The Economic Prospects and Limitations of Population Aging:
The Case of Lao PDR

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Table of Contents

1. Introduction .......................................................................................................................... 1

2. Population Aging: Definition and Causes ............................................................................. 2
   2.1 Increasing Life Expectancy ............................................................................................... 2
   2.2 Decreasing Mortality Rate ............................................................................................... 3
   2.3 Decreasing fertility rate ................................................................................................. 4

   3.2 Better Social Care Systems ............................................................................................ 6
   3.2 Social and Economic Contributions of the Old-age Population ...................................... 8
   3.3 Increasing Consumption ............................................................................................... 8

4. Challenges and Limitations of Population Aging ............................................................... 10
   4.1 Social and Financial Security .......................................................................................... 10
   4.2 Age Discrimination and Exclusion of Old-Age Population ............................................ 11

5. Laos: Current Situation and Tendencies of Population Aging ........................................... 12
   5.1 Country Overview ......................................................................................................... 12
   5.2 Population Structure ..................................................................................................... 13
      5.2.1 Life Expectancy .................................................................................................... 15
      5.2.2 Fertility ............................................................................................................... 16
      5.2.3 Mortality .............................................................................................................. 17
   5.3 Economic Conditions Relative to the Current Population Trends .................................. 19
      5.3.1 The Demographic Bonus ....................................................................................... 20
      5.3.2 The Labor Force ................................................................................................. 21
      5.3.3 Urbanization ........................................................................................................ 23
   5.4 The Current Social Welfare Policies of Lao PDR’s Government ..................................... 23
   5.5 Policy Suggestions for Lao PDR’s Demographic and Economic Development ............. 24
      5.5.1 Human Resource Development .............................................................................. 25
      5.5.2 Improvements of Healthcare and Social Security Systems .................................... 25

6. Conclusion ........................................................................................................................... 26

References .................................................................................................................................. 28
List of Figures

Figure 1: Life Expectancy at Birth, 1960-2016 ................................................................. 3
Figure 2: Crude Death Rate (per 1,000 people), 1960-2016 ........................................ 4
Figure 3: Total Fertility Rate (births per woman), 1960-2016 ........................................ 5
Figure 4: The Percentage of Consumption of Older Population out of Total Consumption, 1960-2016 ......................................................................................................................... 9
Figure 5: Old-age Dependency Ratio, 1960-2016 ............................................................. 10
Figure 6: Population Pyramid, Laos, 2016 ..................................................................... 14
Figure 7: Population Pyramid, Hungary, 2016 ............................................................... 14
Figure 8: Life Expectancy at Birth, Lao PDR and Hungary, 1960-2016 ..................... 16
Figure 9: Total Fertility Rates, Lao PDR and Hungary, 1960-2016 ............................ 17
Figure 10: Crude Death Rate (per 1,000 people), Lao PDR and Hungary, 1960-2016 .... 19

List of Tables

Table 1: Percentages of different age groups and dependency ratios in different continents, 2013 ............................................................................................................................................... 7
Table 2: Lao PDR’s Dependency Ratios and Future Estimates ........................................ 20
1. Introduction

We are all living in a world where nothing stops developing. It is in the nature of the human race to always seek out knowledge and improve every aspect of life. Numerous new innovations and discoveries are introduced to the world every day. These things make our lives better. Technological and medical advancements, especially, have allowed people to live a healthier and longer life. These improvements, accompanied by decreasing mortality rates and declining fertility, gradually result in an aging population.

An aging population is when the proportion of those aged 60 years and above, continuously increases along with the changes in the shares of other age groups in the total population (UNFPA, 2012). It is a natural stage of the demographic development. Different parts of the world are heading towards the same direction, though not at the same pace. In many developed countries, the issue of aging population is already present. Surprisingly, in developing countries, even those with a relatively young population, the pace of population aging is even faster (UNFPA, 2012). Having a rapidly aging population can inflict even more economic and social problems to developing countries since a lot of them do not have the right resources and capability to handle such issues.

Although population aging is often viewed as a major challenge for various nations around the world, it also provides opportunities and positive contributions to the economy. In this thesis, I would like to examine both sides of the effects of an aging population on the economy. Also, being born and raised in a developing country called Laos, I would like to use my home country as an example of a country where the population is still considered young but is quickly heading towards the problem of aging population. If governments do not address these problems with the right policies, there would be damaging consequences on the country’s economy and welfare. Therefore, to ensure the well-being of the people, it is essential that aging population is handled appropriately.
2. Population Aging: Definition and Causes

An aging population is when the proportion of older citizens, aged population, increases and overtake the ratio of other age groups (UNFPA, 2012). According to the United Nations’ publication, the percentage of people aged 60 or over has jumped from 9.2% to 11.7% in between 1990 and 2013 and is expected to reach up to 21.1% by the year 2050, which is one-fifth of the global population (United Nations, 2013). Various factors define population aging, such as death, fertility, migration, and longevity. The main reason that causes population aging is the increasing longevity and the declining mortality and fertility rates. Therefore, I would like to focus mainly on the changes in these three determinants.

2.1 Increasing Life Expectancy

“Life expectancy at a specific age is the average number of additional years a person of that age could expect to live if the current mortality levels observed for ages above that age were to continue for the rest of the person’s life.” (United Nations, 2015) Life expectancy at birth is commonly used to measure the expected longevity of a country’s population.

The changes in life expectancy affect the aging of a population directly. The higher life expectancy gets, the higher the number of people who live until old age. The continuous development in the medical field plays a huge role in increasing longevity. It increases the chance of survival at old age. This means people can now live healthier and longer than before. Consequently, the number of elderly population increases.

Different degrees of changes can be seen in different parts of the world. In more developed nations, life expectancy has always been high. While in developing countries, the survival rate and life expectancy are relatively low due to war, poverty, and diseases. For example, in 1960, the life expectancy at birth in the United States was 69.8 years. It was higher than the global average, which was then 52.3 years (World Bank, 2018a).

In the same year, the average life expectancy in the least developed countries (according to UN classification\(^1\)) was only 40.2 years (World Bank, 2018). In 2016, the United States had a life expectancy of 78.7 years, which remained above the global average.

\(^1\) United Nations, 2018
of 72.04 years (World Bank, 2018). While the LDC average was 64.5 years (World Bank, 2018), it was a dramatic increase since 1960. Although the life expectancy in the US remained higher, the scale of growth in LDC was much more significant.

**Figure 1: Life Expectancy at Birth, 1960-2016**

![Life Expectancy at Birth, 1960-2016](image)

Data source: World Bank (2018a),

It can be seen in Figure 1 that the global trend of life expectancy at birth is progressive. Life expectancy is increasing in both the developing and developed parts of the world. The changes in life expectancy in LCD are noticeably more dramatic than in the US. It could indicate that the population in developing countries are aging at a faster pace, compared to the more stable US population.

### 2.2 Decreasing Mortality Rate

Mortality or death rate is defined as “the number of deaths occurring among the population of a given geographical area during a given year, per 1,000 mid-year total population of the given geographical area during the same year.” (OECD, 2013). Death rate strongly correlates to the changes in life expectancy. The lower the death rate, the higher the life expectancy. That is, when fewer people die, more people survive and contribute to the average longevity. The success of reducing infant mortality in various countries around the
globe plays a huge role in decreasing the overall death rate and increasing life expectancy. (United Nations, 2015)

**Figure 2: Crude Death Rate (per 1,000 people), 1960-2016**

Data source: World Bank (2018b),

Compared to Figure 1, it is even more evident in Figure 2 that the demographic changes in the least developed countries are happening more dramatically. There is a steep drop in mortality among the developing countries, while the death rate in the United States has been remaining almost constant. Over the course of 56 years, the death rate in LDCs has jumped down from 24.36 deaths per 1,000 people in 1960 to 7.69 deaths per 1,000 people in 2016 (World Bank, 2018b). The same factors determine mortality. Economic and social developments, as well as technological and medical advancements, all play a critical role in reducing the number of deaths among the population. It can be said that the improving living conditions, including the gradual yet continuous elimination of war, poverty, and diseases in LCDs are the primary causes of such decline in death rate. (United Nations, 2015)

**2.3 Decreasing fertility rate**

Another key driver of an aging population is the decreasing fertility rate. Total fertility rate is defined by the United Nations as “the average number of children a woman
would bear over the course of her lifetime if current age-specific fertility rates remained constant throughout her childbearing years (normally between the ages of 15 and 49 years).” (United Nations, 2015). Fertility rates around the globe are falling (see Figure 3). When fewer people are born, the difference between the proportions of older and younger citizens in the total population would be even greater.

**Figure 3: Total Fertility Rate (births per woman), 1960-2016**

![Total Fertility Rate (Births per Woman), 1960-2016](image)


According to Figure 3, it can be seen that there was a huge decline in fertility rate in the US in between 1960 and 1976, then it started stabilizing. On the contrary, the steadily high fertility rate in LDCs began decreasing in the 80s and is still falling persistently.

Similar to the other two determinants, the fertility rate is also determined by the economic and social developments. Therefore, the more developed the country becomes, the lower the fertility rate. Better access to education and healthcare also plays a vital role in reducing the number of births per woman. Women around the world are now better aware of constipation and family planning. Being able to control the number of children and the time of being pregnant allow women to be more flexible and productive in their career, not having to take unexpected maternity leaves. Apart from that, birth control also lessens the economic burden of families.
High fertility rates in the period right after World War II, often called Baby Boom, also matter. According to the United Nations’ publication, the number of the population aged over 60 years was the highest in between 2010 and 2015. It was when the people born in the post-war period reached the old age. (United Nations, 2015).

3. Economic Prospects of Population Aging

3.2 Better Social Care Systems

Having an aging population does not only mean having more elderlies but fewer children as well. The older population is often stereotyped as an economic burden, while in reality, a considerable share of them are still capable of working. An increase in the share of older people is not always harmful to the economy. Moreover, a decrease in fertility means a reduction in the number of dependent children in the society.

A decrease in the share of younger people can lead to a modification in economic and social policies. For example, the distribution of public spending can be redirected from education to healthcare and social security instead. It would lead to a more developed social and healthcare system. Having a government that focuses more on the older population would improve the pension systems and ensure the financial securities for the citizens when they reach the old age. It is essential because the current youngsters and working-age population are the future old-age population.

Dependency ratios are used to measure the burden of different age groups carried by the working-age population (people aged 15 to 64 years). There are different types of dependency ratios, but I would only focus on the two most important ones, which are old-age dependency ratio, and child dependency ratio. The old-age dependency ratio is the number of those aged from 65 years and over per one hundred working-age population (United Nations, 2013). The child dependency ratio is the number of those aged 0 to 14 years per one hundred working-age population (United Nations, 2013).

Although elderly population is frequently defined as the people aged 65 and above, the data in Table 1, retrieved from the United Nations’ publication, those aged from 60 years old and over are considered an old-age population. Therefore, the methodology of calculating the old-age dependency ratio in this case is slightly different.
Table 1: Percentages of different age groups and dependency ratios in different continents, 2013

<table>
<thead>
<tr>
<th>Regions</th>
<th>Broad Age Groups (%)</th>
<th>Dependency ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-14</td>
<td>15-59</td>
</tr>
<tr>
<td>World</td>
<td>25.8</td>
<td>62.6</td>
</tr>
<tr>
<td>Africa</td>
<td>40.0</td>
<td>54.7</td>
</tr>
<tr>
<td>Asia</td>
<td>24.4</td>
<td>64.9</td>
</tr>
<tr>
<td>Europe</td>
<td>15.4</td>
<td>61.9</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>26.4</td>
<td>63.2</td>
</tr>
<tr>
<td>Northern</td>
<td>19.0</td>
<td>61.4</td>
</tr>
<tr>
<td>Oceania</td>
<td>23.5</td>
<td>60.8</td>
</tr>
</tbody>
</table>

Data source: United Nations, 2013

According to the data shown in Table 1, child dependency ratio surpasses old-age dependency ration in almost every region of the globe, except in Europe, where population aging is present in many countries. It is natural since the proportion of those aged between 0 and 14 exceeds the share of those aged over 60 years. In Europe and North America, the gaps between the percentages of the youngest and oldest age groups are smaller, resulting in more balanced dependency ratios. Also, in both continents, the proportions of older citizens are relatively high, accompanied by relatively low percentages of the number of younger people, indicating the existence of population aging. Having decreasing fertility results in a decline of younger population and increases the share of the working-age population who would look after the dependents. However, at the same time, due to the decrease in death rate, the old-age dependency ratio is also higher.
3.2 Social and Economic Contributions of the Old-age Population

The aging of a population also allows the society to explore new ways of contributing to the society and the economy. Through years of experience, older persons accumulate more knowledge and expertise than the younger generations. It would be wise to find ways to make use of those potentials instead of having the older ones remain inactive. Historical and cultural knowledge is derived from the older generations.

Older persons are not always dependent. There are many ways other than financial contributions for them to participate in the social and economic development, either directly or indirectly. A lot of elders work as volunteers, educators, and caregivers (UNFPA, 2012). Experts in agricultural and handicrafts are usually elderly, especially in rural areas. Using their knowledge and expertise, combined with modern technology could lead to a more productive outcome. In many parts of the world, older people, especially women, often take care of their grandchildren so that their working-age parents can work and contribute to the labor market. An increase in the number of volunteers also provides free labor to the market.

In societies where public transfers are high, or where the senior population are more financially secure, the older members of the family would also share their wealth with the younger generations, either through inheritance or direct financial support. Apart from that, they also pay taxes, generating more tax income for the nation. (UNFPA, 2012).

An increasing proportion of older people also means a bigger number of voters, unlike the increase in younger population that doesn’t have an immediate effect on the number of voters. The demographics of voters can be game-changing for elections. The votes can determine the elected party, as well as its policies. (UNFPA, 2012).

3.3 Increasing Consumption

One of the critical factors that influence the growth of a nation’s economy is consumption. When the changes in demographic patterns affect consumption and savings, there will eventually be an impact on the economy. According to the Asian Development Bank’s publication (Estrada et al., 2011), there is a negative relationship between the old-age dependency ratio and saving rates. This means the larger the proportion of old people dependent on the working-age population, the lower the saving rates. Naturally, when
people do not save up, the capital is used for consumption. A higher consumption rate stimulates the economy.

It is evident in most countries that the consumption by the population aged 65 and over is continuously increasing (see Figure 4), especially in higher income countries, where the older population dominated over 20% of total consumption in 2016.

**Figure 4: The Percentage of Consumption of Older Population out of Total Consumption, 1960-2016**

![Graph showing the percentage of consumption by older population](image)

Data source: National Transfer Account, 2017

While having a negative relationship with saving rates, the old-age dependency ratio has a positive relationship with consumption. If old-age dependency rises, consumption would also go up. Comparing Figure 4 to Figure 5, the trends of the increase in old-age dependency ratio and the percentage of consumption by older population are almost identical for every type of countries.

It is very likely that people at an older age are more willing to spend their income, while those in their working-age usually save up for the future. In countries with higher income, older people are even more willing in their spending. There are countless possible purposes of spending their income, such as traveling and recreation, cultural activities, family support, and private healthcare. New markets can emerge from the increasing demand for consumption of the older population.
4. Challenges and Limitations of Population Aging

4.1 Social and Financial Security

Population aging occurs in every part of the globe. However, the velocity and scale of the changes vary in every country. Developing countries are accelerating towards aging at a much faster pace. Whereas in most developed countries, population aging is already in existence and is evolving more steadily.

An aging population is a much greater challenge for developing countries since most of them still lack the policies and resources to accommodate the needs of the dramatically increasing old-age population. The inability to provide sufficient pension or other forms of financial care for the elderly could lead to a higher rate of poverty among the old age population. Older citizens in developing countries are considered more financially vulnerable. (UNFPA, 2012). They do not have a source of income. Even if they do, it is still insufficient. Financial support from the government in developing countries is limited and sometimes non-existent. It is a norm in many of these countries that older members of the family would live with the younger generations and take care of the grandchildren. Most of the time it does not come with any returns. It is the family that takes care of the elderly
financially. As a result, households with older members are more exposed to the risks of poverty. While some families can provide for both the younger and older members, some cannot do so without affecting their own economic welfare. (UNFPA, 2012)

Apart from financial support, there are other ways that the government can look after the senior citizens. Government support can be in the form of medical insurance or even other compensations, such as food, clothes, and shelter to cover their basic needs. The failure to provide these things can also lead to social insecurity and vulnerability.

There are also instances of financial, physical, and emotional abuse against the elderly, especially in areas with extreme poverty. Nonetheless, it is also present in urban areas. The abuses, which sometimes are inflicted by their own family members, come in many forms. For example, the deliberate provision of poorer living conditions, confiscation of their pension allowances and even physical violence. (UNFPA, 2002)

In developed countries, a huge portion of older members of the society is well-educated. This provides opportunities for them to still work and contribute to the labor market even after their working age. Meanwhile, in developing countries, especially in rural areas, illiteracy is still a problem (UNFPA, 2012). This, combined with the poor living conditions faced throughout their life and the lack of government aid, it is unsurprising that older citizens in less developed countries are less healthy and less capable of working after the working age. Therefore, it is more difficult to have an income at an old age for people in less economically developed societies.

An imbalance between the proportion of different age groups will occur at one point. The larger the share of the dependent population gets, the more difficult it is for the working-age population to cover the economic burden. It would affect the welfare of every age group, and eventually, the economy.

4.2 Age Discrimination and Exclusion of Old-Age Population

It is a common misunderstanding that old people are no longer capable of being a part of the labor market. Certain jobs even specify age requirements of the applicants. Setting a retirement age also causes misunderstandings and generalizations that people older than that age are less valuable in terms of labor. Many elderlies end up working low-paid
jobs because of age-discrimination in well-paid professions. There were cases of older individuals being forced to leave their jobs or being replaced by younger workers, in some cases, they have to quit even earlier than the appropriate retirement age. (Johnson, 1996)

With an increasing life expectancy, an average person now has longer to live after they reach the retirement age. Along with the improvements in technology and healthcare, people are now healthier, and thus many are still capable of being productive even at an old age. Age discrimination prevents the opportunities of the elderly to contribute in many fields of development. It can affect the economy directly. The fewer people allowed to participate in the labor market, the less productive the economy becomes.

Age discrimination leads to social exclusion, preventing the elderly from having an active role in the society. Social exclusion of old-age population occurs more often in Europe and Central Asia, where the fast demographic transition is becoming problematic. (UNFPA, 2012). UNDP’s Human Development Report has applied the Multidimensional Social Exclusion Index in measuring social exclusion in 6 countries: Kazakhstan, Macedonia, Moldova, Serbia, Tajikistan, and Ukraine. It encompassed economic exclusion, social services exclusion, and the prevention of participation. (UNFPA, 2012). The result showed that 45 percent of the population aged over 65 years had faced social exclusion. (UNDP, 2011)

5. Laos: Current Situation and Tendencies of Population Aging

5.1 Country Overview

The Lao People’s Democratic Republic (Lao PDR, Laos) is a developing country located in South-East Asia. Although the United Nations has classified the country as one of the Least Developed Countries, the country aims to graduate from the LDC list in 2020 (MPI, 2016). Geographically, Laos is surrounded by various nations. The Northern border is connected to China while sharing the border with Cambodia in the South. The Eastern side of Laos is connected to Vietnam and the Western to Thailand and Myanmar.

In 2016, the Lao population was reported to be 6,758,353, of which 50.14% were female. (World Bank, 2017). The population of Lao PDR is projected to increase significantly, regardless whatever policy is adopted. It is expected to be in between 10.3
and 10.5 million in 2050. (Jones, 2015). Although 67% of the Lao population lives in rural areas, the place where population density is the highest in the capital city, Vientiane. In 2015, The population density in Vientiane was 209 people/km$^2$, which was eight times higher than the national average. (Laos Statistics Bureau, 2015)

Throughout this part of my thesis, I would like to compare the demographic situation in Lao PDR to Hungary’s population. The two countries demonstrate entirely different demographic trends. Laos is relatively much younger than Hungary. In 2013, the median age of the Lao population was 21.4 years, while Hungary’s was already at 41.6 years (WHO, 2016). Population aging is considered an on-going phenomenon in many European nations, including Hungary. Whereas Laos has not yet completed the first stage of the demographic transition (MPI, 2016). However, it is heading towards an aging population. It is only a matter of time that the demographic situation in Laos would be similar to Hungary’s current state.

5.2 Population Structure

The population pyramid shows the distribution of the population in different age groups of a country in the given year. A country with a large share of the younger population would have a very defined pyramid, where the base is much larger than the higher parts. On the contrary, a country whose population is aging would show a stronger distribution in the middle and the upper parts of the pyramid, which represent the distribution of working-age and older population.

Observing Figure 6 and Figure 7, the difference in demographic patterns in both countries is quite obvious. The base of Lao PDR’s population pyramid is twice larger than Hungary’s. At the same time, the central part of Hungary’s population pyramid also doubles Laos’. Which can be interpreted that the shares of younger people (those aged from 0 to 15 years) dominates the Lao population. It is an evidence to the claim that Lao population is still relatively young.

On Hungary’s side (Figure 7), it is the complete opposite. The currently dominating working-age population will soon age and become the elderly population. If the current
birth rates are to continue, the proportion of senior citizen would definitely surpass the other age groups. This could result in a heavier burden for the working population.

**Figure 6: Population Pyramid, Laos, 2016**

Created by the website’s online graphing system

**Figure 7: Population Pyramid, Hungary, 2016**

Created by the website’s online graphing system
In the future, if fertility rate keeps dropping and longevity keeps increasing, it is possible for Lao PDR to be in the same situation as Hungary right now. Judging from the structure of its population pyramid, the increase in younger population is likely to slow down due to decreasing fertility. It can be seen on the pyramid that the number of children aged 0-9 years old are lower than in the past decade. At the same time, the working-age population will increase when the current school-age population moves up the population pyramid. Later in a few decades, they would become the elderly population. It means that although the current increase in old-age population is still slow, its pace will increase after the next decade (Hayes, 2015). According to a publication published by the UNFPA (Jones, 2015), over the 8th National Socio-Economic Development Plan (NSEDP) period (2016-2020), the percentage of children aged 5-14 years is estimated to fall by 3.7%, while the working-age population’s share in the total population will increase by 10.6%. The old-age population is expected to increase by 10.1%.

5.2.1 Life Expectancy

Life expectancy at birth in Laos has been increasing at a very fast pace, following the trends of other developing countries. In 1960, life expectancy at birth was 43.2 years. It was way below the global average at that time, but was still above the LDC average of 40.2 years. In 2016, the level of life expectancy at birth in Laos shot up to 66.68 years. (World Bank, 2018a).

Hungary’s life expectancy at birth has always been at a high level. In 1960, it was already at 68 years (World Bank, 2018a), which was even higher than what Laos had in 2016. However, the growth rate of life expectancy in Hungary is much smaller than in Laos. This, once again, provides a proof that the population of developing countries are transitioning at a much faster pace.

Figure 8 demonstrates the overall trends in life expectancy at birth of both countries in between 1960 and 2016. The trend line of Laos is much steeper than Hungary’s, showing a more rapid growth in life expectancy. If the trends were to continue, it is possible that Laos would reach the same level of life expectancy as Hungary.
5.2.2 Fertility

After a period of increasing fertility, Lao PDR’s total fertility rate is now on a downward direction. In 2016, the total fertility rate of Lao PDR was 2.7 children per woman. (World Bank, 2018c). It is expected to continuously decrease and head towards the replacement level, which is 2.1 children per woman. The average numbers of children per woman vary depending on the conditions such as education and wealth. (Jones, 2015). The top wealthiest quantile shows the total fertility rate of 1.9 child and the among most educated group (those with post-secondary education), the total fertility rate is 2.0 children per woman. (Hayes, 2015). The fertility rates of these two groups are already below the replacement level.

Figure 9 illustrates the substantial change in the total fertility rate of Lao PDR over the years and the significant difference in fertility levels between Lao PDR and Hungary. In 1960, Lao PDR’s total fertility rate was roughly at six births per woman, which was four people higher than Hungary’s. Lao PDR’s Fertility started going at the end of 1975, which was the year that the civil war ended. Therefore, it was Lao PDR’s version of the Baby Boom. The total fertility rate then started decreasing in the mid-80s and, since then, has been
heading toward the replacement level. Although Lao PDR’s fertility is no longer on such high level, it is still higher than the total fertility rate of Hungary in 1960. The Hungarian fertility rate has been decreasing as well, but at a much smaller scale.

**Figure 9: Total Fertility Rates, Lao PDR and Hungary, 1960-2016**

The problem of adolescent pregnancy is widespread in Lao PDR, especially in rural areas. It is due to the high number of early marriage, the lack of education and the knowledge and access to birth control and family planning. The adolescent pregnancy rate in rural areas doubles the urban rate (Hayes, 2015). According to the survey in Jones’ publication, 35 percent of women aged 20-24 had been married before the age of 18; and 11 percent had been married before they were 15, even though the legal marriage age in Lao PDR is 18 years (Jones, 2015). This leads to a high teenage fertility rate. With the rate of 94 births per 1,000 teenagers, Lao PDR’s teenage fertility is the highest in ASEAN (Hayes, 2015).

**5.2.3 Mortality**

The crude death rate in Lao PDR has been dropping continuously. However, the problems of high infant mortality and maternal death rate are still present. The national crude death rate was at 8.2 deaths per 1,000 in 2015, while infant mortality was at 57 deaths.
per 1,000 live births and maternal mortality ratio was at 206 maternal deaths per 100,000 live births (Laos Statistics Bureau, 2015). Although these rates had dropped significantly in the last decade, they still place Laos on the top of the list of countries with the highest maternal and infant mortality in ASEAN. (Jones, 2015).

The causes of high infant mortality are mainly poverty, the lack of nutrition and access to quality healthcare. Rural areas with limited access to roads are more exposed to the risk of infant and maternal death. According to UNFPA, in the rural areas lacking road access, the proportion of mothers not receiving antenatal care is as high as 80 percent. Meanwhile, only 8 percent of mothers in urban areas do not have access to antenatal care (Hayes, 2015).

An underdeveloped healthcare sector is a major problem in Lao PDR. There is a shortage of professionals and facilities in the health sector. It has been revealed that the ratio of doctors to population is 0.2 per 1,000, which means for every 10,000 people, there are only two doctors. Moreover, the ratio of nurses and midwives to population is at 0.9 per 1,000. There are nine nurses for every 10,000 people (Hayes, 2015). The lack of development in the area of healthcare is one of the main factors that could lead to not only high maternal and infant mortality but high overall crude death rate on a national level.

In addition, having a high rate of early marriages also correlates to the high level of infant and maternal mortality. Teenage pregnancy exposes both the mother and the child to a higher risk of death. (Jones, 2015).

Observing Figure 10, it is apparent that the trends in mortality in both countries are heading in opposite directions. In 1960, the crude death rate in Laos was significantly higher than Hungary’s. It was at 20.3 deaths per 1,000 people, which was above the global average of 17.7 deaths per 1,000 people. In the same year, Hungary’s crude death rate was at 10.2 deaths per 1,000 people (World Bank, 2018b). It was half the death rate of Laos. Nevertheless, due to the gradual yet constant increase in death rate in Hungary and the downslope trend of the death rate in Laos, the two trend lines crossed in 1990. Since then, the mortality in Lao PDR continued dropping and reached 6.6 deaths per 1,000 people in 2016 (World Bank, 2018b), while the death rate in Hungary started stabilizing and has been
converging around 13. This could also be an indicator that the Lao population is still relatively much younger; therefore, the death rate is not as high as in Hungary.

**Figure 10: Crude Death Rate (per 1,000 people), Lao PDR and Hungary, 1960-2016**

![Graph showing crude death rate comparison between Lao PDR and Hungary, 1960-2016](image)

Data source: World Bank, 2018

### 5.3 Economic Conditions Relative to the Current Population Trends

A country’s population is what determines its economy. It is the people who produce and consume that creates and changes the economy. Therefore, demographic patterns have direct effects on the economic growth. Having a balanced and high-quality human resource can stimulate the economy. Thus, it is crucial for the government to come up with policies that would employ and engage the population in developing the economy in the most efficient ways.

Studying the World Bank’s indicators, the Lao economy is continuously growing. Its annual GDP growth rates are always in between 7 and 8 percent. The highest Lao GDP growth recorded by World Bank was in 2010 when it reached 8.53 percent (World Bank, 2017). Appropriate management and development of human resource and other sectors of the economy would allow Laos to achieve its goal of graduating from the LDC list.
5.3.1 The Demographic Bonus

The Lao economy is benefiting tremendously from the current population patterns. As the effect of high fertility in the past, the working-age population is increasing continuously and is expected to do so for the next few decades. When the share of the working-age population increases, dependency rates would be lower. There would be fewer dependents per one hundred working-age people. This phenomenon is called the “first demographic dividend” (NTA, 2015) or the “demographic bonus” (MPI, 2016). The scale of the economic boost resulting from the demographic bonus depends on the speed of the changes in fertility and the ability of both the government and the people to take advantage of the current situation. (NTA, 2015).

Table 2: Lao PDR’s Dependency Ratios and Future Estimates

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Dependency</th>
<th>Child Dependency</th>
<th>Old-age Dependency</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>0.75</td>
<td>0.69</td>
<td>0.07</td>
</tr>
<tr>
<td>2015</td>
<td>0.62</td>
<td>0.56</td>
<td>0.06</td>
</tr>
<tr>
<td>2020</td>
<td>0.55</td>
<td>0.49</td>
<td>0.06</td>
</tr>
<tr>
<td>2025</td>
<td>0.52</td>
<td>0.46</td>
<td>0.06</td>
</tr>
<tr>
<td>2030</td>
<td>0.51</td>
<td>0.44</td>
<td>0.07</td>
</tr>
<tr>
<td>2035</td>
<td>0.49</td>
<td>0.40</td>
<td>0.08</td>
</tr>
<tr>
<td>2040</td>
<td>0.45</td>
<td>0.36</td>
<td>0.09</td>
</tr>
<tr>
<td>2045</td>
<td>0.43</td>
<td>0.33</td>
<td>0.10</td>
</tr>
<tr>
<td>2050</td>
<td>0.43</td>
<td>0.31</td>
<td>0.12</td>
</tr>
</tbody>
</table>

Data Source: Jones, 2015

The methodology used for calculating the data in Table 2 is slightly different from Table 1. In this case, the old-age population is those aged 65 years and above instead of 60 years as in Table 1. The scale is also different. Table 2 shows the dependency of different age groups per one working-age person, instead of one hundred.

Table 2 illustrates the dependency ratios of the Lao population in 2010 and 2015, as well as the estimates of the said ratios in the next four decades. With the combined effects of the demographic bonus and the decreasing fertility, which results in an increase of the
proportion of the working-age population and a dropping share of children aged 0-14 years, the total dependency rate of Lao PDR is expected to be decreasing. Although the improving longevity also results in the increase in the proportion of the elderly population and old-age dependency, it is not yet significant in Lao PDR, since the number of working-age population is still growing. According to Table 2, the old-age dependency ratio would only start increasing after 2025.

As I have mentioned, population aging is not yet a problem for Lao PDR. The proportion of the old-age population in Laos is still very low. The percentage of the population aged 65 and above was only 3.9 percent of the total population in 2016, which was only a slight increase compared to the 2.6 percent in 1960 (World Bank, 2017). Nevertheless, population aging will eventually become an issue for Laos after a few decades when the effects of the demographic bonus start fading and if the current population trends are to continue. The data discussed in the previous parts of the thesis all indicate that Lao PDR is heading towards an aging population; fertility and death rates have been dropping continuously against the improving life expectancy.

5.3.2 The Labor Force

The demographic dividend positively affects the labor market, resulting in an increasing number of available workforce. Apart from this, the decrease in fertility also enables women to have a bigger role in the labor market. When people decide to have fewer children and prioritize their career, the number of women taking maternity leave or entirely quitting the jobs the childrearing would be lower. Interestingly, despite the high fertility rate, the participation of Lao women in the labor force is considered high; 77.7 percent of the female population aged over 15 years participated in the labor market in 2015 (World Bank, 2017). It could be due to the fact that informal employment is quite common in Laos, allowing women to work and raise their children at the same time (Jones, 2015).

The workforce of Lao PDR is also relatively young. Apart from the dominating share in the labor force of the working-age people, child labor is frequently seen in Laos, especially in areas with extreme poverty, where every capable member of the family has to work. Labor force participation of children is much lower among children in the urban areas, 6.9 percent of them are in the labor market, while 21.7 of the children in rural areas with no
access to roads are working (ILO and LSB, 2012). The International Labor Organization and the Lao Statistics Bureau have conducted a survey on child labor in Laos in 2010. According to their report (ILO and LSB, 2012), 4.1 percent of children aged 5 to 11 years and 12.6 percent of those aged 12 to 13 years are involved in economic activities, though the legal working age in Laos is 14 years. In the same report, it was shown that 34.6 percent of teenagers aged 14 to 17 years are in the labor force. The survey also revealed that 90.2 percent of the working children (aged 5 to 17) work in the primary sector (agriculture, forestry, and fishing), 2.9 percent in manufacturing, 2.9 percent in wholesale and retail trade; repair, 1.1 percent in construction and the remaining work in other sectors. Construction work is considered hazardous to child workers.

There is limited information available on the activities of the old-age population in the Lao workforce. Similar to other developing countries, the elderlies in Laos live with their family. It is also a social norm for Lao families to take care of their older members. Lao families are often multigenerational. A majority the households that suffer from poverty are large, which means there are more dependent members (Jones, 2015). Although in most cases the elderlies are treated with respect, there are also a few cases of domestic abuse, physically, emotionally, and financially.

The majority of older Lao people who are still active, like in many developing countries, are in the agricultural sector (UNFPA, 2002). The older population in rural areas are more economically insecure and vulnerable than those in the urban areas due to poverty, poor living conditions and the lack of access to healthcare and government services. The poverty rate in rural areas without road access was at 42.6 percent in 2015 (Jones, 2015).

The economic growth and the changing population patterns have also lead to a shift in the shares of labor in different sectors of the Lao economy. The share of people working in agriculture has dropped from 78.5 percent in 2005 to 71 percent in 2010. Simultaneously, the share of industrial workers almost doubled from 4.8 percent to 8.3 percent, and the percentage of people working in the service sector also rose from 16.7 to 20.2 percent (Jones, 2015). Despite the constant decrease in labor and productivity in the primary sector, it is Lao PDR’s main source of income and will continue being so for the next one or two
decades (Jones, 2015). Hence, increasing agricultural productivity is a promising way to boost Lao PDR’s economic growth.

5.3.3 Urbanization

Even though 67% of the Lao population live in the rural areas (Laos Statistics Bureau, 2015), urbanization has been happening rapidly in Lao PDR. People move into cities, mainly Vientiane Capital, for better educational and economic opportunities. The rural population is expected to remain almost unchanged, while the proportion of the people living in urban areas is increasing continuously. With the growth rate of only 0.15 percent, the Lao rural population in 2030 is estimated to be the same as in 2014. On the contrary, the urban population is expected to be as high as 50 percent of the country in 2030. (Jones, 2015).

Urbanizations of younger or working-age population could lead to the neglect and isolation of older people in poverty in rural areas (UNFPA, 2002). With family members leaving them, some elderlies in the rural areas, who are already vulnerable, have to find ways to fend for of themselves. Therefore, it is critical for the administrations to address this issue and provide the socially and financially vulnerable population with basic needs such as shelter, food, and medications.

5.4 The Current Social Welfare Policies of Lao PDR’s Government

The pension system in Lao PDR is divided into two main branches, the Public Social Security Pension Scheme and the Private Social Security Pension Scheme. The Public Social Security Pension Scheme provides both social and financial benefits to civil servants and their family members, while the Private Social Security Pension Scheme deals with the employees in private enterprises. Both programs are under the supervision of the Ministry of Labor and Social Welfare (Chanthavong, 2011).

The scheme that takes care of the civil servants is contributory. Its main source of finance is derived from the government officers and the government itself as employers. The scheme would take 8 percent of the civil servants’ salary and 8.5 of the government payroll every month. The Public Social Security Pension Scheme provides several benefits to the government employees, which include health care, maternity benefit, invalidity benefit,
funeral benefit, survivor’s benefit for the deceased employee’s family members, and most importantly, old-age pension benefit. The healthcare benefit also covers the spouse and children under the age of 18 of the insured. After retirement (the retirement age is 60 years), the people who have contributed to the scheme for at least 15 years would be granted a monthly pension payment. The amount of the monthly payment depends on the salary received by the concerned individual for five years multiplied by the number of contribution years and pension percentage (Sonthany, 2015).

The Private Social Security Pension Scheme works similarly to the public scheme; it is contributory and compulsory for all private enterprises with 10 or more employees. The contribution is derived from 9.5 percent of the employee’s earnings. 5 percent of the earning consists of the employers’ contribution and 4.5 percent comes from the employees themselves. The private scheme covers the same areas as the public scheme. In order to be eligible for the old-age pension, the individual must have at least 5 years of contribution and reach the retirement age. If they wish to continue working after reaching the age of 60, additional 0.5 percent of possible pension will be added for each year exceeding 60 (Sonthany, 2015).

Apart from the listed schemes, there are other programs providing social and medical cares to people who are informally employed. However, due to the limited government revenues, these existing programs are still unable to cover several areas, especially the less advantaged parts of the country. Poverty and the lack of social security is still a critical problem in Lao PDR. Out-of-pocket spending on health care is still extremely high. In 2014, 38.9 percent of Lao PDR’s health expenditure was from the private individuals’ own pockets (World Bank, 2017). Foreign financial aids and private insurance companies also play a big role in ensuring the security of the Lao population (Sonthany, 2015).

5.5 Policy Suggestions for Lao PDR’s Demographic and Economic Development

Lao PDR’s main development goal is to graduate from the Least-Developed Countries list. In order to do so, there are still numerous adjustments to make on the current policies, to ensure the most efficient outcomes possible.
5.5.1 Human Resource Development

First, Lao PDR should focus developing its human resource, that is the current and future labor force since the population is the root of every development. Improving education is a way to ensure the quality of the human resource. With the current transformations in population, the number of school-age children is ceasing. Instead of building more schools, Lao PDR should focus on improving the quality of the current ones, which can be done by providing training to improve the expertise the education personnel, providing equipment that would assist in the teaching, and even a reform of the currently inefficient education system (Jones, 2015). Well-educated children would provide a higher quality workforce for the society in the future. The overall improvement in labor quality would result in higher productivity in the long term and as a result, ensure the country’s economic development. Moreover, when the highly skilled workforce moves up the population pyramid and becomes the old-age population, it is more likely for them to age actively and securely.

Apart from prioritizing the younger generations, the Lao government can also focus on improving the agricultural sector of the economy since it is the country’s primary source of income. Increasing productivity in agriculture would undoubtedly lead to an even more rapid economic growth. However, the industrial and service sectors should not be neglected either. Lao PDR is continuously industrializing, which is also favorable to the economic growth.

Another vital adjustment for the society is the promotion of gender equality and raising awareness of population aging. Lao people should be made aware of the importance of the change in age structure to the economy and the future of the society, so they are prepared for the effects of population aging. It would result in a better harmony between generations in the nation. Improved gender equality would allow women to play an even bigger role not only in the labor market but in other parts of the community, which in turn would result in an increase in overall productivity.

5.5.2 Improvements of Healthcare and Social Security Systems

After dealing with education and human development, it is also essential to ensure the social security of the residents and reduce the out-of-pocket health spending made by the
people. The expansion of the coverage of government supports and the improvements in the pension system would improve the well-being of the society, especially of the disadvantaged individuals in the rural areas. An advanced social welfare and healthcare system will not only allow the people to age healthily and securely, but it will also address the on-going problem of high maternal and infant mortality. In order to minimize the setbacks and economic instabilities, it is fundamental that the government prepares its population and economy for the gradual yet certain emergence of population aging in the next few decades.

Furthermore, raising the retirement age is another way to reduce the burden of the old-age dependency on the working-age population. The duration of people receiving pension benefits would also be reduced by pushing up the retirement age. Since life expectancy is increasing, it means older people nowadays are healthier and more work-capable, making an increase in retirement age is a worth-considering adjustment (Chanthavong, 2011).

6. Conclusion

In the first part of my thesis, I have explored the global trends of population aging by comparing the aging patterns of the least developed parts of the globe to the global trend as well as to the representative to the developed nations, which is the United States. Through the observation of the changes in life expectancy, fertility, and mortality in different areas of the world, I can conclude that population aging is indeed an on-going process worldwide. Moreover, the examined data has also shown that developing nations are heading towards an aging population at a noticeably faster pace than the already-aging developed countries.

Subsequently, I have listed the contradicting effects of an aging population. Positive outcomes can be expected from population aging, such as an increase in consumption, greater contributions to the labor market and the economy, as well as improvements in the healthcare sector and social care systems. At the same time, it is undeniable that population aging also comes with negative effects. The problems of social and financial security, accompanied by age discrimination are the possible negative consequence of aging population that needs to be addressed by the government as well as the people in the society themselves.
Besides, I have also compared the different demographic trends of Lao PDR and Hungary. Lao PDR, as a developing country, has shown a drastic increase in life expectancy and a rapid decrease in fertility and mortality, despite high infant and maternal death rates. Hungary, meanwhile, is already facing the challenges of population aging. Its population pyramid’s structure is entirely different from the relatively young Lao population structure. Although population aging is already present in Hungary, the transition in its population pattern is somewhat stable compared to Laos. This further proves the claim that developing countries are accelerating towards population aging at a higher speed. In a few decades, Lao PDR could be in the same situation as Hungary nowadays. Therefore, it is necessary for the government to come up the right measures to accommodate such transformations in the age structure and minimize its negative impacts on the economy as well as on the society.

Finally, I have investigated the current economic and social welfare situations in Lao PDR, along with suggesting possible ways to deal with the current trends and future tendencies of population aging. While having a continuously growing economy, numerous areas in Lao PDR is still far behind in terms of development. The social security system in Lao PDR still does not provide full coverage to the entire society. There are several adjustments that need to be made before the country steps out of the LDC list. Moreover, it is crucial that the government takes the right steps to prepare the society for future challenges of population aging and ensure that the population is allowed to age healthily and securely.
References


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