

SDD-SPPS PROJECT WORKING PAPERS SERIES

INCOME SECURITY FOR OLDER PERSONS IN ASIA AND THE PACIFIC

Income Security for Older Persons in Sri Lanka

Acknowledgements

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Abbreviations

AAIB	Agricultural and Agrarian Insurance Board
CBSL	Central Bank of Sri Lanka
DCS	Department of Census and Statistics
EPF	Employees' Provident Fund
ETF	Employees Trust Fund
FMPS	Farmers' Pension and Social Security Benefit Scheme
FSHPS	Fishermen's Pension and Social Security Benefit Scheme
LFS	Labour Force Survey
PSPS	Public Servants Pension Scheme
NSB	National Savings Bank
SSB	Social Security Board
SPPS	Self-employed Person's Pension Scheme

Executive Summary

Sri Lanka's population is ageing at a rapid pace. The 60 and above population is estimated to increase from its 2001 level of 9.5 per cent to 19.7 per cent by 2030. This backdrop helps to explain the importance of ensuring income security for older persons in Sri Lanka. As a consequence of declining fertility rates, increasing life expectancy and the difference in the life expectancies of males and females, the structure of the population will change. The proportion of older persons in the population will increase and the proportion of older females to older males will also increase. This paper examines whether the existing pension schemes in the Sri Lanka are able to provide adequate income support for all older persons in the country.

Most old age income support schemes in Sri Lanka are employment based, thus labour force participation is linked to old age income support. Although close to 95 per cent of males age 25 to 29 are employed, only about 40 per cent of females in that age group are employed. Labour force participation is highest among females age 40 to 44. But, even in this age group only 47 per cent females participate in the labour force. The access of women to old age income support is of special concern because female life expectancy exceeds male life expectancy. Among those aged 60 and above, it is estimated that there are 81 older males to every 100 older females in the population in 2015.

There are five main employment-based pension schemes in Sri Lanka, namely: the Public Service Pension Scheme (PSPS); Employee Provident Fund (EPF); Farmers' Pension and Social Security Benefit Scheme (FMPS); Fishermen's Pension and Social Security Benefit Scheme (FSHPS); and the Self-employed Persons Pension Scheme (SPPS). Of this only PSPS is a non-contributory pension scheme. Other than these there is a Public Welfare Assistance Allowance (PAMA), which provides an allowance to households whose monthly income falls below a minimum amount. In addition, there is a Public Welfare Assistance Allowance (PAMA) and the Elderly Assistance Programme (EAP), which provides an allowance to households whose monthly income falls below a minimum amount.

Close to 5 million workers were eligible for pensions under various employment-based pension schemes. Of these only PSPS covers the total eligible population. The estimated coverage for other pension schemes fluctuates between 18 per cent (SPPS) and 64 per cent (FMPS). However, the effective coverage is estimated to be much less, ranging from 11 per cent (SPPS) and 38 per cent (FMPS), due to non-payment of dues. Together these pension schemes are estimated to guarantee pensions for 18 per cent of the working age population (15 to 59 year olds). However, the effective coverage of the working age population by these schemes is estimated to be only 13 per cent.

Only the PSPS provides pension benefits are estimated to be adequate, providing benefits greater than the poverty line. The average monthly pension for beneficiaries of PSPS ranged from 307 per cent to 441 per cent of the poverty line, while the benefit amounts for beneficiaries of FMPS, FSHPS and SPPS were 40 per cent, 34 per cent and 26 per cent of the poverty

line. Thus the beneficiaries of informal sector pension schemes do not receive a large enough benefit to keep them out of poverty.

Further, all informal sector pension programmes define benefits in nominal terms. The real value of these benefit amounts will be much less when the beneficiaries receive payments. The SPPS promises a pension benefit at retirement of LKR1,000. The real value of the benefit amount for a person age 40 today will be LKR471, assuming 5 per cent inflation.

The amounts of contributions a female needs to make to build up enough savings to receive an annual pension of LKR50,000 at age 60 is LKR5,882 while a male will only have to save LKR4,334 a year. This is because the male life expectancy is much lower than the female life expectancy.

The fiscal cost of a universal pension varies depending on the age of eligibility and the size of the pension. To provide a pension benefit of 20 per cent of per capita income to the population age 70 and above in the country would cost the Government 1.2 per cent of gross domestic product (GDP) in 2015. Such a pension would cover 6 per cent of the total population. By contrast, the fiscal cost of extending a pension equivalent to the PSPS (47 per cent of per capita income) to the population age 70 and above would be 2.22 per cent of GDP.

At present only 30 per cent of the 60 plus population in the country is receiving any pension. Of this share about 20 per cent receive an adequate pension to keep them out of poverty (PSPS). Unless the Government takes action to extend pension coverage and increase the pension benefit amounts, older persons will be dependent on others and on their own savings for income support.

1 Introduction¹

The population of Sri Lanka is ageing at a rapid rate. It is estimated that the proportion of the population age 60 and above will increase from 9.5 per cent in 2001 to 19.7 per cent in 2030 and to further increase to 25.7 per cent by 2050 (United Nations, Department of Economic and Social Affairs, n.d.). The proportion of older persons in Sri Lanka is estimated to be much higher than the average for South Asia and the world, although the proportion is not as high as it is in Europe (United Nations, Department of Economic and Social Affairs, n.d.). Against this backdrop, it will be important for Sri Lanka to respond to the pressures of an ageing population in terms of financial, institutional and technical resources.

Though the Sri Lankan population has traditionally depended on familial support in old age, this may no longer be a viable option due to migration and reductions in family size. Similarly, as the population ages there will be a smaller share of economically active youth to provide support for older persons. A lack of retirement income coupled with dwindling filial support will expose large numbers of older persons to economic vulnerability. To overcome this impending complication Sri Lanka requires a strengthening of its formal social security systems in a sustainable manner. With this in view this study will seek answers to the following questions:

- 1 What are the characteristics of the existing pension schemes available to the older persons?
- 2 What is the coverage and adequacy of the benefits provided? How are these different for males and females?
- 3 What is the fiscal cost of extending coverage?

Section 2 of the paper describes the demographic transitions taking place in the country and motivates the rest of the study. Section 3 discusses the existing pension funds in Sri Lanka, and their characteristics. Section 4 assesses the coverage and adequacy of these different pension schemes. This section also examines how these are different for males and females. Section 5 estimates the fiscal cost of extending pension coverage to the population. The section examines the fiscal cost of implementing a universal pension at different retirement ages. It also estimates the cost of extending the PSPS to the population of older persons.

¹ This paper was written by Shanika Samarakoon and Nisha Arunatilake of the Institute of Policy Studies of Sri Lanka for the Economic and Social Commission for Asia and the Pacific. The Authors wish to acknowledge the research assistance of Neluka Gunasekara.

2 Sri Lankan Context

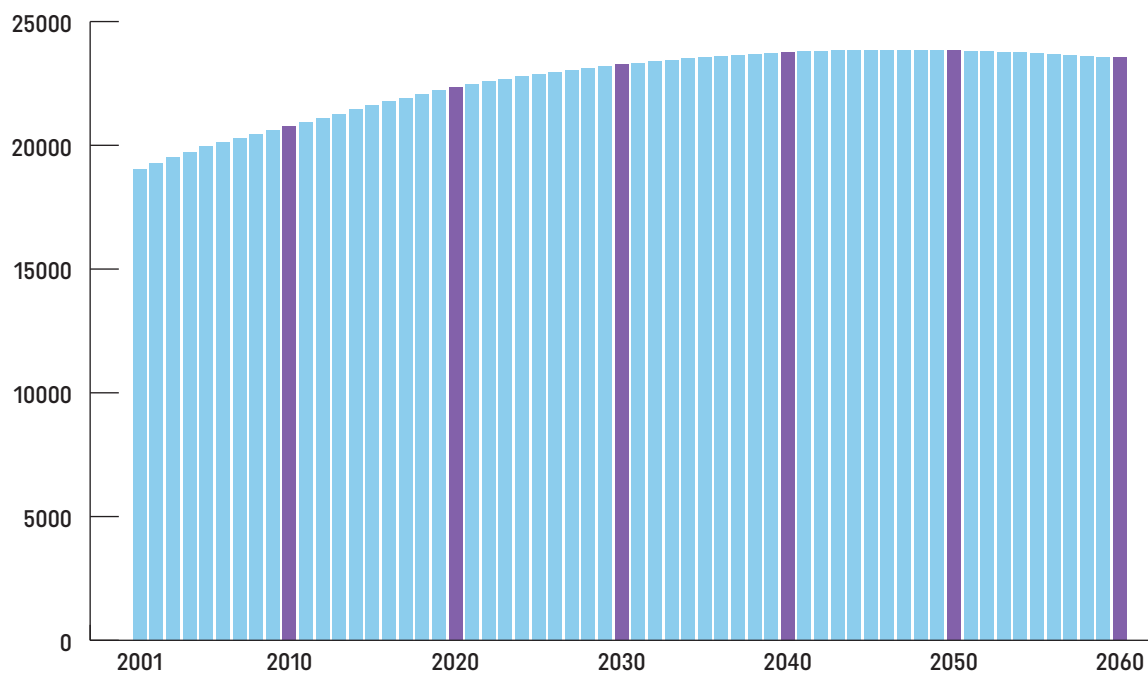
2.1 Demographic trends and dependency ratios

According to the 2012 census of population the Sri Lankan population was 20.4 million. Under a standard growth rate scenario, this number is expected to increase to about 24 million by 2046, and start declining thereafter (United Nations, Department of Economic and Social Affairs, n.d.). Some of the key reasons for the expected stagnation in population growth are the rapid fertility decline, high life expectancy and an increase in emigration (De Silva, 2012). In 1998 the total fertility rate (TFR) was at 1.9 births per woman, below the replacement level of 2.1 (Department of Census and Statistics, 2014a).

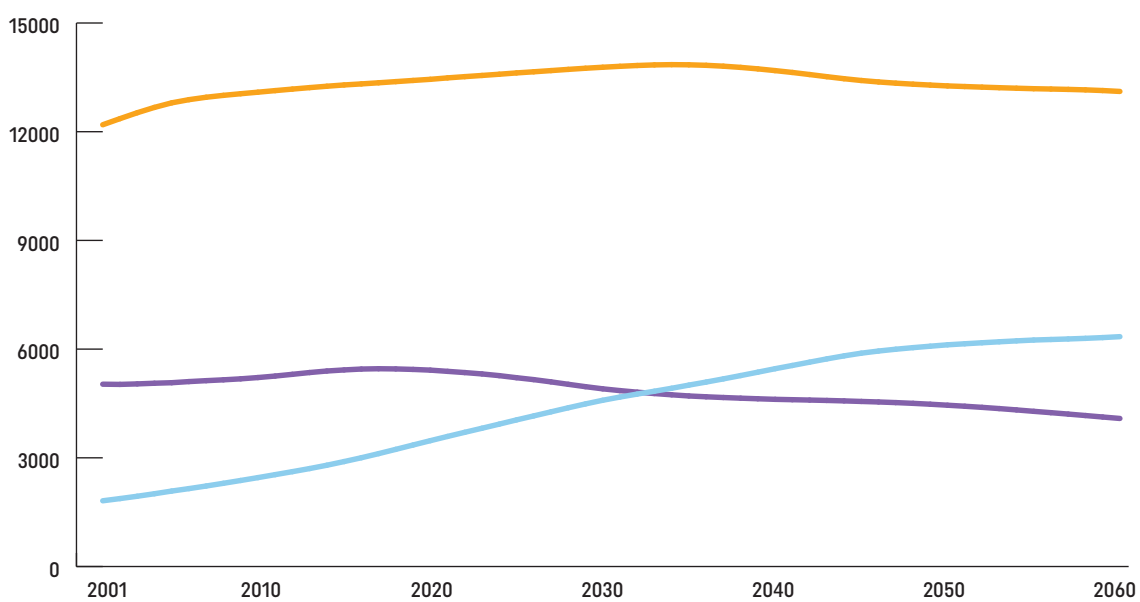
As a result of significant achievements in health and education (including the expansion of health services, eradication of malaria, low maternal and child mortality, increase in female education) Sri Lanka's life expectancy at birth has increased steadily since the 1950s. It is expected to further increase up to 77.8 years by 2050 (World Bank, 2008). However, when considering life expectancy at birth by gender, it is evident that female life expectancy has increased more than male life expectancy. The life expectancy at birth for males and females, under a standard growth rate scenario, is estimated to average 69.90 years and 76.81 years, respectively (De Silva, 2007). Male and female life expectancy are projected to increase to 74.50 and 81.41 years of age, respectively, during 2041-2046. If the disparity between male and female life expectancy remains or increases, Sri Lanka will have a disproportionate number of older females.

As a consequence of declining fertility rates, increasing life expectancy and the difference in the life expectancies of males and females the structure of the population will change. The proportion of older persons in the population will increase and the proportion of older females to older males will also increase. In addition, the growth rate of the population below age 15 has slowed. After 2017, the population below age 15 will gradually start to decline (see figure 2). At the same time, the population age 60 and above will continue to grow until 2060. As the population of older persons increases, the share of women will rise owing to longer female life expectancy. In 2001, there were 91 males for every 100 females in Sri Lanka. The share of males is expected to decline to 81 males per every 100 females by 2015, and 77 males per every 100 females by 2050.

Sri Lanka's dependency ratio is expected to increase over the years as shown in figure 4. The dependency ratio is defined as the number of dependents to every 100 people in the working age group (age 15-59, also referred to as prime-age adults) (De Silva, 2012). Both children (people under age 15) and older persons (those age 60 and above) are considered to be dependent. At present, there are 40 children and 20 older persons per every 100 prime-age adults in the country. By 2060, the old age dependency ratio is estimated to increase close to 50 and the child dependency ratio is estimated to decline to 30 per every 100 prime-age adults. As seen in figure 4, the increase in the old-age dependency ratio is much sharper than the

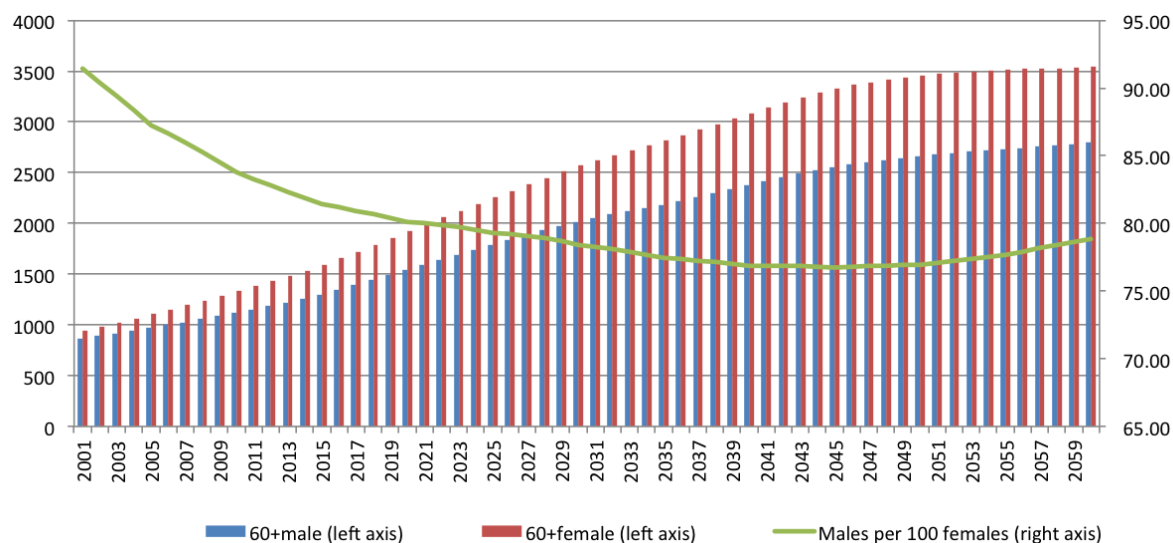
FIGURE 1. PROJECTED POPULATION GROWTH 2001–2060

Source: Compiled based on United Nations, Department of Economic and Social Affairs. (n.d.). Population data. Retrieved 30 Mar. 2015 from World Population Prospects: The 2012 Revision: <http://esa.un.org/unpd/wpp/Excel-Data/population.htm>.

FIGURE 2. DISTRIBUTION OF THE POPULATION BY THREE BROAD AGE GROUPS 2001–2060

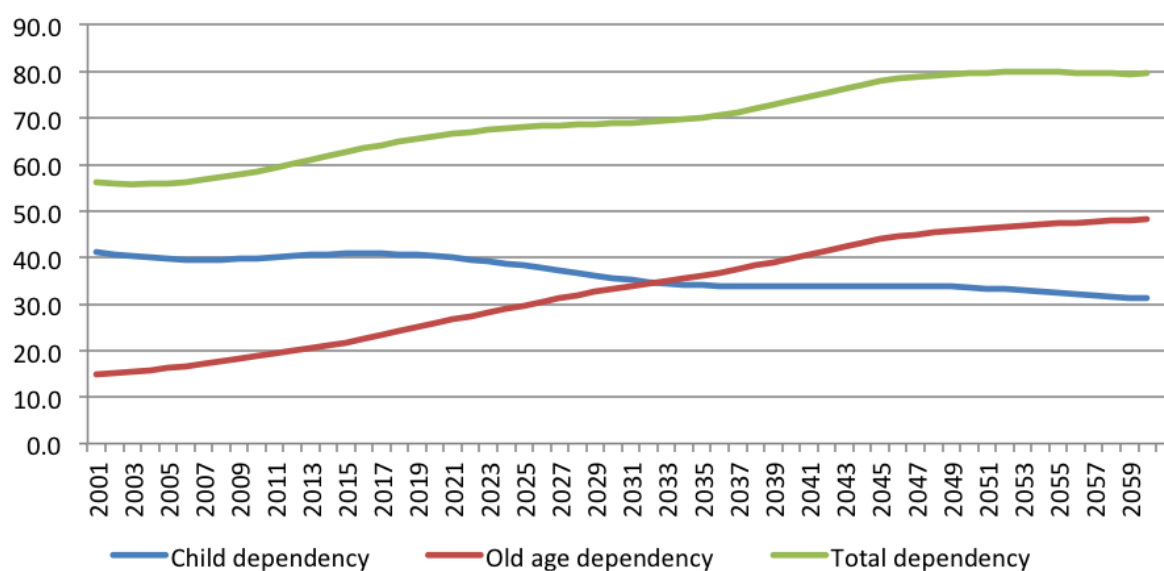
Source: Compiled based on United Nations, Department of Economic and Social Affairs. (n.d.). Population data. Retrieved 30 Mar. 2015 from World Population Prospects: The 2012 Revision: <http://esa.un.org/unpd/wpp/Excel-Data/population.htm>.

FIGURE 3. TRENDS IN 60 AND ABOVE POPULATION BY SEX, 2001–2060



Source: Compiled based on United Nations, Department of Economic and Social Affairs. (n.d.). Population data. Retrieved 30 Mar. 2015 from World Population Prospects: The 2012 Revision: <http://esa.un.org/unpd/wpp/Excel-Data/population.htm>.

FIGURE 4. DEPENDENCY RATIO IN SRI LANKA 2001–2060



Note: Child dependency ratio is defined to be the number of children per every 100 adults age 15–59. Children are defined to be those below age 15. Old age dependency ratio is defined to be the number of older persons per every 100 adults age 15–59. Older persons are those over age 60. Total dependency ratio is the number of children and older persons per every 100 adults age 15–59.

decline in the child dependency ratio; as a result, the total dependency ratio will continue to increase overtime. In 2060 the total dependency ratio is estimated to be 80.

2.1.1 LABOUR FORCE PARTICIPATION

TABLE 1. LABOUR FORCE PARTICIPATION RATES 2012 (PERCENTAGE)

Age group	Male	Female	Total
15	20.79	8.70	14.78
20	73.62	37.66	54.71
25	93.99	39.44	64.59
30	96.36	38.02	64.48
35	95.97	42.91	67.30
40	95.91	46.88	70.13
45	94.36	45.26	68.16
50	90.52	41.82	64.36
55	80.96	36.65	57.45
60	64.88	22.40	42.66
65	55.93	16.41	34.50
70	30.88	7.36	18.06
75	21.11	5.45	12.23
80	7.88	2.00	4.30

Source: Department of Census and Statistics (2012a). Labour Force Survey (LFS). Colombo, Sri Lanka: Department of Census and Statistics.

Most old age income support schemes in Sri Lanka are employment based. As such, labour force participation has a direct bearing on access to old age income support. Table 1 shows Sri Lanka's labour force participation rates by age group and gender. It is evident from the numbers that female labour force participation is lower across all age groups compared to males. Close to 95 per cent of males age 25-29 are employed, but the share of employed females age 25-29 is less than half as great (39.4 per cent). Labour force participation is highest for females age 40-44, but the share nevertheless remains below 50 per cent. This indicates

that more than half the female population is not directly eligible for employment-based old age income support schemes because they are not participating in employment. This is of special concern as older females are estimated to outnumber males.

2.1.2 LIVING ARRANGEMENTS AND POVERTY

The majority of older persons depend on filial support in old age. Nearly 80 per cent of older persons reside with their children and depend on them for financial and other forms of support. Only 6 per cent of older persons live alone (World Bank, 2008). As is true of the general population, the majority of older persons reside in rural areas; data show 80 per cent live in rural areas, 13 per cent live in urban areas and 6 per cent live in estate sectors (World Bank, 2008).

When considering the population as a whole poverty does not appear to affect older persons disproportionately. As can be seen in table 2 the non-poor and poor elderly are respectively 12.4 per cent and 10.4 per cent of the total population. In terms of gender, empirical evidence suggests that older women (age 70–79) are about five per cent more likely to be poor than older men (World Bank, 2008).

TABLE 2. POPULATION DISTRIBUTION AGE AND POVERTY STATUS (PERCENTAGE)

Age group	Poverty status	
	Non-poor	Poor
Less than 25	40.5	50.2
25-44	28.5	26.0
45-59	18.6	13.3
60	12.4	10.4

Source: Department of Census and Statistics, 2013.

2.2 What is known about pensions schemes in the country

Sri Lanka's population is ageing rapidly. Unless older persons have access to formal or informal income support they are likely to fall into poverty. Pensions are an important form of retirement security that is provided to protect the economic standing of older persons. Evidence suggests that the existing pension system in Sri Lanka provides inadequate benefits and coverage. Past data suggest that less than 4 million workers out of a labour force of over 8 million are covered by old age security (World Bank, 2008). After taking into consideration

the high default rate of informal sector pensions the effective coverage rate will be even lower (Gaminiratne, 2004; World Bank, 2008).

Furthermore, the pension benefits provided are deemed insufficient to meet economic and social needs. In the informal sector some pension benefits are well below the national poverty line. In addition, pension benefits in Sri Lanka are not indexed to prices or wages resulting in the deterioration of the real value of income at retirement. For example, a worker age 18 joining a pension scheme which promises a pension of LKR4,167 at age 60, will receive a pension of just LKR76 by age 60 after adjusting for an assumed inflation rate of 10 per cent (Eriyagama and Rannan-Eliya, 2003; Willmore, 2008).

Additionally, the ability of the Government to continue to support the PSPS is in question. Because it is a non-contributory scheme, the ageing of the population and increased life expectancy will increase the number of older persons drawing benefits over a longer period of time.

One of the problems with informal sector pensions is that they were designed after pension schemes for formal sector workers. Differences between formal and informal work make this impractical. For examples, it is not possible to take automatic monthly deductions from salaries for pensions in the informal sector because of low income levels. Also, the earnings of informal sector workers are very irregular, thus they are unable to make regular contributions. The administration of pension funds for informal workers is a further problem, as the administrative capacity of relevant ministries is insufficient to keeping track of ad hoc contributions to pension funds over a very long period. Also, informal sector pension programmes are only available for some employment categories. It is not clear what will happen to a person's pension funds if he or she decides to change from one occupation category to another, and it is expensive to keep separate funds for different occupation categories. This observation appears to be validated by the low level of benefits provided to the participants in these pension schemes.

In addition to pension income, older persons in Sri Lanka depend on filial support for old age income security. According to the World Bank 2006 Sri Lanka Aging Survey about 80 per cent of older persons live with their children and many rely on their children for financial and other types of support (World Bank, 2008; p 7). However, such support is likely declining due to urbanization, changes in family size and migration. At present about 86 per cent of older persons live in rural areas (World Bank, 2008).² Moreover, as the population ages the share of economically active people (those whose labour supports older persons) will decrease. The World Bank (2008) shows that the dependency ratio is steadily increasing in Sri Lanka.

Therefore, low old age income levels coupled with decreasing filial support will expose large numbers of older persons to economic vulnerability. To overcome this impending complication Sri Lanka requires a strengthening of its formal social security systems.

2 This includes 6 per cent living in estates.

3 Existing pension funds in Sri Lanka

There are five occupation-based pension schemes in Sri Lanka at present. These are the Public Service Pension Scheme (PSPS); Employee Provident Fund (EPF); Farmers' Pension and Social Security Benefit Scheme (FMPS); Fishermen's Pension and Social Security Benefit Scheme (FSHPS); and the Self-employed Persons Pension Scheme (SPPS).

The PSPS was the very first pension scheme in the country. It was founded in 1901 to provide pension support for older persons. Although there was talk of extending this scheme to the private sector from the early 1950s, this did not happen till the enactment of the Employees' Provident Fund Act of 1958. The scheme that ensued was not a pension scheme, but a provident fund that provided a lump sum payment at retirement. Starting in the late 1980s the Government has been concerned about old-age support for the workers in the informal sector. In 1987, a contributory pension scheme was started for farmers. Following this, similar contributory pension schemes were introduced for fishermen, and other informal sector workers. In addition to these programmes, under the Government's cash transfer programme the poor elderly are provided a cash transfer. This programme, called the Public Welfare Assistance Allowance (PAMA), provides an allowance to households whose monthly income falls below a minimum amount. Details of these pension programmes are given in tables 3 and 4.

3.1 Public service pension scheme (PSPS)

The PSPS, administered by the Department of Pensions, is a non-contributory scheme for civil servants. It only covers permanent public employees (civil servants, armed forces, provincial and local government employees, teachers and the judiciary). It is financed by general taxation. The monthly pension is calculated as a percentage of the final salary based on the period of service and it is payable from age 55 and must be taken by age 60. The pension is not taxable but it is not inflation protected. Government officers are entitled to a monthly pension if he or she is holding a pensionable post and has completed the required period of service (see table 5).

In the event of a civil servant's death, his/her dependents are entitled to an unreduced pension. In addition, the widows, widowers and orphans pension is a separate contributory scheme that provides benefits to dependents of public sector workers who die in service (Government of Sri Lanka, 2009). For public servants at the primary or secondary level the amount of contribution for this scheme is 6 per cent of their salary; for tertiary and senior level posts it is 7 per cent. The widow or widower is eligible to receive the pension until re-marriage. For orphans, male children under age 21 and unmarried female children under age 21 are entitled to receive the pension. If unemployed, male children age 21-26 can receive the pension. Unemployed and unmarried female children age 21-26 can also receive the pension. The entitlement can be obtained after the death of both mother and father.

TABLE 3. DESCRIPTION OF OLD AGE SOCIAL SECURITY PROGRAMMES IN SRI LANKA

Name	Year established	Administration	Financing
PUBLIC SECTOR PENSIONS			
Public servants pensions scheme ¹	1901	Department of Pension	Treasury
Armed Forces Pensions and Gratuities ¹	1981	Department of Pension	Treasury
Widows/widowers ¹	1983	Department of Pension	Contributory subsidized by government
Public servants provident fund ¹	1942	Department of Pension	Joint contribution; Worker (8%); employer (12%)
PRIVATE SECTOR			
Employees' Provident Fund ²	1958	EPF Department of the Central Bank	Joint contribution; Worker (8%); employer (12%)
Employees' Trust Fund ³	1981	Employees Trust Fund Board	Contribution only from employer 3% of monthly gross earnings
INFORMAL SECTOR			
FMPS ⁴	1987	Agricultural and Agrarian Insurance Board (AAIB)	Contributory subsidized by government
FSHPS ⁴	1990	AAIB	Contributory subsidized by government
Migrant worker pension scheme ⁵	2008	National Pension Trust Fund	Migrant worker prior agreed monthly contribution
Public Assistance Monthly Allowance (PAMA) Program ⁶	2012	Department of the Commissioner General of Samurdhi	Treasury
Sahana ⁷	1996	Sri Lanka Social Security Board	Contributory subsidized by government
Thilina ⁷	1999	Sri Lanka Social Security Board	Contributory subsidized by government
Isuru ⁷	1999	Sri Lanka Social Security Board	Contributory subsidized by government
Sarana ⁷	2006	Sri Lanka Social Security Board	Contributory subsidized by government
Surakuma	2006	Sri Lanka Social Security Board	Contributory subsidized by government
Dhanalakshmi ⁷	2006	Sri Lanka Social Security Board	Contributory subsidized by government

Sources: **1** Department of Pensions, 2014; **2** EPF Department, Central Bank of Sri Lanka; **3** Employees' Trust Fund Board, 2009; **4** Interviews with officials of Agriculture and Agrarian Insurance board and Eriyagama and Rannan-Eliya, 2003; **5** Interviews with officials of the Sri Lanka Foreign Employment Bureau; **6** Tilakaratna, Galappattige and Jayaweera, 2013; **7** Interviews with officials of the Social Security Board.

TABLE 4. ELIGIBILITY AND STATUS OF OLD AGE SOCIAL SECURITY SCHEMES IN SRI LANKA

Name	Eligibility	Comments
PUBLIC SECTOR PENSIONS		
Public servants pensions scheme	Permanent public employees with at least 10 years of service. Benefits from age 55.	Functioning
Armed Forces Pensions and Gratuities	Armed forces. Male and female soldiers with 22 and 15 years of service, respectively; Officers with 20 years of service.	Functioning
Widows/widowers	Widows or children [below 26 years old] of pensionable public servants	Functioning
Public servants provident fund	Non-pensionable government employees.	Functioning
PRIVATE SECTOR		
EPF	Private formal sector workers.	Functioning
ETF	All private and public sector employees who are not entitled to the government pension scheme	Functioning
INFORMAL		
FMPS	Cultivators. Less than 10 acres for paddy cultivators, less than 2 acres of cultivating area for tea rubber and coconut cultivators and less than 3 acres for mixed crops, Non-entitlement to a pension/benefit under EPF and non-income tax payer. Pension is paid after age 60.	Functioning
FSHPS	Fishers in the sea, lagoons, inland waters. Must own fewer than three mechanised boats weighing less than 6 tons, or less than 5 acres of fish culturing places or farms. Non-entitlement to a pension/benefit under EPF. Benefits after age 60.	Functioning
Migrant worker pension scheme	Registered	Not functioning
PAMA Program	Low income families, vulnerable households belonging to the categories of older persons, persons with disabled, and widows with disability, married women living separately and orphaned children below age 16.	Functioning. Prior to 2012 this was partly implemented by provincial councils
Sahana	Self-employed who have less than LKR3,000 of monthly income and Non-entitlement to a government pension.	New registrations stopped. Merged with Surakuma

Name	Eligibility	Comments
Thilina	Self-employed who have less than LKR6000 of monthly income and Non-entitlement to a government pension	New registrations stopped. Merged with Surakuma
Isuru	Non-entitlement to a government pension	New registrations stopped. Merged with Surakuma
Sarana	Non-entitlement to a government pension	New registrations stopped. Merged with Surakuma
Surakuma	Members should be between 18-59 years of age when they register. Benefits are offered after age 60, or five years after joining the scheme for those who join after age 55.	Functioning
Dhanalakshmi	Non-entitlement to a government pension	New registrations stopped. Merged with Surakuma

Sources: 1 Department of Pensions, 2014; 2 EPF Department, Central Bank of Sri Lanka; 3 Employees' Trust Fund Board, 2009; 4 Interviews with officials of Agriculture and Agrarian Insurance board and Eriyagama and Rannan-Eliya, 2003; 5 Interviews with officials of the Sri Lanka Foreign Employment Bureau. 6 Tilakaratna, Galappattige and Jayaweera, 2013; 7 Interviews with officials of the Social Security Board.

TABLE 5. PENSION ENTITLEMENT OF PUBLIC SERVANTS, BY OCCUPATION

Government officer	Gross service period required (months)
Public and provincial public officers	120
Supreme court judges	36
Appeal court judges	36
Other judicial officers	84
Reserve police officers	240

Source: Interviews with officials of the Department of Pensions, Sri Lanka, conducted in 2015.

3.2 Other assistance programmes for older persons

PAMA or the “pin padi” programme began in 1939 and provides income support to the destitute (Willmore, 2008). It was initially implemented and operated through provincial council funds. PAMA provides a monthly allowance to households whose monthly income falls below LKR3,000 a month (Tilakaratna, Galappattige and Jayaweera, 2013). Conditional on the number of dependents, eligible households receive a monthly allowance that ranges from LKR250 to LKR500 a month. The allowance begins at LKR250 for households with a single member and an extra LKR50 is added for each dependent with a maximum of five dependents per family. Moreover, beginning in 2012 the monthly allowance for older persons over age 70 as increased to LKR1,000 per month (Tilakaratna, Galappattige and Jayaweera, 2013). PAMA includes ‘income earnings potential’ criteria which stipulate a programme exit point. For example, when the child of a beneficiary reaches the age of 18, this is considered an exit point (Tilakaratna, Galappattige and Jayaweera, 2013).

In 2011, 447,277 persons received PAMA in difference districts (Tilakaratna, Galappattige, & Jayaweera, 2013). However, some of these were younger vulnerable individuals with disabilities or chronic illnesses.

In addition to the above, the Ministry of Social Services gives a monthly cash transfer of LKR1,000 to eligible people who are 70 years old and older under the Elderly Assistance Programme (EAP). In 2013, 179,910 older persons received benefits under this programme (Institute of Policy Studies of Sri Lanka, 2014). Some older persons benefit from both the PAMA allowance and the Elderly Assistance programme. Moreover, poor and disadvantaged people who are older than 60 also receive a cash transfer under the Samurdhi Programme.

3.3 Private sector superannuation benefits

The Employee Provident Fund (EPF), administered by the EPF Department of the Central Bank, is a mandatory provident fund that acts as a retirement savings scheme for formal private sector employees. It was established in 1958. The EPF is a defined contribution scheme. Employers and employees contribute jointly to the fund at rates of 12 per cent and 8 per cent of gross earnings, respectively. Upon retirement (age 55 for males and age 50 for females) members are entitled to claim their benefits as a lump sum. The benefits may also be claimed for reasons such as migration or female members retiring after marriage. The EPF also provides disability and survivor benefits to its members.

The Employees Trust Fund (ETF), administered by the Employee Trust Fund Board, is a defined contribution old age benefit scheme. Under this scheme the employer makes a mandatory contribution of 3 per cent of the employee’s monthly earnings which is not deductible from the employee’s salary. Similar to the EPF, the ETF provides a lump sum payment at retirement.

3.4 Informal sector pension schemes

The informal sector pension schemes include the Farmers' Pension and Social Security Benefit Scheme (FMPS), Fishermen's Pension and Social Security Benefit Scheme (FSHPS) and the Self-employed Persons Pension Scheme (SPPS).

The FMPS, administered by the Agricultural and Agrarian Insurance Board (AAIB), is a defined-contributory and voluntary scheme subsidized by the Government. A monthly pension is payable to the beneficiary at age 60 if the farmer enrolled in the scheme between 18–54 years of age. If the farmer enrolled between age 55 and 59, he or she will receive the monthly pension on completion of 5 years of contributions. The pension amount ranges from a minimum of LKR1,000 to a maximum of LKR4,167. To be eligible, a farmer should not be eligible for other pensions or benefits under the EPF and should meet criteria related to land ownership (table 6).

TABLE 6. ELIGIBILITY FOR FARMER'S PENSION AND SOCIAL SECURITY BENEFIT SCHEME

Type of cultivation	Land ownership
Paddy	Less than 10 acres
Tea/Rubber/Coconut	Less than 2 acres
Mixed crops	Less than 3 acres

Source: Interviews with officials of Agriculture and Agrarian Insurance Board, Sri Lanka.

The FSHPS is also administered by the AAIB and is a defined contributory, voluntary scheme. Similar to the FMPS, a monthly pension is payable when the beneficiary reaches age 60 or upon completion of five years of contributions, depending on the beneficiary's age at enrolment. To be eligible, a fisherman should not be eligible for other pensions or benefits under the EPF or the ETF. Moreover, the fisherman should own fewer than three merchandized boats weighing less than 6 tons or own less than 5 acres of aquaculture space or fish farms (AAIB, 2014).

Several contributory pension programmes were established for the self-employed, but they merged into a single programme. The 'Surakuma' programme is the main pension scheme currently in operation. It is administered by the Sri Lanka Social Security Board (SSB). Surakuma is a voluntary, contributory scheme that is accessible to those who are not eligible for a government pension. Members are eligible for a monthly pension starting at age 60 until their death.

One of the main problems with informal sector schemes is high default rates. This occurs mainly because workers are expected to make regular contributions to the pension fund even though their income is often irregular and limited. From time to time grace periods have been introduced to allow participants to pay overdue contributions, yet the default rates have remained as high as 40 per cent (ILO, 2008).

4 Effectiveness of different pension schemes

This section examines the effectiveness of pension programmes in the country according to the coverage of pension schemes and the adequacy of benefit amounts. Coverage refers to the proportion of the population covered by different pension schemes. Since pension schemes in Sri Lanka are employment based and target specific types of workers, this section first examines the coverage of each eligible population (specifically those enrolled in the programme as a proportion of those eligible for the programme). It then examines the coverage of each pension scheme for the entire population. Since many of those who are enrolled in different pension programmes have defaulted on their payments, this section estimates effective coverage by discounting those who default. To determine adequacy, this section examines whether the pension benefits are adequate to keep an older person out of poverty. This will be determined by comparing the pension benefits to the poverty line. Where possible this analysis will be conducted for males and females separately.

4.1 Coverage

4.1.1 PUBLIC SECTOR

PSPS

All permanent workers in the public sector are eligible for PSPS. The scheme is funded by the treasury and all permanent public sector workers are automatically enrolled in it when they are recruited, thus this scheme has coverage of 100 per cent. However, temporary workers in the public sector are not eligible for this programme. The number of permanent public sector workers (workers who are eligible for this programme) for 2012 was about 842,000 (CBSL, 2014), or about 10 per cent of the labour force.³ In 2013, 498,291 older persons benefited from this scheme (see table 7). This means about 18.4 per cent of the 2.7 million older persons in the country benefited from the PSPS in 2013.⁴

3 The total labour force in 2012 is 8.45 million; the number of eligible government workers in 2012 is 842,000. Therefore, the estimated coverage of PSPS as a percentage of the labour force is about 10 per cent.

4 United Nations, Department of Economic and Social Affairs, n.d.

TABLE 7. NUMBER AND CATEGORY OF BENEFICIARIES UNDER THE PSPS, 2013

Category	Number of beneficiaries
Civil	299
Widows, widowers and orphans	133
Forces	65
Total	498

Source: Interviews with officials of Department of Pensions, Sri Lanka.

Note: Gender disaggregated data were not readily available for these statistics.

4.1.2 INFORMAL SECTOR⁵

As indicated earlier, there are several informal sector pension schemes, each targeting a different group of workers. Table 8 provides a summary of the number of beneficiaries of informal sector pension schemes. As eligibility and coverage differ with each scheme, the schemes will be examined separately.

TABLE 8. NUMBER OF BENEFICIARIES FOR INFORMAL SECTOR SCHEMES

Informal sector schemes	Number of beneficiaries	
	2014	2013
FMPS	127 960	N/A
FSHPS	N/A	2 361
SPPS	N/A	15 527

Source: Interviews with officials of AAIB and SSB, Sri Lanka.

Note: N/A data not available.

5 Gender disaggregated data were not readily available for the statistics mentioned in this section.

Farmers' pension and social security benefit scheme (FMPS)

As seen in table 8, the average number of beneficiaries under the FMPS in 2014 was 127,960. As illustrated in table 9 the number enrolled in the FMPS as of March 2015 was 959,254.⁶ It is estimated that about 1.5 million active farmers (17.8 per cent of the labour force) are eligible for the pension scheme.⁷ Therefore, estimated coverage of FMPS is about 64 per cent. The number of farmers receiving pension benefits, however, will be much lower because of the default rate, which is quite high in informal sector schemes. Taking into account a default rate of 40 per cent as reported by ILO (2008) the effective coverage of FMPS is reduced to 36 per cent.

Fishermen's pension and social security benefit scheme (FSHPS)

In 2013, the average number of beneficiaries under FSHPS amounted to 2,361, as depicted in table 8. Fishermen constitute an estimated 1.7 per cent of the labour force or about 147,000 workers.⁸ The number of enrollees under FSHPS as of March 2015 was 68,244, for an estimated coverage of 46 per cent (table 9). Similar to FMPS, after taking into account the default rate (40 per cent) the effective coverage was reduced to about 28 per cent.

Under FMPS and FSHPS if a worker defaults on their payments they are eligible for a refund if they have made 10 per cent of the required minimum contribution for a monthly pension. The refund will only be effective upon age 60. If a worker joins a government job the amount already contributed can be refunded two years later. There is no direct link between FMPS and FSHPS, and a worker is eligible for only one scheme at a time.

Self-employed Persons Pension Scheme (SPPS)

The number of beneficiaries under SPPS for 2013 was 15,527, as depicted in table 8. The number of enrollees as of December 2013 was 465,098 as can be seen in table 9. It is estimated that about 2.6 million workers are self-employed (Department of Census and Statistics, 2012b). The estimated coverage rate is about 18 per cent which falls to about 11 per cent after taking the default rate into consideration. The low coverage is in part a result of workers' inability to pay contributions to the scheme (Gaminiratne, 2004).

In the case of default the amount already contributed under this scheme is refunded only if the person has made 25 per cent of the required contributions to receive a monthly pension at retirement. Yet, if a worker enrolled under this scheme joins a government job, the amount already contributed is refunded regardless of whether or not he has made the 25 per cent

6 This number refers to the total number of enrollees from when the programme began up to 2010. Since 2010 enrolment in the programme has been suspended. It must be noted that the FMPS has largely been defunct in recent years due to a lack of funds and the default rate has been high.

7 Farmers as a percentage of total labour force is calculated based on people whose primary occupation falls into ISCO-88 categories 6110-6139 using LFS (2012) data. The number of farmers is calculated by multiplying the total labour force, 8.45 million (obtained from CBSL, 2014), by 17.8 per cent.

8 Fishermen as a percentage of total labour force is calculated based on people whose primary occupation falls into ISCO-88 categories 6151-6154 using LFS (2012) data. The number of fishermen is calculated by multiplying the total labour force, 8.45 million (obtained from CBSL, 2014), by 1.7 per cent.

contribution. If a worker is eligible for the PSPS as a civil servant he/she will no longer be eligible for the SPSS.

About 5 million people are estimated to be eligible for at least one of the four pension schemes (see table 9). Given that the number of enrollees amounts to about 2.3 million, the four pension schemes cover only about 46 per cent of eligible people. Further, the estimated pension coverage was only 18 per cent of the population of the country age 15-59. The effective coverage of the pension schemes is considered to be 13.2 per cent of the prime-age population.⁹

TABLE 9. COVERAGE OF DIFFERENT PENSION SCHEMES (2012 OR MOST RECENT AVAILABLE YEAR)

	PSPS	FMPS	FSHPS	SPSS	Total
Year of enrolment data	2012	201	201	2013	
Number of enrollees (A)	842 000	959 2541	68 2441	465 0982	2 334 596
Estimated eligible population (B)	842 000	1 500 0003	147 0003	2 600 000	5 089 000
Estimated coverage (as a percentage of eligible population) (A as a percentage of B) ³	100	64	46	18	46
Effective coverage (using a default rate of 40%) ³	100	38	28	11	
Estimated coverage as a percentage of age 15-59 population in 2012	6.4	7.3	0.5	3.6	17.7
Effective coverage as a percentage of age 15-59 population in 2012	6.4	4.3	0.3	2.2	13.2

Source: 1 AAIB, 2 SSB; 3 Authors' calculations based on Gaminiratne, 2004.

Notes: **a** Estimated eligible population refers to regular government workers for 2012 obtained from CBSL (2014). **b** Number of enrollees is as of Mar. 2015. This number refers to the total number of enrollees from when the programme began up to 2010. Since 2010 enrolment in the programmes has been suspended. These enrolments would have been constant since 2012. Estimated eligible population is calculated by multiplying the total labour force number by the percentage of farmers or fishermen in the total labour force. **c** Number of enrollees is as of Dec. 2013. Estimated eligible population for 2012 obtained from the Department of Census and Statistics (2012a).

9 This indicates that although 18 per cent of the population was covered by the pension based on enrolments, due to defaulting on pension payments the actual coverage has dropped to an estimated 13.2 per cent.

4.2 Adequacy

4.2.1 PSPS

The PSPS provides a generous replacement income compared to public sector pension schemes in other countries (Gaminiratne, 2004). However, it is not indexed to wages or prices. The Government has made sporadic efforts to adjust the public sector pensions to increase their real value but such adjustments have been below the rate of inflation on average. Thus, the pension loses value in real terms and this leads to a deterioration of the living standards of public sector pensioners.

Table 10 presents the average monthly pension payment of PSPS and informal sector pensions for the year 2013. As of December 2013, the national poverty line in Sri Lanka was set at LKR3,781 (Department of Census and Statistics, 2014b). This number shows that public sector pensioners earn well above the poverty line, on average.

TABLE 10. ESTIMATED AVERAGE MONTHLY PENSION PAYMENT OF PENSION SCHEMES

Pension schemes and national poverty line	Average amount per month (Sri Lankan rupee)	Percentage of national poverty line
Formal sector pension – PSPS		
Civil servants	16 675.01	441
Widows, widowers and orphans	16 814.36	445
Forces	11 618.37	307
Informal sector pensions		
FMPS (2014) ^b	1 498.98	40
FSHPS (2013) ^b	1 301.12	34
SPPS (2013) ^c	1 000.00	26
National poverty line (Dec. 2013) ^d	3 781.00	100

Source: **a** Department of Pensions; **b** AAIB; **c** SSB; **d** Department of Census and Statistics, 2014b.

Note: Gender disaggregated monthly pension data are not available.

4.2.2 INFORMAL SECTOR SCHEMES

As seen in table 10, the average monthly pension payment of FMPS, FSHPS, and SPPS were all well below the poverty line in 2013. The low benefits are likely a result of non-indexing of contributions on inflation and the pension fund being too small as a result of low contributions paid by members (Willmore, 2008). With the expected ageing of the population the number of pensioners will increase in the future. In this respect whether or not the scheme will have sufficient funds to pay all pensioners is uncertain.

Because informal sector schemes are not indexed to inflation inadequacy of retirement income is a problem. As can be seen in table 11, a farmer who enrolls in the scheme today at age 18 can expect a monthly payment at retirement of LKR4,167. However, assuming an inflation rate of 5 per cent, the value of the pension would be only LKR537 in present value terms. The pension would be worth only LKR11.76 in present value terms assuming a 15 per cent rate of inflation. These estimates will change if the Government continues to adjust the pension to maintain its real value, as it has done sporadically in the past.

TABLE 11. IMPACT OF INFLATION ON REAL VALUE OF PENSIONS (SRI LANKAN RUPEE)

Age at enrolment	Promised monthly pension by pension scheme	Present value of pension at age 60	
		5%	15%
18	4	537	11.76
25	2	453	18.77
35	1	394	40.49
40	1	471	76.38
55-59	1	864	657.52

Source: a Gaminiratne, 2004; b Authors' calculations.

Note: * The promised pension for farmers and fishermen ranges from LKR1,000 – LKR4,167.

Tables 12 and 13 show the net present value of a future pension for males and females, respectively, in the informal sector (see Appendix A for a description of the methodology). If a male retires at age 60 and expects to live till age 71 (life expectancy at birth for males), his retirement period would be 11 years. If he earns a yearly pension benefit of LKR12,000, then, assuming an interest rate of 5 per cent the present value of the pension stock at the time of retirement would be LKR99,676. As can be seen from the two tables, when the age at enrolment goes up, the net present value of the pension stock also goes up. However, the minimum

annual contribution required to save the desired value of the pension at retirement age goes up when the age at enrolment is higher. For example, to save LKR135,288 a person age 18 today would have to make a minimum annual payment of LKR946 over 42 years based on the annually compounded 5 per cent discount rate. On the other hand, a person age 45 years today would have to make a minimum annual payment of LKR5,719 to have a pension stock of LKR135,288 at retirement. Furthermore, if an individual now age 18 is promised a yearly pension of LKR50,004 (the maximum annual pension that can be received) the minimum annual contribution is four times higher than if he or she were promised a LKR12,000 yearly pension (the minimum annual pension that can be received).

TABLE 12. NET PRESENT VALUE OF A FUTURE PENSION AND THE REQUIRED MINIMUM ANNUAL CONTRIBUTION TO SAVE FOR THE DESIRED VALUE OF THE PENSION – MALES (SRI LANKAN RUPEE)

Promised monthly pension by the pension scheme ^a (A)	Promised yearly pension by the pension scheme ^b	Present value of pension stock at retirement (age 60) ^c (B= A*12)	Net present value of the pension by age of enrolment to the pension ^d				Minimum annual contribution needed, by age of enrolment to the pension ^e			
			18	25	35	45	18	25	35	45
1	12	99	12	18	29	47	697	1	1	4
2	31	257	33	46	76	123	1	2	5	10
4	50	415	53	75	122	199	2	4	8	17

Source: Authors' calculations.

Notes: **a** The promised monthly pension ranges from a minimum of LKR1,000 to a maximum of LKR4,167; LKR2,584 is the midpoint. **b** Promised yearly pension is the promised monthly pension multiplied by 12.

c Value of the pension at retirement is calculated considering life expectancy at birth (71 years for males) using a 5 per cent interest rate. **d** Net present value is calculated using 5 per cent discount rate. The table presents how this differs according to the age of enrolment. For example, a male enrolling in the pension scheme at 18 years of age has a stock of pension of net present value Rs.12,842. **e** The minimum annual contribution is the minimal required annual payment into the pension programme to save the desired value of the pension at retirement age. For example, to save LKR99,676, a person age 18 today would have to make a minimum annual payment of LKR697 over 42 years based on the annually compounded 5 per cent discount rate.

TABLE 13. NET PRESENT VALUE OF A FUTURE PENSION AND THE REQUIRED MINIMUM ANNUAL CONTRIBUTION TO SAVE FOR THE DESIRED VALUE OF THE PENSION – FEMALES (SRI LANKAN RUPEE)

Promised monthly pension by the pension scheme ^a	Promised yearly pension by the pension scheme ^b	Present value of pension stock at retirement (age 60) ^c	Net present value of the pension by age of enrolment to the pension ^d				Minimum annual contribution needed, by age of enrolment to the pension ^e			
			18	25	35	45	18	25	35	45
1	12	135	17	24	39	65	946	1	2	5
2	31	349	45	63	103	168	2	3	6	14
4	50	563	72	13	166	271	3	5	11	23

Source: Authors' calculations.

Notes: **a** The promised monthly pension ranges from a minimum of LKR1,000 to a maximum of LKR4,167;

LKR2,584 is the midpoint. **b** Promised yearly pension is the promised monthly pension multiplied by 12.

c Present value of the pension at retirement is calculated considering life expectancy at birth (77 years for females) at 5 per cent interest rate. **d** Net present value is calculated using a 5 per cent discount rate.

e The minimum annual contribution is the minimal required annual payment into the pension programme to save the desired value of the pension at retirement age. For example, to save LKR135,288, a person age 18 today would have to make a minimum annual payment of LKR946 over 42 years based on the annually compounded 5 per cent discount rate.

Table 13 shows the net present value of a future pension for females and illustrates that the present value of the pension stock at retirement is higher for females compared to males. Because female life expectancy at birth is 77 years, the minimum annual contribution required to save for the desired value of the pension for females is higher across all ages compared to males. For example, to save LKR135,168, a woman age 25 today would have to make a minimum annual payment of LKR1,412 over 35 years, compared to an annual contribution of LKR1,040 by a man age 25 today (because the pension stock at retirement is LKR99,676). Older women have to contribute higher amounts annually compared to younger women in order to receive the same pension stock.

The earnings of informal sector workers are quite irregular and workers have limited income generating capacity. As a result, they are generally unable to self-finance their own income security schemes (Eriyagama and Rannan-Eliya, 2003; World Bank, 2006). Furthermore, the incidence of default in informal sector pension schemes is rather high. Despite being given extended grace periods and pardons so that members can make outstanding contributions the default rate has remained high (Gaminiratne, 2004). Therefore, whether informal sector workers are able to contribute the minimum annual payments outlined in tables 12 and 13 is

questionable. Some of the contributions, particularly for older persons, are much higher than the poverty line of LKR3,781 for December 2013.

TABLE 14. NET PRESENT VALUE OF A FUTURE PENSION FOR DIFFERENT RETIREMENT AGES – MALE (SRI LANKAN RUPEE)

Age at retirement	Promised yearly pension by the pension scheme	Present value of pension stock at retirement ^a	Net present value of the pension at different ages of enrolment ^b			
			18	25	35	45
60	12	99	12	18	29	47
65	12	60	7	11	17	29
70	12	11	1	2	3	5

Source: Authors' calculations.

Notes: **a** Present value of the pension at retirement is calculated considering life expectancy at birth (71 years for males) at 5 per cent interest rate. **b** Net present value is calculated using a 5 per cent discount rate

Tables 14 and 15 show the net present value of a future pension at different retirement age for men and women. When the age at retirement goes up from 60 to 65 or 60 to 70 the net present value of the pension stock reduces across all age groups. This is because the number of years of retirement is reduced as the age at retirement goes up (considering life expectancy at birth is 71 years for males and 77 years for females).

TABLE 15. NET PRESENT VALUE OF A FUTURE PENSION FOR DIFFERENT RETIREMENT AGES – FEMALE (SRI LANKAN RUPEE)

Age at retirement	Promised yearly pension by the pension scheme	Present value of pension stock at retirement	Net present value of the pension at different ages of enrolment to the pension			
			18	25	35	45
60	12	135	17	24	39	65
65	12	106	13	19	31	51
70	12	69	8	12	20	33

Source: Authors' calculations.

Notes: **a** Present value of the pension at retirement is calculated considering life expectancy at birth (77 years for females) at 5 per cent interest rate. **b** Net present value is calculated using a 5 per cent discount rate

4.2.3 PENSIONS OFFERED BY PRIVATE SECTOR BANKS

Several banks in Sri Lanka also offer retirement schemes. Table 16 presents a summary of some of the available pension schemes. The minimum retirement benefit offered by the banks is LKR10,000, similar to the average benefits offered by the PSPS and higher than informal sector schemes. These schemes are, therefore, an alternative for those seeking higher benefits. However, these schemes have strict eligibility criteria. For example, under the National Savings Bank (NSB) pensions plus scheme, pension eligibility requires a minimum account balance of LKR100,000. Moreover, unlike the informal sector schemes, there is no grace period given to those who default on their contributions; if an individual fails to make contributions for 12 consecutive months he/she becomes ineligible for the pension and the individual's contributions are paid back to him/her. Given that work in the informal sector is characterized by irregular income and limited income generating capacity, it seems unlikely that workers in the informal sector could benefit from the pension schemes offered by these banks.

TABLE 16. SUMMARY OF PENSIONS OFFERED BY BANKS

Bank	Name of scheme	Eligibility	Retirement benefit
Bank of Ceylon	Abhimana retirement scheme	Any Sri Lankan individual above age 18 Private sector employees Semi-government employees (Government Corporations/ Boards/ Authorities) Self-employed people Non-resident Sri Lankans (dual citizenship holders are not eligible) Retired persons (by paying Provident Fund or savings as a lump sum) Private sector employers (for their employees through joint contributions)	Any amount in multiples of LKR10,000
Commercial bank	Future pensions plan	Any Sri Lankan (resident or non-resident) between the ages of 18 and 55.	Starting from LKR10,000 up to any amount.
National Savings Bank	NSB pensions +	Any Sri Lankan citizen over age 16. Pension eligibility requires a minimum account balance of LKR100,000.	A lifetime pension and the nominee benefiting with the residual value or a periodic pension over a specified period of time with no residual value or the entire balance as a lump sum or a combination of any of the above

Source: Bank of Ceylon; Commercial Bank, Sri Lanka; and National Savings Bank, Sri Lanka.

5 Fiscal cost of extending coverage

5.1 Extending coverage to all

As described above, informal sector pensions are contributory-voluntary schemes. However, many informal sector workers do not have the ability to contribute for reasons ranging from irregular income to limited income generating capacity. The income from some informal sector work, particularly in agriculture and fisheries, is irregular because it is connected to seasonal harvests. This income is also dependent on the size of the harvest. Informal workers are vulnerable to income losses due to extreme weather conditions, diseases spread by insects, and the destruction of crops by wild animals. Those who have limited income generating capacity include unpaid family farmers, students and housewives who are generally unable to self-finance their own income security schemes (Gaminiratne, 2004).

Contributory pension programmes in low income countries with a large share of the population in the informal sector, therefore, have proven to be unsuccessful in providing minimum income support to older persons (Willmore, 2008). One option to achieve poverty reduction in old age is to introduce a non-contributory pension. There are two types of non-contributory pensions, namely a) means-tested pensions, and b) universal pensions. Both have been implemented across the world. Means-tested pensions specifically target the poor and are means-tested in terms of earnings, income, or assets (Shen and Williamson, 2006). Countries that provide means-tested pensions in Asia include India and Bangladesh. Under a universal pension each retiree would receive a basic pension aimed at keeping the beneficiary out of poverty. The universal pension is available unconditionally to all people. Nepal is an example of a country in Asia that has a universal pension in place.

Means-tested pensions, though attractive, often fail to reach large numbers of the poor and are captured by people who are better off. In India, for example, only 45 per cent of the means-tested pensions reach the poorest 20 per cent of the nation. Some 55 per cent of benefits were captured by those who are better off (Grosh, Del Ninno, Tesliuc and Ouerghi, 2008). Similarly, in Chile, only 60 per cent of means-tested pensions reach the poorest quintile (de Mesa and Mesa-Lago, 2006). Moreover, means-tested pension schemes tend to discourage working and savings as a result of increased marginal tax rates. It can, therefore, encourage high levels of informal sector employment to avoid taxes (Ginneken, 2003).

Non-contributory universal pension schemes are an alternative to means-tested pensions. The World Bank (1994) report argues in favour of universal pensions as they do not diminish incentives to work and save. Moreover, it is evident from a range of countries with large informal sectors and high incidences of poverty (for example, Nepal and Namibia) that a non-contributory universal pension scheme funded by government revenue is the most effective at smoothing at providing older persons with a minimum income. It has been reported

that in countries with universal pensions, regular pension income has reduced older persons' perception of vulnerability and increased household disposable income (Gaminiratne, 2004).

In Mauritius, for example, the universal pension has reduced the poverty rate. The current poverty rate among households with an older person is 6 per cent; in the absence of a universal pension the poverty rate would be 30 per cent (Kaniki, 2007). Similarly, in Nepal, 40 per cent of non-contributory universal pension recipients report that their daily living expenses are covered by the pension (Rajan, 2003). Moreover, empirical evidence shows that pensions have positive impacts on children's health and well-being. For example, in Brazil and South Africa, in households with an older person receiving a pension, female children are about 3-4 cm taller than female children in other households (Barrientos and Lloyd-Sherlock, 2002).

However, it has been argued that universal pensions systems provide benefits to those who are better off. Willmore (2008) maintains that this should not be considered a drawback because those who are better off would have paid higher taxes. In this sense, it is appropriate that they receive a benefit which they have already paid for.

5.1.1 FISCAL COST OF A UNIVERSAL PENSION

This section will estimate and evaluate the cost of introducing a universal pension in Sri Lanka. It is important to quantify the costs of implementing a universal pension to determine the affordability of such a policy.

The fiscal cost of extending access to all eligible people at pensionable age is derived by multiplying the size of the population eligible for a pension by the pension entitlement which is expressed as a share of per capita GDP (Willmore, 2001). Even though such variables vary according to a country's socioeconomic and political context there are international benchmarks for the purpose of costing as outlined in Help Age (2011). The results of the fiscal cost of a universal pension are provided in table 17. See Appendix B for a description of the methodology.

Age of eligibility

Table 17 shows the calculations for implementing a universal pension under three alternative qualifying ages: all those over age 60, over age 65, and over age 70. The share of the population potentially eligible for the pension using 2015 population estimates ranges from 6 per cent to provide benefits to those over age 70, to 15 per cent to provide benefits to all over age 60.

Pension benefit

Following Help Age (2011), the costing aimed to use a transfer level which could be considered a basic minimum. The costing assumed a transfer level of 20 per cent of average income (GDP per capita). In Nepal, Bolivia and Mauritius, for example, a universal pension transfer

of approximately 20 per cent has been found to have a significant impact on older persons as well as their families (Willmore, 2003; Uprety, 2010).

Administration costs

Administrative costs are set at 5 per cent of the total cost of transfers following international evidence on the cost of administering a universal pension (Willmore, 2008; Help Age, 2011). In most situations administration costs tend to be lower than 5 per cent.

Projecting fiscal costs into the future

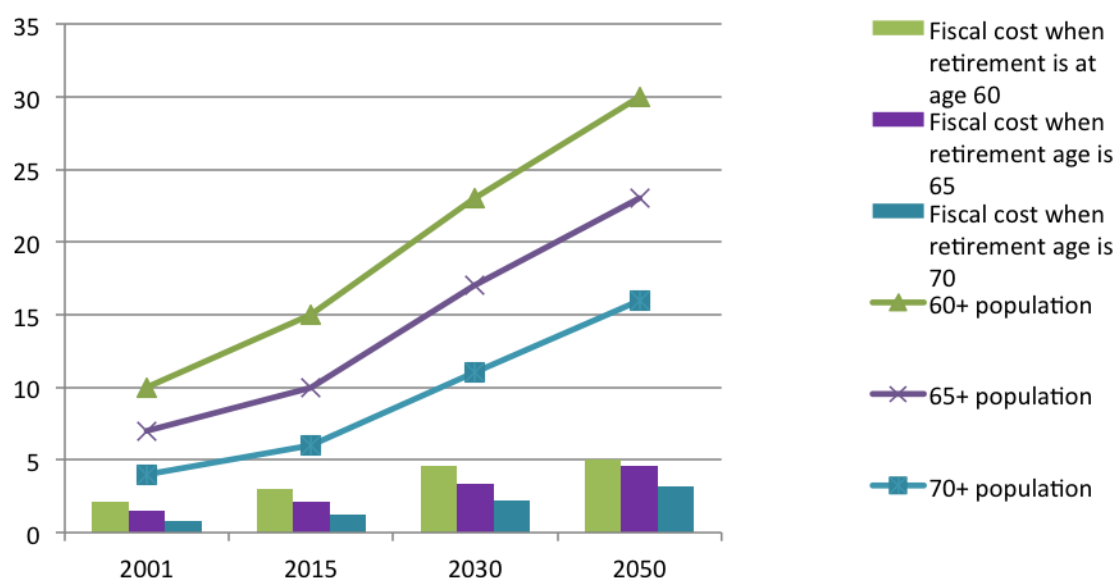
The future sustainability of a universal pension in terms of its fiscal cost can be understood by forecasting the costs into the future. The results are given in table 17. The transfer level will depend on whether it is indexed to average income. Under this scenario the pension level would remain the same relative to average income (at 20 per cent of GDP per capita). If a country's GDP per capita increases this would entail an increase in the real value of the transfer.

TABLE 17. POPULATION COVERAGE AND THE FISCAL COST OF A UNIVERSAL PENSION

Qualifying age for universal pension	2001	2015	2030	2050
Coverage of pension receivers as a percentage of total population				
60+	10	15	23	30
65+	7	10	17	23
70+	4	6	11	16
Fiscal cost of providing the universal pension (percentage of GDP) ^a				
60+	2.1	3.0	4.6	5
65+	1.5	2.1	3.4	4.6
70+	0.8	1.2	2.2	3.2

Source: Author's calculations; Numbers for older persons as a percentage of total population are derived from De Silva (2007).

Note: Fiscal cost of the universal pension is equal to the population proportion that is eligible for pensions times the ratio of the flat pension to per capita GDP (following Help Age (2011), a pension benefit of 20 per cent of GDP per capita is used in this study), plus administration costs of 5 per cent.

FIGURE 5. PERCENTAGE OF OLDER PERSONS AND THE CORRESPONDING FISCAL COST OF A UNIVERSAL PENSION

Source: Author's calculations; Older persons as a percentage of the total population is derived from De Silva (2007).

Note: Fiscal cost of the universal pension is equal to the population proportion that is eligible for pensions times the ratio of the flat pension to per capita GDP (following Help Age (2011), a pension benefit of 20 per cent of GDP per capita is used in this study), plus administration costs of 5 per cent.

The cost of extending access to all (universal pension) increases over the 2001-2050 period in line with the increase in the pensioner population over the same period (see figure 5). If the qualifying age is set at 60 the fiscal cost of extending access increases from 3 per cent to 5 per cent between 2015 and 2050. The fiscal cost can be reduced if the qualifying age is increased; for example, if the qualifying age is 70 the cost is about 50 per cent lower in 2015. It might make sense, therefore, to aim for a universal pension with the qualifying age set between 60 and 65 in order to make it both fiscally sustainable and effective.

5.2 Fiscal cost of extending coverage of the PSPS to all

The fiscal cost of extending the PSPS to the entire population of older people is equal to the administrative cost of implementing the pension, the size of the population eligible for a pension and the pension entitlement expressed as a share of per capita GDP.

$$FC^{PSPS} = A^{PSPS} + \left(\frac{\text{Number of 60+ population}}{\text{Total population}} \right) \times \left(\frac{\text{Pension entitlement}}{\text{GDP per capita}} \right)$$

Where;

A^{PSPS} is the administrative cost of extending access to the informal sector.

TABLE 18. FISCAL COST OF EXTENDING THE PSPS TO ALL AGE 60+, 65+ OR 70+

	Age 60+	Age 65+	Age 70+
Percentage of total population ^a	12.3	7.8	4.7
Estimated yearly pension benefit (LKR) ^b	175	175	175
GDP per capita 2012 (LKR) ^a	372	372	372
Pension benefit (percentage of GDP per capita) ^c	47.17	47.17	47.1
Fiscal cost (percentage of GDP) ^c	5.80	3.68	2.22

Source: **a** CBSL, 2014; **b** Department of Pension; **d** Authors' calculations.

The fiscal cost of extending the PSPS is presented in table 18. The cost is higher than under a universal pension because the pension benefit of LKR175,842 under the PSPS equals to 47 per cent of GDP per capita. Under a universal pension the benefit is equivalent to only 20 per cent of GDP per capita.

6 Conclusions and policy recommendations

As can be seen in table 19, there are approximately 756,025 people over age 60 receiving a pension from the five occupation-related schemes. The total population over age 60 in Sri Lanka in 2013 was about 2.5 million (CBSL, 2014). This indicates that the five schemes provide retirement income to only about 30 per cent of older persons. 70 per cent of older persons do not receive any pension benefit. The only non-contributory scheme in the country (PSPS) provides benefits to only about 20 per cent of older persons. The three contributory/voluntary informal sector schemes combined provides benefits to only 5.61 per cent of older persons. Given that a large proportion of employment in Sri Lanka is in the informal sector it is evident that the existing pension system is inadequate to help provide income security for the majority of older persons. The existing contributory, voluntary schemes in the informal sector have resulted in a high incidence of default among enrollees (about 40 per cent) and it could be a reason why the number of beneficiaries under informal sector pensions is low.

TABLE 19. ELDERLY POPULATION RECEIVING A PENSION (PERCENTAGE)

	Public sector	Informal sector			Public assistance		
	PSPS 2011	FMPS 2013	FSHPS 2013	Self-employed 2013	PAMA 2011	EAP 2013	Total
Number of beneficiaries ^a	498,291	124,192	2361	15,527	447,277	179,910	756,025
Population receiving a pension (as a percentage of total 60+ population) ^b	19.71	4.91	0.09	0.61	17.69	7.12	47.58

Source: **a** CBSL(2014); **b** Department of Pensions, Sri Lanka; AAIB; SSB; (Tilakaratna, Galappattige, and Jayaweera, 2013), Institute of Policy Studies of Sri Lanka, 2014; **c** Author's own calculations.

Notes: Calculations assume that the number of beneficiaries does not change from 2011 to 2013. EPF is strictly not a pension scheme, it provides its beneficiaries with a lump-sum fund at retirement. In 2012, 115,654 or 4.57 per cent of the population older than 60 years old received EPF benefits.

The existing pension scheme is also characteristic of low coverage. As outlined in table 9, of those eligible to be covered under the PSPS or any one of the three informal sector schemes only 46 per cent are covered. When considering only the informal sector pension schemes, out of an eligible population of about 4 million only about 1.5 million people are covered, suggesting a coverage rate of about 35 per cent. However, this number is lower, about 21 per

cent after taking into consideration the high default rate in informal sector schemes. One option to overcome this problem that is practiced in other countries (including Italy and New Zealand) is to make participation compulsory. In this regard it may be semi-compulsory or fully compulsory (Hu and Stewart, 2009). Rather than giving individuals the option to join a pension, semi-compulsion automatically enrolls people in a programme and gives them the ability to opt out. In situations where informal sector workers are not properly covered by any other type of voluntary pension scheme, compulsory participation in pension programmes is worthwhile. However, the irregularity of income and limited income generating capacity of people in the informal sector must be taken into consideration when determining contribution levels. If forced savings plans reduce the ability of workers in the informal sector to meet their basic needs (since such savings are only available for use upon retirement), then compulsory pension participation is not a viable option (Martin and Whitehouse, 2008).

Currently, informal sector pensions do not provide adequate benefits. The average monthly pension under the three schemes as shown in table 10 is below the national poverty line. Pension benefits in both the formal and informal sectors are not indexed to wages or prices and as a result the real value of the pension at retirement is reduced. Furthermore, informal sector workers' irregular income and limited income generating capacity prevent them from making sufficient contributions to pension schemes. As a result, the accumulated pension fund at retirement age is likely to be low.

The current employment-based pension system excludes those who are outside the labour force. Given that the majority of those outside the labour force are women, they will be disproportionately vulnerable in old age. In this regard, extending social security that covers all of the population is important. The cost of extending the PSPS to all older persons is much higher than the cost of implementing a universal pension because the average monthly benefit provided under the PSPS is higher. If extending the PSPS is considered an option, raising the retirement age to 65 or 70 would reduce the cost.

A universal pension is an alternative that can be put in place to provide income security for older persons. A universal pension covers all older persons and is means of providing the ability to smooth income in old age. As can be seen from the calculations presented in this paper, the cost of implementing a universal pension is likely to double over the next 35 years due to the increase in the population of older persons. One way to reduce this cost is to extend the retirement age to 70. Under a universal pension the regularity of the pension income is likely to reduce vulnerability and increase household disposable income. International evidence shows the positive results of such a measure. In Mauritius, for example, where a universal pension has been implemented, the current poverty rate among households with an older person is 6 per cent; in the absence of a universal pension the poverty rate would be 30 per cent. Similarly, in Nepal, 40 per cent of non-contributory universal pension recipients report that their daily living expenses are covered by the pension.

Bibliography

- Agricultural and Agrarian Insurance Board (AAIB). (2014). *Agricultural and Agrarian Insurance Board*. Sri Lanka.
- Bank of Ceylon. (n.d.). *BOC Abhimana Retirement Scheme*. Retrieved 25 March 2015, from http://web.boc.lk/index.php?route=product/category&path=87_89_361
- Barrientos, A., and Lloyd-Sherlock, P. (2002). *Non-Contributory Pensions and Social Protection, 'Issues in Social Protection' Series, Social Protection Sector*. ILO.
- Central Bank of Sri Lanka (CBSL). (2014). *Economic and Social Statistics of Sri Lanka*. Colombo, Sri Lanka.
- Commercial Bank. (n.d.). *Future Pensions Plan*. Retrieved 25 March 2015, from <http://www.combank.net/new-web/personal/deposits?product=148>
- de Mesa, A., and Mesa-Lago, C. (2006). The Structural Pension Reform in Chile. *Oxford Review of Economic Policy*, 149-167.
- De Silva, I. (2007). *A Population Projection of Sri Lanka for the New Millennium, 2001-2101: Trends and Implications*. Colombo, Sri Lanka: Institute for Health Policy.
- De Silva, I. (2012). The Age Structure Transition and the Demographic Dividend: An Opportunity for Rapid Economic Take-off in Sri Lanka. *Sri Lanka Journal of Advanced Social Studies*, 2 (1).
- Department of Census and Statistics. (2011). *Household Income and Expenditure Survey 2009/10 Preliminary Report*. Colombo: Department of Census and Statistics.
- Department of Census and Statistics. (2012a). *Labour Force Survey*. Colombo, Sri Lanka: Department of Census and Statistics.
- Department of Census and Statistics. (2012b). *Sri Lanka Labour Force Survey Annual Report*. Colombo: Department of Census and Statistics.
- Department of Census and Statistics. (2013). *Sri Lanka Poverty Review: A study on Household Income and Expenditure Survey 2009/10*. Colombo: Department of Census and Statistics.
- Department of Census and Statistics. (2014a). *Census of Population and Housing 2012*. Colombo: Department of Census and Statistics.
- Department of Census and Statistics. (2014b). *District official poverty lines*. Retrieved 29 December 2014, from http://www.statistics.gov.lk/poverty/monthly_poverty/
- Department of Pensions. (2011). *Annual Performance Report and Accounts*. Sri Lanka: Department of Pensions.
- Department of Pensions. (2014). *Department of Pensions*. Retrieved 2 December 2014, from http://www.pensions.gov.lk/index.php?option=com_phocadownload&view=sections&Itemid=60
- Employees' Trust Fund Board. (2009). *Employees' Trust Fund Board*. Retrieved 2 December 2014, from http://www.etfb.lk/sub_pgs/sub_aboutus.html
- EPF Department, Central Bank of Sri Lanka. (n.d.). *Employees' Provident Fund*. Retrieved 2 December 2014, from <http://www.epf.lk/whatisepf.php>
- Eriyagama, V., and Rannan-Eliya, R. (2003). *Assessment of the Farmers' and Fishermen's Pension and Social Security Benefit Scheme in Sri Lanka*. Colombo: Institute of Policy Studies.
- Gaminiratne, N. (2004). *Population Ageing, Elderly Welfare, and Extending Retirement Cover: The Case Study of Sri Lanka*. London: Economic and Statistics Analysis Unit. Overseas Development Institute.
- Ginneken, W. (2003). *Extending Social Security: Policies for Developing Countries*. Geneva: International Labour Office.
- Government of Sri Lanka. (2009). *Widows'/Widowers' and Orphans' Pension Scheme*. Retrieved 25 May 2015, from Government Information Centre: http://www.gic.gov.lk/gic/index.php?option=com_info&id=506&task=info&lang=en
- Grosh, M., Del Ninno, C., Tesliuc, E., and Ouerghi, A. (2008). *For Protection and Promotion: The Design and Implementation of Effective Safety Nets*. Washington, DC: World Bank.
- Help Age. (2011). *The Price of Income Security in Older Age: Cost of a Universal Pension in 50 Low Income Countries*. Help Age International.

- Hu, Y., and Stewart, F. (2009). *Pension Coverage and Informal Sector Workers: International Experiences*. OECD Working Papers on Insurance and Private Pensions, No. 31. OECD publishing.
- International Labour Organization (ILO). (2008). *Social Security in Sri Lanka: A review of the social security system for the Ministry of Labour Relations and Manpower*. Geneva: International Labour Office, Social Security Department.
- Kaniki. (2007). Mauritius Case Study. Cape Town: Unpublished Manuscript from Economic Policy Research Institute.
- Martin, J., and Whitehouse, E. (2008). *Reforming retirement-income systems: lessons from the recent experiences of OECD countries*. OECD Social, Employment and Migration Working Papers. No. 66. Paris: OECD.
- National Savings Bank. (n.d.). *NSB Pension +*. Retrieved 25 March 2015, from <http://www.nsb.lk/pension/>
- Rajan, S. (2003). *Oldage Allowance Program in Nepal (paper presented at Institute for Development Policy and Management International Conference, "Staying Poor: Chronic Poverty and Development Policy", Manchester 7-9 April*. Manchester: Institute for Development Policy and Management.
- Shen, C., and Williamson, J. (2006). Does a Universal non-Contributory Pension Scheme Make Sense for Rural China? *Journal of Comparative Social Welfare*, 22 (2) 143-153.
- Tilakaratna, G., Galappattige, A., and Jayaweera, R. (2013). *Safety Nets in Sri Lanka: An Overview*.
- United Nations, Department of Economic and Social Affairs. (n.d.). Population data. Retrieved 30 March 2015, from World Population Prospects: The 2012 Revision: <http://esa.un.org/unpd/wpp/Excel-Data/population.htm>
- Uprety, L. (2010). *The Effectiveness of Non-contributory Social Pension in Nepal*. Participatory Research Report. Kathmandu and London: Nepal Participatory Action Network (NEPAN) and Help Age International.
- Willmore, L. (2001). Universal Pensions in Low Income Countries. *Initiative for Policy Dialogue Discussion Paper IPD-01-05 September*.
- Willmore, L. (2003). *Universal Pensions in Mauritius. Lessons for the rest of us*. United Nations DESA Discussion Paper No. 32.
- Willmore, L. (2008). *Tackling Poverty in Old Age: A Universal Pension for Sri Lanka*. London: Help Age International.
- World Bank. (1994). *Averting the Old Age Crisis*. Oxford: Oxford University Press.
- World Bank. (2006). *Sri Lanka: Strengthening Social Protection*.
- World Bank. (2008). *Sri Lanka: Addressing the Needs of an Ageing Population*. Human Development Unit South Asia Region.

Appendix A

The net present value of a future pension

Estimating the present value involves two steps. The first is to determine the value of the pension at the time of retirement (i.e., the future value of the pension) as follows:

$$PV = PMT [(1 - (1+i)^{-n}) / i] \quad (1)$$

Where;

YPAY = yearly pension payment

i = yearly interest rate (an estimate)

n = the time period in years

PV = present value

Given equation (1), if one retires at age 60 and expects to live till 71 (the life expectancy at birth) his/her retirement period (n) would be 11. If he/she earns an yearly pension benefit of LKR50,004 (i.e., YPAY = 50,004, then assuming an interest rate of 5 per cent the present value of the stock of pension at the time of retirement would be:

$$PV = \text{LKR}50,004 [1 - (1.05)^{-11}] / 0.05 = \text{LKR}415,353.94.$$

The current value of this stock of pension will be different for individuals of different ages.

The second step is to calculate the present value of that amount of money as follows:

$$NPV = SP / (1 + r)^n \quad (2)$$

Where;

NPV = net present value

SP = stock of pensions

r = discount rate/inflation rate

n = time in years

Therefore, for example, a person age 18 will start receiving a pension 42 years from now. Then the current value of the pension can be worked out as follows:

$$NPV = \text{LKR} 415,353.94 / (1.05)^{42} = \text{LKR} 53,514.04$$

Appendix B

Fiscal cost of extending access

As outlined by Willmore (2001) the cost of pensions as a proportion of GDP is equal to the proportion of pensioners in the population times the ratio of the pensions to per capita GDP.

Consider that proportion 'r' of the population is eligible for a uniform pension of 'py', where;

p = ratio of the flat pension to per capita GDP

y = per capita GDP

ignoring administration costs, per capita expenditure on pensions is, therefore, 'rpy'. This is less than the size of the flat pension because 'r' is less than unity. 'ty' can be considered to be the per capita taxes required to pay these pensions; 't' is the ratio of taxes to GDP and y is per capita GDP.

Balancing the budget for basic pensions requires that tax revenue equal pension expenditures or equivalently that tax revenue per capita (ty) equal expenditure per capita (rpy):

$$ty = rpy \quad (1)$$

solving for t (taxes as a proportion of GDP) yields:

$$t = rp \quad (2)$$

meaning that, the required tax revenue of a universal pension (as a proportion of GDP) is equal to the population proportion that is eligible for pensions times the ratio of the flat pension to per capita GDP. The cost will be higher when the pension is more generous and when the number of pensioners in the population is larger.