Sri Lanka
State of the Economy Report 2014

Chapter 5
Demographic Challenges of an Ageing Asia

by
Ganga Tilakaratne & Sahan Jayawardena

5. Demographic Challenges of an Ageing Asia

5.1 Introduction

Asia is the fastest growing region in the world. The emergence of Asia as an economic force over the past 40 years has been one of the most successful economic development stories in recent history. With Asian growth projected to account for more than 50 per cent of global GDP by 2050, and per capita income expected to rise six-fold by then, it is envisaged that the region will come to dominate the 21st Century.[1] However, Asia faces numerous risks and challenges that could impede this growth momentum if not adequately addressed. One such challenge is the rapid demographic changes the region will experience over the next few decades.

Asia is on track to become the oldest region in the world, with the elderly population projected to reach 922.7 million in 2050.[2] A rapidly ageing population could be a drag on economic growth. The rise in the elderly population will increase the fiscal burden on healthcare and social welfare. In addition, a shrinking working age population would create labour supply shortages, and have an adverse impact on total factor productivity which would adversely impact GDP growth.

Demographic change is a particularly relevant issue in Asia for two reasons. Firstly, Asia is ageing at an unprecedented pace. The transition in the population age structure in Asia will happen significantly faster than it did in the West, giving less time to prepare for the new demographic landscape. Secondly, the demographic dividend - where the proportion of working age population is significantly larger than the dependent population (those below 15 years, and 60 years and above) - was an important ingredient that contributed to the growth of many East and Southeast Asian economies. These favourable demographics are now turning less favourable, and the countries that experienced the demographic dividend must now prepare to face the 'demographic tax', and take measures to effectively accommodate this demographic change while ensuring productivity gains for growth.

Sri Lanka, for example, is currently at the tail end of its demographic dividend, which is expected to end

Asia is on track to become the oldest region in the world, with the elderly population projected to reach 922.7 million in 2050.

1 ADB (2011), *Asia 2050 - Realizing the Asian Century*, Asian Development Bank, Manila..

2 *Ibid*.

in 2017, where the proportion of elderly will increase to around 15 per cent.[3] The elderly population of Sri Lanka is expected to reach over 20 per cent of the total population by 2031 and will further increase to a point where one in every four persons in Sri Lanka will be elderly by 2041.[4]

In this context, this Chapter seeks to examine the demographic challenge Asia faces in the coming decades. Section 5.2 examines the current status of demographics in Asia and its implications. With Sri Lanka about to end its demographic dividend and enter a phase of population ageing, the demographic patterns and trends for the country are discussed in Section 5.3. Finally, Section 5.4 discusses some emerging issues and challenges in the areas of social protection, health and labour markets, and suggests policy options to face the demographic transition in Sri Lanka.

5.2 Asia's Demographic Transition: Boon or Bane?

As a consequence of falling fertility rates and improvements in life expectancy, Asia as a whole is experiencing a demographic transition towards older population structures. Within the region there is demographic heterogeneity, with various countries at different stages of the transition. As a result, the share of the elderly in the population is rising throughout the region, but not uniformly. Population ageing is most advanced in East Asia. Countries like Japan and South Korea are at advanced stages of their transition, while India, Indonesia and the Philippines are on the verge of realizing their demographic dividend.

Figure 5.1 illustrate the decline in fertility rates and the rise in life expectancy of Asian countries in recent decades. Countries in the advanced stages of their demographic transition, like Japan, Singapore and South Korea, have reached high levels of life expectancy rates due to advances in health and sanitation, as well as changes in social conditions such as urbanization. However, the increase in population shares of the elderly has been largely driven by the declining fertility rates in Asia, and intra-regional disparities in the age distributions resulting due to the differential decline in the fertility rates (Figure 5.1).

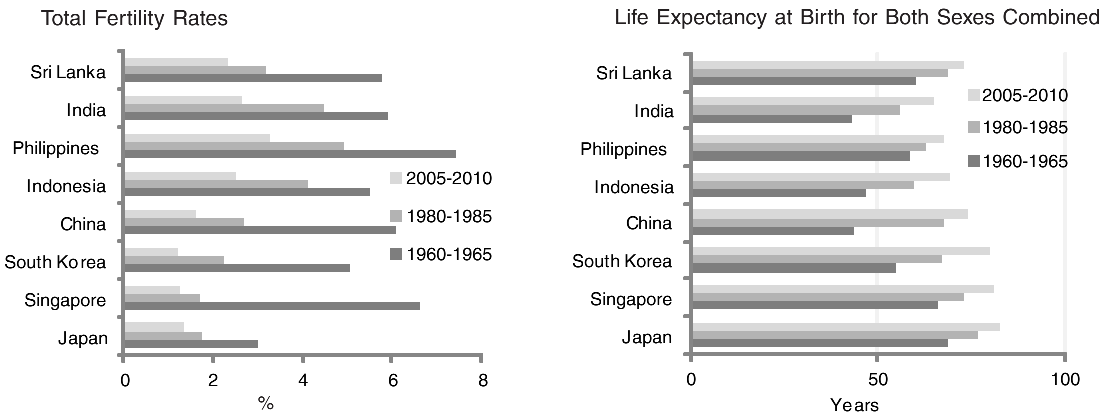
Changes in fertility rates and life expectancy have led to changes in the population structure of Asia, and this will continue to change in the coming decades. In Japan, the proportion of the population aged 65 and above, which stood at 7 per cent in 1970, is projected to reach 41.1 per cent in 2050. South Korea will also experience a rapid increase in the proportion of the 65 and over age group, where the proportion which stood at 3.3 per cent in 1970 is expected to rise to 39.3 per cent in 2050. China will go through a similar rise in the 65 and above proportion, though not as rapidly as Japan and South Korea (Figure 5.2).

As can be seen in Figure 5.2, the decline in the below 15 age group started in Japan in the 1970s, where the proportion stood at 24.1 per cent. South Korea and China experienced a similar decline in the 1990s, where the proportions stood at 25.6 per cent and 29.3 per cent, respectively. The populations of India and Indonesia are also experiencing declines in the 15 and below age group, but due to the fertility rate peaking at a later stage, the proportions will be higher than in East Asian countries. In the 1990s, the below 15 age group was 36.4 per cent of the population in Indonesia and 37.5 per cent in India. As a result, these countries are entering a period of increasing demographic dividends as fertility rates continue to drop, reducing the youth dependency burden and increasing the size of the labour force.

[3] De Silva, W. 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*, Vol. 2, No. 1.

[4] *Ibid*.

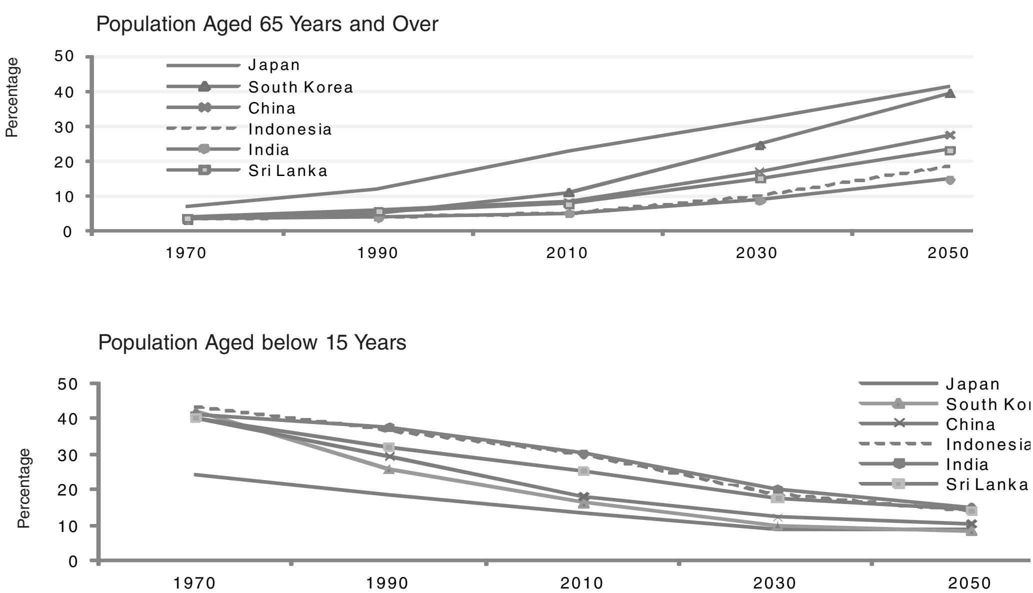
Figure 5.1
Fertility Rates and Life Expectancy at Birth for Selected Countries



Notes: Fertility rate refers to children per woman.

Source: United Nations, Department of Economic and Social Affairs, Population Division (2013). World Population Prospects: The 2012 Revision.

Figure 5.2
Population Aged 65 Years and Over and below 15 Years in Selected Countries, 1960-2050

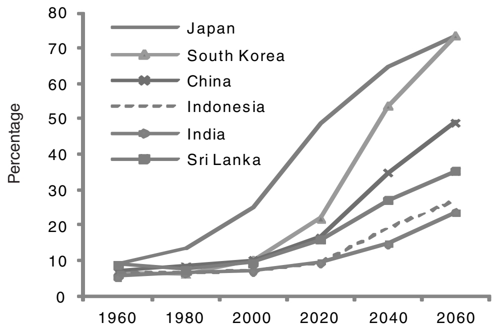


Notes: Projections are based on UN low fertility estimates.

Source: United Nations, Department of Economic and Social Affairs, Population Division (2013). World Population Prospects: The 2012 Revision.

With the percentage of older persons in the population rising, the old-age dependency ratios - i.e. the ratio of persons above the age of 65 years to the number of people in the 15-64 year working age group - are projected to increase in many Asian countries (Figure 5.3).

Figure 5.3
Old-age Dependency Ratios for Selected Countries



Source: United Nations, Department of Economic and Social Affairs, Population Division (2013). World Population Prospects: The 2012 Revision.

The old-age dependency ratios will reach higher levels in East Asian countries like Japan and South Korea due to them being in a more advanced stage of the demographic transition. China will also experience a sharp rise in the old-age dependency ratio, partly due to the one-child policy introduced in the 1970s, causing fertility to peak early. The old-age dependency ratios will grow at a slower rate in countries like India and Indonesia with younger populations.

Based on current population projections, the demographics will be diverse in Asia. Ageing will be most advanced in East Asia while, with the exception of countries like Singapore and Sri Lanka, South and Southeast Asia will have a younger age profile. The economic implications of Asia's demographic transition will be explored in the next section.

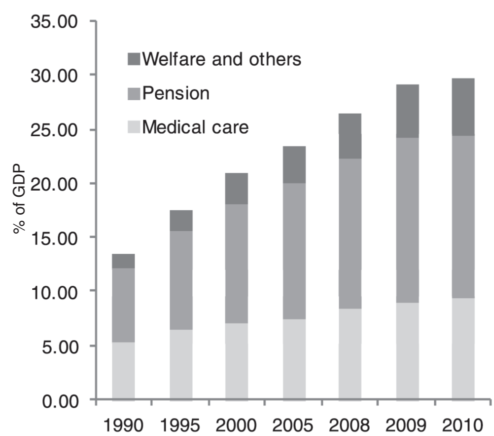
5.2.1 Implications of the Demographic Transition

As Asia advances through the demographic transition, an ageing population will have an impact on the economy. The impact would be transmitted mainly through public finance pressures (particularly related to social protection, health, etc.) and the implications ageing would have on the labour force.[5]

As the old-age dependency ratios rise in Asian countries, substantial increases in age-related public expenditures like pensions and healthcare are expected.[6] In Japan, total public expenditure has soared. The fastest rising expenditure item is social security (pensions, medical insurance, welfare programmes), with pension payments taking up the largest share in social security expenditure (Figure 5.4). In 2010, 68.1 per cent of total social security expenditure went towards those over 65 years of age.[7]

While Asia relies less on the public sector for old-age support compared to Europe and Latin America, public transfer programmes in East Asian countries like Japan, China and South Korea amount to a substantial proportion of old-age support (Figure

Figure 5.4
Social Security Expenditure in Japan, 1990- 2010



Source: NIPS (2014), "Public Expenditure Database", National Institute of Population and Social Security Research, Japan.

[5] McMorrow, K., and W. Roeger (2011), "The Economic Consequences of Ageing Populations", Directorate-General for Economic and Financial Affairs - European Commission, Brussels.

[6] *Ibid*.

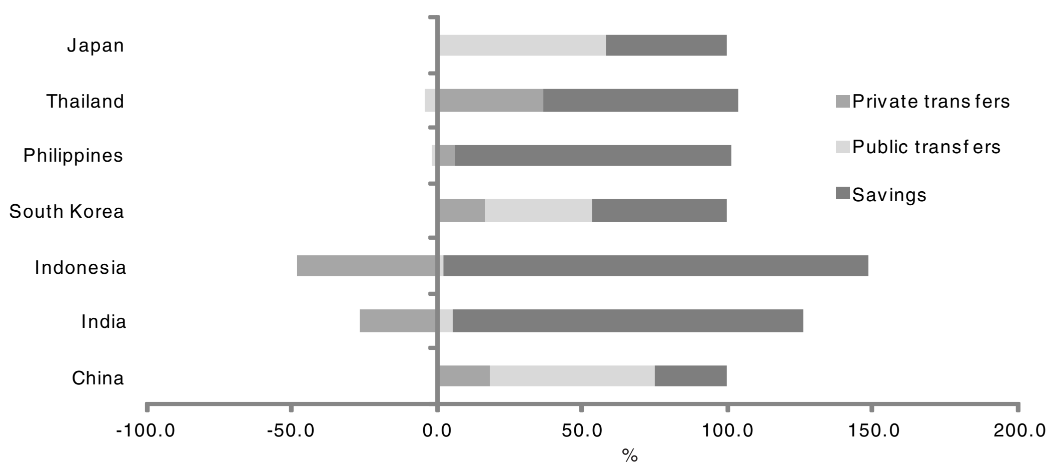
[7] NIPS (2014), "Public Expenditure Database", National Institute of Population and Social Security Research, Japan.

5.5).[8] Therefore, the continuing rise of old-age dependency would be a major fiscal burden. To ensure the sustainability of the public-pension system, Japan enacted reforms in 2004. The reforms introduced an automatic adjustment of benefit levels to changes in demographic structures. This macro indexing will cut benefit levels in accordance with population ageing, and contribution rates will be increased moderately until 2017, where it will be set at a constant rate of 18.3 per cent of income.[9]

An ageing population of a country would also have several implications on its labour force too. In 1995, Japan's working age population (15-64 years) peaked at 87 million, representing the height of its demographic divided. Since then, Japan's working-age population has been falling in both relative and absolute terms (proportion and number of the working-age population falling) as evident from Figure 5.6, where it is projected to drop to 73 million by 2020. In 2050, Japan's labour force will shrink to 50 million (50 per cent of the population).[10] In the next couple of decades, South Korea would also go through a reduction in the proportion of the working-age population, where in 2050 it is projected to drop to 52.3 per cent. By contrast, India's labour force population will continue to grow up to 2030, creating a favourable demographic environment.

A shrinking labour force may lead to lower output if productivity does not rise. The decline in the demographic dividend will start to weigh on the economy, and a country like Japan that is at an advanced stage of the demographic transition would have to achieve large productivity gains to remain competitive. In addition, a shrinking labour force will increase the burden upon each worker to support the growing elderly population in the form of

Figure 5.5
Support System for Elderly in Selected Countries

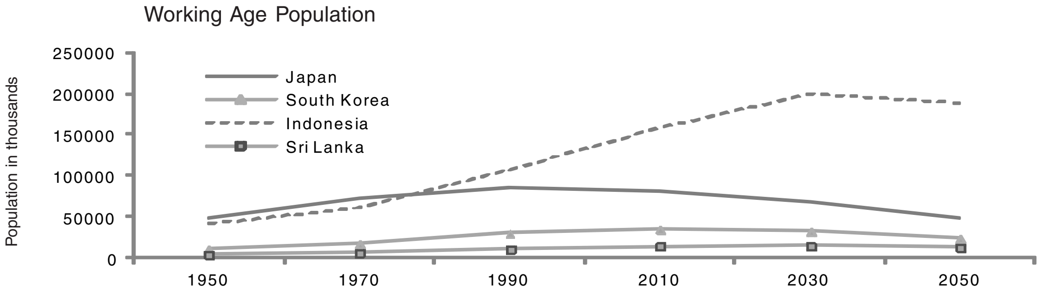


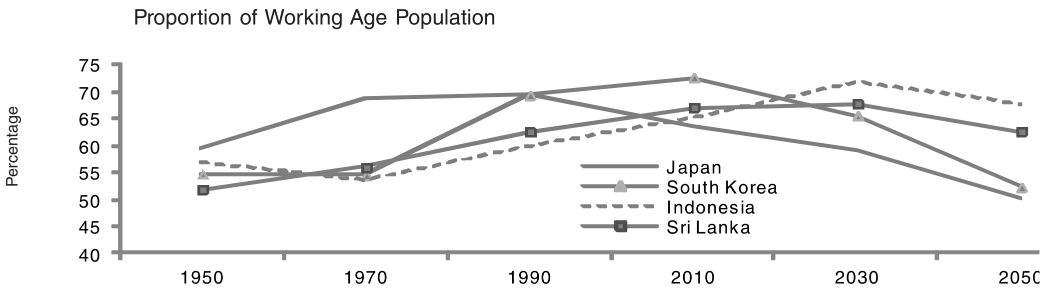
Notes: For those 65 years and above.
Source: ADB (2011), "Asian Development Outlook 2011 Update: Preparing for Demographic Transition", Asian Development Bank, Manila.

---

8 ADB (2011), "Asian Development Outlook 2011 Update: Preparing for Demographic Transition", Asian Development Bank, Manila.
9 IMF (2012), "Japan: Selected Issues", International Monetary Fund, Washington.
10 NIPS (2014), "Japan Population Database", National Institute of Population and Social Security Research, Tokyo.

Figure 5.6
Working Age Population for Selected Countries, 1950-2050





Notes: Population in the 15-64 year age group. Projections based on UN low fertility estimates.
Source: United Nations, Department of Economic and Social Affairs, Population Division (2013). World Population Prospects: The 2012 Revision.

increased taxes and social security contributions.[11] An ageing workforce would also reduce innovation, risk taking and mobility, which may influence the dynamism of the economy.[12] Further, it would create limitations in vertical mobility, putting younger workers at a disadvantage. Geographic mobility would also be hampered by an ageing workforce, which would limit the adaptability of the labour force to structural changes in the market.[13]

5.3 Sri Lanka: From Demographic Dividend to Demographic Tax?

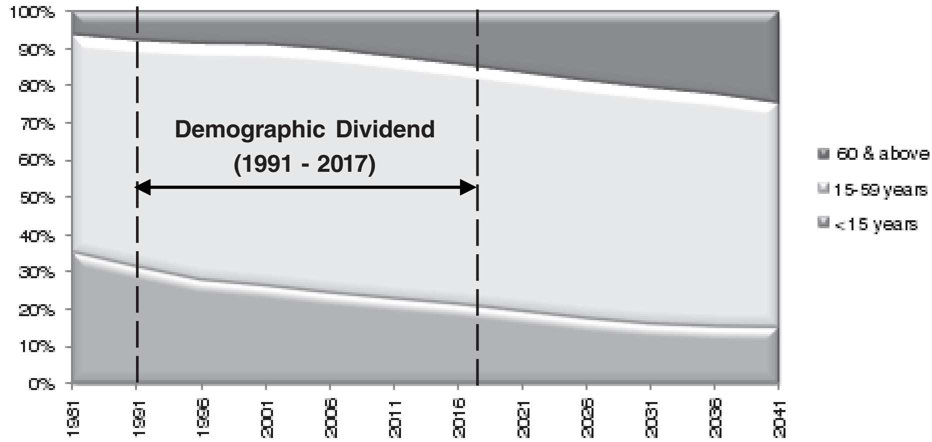
Similar to many East Asian countries, Sri Lanka is currently undergoing a rapid demographic transition. The child population that was over 35 per cent of the total population in 1981 declined sharply to 22.8 per cent in 2011 and is projected to decrease further to around 15 per cent by 2031 (Figure 5.7). The

[11] Lee, S., A. Mason, and D. Park (2011), "Why Does Population Aging Matter So Much for Asia? Population Aging, Economic Security and Economic Growth in Asia", ERIA Discussion Paper Series, Economic Research Institute for ASEAN and East Asia, Jakarta.

[12] Jackson, R. (2003), *Germany and the Challenge of Global Ageing*, Center for Strategic International Studies, Washington.

[13] Hagemann, R., and G. Nicoletti (1989), *Population Ageing: Economic Effects and some Policy Implications for Financing Public Pensions,* OECD, Paris.

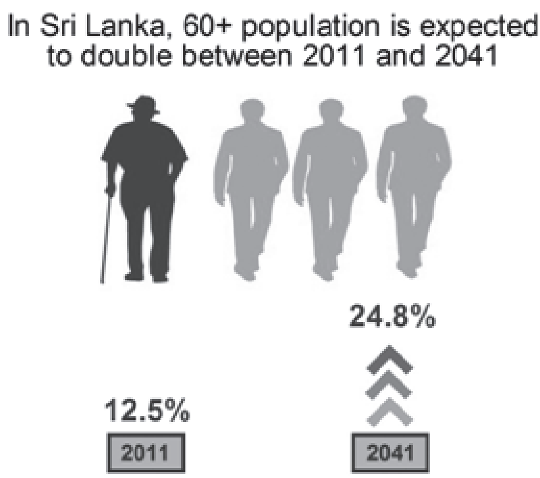
Figure 5.7
Age Structure Transition and Demographic Dividend in Sri Lanka



Source: De Silva,W.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*, Vol. 2, No. 1.

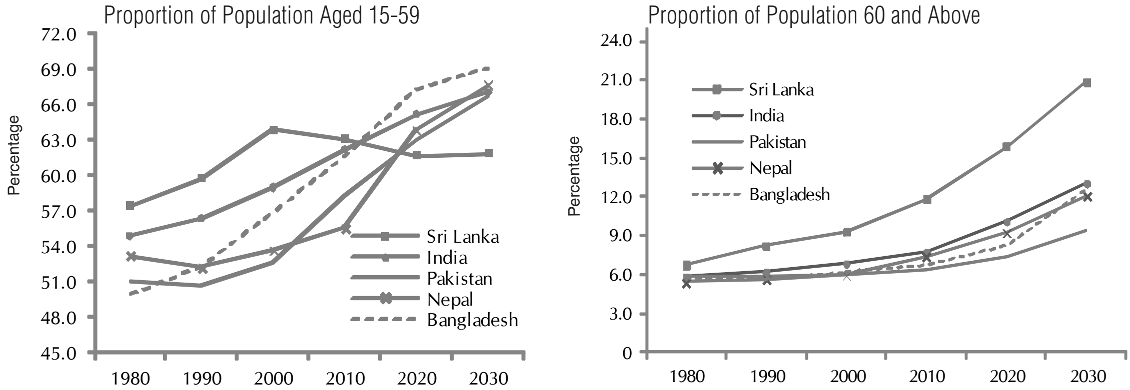
share of the elderly population (60 years and above) has almost doubled since 1981 reaching 12.5 per cent in 2011. The proportion of the working age population reached its peak in 2006 (65.1 per cent) and will continue to fall over the coming decades. Consequently, the total dependency ratio, defined as the ratio of the dependent population (those below 15 years, and 60 years and above) to the working age population (15-59 years), was at its lowest in 2006 at 53.6 per cent.

The above age-structure transition in Sri Lanka led to a demographic dividend (or demographic bonus) - where the proportion of the working age population is significantly larger than the dependent population - much earlier than the rest of South Asia. This demographic dividend that started around 1991 is projected to end within the next few years (by 2017).[14] With the end of the demographic dividend, the country will experience a rapid ageing of the population along with a shrinking working age population. The 60 years and above population is expected to double between 2011 and 2041, reaching nearly 5.4 million. The share of this age category will rise to 24.8 per cent by 2041 (from 12.5 per cent in 2011) indicating that one-in-every four people in the country will be an elderly person.



[14] In Sri Lanka, elders are defined as those of 60 years and above. This is particularly relevant because the retirement age for the state sector as well as for most in the private sector is 60 years. The UN defines the elderly as those 65 years and above. As per the UN definition of elderly population, the demographic dividend in Sri Lanka that started in 1991 will end by 2030 (De Silva, 2012).

Figure 5.8
Proportion of Population Aged 15-59 Years and 60 Years and Above

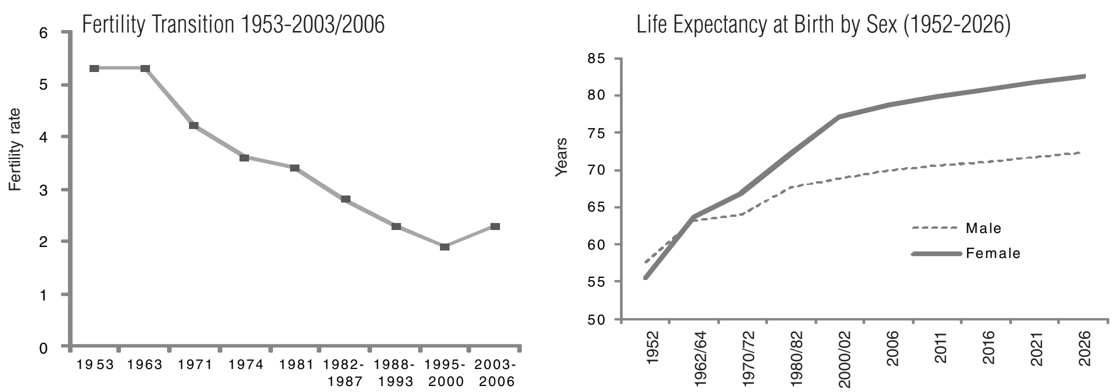


Source: United Nations, Department of Economic and Social Affairs, Population Division (2013). World Population Prospects: The 2012 Revision.

As already mentioned, Sri Lanka experienced the demographic dividend much earlier than other South Asian countries. South Asian countries like India, Pakistan and Bangladesh are currently entering the demographic dividend while Sri Lanka is at the tail end of its demographic dividend. As shown in Figure 5.8, by 2020, Sri Lanka will have the lowest proportion of the population aged 15-59 in the region. Moreover, Sri Lanka has had the highest proportion of the elderly population in South Asia since 1980 - remarkably higher than the rest of the countries in the region.

Sri Lanka experienced the demographic dividend much earlier than the other South Asian countries.

Figure 5.9
Key Determinants of the Demographic Transition: Fertility and Life Expectancy



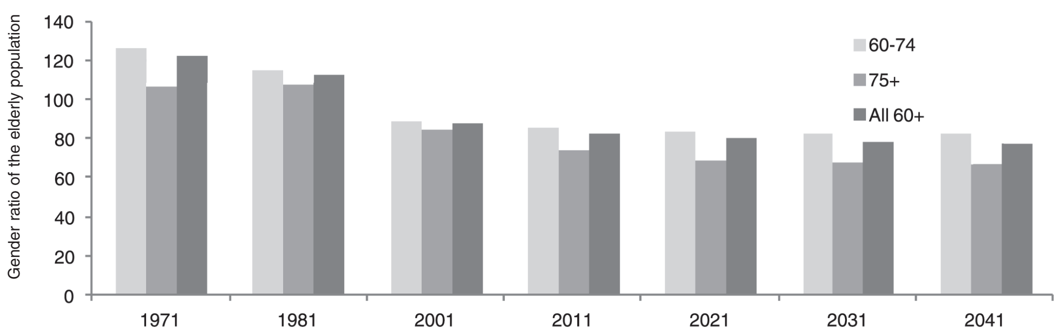
Source: Gunasekera, H.R., (2008), "Life Tables for Sri Lanka and Districts," Department of Census and Statistics, Colombo; De Silva, W.I (2012), "The age Structure Transition and Demographic Dividend: An Opportunity for Rapid Economic Take-off in Sri Lanka", *Sri Lanka Journal of Advanced Social Studies*, Vol. 2, No. 1.

Sri Lanka has had the highest proportion of the elderly population in South Asia since 1980 – remarkably higher than rest of the countries in the region.

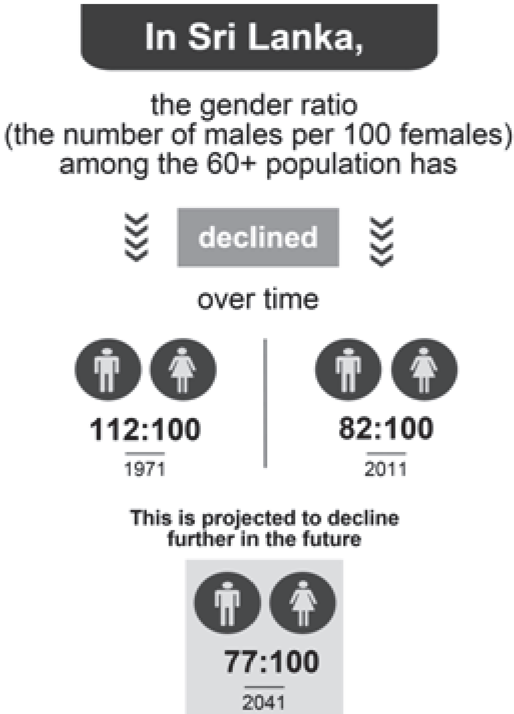
The demographic transition in Sri Lanka is primarily the outcome of a decline in fertility rates, rising life expectancy at birth, and increasing out-migration (particularly among the younger people) during the past several decades. As shown in Figure 5.9, fertility rates started to decline in the 1960s and have come down to around 2 per cent in 2000. Life expectancy at birth - for both males and females - has been on the rise since the 1950s, and is projected to rise further in the coming decades (Figure 5.19). However, life expectancy for females has been higher than that of males and the gap is projected to widen further in the next two decades.

The above patterns have also contributed to some structural changes among the elderly population. As shown in Figure 5.10, the gender ratio (the number of males per 100 females) among the elderly population (60 years and above) has declined over time, from 112 males for every 100 females in 1971 to 82 males for 100 females in 2011, indicating a rapid increase in the proportion of females in the elderly population in Sri Lanka. This gender ratio is projected to decline further to around 77 by 2041. The higher proportion of females compared to males is more significant among the elderly aged 75 years and above. The gender ratio for this age category declined sharply from around 106 in 1971 to around 74 in 2011, and is projected to decline further in the next three decades. This is primarily due to the higher life expectancy of females compared to men. This brings several challenges as many females are less likely to have adequate social protection, particularly old-age retirement benefits, due to the continuing low female labour force participation rate in the country. In addition, old-age retirement benefit schemes at present are largely confined to the formal sector, while only a smaller share of the informal sector workers have access to (contributory) pension schemes. The economic and social implications of the above demographic patterns will be discussed in detail in the next section.

Figure 5.10
Gender Ratio of the Elderly Population in Sri Lanka, 1971-2041



Note: Gender ratio = number of males per 100 females.
Source: De Silva, W. I. (2012), "The Age Structure Transition and Demographic Dividend: An Opportunity for Rapid Economic Take-off in Sri Lanka", *Sri Lanka Journal of Advanced Social Studies*, Vol. 2, No. 1.



5.4 Issues, Challenges and Policy Options

As Sri Lanka experiences a demographic transition, it will face the challenge of handling the social protection and health needs of a rising elderly population, and the potential constraint a shrinking workforce may impose on growth. This section examines key issues and challenges related to social protection, health, and the labour market and suggest policy options to better face the demographic changes in the coming decades.

5.4.1 Social Protection

The current social protection system in Sri Lanka is far from adequate to cater to the needs of the rising elderly population in the coming decades. The available programmes for the elderly are largely old-age retirement benefit schemes with a primary focus on the formal sector workers. These include the Public Servants' Pension Scheme (PSPS) - a non-contributory pension scheme covering all permanent public sector employees - the Widows, Widowers and Orphans Pension Scheme (W&OP) - a mandatory contributory scheme under the PSPS - and the Public Servants' Provident Fund (see Table 5.1). All formal workers in the private sector are mandated to contribute towards the Employees' Provident Fund (EPF) and the Employees' Trust Fund (ETF). Moreover, a handful of contributory and voluntary pension and social security benefit schemes are available for the informal sector workers. Inactive membership, poor coverage, inadequacy and irregularity of benefits (inadequate level of replacement income), insufficient funding and concerns over the sustainability of these schemes are some of the drawbacks of the pension schemes for informal workers.[15]

In addition to the old-age retirement benefit programmes, an elderly assistance programme targeted towards elders from low-income groups is carried out by the Ministry of Social Services, under which a monthly cash transfer of Rs. 1,000 is given

The current social protection system in Sri Lanka is far from adequate to cater to the needs of the rising elderly population in the coming decades.

[15] Eriyagama, V. ,and R. Rannan-Eliya (2003), "Assessment of Pension and Social Security Benefit Scheme for the Self-Employed Persons in Sri Lanka", Demographic Transition and Pensions Series No.5, Institute of Policy Studies of Sri Lanka, Colombo; Eriyagama,V.,and R. Rannan-Eliya (2003), "Assessment of the Farmers' and Fishermen's Pension and Social Security Benefit Scheme in Sri Lanka", Demographic Transition and Pensions Series No.4, Institute of Policy Studies of Sri Lanka, Colombo.

to eligible elders aged 70 years and above. Poor and disadvantaged elders (aged 60 years and above) are also covered under the Samurdhi cash transfer programme and the Public Assistance Monthly Allowance (PAMA). However, inadequacy of monthly benefits, and benefits not being indexed to inflation, are key weaknesses across all existing social assistance programmes.

With a significant increase in the elderly population in the coming decades, reaching over 4.5 million by 2031, it is crucial to improve the coverage and the quality of the existing old-age benefit programmes while ensuring their long-term sustainability. Currently, only around 40-50 per cent of the elders are covered under some form of social protection/old-age benefit programme like pension schemes, provident funds or monthly cash transfers.[16] Moreover, the bulk of the government spending on old-age retirement benefits and social protection in general goes towards pensions for public sector workers, covering only around 25 per cent of the total elders in the country. The number of pensioners and expenditure on public sector pensions has increased in recent years and, at present expenditure on public sector pensions accounts for about 1.5 per cent of GDP. The non-contributory nature of the pensions would be a

Table 5.1
Social Protection Programmes for Elders

Programme	Description	Beneficiary Numbers 2012	Expenditure (Rs. mn.) 2012
Public Servants Pension Scheme (PSPS)	Non- contributory pension scheme for permanent public sector workers. The entitlement arises after 10 years of service.	379,927	90,500
W&OP	Mandatory contributory pension scheme under PSPS where dependents will be entitled to a pension following the death of the public servant.	130,416	20,117
Public Servants Provident Fund	Contributory fund for public servants not entitled to the pension. Benefits received in the form of a lump sum at retirement.	6,845	1,000
Employees' Provident Fund (EPF)	Mandatory contributory fund for formal private sector workers. Benefits received in the form of a lump sum at retirement.	115,654	48,700
Surekuma Pension Scheme of the Social Security Board (SSB)	Contributory, voluntary pension scheme for informal sector workers. In addition to pension, death and disablement gratuity is also covered.	12,252	9
Farmers' Pension and Social Security Benefit Scheme	Contributory voluntary pension scheme for farmers owning not more than 10 acres of farming land and not paying income tax.	124,192[a]	1,464[a]
Elderly Assistance Programme of the Ministry of Social Services	Monthly cash transfer of Rs. 1,000 is given to identified elders who are 70 years or above from low-income groups.	179,910[b]	179[b]

Notes: a. Data for 2011; b. Data for 2013.
Sources: Department of Pensions, National Secretariat for Elders of the Ministry of Social Services, Social Security Board and other relevant institutes.

[16] Calculations based on the beneficiary numbers.

substantial fiscal burden. Given the rapidly increasing elderly population, rising expenditure on pensions, and the need to expand old-age benefit schemes to cover a larger share of the elders (beyond the public sector/formal sector workers), pension reforms are necessary to ensure the sustainability of the programmes in the long run. Reforming the non-contributory system to a contributory or pay-as-you-go (PAYG) system would help reduce the fiscal burden and ensure financial sustainability of the pension programmes, while allowing the utilization of additional funds to cater to the needs of other elderly groups (e.g., those in the informal sector), and other sectors (e.g., health sector). This should be accompanied by other parametric reforms such as raising the official retirement age and indexing the benefit levels. Other Asian countries experiencing rapid population ageing like Vietnam have also undergone pension reforms in the mid-1990s from non-contributory to a PAYG system.[17]

Given that the overall coverage of social protection programmes for the elderly is low, and the available monthly cash assistance programmes are limited in coverage as is the size of the benefits, measures are required to improve coverage and benefits to address old-age income insecurity in Sri Lanka. The experience of other Asian countries like Thailand has shown that well-designed old-age assistance programmes or 'social pensions' can lead to significant reduction of poverty among the elderly. In Thailand, the old age allowance system (or 'B500 pension scheme') introduced in 1993 as a means-tested old-age income guarantee programme targeted at the elderly from low-income groups was extended to a universal programme in 2009. It covered all elderly aged 60 years and above who are not receiving a permanent income as a salary or a pension, or who are not living in public elderly homes. Currently, this programme covers over 5 million elderly, and the costs remain around 2 per cent of the government's total expenditure.[18]

5.4.2 Health

With the onset of rapid ageing, Sri Lanka will have to make adjustments to its health care system to accommodate the growing health care needs of the elderly. Population ageing has been projected to add 0.4 per cent of GDP to national health expenditure by 2050. Total health spending is expected to reach 6-8 per cent of GDP once the age structure of the population stabilizes, similar to Japan.[19] Many of the elderly in the population lack social security coverage as previously mentioned. Given dwindling traditional family support for old people, the burden of care will increasingly switch to the national health care system. In addition, the current health care system may not be adequately oriented towards meeting the health needs of the elderly.[20]

Expenditure on non-communicable diseases (NCDs) is presently a major component of health care expenditure in Sri Lanka. It is expected to rise further, as the prevalence of NCDs increase with population ageing. Expenditure for cardiovascular disease, chronic respiratory disease and diabetes mellitus are projected to increase in line with the health expenditure patterns of developed economies.[21] Sri Lanka offers free health care, but the level of public health financing is low compared to other countries with similar health indicators. In addition, out-of-pocket expenditure remains a major source of health care funding in the country, and health insurance is inadequately developed with low coverage. In 2011, household out-of-pocket expenditure accounted for 41.7 per cent of total health expenditure and 83.5 per cent of total private

[17] ADB (2012), *Social Protection for Older Persons: Social Pensions in Asia*, Asian Development Bank, Manila.
[18] *Ibid*.
[19] Rannan-eliya, R. (2008), "Population Ageing and Health Expenditure", Institute for Health Policy, Colombo.
[20] World Bank (2008), *Addressing the Needs of an Ageing Population*, World Bank,Washington, D.C.
[21] Rannan-eliya. R. (2008), "Population Ageing and Health Expenditure", Institute for Health Policy, Colombo.

health expenditure.[22] People in lower income categories use public health care facilities more than those in higher income categories. More importantly, the World Bank Sri Lanka Ageing Survey (2006) revealed that the elderly utilize public healthcare facilities more than the younger age groups.

While Sri Lanka has a prevention-based strategy to combat NCDs, cost-effective management of NCD patients is limited in the health care system. This is due to under-financing and having limited access to cost effective medication to manage NCD patients. Therefore, a prevention-based strategy will have to be combined with a sufficient increase in public funding with a focus on providing long term care to effectively manage NCDs. In addition, increasing health insurance coverage would be important to reduce the burden on state finances. For example, introducing a long-term care insurance scheme similar to Japan would help to minimize the financial risk arising from rising medical costs.

5.4.3 Labour Market

Sri Lanka's labour force increased from 4.5 million to 8.5 million between 1971 and 2012, while it is projected to increase to 9.3 million in 2021.[23] However, the absolute size of Sri Lanka's labour force will start to shrink after 2030.[24] Similarly, the working age population of the country too will continue to grow in absolute numbers until 2026, after which it will start to decline. However, as discussed in Section 5.3, Sri Lanka's working age population (15-59 years) as a percentage of the total population peaked in 2006 and has been gradually declining since then. The proportion of the working age population will decline to 63.8 per cent of the population in 2021 and 63.2 per cent of the population in 2031. This decline along with the projected increase in the old-age dependency ratio can have a negative impact on GDP growth.

A country with a large dependent population relative to its labour force will, on average, have lower productivity growth. Old-age dependency has been found to adversely affect per capita GDP growth in many Asian countries.[25] For example, in China from 2001-2020, the increase in the old-age dependency ratio is expected to reduce the total factor productivity (TFP) growth rate by 0.21 per cent. The effect is similar in ageing countries like Singapore and South Korea. Germany faces a similar situation with the decline in the working population expected to reduce long-term productivity by about one-third.[26]

Labour market reforms with strategies to boost the labour force participation rate, increase the mandatory and effective retirement age, as well as structural reforms to boost productivity through effective human capital development can help address the challenges arising from the rapid ageing of the population and a shrinking working-age population.[27]

Increasing female labour force participation (FLFP)

Increasing female labour force participation (FLFP)[28] is an important strategy to counter the effects of a shrinking working-age (and hence

[22] IPS (2014), "Sri Lanka National Health Accounts 2010-2011", Institute of Policy Studies of Sri Lanka, Colombo.

[23] DCS, "Sri Lanka Labour Force Surveys", Department of Census and Statistics, Colombo; Ministry of Labour and Labour Relations and Central Bank of Sri Lanka (2011)," Labour and Social Trends in Sri Lanka".

[24] Vodopivec, M., and N. Arunatilake (2008), "The Impact of Population Ageing on the Labour Market: The Case of Sri Lanka", Institute for the Study of Labour, Bonn.

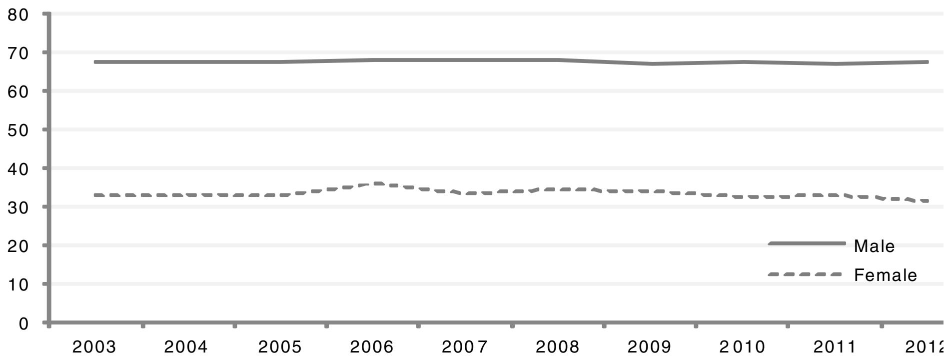
[25] Park, D., and K. Shin (2011), "Impact of Population Ageing on Asia 's Future Growth", ADB Economics Working Paper Series, Asian Development Bank, Manila.

[26] Börsch-Supan, A. (2002), "Labor Market Effects of Population Ageing", Mannhein Research Institute for the Economics of Ageing, Mannheim.

[27] McMorrow, K., and W. Roeger, (2011), "The Economic Consequences of Ageing Populations", Directorate-General for Economic and Financial Affairs (ECFIN), European Commission, Brussels.

[28] The labour force participation rate is defined as the percentage of the current economically active population (or labour force) to the total working age population. The current economically active population is defined as people who are employed or unemployed during the reference period of the Labour Force Survey. It does not take into account migrant workers, where female migrant workers constitute approximately 50 per cent of total migrant workers in Sri Lanka.

Figure 5.11
Labour Force Participation Rates in Sri Lanka 2003-2012



Source: DCS (2012) "Labour Force Survey 2012".

labour force) population. In Sri Lanka, the FLFP rate has remained stagnant in recent decades (Figure 5.11). The rate has been around 30-35 per cent of working age women, which is low considering the low fertility rate and high education attainment of the female population. Sri Lanka is behind South Asian countries like Nepal, Bhutan and Bangladesh in terms of FLFP.

The time constraint women face in playing the role of care-giver for children and the elderly is one of the barriers to greater participation in the labour force. This is a common phenomenon in many Asian countries. A survey conducted on married women in South Korea under the age of 45 revealed that 61 per cent of them quit their job after getting married.[29] Low FLFP rates amongst married women may reflect weak support systems for working mothers as well as workplace inflexibilities.[30]

Affordable childcare services have been found to increase FLFP rates.[31] Sweden has universal childcare access which has helped the country to have one of the highest FLFP rates in the world.[32] While Sri Lanka has traditionally relied upon the extended family culture for child support, the transition to a more nuclear family culture has increased the cost of childcare in Sri Lanka over the last decade.[33] Therefore, subsidizing childcare would encourage higher female labour force participation.

Labour market supply-side biases such as structural rigidities and wage discrimination may also be a contributing factor to the low FLFP rates. In Sri Lanka, on average, men earn more than women, irrespective of their productive capacity. In the private sector, the earnings gap was greater than 35 per cent in 2009, while there was gender parity in the public sector.[34] In addition, men have higher

---

29 Jackson,R., N. How and K. Nakashima (2007), *The Ageing of Korea: Demographics and Retirement Policy*, Center for Strategic and International Studies, Washington, D.C.

30 IMF (2012), "Japan: Selected Issues", International Monetary Fund, Washington, D.C.

31 Jaumotte, F. (2004), *Labour Force Participation of Women: Empirical Evidence on the Role of Policy*, OECD, Paris.

32 Garcia-Moran, E. M. (2010), "Childcare Costs , Female Labour Force Participation and Public Policy", mimeo..

33 Premaratne, S. P. (2011), "Household Labour Supply in Sri Lanka for an Urban Young Couple with Pre-school Children", *South Asia Economic Journal*, Vol. 12, No. 2.

34 Chowdhury, A. R. (2013), "Low Female Labour Force Participation in Sri Lanka: Contributory Factors, Challenges and Policy Implications", World Bank Discussion Paper Series, World Bank, Washington, D.C.

returns to education of 8 per cent compared to 3 per cent for women.[35] The unemployment rate among the educated group with G.C.E (A/L) and above was higher for women at 10.8 per cent compared to only 4.5 per cent for men in 2012.[36]

In order to increase the FLP rate, labour market institutions and practices should be designed in a way that reduces gender earnings disparities, while ensuring sufficient flexibility to attract women to the labour force. However, reducing the gender wage disparity is a particularly difficult issue to solve. South Korea introduced legislation in 2006 that required all firms with more than 1,000 employees to draw up an action plan to promote gender equality. The initiative was unsuccessful, with the programme failing to reduce the gender wage gap (females were only paid 60 per cent of what male workers earned). South Korea was more successful in encouraging flexible working schedules to accommodate parents with children. The Equal Employment Opportunity and Work-Family Balance Assistance Law allows parents with children under the age of six to request for shorter working hours, which has benefited firms by reducing the turnover of skilled workers.[37] In Sri Lanka, it is difficult to implement flexible work arrangements due to the highly protective labour laws in the country at present. The high severance costs restrict job flows, while discouraging employment growth in the formal sector.

Raising the retirement age

Parametric reforms such as increasing the effective and mandatory retirement age has the double benefit of reducing the number of retirees and

Table 5.2
Mandatory Minimum Retirement Ages for Selected Asian Countries

Country	Men (Year)	Women (Year)	Revisions
Japan	61	61	Retirement age was raised from 55 to 60 years in 1998. From 2013, retirement age will increase at a rate of 1 year every 3 years until 2025, when the minimum retirement age reaches 65 years.
China	60	50 or 55[a]	China's current retirement age has been the same since 1950. Currently planning on gradually raising the retirement age to 65 years by 2020.
South Korea	55[b]	55	The current contractual mandatory retirement age is typically set by firms at 55 years of age. In 2013, the government passed legislation that phased-in a minimum retirement age. By 2017, it will be set to 6 years.
Singapore	62	62	Statutory minimum age of 62 years set in 2012 through the Retirement Age Act (RAA). Retire and Re-employment Act now replaces the RAA, which require employers to offer re-employment to eligible employees who turn 62, up to the age of 65 years.

Notes: a. Fifty-five years for a white-collar job; b. There is no mandatory retirement age in South Korea. The mandatory retirement age set by firms is typically 55 years.

Sources: Japan - Ministry of Health, Labour and Welfare; China - Ministry of Human Resources and Social Security; South Korea - Center for Strategic and International Studies; Singapore - Ministry of Manpower.

[35] Sinha, N. (2012), "Demographic Transition and the Labour Market in Sri Lanka", World Bank Discussion Paper Series, World Bank, Washington, D.C.

[36] DCS, "Sri Lanka 2012", Department of Census and Statistics, Colombo.

[37] Jones, R. S., and S. Urasawa (2013), "Labour Market Policies to Promote Growth and Social Cohesion in Korea", OECD Economics Department Working Papers No. 1068, OECD, Paris.

increasing the labour force. Thus, it would help to reduce the fiscal burden of old-age support, while ensuring economic growth is maintained amidst a graying workforce. Many countries in Asia have initiated plans to raise their mandatory retirement ages (Table 5.2). Implementing measures to raise the retirement age in South Korea has been particularly challenging and brings out some pertinent issues that other countries should consider before raising the retirement age. In 2013, South Korea passed legislation to increase the minimum retirement age to 60 years in response to an ageing workforce and a comparatively low retirement age. The law will take effect from 2016 for large firms and 2017 for small firms.

The seniority-age system in South Korea incentivized employers to dismiss old-age employees, whom they deemed to be too costly. Reforming the compensation structure in order to extend the longevity of employment has become a policy focus for the government. Further, the South Korean government is considering drafting an Equal Employment Opportunity Act to monitor and penalize age discrimination in terms of employment and retirement, which would be needed to reinforce longer working lives in the long run.[38]

In Sri Lanka, the mandatory retirement age is 60 years. The World Bank's Sri Lanka Ageing Survey (2006) revealed that the mandatory retirement age was a significant push factor for retirement,[39] with around 40 per cent of respondents sighting it as a reason for their retirement. Workers in the public and private sector retire early, mostly due to mandatory retirement. However, casual and self-employed workers continue to work into very old ages. Moreover, similar to other countries in Asia,

To counter the effects of labour force reduction, Sri Lanka should design policies to increase participation rates, particularly among women and the elderly.

the Sri Lanka Ageing Survey (2006) identified labour market inflexibilities, such as the inability to adjust working hours, as one of the main obstacles to working at old-age. This discourages part-time employment, which is one of the most effective ways to encourage longer working lives.[40]

In addition, as mentioned previously, the highly protective labour laws in Sri Lanka would induce employers to stipulate mandatory retirement in employment contracts in order to reduce the cost of lay-offs. This has been an issue in Japan, Singapore and South Korea, which prompted their governments to introduce measures to reduce the cost of retaining old-age workers. In South Korea, the government set employment quotas for older workers and offered subsidies to firms that hire and retain them.[41] In Singapore, the Retire and Re-employment Act, introduced to re-employ workers between the ages of 62-65 years, offers

38 Asian Productivity Organization (2011), *Population Ageing and Productivity in Asian Countries*, Asian Productivity Organization, Tokyo.

39 Vodopivec, M., and N. Arunatilake (2008), "The Impact of Population Aging on the Labour Market: The Case of Sri Lanka", Institute for the Study of Labour, Bonn.

40 Jones, R. S., and S. Urasawa (2013), "Labour Market Policies to Promote Growth and Social Cohesion in Korea", OECD Economics Department Working Papers No. 1068, OECD, Paris.

41 Jackson, R., N. How and K. Nakashima (2007), "The Ageing of Korea: Demographics and Retirement Policy", Center for Strategic and International Studies, Washington, D.C.

considerable flexibility to employers to make adjustment to their employment contracts in terms of wages and benefits in order to reduce the cost of re-hiring.[42]

To counter the effects of labour force reduction, Sri Lanka should design policies to increase participation rates, particularly among women and the elderly. Many East Asian countries have already implemented policies to increase participation rates, recognizing the detrimental effects a shrinking workforce could have on economic growth. As a country that is facing a shrinking labour force, Sri Lanka would benefit by introducing measures to make labour markets more flexible, reduce the cost of labour protection, and incentivize employers to extend retirement ages.

5.5 Conclusion

Rapid demographic change is one of the key challenges faced by Asia in the coming decades. Many countries in the region, and East Asian countries in particular, are experiencing a rapid ageing of population alongside a decline in their working-age population, which would be an impediment to Asia's growth momentum. While the rapid ageing of population could raise the fiscal burden of social protection and health care services, a shrinking working-age population could lead to shortages of labour supply and have adverse impacts on productivity and GDP growth.

Similar to many East Asian countries, Sri Lanka is undergoing a rapid demographic transition. The 'demographic dividend' or the 'demographic bonus' that the country experienced over the past two decades is expected to end by 2017. Sri Lanka will then be faced with a rapid ageing of population, where by 2031, the elderly population will reach over 20 per cent of the total population. By 2041, one-in-every-four people in the country will be an elderly person, with a disproportionately higher share of females amongst them.

Along with the demographic transition, Sri Lanka will face several economic and social challenges, particularly in meeting the social protection and health care needs of the rising elderly population, and addressing the implications of a shrinking working-age population on the growth of the country.

Given the rising elderly population in Sri Lanka, it is vital to improve the current social protection programmes for elders - their coverage, quality of benefits, programme design, and sustainability. Less than a half of the elders are covered by existing old-age retirement benefit programmes at present like pensions, provident funds and cash transfer programmes, while the bulk of the social protection expenditure is on pensions for public servants that cover only one-fourth of the total elders in the country. Given the rising cost of pensions in Sri Lanka, reforming the current non-contributory system to a pay- as-you-go (PAYG) system along with some parametric reforms on retirement age are important to ensure its long-term sustainability. This would also allow utilizing the additional funds for other social protection programmes (e.g., cash transfers). In particular, it is important to improve the benefit amounts, and gradually extend the coverage of the existing cash transfer programmes to include all elders who are without a regular income (e.g., pension or salary), like in the case of the old-age allowance scheme in Thailand (or 'B500 pension scheme). These measures are crucial to ensure old age income security in Sri Lanka in the coming decades.

Improvements to Sri Lanka's health sector are also needed to accommodate the growing health care needs of the elderly. Given that the prevalence of NCDs is likely to increase with an ageing population, resources have to be allocated for NCDs. Moreover,

[42] Ministry of Manpower, Singapore.

expanding the health insurance sector (which has not been adequately developed) would be important to help minimize risks arising from increasing medical costs, and help reduce the burden on state finances.

Furthermore, labour market reforms with strategies to boost the labour force participation rate, in particular amongst females, raising the current retirement age (above 60 years), and measures to boost productivity through effective human capital development are important to address the challenges arising from the rapid ageing of population, and the shrinking working-age population in Sri Lanka.