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Research Paper

Population Ageing and Financial Inclusion

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ABSTRACT : *As per the forecasts of the demographics of Sri Lanka, the ageing structures will gradually shift from a pyramid shape to a barrel shape and then to a tower shape. The share of population over 65 years of age of the total population of Sri Lanka is projected to grow by 21% in 2045. While the ageing of population in Sri Lanka is faster than developed economies, the tragic situation is that per capita income is relatively low. This paper covered a comprehensive literature review including an analysis of theoretical approach regarding the population projections, demographic dividends, emerging issues, i.e., health issues, family tension, dependency burden, aggregate life cycle deficits and how fiscal imbalances occurred. Further, the literature review discussed the necessity of the financial inclusion to face the financial security concerns of the elderly population. In the latter part of the paper included the discussion of activating the window of opportunity for demographic dividends and the preparedness for financial inclusion by improving the financial management, removing age-based barriers to financial inclusion and introducing National Financial Inclusion Strategy (NFIS) of Sri Lanka.*
KEYWORDS: *ageing population, demographic dividends, window of opportunity, financial inclusion*

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I. INTRODUCTION

Demographics are of key importance to development, but this link is often ignored. Debates about population policy are exciting, with columnists and academics arguing about what lies ahead if global population challenges aren't actively integrated into policy and planning processes.

The number of adult people in the world aged 60 years or over in 2017 is 962 million which is more than double with compared to the population of 1980 which was 382 million. Between 2017 and 2030, the adult population in the world is projected to grow by 45 per cent from 962 million to 1.4 billion. By 2050, this number is projected to more than double again with compared to 2017, reaching nearly 2.1 billion. It was identified that the adult population in developing regions are much faster than the developed countries and it is projected by 2050, 80% of elder people will live in developing regions (World Population Ageing, 2017).

Population ageing in Sri Lanka is particularly notable since Sri Lanka has the oldest population in South Asia and it is one of the fastest ageing populations in the world. As per the Central Bank (2017), the population of the country is 21.4 million and 12.4 % out of it was estimated to be over 60 years old which was higher than the world figure 12%. It is also expected that this Sri Lankan old population figure will further be increased to 28.8% by 2050 (World Population Ageing, 2017). Moreover, unlike the developed countries with ageing populations, Sri Lanka is facing this rapid transition in the demographic structure within a comparably low per capita GDP and less developed old age welfare facilities in the country. Tayler et al. (2012) explained that this elder population is not spread evenly and around 80% of the adult population lives in rural areas. On the other hand, Sri Lanka displays a trend of urbanization in which these rural old people have a tendency to live alone. Further, the concern is getting worse due to the change in household composition and family structures. The traditional pattern that, elders live with their children is threatened due to urbanization, lower household size, foreign employment, migrations (Siddhisena, 2005). World Population Ageing (2017) shows that living independently alone or with a spouse is very low in developing countries but vice versa in developed countries. It was evident that, the lowest is Afghanistan at 2.3% but it is 93.4% in the Netherlands.

Since Sri Lanka shows the critical expansion of ageing population, there will be requirements to face the concerns that lies ahead. Elderly people are not uniform. They have to classify as high-risk type compared to other age categories. The ageing concern upturned due to the changing family structure, extra health needs and mainly due to uncertain financial support. However, Sri Lankan ageing policy structures are not accompanied with the financial security to face the poverty concern in the future (Tayler et al., 2012).

In Sri Lanka, a major portion of the labour force is engaged with the informal sector and these casual workers significantly associate with the poverty (Gunawardhana et al 2007). Gaminiratne (2007) further explained this concern as, 72% of labour force in Sri Lanka is mainly engaged in informal sector, but not covered with formal retirement schemes. Further he explained that half of these informal labours such as farmers and fishermen can join with contributory pension schemes, but only about a quarter are successful due to default payments of the contribution. In the case of old women who mostly worked as unpaid labour, identified as more unprotected and poorer. In the meantime, better to have attention on population that are around 40 years of age today, who will be 70 years in 2050. Tayler et al. (2012) stressed that, financially preparedness for them is essential while caring for the vulnerable elders today.

Lyons et al. (2018) explained that the solving of this ageing problem cannot be solely relied on the Government. Instead, households need to get more responsibility to make their own security. Almost all nations in developing world are having strategies and national campaigns to establish financial inclusion and encourage personal savings and accumulating assets for future consumptions. Financial inclusion is an essential component of enabling the developing world to avoid the poverty trap. In many countries the majority of households experiencing lack of access to basic financial services and many more are only partly involved or get poor-quality services.

Though there is an extreme demographic transition taking place in Sri Lanka, not many studies have taken place in evaluating the economic impacts of it. The empirical studies undertaken are primarily based on health and welfare issues and mainly on descriptive nature. It is rare to find any studies on ageing poverty and financial inclusion nexus on Sri Lanka. Accordingly, the main objective of this study is to evaluate the emerging issues, demographic dividends and financial inclusion as a solution through the existing literature and theoretical approaches.

The remaining part of this paper is structured as follows; Section I includes a review of literature with the theoretical approaches that discuss population projections, demographic dividends, emerging issues and financial preparedness. Section II presents the discussion of solutions before Concluding in section III.

II. Literature review with the Theoretical approach

2.1 Old and Ageing

Definition for the older, can be differ by countries, its culture, context and individuals' physical and mental differentiations. United Nation Organization sets 60 year and World Health Organization sets 50 years of age as the commencement of old age. However, sometimes we define old not by the age but by changing the active role of the family and their ability to be employed in society (CFI & HelpAge, 2015). Based on the mandatory retirement age, 60 years is considered as the official older age in Sri Lanka, (De Silva, 2012).

Ageing population is the growth of elder population in number and proportion, which effects a country economically, socially and politically. The main drivers of population ageing are changes in fertility and mortality. Development of Social and Economic factors related with these demographic drivers are causing this ageing transition. Reduction of fertility (Birth per women) or childbirth contributes by decreasing child mortality, grown up employment opportunities and openings of education, progressing of gender equivalence, family planning programs and encouraging reproductive health. Furthermore, progress of medical facilities & technology and better-quality living standards compared to the past, cause people to live longer. Two factors; low fertility and high longevity grounds the low child population and higher elder population respectively (United Nations, 2015).

In Sri Lanka total fertility rate in 1953 was 5.3 and gradually declined to 1.9 in year 2000 (World Bank, 2012). However, it slightly recovered and reported as 2.1 in 2014. This is the second lowest in the SAARC region alongside with Maldives, and just above the Bhutan fertility rate which was 2.0 (CBSL statistics, 2017). The mortality rate of the country also declined. The life expectancy of the country increased due to the development of the social infrastructures, upgrading of economic wellbeing and the average level of consumption (World Bank, 2012). The expectation of life at birth is 75 years in 2015 and this is the second highest of the SAARC regional countries, as Maldives reported 78.5 years.

2.2 Projection of population ageing in Sri Lanka

As a country planning towards sustainable development goals, the analysis of projected population composition and related economic patterns are essentially important. This would be beneficial for the determination of the demand and supply of Socio-Political products and services expected by future communities. Further, this projection would consider the size, pattern, rate of growth of the different population categories. Hence, this analysis should beyond the projection of birth and death rates, should estimate the capability of the existing policies and programs to cater the future demographic changes (De Silva, 2012).

The age structure transition of the population has three broad phases. i.e., (i) growth of child population due to high fertility and less infant mortality (ii) Rising of working population by previous phase children turning into adults mainly due to drop in fertility and mortality (iii) increase in the proportion of elder population due to the upturn life expectancy.

As per Central Bank (2019), the population of Sri Lanka is 21.8 million. According to the United Nations World Population Forecast (2019), total population of Sri Lanka is expected to increase slightly to 22.2 million by 2038. Assuming that the population will continue to grow at a slower pace for another two decades, considering the fertility rate remains low and there will be no significant internal migration, Sri Lanka will experience a shrinking population after 2038. According to world population projections (2020), the population of Sri Lanka is projected to be 22.3 million by 2050.

According to the various forecasts including United Nations World Population Forecast, the working age population in Sri Lanka, the 15-64 age group, will peak in 2027, and the 15–59 age group will peak in 2026. Compared to 2015, the number of people aged 65 and above will double by 2040. As per the future forecasts of the demographics of Sri Lanka, the ageing structures will gradually shift from a pyramid shape to a barrel shape then to a tower shape as exhibited in most developing economies (Figure 1). With changes in the age structure, the old-age dependency ratio will increase rapidly.

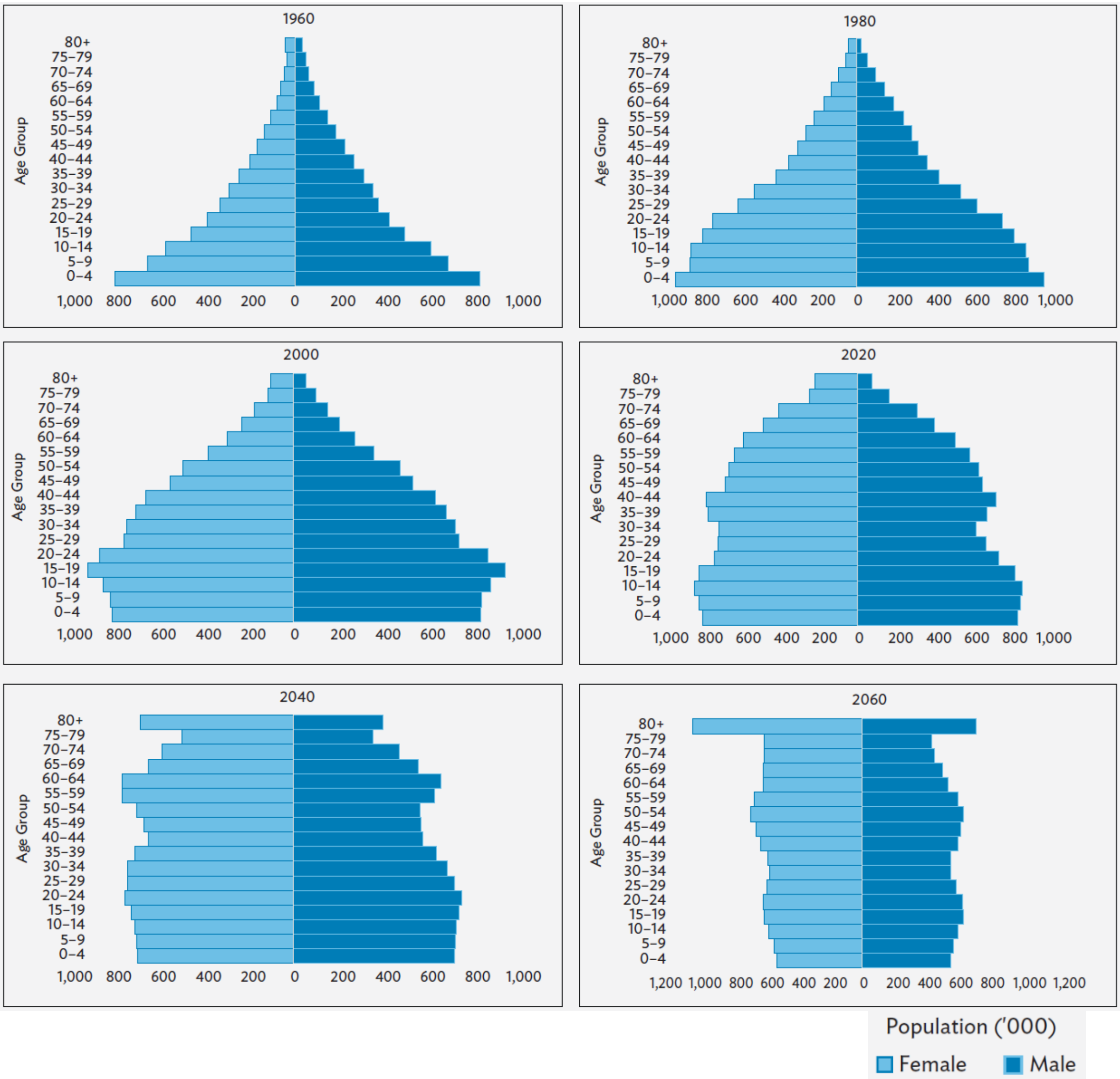

Figure 1: Population pyramid evolution in Sri Lanka 1960 – 2060

Source: Asian Development Bank (2019)

2.3 Demographic Dividends

1st demographic dividend: De Silva (2014) described that, definition of the demographic dividend by United Nations Population Department. It is a transitional time interim when the population of age under 15 are below

30 per cent and above 60 are below 15 per cent. In the demographic dividend period, it is expected to take advantage from the high levels of per capita income. The first demographic dividend in Sri Lanka was opened in 1991 and it lasted in 2017.

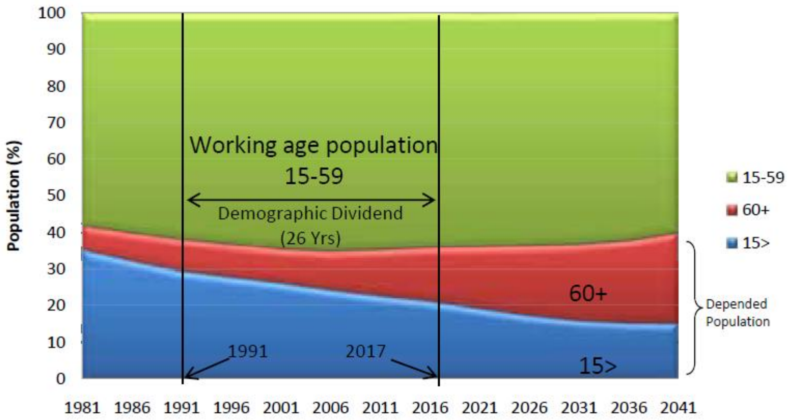

Figure 2: Age Structure Transition and accessibility of Demographic Dividend (Bonus)

Source: De Silva (2012)

2nd demographic dividend: After the current labour force shift into the old category, the second dividend will take place. Argument based on the forecasted long life and lengthy retirement life with the environment of absence of social security and family support, people yet to be elder will make great environment to savings. Further, this population will accumulate more assets than others. This will result higher wealth accumulation and assets income which will lead to higher per capita income, higher productivity and boost the output levels of the country (CBSL, 2012).

2.4 Emerging issues of ageing population

2.4.1 Health issues

Death rates in Sri Lanka are reducing compared to the past. While deaths due to infectious diseases reducing, the share of non-communicable diseases (NCD) reported 75 per cent of all deaths. High life expectancy for females is still present but for males it is stagnated, mainly due to NCDs Cardiovascular Diseases followed by cancers and diabetes. Developing of NCDs are common with ageing. (WHO, 2016). Risk factors which will lead to NCDs such as hypertension, alcohol & tobacco usage, physical inactivity and obesity are lower in Sri Lanka compared to developed countries. But with the changing of lifestyle, urbanization, poor nutrition and other economic status, there is a fear to increase these risk factors in Sri Lanka (Engelgau *et al.* 2010). Escaping, timely detecting and treating for these factors is essential for the population to avoid unnecessary burden from the ageing population. Planning for a healthier elder population will be the most effective way to reduce the burden of the young workforce in the family by reducing the expenditure of long-term caring of elders. However, health system in the country should prepare to address the forthcoming demographic transition.

However, World Bank (2008) stated that the Sri Lankan health structure was not ready to face the ageing population. Concerns such as, outdated NCD treatments, poor health awareness, poor systems for preventions and early warnings, less projected health budgeting permitting to the trends are emphasized that, overall system is not developed. In the meantime, it was reported over 75% of the deaths due to Covid -19 in Sri Lanka was aged 60 and above.

2.4.2 Family tension

Most of the elders in Sri Lanka, about 80% live with their children. Living together with elders and children in a family is a two-way supporting system. Elders usually rely on children for financial and other caring support and they give support to their children by childcaring and other domestic support. Since the share of females of elderly population will be higher than males, the poverty concern will be high and need exceptional attention for them especially for widows.

At Present, the socio-economic situation is not alarming. But the traditional family supporting system shows signs developing of strains. Specially, primary caregivers, generally women, reports substantial tension due to working for earnings, caring of children and parents (World Bank 2008).

The modernization of the society also put stress on traditional families in several ways. Less number of children due to lower fertility will cause higher weight of elders and non-marriage. Having higher education for the children will lead to informational gaps and attitude differences which will be harmful for the family support. Increase of female labour participation will decline in the number of care supporters and adult children who move away from home and migrate to urban or foreign environment for better employments may lead to lack of care given to elder people.

2.4.3 Dependency Burden

The relationship of the age groups of children (14>), working age (15-59) and elders (60<) can be presented by the dependent ratio. Dependent ratio is defined as number of the dependents to every hundred persons in working age (15-59). Accordingly, the three dependent ratios are named child dependency ratio, old dependency ratio and total of these two ratios as total dependency ratio (De Silva, 2012).

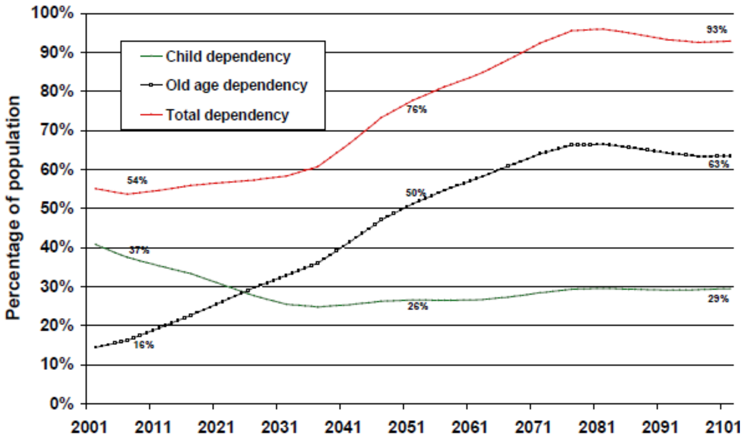

Figure 3: Trends in dependency ratios, Sri Lanka 2001-2101

Source: De Silva, 2007

Figure 3 explained that, up to 2025 the increase of old age dependency ratio is approximately balanced by the corresponding decline of the child dependency ratio. It indicates the increasing of age caring social cost will be balanced from the saving of investments in children in an economy (World Bank 2008).

The old dependency ratio is increased to 20 per cent in year 2012 from 12 per cent in year 1981, due to low population growth and high life expectancy (Census and Statistics, 2012). Furthermore, the old age dependency ratio is projected as 50 per cent which is double the child dependency ratio (World Bank 2008). These projections show how old age dependency ratio is going to burden care givers in future and the requirement of preparation with policy implications and personal arrangements.

2.4.4 Aggregate lifecycle deficit

The two drivers of the life cycle deficit are (i) Income profile of the Labor force and (ii) Consumption. Life cycle deficit that contains the difference between private and public consumption (*C*) and labour income (*YL*) at each age (*x*). Usually, the life cycle deficit for youth is positive. But, this negative for the elderly due to earnings being less than consumption (Istenic et al., 2018).

Figure 4 illustrates, with the demographic transition, it is clear that the elderly share in life cycle deficit will grow. This enlargement will set pressure on the working age labour force to fill the deficit. Though, elder labour force earn income, since their consumption level exceeds that level, elders make greater life cycle deficits. As a result, the vulnerability of the dependency ratio will rise. Accordingly, the life cycle deficit in the economy will increase significantly, if retirement age, all age employment rates, and skill compositions are kept constant (World Bank, 2012).

Hence it is important to identify financial security measures to reduce the identified aggregate life cycle deficit and to open the second window of opportunity in the third phase of the demographic transition.

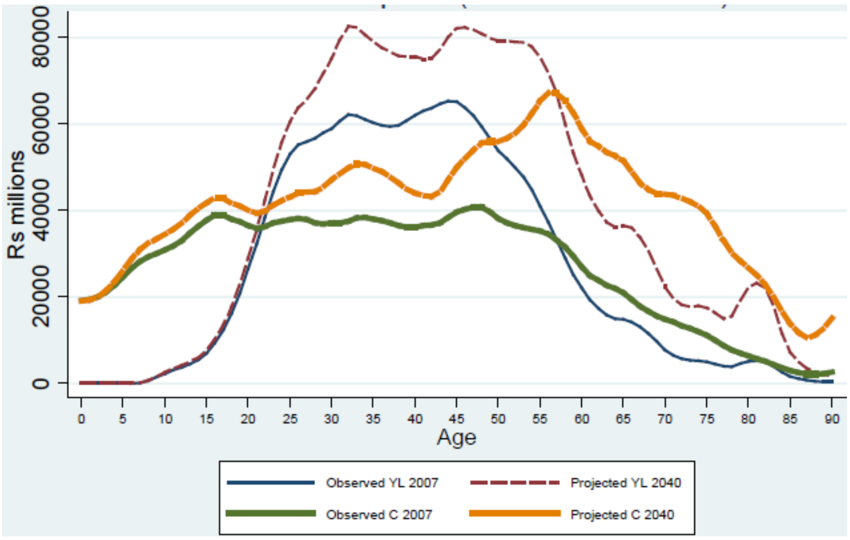

Figure 4: Projected aggregate lifecycle deficit [Total Consumption (C) – Total labour Income (YL)]
Source: World Bank (2012)

2.4.5 Fiscal imbalance

Carone et al. (2005) stressed several direct effects on the economy from ageing. Both labour supply and the quality will have a direct impact in medium term and long-term real economy. He explained that, if an individual's productivity will decline with age, the increasing of old workers will negatively affect the total labour productivity of the country. Further, ageing has three direct effects on capital intensity: increasing product of capital, declining the savings rate and capital inflow.

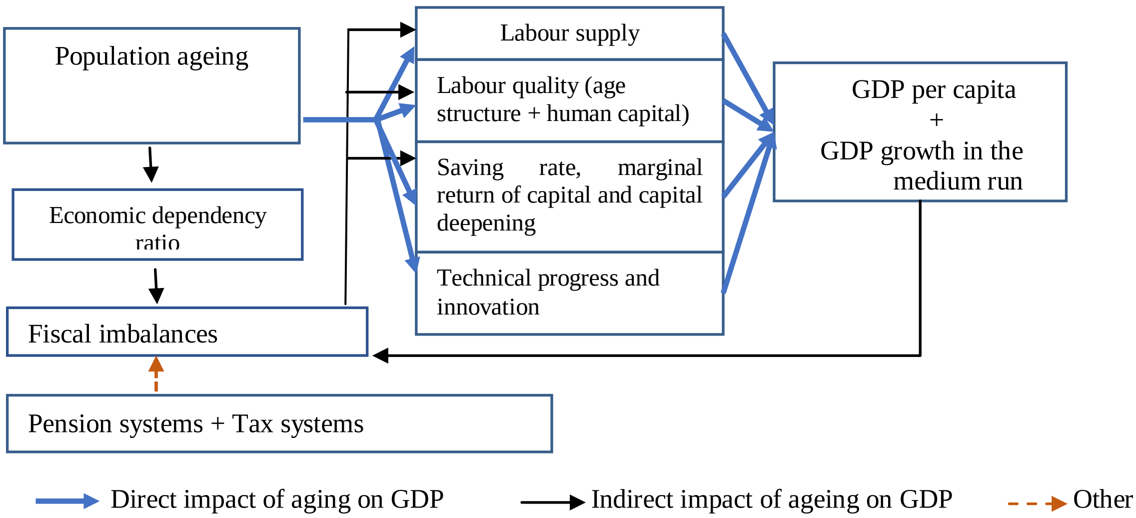

Figure 5: Main transmission channels of ageing to overall economic performances
Source: Carone et al., 2005

Ageing population impacts on the economy indirectly through budgetary effects, financing the developing of older population will lead to rise in taxes and other social security contributions in the economy. This will distort the macroeconomic decisions and impact on GDP growth of a country (Ehrlich and Kim, 2005). Carone et al. (2005) further explained that the increasing of taxes on work force to finance the old dependents will reduce the capital accumulation, which will reduce the income generation of the country. Figure 5 summarizes the main channels that influence the macro-economic conditions in a country.

2.5 Financial security of the elder population

Lyons et al. (2018) explained that it's required to consider both elderly and soon to be elder (pre-elder) should prepare for their old age. The preparation of these groups may vary according to the vulnerability of the people. The most vulnerable are women, people in poverty and the less educated. Especially in less developed countries, vulnerable groups are generally far behind in the preparation of financial security for their older life. Reasons behind the less participation are economic, informational and institutional barriers. The less financial preparedness will be a serious effect for a country, economically and socially. Consequently, negative impacts for the GDP growth and fiscal pressure on weak social safety nets.

In response to this problem most of countries already established or began some actions to establish viable retirement schemes. Further, policy makers of some countries begin to reconsider the existing benefit schemes (Lyons et al., 2018). But it is questionable for many countries especially less developed countries can establish adequate financial security mechanism for the future. Further, young working group with less per capita income are not capable to fund these plans. Half of the old people of the world will not receive pension benefits (United Nations, 2015).

2.6 Financial Inclusion as a solution

Most of the developing countries now forming nationwide campaigns and policy strategies to increase level of the financial inclusion to face the financial security of the elder population. As pioneers, China and India form strategies targeting every household to open a formal bank account. As a first step of this strategy will lead to improve the individuals' financial security and the country's financial and economic security in the long run (Sahay et al., 2015). Bearing of an account is an easier step to encourage the personal savings for the future safety and distribute government social benefits in an efficiently and fairly manner.

Financial education is a growing important challenge that policy makers have to face. Since householders are not entirely dependent on government social protection plans, they tend to ensure their future financial security as a personal responsibility (Lusardi & Mitchell, 2014). Having good financial education will result in demand for specialized financial services in which are can plan personally a better financial security based on the present and future asset accumulation (Lyons et al., 2018).

According to the World Bank (2018), adult usage of accounts in a formal financial institution is taken as a measurement of the financial inclusion level of a country. Accordingly, Sri Lanka recorded 73.6% for 2018, which is a significant decline compared to year 2014 which was 82.7%. However, it is far above compared to lower middle-income countries as 57.8% and 41.9% in 2018 and 2014 respectively. The data base published saved for old age only as 18.9%, but slightly above South Asia and lower middle-income countries as 11.4% and 13.2% respectively. Whereas the world figure on savings for old marked as 20.6 per cent, high income countries reckoned as 43.9 per cent, giving an indication of the preparation of developed countries for the ageing population.

III. DISCUSSION

3.1 Activating the window of opportunity

It is questionable where the country has taken the window of opportunity in a better manner. But countries having steady macroeconomic environments, got positive economic results by implementing policies on encouraging labour force participation including greater number of female participations, encouraging savings and investments which lead to higher per capita income. Sri Lanka can still open the window of opportunity up to 2030 by changing the definition of old age is as 65 years or above (Figure 6).

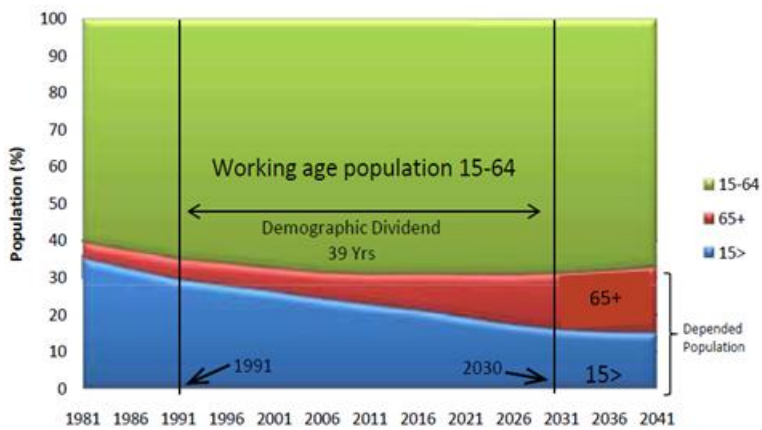

Figure 6: Age Structure Transition and accessibility of Demographic Dividend (Bonus)

Source: De Silva (2012)

The second dividend will not occur automatically. It needs dynamic policy measures to activate the window of opportunity. Forward looking policies such as; adopting long services, required legal amendments, discourage age discriminations and required cultural changes, modifying retirement benefits, skill developments to adopt the changing economy and especially increasing their financial inclusiveness could be benefited to grab the opportunity. Hence it is important to identify financial security measures to reduce the identified aggregate life cycle deficit and to open the second window of opportunity in the third phase of the demographic transition.

3.2 Preparedness for Financial Inclusion

Several researchers such as CFI & HelpAge (2015), World Bank (2008), De Silva (2012) discussed the specific points to consider on financial management when we use financial inclusion as a tool to face the ageing population problem.

3.2.1 Financial Management

Working in old age: Most of the elders of low- and middle-income countries are continuing their labor. Since, data not available to measure the informal employment, the perception of elders do not work. Work in older life needs a required amount of financial support. However, government has a serious responsibility when bringing these people into the work force, such as, controlling age discriminations, human capital development and specially make available and open avenues for financial information and products to working them as long as they can. Policy makers should involve with financial institutions to tailor credit tools to match with self-employees who are micro or small level entrepreneurs. However, negotiating to removing the age caps is essential to easy access to finance from a formal financial market.

Receiving efficient Family support: To receive remittances from migrated or urbanized family members, it is required to improve international and domestic money transfer methods, which are affordable, convenient, reliable and user friendly for elders.

Day to day and Emergency financing: Expenditure pattern of elders may vary broadly according to the social norms, availability of services of public or private and cost of living. Usually, the level of the expenditure may be constant throughout the lifespan, except obligations that occurred from health or other specific family occasion. Financial literacy is essential for the old population for the expenditure management.

Improving the amount of savings as a practice is vital to face the emergency expenditure and for investment purposes. Tailored short term loans or micro-financing are also required to meet the emergency shortfalls. Further, make availability of micro-insurance schemes with features of low premiums and limited coverage for poor people is required.

3.2.2 Removing Age based barriers to financial inclusion

Beck et al. (2009) explained the reasons for the exclusion of formal financial services in general. Accordingly, there are factors for non-use of formal financial services (i) voluntary exclusion factors; no need, Cultural/religious reasons not to use/indirect access etc. (ii) Involuntary exclusion; Insufficient income/high risk, Discrimination, Contractual/informational framework and Price/product features etc.

CFI & HelpAge (2015) described exclusion factors as barriers for the inclusion of old people. Financial service providers should take challenge to treat elder customers who are react slowly due to hearing and vision issues. Weak communication leads to build up knowledge gap with the available financial services. Establishment appropriate customers protection methodology to make complaints by elders about the weak communications is required. Further, Financial institutions should attend to make infrastructures to have easy access for old people who are in trouble with physical mobility, especially in rural areas. In addition, make available of customer friendly mobile money services also can be proposed.

Practicing of flexible know your customer laws where possible is required for the elders who are in trouble with prove their identity. Find some alternative methods for identification, especially in rural banking is an avoiding of significant barrier in financial inclusion.

Self-exclusion of elders may be due to the; existing of a bank account for a family member, not trust on the services, earlier bad experience or self-judgments of they are not eligible for particular product. Policy makers and financial institutions should educate old people with flexible policies to respond these concerns, as financial inclusion is an identified medium- and long-term tool to face the population ageing problem.

3.3 National financial Inclusion Strategy (NFIS)

The National Financial Inclusion Strategy (NFIS) of Sri Lanka was launched with an aspiring vision of "Better Quality Inclusion for Better Lives". This is a multi-stakeholder mission representing both public and private, led by Central Bank of Sri Lanka. The NFIS aimed to improve the access of quality, suitable, safe and affordable financial products and services to the country population, which are considered as an opening of opportunities and improving their standard of living. NFIS identified the key financial inclusion gaps and underlying causes. NFIS contain four major pillars [i.e., (i) Digital Finance and payments, (ii) Micro Small Medium Small Entrepreneurs (MSME) finance (iii) Consumer protection (iv) Financial Literacy and Capacity Building] and three enablers [i.e., data, infrastructure, gender and policy regulation and supervision]. The NFIS will be a great supportive platform to improve the financial inclusion of the elders and yet to be elderly population.

IV. CONCLUSION

Sri Lanka will face multidimensional challenges due to the exceptional demographic transition which will lead to an unsafe poverty trap of the country. Most of the elder population engaged in informal economic activities, women who only engaged with the non-paid home activities and disabled old groups will have to face the poverty issue critically. Many of the elders who are not having pension or other financial security arrangements may be unable to face the emerging issues leading to poverty, without having the family support. This trend will decline the healthy workforce while it creates huge pressure on the young workforce. Although the elder labour force earns income, since their consumption level exceeds that level, elders make greater life cycle deficits. With the demographic transition, it is clear that the elderly share in life cycle deficit will grow. This enlargement will set pressure on the working age labour force to fill the deficit. Protecting of the existing and future old population that are unsecured, will accumulate the pressure on fiscal budget by increasing the expenditure on pension, health and related welfare. This expenditure pressure difficult to be tolerated by the government without support from the general public.

Further, second demographic dividend will take place after the current labour force shifts into the old category would create a great environment for savings for people yet to be elders. Early preparation for the second demographic window is essential for the development goals of the country. Bettter financial inclusion is essential to succeed this opportunity and increasing of the financial inclusion level is identified as a tool to reduce poverty pressure built due to the population ageing.

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