

## IMPLICATIONS OF DEMOGRAPHIC CHANGE FOR LONG-TERM DEVELOPMENT IN SRI LANKA

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### Introduction

The United Nations' forecast of the age structure transition of Sri Lanka from 2015 to 2050 shows an increasing share of the aged population who are 60 years and above -- from 13.9% to 28.6% (United Nations, 2015). The old age dependency ratio would rise from 14.1 in 2015 to 37.7 in 2050. When compared to other countries in the region, Sri Lanka is foremost as a society with a rapidly ageing population (Siddhisena, 2004, p.8). Table 1 shows how Sri Lankan population will encounter significant changes in age structure and distribution during the coming decades. A strong linear increase is observed in the proportion of elderly to total population.

**Table 1: Demographic Characteristics of Sri Lankan Population**

	2015	2050
Population by broad age groups ('000)		
< 15 years	5,288	3,149
15 – 59 years	11,989	11,874
60+ years	3,689	6,081
Median age (years)	32.3	42.5
Life expectancy at birth (years)	76.35 (2010-2015)	79.5 (2045-2050)

Ageing of population poses many challenges to Sri Lanka. The population pyramid, which was originally broad based is now converting to an “urn-shaped” which depicts ageing at the top. Increased life spans mean post-retirement periods are longer, and the elderly become increasingly dependent on social security benefits provided by the state.

Economically inactive retirees account for a growing share of the total population, making each worker support more retirees under public pension and healthcare systems. Increased demand to enhance healthcare and upgrade public infrastructure, reduction in the real value of retirement benefits in the extended retirement period, and increased public expenditure to finance institutional facilities for the elderly are some other economic challenges arising due to ageing.

With reference to the existing literature, de Silva's (2005) analysis concludes that ageing leads to increased healthcare costs, and that further research is required to understand the impact of additional expenditures of the elderly population so that budgetary expenditure policies could be formulated. Jegarasasingam (2004) provides a broad overview of the formulation and implementation of policies on elderly in Sri Lanka from independence to 2004. Vodopivec and Arunatilake (2008) observe labor market impacts of ageing, drawing on retirement pathways and determinants of labor market withdrawal. Their study finds that a majority of Sri Lankan aged are informal sector workers.

The vast majority of Sri Lankan literature identified ageing population as a central issue and the need to increase public expenditure, but they leave an important gap in explaining and quantifying long-term implications of population ageing on Sri Lanka's economic development. Therefore, the objective of the paper is to evaluate and discuss economic impacts and policy implications of the ageing population profile in Sri Lanka.

### **Methodology**

A mix of secondary quantitative data and qualitative information, nationally and internationally published, is used for the analysis. Economic impacts of the ageing population are analyzed via an economic analysis using population projections and fiscal data, and Miller's Budget Forecasting Model. Data from 1980-2014 are used in a forecasting exercise to predict values till 2050 using Vector Auto Regression in EViews software. Impact is assessed by simulating two fiscal instruments: government revenue and expenditure.

## Results & Discussion

Impact of ageing on public expenditure is evident from the positive growth rates of expenditure categories considered. The fiscal burden on pensions would increase owing to the large number reaching retirement. Expenditure on social protection would rise due to the oldest category of the aged increasing, and the likely reduction of family support for them in the future. The forecasted share of total expenditure for elderly population shows an increase from about 17% in 2021 to about 29% in 2050.

An increasing trend is observed in absolute terms of tax revenue during 2021- 2050. However, the Fiscal Support Ratio (FSR) gives a reverse trend, as number of tax payers relative to public transfer beneficiaries drops due to ageing.

**Table 2: Fiscal Support Ratio (Tax Revenue/ Aggregate Public Expenditure), SL, 2021- 2050**

Year	FSR
2021	233
2031	189
2041	156
2050	134

If the above were to happen, it would have a negative impact on Sri Lanka's public finances. However, FSR is still above the conventional benchmark of 100 in 2050 which suggests that ageing would not drastically reduce tax buoyancy in the long-run. It is likely that pension and social security expenditure grow at a rate higher than the ability of the tax base to sustain them. Government has to anyway pay pensions which it has already promised to employees when they are recruited. The declining FSR may also be due to falling proportion of the productive labor force during 2021-2050, as revealed by projections. However, the decline in FSR is not that drastic because around 61 per cent of the Sri Lankan workers are in the informal sector according to the Department

of Census and Statistics. As there is no statutory retirement age, negative impacts of ageing would be less, compared to a country where bulk of the labor force is compelled to exit from the labor market on reaching the statutory retirement age. However if in the next few decades there is a significant increase in the proportion of workers in the formal sector, this observation would be weaker.

### **Conclusions**

Amidst the increasing aggregate public expenditure for elderly and the future tendency to reduce tax buoyancy, the positive FSR implies that population ageing may not have an adverse impact on Sri Lanka's development. However, the declining FSR suggests the need to have a more efficient and effective tax administration than at present.

The projected shrinking of the labor force could be compensated by three ways: increasing retirement age, labor productivity and female labor participation. Phased retirement and increased flexibility of employment, especially for employees with a long service record, are measures taken elsewhere in the world which Sri Lanka could follow. Jobs which require less physical work need to be expanded for the elderly to be productively engaged in the labor market. Part time jobs should be available to older workers who are still willing to work although retired. Suitable jobs for educated young women must be created. Industries favoring female workers should be promoted. There needs to be an attitudinal shift regarding employing females and flexible working arrangements should be in place to allow female re-entry to work force after child bearing.

Overall, it is important for Sri Lanka to pursue policies supportive of rapid economic growth which would enable increased incomes to finance higher living standards in the long-run when the aged become a significant proportion of the population.

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