IV. INFORMAL SUPPORT TRANSFERS BETWEEN GENERATIONS

Population censuses and multi-purpose surveys generally exclude information on key issues related to the living arrangements of older persons, such as the number and characteristics of their children and the flow of informal support transfers between generations. Data of this kind are normally assessed only through special surveys that focus mainly on the older population. One example is the survey on Health, Well-being and Ageing in Latin America and the Caribbean—SABE, a multicentre survey conducted in seven major urban centres—Bridgetown (Barbados), Buenos Aires (Argentina), São Paulo (Brazil), Santiago (Chile), Havana (Cuba), Mexico City (Mexico) and Montevideo (Uruguay)—during the period from October 1999 to December 2000, under the general coordination of the Pan American Health Organization/World Health Organization (PAHO/WHO).[1]

Although the exclusively urban samples of SABE do not capture the diversity of the older persons' living situations within each country, they do represent a valuable source of comparable cross-national data on older persons in Latin America and the Caribbean. Relatively little research has been conducted on ageing in that region, particularly if compared with Asia (see, for example, Andrews and Hermalin, 2000), even though the demographic transition began relatively early in Latin America and the Caribbean, and the process of population ageing is progressing rapidly.

The study of informal support transfers and living arrangements of older persons is particularly important in the Latin America and Caribbean context of rapid population ageing. It is widely acknowledged that the lack of formal support provided by an adequate public welfare system makes much of the older population in the region dependent, either partially or exclusively, on the informal support granted mainly by the immediate family. However, at the same time that the ageing process is intensifying, thus increasing the demand for informal care of older persons, several factors have contributed to constraining the family's ability to provide such support. For instance, the decreasing fertility levels tend to reduce substantially the size of the family network, while the increasing participation of women in the labour force tends to reduce the available time of women, who traditionally have been the major providers of basic care for older relatives.

Based on data from the SABE survey, the present chapter deals with two aspects relating to the living arrangements of older persons that could not otherwise be addressed through the information available in data sources such as those considered in previous chapters. The first aspect concerns the effect of particular characteristics on the household composition of the older population, particularly the number of living children and the older individuals' ability to carry out activities of daily living (ADL). The second aspect concerns the relationship between living arrangements and informal support transfers or, more specifically, the effect of co-residence on the probability that older persons receive informal support.

A. Characteristics of Older Persons in the Samples

As mentioned earlier in this report, it is necessary to bear in mind that older persons may not be dependent on their co-resident children. A married man aged 60-64 living with a relatively young and still dependent child, for example, represents a completely different situation from an unmarried woman older than 75 living with a married child. The classification of living arrangements of older persons adopted in the analysis of the SABE data distinguishes between older persons living with unmarried children and those living with at least one married child, under the assumption that co-residence with married children, more frequently than co-residence with non-married children, aims to meet the needs of the older individuals. In their study of selected Asian countries, for example, Knodel and Ofstedal (2002) found that "co-residence with

married children appears to be more strongly influenced by the physical, social and financial needs of the parents" (p. 181). However, especially in contexts where most older persons are covered by the pension system, co-residence with married children may also respond primarily to the needs of the children. The older person's pension income sometimes represents an important component of the household budget (Saad, 1999; Camarano and El Ghaoury, 1999). Even in the cases where older parents are financially dependent, they are likely to provide service support in the forms of shopping, babysitting and cooking among others.[2]

Besides the two categories of co-residence with children, the classification of living arrangements includes three other categories: "living alone", "living with spouse only" and "other". The latter category includes the cases of co-residence with relatives (other than spouse or children) and/or non-relatives, but no children. As in the previous sections of the report, the older population refers to the population aged 60 years and older.

As can be seen from table IV.1, a substantial proportion of older persons are living with children in the urban areas of Latin America and the Caribbean included in the study. In the cases of the Brazilian, Chilean, Mexican and Cuban samples, more than half of the older population was living with a married or unmarried child.[3] In Argentina, Uruguay and Barbados, the combined proportion of older persons living alone or with spouse only is 44-49 per cent, as contrasted to only 22-23 per cent in Chile and Cuba. In the latter two settings, relatively high proportions live with persons other than children.

TABLE IV.1. PERCENTAGE DISTRIBUTION OF PERSONS AGED 60 YEARS OR OVER, BY LIVING ARRANGEMENTS, SELECTED CITIES IN LATIN AMERICA AND THE CARIBBEAN, 1999-2000

		Living arrangement					
City (country)	*Sample size*	*Alone*	*Spouse only*	*Unmarried children*	*Married children*	*Other*	*Total*
Buenos Aires (Argentina).....	1 039	19.6	29.6	27.3	11.8	11.8	100.0
Bridgetown (Barbados)	1 809	21.7	22.2	35.3	5.4	15.5	100.0
São Paulo (Brazil)	2 143	13.1	20.0	40.9	10.8	15.2	100.0
Santiago (Chile)	1 298	8.9	13.9	46.8	11.8	18.6	100.0
Havana (Cuba)	1 903	10.8	11.1	25.8	32.3	20.0	100.0
Mexico City (Mexico).....	1 245	9.7	13.5	43.6	22.7	10.6	100.0
Montevideo (Uruguay).....	1 441	18.8	25.1	30.5	14.1	11.5	100.0
Total	10 878	15.0	21.7	34.3	16.3	12.7	100.0

Source: SABE survey.

Taking the aggregate sample for the seven cities, the proportion of older persons living alone, with married children or in another kind of arrangement increases with age, while the proportion living with unmarried children decreases with age. The proportion living only with the spouse increases until an intermediate age—because of the departure of adult children from home—after which it decreases owing to the growing toll of widowhood (table IV.2).

Given the striking sex differential in marital status among the older population, in which men are predominantly married and women predominantly widowed, the proportion living only with the spouse is significantly higher among older men (about 28 per cent) than among older women (about 18 per cent), while the proportion living alone is significantly higher among older women (about 18 per cent) than men (about 10 per cent). This latter situation is completely

reversed, however, if only the unmarried older persons—those in fact exposed to the risk of living alone—are considered. In this case, the proportion living alone becomes significantly higher among men (40 per cent) than women (30 per cent). These findings are consistent with those presented in chapter II. Among unmarried older persons, the proportion living with children is significantly higher among women than men, particularly with respect to unmarried children, while the proportion living in "other" arrangements is only slightly higher among women than among men.

TABLE IV.2. PERCENTAGE DISTRIBUTION OF PERSONS AGED 60 YEARS OR OVER, BY LIVING ARRANGEMENTS ACCORDING TO SELECTED DEMOGRAPHIC CHARACTERISTICS, SELECTED CITIES IN LATIN AMERICA AND THE CARIBBEAN, 1999-2000

	Living arrangement					
Demographic characteristic	*Alone*	*Spouse only*	*Unmarried children*	*Married children*	*Other*	*Total*
Age group						
60-64	9.8	17.6	47.3	14.3	11.1	100.0
65-74	14.0	24.9	32.7	16.1	12.3	100.0
75+	22.1	20.2	23.8	18.9	15.0	100.0
Sex (all)						
Male	10.3	27.6	36.5	14.6	11.0	100.0
Female	18.2	17.7	32.8	17.5	13.8	100.0
Sex (unmarried)						
Male	40.1	-	23.2	19.3	17.4	100.0
Female	30.1	-	30.5	21.4	18.1	100.0
Living children						
None	36.7	17.4	-	-	46.0	100.0
1-2	17.5	28.9	27.9	15.1	10.6	100.0
3-4	11.5	21.5	40.8	16.7	9.6	100.0
5+	7.4	12.9	49.3	23.2	7.3	100.0

Source: SABE Survey.

The preliminary assessment of the relationship between living arrangement and demographic characteristics of the older population in table IV.2 also suggests a possible effect of the number of living children on the household composition of older persons. The effect is expected to be positive on the likelihood of living with children, both married and unmarried, and negative on the likelihood of living alone or in another kind of arrangement.

Regarding the relationship between socio-economic characteristics and living arrangements of the older population, a first assessment provided by the indicators presented in table IV.3, suggests that those living with married children would be the ones in less favourable conditions, while those in more favourable conditions would be living with the spouse only. The proportion without formal education, for instance, is more than twice as high among older persons living with married children (18 per cent) as among those living with spouse only (7 per cent), while the proportion in a vulnerable situation (with difficulty in ADL/IADL) is almost double. However, it is possible that these differences are attributable to demographic characteristics such as age, which are associated with both living arrangements and socio-economic conditions. The next section turns to multivariate analysis to control for such effects.

TABLE IV.3. PERCENTAGE DISTRIBUTION OF PERSONS AGED 60 YEARS AND OVER BY SELECTED SOCIO-ECONOMIC CHARACTERISTICS ACCORDING TO LIVING ARRANGEMENT, SELECTED CITIES IN LATIN AMERICA AND THE CARIBBEAN, 1999-2000

Socio-economic characteristics	*Living arrangement*				
	Alone	*Spouse only*	*Unmarried children*	*Married children*	*Other*
Formal education[a]					
None…..……	11	7	12	17	10
Any.....	89	93	88	83	90
Total	100	100	100	100	100
Non-family income[b]					
None.....	7	26	26	31	18
Any.....	93	74	74	69	82
Total	100	100	100	100	100
Difficulty in performing any ADL/IADL[c]					
Yes	34	24	29	41	35
No.....	66	76	71	59	65
Total	100	100	100	100	100

Source: SABE Survey.

[a] Not including the Cuban sample.

[b] Not including the samples from Chile and Cuba.

[c] The Activities of Daily Living (ADL) include: walking across a room; dressing; bathing; eating; and using the toilet. The Instrumental Activities of Daily Living (IADL) include: preparing a hot meal; managing one's own money; shopping for groceries; taking medications; and doing light housework.

B. EFFECTS OF SELECTED COVARIATES ON LIVING ARRANGEMENTS OF OLDER PERSONS IN LATIN AMERICA AND THE CARIBBEAN

Multinomial logistic regressions were used to estimate the net effects of the selected covariates on living arrangements of the older persons. This multivariate analysis was intended to provide a statistical basis for determining the associations between different types of living arrangements and some attributes of the older persons suggested by the initial assessment in the previous section.

Multivariate models were fitted separately for married and unmarried older persons. In both cases, the outcome variable was subdivided into four categories. In the case of married older persons, the reference category was "living with spouse only" and the contrasting categories were "living with unmarried children", "living with married children" and "other". In the case of unmarried older persons, the contrasting categories were the same, but the reference category was "living alone".[4] The demographic covariates included in the models were sex, age and number of living children. The socio-economic covariates were the level of education and whether the person received non-family income. In addition, two other variables were considered in the analysis: the country of residence and an indicator of vulnerability given by the difficulty of performing activities of daily living. All these variables were transformed into categorical variables to be included in the multivariate analysis, as shown in table IV.3. The multivariate analysis included data from five subsamples: Brazil (São Paulo), Argentina (Buenos Aires), Uruguay (Montevideo), Mexico (Mexico City) and Barbados (Bridgetown).5 The results of the analysis are shown in table IV.4.

Figures in table IV.4 represent the estimated odds ratio for those in each category of interest versus those in the reference category. For instance, the odds of living with an unmarried child as opposed to living only with spouse among married older persons is 29 per cent ((1-0.71) 100) lower for women compared with men, controlling for all other variables included in the model. Among the unmarried older persons, on the other hand, the odds of living with an unmarried child as opposed to living alone are more than twice (2.18 times) as high among women compared with men.

TABLE IV.4. ODDS RATIOS FROM MULTINOMIAL LOGISTIC REGRESSIONS OF LIVING ARRANGEMENTS ON SELECTED COVARIATES, FOR MARRIED AND UNMARRIED OLDER PERSONS IN SELECTED CITIES OF LATIN AMERICA AND THE CARIBBEAN, 1999-2000

Covariate[a]		*Married older persons*[b]			*Unmarried older persons*[c]		
		Unmarried children	*Married children*	*Other*	*Unmarried children*	*Married children*	*Other*
Sex	(Male)						
	Female	0.71***	0.63**	0.81	2.18***	1.40**	1.29*
Age group	(60-64)						
	65-69	0.45***	0.56***	0.60**	0.59***	0.94	0.82
	70+	0.26***	0.40***	0.52***	0.51***	1.02	0.78
Living children	(1-2)						
	None	-	-	1.27	-	-	2.16***
	3-4	1.65***	1.13	1.33	1.59***	1.12	0.81
	5+	3.14***	2.01***	2.11***	2.89***	1.95***	0.77
Country	(Brazil)						
	Argentina	0.66**	1.28	0.37***	0.56***	0.83	0.50***
	Uruguay	0.63***	1.26	0.50***	0.80*	1.13	0.84
	Barbados	0.58***	0.93	0.81	0.92	0.27***	0.88
	Mexico	1.04	3.41***	0.67	1.24	1.90***	1.11
Education	(Primary)						
	None	0.84	1.37	0.77	0.95	0.96	1.01
	Secondary	0.95	0.53***	1.01	1.04	0.64**	0.96
Income	(No income)						
	Has non-family income	0.92	0.82	0.86	0.62**	0.48***	0.68
ADL/IADL[d]	(No difficulty)						
	Has difficulty	1.03	1.28	1.08	1.24*	1.53***	1.39**

Source: SABE survey.
NOTE: Significance levels: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

[a] Reference category for each covariate appears between parentheses.
[b] Number of observations was 3,681. Reference category is "living with spouse only".
[c] Number of observations was 3,823. Reference category is "living alone".
[d] Activities of daily living include: walking across a room; dressing; bathing; eating; and using the toilet. Instrumental activities of daily living include: preparing a hot meal; managing one's own money; shopping for groceries; taking medications; and doing light housework.

Consistent with the findings of a recent study in four Asian populations where co-residence with adult children also prevails—Philippines, Singapore, Taiwan Province of China and Thailand (see Hermalin, ed., 2002)—the SABE surveys show that gender, age and kin availability play an important role in determining the living arrangements of older persons in Latin America and the Caribbean. The probability of living with children, both married and unmarried, is significantly higher among men than women in the case of married older persons, and significantly higher among women than men in the case of unmarried older persons. As age advances, the probability of living with married or unmarried children or any person other than the spouse decreases significantly among married older persons. Among the unmarried, only the probability of living with unmarried children (compared with living alone) decreases significantly with age. The number of living children, on the other hand, positively affects the probability of living with married and unmarried children, for both married and unmarried older persons.

Important differences in living arrangements of older persons persist among cities even after controlling for the demographic and socio-economic variables and the indicator of vulnerability (difficulty with ADL or IADL). Taking the Brazilian sample as reference, the probability of living with unmarried children, especially in the case of married older persons, is significantly lower in Argentina, Uruguay and Barbados—countries where the demographic

transition started earlier—while in Mexico, the probability of living with married children is significantly higher. Also, the probability of living with a person other than a child or spouse is significantly lower in Argentina among both married and unmarried persons (again, compared with Brazil). The same is true for Uruguay, in the specific case of married older persons.

The effect of the socio-economic variables seems to indicate a preference for independent forms of living arrangement among older persons—with spouse only in the case of the married, and alone in the case of the unmarried. A higher level of education, for instance, significantly decreases the probability of living with married children, which, in theory, represents the most dependent form of living arrangement. In a similar way, having non-family income substantially decreases the probability of living with both married and unmarried children, among unmarried older persons. Similar associations were found in the comparative study in Asia previously mentioned. According to the authors: "Whereas co-residence with unmarried children appears to be primarily responsive to the children's needs, co-residence with married children appears to be more strongly influenced by physical, social and financial needs of the parents" (Knodel and Ofstedal, 2002, p. 181).

The exercise of a preference for independent living arrangements may be constrained by a number of factors. One factor of great relevance has to do with the physical and mental status of the older person. For unmarried older persons, those with difficulty in performing either activities of daily living or instrumental activities of daily living are more likely to live with children, especially married ones, or with any other person. For married older persons, by contrast, there is no significant association between vulnerability and co-residence with children or persons other than the spouse. This suggests that it is the spouse who primarily provides support in the cases of vulnerable married elders. The important role that co-residence plays in assuring the necessary support for older people with some degree of vulnerability is further explored in the next section.

C. The Role of Co-residence in Support Transfers

In Latin America and the Caribbean, as in most of the less developed world, co-residence is an important element of the intra-family support transfers. Because a substantial portion of the informal transfers take place among household members, co-residence in the less developed regions is usually viewed as a propeller of the support flows upon which the well-being of most of the older population depends. The SABE survey collected a variety of information regarding the exchange of informal support involving older persons, making it possible to assess the relationship between support transfers and the living arrangements of older individuals.

The analysis that follows examines the effect of co-residence on the probability of older persons receiving different types of informal support. Through a series of multivariate logistic regressions, three models were fitted separately for married and unmarried older persons. The outcome (dependent) variables in these regressions were, respectively: (a) assistance received in activities of daily living; (b) assistance received in instrumental activities of daily living; and (c) financial assistance. The first two models were restricted to older persons who reported having difficulty in performing at least one of the activities of daily living or one of the instrumental activities of daily living, respectively. The activities of daily living included: walking across a room; dressing; bathing; eating; and using the toilet. The instrumental activities of daily living included: preparing a hot meal; managing one's own money; shopping for groceries; taking medications; and doing light housework. An older individual would be classified as receiving support if assistance was reported in any of those activities. The regression model for financial assistance, on the other hand, included all older persons.

The number of co-residents—the explanatory variable—was inferred from the information about household size, given by the number of persons living in the residential units where at

least one member was aged 60 years or over. The effect of co-residence on the probability of receiving informal support was estimated controlling for a number of demographic and socio-economic characteristics of the older persons. As in the previous section, the demographic variables included in this analysis were gender, age and number of living children, while the level of education and whether the person received non-family income were the socio-economic variables included in the analysis. Again, all variables were transformed into categorical "dummy" variables indicating whether the individual had or did not have each characteristic of interest, and the analysis included data from five SABE subsamples: Brazil (São Paulo), Argentina (Buenos Aires), Uruguay (Montevideo), Mexico (Mexico City) and Barbados (Bridgetown).

The results in table IV.5 are presented in the form of odds ratios. For instance, the odds of receiving support in activities of daily living among unmarried older persons with difficulty in performing such activities is more than four times as high (odds ratio = 4.21) for those who live with one other person compared with those who live alone, all other variables being controlled.

TABLE IV.5. ODDS RATIOS FROM LOGISTIC REGRESSIONS OF INFORMAL SUPPORT RECEIVED IN ACTIVITIES OF DAILY LIVING, IN INSTRUMENTAL ACTIVITIES OF DAILY LIVING AND AS MONEY ON SELECTED COVARIATES, FOR MARRIED AND UNMARRIED OLDER PERSONS IN SELECTED CITIES OF LATIN AMERICA AND THE CARIBBEAN, 1999-2000

	Married older persons			*Unmarried older persons*		
Covariate[a]	*ADL*[b]	*IADL*[c]	*Money*	*ADL*[b]	*IADL*[c]	*Money*
Sex (Male)						
Female	0.45***	0.97	4.41***	1.07	1.00	2.21***
Age group (60-64)						
65-69	1.78*	1.51	1.19	1.37	1.43	1.18
70+	2.52**	3.14***	0.99	3.53***	2.94***	1.07
Living children (1-2)						
None	0.97	0.74	0.88	1.02	1.00	0.56***
3-4	1.11	1.36	1.19	0.90	1.39	1.34**
5+	1.03	1.30	1.37**	1.25	1.95**	1.56***
Co-residents[d] (None)						
(1)				4.21***	1.99**	3.72***
2-3	1.29	2.02**	1.47***	3.93***	3.42***	4.84***
4+	1.14	1.71*	1.99***	4.22***	2.31***	3.89***
Education (Primary)						
None	1.26	1.99*	0.93	1.12	2.29**	0.92
Secondary	0.90	0.93	0.76**	0.99	1.19	0.66***
Income (No income)						
Has non-family income	0.64	0.77	0.64**	1.05	1.28	0.31***
N (Observations)	545	796	3 689	844	1 332	3 825

Source: SABE survey.
NOTE: Significance levels: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

[a] Reference category for each covariate appears between parentheses.
[b] Activities of daily living include: walking across a room; dressing; bathing; eating; and using the toilet. The observations refer exclusively to those who reported having difficulty in performing at least one of such activities.
[c] Instrumental activities of daily living include: preparing a hot meal; managing one's own money; shopping for groceries; taking medications; and doing light housework. The observations refer exclusively to those who reported having difficulty in performing at least one of such activities.
[d] Reference category in the regressions relative to married older persons is (1) and refers to the spouse. In the regressions relative to unmarried older persons, the reference category is (none).

In general, the results show that it is co-residence, more than the availability of living children, that is crucial for the older population's receiving some kinds of support. Except for the case of support received in activities of daily living by married older persons, co-residence significantly increases the probability of receiving support. The recent comparative study on ageing in Asia mentioned above also highlights the importance of co-residence for the well-being of older persons in that region by concluding that "… those living alone or without living children display a consistent social disadvantage … but only those living alone tend to experience a consistent economic disadvantage" (Hermalin, Ofstedal and Mehta, 2002, p. 501). The SABE surveys show that the number of living children positively affects the chances of older persons receiving financial assistance, especially in the case of unmarried older persons. However, the number of children has almost no effect on the probability of receiving support in activities of daily living. There is one exception: having five or more children increases the probability of receiving support in instrumental activities of daily living among unmarried older persons.

For those who are married, support with activities of daily living is affected neither by the number of living children nor by the number of co-residents besides the spouse. This suggests, once again, that spouses are the primary provider of this kind of support. Furthermore, it is wives who mainly provide such support, as indicated by the fact that the probability of receiving support with activities of daily living is significantly lower among married women compared with married men.

Thus, what can be concluded is that, although the number of children significantly increases the probability that older persons live with children, it seems that co-residence is what ultimately matters in respect of older persons' receiving certain forms of informal support, particularly types of help—for example, in performing either activities of daily living or instrumental activities of daily living—that are more directly dependent on physical proximity.

D. Concluding Remarks

Regarding the living arrangements of older persons, the results indicate a higher propensity for independent arrangements in countries that are currently in a more advanced stage of the demographic transition. Although the differences could be interpreted as being due to cultural factors, they also may suggest that regardless of cultural diversity, a sizeable increase in the incidence of older persons living alone in the Latin American and Caribbean region should be expected as the countries in which demographic transition started later advance into the process.

This may, however, also depend on future social and economic development, especially as such development affects older persons' access to pensions, social security and other sources of income. The analysis showed that having an outside income substantially reduced the likelihood that an unmarried older person would reside with children in the settings examined here. In fact, although the probability of receiving some sort of informal support tends to be higher among the older persons who live with children or any other relative/non-relative, the results seems to indicate a preference for independent living arrangements whenever propitious conditions are present.

In this regard, an aspect of the analysis to be highlighted is the importance of co-residence in the process of informal support transfers towards the older population in Latin American and the Caribbean, particularly in the case of support—in, for example, the activities of daily living and the instrumental activities of daily living—that requires physical proximity.

Notes

[1]See Palloni and Pelaez (2002) for further information on the SABE (Salud, Bienestar y Envejecimiento) project.

[2]See, for instance, Biddlecom, Chayovan and Ofstedal (2002) in the case of Asia, and Saad (2003) in the case of Latin America and the Caribbean.

[3]With the exception of Havana, the proportion of older people living with at least one married child is much lower than the proportion living with unmarried children only.

[4]As expected, practically all older persons living alone were declared to be unmarried, and all older persons living with spouse were declared to be married. In the very few cases in which older persons living alone were declared to be married or older persons living with spouse only were declared to be unmarried, they were reclassified as being, respectively, unmarried and married. Consequently, the outcome "living alone" was excluded from the models for the married group, and the outcome "living with spouse only" was excluded from the models for the unmarried.

[5]Data from the Cuban (Havana) and Chilean (Santiago) subsamples were not included owing to the distinct way in which data on education and income had been originally compiled in these subsamples compared with the others. An updated version of the SABE database is expected to make all subsamples comparable.