Extended Abstract

THE EFFECTS OF FERTILITY DECLINE ON FAMILY STRUCTURE AND SUPPORT FOR OLDER PERSONS IN LATIN AMERICA AND ASIA
Karen Glaser¹, Emily M. Agree², Elizabeth Costenbader³, Antonio Camargo⁴ and Belkis Trench⁵.

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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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


<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Argentina</th>
<th>Uruguay</th>
<th>Chile</th>
<th>Cuba</th>
<th>Brazil</th>
<th>Mexico</th>
<th>Taiwan</th>
<th>Philippines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never-married</td>
<td>5.6</td>
<td>3.6</td>
<td>7.4</td>
<td>3.4</td>
<td>4.8</td>
<td>4.0</td>
<td>3.3</td>
<td>3.6</td>
</tr>
<tr>
<td>Currently Married</td>
<td>37.8</td>
<td>45.0</td>
<td>37.1</td>
<td>31.4</td>
<td>47.7</td>
<td>48.8</td>
<td>61.6</td>
<td>49.7</td>
</tr>
<tr>
<td>Cohabiting</td>
<td>5.3</td>
<td>3.5</td>
<td>6.6</td>
<td>6.0</td>
<td>4.6</td>
<td>5.3</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Divorced/Separated *</td>
<td>9.5</td>
<td>11.2</td>
<td>13.4</td>
<td>24.1</td>
<td>7.4</td>
<td>10.0</td>
<td>2.9</td>
<td>4.1</td>
</tr>
<tr>
<td>Widowed</td>
<td>41.8</td>
<td>36.7</td>
<td>35.5</td>
<td>35.0</td>
<td>35.5</td>
<td>31.9</td>
<td>32.2</td>
<td>42.6</td>
</tr>
</tbody>
</table>

| Age                     |           |         |       |      |        |        |        |             |
| 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         |

| Employment Status       |           |         |       |      |        |        |        |             |
| 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        |

| Health Measure          |           |         |       |      |        |        |        |             |
| % reporting difficulty  | 18.6      | 16.8    | 22.3  | 20.5 | 23.7   | 19.4   | 11.4   | 14.9        |
| with at least one ADL   |           |         |       |      |        |        |        |             |

| Urban                   | NA        | NA      | NA    | NA   | NA     | NA     | 36.4   | 45.6        |

| % Urban                 |           |         |       |      |        |        |        |             |
| 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

<table>
<thead>
<tr>
<th>Country and Stage of Demographic Transition</th>
<th>Latin America</th>
<th>Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Advanced</td>
<td>Advanced</td>
</tr>
<tr>
<td></td>
<td>Argentina</td>
<td>Uruguay</td>
</tr>
<tr>
<td>% Childless*</td>
<td>12.8</td>
<td>10.6</td>
</tr>
<tr>
<td>Mean number of children (Range)*</td>
<td>2.5</td>
<td>2.9</td>
</tr>
<tr>
<td>Those with one or more children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Age at First Birth (range)**</td>
<td>27.4</td>
<td>27.5</td>
</tr>
<tr>
<td>% with adopted children*</td>
<td>2.6</td>
<td>3.6</td>
</tr>
<tr>
<td>% with step-children*</td>
<td>4.8</td>
<td>7.7</td>
</tr>
<tr>
<td>% with youngest child &lt; 16**</td>
<td>1.5</td>
<td>1.8</td>
</tr>
<tr>
<td>% with youngest child 16-25**</td>
<td>8.4</td>
<td>11.2</td>
</tr>
<tr>
<td>% with Grandchildren***</td>
<td>73.9</td>
<td>81.0</td>
</tr>
<tr>
<td>Base Sample Size</td>
<td>1039</td>
<td>1444</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Country and Stage of Demographic Transition</th>
<th>Latin America</th>
<th>Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Advanced</td>
<td>Advanced</td>
</tr>
<tr>
<td>Argentina</td>
<td>5.9</td>
<td>5.8</td>
</tr>
<tr>
<td>Uruguay</td>
<td>1.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Chile</td>
<td>72.0</td>
<td>75.4</td>
</tr>
<tr>
<td>Cuba</td>
<td>1039</td>
<td>1444</td>
</tr>
<tr>
<td>Brazil</td>
<td>2143</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>1247</td>
<td></td>
</tr>
<tr>
<td>Taiwan</td>
<td>3530</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>469</td>
<td></td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Country and Stage of Demographic Transition</th>
<th>Latin America</th>
<th>Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Advanced</td>
<td>Advanced</td>
</tr>
<tr>
<td>Argentina</td>
<td>0.65</td>
<td>0.72</td>
</tr>
<tr>
<td>Uruguay</td>
<td>(0 - 3)</td>
<td>(0-3)</td>
</tr>
<tr>
<td>Chile</td>
<td>5.4</td>
<td>5.7</td>
</tr>
<tr>
<td>Cuba</td>
<td>8.1</td>
<td>7.9</td>
</tr>
<tr>
<td>Brazil</td>
<td>5.4</td>
<td>6.3</td>
</tr>
<tr>
<td>Mexico</td>
<td>447</td>
<td>696</td>
</tr>
<tr>
<td>Taiwan</td>
<td>46.5</td>
<td>36.4</td>
</tr>
<tr>
<td>Philippines</td>
<td>22.6</td>
<td>26.7</td>
</tr>
<tr>
<td>Number of Generations in HH (Mean, Range)</td>
<td>22.6</td>
<td>26.7</td>
</tr>
<tr>
<td>Only with Unmarried Children</td>
<td>16.9</td>
<td>17.9</td>
</tr>
<tr>
<td>Only with Unmarried Children</td>
<td>13.9</td>
<td>18.1</td>
</tr>
<tr>
<td>Living Alone</td>
<td>46.5</td>
<td>36.4</td>
</tr>
<tr>
<td>Only with Unmarried Children</td>
<td>22.6</td>
<td>26.7</td>
</tr>
<tr>
<td>Total N = 100%</td>
<td>592</td>
<td>748</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Country and Stage of Demographic Transition</th>
<th>Financial</th>
<th>Goods</th>
<th>ADLS and/or IADLS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very Advanced</td>
<td>Advanced</td>
<td>Progressing</td>
</tr>
<tr>
<td></td>
<td>Argentina</td>
<td>Uruguay</td>
<td>Chile</td>
</tr>
<tr>
<td>Co-resident</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spouse</td>
<td>33.1</td>
<td>48.7</td>
<td>31.5</td>
</tr>
<tr>
<td>Children</td>
<td>38.8</td>
<td>39.7</td>
<td>48.9</td>
</tr>
<tr>
<td>Other</td>
<td>15.2</td>
<td>24.7</td>
<td>29.7</td>
</tr>
<tr>
<td>Children</td>
<td>40.8</td>
<td>22.0</td>
<td>36.4</td>
</tr>
<tr>
<td>Other</td>
<td>10.7</td>
<td>5.6</td>
<td>7.3</td>
</tr>
<tr>
<td>Formal</td>
<td>0.8</td>
<td>0.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Base Sample Size</td>
<td>598</td>
<td>928</td>
<td>913</td>
</tr>
<tr>
<td>Non-co-resident</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spouse</td>
<td>30.6</td>
<td>50.5</td>
<td>34.9</td>
</tr>
<tr>
<td>Children</td>
<td>31.9</td>
<td>36.6</td>
<td>40.7</td>
</tr>
<tr>
<td>Other</td>
<td>18.2</td>
<td>22.8</td>
<td>27.7</td>
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<tr>
<td>Children</td>
<td>34.0</td>
<td>20.8</td>
<td>30.9</td>
</tr>
<tr>
<td>Other</td>
<td>10.6</td>
<td>7.2</td>
<td>6.7</td>
</tr>
<tr>
<td>Formal</td>
<td>11.4</td>
<td>1.6</td>
<td>4.4</td>
</tr>
<tr>
<td>Base Sample Size</td>
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<td>755</td>
<td>810</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td>Spouse</td>
<td>46.1</td>
<td>51.5</td>
<td>37.3</td>
</tr>
<tr>
<td>Children</td>
<td>36.5</td>
<td>40.6</td>
<td>51.5</td>
</tr>
<tr>
<td>Other</td>
<td>25.9</td>
<td>27.0</td>
<td>35.4</td>
</tr>
<tr>
<td>Children</td>
<td>23.9</td>
<td>16.1</td>
<td>17.4</td>
</tr>
<tr>
<td>Other</td>
<td>15.3</td>
<td>8.9</td>
<td>9.0</td>
</tr>
<tr>
<td>Formal</td>
<td>0.0</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Base Sample Size</td>
<td>698</td>
<td>1022</td>
<td>960</td>
</tr>
</tbody>
</table>

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