

Singapore's Changing Structure and the Policy Implications for Financial Security, Employment, Living Arrangements and Health Care

Angelique Chan



Founded 1905



ASIAN METACENTRE

FOR POPULATION AND SUSTAINABLE DEVELOPMENT ANALYSIS

**HEADQUARTERS AT INSTITUTE FOR ASIAN RESEARCH
NATIONAL UNIVERSITY OF SINGAPORE**

Singapore's Changing Age Structure And The Policy Implications For Financial Security, Employment, Living Arrangements, and Health Care

Angelique Chan

Angelique Chan is an Assistant Professor of Sociology at the National University of Singapore. She received her Ph.D from the University of California, Los Angeles and completed a Postdoctoral Fellowship at the University of Michigan Population Studies Center. Most of her research lies in the area of social demography. She has carried out analyses of infant mortality in China and analyses of population aging in Malaysia and Singapore. Her current research focuses on comparative analyses of the social and economic consequences of population aging in Asia using survey data from the region.

Contents

Contents	<i>i</i>
Abstract	<i>ii</i>
List of Tables	<i>iii</i>
List of Figures	<i>iv</i>
Section 1 Introduction	<i>1</i>
Section 2 Singapore's Changing Age Structure	<i>3</i>
Section 3 Data	<i>6</i>
Section 4 Financial Security	<i>7</i>
Section 5 Employment and Employability	<i>13</i>
Section 6 Housing and Land Use Policies	<i>15</i>
Section 7 Health Care	<i>18</i>
Section 8 Conclusion	<i>22</i>
References	<i>23</i>
Notes	<i>25</i>

Abstract

This paper discusses the issues and implications of population aging for Singapore. As one of the fastest aging populations in Asia, Singapore faces the challenge of developing public policies to accommodate this changing age structure. This paper examines some of the social and economic consequences of this rapid shift in Singapore's age structure. The specific areas discussed are financial security, employment, living arrangements, and health care, for Singapore elderly. Recently available panel data for Singapore (1995-1999) is used to examine the changing needs of the elderly over time. The results show large variations in financial and health status of the elderly between the two survey periods. The panel data also reveal changes in living arrangements between 1995 and 1999, although the changes are not as dramatic as those for income. An increasing percentage of elderly persons who are not working are looking for work. This suggests that policies aimed at hiring older workers will be well received by the elderly themselves in future. The results point to the need to develop policies that cater to specific sub-groups of elderly persons. The implementation of uniform policies across all ages of elderly runs the risk of neglecting needs of specific sub-groups over time.

List of Tables

Table 1	Singapore's Population and Growth Rate, 1871-2030	3
Table 2	Median Age for Singapore (1911-2000)	4
Table 3	Target Contribution Rates for the Various CPF Accounts (Current Rates are Indicated in Brackets Below)	8
Table 4	Total CPF Savings at Age 55 Among Elderly Who Were Aged 59 and Above in 1999	9
Table 5	Level and Change in Income: Singapore, 1995-1999	10
Table 6	Changing Levels of Perceived Income Adequacy Between 1995 and 1999	11
Table 7	Association Between Change in Actual Income and Change in Perceived Income Adequacy: Singapore, 1995-1999	11
Table 8	Employment Status of Elderly Singaporeans, 1995 and 1999	13
Table 9	Main Reason for Continuing Work After Retirement by Ethnicity, 1999	14
Table 10	Type of Living Arrangements for Respondents Aged 59 and Above in 1999	15
Table 11	Health Status of Elderly Singaporeans, 1995 and 1999	19
Table 12	Change in Health Status of Respondents Between 1995 and 1999	19
Table 13	Type of Ailments by Age Group for Chinese Elderly	20
Table 14	Type of Ailments by Age Group for Malay Elderly	20
Table 15	Type of Ailments by Age Group for Indian Elderly	21

List of Figures

Figure 1	Changes in Living Arrangements Between 1995 and 1999	16
----------	--	----

Section 1 Introduction

This paper discusses the implications of population aging for policies regarding old age support in Singapore. As one of the fastest aging populations in Asia, Singapore faces the challenge of developing public policies to accommodate this changing age structure. Currently 7% of Singapore's population is over the age of 65, however, by 2030 this will increase to 19% (Inter-Ministerial Committee on Aging Report 1999). As Pool (2000) discusses in an earlier paper, age structural transitions affect supply and demand factors within a society, differentially putting pressure on key life cycle stages and consequently policies catering to the needs of populations at specific ages. In this paper I discuss the policy implications of population aging in the areas of financial security, employment, living arrangements, and health care for Singapore elderly. I combine this discussion with recently available longitudinal data for Singapore. My focus is on the changing needs of the elderly over time and the need for policy makers to take these changes into account when developing policies for older adults. Longitudinal data provide for more accurate projections of the changing needs of the elderly over time (Andrews and Hermalin 2000). Given increases in life expectancy, the importance of changing needs within the span of "old age" (from age 65 onwards) becomes even more pertinent. For example, housing and health care policies for the aged may have to be fine-tuned so as to cater to specific needs of young-old (65-74) versus oldest-old elderly (75+). The goal of most Asian governments is to develop programmes that do not undermine family support which is perceived as far superior to state-based support, both morally and financially (Ofstedal, Chayovan, Chan, et al. 2001).

The family has traditionally been the main source of support for the elderly in Asia, and Singapore is no exception. In recent decades, academic debate has centered upon gauging the effect of modernization or industrialization on levels of familial support (Cowgill and Holmes 1972; Martin and Kinsella 1994). This interest intersects with the awareness of policymakers in Asia that traditional family support of the elderly may decline in future. There is some evidence of declining levels of familial support in countries such as China and India due to the effects of massive rural-urban migration of young adults, and changes in the occupational structures (World Bank 1994). This has led some policy makers to decry the influence of "Westernization" and its by-product, individualism. However, there is also evidence to suggest that the Asian family is adapting to changing economies and that elderly well-being is not declining. Research on intergenerational transfers in Indonesia, Malaysia, the Philippines, Singapore, Taiwan, and Thailand, has shown high-levels of intergenerational support for elderly parents either via coresidence or the transfer of goods and services (Knodel 1997a, 1997b; Hermalin 1997, Chan 1999a, 1999b; Ofstedal, Knodel and Chayovan 1999; Chang 1999).

In Singapore, the government has strongly upheld the belief that familial support of the elderly is the ideal. To a certain extent, we see that there remain very high-levels of family support, as measured by coresidence rates. Approximately 85% of Singaporean elderly live with at least one child.ⁱ The challenge for policy makers in all of these countries is to develop sound systems to ensure economic and social well-

being of the elderly. This means developing a delicate mix to enhance levels of familial support while at the same time ensuring individual preparation for old age. Understanding the role of policies in ensuring old age support necessitates a recognition that there exists a politics of aging which involves the allocation of resources by age (Rappa 1999). Singapore is not a welfare state and individual responsibility is the mantra underlying most, if not all, policymaking decisions. This attitude is reflected in the types of policies implemented, for example, the Central Provident Fund described later in this paper.

In the following section, I review the changes that have occurred in Singapore's age structure since Independence in 1965. I then discuss policies for financial security, employment, living arrangements, and health care, that have been developed by the Singapore Government. Where possible, I provide illustrations of the changing characteristics of elderly Singaporeans over time, using data from a longitudinal survey carried out between 1995 and 1999.

Section 2 Singapore's Changing Age Structure

At present, Singapore's population stands at 4.02 million, with an annual growth rate of 1.8% for resident Singaporeans (Singapore Census of Population 2000). As shown in Table 1, the growth rate of non-residents is much higher (9%). This group consists mainly of migrant labourers ensconced in lower-level occupations, such as construction or foreign domestic workers.

Older Singaporeans, age 65 and above make up 7.3% of the population and by the year 2030, they are expected to make up 19% of the population. This translates into an increase from 235,000 elderly in 1999 to 796,000 elderly in 2030 (IMC 1999). The oldest-old population (85 and above) is experiencing the fastest growth at 6.1% per year. As a result of improvements in sanitation, medical technology, and public health awareness, life expectancy has risen in Singapore to 76 for men and 79 for women (IMC 1999). As shown in Table 2, this aging of the population has had the cumulative effect of raising the median age of the population from 19 in 1957 to 34 in 2000 (Singapore Census of the Population 2000).

Table 1 Singapore's Population and Growth Rate, 1871 - 2030

Year	Total pop ⁿ	Residents	Non-residents	Growth rate (%)		
				Total pop ⁿ	Residents	Non-residents
1871	97,111	--	--	--	--	--
1881	137,755	--	--	3.6	--	--
1891	181,612	--	--	2.8	--	--
1901	227,592	--	--	2.3	--	--
1911	303,321	--	--	2.9	--	--
1921	418,358	--	--	3.3	--	--
1931	557,745	--	--	2.9	--	--
1947	938,144	--	--	3.3	--	--
1957	1,445,929	--	--	4.4	--	--
1970	2,074,507	--	--	2.8	--	--
1980	2,413,945	2,282,125	131,820	1.5	--	--
1990 ¹	3,047,132	2,735,868	311,264	2.4	1.8	9.0
2000	4,017,733	3,263,209	754,524	2.8	1.8	9.3

¹Includes resident population residing overseas.
Source: Census of Population 2000

Table 2 Median Age for Singapore (1911-2000)

Census year	Median age
1911	28
1921	28
1931	26
1947	23
1957	19
1970	20
1980	24
1990	29
2000	34
2010	37
2020	39
2030	41

Source: Singapore Census of Population 2000 and the Inter-Ministerial Committee Report on the Ageing Population (1999)

The ageing of Singapore's population was primarily motivated by a fertility decline beginning in the 1970s. Since Independence in 1965, Singapore has completed the demographic transition. In the 1960s, the Total Fertility Rate stood around 6 children per woman. An aggressive government campaign to reduce the TFR was implemented in the late 1960s and throughout the 1970s and early 80s. Under this policy, the Government created a number of disincentives to having children such as no-maternity leave for the third child, and no priority for Primary One registration for the third and subsequent child unless one parent underwent sterilization. Due to the high premium placed on education, these disincentives led many women to opt for tubal ligations and abortions, while some simply refused to bear more children (Straits Times 9/22/2000). This campaign proved to be highly successful, and resulted in Singapore reaching 0% population growth rate by 1986.

The realization that the Singapore population was not reproducing itself led the Government to reverse its population planning policy to encourage Singaporean couples to have three or more children if family finances permit (Straits Times 21/8/2000). The Government has gone so far as to provide two financial incentives for couples to have more children. The first is the provision of a "Baby Bonus" for parents having a second or third child. Under the new Baby Bonus scheme, a Children Development Account (CDA) will be opened for a family once a couple has a second or third child. For the second child, the Government will contribute \$500 per year into the account and up to another \$1,000 each year to match contributions from the parents – dollar for dollar.ⁱⁱ For the third child, the Government will double its contribution to \$1,000 per year, and up to \$2,000 in matching contributions annually. This baby bonus will stop when the child turns six as the Government recognizes that it is the primary responsibility of parents to provide for children. The money in the CDA can be used to pay for the development and education of all children in a family.

In addition to the baby bonus, mothers will get eight weeks of paid-maternity leave for their third child, instead of just for the first two children as provided for in Singapore's Employment Act. The Government will pay the wage cost of maternity leave for the third child (to be capped at S\$20,000) so as to ease employer burden. In addition to these financial incentives, the Government aims to create a total environment conducive to raising a family such as making child-care centers more easily available and affordable, and creating family-friendly work arrangements in the civil service.

The policy implications of this dramatic drop in the fertility rate range from supply and demand issues affecting youth (See Jones 2000 in this collection for a discussion of the interrelationship between declining fertility and education policies in Singapore) to supply and demand issues affecting the elderly. Thus, while the Government is actively promoting an increase in fertility rates, the concern with policies for the elderly is also receiving focused attention.

There are several economic and social policy implications of a rapid ageing population. One of the most apparent economic implications is the increase in the old age dependency ratio that will occur within the next 30 years. In the year, 2000, one elderly person was supported by 9.8 working persons. This will decrease to 3.5 working persons per elderly person, in the year 2030 (Vasoo, Ngiam, and Cheung 2000). Therefore policy makers are concerned with the need to ensure financial security of elderly persons either through retirement savings or an extension of employment years. Social implications include the need for appropriate housing and health care for current and future cohorts of elderly. The various areas of concern are neatly spelled out in an Inter-Ministerial report on ageing that was published in 1999. In this report, the following six areas were highlighted as foci for policy development for elderly: employment and employability, housing and land use policies, financial security, social integration of the elderly, healthcare, and cohesion and conflict in an ageing society. [For a review of Government policies for the aged see Vasoo, Ngiam, and Cheung (2000)].ⁱⁱⁱ

The rest of the discussion in this paper will center upon a discussion of financial security, employment, living arrangements, and health care policies for the aged. As stated above, policymakers need to be aware of the types of changes elderly individuals undergo throughout the period of "old age" (age 65 and onwards). I summarize key changes in these areas that have occurred between 1995 and 1999 among Singaporean elderly.

Section 3 Data

The recent availability of longitudinal survey data has facilitated in-depth analyses of the complex processes that occur within families as economies develop. I use data from two surveys; the 1995 *National Survey of Senior Citizens* and the 1999 survey of *Transitions in Health, Wealth, and Welfare of Elderly Singaporeans*. Both surveys are nationally representative and form a source of panel data. In 1995, 4,750 individuals age 55 and above were interviewed concerning a variety of issues including demographics, work, intergenerational support, income, health, and voluntary activities. In 1999, researchers attempted to re-interview as many of the original respondents as possible.^{iv} Taking into account the mortality rate for this age group (4% per year) and other losses to follow-up (including moves and severe health impairments impeding interview), we managed to re-contact 42% of available cases. This resulted in a total sample size of 1981.

The re-interview collected information on changes that occurred to the individual during the four-year period. In addition, the project team supplemented available information by including a detailed questionnaire module on Central Provident Fund usage and holdings. The Income and Assets module was also expanded. The re-interview collected in-depth information on health and health care services usage. We also expanded our database on available kin networks.

The data allow for analyses of transitions in health, wealth, and welfare of elderly Singaporeans between 1995 and 1999. As such, investigators can now make more definite claims with regards to the direction of causality in numerous processes, e.g., the relationship between health and retirement. Previous studies that used cross-sectional data could not separate cause from effect, e.g., does poor health cause retirement, or does retirement cause health status to deteriorate? By collecting information on when a person retires and subsequent information on health, researchers can test the hypothesis that retirement results in a deterioration of health status. Indeed Andrews and Hermalin (2000) note that in order to develop sound policy, there is a need for longitudinal data and given the subtlety of the information needed, this usually points to a panel design with re-interviews rather than reliance on retrospective reporting of complex histories.

Section 4 Financial Security

In economic terms, below replacement fertility levels since 1986, translate into a decrease in the number of working age persons (15-64) per older person (65+). In 1980, 13.7 working-age persons supported an elderly person, however, this number will decrease to 3.5 working persons per elderly person in 2030 (Vasoo, Ngiam, and Cheung 2000).^v Old age economic support is an issue that the Singapore Government has been concerned with since Independence. Singapore's Central Provident Fund (CPF) was instituted in 1955 as a mechanism to provide Singaporeans with financial security in old age. Since its inception, the CPF has evolved into a savings system that "changes the whole concept of social security from provision for retirement to provision for life" (Choon and Low 1996). It remains a mandatory savings scheme for all employees and employers in Singapore. Some observers have questioned, however, whether individual CPF savings will be sufficient for support in old age. As Asher (1996) notes, government estimates show that by 2003 the net balance of members' accounts, after withdrawal for housing, investments, and other schemes, will not reach the minimum balance. Thus many elderly will have to resort to private savings and family support (Shantakumar 1999).^{vi}

A CPF member has three savings accounts into which their contributions are transferred automatically; an Ordinary account (30%), a Medisave account (6%), and a Special account (4%). Ordinary account savings can be used to purchase property, approved investments, insurance, to pay for children's tertiary education, and to top-up spouse's or elderly parents' CPF accounts. Medisave account savings are for meeting hospitalization and medical expenses and to buy medical insurance. Members must keep a minimum of \$17,000 in their Medisave account to pay for medical expenses. The Ministry of Health plans to raise this gradually to \$25,000 by 2003 (IMC 1999).

Savings in the Special account can only be withdrawn upon retirement, currently set at age 55. Currently individuals must maintain a Minimum Sum of \$65,000 in his/her Retirement account to be used for old age income. This minimum sum will be increased by \$5,000 every July until it reaches \$80,000 by the year 2003 (Central Provident Fund Board 6 December 2000). This target figure will yield a monthly annuity of \$613 for approximately twenty years from retirement (IMC 1999). Alternatively, the sum can be used to buy a life annuity with an insurance company or deposited with a bank which will yield a monthly income. The government is presently trying to encourage CPF members to purchase annuities which would provide them with a regularly monthly income in old age. The take-up rate, however, has been slow prompting the government to offer several seminars to inform the elderly about annuities. Withdrawals in 1994 were highest for approved residential properties (28.7%), Medisave expenses (27.5%) and approved stocks (26.7%) (Choon and Low 1996).

Recently, the CPF Board has announced a new policy target whereby the percentage of savings channeled into the Ordinary, Special, and Medisave accounts each month will be linked directly to age (CPF Board News Release 30 May 2000).^{vii} Table 3 shows the target contribution rates for the various CPF accounts.

**Table 3 Target Contribution Rates for the Various CPF Accounts
(Current Rates are Indicated in Brackets Below)**

Age	Ordinary Account	Special Account	Medisave Account	Total contribution
35 & below	29(24)	4 (2)	7(6)	40(32)
35-45	26(23)	6(2)	8(7)	40(32)
45-55	23(22)	8(2)	9(8)	40(32)
55-60	11(9)	0(0)	9(8)	20(17)
60-65	2.5(2)	0(0)	9(8)	11.5(10)
65 & above	0(0)	0(0)	9(7.5)	9(7.5)

Source: Central Provident Fund Board, 2000.

The CPF is a highly efficient savings mechanism for the Singaporean government. The average active member's balance in 1994 was S\$73,816 (includes amounts withdrawn). This has led some observers to wonder whether the plan promotes over-saving and under-consumption (Choon and Low 1996). Currently, Singapore's CPF has the highest coverage of any retirement plan in Asia. The CPF contributes between 16.3 and 30.4% to the gross national savings rate (Asher 1995). In absolute terms, total CPF members' balances at S\$57,649.2 million is higher than the gross national savings at S\$52,178.3 million (Choon and Low 1996).

Cohort differences in CPF coverage are significant. A much higher percentage of those aged 55 to 59 years old in 1995 are covered by the CPF (52%) compared to those aged 70-79 (25%). The percentage of elderly aged 80 and above in 1995 who have CPF accounts is even lower, 14% (Chan 1999). Of those with CPF accounts, the majority, 31%, had a total of under S\$5,000 in their account (see Table 4). One-fifth of the elderly in this sample had no savings left in their CPF account.

Table 4 Total CPF Savings at Age 55 Among Elderly Who Were Age 59 and Above in 1999

Total CPF savings (in Singapore dollars)	Percent
< 5000	30.7
5,000 – 9999	7.8
10,000 – 19,999	12.0
20,000 – 29,999	5.6
39,000 – 39,999	4.7
40,000 – 49,999	3.2
50,000 – 99,999	6.1
100,000 – 149,999	2.7
150,000 & above	2.4
None	24.9
Total	100.0

Source: 1999 Transitions in Health, Wealth, & Welfare of elderly Singaporeans: 1995 – 1999.

Given the low coverage rates and savings amounts among the current generation of elderly, this generation is less likely to rely on CPF savings compared to family support. In fact, 87% of this cohort of elderly (age 59 and above in 1999) are living in households in which they are not the main breadwinners. Most of these elderly report receiving money from children; 79% of Chinese elderly, 63% of Malay elderly, and 44% of Indian elderly (Chan 2001).

It is important to note that during the period of old age, the economic status of the elderly can change. Policies regarding the economic well being of Singapore elderly are based on the idea that family support will supplement individual savings and satisfy the elderly individual's needs. The underlying assumption is that the needs of the elderly either remain static or decrease over time. However, little work has been done on the relationship between needs and actual income changes at older ages in Singapore. Most analyses of elderly economic well-being have used cross-sectional data. Unfortunately these data do not allow for individual-level comparisons of changes in economic well-being over time. As shown in Table 5, there is substantial variation over time in actual income reported by elderly Singaporeans; 20% of elderly respondents reported a decrease in income whereas 32% reported an increase in income level. A total of 48% of respondents reported no change in income over the four year time period. These shifts in actual income levels are correlated with changes in marital status, employment status, and living arrangements of the elderly. [For a detailed analysis of the determinants of these changes please see Chan, Hermalin, and Ofstedal 2001]. These results suggest the need for specific policies to cater to certain sub-groups of elderly persons, e.g., widowed or retired elderly. As such, blanket policies that refer to the elderly in general will be of limited success unless target populations are identified and their concerns addressed.

Table 5 Level and Change in Income: Singapore, 1995-1999

Monthly individual income in 1995 ^a	Change in Income			Total	Income Level	
	Decrease	Same	Increase		1995	1999
< \$500	--	62.8	37.1	100	52.0	46.9
\$500-999	37.3	35.6	27.2	100	30.5	27.6
\$1,000-1,499	48.0	21.4	30.6	100	11.0	13.2
\$1,500-1,999	57.5	21.3	21.3	100	2.6	5.4
\$2,000+	50.7	49.3	--	100	4.0	6.9
Total	20.1	48.4	31.5	100	100.0	100.0

Chi-square=539.04 (df=8), p< 0.001

Source: Chan, A., Ofstedal, MB, and A. I. Hermalin. 2001. Changes in Subjective and Objective Measures of Economic Well-Being and Their Interrelationship Among the Elderly in Singapore and Taiwan. Working Draft. National University of Singapore and University of Michigan.

Economic well being has objective and subjective components, e.g., elderly with similar actual income levels may perceive their income to be inadequate due to large financial or familial commitments. One possible measure of economic “need” is the *perception* of income adequacy. Table 6 compares levels of perceived income adequacy reported in 1995 by respondents aged 55 and above at that time, with levels of perceived adequacy reported by the same individuals four years later. Of those respondents reporting enough money left over in 1995, 72% reported a worsening of perceived adequacy in 1999. Of those respondents that perceived much difficulty with income adequacy, 91% reported an improved status by 1999. These results show a substantial change in levels of perceived income adequacy over time which may reflect changes in levels of need.

Table 6 Changing Levels of Perceived Income Adequacy Between 1995 and 1999

Level in 1995	Change in Adequacy			Total	Perceived Adequacy	
	Better	Same	Worse		1995	1999
Enough with money left over	---	28.0	72.0	100.0	10.5	21.0
Just enough, no difficulty	21.0	63.2	15.8	100.0	79.9	61.8
Some difficulty	68.2	26.7	5.2	100.0	7.8	14.7
Much difficulty	90.6	9.4	---	100.0	1.9	2.5
Total	24.0	55.7	20.6	100.0	100.0	100.0

Source: Chan, A., Ofstedal, MB, and A. I. Hermalin. 2001. Changes in Subjective and Objective Measures of Economic Well-Being and Their Interrelationship Among the Elderly in Singapore and Taiwan. Working Draft. National University of Singapore and University of Michigan.

The hypothesis that economic needs of the elderly change over time is further supported by the finding that perceived and actual income levels are not highly correlated (see Table 7).

Table 7 Association Between Change in Actual Income and Change in Perceived Income Adequacy: Singapore, 1995-1999

Change in income between 1995 and 1999	Change in Perceived Adequacy			Total
	Better	Same	Worse	
Increase	31.4	53.1	15.2	100.0
Same	21.7	58.7	19.5	100.0
Decrease	16.7	54.2	29.2	100.0
Total	23.8	55.0	20.2	100.0

Chi-square=46.1 (df=4), $p < 0.0001$

Source: Chan, A., Ofstedal, MB, and A. I. Hermalin. 2001. Changes in Subjective and Objective Measures of Economic Well-Being and Their Interrelationship Among the Elderly in Singapore and Taiwan. Working Draft. National University of Singapore and University of Michigan.

Among elderly who experienced an actual increase in income between 1995 and 1999, only one-third reported an increase in perceived income adequacy. In fact, 15% of elderly reported a decrease in perceived income adequacy. For those elderly whose actual income level remained the same, 22% reported an increase in perceived adequacy, and 20% reported a worsening of perceived income adequacy. Finally, among those elderly who experienced a decrease in actual income over the time period, 17% reported an increase in perceived income adequacy, and 54% reported that their perceived income adequacy remained stable.

There are several possible explanations for this lack of correlation between perceived adequacy and actual income. A change in living arrangements could mitigate the relationship between actual income levels and perceived income adequacy. For example, the transition into a larger household could result in fewer of the elderly individual's needs being met.

There are several policy implications of these results. Firstly, the perception of income adequacy and changes in actual income are not highly correlated. Policy makers interested in facilitating financial planning for old age need to be sensitive to this disjuncture when interpreting data for policy planning purposes. Elderly who perceive income adequacy to have increased, may actually have experienced a drop in actual income. For example, elderly who retire and move in with children may experience a decrease in actual income, but receive transfers-in-kind from children to compensate.

Secondly, there is a great deal of instability in actual income levels over time for Singapore elderly. Our findings suggest that actual income levels vary substantially during old age. This is primarily an outcome of one's health needs, work status, education levels, and living arrangements. How each of these factors operate is still unclear but an understanding of the underlying mechanisms will allow policy planners to better predict which individuals are likely to experience declines in actual income. This allows better targeting of policies towards needy populations.

Section 5 Employment and Employability

Over the past few years, labor and skill shortages have driven government policy to recruit foreign talent. In addition, the Government has begun to emphasize the re-training of older workers. However, a large pool of older workers have not sought active reemployment (Shantakumar 1999). This shift towards realizing the potential of older workers is a recent trend. Singapore continues to have a mandatory retirement age that was raised from 60 to 62 on January 1st 1999 with the expectation of raising it to 67 years in the future. At present, employers tend to be hesitant about hiring older workers and this has led to public debates on this issue (Straits Times 16 July 1999). Among the current generation of elderly (aged 59 and above), 16% are employed.^{viii} Male elderly are more likely to be employed (28%) compared to female elderly (8%). The panel data shown in Table 8 reveal the sharp drop in number of elderly individuals employed over the survey period. This is a product of the mandatory retirement age of 60 applicable to this cohort. Recently, the Government has emphasized the importance of a shift in attitude among employers towards hiring older workers (Straits Times 16 July 1999). Job advertisements in Singapore newspapers tend to specify preferred ages which disadvantage older applicants. This runs counter to recent Government initiatives to keep older workers in the work force. As shown in Table 7, the percentage of unemployed older workers rose over the 1995 – 1999 period for both male and female elderly. This suggests a growing pool of elderly persons who would like to work if given the chance to do so.

Table 8 Employment Status of Elderly Singaporeans, 1995 and 1999

<i>Employment Status</i>	<i>Total (%) 55 & above (1995)</i>	<i>Total (%) 59 & above (1999)</i>
Total		
Employed	27.4	16.2
Unemployed	1.5	5.1
Economically inactive	71.1	78.6
Male		
Employed	44.3	27.8
Unemployed	1.8	4.9
Economically inactive	53.9	67.3
Female		
Employed	12.1	7.7
Unemployed	1.3	5.3
Economically inactive	86.6	87.0
Total (N)	4750	1981

Source: 1995 National Survey of Senior Citizens and Transitions in Health, Wealth, and Welfare of Elderly Singaporeans: 1995-1999

Among those elderly who continue to work, reasons for working include financial need, the need to remain active, and to prevent boredom (see Table 9). There are some ethnic differences in reasons given. Chinese elderly are most likely to cite feeling bored as a reason for continuing to work whereas Malay and Indian elderly are most likely to cite a feeling that they can still lead an active life. A quarter of the Chinese elderly sample report needing money as a reason for working, compared to 16% of Malays and 22% of Indians.

Table 9 Main Reason for Continuing Work After Retirement by Ethnicity, 1999

Reasons for working after retirement	Ethnic Group				Total
	CHINESE	MALAY	INDIAN	OTHER	
Need money for own and family expenses	26.6%	15.8%	22.2%	33.3%	25.1%
Need money for future financial security	7.1%	7.9%	11.1%		7.4%
Not enough support from children	6.0%	18.4%	11.1%	33.3%	8.0%
Saving for something specific	.4%				.3%
Feel that can still lead an active life	27.0%	36.8%	33.3%		28.3%
Interested in job	3.6%		5.6%		3.2%
Feel bored	28.6%	18.4%	11.1%	33.3%	26.4%
Others (specify)	.8%	2.6%	5.6%		1.3%
Total	252 100.0%	38 100.0%	18 100.0%	3 100.0%	311 100.0%

Source: Transitions in Health, Wealth, and Welfare of Elderly Singaporeans: 1995-1999

Section 6 Housing and Land Use Policies

Living arrangements of the elderly in Asia are often used as an indicator of elderly well being by researchers and policy makers. In early studies of living arrangements of the elderly, coresidence levels were used to make indirect evaluations of levels of family support of the elderly in Asia (Martin 1988). Since then, research has focused more on the “function” of the family as opposed to the “form” (Hermalin 1997). The understanding is that although levels of coresidence between elderly and adult children may decrease over time, intergenerational transfers across households may ensure that elderly well being does not decline. Singapore has one of the highest coresidence rates in Asia. In 1995, 86% of elderly with at least one adult child, live with at least one adult child (Chan 1997). This high coresidence rate is in part a function of availability of children with whom to live with, and a culture that stresses filial piety. In addition, high housing costs in Singapore make it more economical for adult children to coreside with older parents.

Government policies have also encouraged coresidence both as a moral obligation of adult children to older parents, and as an attractive financial arrangement. The Singapore Government has instituted a variety of tax and financial incentives such as tax reliefs and priority housing to adult children who live with, or nearby, elderly parents. In addition, the Government has recently introduced housing options for those elderly that choose to live alone or with a spouse only.

Currently, as shown in Table 10, 6% of elderly (aged 59 and above) live alone. Ten percent live with a spouse only. The large majority, 80% live with at least one adult child. However, these living arrangements are not static. During the period of old age (65 to ~79), elderly can live in a variety of living arrangements.

Table 10 Type of Living Arrangements for Respondents Aged 59 and Above in 1999

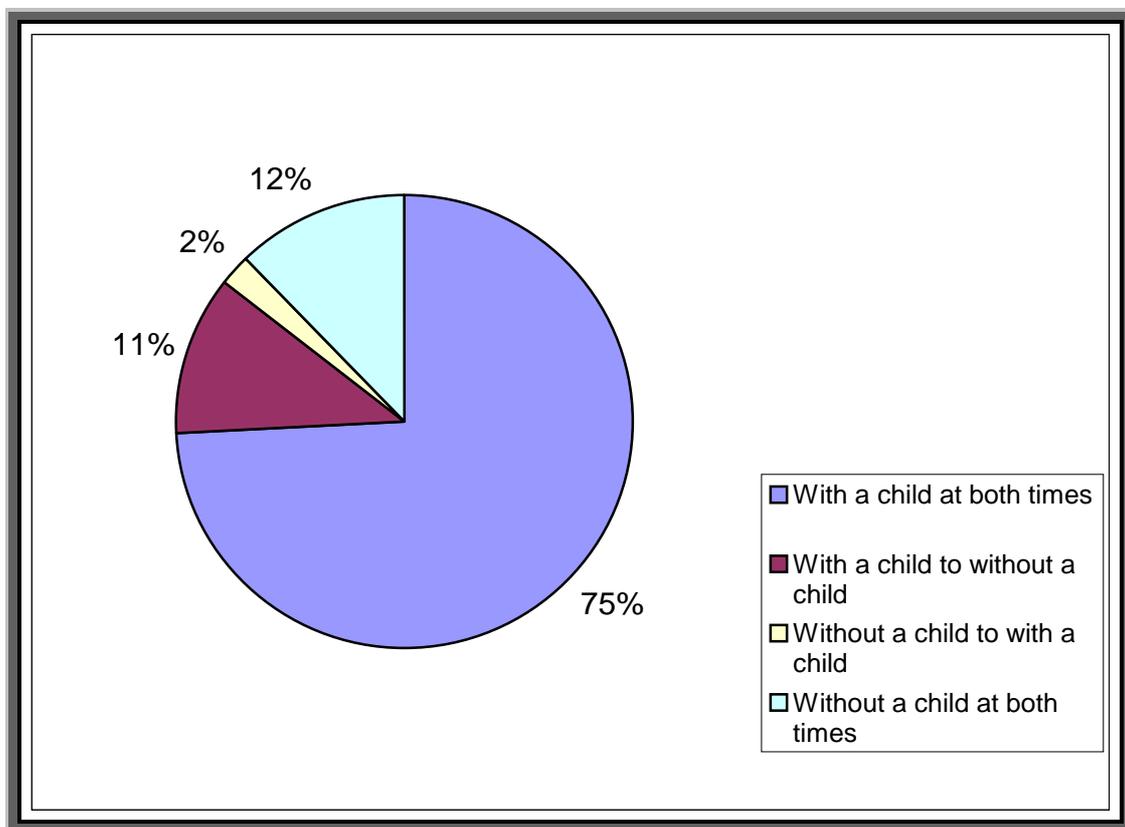
Living Arrangement of Senior Citizens in 1999	Age Categories for 1999			Total
	59 - 69	70 - 79	80+	
Alone	5.6%	7.5%	5.9%	6.2%
With Spouse only	10.9%	10.3%	7.5%	9.6%
With Spouse & Children but no Grandchildren	65.5%	44.8%	35.6%	50.5%
With Spouse, Children & Grandchildren	5.3%	15.6%	27.5%	15.1%
With Children and/or Grandchildren but no Spouse	8.3%	17.4%	19.3%	14.2%
Other Living Arrangements	4.3%	4.4%	4.3%	4.3%
Total	833	505	644	1982
	100.0%	100.0%	100.0%	100.0%

Source: Transitions in Health, Wealth, and Welfare of Elderly Singaporeans: 1995-1999

Figure 1 shows the amount of change that has occurred between 1995 and 1999 for this group of elderly respondents; 75% of respondents lived with an adult child at both

times, 2% transitioned to living with a child, and 11% transitioned to not living with a child. The later group most probably consists of respondents whose adult children have left home. In a companion paper, we investigate the determinants of these transitions in living arrangements to isolate some of the significant explanatory factors (Chan, Frankenberg, and Ofstedal 2001). We find that although co-residence is common, much of it may reflect a situation in which young adult children have not left yet home. As they age and leave school, co-residence becomes less common. In Singapore, the institution of two years of national service for male adults to be completed when they are 18 and 19 years old, later age at marriage, and increasing education levels for children have created a situation where adult children remain dependent on parents for longer periods of time. On average, males do not graduate from university until the age of 24 whereas females graduate at 22 years old (Chan, Frankenberg, and Ofstedal 2001).

Figure 1 Changes in Living Arrangements Between 1995 and 1999



Source: Chan, A., E. Frankenberg, and M.B. Ofstedal. 2001. "Stability and Change in Living Arrangements of the Elderly in Southeast Asia." Working Draft: National University of Singapore, RAND, and the University of Michigan.

Current Government policies promote "ageing in place." This policy underlies the recent efforts to retrofit older housing estates with elder-friendly features such as lifts at every floor, non-slip flooring in bathrooms, corridor railings, and wheelchair access (IMC 1999). However, it remains to be seen whether future cohorts of elderly Singaporeans will opt for privacy and prefer to live alone or with a spouse only.

Although modernization theory (Cowgill and Holmes 1972) would predict a decrease in coresidence rates as modernization occurs, Singapore's unique situation may dispel this theory. Consistent and far-reaching government programmes encouraging family support, in addition to high housing costs and lower marriage rates, may result in the maintenance of high coresidence levels.

Section 7 Health Care

One of the recommendations outlined in the recent Report of the Inter-Ministerial Committee on the Ageing Population (1999), was the need for more research on health issues concerning the Singapore population. Health care policies for the elderly have been receiving a lot of attention in the past year. The Government has been actively promoting awareness of health care issues among the elderly population in general. At the same time, elderly without health care insurance have been urged to open medical insurance (Medishield accounts) with aid from the Government. In December of 2000, the Government announced it would spend S\$110 million to pay basic Medishield premiums for two years for Singaporeans aged 61 to 69.^{ix} Approximately 65% of eligible elderly enrolled in the program (Straits Times 8 January 2001). With the inclusion of this group of elderly, approximately 90% of elderly Singaporeans between the ages of 61 and 69, now have health care benefits.

The Ministry of Community Development and Sports (MCDS) has recently began a five-year master plan for elder care which involves increased funding to Voluntary Work Organisations, funding a series of programmes for the elderly, and spending S\$15 million on a five-year public education programme. Funding will be provided to set up support services for frail elderly. These support services will be run out of three centers with the help of twelve case managers. These case managers will plan services and support for individual elderly, and provide support to care-givers of the elderly (Straits Times, 13 January 2001).

Policy making decisions regarding health care for the elderly need to take into account trends in health status and the prevalence of particular diseases. The recent 1995 National Survey of Senior Citizens showed that approximately 85% of elderly reported themselves to be in very good or good health. However, substantial changes in health status can occur over time as shown below. Table 11 shows the percentage distribution of self-reported health status among elderly Singaporeans in 1995 and 1999. In 1995, 85% of elderly reported themselves to be in good health whereas less than 1% reported poor health status. In 1999, the percentage reporting good health status decreased to 50%, and the percentage reporting poor health status increased to 13%.

Looking at the same individuals over time, for one-third of elderly respondents, health remained good (see Table 12). However, for over half the respondents (53%) health status deteriorated. A small percentage of elderly, 9%, reported an improvement in health status. These results show that significant changes in health status can occur in a four-year period.

Table 11 Health Status of Elderly Singaporeans, 1995 and 1999

Health Status	Total (%) 55 and above (1995)	Total (%) 59 and above (1999)
Good	85.2	50.4
Not too good	14.0	37.0
Poor	0.8	12.6
Total (%)	100.0	100.0
N	4750	1981

Source: 1995 National Survey of Senior Citizens
Transitions in Health, Wealth, and Welfare of Elderly Singaporeans: 1995-1999

Table 12 Change in Health Status of Respondents between 1995 and 1999

Change in Health Status	Percentage
Health remained good	32.3
Health improved	8.5
Health declined	52.8
Health remained poor	6.4
Total	100

Source: 1995 National Survey of Senior Citizens
Transitions in Health, Wealth, and Welfare of Elderly Singaporeans: 1995-1999

Research on the determinants of declines in health status reveals that being female elderly, Malay and Indian elderly, elderly with no formal education, those with lower monthly incomes, and elderly with little social support, are most likely to experience a decline in self-reported health status over time (Straughan, Chan, and Teo 2001).

In general, the most common ailment among the current cohort of Singaporean elderly is high blood pressure or hypertension. However, the prevalence of certain diseases appears to be correlated with age and ethnicity. As shown in Table 13, 42% of Chinese elderly suffer from hypertension. One-quarter, or 25%, suffer from arthritis. The percentage of Chinese elderly suffering from heart disease and glaucoma is relatively low but increases with age.

Table 13 Type of Ailments by Age Group for Chinese Elderly

Ethnic Group	Ailments of respondents	Age Categories for 1999			Total
		59 - 69	70 - 79	80+	
CHINESE	A stroke	5.3%	10.0%	7.4%	7.3%
	High blood pressure/hypertension	47.0%	41.3%	38.0%	42.2%
	Diabetes	9.1%	7.0%	7.8%	8.1%
	Cancer or a maglignant	1.7%	1.2%	2.1%	1.7%
	Chronic lung disease	2.5%	4.0%	4.7%	3.7%
	Heart ailments	3.8%	4.6%	7.0%	5.2%
	Arthritis or rheumatism	25.6%	25.2%	23.0%	24.5%
	Permant loss of memory	.6%	.9%	2.3%	1.3%
	Kidney problems	.2%	.6%	.4%	.4%
	Cataract or glaucoma	4.0%	5.2%	7.4%	5.6%
	Total	472	329	487	5.3%
	100.0%	100.0%	100.0%	47.0%	

Source: Transitions in Health, Wealth, and Welfare of Elderly Singaporeans: 1995-1999

In comparison, older Malay elderly (80+) are more likely compared to Chinese elderly to suffer from stroke, heart ailments, and cataracts or glaucoma (Table 14). Indian elderly are more likely, compared to Chinese and Malay elderly, to suffer permanent memory loss and stroke (Table 15).^x

Table 14 Type of Ailments by Age Group for Malay Elderly

Ethnic Group	Ailments of respondents	Age Categories for 1999			Total
		59 - 69	70 - 79	80+	
MALAY	A stroke	5.6%		11.4%	5.6%
	High blood pressure/hypertension	42.3%	50.0%	17.1%	38.2%
	Diabetes	5.6%	15.8%	5.7%	8.3%
	Cancer or a maglignant		2.6%		.7%
	Chronic lung disease	8.5%		5.7%	5.6%
	Heart ailments	4.2%	10.5%	17.1%	9.0%
	Arthritis or rheumatism	29.6%	13.2%	22.9%	23.6%
	Permant loss of memory			2.9%	.7%
	Cataract or glaucoma	4.2%	7.9%	17.1%	8.3%
	Total	71	38	35	144
		100.0%	100.0%	100.0%	100.0%

Source: Transitions in Health, Wealth, and Welfare of Elderly Singaporeans: 1995-1999

Table 15 Type of Ailments by Age Group for Indian Elderly

Ethnic Group	Ailments of respondents	Age Categories for 1999			Total
		59 - 69	70 - 79	80+	
INDIAN	A stroke	7.4%		20.0%	5.7%
	High blood pressure/hypertension	40.7%	47.6%		39.6%
	Diabetes	18.5%	19.0%		17.0%
	Cancer or a maglignant		4.8%		1.9%
	Chronic lung disease	3.7%			1.9%
	Heart ailments	11.1%			5.7%
	Arthritis or rheumatism	18.5%	23.8%	60.0%	24.5%
	Permant loss of memory			20.0%	1.9%
	Cataract or glaucoma		4.8%		1.9%
	Total	27	21	5	53
	100.0%	100.0%	100.0%	100.0%	

Source: Transitions in Health, Wealth, and Welfare of Elderly Singaporeans: 1995-1999

These ethnic differences need to be examined more closely in future research. Cultural factors may play a part in the interpretation of disease and in determining the utilization of health services. The experience of disease may differ across ethnic groups and influence health seeking behaviors.

Section 8 Conclusion

The dramatic shift in age structure that Singapore will experience over the next thirty years was set in motion in the 1970s by an equally dramatic decline in fertility levels. These changes in the age structure are affecting economic and social aspects of life for all Singaporeans among which include financial security, employment, living arrangements, and health care. This paper discusses Government policies pertaining to these areas, in combination with recently available data on the elderly for Singapore.

In terms of financial security, the current generation of elderly have minimal amounts (less than \$5,000) in their CPF accounts. Over time, the amount of actual income received by elderly varies significantly, as does the perception of income adequacy. This points to the need for policies that are sensitive to the changing financial needs of the elderly over time rather than viewing these needs as static. The longitudinal data also reveal changes in living arrangements over time although the changes are not as dramatic as those for income. A significant amount of this change in living arrangements is the result of adult children leaving the home.

With regards to employment among this current generation of elderly, the majority retired during the two waves of the survey. We do see, however, an increasing percentage of elderly persons who are not working but looking for work. This suggests that policies aimed at hiring older workers will be well received by the elderly themselves in future. The success of these policies, however, requires a change in mindset among many employers who retain ageist attitudes.

Finally, analyses of self-reported health status among this elderly cohort reveals large declines in health status that occurred between 1995 and 1999. Declines in health status are significantly correlated with a lack of formal education, lower income, and a lack of social support. These findings suggest sub-groups of elderly that require special attention with regards to health care.

In conclusion, findings from research using these longitudinal data reveal a substantial amount of change in elderly individual's economic status, employment status, living arrangements, and health status, over time. These results point to the need to develop policies that cater to specific sub-groups of elderly persons. The implementation of uniform policies across all ages of elderly runs the risk of neglecting needs of specific sub-groups over time. The formulation of age-specific policies requires an in-depth understanding of the processes that occur during old age. This includes understanding how individual processes interact with the family and society. This can be achieved through the analysis of longitudinal data that provides information on individual changes over time.

References

- Andrews, G. R. and A.I. Hermalin. (2000). 'Research directions in ageing in the Asia-Pacific region: past, present and future', in Phillips, D.R. (ed), (2000), *Ageing in the Asia-Pacific Region: Issues, Policies and Future Trends*, Routledge: London.
- Asher, M. (1996) 'Financing old age in Southeast Asia: an overview', *Southeast Asian Affairs*, 70-98.
- Central Provident Fund Board website at www.cpf.gov.sg.
- Chan, A., E. Frankenberg, and M.B. Ofstedal. (2001) 'Stability and change in living arrangements of the elderly in Southeast Asia', *Working Draft*, National University of Singapore, RAND, and University of Michigan.
- (1999) 'The social and economic consequences of ageing in Asia', *Southeast Asian Journal of Social Science*, Volume 27 (2): 1-8.
- (1997) 'An overview of the living arrangements and social support exchanges of older Singaporeans', *Asia-Pacific Population Journal*, Volume 12 (4): 35-50.
- Chang, Ming-Cheng. (1999) 'A longitudinal study on living arrangements of the elderly in Taiwan', in Chaonan Chen, Albert I. Hermalin, Sheng-cheng Hu, and James P. Smith (editors), *Emerging Social Economic Welfare Programs for Aging in Taiwan in a World Context*, Institute of Economics, Academia Sinica, Taipei, Taiwan, R.O.C..
- Choon, A.T. and L. Low. (1996) 'Social security: how Singapore does it', *Asia-Pacific Journal of Social Work*, 6(1): 97-119.
- Cowgill, Donald O. and L. D. Holmes (Eds). (1972) *Aging and Modernization*, New York: Appleton-Century-Crofts.
- Hermalin. (2000) 'Challenges to comparative research on intergenerational transfers', Comparative Study of the Elderly in Asia Research Report No. 00-56, Population Studies Center: University of Michigan.
- (1997) 'Drawing policy lessons for Asia from research on ageing', *Asia Pacific Population Journal*, 12(4): 89-102.
- Inter-Ministerial Committee on Ageing Report. (1999) Ministry of Community Development: Singapore.
- Jones, G. W. (2000) 'Human capital aspects of economic development: a comparative perspective in Asia', Paper presented at the IUSSP Conference on Age Structural Transitions and Policy Implications, November 8-10, Phuket, Thailand.
- Kinsella, K. (2000) 'Demographic dimensions of ageing in East and Southeast Asia', in Phillips, D.R. (ed). (2000), *Ageing in the Asia-Pacific Region: Issues, Policies and Future Trends*, Routledge: London.
- Knodel, John and Nibhon Debavalya. (1997) 'Living arrangements and support among the elderly in South-East Asia: an introduction', *Asia Pacific Population Journal*, 12(4):5-16.
- and Napaporn Chayovan. (1997) 'Family support and living arrangements of Thai elderly', *Asia Pacific Population Journal*, 12(4): 51-68.

Martin, Linda and Kevin Kinsella. (1994) 'Research on the demography of aging in developing countries', in Linda Martin and Samuel H. Preston (eds), *Demography of Aging*, Washington D.C.: National Academy Press.

Natividad, Josefina N. and Grace Cruz. (1997) 'Patterns in living arrangements and familial support for the elderly in the Philippines', *Asia Pacific Population Journal*, 12(4): 17-34.

Ofstedal, M.B., N. Chayovan, A. Chan, Y.L. Chuang, A. Perez, and A.I. Hermalin. *Forthcoming 2001*, 'Policies and programs pertaining to the welfare of the elderly', in A.I. Hermalin (Ed.), *The Well-Being of the Elderly in Asia: A Four-Country Comparative Study*, Ann Arbor, Michigan: University of Michigan Press.

-----, John Knodel and Napaporn Chayovan. (1999) 'Intergenerational support and gender: a comparison of four Asian countries', *Southeast Asian Journal of Social Science*, Volume 27 (2): 21-42.

Phillips, D.R. (2000) 'Ageing in the Asia-Pacific region: issues, policies and contexts', in Phillips, D.R. (ed). (2000), *Ageing in the Asia-Pacific Region: Issues, Policies and Future Trends*, Routledge: London.

Pool, I. (2000) 'Age-structural transitions and policy: frameworks', Paper presented at the IUSSP Conference on Age Structural Transitions and Policy Implications, November 8-10, Phuket, Thailand.

Rappa, Antonio. (1999) 'The politics of ageing: perspectives from state and society in Singapore', *Southeast Asian Journal of Social Science*, Volume 27 (2): 123-138.

Shantakumar, G. (1999) 'Ageing in the city-state context: perspectives from Singapore', *Ageing International*, Summer, pp. 46-60.

----- (1994) *The Aged Population in Singapore*, Singapore: Singapore National Printers.

Straits Times. 8/21/2000, 'More babies wanted: bonus for second and third', Singapore: Singapore Press Holdings.

Straughan, P., A. Chan, and P. Teo. (2001) 'The determinants of changes in perceived health among older Singaporeans', *Working Draft*: National University of Singapore.

Vasoo, Ngiam and Cheung. 'Singapore's ageing population: social challenges and responses', in Phillips, D.R. (ed), (2000), *Ageing in the Asia-Pacific Region: Issues, Policies and Future Trends*, Routledge: London.

World Bank. (1994) *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth*, Oxford University Press.

Notes

ⁱ However, familial support cannot be measured by coresidence levels alone (Hermalin 1997). We need an understanding of the intergenerational transfers that occur within the family in order to better judge whether the elderly are being taken care of. The rapidly changing age structures of many Asian nations require that we understand the complex changes that occur within families as economies develop.

ⁱⁱ Unless otherwise specified, dollar amounts reported are in Singapore dollars. At the time of writing, US\$1 equaled S\$1.8 (26 January 2001).

ⁱⁱⁱ The Government's review of the population planning policies began in the 1984 with the establishment of the Inter-Ministerial Population Committee (Vasoo, Ngiam, and Cheung 2000). At the same time, the Government began analyzing the impending shift in Singapore's age structure from a youthful population to a mature and aged population. As early as 1982, a high-level committee on Problems of the Aged was formed to address the long-term impact of population aging. Since then various policy recommendations have been implemented such as changing the provident fund contribution rates for older persons, legislation on minimum standards for old age homes, increasing elderly dependants' tax relief, and legislation on filial piety, i.e., the Parental Maintenance Act (Vasoo, Ngiam, and Cheung 2000). In June 1988, the National Advisory Council on the Aged (NACA) was formed to address aging issues in Singapore. Various policies have been implemented as a result of the NACA's recommendations, including an increase in the retirement age from 60 to 62 on January 1st 1999. Most recently in 1998, the Inter-Ministerial Committee on Aging Population was established to examine six main areas related to the elderly: employment and employability, housing and land use policies, financial security, social integration of the elderly, healthcare and cohesion and conflict in an ageing society.

^{iv} This research project was a collaborative effort between researchers at the National University of Singapore, the Ministry of Community Development and Sports (Singapore), and the Population Studies Center of the University of Michigan (USA). Funding for the project was provided by the National University of Singapore.

^v As Jones (2000) notes, the dependency ratio is a crude indicator. Increased productivity of the working age population could translate into a decline in "real" dependency, even as "demographic" dependency rises.

^{vi} Singapore citizens and permanent residents are eligible to be covered under the CPF scheme. For employees (both public and private) participation is mandatory. Overall, the contribution rate is 40% (a government target that was achieved in 1994); workers contribute 20% of their income and employers match this figure. Since 1994, self-employed individuals can elect to open a CPF account.

^{vii} The CPF is constantly evolving policies to cater to the needs of the population. The Government has also been providing cash top-ups to individuals. Recently, all Singapore citizens at least 21 years of age on December 31st 2000, and who had contributed at least S\$100 into their CPF accounts, were eligible to receive top-up payments of between S\$500 and S\$1,700. The actual amount received is dependent upon employment status, monthly salary, and type of housing (Straits Times 3rd January 2001).

^{viii} Employed status includes individuals that are currently holding a job, those that are holding a job but temporarily not working for various reasons, and individuals that are working in family business but are not getting paid.

^{ix} Premiums range from S\$96 a year for those aged 61 to 65, to S\$132 for elderly aged 66 to 70. Elderly who fail to qualify for coverage, because of pre-existing medical conditions, will receive the equivalent of the premium in the form of a Medisave top-up (Straits Times 7 January 2001).

^x Given the small sample size for Indians, these results need to be interpreted with caution.