

Gender Disparity and Older Women: the case of Singapore

Pundarik Mukhopadhaya
Macquarie University
Australia

G Shantakumar
Consultant Demographer
Singapore

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Abstract

In Singapore, older women (and men) are ‘marginalized’ by the global labour market. They have higher incidence of disability, smaller savings from short work histories, and lower incomes from less commensurate qualifications and skills. Widowhood increases their vulnerability and high family dependency which may not guarantee sustained welfare. Formal old age support by the State is a necessary condition for older women’s income security that could lessen past inequities and life-course shortcomings. This paper analyses the economic situation of older Singapore women and focuses on appropriate income security policy, based on two decades of socio-economic data (1980 to date). Universal suffrage and widespread education, and the Women’s Charter (1961) should have translated into women development, but there are gaps in women’s welfare through inadequate social security (which is employment-based). This exemplifies lack of concerted government effort amidst globalization policies manifested through labour market discrimination and segmented wage systems, unequal benefits and increasing old age disability, calling for long-term healthcare financing and management.

Key words: ageing, feminization, social security, Gini coefficient, welfare, health, education, disability.

JEL classification: I18, I28, I31, H53, H55

1. Introduction

Women development in most countries has been concerned with issues that covertly or overtly discriminated women: voting rights, universal education, parliamentary representation and work opportunities (UNDP, 1996). In Singapore, despite substantial socio-economic development, there is still lack of political will and commitment to treat the sexes equally, at times manifested through sexism, ageism, segmented labour markets, lack of social security, family dependency and insufficient long-term care finance for older men and women. Official agenda for women's welfare may exist, but has not resulted in implementable policies. Accepting equality in suffrage, education and work opportunities, the crucial issue is lack of income security for older women, despite existing care giving and healthcare through limited 'pension' systems, informal supports and public assistance to the needy old.

Income security issues confront any ageing population, intensified by feminization. Older women may be 'marginalized' as they lack income security from past inequities and endowments within segmented labour markets. For women, many comforts lost through younger ages may manifest in higher incidence of old-age disability. They have smaller employment savings from shorter work histories and lower incomes from less commensurate qualifications and skills. Widowhood increases their vulnerability and they tend to depend more on informal family supports. Despite existing filial norms, there is no guaranteed sustained welfare.

Formal old age supports (through income supports) by the State are a necessary condition for old age security in Singapore. These will lessen past inequities while life-course shortcomings may be mitigated through specific policy measures. This paper is organized as follows: *Section 2* discusses the demographics of gender, living arrangements, educational attainment and occupational distribution. *Section 3* considers the economic welfare through the distribution of income and addresses the causes of low incomes of older women. *Section 4* examines social security and social protection for older women with emphasis on the Central Provident Fund (CPF) system of Singapore. *Section 5* offers some possible policy prescriptions.

2. Singapore's Aged Population

For this essay we will follow the UN (1982a, 1982b, 1988) recommended 60+ age cut-off.¹

In 2006, there were 427.3 thousand persons in ages 60+, representing an average annual growth rate of 4.5 per cent from 1990 (246.9 thousand). Corresponding figures for the 65+ ages are 306.4 thousand from 164.1 thousand in 1990, growing at 5.4 per cent annually (Table 1).

Insert Table 1 here

There were 10.9 per cent of males aged 60+, compared to 12.7 per cent of females. Over 1980-2006, females aged 60+ have been proportionately higher than males; though it is an expected phenomenon from differential longevities between the sexes, the absolute increase is substantial for the female aged (231.2 thousand from 132.2 thousand during 1990-2006). The aged 65+ have certainly increased for both sexes, but female survivors have increased even more. It may be established that the increasing older population confirms the feminization of the ageing process.²

2.1 Women in an Ageing Society: The Demographics of Gender

2.1.1 Sex Ratio

In Singapore there were 1,787 thousand males of all ages as compared to 1,820 thousand females in 2006, which implies a sex ratio of 1018 females to 1000 males. We expect the sex ratio to increasingly reflect the predominance of women in the total population. Sex ratio of age groups 30+ for 2006 is summarized in Table 2:

Insert Table 2 here

Generally, after age 50, the sex ratio is in women's favour. There were 1,114.9 thousand women aged 30+ in 2006, compared to 1,065.9 thousand men (or a sex ratio of 1045 females per 1000 males). They comprised more than 61 per cent of all women in Singapore. As the emphasis of this study is older women and their income security, we focus the ages 30 onwards, since those aged below 30 are at the beginning of their careers with better educational qualifications. Important to note that more working females could also mean labour market segmentation by gender arising from their lower commensurate skills, working to women's disadvantage especially when family responsibilities increase. The increasing sex-ratio by age indicates that the process of feminization of the older ages (beyond 50) cannot be avoided.³

2.1.2 Marital Status

Table 3 presents the marital status distribution of women during 1980-2005. In 1980, 92.2 per cent of women in ages 30+ were "ever married" (that is, currently married, divorced, separated/widowed) and by 2005 had reduced to 87.2 per cent. This may be explained by increasing single hood status. The reduction in widowhood (not in absolute numbers) could be due to increasing longevity at older ages of both sexes (17.9 to 13.9 per cent were widowed in 1980 and 2005 respectively, in ages 30+).

Insert Table 3 here

Ever married women aged 30+ increased from 423 thousand to 932 thousand in the 25-year period, with more women remaining married. Increases in single hood status can also be seen in ages below 60, but certainly at ages below 40.⁴ Despite these proportionate changes of singles, the widowed and divorced/separated women cannot be ignored. They had increased from 91 to 159 thousand during 1980-2005.

The distribution of widows for 2005 by age-group can be visualized below (Table 4):

Insert Table 4 here

There were some 108.2 thousand widows aged 50+ in 2005, with the maximum in ages 70+ (64.0 thousand, or 56 per cent of widows aged 70+). These magnitudes will escalate with the maturation process for at least next three decades as women increase their life-expectancy through the epidemiological transition.

As observed in *Census* 2000 among ages 80+, widowhood incidence was near 80 per cent, while singles and divorced/separated comprised only 3 per cent. Beyond 60 years of age, the chances of widowhood would be higher, say 9 to 80 per cent from age groups 60-69 to 80+. It may be concluded that widowhood starts increasing from ages 50-59, thereafter continuing the uptrend.

It is important to note that in addition to widows, single and divorced women may constitute a policy focus area. Unlike the widows who were increasingly outside the labour force, single and divorced women may have been in the workforce, having a *modicum* of self-support.⁵ For old age security of women, the above trends underline the importance of adequate supports (finance and otherwise) for widowed and divorced women primarily, then for the single and married women. Most pertinent is the very high incidence of widowhood in older ages. These are the likely cohorts that may need support from the family, which the latter may be constrained to provide given the globalization trends and risks in the economy. Uncertain family incomes in times of global recession may also adversely impact the general population, but the vulnerability is higher for older women.

2.1.3 Housing and Households

In 2000, some 164 thousand households (or 18%) were *headed* by women, compared to 759 thousand male-headed households. Twenty years earlier, 93 thousand households had female heads against 417 thousand male-headed households (also 18%). Even in 1990, there were 17 per cent of households headed by women. It would seem that the proportion of women heading households has been virtually *unchanged*. That is, some 82 per cent of all households would be headed by males by virtue of their incomes and traditional roles. It is probable that this share for women will increase through population ageing in future years. In the absence of relevant data we assume that female heads have *very little* control over household resources as well as equity in their homes and this extent is about 18 percent only. This shows that extent of intra-household income inequality is quite high and there has been virtually no change in this over two decades.⁶

The distribution of households (for all ages) by dwelling type and headship does not vary much between the sexes, as seen below (Table 5):

Insert Table 5 here

Female headships have increased for HDB/JTC flats especially for 3+ room types, with a corresponding decline of 1/2- room flats.⁷ In 2000, for the latter category, female-headed households exceeded male-headed households in proportionate terms. Very likely, these lower-priced apartments may house singles, widowed and even divorced/separated older women, thus enhancing affordable shelter and living arrangements. Income security for these dwellers must be determined, apart from the availability of home equity.

Data on females by headship and tenancy status for ages 40+ may provide clues on home equity status of older women (Table 6).

Insert Table 6 here

A dwelling can be “owned” solely by one or more related persons. Joint ownership by married couples is most common, as reflected by 92.1 per cent for ages 40-59, declining to 87.2 per cent for ages 60+. Cohort differences must be taken into reckoning, however. The important statistic is the *increasing* incidence with age of both rented and other forms of tenancy, some 12.8 per cent for ages 60+ compared to 7.9 per cent for ages 40-59. In the absence of detailed data, it may be speculated that at older ages, some women would be in dwellings that were not “owned” but rented or provided for. This situation may last for the next two decades, when younger women gain universal ownership status eventually.

A simple conclusion arises: female headships are prominent for lower-priced households in most cases, and it is probable that many of these women may be older widows, single or divorced/separated. Of course, female headships can also be discerned for upper-tier dwelling types such as private flats, condominiums and landed properties. Such women may have the resources to share living arrangements with their extended families. Population data by dwelling type, age-group and female headed households may provide further pointers as to women’s family status:

With increasing age, women-headed households would increase, especially at ages 60+, whatever the dwelling type. For the lower-end of HDB housing (1-3 room flats), increasing predominance of women heading the households can only be explained by increasing widowhood and legacy from spouses. For upper-end housing (larger public flats and non-HDB private homes, including condominiums and landed properties), the explanation may be found in legacies of higher income families. For lower income families, including downgrading for some, more older women have home equity only through HDB dwellings. The latter constituted around 46 per cent in ages 60+, while it was 42 per cent for ages 40-59. Female household heads also increased from 11.8 to 22.8 per cent through the ages 40 to 60+, for all types of dwellings.

2.2 Educational Attainment of Women

Table 7 provides age-sex segregated data on educational attainment (i.e., highest educational level attained) for 1990, 2000 and 2005. The analysis covers ages 40+ only. The following trends may be inferred:

- (i) Educational attainment between men and women in ages below 60 and 60+ differ considerably and is a historical continuation of past trends;
- (ii) The period 1990-2005 has witnessed increasing higher educational attainment for both sexes;
- (iii) Attainment rates (in percentage) for the “below secondary level” (which includes persons *without* any qualification at all) escalate with age, reaching rather high levels by older ages: this is a historical continuation of past lower attainment levels among women;
- (iv) At ages below 40, the attainment rates for both sexes are similar for secondary and upper secondary levels during 1990-2005, but males were proportionately better educated than females, at all ages;
- (v) For ages 60+, 87.3 per cent of females had a “below secondary” qualification in 2005, compared to 96.6 per cent in 1990. For males, 74.2 and 90.3 percent were in this category, reinforcing earlier observations of lower-educated older persons, especially females;
- (vi) “Below secondary” qualified females in ages 50-59 made up 90.2 per cent in 1990, reducing to 60.3 per cent by 2005. For males, corresponding figures would be 79.2 and 49.5 per cent;
- (vii) Attainment of polytechnic and university qualifications for ages 60+ was 0.4 per cent in 1990 for females, increasing to 3.4 per cent by 2005. Corresponding figures for males are 1.7 and 9.1 percent. These disparities are historical.

Insert Table 7 here

Though attainment levels have improved with cohort attrition (here 15 years), there is still a considerable number of females *without* a secondary education, which is a desired qualification for skilled workers in the new economy. No doubt, male attainment rates are much better, but higher female longevity would ensure (not assure) lack of recognizable skills and commensurate incomes of women. Policy makers in Singapore aim to develop an efficiency based system⁸ and to create equal opportunities, irrespective of gender. The objective is to improve the income level of the overall population through educational development; however, there is a lack of specific target group policies.⁹

Meanwhile, cohorts aged 40-59 who have higher attainment levels may have to be motivated through continuing education and upgrading of skills to ensure their relevance in the present labour market, for males and critically for females. All the more, women below ages 60 must be “empowered” through enrichment and skill-enhancement programmes at the state’s expense, alongside their male counterparts. Such an approach will boost labour participation rates for women, especially when male participation rates at older ages have been observed to decline (as in many developed economies, including Singapore).¹⁰

Despite the ages 40-49 having better attainments in 2005, 38.9 per cent of females (working and non-working) have only “below secondary” qualifications. This age group is still vulnerable to vagaries of the market economy and may face retrenchment in the first instance. Those who had bettered their education levels may fare only slightly better, but will also face *mismatches* in the labour sector within a weak economy.

3. Economic Welfare Scenario

3.1 Income Distribution

This section analyses changes in economic welfare of older women in Singapore. The welfare economics literature incorporates both income growth and changes in income distribution as part of the welfare consideration. In this context, let us discuss first the distribution of personal incomes. Incomes from work relate to paid employment and self-employment and may exclude other forms of non-work incomes. In the 1990 *Census*, sources of income were enumerated, but the 2000 *Census* and 2005 *General Household Survey* considered only gross monthly income from work during the ‘last’ month (as reference period), *plus* bonus incomes for the last 12 months. Thus, income from work is an aggregate of both, *averaged* by month.^{11, 12}

The average monthly income in 2005 was S\$2136 per person age 60+, declining to S\$1865 at 65+. Males obtained better incomes than females, irrespective of age. Older women averaged incomes below the national average, while older males far exceeded it. Gender, skill and educational attainment differentials may be responsible. Nevertheless, the declining incomes over the ageing years for older workers are manifest for both sexes. Differentials in incomes may also be due to skill and time on the job, besides age-based employment policies (Mukhopadhaya, 2003b).

Insert Table 8 here

The income distribution for various age groups of 2005 is presented in Figure 1. For males aged 60+, 29 percent earned below S\$1000 per month, while 35.9 percent earned between S\$1000 and S\$2000 per month; 50.5 percent female aged 60+ earned below S\$1000 per month and 29.6 percent earned between S\$ 1000 and S\$ 2000 per month. At ages 65+, the respective income groups constituted some 37.0 and 34.6 percent for males and 60.0 and 23.3 percent for females. That is, 60 percent males and 80 percent females in ages 60+ earned below S\$2000 per month, while 71 percent males and 83 percent females did so in ages 65+.¹³ Thus, it is clear that in older ages with respect to income, males are better positioned than women (at least in the lowest income bracket) and the situation of the older women worsens with increases in age.

Insert Figure 1 here

Table 9 below presents the changes in income distribution over the period 1990-2005. Over the 15 years, there is literally no decrease in the share of older women with incomes below S\$1000 while for males there is a 45 percent decrease¹⁴. It is clear that the improvement observed for males is due to the sex bias of increasing incomes rather than market shifts to accommodate older workers, amidst erstwhile labour shortages.

Insert Table 9 here

There is an improvement in nominal incomes during the last decade, as more aged workers moved up the income ladder, reducing the proportions in lower income brackets. The improving income distribution (although higher income brackets may be related to better-qualified older workers in 2000 and 2005 than in 1990) may also include workers with new skills and the tight labour market showing through effective labour demand. Any lag noticeable for older female workers could be from their shorter work history or lack of commensurate skills.

It can be noted from Table 10 that the nominal income of women in general increased over 1990-2005 and the percentage per annum change has been more than of their male counterparts with the exception for older women. Also the increase in nominal income, although quite prominent at the younger ages, is minimal at the older ages, particularly for females. It is clear from Table 9 and Figure 2 that the Lorenz curve of older women in 2000 is above that of the older women of 1990. However, the curves are not very distinctly apart and are drawn from the grouped data. Thus, one cannot infer with certainty¹⁵ that for any increasingly concave utility function the older women in 2000 were better-off compared to those in 1990 (the real income increase for women aged 60-64 is 1.08% while that of males is 2.60% and there is a decrease in income for women over age 65+). Most noticeably, the Lorenz curve of 2005 lies below that of 2000 at many points (although completely above those at 1990) indicating a possible worsening off for the older women during 2000-2005 in terms of economic welfare.¹⁶

Insert Table 10 here

Income inequality can be introspected through Gini coefficients which are presented in Table 11.¹⁷ For the national level, considering the entire workforce in ages 15+, the Gini coefficients range around 0.4. This is slightly below the half-way level in the Gini scale of 0 to 1; and its distance from 0 is considerable. Male Gini (of 0.410) is slightly higher than the national Gini level, and would indicate a higher inequality in incomes, whereas for females it is just lower than the national level (0.395). For the latter, it is more than probable that occupational incomes are more homogenous across the national workforce, mainly from lower educational attainment in the past for older women workers, their exit and re-entry from/into the workforce and their additional homemaker responsibilities. The younger women may have fared better over the years on account of their increasingly better educational attainments, but this will be less reflected in present Gini ratios, thereby showing more equal incomes as per talent or skill level. Increasing heterogeneity

in occupational structures that may warrant differential wage structures would increase the Gini coefficient, as symbolized by the male Gini at the national level.

Insert Figure 2 here

Ages 55–59 show high income inequalities for women compared to national and male Gini levels. It is probable that women in these ages could have differential skill endowments attracting competitive wages (incomes). For the older ages (60+), both sexes have experienced higher Gini when compared to the national Gini, signaling greater heterogeneity in skills composition among older workers. It has been observed before that older persons had less than commensurate educational attainments, while a few (both sexes) would possess the requisite skills and this is reflected in the higher Gini value.

For ages 65+, the situation differs from ages 60+, suggesting that the age-group 60–64 may comprise better-qualified persons (males more than females). Here, the combined Gini (of 0.478) is higher than for each gender Gini (male 0.469, female 0.476). This indicates that the within-gender inequality is also quite high for this age group. Women aged 65+ are even more heterogeneous in skills/income composition, resulting in this high Gini.

Insert Table 11 here

Most income differentials by age and gender may be explained through educational-occupational and skills attainment levels. The restructured economy of the 1990s required a technical and engineering bias to reduce labour-intensive manufacturing industries. Higher education as well as technical / vocational education attracted better remuneration, benefiting both sexes.¹⁸ Lower-qualified female workers were preoccupied with occupations that did not command premiums in the labour market, especially in production-related vocations and the services. These differences might have diminished through age, as older workers of both sexes had minimal or no qualifications, generally not commensurate with market demand, depressing or keeping wages stagnant. Homogenous skills at *both ends* of the educational scale would tend to reduce income inequalities but when the better-educated workers experienced higher demand, the income gap will widen. This has been happening in the Singapore economy since the late 1980s when restructuring was first mooted and the process continues.

Ageing progression also means increasing levels of inequalities as seen by the increasing Gini ratios. This would be true not only at present but also in the future, when changing technology may result in changes in generic abilities, while existing technologies and corresponding skills become redundant. This would necessitate appropriate management policies to address increasing inequalities, particularly between young and older workers, between older men and women and so forth. Continuous influx of immigrant skilled labour and professionals (about 30,000 annually by government policy, now increased further to meet effective and increasing demand) would exert

upward wage pressures, worsening the employment and income situation of older workers (starting from ages 40+) at present as well as in future.

Mukhopadhaya (2001) has explained the Gini differentials in terms of skills composition and highly varying incomes. Higher female labour force participation, especially among the higher educated, has certainly led to increasing income inequality among women, mostly in younger ages. There was a 13 percent increase in average income inequality (measured by the Gini) among female workers during the 1980-1990s, while for males this increase was only 0.5 percent. Reasons cited were: higher participation of women in lower-scale jobs, massive wage cuts during financial crises (1997 economic crisis, for instance) which reduced male income inequality compensating for higher inequality for females. Further, the equalization of the income gap was significant in higher occupational groups (where females had increased ten-fold). The male-female wage ratio is still lower than in many countries, but higher than for the UK, Japan, Australia and Canada. Two factors continue to exemplify female employment: their employment in male-dominated industries is low and female labour participation beyond 35 years is still low but has been rising slowly.

Age-wise income inequalities have been addressed in analyses of income distribution from the annual *Singapore Labour Force Surveys* (Mukhopadhaya, 2003c; Mukhopadhaya and Rao, 2002). The narrowing of inter-age income inequality has been traced to reducing age-premiums from an explicit /implicit flexi-wage system where earnings were not correlated with experience (age). This has reduced the seniority-wage system, further reducing inter-age inequalities. But, within-age-group income differentials would have remained from the past, due to skills heterogeneity among older workers. For the ages 50+, less educated people dominate with some moderation in recent years, while for ages 30–49, there is no significant increase in education levels, while the income distribution continues to be reasonably unequal.

By the end of the last century, average incomes of the tertiary-educated had declined to 2.4 times compared to 4.3 times in the 1970s, as measured by the age-premium. The gap between least educated and tertiary-educated continues to be maintained only through a reduction in relative mean income of the former. That is, presently one needs a higher qualification to get a job which only needed a lower attainment in the past. At this rate, the age-premiums of older workers are at *askance*, as their skills may no longer be relevant in a global economy.

The new economy will require increasingly higher skills which the older workers (even from ages 40+) may not possess. At the lowest unskilled scale, contract workers (from outside Singapore) with short employment passes (2 to 6 years) are recruited at lower but competitive wages. This source is unlikely to diminish in an expanding economy. At the higher end, a relentless talent search has attracted professionals and technicians on high remunerative terms, even through residence / citizenship status. Educational policies have not resulted in very high skills attainment of local workers in ages 40+, certainly of older workers in ages 60+ (who had no benefit of past colonial policies, if they ever existed). Since, policy allows workers at both ends of the wage

scale for both ends of the occupational range, income inequalities would increase, except during economic crises. Workers in their 40+ would join the older ones in their 50+ and 60+ ages in becoming unemployed, underemployed and unemployable. Newer work specifications must be defined to accommodate older and middle-aged workers of both sexes, even those with educational levels that may be just sufficient or inadequate. Besides computerization, other linguistic and numeric skills are expected, but national policies are wanting or inadequate.

Older workers (including the middle-aged displaced) must be accommodated through *affirmative* policy prescriptions. Retraining is one avenue, but costs must be borne by the State. A developmental *ethos* must nurture the habit of acquiring “continuous education” through the life cycle (see Kalirajan and Shantakumar, 1998). Even younger workers who may be relevant today will be obsolete tomorrow, unless they continuously upgrade their talents and skills. In the interim, workers from ages 40+ need positive directions and assistance through national policy to continue in employment. If not, inequalities may reach an unpalatable point, though government policies are expected to narrow the gaps through public measures of empowerment (education, training opportunities, subsidies in housing, health, transport, so on) for older and near-older workers. As there is no absolute social security, safety-nets and new measures for employment in services are imperative.

3.2 Hours Worked by Older Workers

The income distribution analyzed thus far is for persons with different workweek records: that is, older workers may not be able to contribute a full workweek (of 40 to 45 hours by international standards) and this may affect their incomes. Also, the market may not provide sufficient incentives and opportunities for older workers to contribute a full workweek, thereby depressing their incomes. Some older workers may actually prefer flexi-work arrangements, working part-time or in casual employment, or even piecework basis. These aspects are not captured in full by the *Census* enumeration, but the “number of hours worked” within a week may be used as a *proxy* measure of the workweek expended. In this analysis, the cut-off for the standard workweek is taken as 40–44 hours and the distributions are provided for workers aged 15+, 50+ and 60+ by sex (Table 12).¹⁹

The following summary statistics of average number of hours expended by the various age groups by sex are presented in Table 12:

Insert Table 12 here

At the national level, the average workweek recorded in the 2000 *Census* was nearly 50 hours. The ages 50–59 also recorded such levels, generally high for a near-aged or ageing working population. It may be noted that at these ages and beyond, the Singapore labour system may only encourage a productive labour force, as these figures attest. Workers who have opted out or retired at these ages may be doing so for a variety

of reasons, one of which may be a reaction to expectations of constant higher productivity, but remains unproven by published data. At 60+ ages, there is a slight decline in the workweek expended: 46.8 for 60+ and 46.5 hours for 65+, but these only differ by 1.4 and 1.7 weekly hours from the national workweek.

Sex-differentials are expected to arise for many reasons, as women must shoulder dual (even multiple) roles in the society. Nevertheless, women are also highly productive in paid employment, despite their household responsibilities, which must be appreciated and rewarded through other perks in life but translatable in tangible terms (like monetary compensation, quality time for family, leisure and health care financing). In general, at the national level, males contribute a higher average workweek (49.9 hours) than women (45.7 hours), the difference (4.2 hours per week) perhaps related to their respective roles and responsibilities. Such a differential could also affect incomes, but women have taken it in their stride.

At ages 50–59, the near aged, this differential ranges about 3.9 to 4.5 hours per week, tallying with that of the national workforce. The differential reduces to 3.6 hours at ages 60+ and 3.2 hours at ages 65+. It is our contention that these are suitable differences, but on a yearly basis may add up in economic terms (about 166.4 and 187.2 hours respectively for 52 weeks). At older ages, it is known that women have higher semi and full disability levels and these may hamper the workweek (Shantakumar, 1994); there is international evidence on this for developed and developing societies, in that hormonal imbalances at old age may affect many women making them vulnerable to higher disability.²⁰ The larger workweek sex-differential at old-old ages is understandable.²¹

The distribution of workers according to the workweek norm adopted here can be visualized further from the following reconstruction (Table 13).

Insert Table 13 here

Irrespective of age or gender, most of the working population expends an average workweek of 40–49 hours. At the national level, 59.1 percent contribute within this norm, while 32.6 percent work above 50 hours per week. By ages 50–59, this reduces slightly to 53.9–55.1 percent, since more are working below 40 hours. At ages 60+, there is an increase in persons working below 40 hours, as expected of an ageing workforce: corresponding figures for males and females respectively are 8.0 and 10.9 percent, and 17.3 and 18.6 percent for ages 50–59. That is, at older ages, part-time or flexi work arrangements may be progressively preferred, even truer for older females. By ages 60+, such preferences are high (19.5, 22.9 and 23.8 percent respectively for ages 60+, 65+ and 70+), and this is very acute for females (27.1, 31.6 and 35.1 percent for the respective age groups) compared to males (17.0, 20.4 and 20.7 percent). Despite reductions in workweek with age progression, those working beyond 50 hours remain more or less constant (for 60+, note 32.9 percent for males and 21.7 percent for females, compared to the national figures of 39.9 and 21.7 hours). Any reduction below the norm over the

older ages must be a manifestation of a preference for a work-week of less than full time, by choice or imposition. This could partly explain lower incomes for older women.²²

The evidence on the workweek for older ages may provide an indication on worker productivity, only in terms of hours worked and unrelated to incomes. For males working below 30 hours per week, only 15.7 percent were aged 60+ and 8.5 percent aged 65+. Even for females at these ages, only 6.2 and 2.8 percent worked below 30 hours per week.²³ In general, older aged males seem to work less weekly hours (judging from relatively high proportionate workers) than females. That females were originally believed to work a smaller workweek at older ages may be “untrue” or remains moot. For the average workweek of 40–44 hours, there were only 4.3 percent of males aged 60+, compared to 1.7 percent for females. A workweek of more than 45 or 50 hours can also be discerned at older ages. It would seem, therefore, that older workers have not slackened in their workweek, and gender is no exception.²⁴

3.3 Health Factors and Health Care

Mortality and Longevity: Female mortality is generally lower than for men and higher longevity is the norm for older women. By 2001, life expectancy at birth for females had reached 80.4 years when compared to males (76.4 years). Thus, the life span will *exceed* the life expectancy at birth. In 2001, the average life expectancy for both sexes taken together at age 65 was 17.2 *additional* years, which translates to an average of 82.2 years of life span.²⁵

Life expectancy at Ages 60 and 65: For 1999, the life expectancy for females at age 60 was 24.4 years and 20.7 years for males. By age 65, their respective life expectancies were 20.7 and 17.3 years. Potentially, males would live some 81 years and females some 84 years on average, had they lived to 60. If they lived to 65, the life span would be 82 and 86 years respectively. Additional years of life imply longer retirement years from age 60 or 62, according to current retirement norms. Longer retirement is an extra dependency burden on old age security, even more so for longer-living women. Available life-years should be translated into *productive* life or productive ageing, through work innovations and policies.

WHO (1999) estimates for Singapore that “health expectancy” would be 71.2 years for women, and 67.4 years for men, compared to “life expectancy” of 80.8 and 75.1 years. Number of years lived in “disability” would be 9.6 and 7.7 years respectively (or 11.8 and 10.2 % of life spans). This would imply the higher need for long term care for women. By year 2000, disability years had reached 11.3 and 8.6 years. That is, in 1999-2000, an increase of 1.7 and 0.9 years of disability has been recorded.

From the ‘working life’ table (only available for 1987), it is concluded that 11.8 *more working years* could be expected for females aged 55-59 and 11.2 years for males. By ages 60-64, respective extra working life would be 12.3 and 10.6 years. This quantum would have improved further with decreasing mortality and higher labour participation of women. This is a strong reason for *extending* one’s work life into their

60s or even 70s, or to keep retirement open-ended instead of imposing mandatory retirement at 62 (or 65/67 in future). Working life tables imply a *productive* contribution by the aged workforce.

Important to note that the public hospital admission rates for ages 50-59 during 1980-2005 have declined, especially for females, however an increase at ages 60+ has been recorded. After age 70, there is a perceptible increase in hospital admissions for women, since “feminization” of ageing is *correlated* with increasing disability rates. Hospital patient statistics indicate *increasing incidence* of degenerative diseases among the elderly, and increasingly of women: in terms of higher proportion discharged, increases in hospital bed days (but length of stay may have declined).

Increasing government operating expenditure on health is also evident: S\$40 per person in 1970 to S\$191 by 2005 in real terms. Proportionate share of *operating* expenditure on health has declined (9.5 to 6.2 % of total *government operating expenditure* during 1970-2005), from cost-cutting, lower subsidies, increased ‘self-responsibility’ for health care, and new health care policies. This is matched by higher private health consumption expenditure on medical services (2.4 to 6.0 per cent) during 1970-2005. Both are correlated, underlying self-financing through Medisave, Medishield (both personally-financed) and Medifund (government aid for absolute needy). Government provision is for cost-effective public health expenditure intervention on a social product basis.

Self-assessment of *functional (dis)ability* determines ambulatory status of the older population (in *Census*, 1990 ambulatory status was enumerated for persons aged 60+ while *Census*, 2000 enumerated this only for ages 65+). The semi-ambulatory and ambulatory category as a whole comprised 11.2 % (out of that 6.1% is women) of the 65+ aged (up from 8.9% in 1990, of which 4.4% was women). Any uptrend is a manifestation of an epidemiological transition towards higher degenerative disease regimes that may result in increased disability rates. Since the semi-ambulant had some functionality, the critical rate is *non-ambulatory* incidence: 2.1% in 1990, increasing to 3.3 % by 2000 for the 65+ aged, and may reach 4.5% in 2010, and 5.7% in 2020 and more than 60 percent of the total is women.²⁶

Mobility status data (from Censuses 1990 and 2000) provides the following observations for the ages 65+:

- Female disabilities are higher in incidence than for men, even within the same ages;
- Frail ages increase disability rates progressively (for women) compared to males;
- Age-related disabilities must be addressed earlier in the life cycle through preventive care.
- Widowhood, frailty and disability at older ages(a triple jeopardy) will reduce women’s quality of life, thereby increasing their dependency burden when income security is inadequate or absent.

Frail ages and non-or semi-ambulatory status of older women *may* encourage filial responsibility by extended families. Increasingly, the chronically disabled may become institutionalized. This cost factor can be considerable, given the reduction of government-run aged homes. “Older women around the world are more likely than men to suffer from certain chronic health conditions such as osteoporosis, arthritis, hypertension, and diabetes” (Garner and Mercer, 1989: 38). They are “...more likely to be bedfast or unable to perform essential self-care tasks or activities of daily living and could only infrequently leave their homes because of their immobility” (*Op cit*: 39). Singapore’s older women are also expected to undergo such transitions, and long-term care is not guaranteed, unless there is an insurance policy or public assistance. Their reliance on children is total.

Of the non-ambulant, 36.9% lived with their spouses, and 10.2% had no children living alongside. Some children were working members (24.4%). Among the non-ambulant, 53.7% lived with children only, mostly working members, a situation not very different from the semi-ambulant. The chances of female widowed elderly, certainly the disabled (semi and non-ambulant), living with working children are higher than for males, increasing with disability incidence. Thus elderly women are doubly jeopardized: widowhood and increasing disability with frailty. At the worst, old age homes for the disabled may be the last refuge for women and men during chronic illness requiring long term care and medical interventions.

In 2002, the Singapore government introduced an ‘affordable’ severe disability insurance scheme to provide insurance coverage to elderly Singaporeans for long term care. It pays a monthly cash of S\$300 (for a maximum period of 60 months), provided the insurance applies on the basis of yearly premiums from Medisave or other sources (called Eldershield). In reality, it is an opt-out scheme as a personal choice, and those without sufficient Medisave savings may be unable to afford it. “Disability” under the Eldershield scheme is defined as not being able to perform 3 or more activities of daily living (washing, dressing, feeding, toileting, mobility, transferring). Interim Disability Assistance Programme for Elderly (IDAPE) is another government assistance scheme to provide financial assistance to needy citizens who become disabled and need help to cope with their care expenses. IDAPE covers Singapore citizens who become disabled and need help to cope with their long-term care expenses, covering those who were not eligible to join the ElderShield when it was launched for ages 70+, or were aged 40-69 and were suffering from pre-existing disabilities. The National Trades Union Congress (NTUC, a quasi government organization in Singapore) is the appointed administrator. There is no premium for IDAPE, as government bears the cost and cash pay out is S\$100-150 per month (for up to 60 months) and depends on claimant’s per capita monthly household income. The Health Minister Mr Khaw Boon Wan announced that by the end of 2007, the ElderShield will be revamped – the coverage will increase from five years to six years and the pay out will be raised from S\$300 to S\$400 (with some increase in premium). Despite this gesture, the amount (even after an increase to S\$400) to the elderly widowed women in many cases may not be sufficient enough.

4. Social Security

It is believed that for a healthy economy the provision of social security is essential. Elson (1991) argues that failure to provide basic social security generates cost escalation which could generate multiplier repercussions onto other important economic variables. In the male-breadwinner model, benefits are directed to men and their families while a modest means-tested sum is provided for women in the absence of men²⁷ and in the universal-breadwinner model, benefits are provided universally to adults who actively participated in the labour force²⁸.

Many social security policies treat the family unit as a whole (thus women are entitled as wives or mothers) to deal with inter-family inequality where intra-family inequality is vastly neglected.²⁹ Earnings-related benefits such as old age pensions, although provided to an individual, are expected to provide for the family – thus women's access to this income is not assured. In a reform of the Canadian old age security system (Finance Canada, 1996), the basis of entitlement has changed from individual to joint income, with a promise of issuing a separate cheque to each spouse of half the amount. Some other countries (such as Britain, Australia, and New Zealand) provide individual entitlement to social security (healthcare). Although splitting of earnings-related pension credit helps married women, such splitting can never make up for the penalty women face due to labour market inequality and the penalty to earnings from unpaid and caring activities they are generally involved in (Joshi and Davies, 1992). There are further complexities in this family *versus* individual entitlement of social security benefits. Aslaksen and Koren's (1995) study on Norway indicates that under individualization of social security benefits, older women face greater loss of inherited earning-related pension rights from spouses which increases pension inequality among women. Nelson (1996) suggests an appropriate tax structure to tackle the problem of lone individual *versus* the nuclear family as the unit of policy analysis.³⁰

On the other hand State does not have unlimited amount of resources: developed countries with advanced, established and extensive social security programmes have started considering imposition of eligibility to accommodate fiscal pressures. East European countries are examples (Goldberg, 1991; Duggan, 1992, 1995). The middle income countries are also experiencing high fiscal pressure (Mesa-Lago, 1989). Low income countries did not establish any extensive programme. Singapore (considered a highly human-capitalised developed country with per capita annual national income exceeding thirty thousand US dollars per annum) does not have any specific social security policy as such for older women (and neither for men).

In Singapore, health care, pension (social security arrangements) and housing are managed through the Central Provident Fund (CPF) scheme (Asher and Shantakumar, 1996). This is a pro-family, defined contribution scheme where the individual's benefits are derived from total contributions accumulated *plus* the interest earned. This scheme started from 1955. A nomination scheme was introduced in 1957 to speed up payments to beneficiaries of deceased members. A law passed in 1980 to revoke nominations upon marriage by making married members to re-nominate aims to protect immediate members (eg, spouse and children). Among CPF members with nominations, family

members stand to inherit CPF savings in 98% of cases, and among CPF members without nominations, CPF savings are distributed to next-of-kin under the law of intestacy in Singapore.

4.1 Social Security or Social Protection?

Thus, the CPF as presently constituted is at best a basket of social security arrangements based on individual responsibility governed by legislation and rules. However, it offers only a *modicum* of social security when compared to systems in other industrialised nations, despite the latter being ‘touted’ as unsustainable in ageing regimes (OECD, 2002). Only gainful employment entitles a person to a CPF account, to which employers are expected to contribute a share.^{31 32} Over the years, this share has declined, mainly through government legislation and National Wages Council (NWC) guidelines to address high operating expenses of businesses.³³ Foreign workers and professionals (non-citizens), not work permit holders (for whom there is no CPF provision), do not contribute to CPF but may be eligible for contractual gratuities.³⁴ The new CPF rules allow employers to contribute CPF above a certain quantum thereby depriving lower income earners of potential CPF savings.

Large “leakages” for housing equity in the past, especially for public flats, have diminished total CPF savings for the average worker. Past contributory rates have yet to be restored.³⁵ Other leakages for approved investments, shares, medical care and annuities may erode the savings (actually balances) even further. The high CPF contributory rates have reduced the potential for private savings in the past, unless the mandatory CPF is considered as private savings. Over and above, the returns on the tax-exempt CPF contributions have been below expectations of long-term investment instruments, despite government guarantees, perhaps suggesting an implied indirect tax. Those who do not work at all will have no CPF savings; those with short work-histories (mostly women) will have far smaller CPF balances (not savings), after paying for mortgages, insurances, health care and so on. Married women may continue to utilize their CPF with spouses to purchase housing, thereby depleting their own savings for old age, despite the safeguards imposed by law. Past trends in educational attainment and economic activity do not show up in ‘healthy’ levels of CPF savings for women. The burden of old age for women is real and must be addressed sooner in government policies, despite filial responsibility being taken for granted.

Social protection and social security may sound synonymous but there may be a *subtle* distinction. Generally, social security is understood to follow norms in the developed world, where welfare systems are well established despite available informal family care. In these systems, citizens have a right to a social pension whether or not they had been economically active. Over and above this “minimal” or flat pension, a retiree would be entitled to occupational pensions and medical care according to eligibility. In general, social security in developed nations is redistributive and contributions may not exactly match benefits; that is, those who had not contributed or contributed a meagre portion would also receive pension benefits, especially women. Longer living women are expected to gain from such pension

schemes. In some cases, benefits are inflation-adjusted to ensure welfare gains. Also, these Pay-As-You-Go (PAYG) systems are so designed that the present workforce may be contributing to future generations. In advanced societies, total contributions from a smaller younger population may not match their own benefits on their retirement, and they would have subsidized more generous benefits for older generations, which may give rise to intergenerational conflict, since the tax base will shrink in future years. Thus, the PAYG social security systems are more comprehensive, covering unemployment benefits and assistance to the poorest of the poor, however meagre the benefits may be. In these systems, insurance premiums are prohibitive enough to keep very old women (and men) from having medical insurance. Basic social insurance is minimal catering to those who have no support at all. And the risk-pooling reduces the premiums.

When PAYG social security systems are non-existent, as in many developing countries, social protection is the last resort, and is couched in norms of “filial responsibility”. Changing economic structures may not encourage filial responsibility, unless there is a mutual transfer of services for care in many families. Therefore, the Singapore system is best described as a *social protection scheme* rather than social security: the mandatory-based CPF contributory scheme is for working citizens only, though top-ups are encouraged for non-CPF family members for medical expenses.

This is tantamount to saying that older persons (certainly the longer-living women) may be forced to seek family support systems in exchange for services to their children’s families.³⁶ If women had no CPF savings of their own, such dependence is total. For those who had shorter work-histories or had depleted their CPF savings for their families (including spouses’ medical care) may have very small savings to ‘bargain’ for care giving within their extended families.

Home equity may be the main incentive for women to bargain for care giving. However, whatever the asset, women are subject to higher risk of disabilities in old age, which begs the question as to their level of affordability and access to quality medical care. Thus, social protection may exist but it may be eroded by fluctuations in the global economy. Social protection can be strengthened through a flat pension or a special top-up savings account for women’s old age, irrespective of their past work status, in recognition of their services to family, home and the nation.³⁷ This may come from government finance, or from a special fund set up from “hiving off” some CPF profits, payable on a “needs” basis in old age.

4.2 CPF Balances and Membership

Analyses on social protection are based on CPF balances in members’ accounts, generally withdrawn at age 55 after purchasing a mandatory annuity policy from age 60 (or a property *in lieu*).³⁸ Limited published data on CPF balances provide analyses of age-sex savings levels during 1980-2005. These are not total savings from aggregate contributions, but balances *remaining* after approved leakages for housing, medical care, insurance, shares and so forth. Members may be active or inactive. By age 55, the balances would be accumulative of interest, dividends, profits and other returns (when a

second mortgage is taken, the previous partial withdrawal must be returned with prevailing interest), so as not to deplete CPF savings for old age. At age 55, most members would withdraw their balances after purchasing annuities as per legal provisions. Thus, by ages 55-59, the balances would have reached rock-bottom levels. Any balances in ages 55+ would reflect contributions (at reduced rates) from work incomes that may be less than for pre-retirement employment. These *caveats* have to be borne in mind when CPF balances are analyzed. Also, substantial withdrawals from existing accounts (including future loan repayments to Central Provident Fund Board (CPF Board)) for housing would reduce balances but this is considered as home equity for both the sexes. With universal home equity, CPF savings may be large for high-income earners. CPF savings also replicate the income distribution from which contributions had been made.

The distribution of CPF members and their balances by age group and sex are presented in Table 14.

Insert Table 14 here

About 48 per cent of female CPF members in ages 30-49 “own” 64.4 per cent of their total CPF balances. The older females (in ages 50+) account for only 27 per cent of the balances. Corresponding figures for males are 49.2 per cent and 66.3 per cent balances in ages 30-49; older males own 25.1 percent.³⁹ Only up to ages below 40, women’s CPF balances are expected to be equal or higher than for men; beyond age 40, the disparity between the sexes widens to the advantage of employed men. By ages 50-54, just prior to withdrawal, men had S\$12,752.8 million (S\$74,004.5 on average) as compared to S\$7,802.5 million (S\$52,209.0 on average) for women. These attest to the inequality of the sexes in terms of CPF savings for old age; if the withdrawn savings were intact on the death of the spouse, widowed women may benefit through adequate social security. In the absence of relevant information, it may be speculated that this may not be so, as savings may get depleted for high medical expenditure of both spouses (but critically for males, who may die earlier).⁴⁰

The figures in Table 14 reflect the current situation. It is observed from the 2006 *CPF Board Annual Report* that except for ages 30-39 and 60+, male CPF membership exceeds female membership by 1.2 times (in ages 40-44 and for ages 50-54); even at ages 55-59, it exceeds by 1.1 times. As about half the women in working ages are outside the labour force, these disparities reflect the larger number of working males than of females, and hence tend to reflect their accumulated CPF balances, which can be large. For instance, at ages 40-44, male CPF balances exceed that of females by 1.28 times, reaching 1.63 times by ages 50-54, and 1.65 times at ages 55-59 given the withdrawals at age 55 and over. At the older ages (60+), the disparity is 1.90 times in favour of males.

The older ages are the very stages where both males and females would be less qualified compared to younger persons: as age progressed, educational attainment would be lower, explaining declining CPF savings from lower incomes, even more so for females whose educational attainment is even lower. Thus, total CPF balances are a function of skills and educational background determining incomes. Given the lower work participation rates, women are certainly disadvantaged.

Average CPF balances may provide a better sense of the situation by sex, given the *caveat* that extremes will determine mean CPF savings. Since far fewer persons would own a large proportion of CPF savings arising from higher incomes (for both sexes), the average CPF balances derived here are reflective of an average individual's savings in the CPF. Females of all ages have registered average CPF savings of S\$4537 per head in 1980, in contrast to S\$35,548 in 2005, in nominal terms (which includes interest accrued so far). Male average CPF balances increased from S\$ 7630 to S\$42,960 during the same period.

Insert Figure 3 here

Average CPF balances for females are traced for each age-group for 1980-2005, as a proportion of total (male-female combined) average CPF balance in Figure 3. This shows both the increase in average balance for each age group (inflation rate does not pose a problem as the figures are in proportion) and it also shows the gender gaps for each age-group. That is, here the age cohort 30-34 in 1980 is compared to the cohort 30-34 in 1981 and so on until 2005.⁴¹ Nevertheless, the movement of the average CPF balances for each age-group over time provides a trend towards higher savings (from higher incomes) of females. It also shows that substantial gender gaps are still prevalent for any age group over 34 years. Except for ages 60+, all ages (30+) experience a *narrowing* gap (difference) between male and female average CPF savings; which is expected from increasing work opportunities and better incomes (with enhanced educational opportunities), affecting CPF savings.

Despite equal starting pay between the sexes, the existing gender gap is symptomatic of labour market discrimination, in the absence of data on educational attainment of CPF members. Age-group can be considered as a “proxy” for skills and educational background of the genders. It is possible to conclude that the female workforce has not fared *justly* to eradicate past injustice. Labour market segmentation is a possible explanation for employer-discrimination and hiring practices with respect to female labour. To this may be added the lower work participation levels of women and their lack of commensurate qualifications at older ages. A combination of factors would have worked against employed women, including their dual role which may inhibit them from seeking a full-time career. Thus, the lower average CPF savings of women as compared to men, and the existing gender disparity in CPF savings, are testimony of market imperfections that may discriminate women employees. Such ‘discrimination’ may be subtle or coerced and may be unnoticeable enough that women may consider their economic participation as secondary or supplementary income-earners. A non-committed career path may not even be a serious consideration among most working women, as career tracks may prevent them from an effective family role.

In the above analyses, the averages are based on cross-section data which includes different successive cohorts, thereby not fully representing a ‘single’ cohort born sometime in the past. For example, the age cohort of 55-59 in 2005 would have been

born in 1950-54 and would have entered the workforce some 20 years later (1970-74). A partial cohort can be traced for ages 55-59 (55 to <60) in 2005 to ages 30-34 (30 - <35) in 1980; this cohort movement over the 1985-2005 period through five-year time-points will also provide an indication of the accumulation of savings. Seen this way, 1995-2000 registered a higher growth rate in average CPF savings for women (and men) aged 45-49 in 1995. Otherwise, the growth rates, cross-section wise, are better for females than for males, but their starting base is smaller (Table 15).

Insert Table 15 here

Table 15 shows cohort-based membership and CPF balances for two selected age-groups: the ages 55-59 and 60+ in 2005 were chosen and compared to moving cohorts from 1980 through 2005. The increasing membership of the cohorts is from increasing work participation rates, at least up to ages below 55 for both age cohorts. The difference in the membership between the sexes is large (males *exceed* females). The large differential between average CPF balances pertains to the oldest cohorts (ages 60+), arising from erstwhile lower female participation rates. Even at present, such differences are similarly explained, but the younger cohorts are increasingly better skilled through educational attainment. Savings differ drastically in ages 50-54 (year 2000) for the youngest of the two cohorts and 45-49 (year 1990) for the other, despite better attainments for ages below 40 in 1980, but may be insufficient to make an impact on savings.

It is noted that the female membership growth was higher in ages 40-49 compared to males. Average CPF balances (hence savings) growth was high for males in ages 35-39 and 45-49; for females the ages 40-44 and 50-54 had seen higher growth for the younger cohort. Between the sexes, female membership growth was high, but for average balances, males fared better. Thus, despite more women entering the workforce, the average balances were in favour of men. Irrespective of educational background (as it is crucial in ages below 40 only), males tended to accumulate higher CPF savings. It leads to the conclusion that the average female still lags behind in savings for old age. An alternative explanation is that married women would have used up their CPF savings to top-up their husbands' savings to purchase home equity, a very likely explanation for the disparity. However, both sexes are equally exposed to purchasing home equity through the CPF, which means that the CPF balance disparities have other explanations as well, including women's dual roles, lack of career paths and economic inactivity for a good part of their life-time when they raised families.

Insert Figure 4 here

Figure 4 illustrates the changing gender gap between CPF membership and average CPF savings. The cohort aged 55-59 in 2005 would have been aged 35-39 in 1980, 40-45 in 1985, 45-49 in 1990, and 50-55 in 1995. Membership of this cohort is traced in panel (a), while average CPF savings are traced in panel (b). There is some convergence in the gender membership, but male membership continues to be higher. In

contrast, average CPF savings for the sexes seem to *widen* for this cohort, with female averages remaining below that of males. The expected convergence in CPF savings has not materialized despite increased CPF membership from higher economic participation of women. In fact, the widening gap in CPF savings is testimony to the lower compensation received by female workers whose labour market characteristics certainly differ compared to males, while being more varied.

Under the present circumstances, the decreasing gender gap (which was observed in Figure 3) should be appreciated for the right policy prescription towards equal opportunity in educational development. However, the existing income gaps (which are quite substantial at the older ages) between sexes must be addressed. In the globalization process, as characterized in the trends of the 1990s, women may face increased market discrimination and may have to settle for remuneration packages that could be less than satisfactory. Table 15 and Figure 4 clearly indicate that the age cohort which is now retiring from the workforce had experienced discrimination when they had entered the labour force, while the gender gap in CPF savings had increased continuously over time. That means although the education policy is effective in reducing the gender gap over time, specific age cohort analyses establish that the effectiveness of education policies in reducing gender gap is not sufficient enough. This observation clearly points to the requirement of specifically-focused targeted policies in favour of the older women.

The gender gap for the ages 60+ was more or less stable during 1980-1989, but diverges in the mid-1990s; older persons who were least qualified would be in marginal occupations. For ages 60+, most working persons attract smaller CPF savings on account of their smaller incomes and lower contributions, but average CPF savings show an increase in the late 1990s for both sexes. The sharp increase for older males accounts for the increasing gap between the sexes.

Older men (a few) had continued to work beyond 60, *in tandem* with the new mandatory age (not universally implemented) of 62, and could have postponed withdrawing all their CPF savings at age 55. It is doubtful whether globalization had improved older workers' incomes: the contrary is expected, however. Most of the older women are also similarly placed, but past employment history of men could explain the CPF balance increases. Thus, it is concluded that women in ages (from 40) have less CPF savings in general, reflecting an average female worker. Fewer women, and a slightly better proportion of older men, may have earned higher incomes in the past to attract higher CPF savings. It would seem that this gender gap will persist over the next two decades, ensuring a less than adequate social protection for women. The complete lack of CPF for non-working women is another contentious issue.

All the more, women (working or otherwise) must be brought under a national safety-net to compensate for their inactivity status, which is contingent on family circumstances. An assured flat pension for women also assumes filial piety norms as practiced in the country. The only assurance so far is home equity, either shared with a living spouse or individually owned after possible inheritance at widowhood. This equity can purchase some form of filial responsibility, but older people increasingly prefer

single or two person households while attracting filial responsibility from a distance. An adequate social protection scheme for older women seems a natural outcome in years to come, provided the gender dimension is taken seriously.

5. Conclusion

In 1961 the Women's Charter Act of Singapore was passed by the Parliament. It was designed to improve and protect the rights of women in Singapore and to guarantee greater legal equality for women. The Act was strengthened in a 1996 amendment by including rights regarding domestic abuse and matrimonial assets. However, in this essay on the older women, we see a lack of commitment from the Singapore polity to treat the sexes equally. Because of longer female life expectancy and higher widowhood rates, social security provision by the government should be adequately safeguarded, and introduced if absent. In terms of housing arrangements and provision of medical facilities no such special provision was noticed. We have also seen a substantial amount of intra-household inequality (in the absence of proper information we have used the headship of the household to proxy this). This implies the need for a more individual based social security provision. However, the CPF system of Singapore is based on efficiency considerations. In terms of economic welfare, older women were better off in 2000 compared to 1990; however, their position could have worsened in 2005. Older women's earnings are always *lower* than of male counterparts and that is not because of lesser workweek expended by women. This arises from the obsolescence of skills and their older workers' inability to re-skill themselves.

The current CPF system in Singapore is based on lifelong continual employment. In a globalized world with flexible labour markets that allow restructuring and reorganization of firms, the trend is to employ staff on contractual and part time basis. Continual re-skilling and job changes in interim unemployment and underemployment are quite common. The CPF scheme does not protect workers from non-employment (or structural unemployment). Thus, re-skilling at a fast pace becomes necessary to move to a higher paid job. Although the government has increased vocational training institutes over the years it was unable to target older women (and men) who were out of the workforce during their active life to readjust themselves within the new world rather than to support the family. The modern generation is less interested to be out of the workforce, thus creating a downward trend in the fertility rate. With this present trend, the medical provision of the older person is largely financed from the children's CPF, and this is not workable in the long run.

The evidence so far exemplifies the uncertain nature of adequate incomes and savings for workers of both sexes with less than commensurate educational attainments or relevant skills. Globalization exacerbates this problem within the ageing context. Increasing feminization increases higher demographic and economic dependency of older women on the family. Filial piety may work to a limited extent, but younger families are also affected by the uncertainties of globalization and world recessions. Empowerment through retraining and life-long continuing education and new skills acquisition take time

and national resources, and are not an immediate solution. The general observation is that the next 20 to 30 years will be the arena of generational 'conflicts' when the aged grow rapidly as compared with younger workers, and many support mechanisms are thus constrained. This is an area that the national planners have yet to address seriously despite being aware of the issues, since national policy is to contain ageing through national incomes from globalization. The present (and future) priorities are towards the objective of increasing national incomes, not expenditures on older women (and men).

On the one hand, income inequalities are widening the gap in wages that are conditioned by effective demand for a re-skilled workforce, and women (certainly at older ages) fare badly from historical circumstances, thus necessitating a better social security system that addresses healthcare and sustained welfare. "Welfarism" is still anathema to the national ethos, and may prevent institutional changes in the immediate future. Some years back, there was a suggestion to contain ageing issues and the increasing political clout of the older vote banks through empowering presently younger voters (Shantakumar, 1993 through 1999): a double vote for the younger person was mooted against a single vote for the older voter, though how this was to be affected was not discussed. The debate has presumably died (so the authors contend) after realising that presently younger voters may promulgate measures to suit their old age concerns at the expense of the present and near-older population. It is more sensible to contain old age issues (and feminization) by appropriate institutional changes and policies from now, and make changes on-line through time.

Women's groups like *Asian Women's Association for Research* (AWARE, based in Singapore) advocate a minimum pension for both sexes so that it will supplement other savings or supports, but it has not been heeded by government policy planners so far. Other income support mechanisms have also been proposed: 'hiving' a portion of the spouses' income into a *portable* CPF savings account for women, and which can only be tapped in old age or when disabled. This proposal has not been seriously considered, but may crop up later. Women advocacy, though existent here and promoted by the 1961 *Women's Charter*, is still at infancy and not vocally strong. Pro-longevity of women could speed this process, as Government may have to address the problem later on. Palliatives are needed from now, instead of *ad hoc* top-ups by Government (during good economic earnings periods) into CPF accounts, and these are meagre and far in-between. It is time for planners to constitute a Commission to study feminization and its repercussions in the medium and long term. It should not be left to advocacy groups to conduct research, as resources may be deficient. A national level group should be constituted to seek out the problems and solutions that can be accepted by the general polity and population at large. Only recently, a Minister has been appointed to look into older worker employability and retirement: he opines that continued employment after mandatory retirement must be encouraged and effectively implemented by employers, while stretching retirement age is also being considered. Under these renewed paradigms, we expect to see profound policy changes to benefit older women and associated income security.

Furthermore special attention is warranted on housing and medical provisions as well. Only a limited reverse mortgage schemes are available in Singapore at this moment and it is not very effective to the older women (as substantial property ownership is required for this). In 1998 Government launched the Studio Apartment Project to solve

the housing problem for elderly. This scheme enables the older people to move from a bigger to a smaller flat with a gain in income, however to the older women it is not a lucrative scheme as more than 30 percent of them live in very small flats (or in rented flats). Only recently (May, 2007) the Health Minister Khaw Boon Wan has expressed his positive views towards the idea of retirement village. Also there is an announcement of increase in financial assistance (by the end of 2007) to needy citizens who become disabled and need help to cope with their care expenses. However, this policy does not target the older women (particularly the widowed) who do not have adequate financial support.

Table 1: The Aged Population, Growth Rates and Sex, 1980-2006

Year	Ages 60+ (‘000)	% in Population	Growth Rate (%pa)	Ages 65+ (‘000)	% in Population	Growth Rate (%pa)
Both Sexes						
1980	170.4	7.5	-	111.9	4.9	-
1990	246.9	9.1	3.8	164.1	6.1	3.9
2000	348.7	10.7	3.5	237.6	7.3	3.8
2006	427.3	11.8	3.7	306.4	8.5	4.8
Males						
1980	81.0	6.6	-	51.2	4.2	-
1990	114.7	8.4	3.5	73.8	5.4	3.7
2000	161.8	9.9	3.5	102.2	6.3	3.3
2006	196.2	10.9	3.5	136.9	7.7	5.6
Females						
1980	89.4	7.6	-	62.7	5.3	-
1990	132.2	9.9	4.0	90.3	6.8	3.7
2000	187.0	11.5	3.5	128.9	7.9	3.6
2006	231.2	12.7	3.9	169.6	9.31	5.2

Note: % of respective population by sex

Source: *Census of Population*, 1980, 1990, 2000 and *Population Trends*, 2006, Singapore Department of Statistics, Government of Singapore and authors’ computations.

Table 2: Sex-ratio by Age-Group, 2006

Age Group	Sex Ratio (males per 1000 females)	Sex –Ratio (females per 1000 males)	% of women in total female population
30-39	935	1069	17.33
40-49	1014	985	17.75
50-59	1007	993	13.44
60-69	936	1068	6.60
70-79	818	1222	4.17
80+	615	1625	1.93

Source: Computed from *Population Trends*, 2006, Singapore Department of Statistics, Government of Singapore

Table 3: Females by Age-group and Marital Status, 1980-2005

Age-group	Ever-Married Women: Per cent											
	1980			1990			2000			2005		
	M	W+D	Total	M	W+D	Total	M	W+D	Total	M	W+D	Total
30-39	83.1	3.4	86.5	78.4	3.5	81.9	79.3	3.5	82.8	78.04	3.5	81.54
40-49	85.0	9.8	94.8	82.5	7.6	90.1	79.7	7.2	86.9	79.6	6.6	86.2
50-59	71.1	26.0	97.1	75.6	19.4	95.0	76.6	14.4	91.0	75.8	12.8	88.2
60-69	47.6	47.7	95.3	53.5	43.5	97.0	62.9	32.5	95.4	65.5	28.6	94.1
70-79	24.6	69.8	94.4	30.8	65.2	96.0	37.4	60.3	97.7	34.8	62.4	97.2
80+	11.2	83.7	94.9	15.4	79.5	94.9	17.5	80.2	97.7	Na	Na	Na
Total %	72.3	19.9	92.2	71.6	17.2	88.8	72.8	15.3	88.1	72.3	14.9	87.2
No.(‘000)	332	91	423	482	116	598	678	143	821	773	159	932

Notes: Ever Married = M+W+D

M = Married, W = Widowed, D = Divorced/Separated

Row-wise add to 100 % in each age-group in each year. Singles are not shown.

For 2005 source does not provide data for age group 80+

Source: Computed from *Census of Population*, 1980, 1990, 2000 and *General Household Survey*, 2005, Department of Statistics, Government of Singapore.

Table 4: Widows by Age-Group (50+), 2005

Age – group	Number (‘000)	% Widowed
50-59	15.9	13.9
60-69	28.3	24.8
70+	64.0	56.1

Source: Computed from *General Household Survey*, 2005, Department of Statistics, Government of Singapore.

Table 5: Distribution of Household Dwellings by Sex and Headship, 1980-2000

Dwelling Type	1980 (%)		1990 (%)		2000 (%)	
	Males	Females	Males	Females	Males	Females
HDB/JTC:	65.8	63.3	85.1	82.2	87.7	89.3
1/2- rooms	19.3	27.2	6.7	15.6	3.9	10.1
3 + rooms	46.5	36.1	78.4	66.6	83.8	79.2
Other Flats	2.3	0.8	1.7	1.1	0.9	0.8
Private						
Flats/condominiums	3.6	4.5	3.9	4.9	6.1	5.6
Landed Properties	9.4	8.8	6.9	7.3	5.3	4.2
Rest	18.9	22.6	2.4	4.5	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from *Census, 1980, 1990 and 2000*, Department of Statistics, Government of Singapore

Table 6: Tenancy Status and Dwelling type of Female Household Heads by Age-Group, 2000

Tenancy Status	Ages 40-59		Ages 60+	
	No.	%	No.	%
Owner (self + others)	193,510	92.1	99,230	87.2
Tenants (rented)	14,250	6.8	11,600	10.2
Others (provided by others)	2,330	1.1	2,920	2.6
Dwelling Type				
HDB 1 / 2 room flats	13,580	32.1**	12,360	34.1**
HDB 3-room flats	74,990	19.8**	40,220	24.6**
Other public flats*	104,460	9.2**	46,780	20.2**
Rest (non HDB)	17,060	7.6**	14,390	20.9**
Total	210,090	11.8**	113,750	22.8**

Notes: * includes HDB 4+ room flats and public flats

** % of population (females) within each dwelling type

Source: Culled from *Census, 2000*, Department of Statistics, Government of Singapore.

Table 7: Educational Attainment by Sex, Age-group and Level, 1990- 2005

Educational Attainment	1990 (%) various ages			2000 (%) various ages			2005 (%) various ages		
	40-49	50-59	60+	40-49	50-59	60+	40-49	50-59	60+
Females:									
Below Secondary	73.1	90.2	96.6	47.2	68.5	90.0	38.9	60.3	87.3
Secondary	18.8	6.0	-	31.0	18.5	-	30.6	23.7	6.4
Upper Secondary	5.0	2.6	3.0	9.3	6.2	7.9	10.8	6.9	2.9
Polytechnic +	3.1	1.2	0.4	12.5	6.8	2.1	19.5	9.1	3.4
Males:									
Below Secondary	62.7	79.2	90.3	41.7	54.8	76.8	35.7	49.5	74.2
Secondary	21.4	11.7	-	28.7	22.1	-	25.0	23.8	12.2
Upper Secondary	6.6	4.2	8.0	9.2	8.5	16.8	10.0	9.4	4.6
Polytechnic*	9.3	4.9	1.7	20.4	14.6	6.4	29.3	17.3	9.1

Note: *Includes other diploma and university qualifications. Columns in panel will add to 100 per cent, subject to rounding errors.

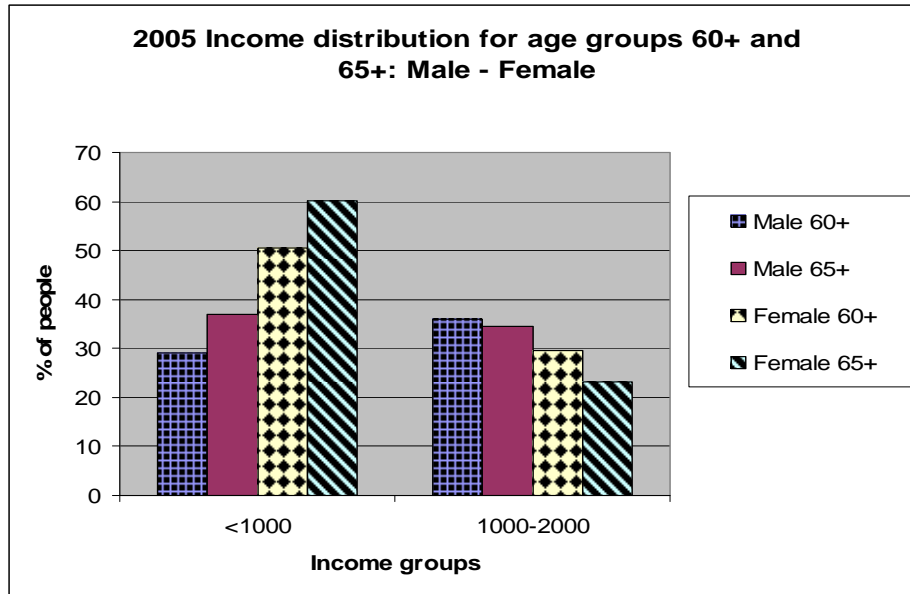
Source: *Census*, 1990, 2000, Department of Statistics, Government of Singapore and *General Household Survey*, 2005, Department of Statistics, Government of Singapore.

Table 8: Average earnings: various ages and sexes, 2005

Age Group	Males	Females	Persons
50 – 54	3526	2615	3187
55 – 59	3170	2433	2915
60 – 64	2619	1673	2338
60 +	2358	1573	2136
65 +	2024	1420	1865
15 +	3468	2907	3234

Source: Computed from *General Household Survey*, 2005, Department of Statistics, Government of Singapore

Figure 1



Data source: *General Household Survey, 2005*, Department of Statistics, Government of Singapore

Table 9: Income Distribution at ages 60+ by sex, 1990-2005

Income Group (S\$ pm)	Ages 60+ (%)								
	Persons			Males			Females		
	1990	2000	2005	1990	2000	2005	1990	2000	2005
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
< 1000	44.0	32.5	35.0	41.9	27.0	29.0	51.0	49.9	50.5
1000-<2000	45.6	37.5	34.1	26.3	38.9	35.9	43.3	33.4	29.6
2000-<4000	6.6	17.7	18.3	7.4	20.4	20.5	3.7	9.6	12.9
4000-<6000	1.9	5.1	5.4	2.2	5.3	6.1	1.1	4.2	3.6
6000-<10000	1.1	3.5	3.2	1.3	4.1	3.8	0.5	1.7	1.8
10000 +	0.8	3.4	3.6	0.9	4.1	4.4	0.3	1.3	1.6

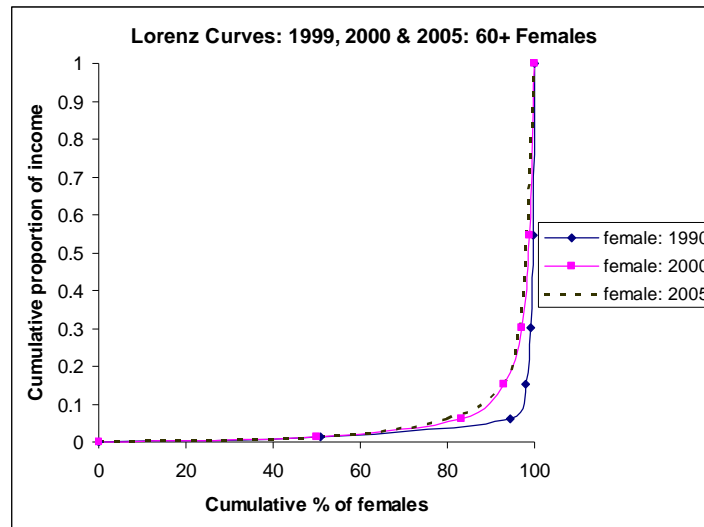
Source: Computed from *Census, 1990, 2000* and *General Household Survey, 2005*, Department of Statistics, Government of Singapore

Table 10: Mean Monthly incomes of working persons by age groups and sex, as ratio of years shown

Age group	Females		Males	
	2000/1990	2005/1990	2000/1990	2005/1990
20-24	2.30	2.34	1.57	1.62
25-29	2.30	2.52	2.05	2.21
30-34	2.11	2.57	1.90	2.29
35-39	1.96	2.45	1.63	2.23
40-44	1.73	2.19	1.48	2.03
45-49	1.57	1.98	1.48	1.96
50-54	1.57	1.85	1.50	1.98
55-59	1.62	1.94	1.52	2.00
60+	1.31	1.47	1.49	1.90
Total	2.26	2.45	2.09	2.14

Computed from *Census 1990, 2000 and General Household Survey, 2005*, Department of Statistics, Government of Singapore

Figure 2: Female Lorenz Curves



Computed from *Census 1990, 2000 and General Household Survey, 2005*, Department of Statistics, Government of Singapore

Table 11: Gini coefficients of various age groups and sexes, 2005

Age Group	Males	Females	Persons
15+ (national)	0.410	0.395	0.407
50 – 54	0.428	0.460	0.445
55 – 59	0.443	0.477	0.459
60 +	0.471	0.464	0.475
65 +	0.469	0.476	0.478

Source: Computed from *General Household Survey*, 2005, Department of Statistics, Government of Singapore

Table 12: Average Number of Hours Worked by Sex, Selected Age Groups

Age Group	Average Number of Hours Worked per Week			
	Males	Females	Persons	Δ (Males-Females)
15+	49.9	45.7	48.2	4.2
50 – 54	49.8	45.3	48.2	4.5
55 – 59	49.4	45.5	48.1	3.9
60 – 64	48.1	44.1	47.0	2.3
65 – 69	47.1	44.2	46.4	2.9
70+	47.4	43.3	46.5	4.1
60+	47.7	44.1	46.8	3.6
65+	47.1	43.9	46.5	3.2

Source: Computed from *Census*, 2000, Department of Statistics, Government of Singapore

Table 13: Percentage of People with Various Average Number of Hours Worked Per Week (Various Age Groups by Sexes, 2000)

No. Of Hours Worked per Week	Age Group (%)					
	15 +	50 – 54	55 – 59	60 +	65 +	70 +
<i>Males</i>						
Below 30	3.0	4.1	5.6	9.3	11.9	12.0
30 – 39	3.1	3.9	5.3	7.7	8.5	8.7
40 – 44	35.2	34.2	32.7	30.7	28.6	28.1
45 – 49	18.8	18.0	19.5	19.4	18.8	18.1
50+	39.9	39.8	36.9	32.9	32.2	33.1
<i>Females</i>						
Below 30	6.2	9.6	10.5	16.2	19.5	19.9
30 – 39	5.3	7.7	8.1	10.9	12.1	15.2
40 – 44	47.7	40.2	36.9	32.1	28.5	26.7
45 – 49	19.1	20.6	20.7	19.1	15.6	14.8
50+	21.7	21.9	23.8	21.7	24.3	23.4

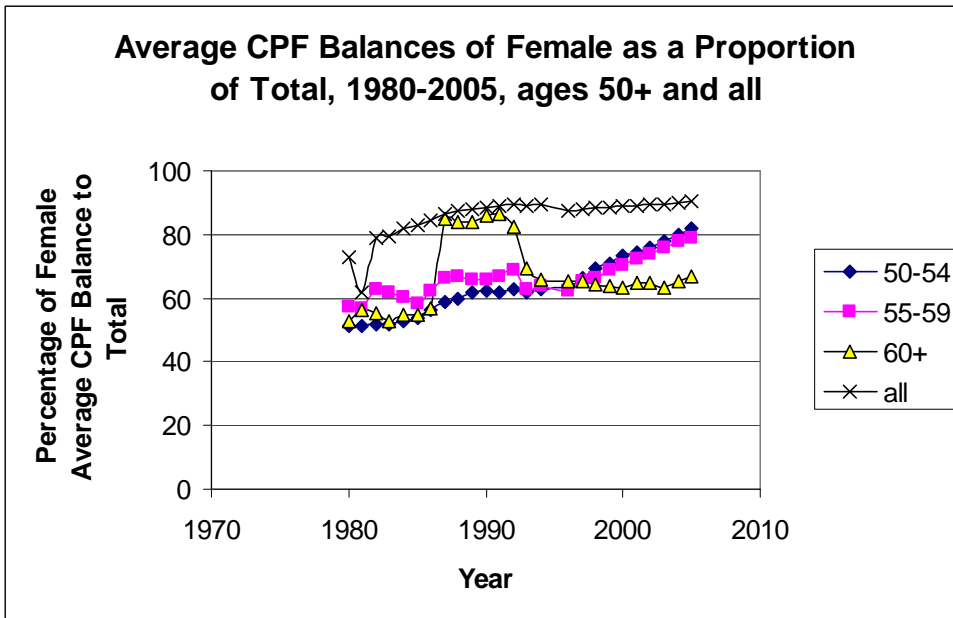
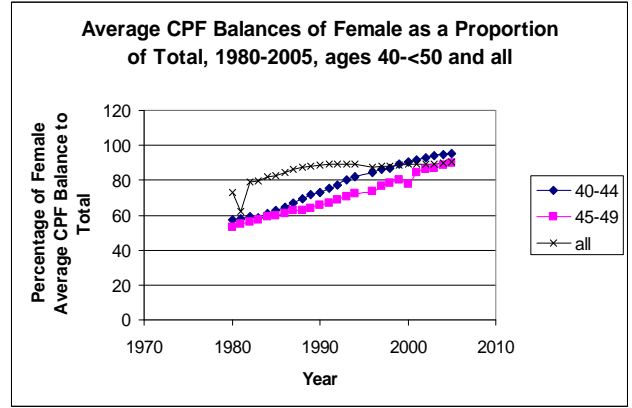
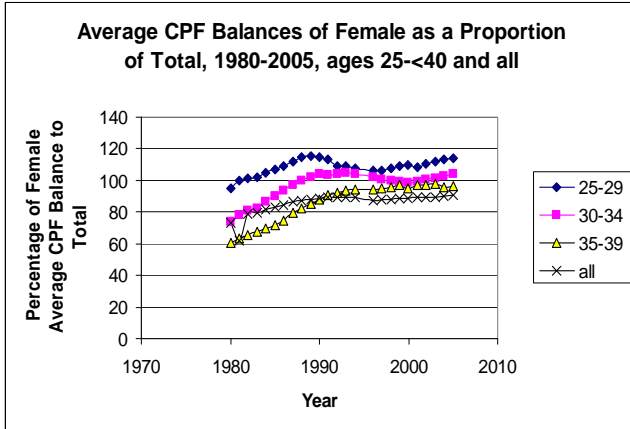
Source: Computed from *Census, 2000*, Department of Statistics, Government of Singapore

Table 14: Distribution of CPF Membership and Balances by Age-group and Sex, 2005

Age-group	Females (%)		Males (%)		Difference (M-F): % points	
	Members	Balances	Members	Balances	Members	Balances
< 30	18.4	8.8	16.8	4.7	1.6	-4.1
30-39	21.8	28.8	20.8	23.0	-1.0	-5.8
40-49	25.8	35.6	28.3	37.2	2.3	1.6
50-59	17.8	22.8	18.9	29.1	0.9	6.3
60+	15.8	4.1	14.0	6.0	-1.8	1.9
Total	100.0	100.0	100.0	100.0	-	-

Source: Computed from *Annual Report*, Central Provident Fund Board, Singapore, 2006

Figure 3 Average CPF Balances by Gender and Age-group, 1980-2005



Source: Computed from Central Provident Fund Board, *Annual Report*, Various issues, Singapore

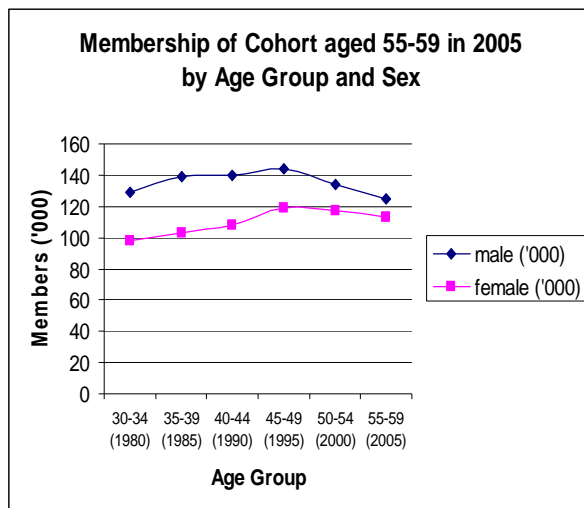
Table 15: Cohort-Based CPF Members and CPF Balances, by Age-Cohort, Sex and Age-Group, 1980-2005

Age-Group Cohort	Members			Average CPF Balances (S\$)		
	Females ('000)	Males ('000)	Δ (M-F)	Females ('000)	Males ('000)	Δ (M-F)
<i>Age-Group Cohort 55-59 in 2005</i>						
30-34 (1980)	97.9	129.2	+31.3	6.091	9.891	3.800
35-39 (1985)	103.4 (1.1)	138.7 (1.5)	+35.3	15.024 (29.3)	25.429 (31.4)	10.405
40-44 (1990)	108.1 (0.9)	139.9 (0.2)	+31.8	21.453 (8.6)	35.367 (7.8)	13.914
45-49 (1995)	119.2 (2.1)	143.9 (0.6)	+24.7	29.065 (7.1)	49.623 (8.1)	20.558
50-54 (2000)	117.4 (-0.3)	134.3 (-1.3)	+16.9	39.211 (7.0)	66.123 (6.7)	26.912
55-59 (2005)	113.2 (-0.7)	124.5 (-1.5)	+11.3	36.446 (-1.4)	54.865 (3.4)	18.419
<i>Age-Group Cohort 60+ in 2005</i>						
35-39 (1980)	48.1	73.1	+25.0	5.954	12.478	6.524
40-44 (1985)	51.9 (1.6)	78.3 (1.4)	+26.4	14.403 (28.4)	28.802 (26.2)	14.399
45-49 (1990)	54.9 (1.2)	78.8 (0.1)	+23.9	20.39 (8.3)	38.647 (6.8)	36.608
50-54 (1995)	66.0 (4.0)	78.6 (-0.1)	+12.6	25.164 (4.7)	53.122 (7.5)	27.958
55-59 (2000)	65.7 (-0.1)	72.7 (-1.5)	+7.0	16.199 (-7.1)	29.293 (-9.0)	13.084
60+ (2005)	212.5 (44.7)	219.5 (40.4)	+7.0	9.100 (-8.8)	18.413 (-7.4)	9.313

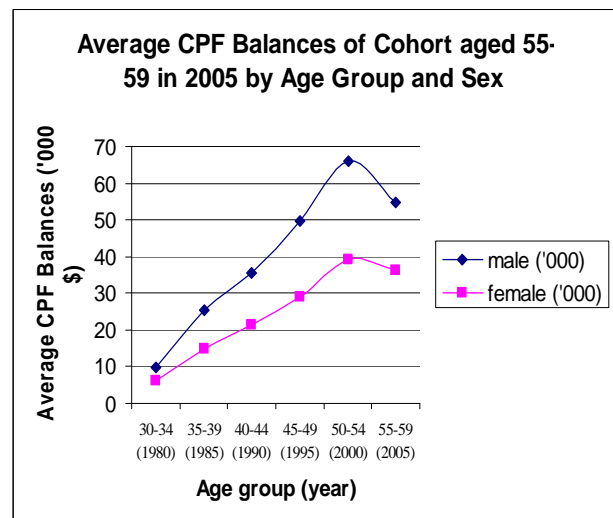
Note: Numbers in parentheses indicate the annual growth rate over the previous period

Source: Computed from *Central Provident Fund Board, Annual Report, Various issues, Singapore*

Figure 4: Membership and Average CPF Balances by Gender and Age-group, in terms of Cohorts



(a)



(b)

Source: Computed from *Central Provident Fund Board, Annual Report, Various issues, Singapore*

¹ Although the current official definition of Singapore's "old age" is 65+ as in other developed countries with the Central Provident Fund (CPF) withdrawal age being 55 or beyond (optional), and the official retirement age being 62 (*de facto* 55-60), the 60+ age norm is relevant.

² An added concern voiced by Guest (2006) from his simulation model is that the living standard in Singapore (also Japan, Australia and New Zealand) will be negatively impacted by the demographic change for at least the next 50 years.

³ And perhaps will intensify in future years.

⁴ Single hood incidence can be seen as 100 *minus* "ever married".

⁵ This is mere speculation at this juncture.

⁶ In Section 4 we will consider this aspect to address proper policy prescriptions.

⁷ HDB and JCT are respectively, Housing Development Board and Jurong Town Council, both statutory entities, that have built and maintained public apartments and industry areas in Singapore.

⁸ See Selvaratnam (1994), Gopinathan (1997).

⁹ Mukhopadhaya (2003a) has shown that the upper and middle class families, in most of the cases, are the beneficiaries of the education policies: this remains an equity aspect of the distribution of the educational resources.

¹⁰ Sakellarios (2006) indicates that the vocational education system in Singapore has served women with secondary vocational qualification particularly well. They earn more, have higher labour force participation, experience higher employment rates associated with a narrower gender earnings gap compared with women with general education. However, the case for women with polytechnic qualification is quite different, where gender wage gap is pronouncedly high.

¹¹ Household income can be aggregated from the working family members in a household. DOS (2000) has attempted to analyse the income distribution using Census data of household income. However, if household sizes are not considered, the distribution does not provide any meaningful result. One further point to note would be that the available income data is grouped under various income classes; thus, for calculation of income inequality, assumption of 'no-inequality' within group is assumed, which creates a downward bias to the measure. On this see Mukhopadhaya (2006).

¹² The income analysis henceforth refers to monthly income per person, unless otherwise stated (as for 1990). As the information relates to work, other transfers such as pensions, allowances from children, asset incomes, interests, dividends and rents are "unlikely" to be included in the reckoning. Only the working population generates income in the analyses to follow. The accuracy of data seems assured since the income data maybe cross-checked with CPF data and Inland Revenue records, but this is only a speculation.

¹³ The declines in the "learning process" over the older ages begins (we conjecture) around ages 45 – 54 with progressive increases to 45.2 percent in ages 70+, within the bracket of below S\$1000 (*Census*, 2000). This observation is also true for the next income bracket (up to S\$2000). Incomes beyond these levels declined in proportionate terms, compensated by the increases in the first two income brackets.

¹⁴ Note that during 2000 to 2005 the male share in the below S\$1000 income group increased by 33 percent; however, even after this increase, the share of males in this group is much less than that for women.

¹⁵ With micro data (or even with smaller class intervals), there could be a possibility of intersection(s) between two Lorenz curves.

¹⁶ See Atkinson (1970) for the seminal paper on the theoretical discussion. An application of this theory on Singapore with detailed discussion will be found in Mukhopadhaya (2003c).

¹⁷ Gini coefficient is a commonly used measure of inequality. The coefficient is based on a pair-wise comparison of incomes. Sen (1997: 33) interprets this coefficient as “in any pair-wise comparison the man with the lower income can be thought to be suffering from some depression on finding his income to be lower. Let this depression be proportional to the difference of income. The sum total of such depressions of all possible pair-wise comparisons takes us to the Gini coefficient”.

¹⁸ We have discussed this in Section 2.2.

¹⁹ The Singapore workweek norm for the entire labour force (15+) to average around 48 hours, while the median is around 45 hours. Probably, the workweek is in the 45 – 49 hours range, but for analysis purposes, the cut-off workweek of 40 – 44 hours can be adopted, despite the input of 45.4 hours (median) by 50 percent of the working population. Another reason for adopting this yardstick is the probability of older workers expending below the national norm observed so far.

²⁰ We will discuss this in Section 3.3.

²¹ The median workweek relates to the mid-point in the distribution of the workweek, providing a measure of the actual contribution to the workweek, since each worker contributes a unique workweek. The median workweek may even be considered as what is “possible” or reality or even preferred. Thus, at the national level, the median will be lower by 2.8 hours (48.2 *versus* 45.4 hours). At ages 50 – 59 the difference is around 2.5 hours, declining to 1.7 hours at ages 60+ and 1.8 hours at ages 65+. It is interesting to note this difference between ages 50 – 59 and 60+ / 65+. In all likelihood, if workers continued beyond 60, they may be contributing less median workweek hours differing by less than the average workweek. These figures seem to support a thesis that older workers would continue to expend the expected workweek norms (or very near to it), once they have decided to continue working. The slight decline in average workweek at older ages may reduce pay, but it cannot be substantially reduced, given that other things remained constant.

²² Or, it could be that the expectations and offers do not match. Both factors are confounded within a ‘chicken and egg’ problem. Those who continue to work more than the average workweek, still substantial, may be in jobs that are in continuous demand or even attract self-employment.

²³ Note that these figures are not presented in the Table.

²⁴ At the highest workweek (≥ 65 hours), both males and females in ages 50 – 59 record relatively high proportions: 15.5 percent for males, 14.8 percent for females (*Census*, 2000 – these are not shown in the Table).

²⁵ Detailed discussion will be found in Lee (1990), Mehta (1997), Koh (2001), Heng (2001), DOS (2002), MOH (2002).

²⁶ Some of the semi-ambulant may become non-ambulant.

²⁷ This model is followed in many Western countries eg Britain. However, some other countries (eg France) follow a ‘parental model’, where economic dependence of women was not assumed.

²⁸ Sweden for example.

²⁹ Sen (1990), Blumberg (1988), Woolley (1993), Phipps and Burton (1994), Dwyer and Bruce (1988), Haddad and Kanbur (1990).

³⁰ For country-specific studies on this aspect, see Cigno (1994), Nelson (1996), Gustafsson et al (1995), Jones and Savage (1995), Ontario Fair Tax Commission (1992, 1993), Gordon (1988), World Bank (1992, 1993), Jarvis (1995).

³¹ The current social security reform initiative which is experienced by almost the whole world is primarily to overcome fiscal pressure. Most insurance programmes in the developed countries are partly funded out of employer-employee contributions (Gordon, 1988; Mesa-Lago, 1989).

³² CPF contribution rate in May 2007 for a Singapore permanent resident private sector employee or a government non-pensionable employee is 33% of the wage (13% for the employer and 20% for the employee) with a stipulated maximum monthly contribution. People in the labour force above 55 years of age are subject to a lower rate of contribution since July 1988. This is designed to partly delink wages from seniority and to reduce the cost of hiring older workers (*CPF Board Annual Reports*, various years). This contribution is channelled into 3 separate accounts: (i) ordinary account (approximately 60-70% decreasing with age; balance is used for housing, pre-retirement investment and other purposes); (ii) special account (approximately 11-17%, increasing with age – this account is created as retirement security) and (iii) Medisave account (between 17-22 percent for below 55 years and for above 55 years, varies from 43-100%; amount cannot be withdrawn until death and any surplus after death is distributed among the beneficiaries). Note that although Medisave account ensures medical care after retirement the health insurance scheme has inadequate coverage with more than one third not covered by the scheme. Also the scheme has a very narrow coverage. It pays only a small proportion of the hospital bill: typically 25-40%.

³³ However, note that effective from 1 July, 2007 employers' CPF contribution will increase up to 1.5% points (1% in ordinary account and 0.5% in Medisave account), to adjust the decrease announced in 2003 for the business failure at the aftermath of financial crises. This increase is not applicable for the low wage older workers. For these groups, both the contributions of employers and employees have been reduced to increase their employability and take-home salary.

³⁴ This is worked out as a function of the person's normal salary amount and the period of contract. Under the Singapore system contractual workers are not that common at an older/ near retirement age.

³⁵ During 1987-99 about 70 percent of the contributions were withdrawn annually. Such a high level of withdrawals for non-retirement purposes – especially for housing – had adversely affected the accumulation of CPF balances.

³⁶ There exist CPF top-ups and voluntary contribution schemes where (started from 1987) cash or CPF savings to top-up parents' and spouse's retirement accounts and cash to supplement CPF savings of family members can be allowed, subject to a cap to prevent tax shelters.

³⁷ A universal flat pension scheme is potentially a disadvantage for women because of their lower earning capacity. Recent reforms of pension in Australia moved away from flat universal pension to mandatory earning-related private programmes. We are not prescribing a *universal* flat pension scheme but rather a flat pension scheme among women only. Also note that, Sharp and Broomhill (1995) found that although the mandatory company pension plans have increased the coverage of women workers drastically, their pension entitlement will only be half when compared to that of men.

³⁸ Note that members have to set aside a minimum sum (MSS) at age 55 and they can withdraw the balance of their CPF savings. This concept of minimum sum provides a basic standard of living. This amount is reviewed annually. From 1 July 2005, the minimum sum is S\$ 90,000. Under MSS there is a joint minimum sum scheme (to protect the family) which is extended to husband-wife. The MSS is 1.5 times instead of 2 times individually. Here the couple is required to nominate each other as beneficiaries of other CPF savings. The single (older women in most cases) are at the sufferer's end under such a case (*Census*, 2000 reveals that almost 60 percent of female household heads in age group 40-59 are single while 46 percent are single in the age group 60+).

³⁹ The balances between the sexes vary significantly: women in ages 30-49 actually owned S\$ 33,738.7 million out of the total balances for all women (amounting to S\$52,391.1 million), while men had S\$40,563.7 million out of the total of S\$67,382.6 million.

⁴⁰ This contention needs verification through savings of widows or older women. Such data has to be determined through primary surveys.

⁴¹ A point on every line in Figure 3 represents the ratio of (at a particular age group and at particular year) average CPF balance of female to average total CPF balance (male-female combined). Thus the line in Figure 3 below 100 implies lower female CPF balance compared to male. The more the line away from 100 higher is the gender disparity. Three separate diagrams are presented and each age group is compared with 'all'. Note that the higher dispersion of older age lines from 'all' is quite prominent in the figure.