70)	25.4 (10-59)	24.5	24.2 (11-50)
	Mean Age at Last Birth (range)**	37.6 (10-69)	35.1 (17-63)	35.7 (14-66)	33.3 (12-66)	34.9 (12-80)	37.6 (10-69)	34.9	38.6 (14-68)
	% with adopted children*	2.6	3.6	4.2	1.6	8.3	4.1	6.4	7.5
	% with step-children*	4.8	7.7	9.8	16.5	5.6	8.1		
	% with youngest child < 16**	1.5	1.8	1.8	0.8	1.3	3.1	6.2	3.6
	% with youngest child 16-25**	8.4	11.2	8.7	4.5	4.6	16.7	5.3	24.3
	% with Grand-children***	73.9	81.0	87.3	80.3	81.9	87.7	91.6	90.2
	Base Sample Size	1039	1444	1301	1905	2143	1247	3530	469

NOTE: SABE and Taiwan data are unweighted

Sources: Salud, Bienestar y Envejecimiento en América Latina y el Caribe (SABE); 2000 Philippine Survey of Near Elderly and Elderly; 1999 Taiwan Survey of Health and Living Status of the Elderly (TES); classification by fertility from Chackiel and Schkolnik 1996.

\*From Interview Schedule - (ever had)

\*\*Rosters (hh and children living outside household - counting only natural children)

\*\*\*Identified from rosters (hh roster - grandchildren; or children roster and say have children)

Notes: % with youngest child < 16 and % youngest cld 16-25 refers to natural children only.

**Table 3: Surviving Kin of Persons aged 60 and over for selected countries by timing of their fertility transitions (selected countries)**

Country and Stage of Demographic Transition	Latin America						Asia		
	Very Advanced		Advanced		Progressing		Advanced	Progressing	
	Argentina	Uruguay	Chile	Cuba	Brazil	Mexico	Taiwan	Philippines	
<b>Other Family Members</b>	% with living mother	5.9	5.8	6.1	8.4	4.7	11.4	5.4	3.6
	% with living father	1.3	0.9	1.3	2.6	1.4	3.5	1.5	1.7
	% with living siblings	72.0	75.4	83.9	82.5	81.0	78.0	79.4	83.4
Base Sample Size	1039	1444	1301	1905	2143	1247	3530	469	

Sources: Salud, Bienestar y Envejecimiento en América Latina y el Caribe (SABE); 2000 Philippine Survey of Near Elderly and Elderly; 1999 Taiwan Survey of Health and Living Status of the Elderly (TES);

NOTE: SABE and Taiwan data are unweighted

**Table 4: Household Characteristics of Persons aged 60 and over for selected countries by timing of their fertility transitions (selected countries)**

Country and Stage of Demographic Transition	Latin America						Asia	
	Very Advanced		Advanced		Progressing		Advanced	Progressing
	Argentina	Uruguay	Chile	Cuba	Brazil	Mexico	Taiwan	Philippines
Number of Generations in HH (Mean, Range)	0.65 (0 - 3)	0.72 (0-3)	1.1 (0-3)	1.1 (0-3)	0.81 (0-3)	1.07 (0-3)	2.2 (0 - 4)	2.1 (1 - 4)
Married*								
With Spouse/ Partner only	50.6	50.4	25.4	28.3	39.8	24.9	35.4	0.9
Only with Unmarried Children	34.9	34.5	38.0	27.6	42.7	47.9	27.6	70.6
With at least one Married Child	8.1	7.9	23.4	30.9	6.4	18.8	34.9	8.5
Others	5.4	6.3	12.0	12.7	10.7	6.3	2.2	20
Total N = 100%	447	696	560	710	1121	672	2089	235
Unmarried								
Living Alone	46.5	36.4	21.5	17.5	32.3	19.3	27.3	18.8
Only with Unmarried Children	22.6	26.7	31.3	27.2	32.1	38.1	20.6	59.8
With at least one Married Child	16.9	17.9	25.8	33.6	17.0	28.4	44.6	17.1
Others	13.9	18.1	20.5	21.8	18.6	14.1	7.5	4.3
Total N = 100%	592	748	741	1195	1022	575	1441	234

Sources: Salud, Bienestar y Envejecimiento en América Latina y el Caribe (SABE); 2000 Philippine Survey of Near Elderly and Elderly; 1999 Taiwan Survey of Health and Living Status of the Elderly (TES);

NOTE: SABE and Taiwan data are unweighted



**Table 5: Percentage of persons aged 60 and older receiving each type of support from specific source and location among those receiving support (selected countries)**

Country and Stage of Demographic Transition			Latin America					Asia		
			Very Advanced		Advanced		Progressing		Advanced	Progressing
			Argentina	Uruguay	Chile	Cuba	Brazil	Mexico	Taiwan	Philippines
Financial	Co-resident	Spouse	33.1	48.7	31.5	24.0	36.5	30.1	0.0	NA
		Children	38.8	39.7	48.9	49.9	39.3	55.4	53.3	40.9
		Other	15.2	24.7	29.7	30.7	16.5	15.9	1.4	25.0
	Non co-resident	Children	40.8	22.0	36.4	45.7	41.4	54.4	81.8	69.9
		Other	10.7	5.6	7.3	18.8	7.1	7.7	2.3	**
		Formal	0.8	0.5	0.8	1.7	0.7	0.4	0.0	NA
Base Sample Size			598	928	913	1334	1267	939	2084	389
Goods	Co-resident	Spouse	30.6	50.5	34.9	31.5	32.4	41.1	0.0	NA
		Children	31.9	36.6	40.7	53.3	40.1	45.8	90.0 **	47.3
		Other	18.2	22.8	27.7	37.1	18.9	20.6	13.0 **	42.4
	Non co-resident	Children	34.0	20.8	30.9	38.5	38.9	33.2	---	74.4
		Other	10.6	7.2	6.7	17.0	7.6	6.3	---	**
		Formal	11.4	1.6	4.4	3.9	3.0	1.2	0.5 **	NA
Base Sample Size			483	755	810	1500	1458	681	552	415
ADLS and/or IADLS	Co-resident	Spouse	46.1	51.5	37.3	36.7	46.9		26.0**	7.7
		Children	36.5	40.6	51.5	55.3	40.7	41.4	57.8 **	13.2
		Other	25.9	27.0	35.4	44.7	25.4	52.3	10.8 **	2.0
	Non co-resident	Children	23.9	16.1	17.4	22.3	30.7	32.9	---	2.4
		Other	15.3	8.9	9.0	13.0	15.6	16.1	---	0.9
		Formal	0.0	0.8	0.7	0.7	0.4	1.2	5.4**	NA
Base Sample Size			698	1022	960	1626	1781	872	1463	133

Sources: Salud, Bienestar y Envejecimiento en América Latina y el Caribe (SABE); 2000 Philippine Survey of Near Elderly and Elderly; 1999 Taiwan Survey of Health and Living Status of the Elderly (TES);

NOTE: SABE and Taiwan data are unweighted

\* does not have to add to 100%

\*\* not possible to tell whether relative is a co-resident or not

Note: Children refers to all children in roster