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A Qualitative Analysis of

The Demographic Challenge and the Future of Work

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Abstract

This thesis immerses into the debate on the demographic shift that, in past years, has been characterized by widely diverse opinions and standpoints. The unpredictable nature of the expected challenge has inspired this qualitative analysis to explore and question the proposed effects of an aging population. Furthermore, this literature review investigates the suggested strategies and means to manage the demographic challenge. As an aging population calls for major social change, the emphasis on the characteristics of modernity allows this inquiry to gain a profound and far-reaching understanding of society and its continuous thrive for development. This thesis strives to generate a more nuanced perspective on the demographic shift by analyzing the challenge within the context of work and labor markets, technological innovations and social contracts. The findings indicate that many suggested strategies seem inadequate for implementation due to the inabilities to fit in with the specific prospects. The thesis concludes that motivations for Universal Basic Income are solid in terms of its potentials to address some of the identified concerns. However, more trials and experiments on a larger scale are necessary to fully understand the ramifications of introducing such a system.

Keywords: demographic shift, pensions, intergenerational solidarity, modernity, social contract, technological unemployment

Table of Contents

1. Introduction	<u>l</u>
1.1 Background	1
1.1.1 Driving Forces	2
1.1.2 Prognosis and Statistics	3
1.2 Purpose of Thesis	4
1.2.1 Research Questions	4
1.3 Disposition of Thesis	4
2. Demographic Transition Theory	5
3. Methodology	7
3.1 Assessment	8
3.2 Limitations and Delimitations	9
4. Theoretical Frameworks	9
4.1 Technological Unemployment	10
4.2 The Social Contract	13
4.3 Modernity	15
5. Analysis	19
5.1 Effects of the Demographic Shift	19
5.1.1 The Economic Aspects	19
5.1.2 The Social Aspects	22
5.1.3 The Political Aspects	27
5.1.4 Crisis or a Challenge?	28
5.2 Managing the Challenge	30
5.2.1 Market Solutions	31
5.2.2 The State System	33
5.2.3 Pay As You Go vs. Fully Funded	34
5.2.4 Reducing Benefits vs. Raising Contribution Rates	36

5.2.5 Raising the Legal Retirement Age	37
5.3 Future of Work	39
5.3.1 Universal Basic Income	44
5.3.1.1 Human Fulfillment and Creativity	45
5.3.1.2 Basic Income and the Social Contract	47
6. Concluding Remarks	51
7. Bibliography	52

1. Introduction

Today, the demand for a new welfare state seems greater than ever. Numerous changes produced by globalization, altering household structures and a growing aging population have indicated the necessity of adopting policies which address the diverse conditions. However, there are widely distinguishing opinions on whether responsibilities should lie within the welfare state, market or individuals. Thus, the ongoing debate is marked by political, economic and social motivations of which each is attempting to discover to what the degree the state can face the changing circumstances.

The demographic change is one of many subjects given attention, and one that has been identified as a serious challenge as there is a rapidly aging population in virtually every country. It is argued to be one of the most significant social transformations of the twenty-first century that affects "all sectors of society, including labor and financial markets, the demand for goods and services, such as housing, transportation, and social protection, as well as family structures and intergenerational ties." (UN 2015: 1). Thus, it is considered a major global issue.

Scholars and experts are stressing the importance of preparing now, as the most intense results of the demographic shift are not yet visible and will not be for another decade or two (Bloom et al. 2010: 588). The lack of adequate solutions will not only have negative implications on poverty eradication but affect the ability to assure "healthy lives and well-being at all ages, promoting gender equality" and employment for everyone. (UN 2015: 1). Furthurmore, UN (2015) argues that preparation is necessary as the significant shift can come to affect the reduction of inequalities between as well as within countries and other delineated goals.

Due to this, it is of great interest to analyze the demographic change and its alleged effects. Thus, this thesis discusses problems and consequences that are expected to emerge while offering insights on the various proposals that have been put forward to address these concerns. However, the main goal of this thesis is to provide a holistic view of the matter that entails highlighting other potential issues that interact and, above all, can come to disturb the proposed solutions. Primarily, it is necessary to understand the context of the demographic shift and the expected scale of the transformation.

1.1 Background

During the post-war years, also referred to as the Golden age, the welfare state came to represent

"an effort to bring about economic, moral and political reconstruction" (Esping-Andersen 1994: 1). Back then, the moral purpose of the welfare state sought to defend the ideas of social justice, solidarity, and universalism. However, the political motive was concentrated on the welfare state being "a part of a project of nation-building, affirming liberal democracy against the twin perils of fascism and bolshevism" (Esping-Andersen 1994: 1). Described as a period where the advanced welfare states prospered, much support was concentrated on male breadwinners due to the household structures at that time. However, as the world has undergone remarkable shifts during the past decades, many economies have been forced to conduct welfare reforms to keep up the pace with the changes.

Due to its complexity, the demographic shift will demand elaborate policy changes. As stated by Bloom et al. (2010: 588) "its unprecedented nature means that we cannot look to earlier historical episodes for guidance on how this demographic upheaval will unfold or on how best to manage it." Thus, identifying potential effects and consequences can bring policymakers one step closer to developing plausible management strategies.

1.1.1 Driving forces

Fertility, mortality, and migration are demographic elements that determine the size and age compositions of a population. Since 1950, life expectancy has increased strongly simultaneously as infant mortality rates have been declining. UN projections show that global life expectancy was 71 years from 2010 to 2015, a number that is expected to reach 77 years by the year 2045-2050. The scenario contends that by 2095-2100, the global life expectancy will have reached 83 years (UN 2017: 8).

The prognosis reflects the numerous improvements that have made it possible for people to live longer. This development can also be associated with 'compression of morbidity,' a term often used by demographers and health specialists to describe the decline of time spent in chronic illnesses in relation to life expectancy (Bloom et al. 2010: 584).

According to UN, the main driving factors for the aging population is the declining fertility rates and increasing longevity. Rechel et al. (2013) also argue that these are the two main factors for the growing proportion of older adults in the EU member countries. All countries have not experienced the same demographic development, referring to the fact that many of the Scandinavian nations had lower fertility rates earlier than the economies in Southern and

Eastern Europe. Nonetheless, the decreasing fertility rates in those countries were more rapid. Globally, statistics on fertility rates measured between 1950 and 2005 demonstrated a drop from 5 children per woman to 2.5 per woman. This number is expected to fall to 2 children per women in 2095-2100 according to the latest projections (Bloom et al. 2010: 587; UN 2017). Although fertility rates are considered an influential factor for the demographic changes, Rechel et al. (2013) argue that the significant drop in mortality rates since the 1970s is the main driving force for the aging population in Europe (Rechel et al. 2013: 1). Bloom et al. (2010) discuss an additional key factor which concentrates on the relationship between an aging population and the past disparities in birth and death rates. The 'baby booms' after the Second World War are frequently used as an example of this, which occurred due to the rising fertility rates in the wealthier countries. Similar patterns are visible in some developing nations with stable high fertility rates and fast-declining child mortality (Bloom et al. 2010: 588).

International migration has been identified a contributing factor to the changing demography in some parts of the world. Rechel et al. (2013) explain that flows of migration groups, with higher fertility rates than in the destination country, can invigorate its population. It can occur in nations with large influxes of immigration, especially as migrants tend to be in the younger working ages thus evening out the demographic composition. However, slowing down the demographic shift in a country would require that migrants return to their home country when retiring, which is not always the case. Therefore, international migration can only temporarily affect the demography of the destination country. Regardless, the number of migrants needed in Europe at least, are not close to the amount required to slow down an aging population (Rechel et al. 2013: 2).

1.1.2 Prognosis and Statistics

UN (2015) demonstrated that one in eight was 60 years and more in 2015, and by 2050, one in five will be 60 years old or above. By 2030, UN states that more than 25 percent of the population will be elderly in both Europe and North America. By this time, elderly will have outnumbered children between the ages of 0 and 9. Twenty years after that, in 2050, there will be fewer adolescents and young people between the ages 10-24 years than people aged 60 and above. Overall, the number of elderly is expected to grow from 1.4 billion in 2030 to 2.1 billion by 2050 (UN 2015: 2).

When elaborating on the demographic developments, Patti (2000: 522) uses the United States as an example where people at the age of 65 and above are the fastest-growing section of the

population. It is increasing at more than twice the rate of those under 65 years old. However, the most significant increase has occurred in the population group encompassing the ages of 85 and above.

The demographic development in Sweden shows that the group of people at the age of 65 and above has increased from 8 % to 17 % during the 20th century. Bengtsson & Scott (2010: 8) explains that the population pyramid in Sweden during 1900 had a classic pattern, characterized by a "broad base made up of younger people successively tapering off with increasing age to a pointed top." It resembles the pattern found in all agricultural societies and most of the developing countries today. This traditional population pyramid is not accurate when describing the population in 2000 which then could be described to have "a more urn-shaped age structure, with a smaller base and wider top than before" (Bengtsson & Scott 2010: 8). This shape is expected to become more rectangular with time as the aging population continues to grow.

1.2 The Purpose of Thesis

This thesis aims at providing a comprehensive understanding of the demographic shift by deliberating its anticipated effects on the social, political and economic level. Furthermore, the literature review concentrates on delivering an investigative discussion offering insights into other potential problems that could correlate with the demographic shift as well as the suggested means to manage it.

1.2.1 Research Questions

- 1. What are the expected effects of the demographic shift? Do these effects indicate a crisis or a challenge?
- 2. What recommendations and strategies suggets to adress the demographic shift? Do these suggestions correspond with other, both present and expected, challenges?

1.3 Disposition of Thesis

The following chapter focuses on explaining the Demographic Transition Model which has been discussed in relation the demographic development. Despite this being a theoretical model, it should not be confused with any of the selected frameworks for the analysis. As this literature review concentrates on investigating previous sources in the analysis, the next chapter will be devoted to describing the demographical structure through historical eras. The third chapter rationalizes the selection of methods for this research and its advantages as well as limitations.

The fourth chapter presents the theoretical frameworks that hopes to offer a far-reaching understanding of the contemporary society, and it's embedded forces that continuously controls and shapes our development. The analysis, covered in the fifth chapter, explores the previous literature with an emphasis on the theoretical views. The last chapter offers concluding remarks on the findings.

2. The Demographic Transition

The Demographic Transition refers to a model that was formulated already back in 1945 and that has ever since, been shared and discusses by many scholars. Kirk (1996: 363) explains that in the year 1945, Notestein gave a formulation of the demographic transition theory that came to be "conventionally accepted as classic." Despite Notestein offering the first clear framework of the theory, Nielsen (2016: 35) explains that Thompson presented it already back in 1929 but in an undeveloped form. According to Kirk (1996), Thompson did not at first believe his formulation to be a theory. At the time, Thompson did not even use the word "transition," which was first introduced by Landry in 1934 (Nielsen 2016: 35). The particular model hopes to offer some insight into on demographic change and how its structure has developed over time.

Kirk (1996: 365) argues that motivations given by Notestein were both "lucid and sharply focused." Back then, Notestein presented three types of typologies of populations which were not far from Thompson's and Landry's formulations. These three types were used to describe forecasts for the world population growth. One of his predictions claimed that until 1950, the Western and Central Europe's population would have reached a top before starting to decline. It was expected to happen in Southern Europe as well but later, in the year 1970. Notestein even believed that a drop in fertility rates would be more abrupt than it did (Kirk 1996: 364).

It is contended that Notestein focused far too little on cultural influences as he, instead, tended to place a lot of weight on socio-economic factors as reasons for the fertility rates declining. Due to this, Notestein was highly criticized which, according to Kirk (1996), could also be considered unfair. Kirk (1996) argues that Notestein stressed factors which were acknowledged to be altering norms and values associated with the development of modernization. Nevertheless, Kirk (1996: 364) also states that the theory "enjoyed a honeymoon which lasted for nearly 20 years, and was widely accepted, at least as a generalization."

The demographic transition model concentrates on variations in birth rates as well as death rates in relation to population growth and rate of natural increases. The theoretical model emphasizes developments within socio-economic conditions as key factors impacting death and birth rates (Nielsen 2016: 35). The theoretical model is specified in four stages. Stage one refers to a period of which high birth- and death rates characterized the population. These rates varied around the same constant value thus creating a still development of growth. Overall, this produced almost an unchanging population growth rate simultaneously keeping the rate of natural increase at around zero. Nielsen (2016) explains how this stage consisted of poor living conditions, especially in relation to health care and hygiene. At this stage, a "continuing struggle for survival" was created (Nielsen 2016: 36). This stage portrays the earlier demographic realities and therefore called "Preindustrial Age" or the "Preindustrial Society" (Nielsen 2016: 36).

The Industrial Revolution is argued to be closely related to the "stage two" of the model. It is mainly due to the population explosion that occurred, abandoning a period of long-lasting stagnation and introducing a fast population growth. Stage two also reflects a period of a rapidly increasing rate of natural increase and fast-growing population size. This stage is also referred to as "Early Industrial Society" or the "Early-Demographic Transition" (Nielsen 2016: 36). It is also commonly described as the great escape, considering the problematic conditions specified in the first stage. The second stage supposedly produced better living conditions which contributed to reducing death rates. Improvements were made in areas such as health care, hygiene, water access, sanitation and food inventions.

The decelerating growth is reflected in the third stage of the model. The reasons for the transformation from the previous stage is argued to be due to "women joining the workforce, better education, the availability of contraceptives and by the general tendency to have a smaller number of children to improve the standard of living" (Nielsen 2016: 36).

Stage four of the model is associated with the first stage due to the close equilibrium between birth and death rates, except that the fourth stage reflects a period where both these are low. However, this stage portrays a stable size of the population thus called the Post-industrial Society. The low rates are argued to be due to personal preferences. Lifestyle changes that are harmful, such as smoking and obesity, are replacing the reduced impact of infectious diseases during this stage (Nielsen 2016).

However, despite this broadly acknowledged model, some claim that it is not entirely accurate to the demographic reality. It has, instead, received criticism that claims the model is not

reflecting the actual development. For instance, Nielsen (2016) explains that Sweden has been used as an example to support the Demographic Transition theory despite many contradicting claims that argue that such progress did not occur in the country. Similar claims have been stated for the country Mauritius, which also shows deviations from the model. According to Nielsen (2016), neither does data on England show evidence for the Demographic Transition Theory.

Nevertheless, this model is an important one to be aware of, not only because it provides an understanding on how the population is affected by birth rates and death rates but also on how certain changes in society managed to influence the demographic structure. However, one of the main reasons for its relevance has been evoked by the recent discussion on a new emerging stage - reflecting the recent demographic shift. Demographers have suggested a fifth stage that is characterized by birth rate is lower than the death rate, resulting in a decreasing population. Although there is a belief that industrialized countries are currently in the fourth phase, recent developments indicate a fifth phase emerging (Duvander 2017: 29). This thesis intends to offer more knowledge about the "fifth stage," and in particular, its implications.

3. Methodology

This thesis conducts a literature review, characterizing a qualitative approach that strives to highlight various contradictions, clashes of evidence and different perceptions of the subject. Even though most research investigations initiates with exploring what has previously been studied and identifying areas that deserve more attention, this thesis concentrates on collecting and exploring the previous sources solely for the analysis.

Clearly and succinctly explained by Knopf (2006: 127), "a literature review summarizes and evaluates a body of writings about a specific topic." This thesis intends to do so by analyzing the claims from previous accomplishment on the specific topic. It hopes to produce a second opinion on the accuracy and completeness of the learned knowledge, and from there, be able to discuss more extensively. There is great importance in discovering what is considered inconclusive or also entirely missing from previous studies, thus identifying what the present and future research can develop furthermore.

The first step in conducting this research focuses on attaining an idea of how the demographic shift is perceived and described by world organizations, such as the UN. This step hopes to give insight into the scope and forecast of the challenge thus establishing a general view. This step

makes it easier to move on with searching other sources, and more specifically, what to look for in these. As this thesis does not conduct nor challenge any statistics, sources that are solely concerned with such measurements, are excluded as these do not serve the purpose of this research. The second step involves finding relevant sources by searching the library and internet using keywords such as a demographic challenge or aging population. One understands that there are numerous sources on the subject, so it is vital to identify sources that are prioritizing. This thesis collects and analyses "newer" research efforts primarily. Nonetheless, the research includes older sources if the findings offer a broader perspective on the issue.

The benefits of applying a literature review are numerous. Knopf (2006: 127) argues that besides offering a general overview of a body of the research field, it can also give the researcher new ideas to apply in his or her study. This technique is not only optimal in research with a limited time frame but even if there are lacking resources. It still has methodological benefits that allow new knowledge to be produced.

3.1 Assessment

The lack of transparency in qualitative studies is typical as it can be hard to determine what researchers have done. It is usually the case where qualitative methods such as interviews and observations are applied. These reports can be blurred in the process thus lacking transparency (Bryman 2015). This study, however, does not use such methods.

This thesis investigates data that has been collected for another purpose and by another researcher, which is an evident weakness as no one can be sure how the researcher performed the study or reached its conclusions. As stated by Johnston (2017: 624), secondary researchers cannot be sure on how well the primary data could have been affected. Nonetheless, this issue can be avoided by using a systematic process that possesses a thoughtful examination and critical evaluation of the research results (Johnston 2017). Furthermore, involving multiple sources and comparing the different conclusions in the research field can be helpful. Overall, it is incredibly important to remain critical when reading all sources.

This thesis concentrates on a broad topic where statistics and prognosis are presented as well. There is a great convenience in using earlier studies as it allows access to a significant amount of high-quality data, which has been previously collected by institutions and funded studies. These are highly beneficial as they consist of larger samples with a wide-ranging scope, and as

Johnston (2017: 624) states, the data is then more representative of the target population thus producing stronger validity.

This thesis strives to provide knowledge while generating a high level of trustworthiness and authenticity, as these constitute essential criteria for determining the strength of qualitative studies. A reflexive stance plays a vital role as it involves self-questioning methodological choices as well as reflecting upon the data collection and analysis (Bryman 2015: 384).

3.2 Limitations and Delimitations

This study will not be able to analyze all previous research on the topic due to the limited amount of time. Unfortunately, this also increases the possibility of missing equally important efforts that have been conducted in the field. Different perspectives can always assist with providing a more profound knowledge of a specific topic. However, having fewer sources give more time to analyze each more properly and extensively.

This paper provides statistical data generated by previous sources but is not applying a quantitative approach to analyze these. It implies that the quantitative data is not reflected upon but only presented, as the thesis's purpose is not concerned with questioning statistical material. However, offering the statistics and forecasts are important for this paper, as it provides a comprehensive view of the future expectations.

4. Theoretical Frameworks

The selected theories aim to provide a holistic view of the future expectations and social changes. The first conceptual framework is technological unemployment, a topic that has gained much attention these past years. Even though the claim of automatization replacing jobs is nothing new, people are beginning to question more extensively what the technological developments will mean for the future and especially the labor markets. Therefore, this framework is necessary as the demographic structure is closely related to the topic of productivity and employment thus helps to understand the fundamental circumstances that could determine and shape future policies.

The Social Contract describes a contractual theory of society and is highly significant as the modern welfare state is characterized by specific agreements and forms which aim to establish social cohesion and stability. Social Contract Theory is also vital as it does not only strive to provide an understanding of the relationship between the state and citizens but can be applied

to describe the bonds between all members in society and the specific conditions under which they relate. As the topic of the demographic shift comprises elements such as intergenerational ties, family care, and pensions, all characterizing social contracts and relationships, this framework becomes highly relevant and necessary to include.

Finally, modernity has a significant role in providing the holistic outlook that this thesis strives to gain. Modernity is not only a social theory but a driving force that never ceases to affect us. While it is a robust approach on its own, modernity is a philosophy that connects all the perspectives above as well. It represents a far-reaching understanding of the society we live in and its evolution. As the demographic shift indicates major social change, modernity is vital to include to create more profound reasoning on what controls and determines our development and progress.

4.1 Technological Unemployment

Technological unemployment is a term commonly applied when referring to job losses occurring due to technological advances. The topic itself has become an increasingly debated one, usually reflecting two different positions. On the one hand, some argue that technological improvements will replace many present job occupations thus resulting in mass unemployment all over the world. On the other hand, there are those that believe technological advances are going to create more and even new jobs. Despite many intriguing visualizations about the future labor market, this framework focuses mainly on the one offered by Frey and Osborne (2013). This widely acknowledged research have invoked many deliberations, of which many involve conceptions of a low-working society. Frey and Osborne (2013: 5) research stands out, as they conducted it with the purpose of filling a gap in the existing literature. They argue that no study, to their knowledge, has attempted to perform a similar strategy as them. However, the researchers acknowledge that valuable frameworks exist for investigating the impacts of computerization in relation to employment. Nevertheless, Frey and Osborne (2013) deem that these are insufficient for describing the outcomes of technological trends that go beyond automation of routine tasks (Frey and Osborne 2013: 5).

Many argue that human perception is necessary for complex situations such as in traffic, thus cannot be replaced by automatization. Such an argument was made by Levy and Murnane back in 2004. Despite this, some years later in October 2013, Google publicized that it had adapted several Toyota Priuses to be fully autonomous (Frey and Osborne 2013: 3). This advance is an example of how manual functions in transport and logistics can, within the near future, be

automated. As algorithms for big data is continuing to evolve fast, it is expected to be able to replace a broad scope of occupations which carry out non-routine cognitive tasks (Frey and Osborne 2013: 47-48).

Frey and Osborne (2013) explain how across developed countries, the poor performance of labor markets has initiated and embraced the discussion on technological unemployment. Although there is no clear answer to why the poor performance has emerged, Frey and Osborne (2013: 2) stress that earlier studies argue that one reason for the jobless growth is the increasing automatization. The argument refers to the research conducted by Brynjolfsson and McAfee (2012) which investigated the relationship between technology and the demand for human labor. Brynjolfsson and McAfee (2012) claim that as the technological advances are still increasingly developing elaborate techniques, more workers are expected to be laid off their occupations thus continuing to impact the balance in labor markets. Despite their findings, Brynjolfsson and McAfee (2012) emphasize that they are not pessimistic about the technological effects as they believe that it has established an enormously rich territory and will continue to do so.

Frey and Osborne (2013) discuss other previous sources which have detected, when examining this relationship, that there has been a decline in jobs "in routine intensive occupations" (Frey and Osborne 2013: 3). These jobs comprise of tasks with well-established procedures that can without difficulty be replaced by algorithms. It also suggests that the reason behind the increasing unemployment rates is evident in the present decrease of occupations within manufacturing as well as other routine jobs. Aside from higher unemployment rates in the labor market, this forces workers to shift their "labor supply from middle-income manufacturing to low-income service occupations," demonstrating a structural transformation in labor markets (Frey and Osborne 2013: 3).

This alteration reflects polarization of the labor market, as the technological advances are claimed to produce increasing employment in cognitive jobs with high income and low-income occupations, while the middle-income routine jobs are decreasing and thinning out. The development is not unexpected, as Frey and Osborne (2013: 12) explain, the decreasing prices of computers has caused problem-solving skills to become even more productive which reflects in the increasing employability in occupations concentrated on cognitive tasks.

When investigating the extent to which computerization can replace jobs, Frey and Osborne (2013) examined 702 occupations of which 47 % of American workers are considered at high

risk of being replaced due to potential automatization. High-risk categories comprise of professions that are believed to automatize over the next decade or two. Within this category, they find that people at the highest risk are working with transportation, logistics, production "or together with the bulk of office and administrative support workers" (Frey and Osborne 2013: 48).

Frey and Osborne (2013) confirm that their findings are consistent with new technological improvements already covered in the previous literature. However, they were quite staggered to detect a substantial portion of employment in service occupations at risk of being replaced, as this is a sector that has experienced the most job growth in the US. Nevertheless, support for this finding can be detected when examining the growth in markets for service robots and its recent developments. Also, the gradual decline in relation to the qualified advantage of human labor in tasks involving mobility and skill is emphasized.

Additionally, Frey and Osborne (2013) provide evidence on how this development can affect education and wages. The evidence is considered essential for offering a comprehensive view of the implications of technological developments on the future of employment. Frey and Osbourne (2013) find that wages and educational attainment displaying a robust negative relationship with the prospect of computerization. It was discovered by plotting the average median wage of occupations by their probability of computerization. The same was done to analyze the skill level, which was "measured by the fraction of workers having obtained a bachelor's degree, or higher educational attainment, within each occupation" (Frey and Osborne 2013: 44-45).

According to the model created by Frey and Osborne (2013: 45, 47-48), they believe that the technological advances will mainly affect low-skill and low-wage occupations within the near future. They argue that high-skill and high-wage occupations will be least affected as these are less likely to be substituted by computerization. According to Frey and Osborne (2013), this entails that workers within low-skilled occupations will transfer to professions which are not as vulnerable to automation, such as tasks that demand both creative and social intelligence.

To sum up, the enhanced development of robots implies that these will be able to execute a broader range of manual tasks which is assumed to alter the nature of work across industries and occupations. Therefore, Frey and Osborne (2013: 15-16) conclude that technological advances will produce a higher number of job turnover thus an increasing natural rate of unemployment. Therefore, when discussing potential outcomes on the future labor market, they

question the capacity of workers and human labor to "win the race against technology by means of education."

4.2 The Social Contract

This framework is important to use for understanding our thinking in relation to the state as well as all members of society. Social contracts have a high impact on how citizens interact, which is very interesting as the demographic challenge has become increasingly associated with promoting features such as intergenerational solidarity and decreasing age discrimination. Also, this framework is important to understand as cases where the state has entered an agreement with its citizens, such as rights to pensions, are governed by a social contract. Therefore, it becomes increasingly relevant to discover how social contracts are impacted by the demographic shift, or more specifically, examining the meaning of introducing a new social contract. But before reaching this understanding, we must learn what the theories of the social contracts states.

The Social Contract theory can refer to a hypothetical or actual agreement between people, of which purpose is to set certain moral and political directions of desirable behaviors in society. The theory did not only come to represent grounds on which political authority should receive legitimacy through agreements but, as described by Lessnoff (1990), it reflected a way that restrained from egoism in the name of moral obligation. Enormous efforts were made with the purpose of rationalizing political power based on the individual self-regard and clear agreements.

Social contract theories have developed different definitions of the approach depending on their views on the "state of nature," as this was something that established what people could and should be held to. It was considered a fundamental standing point for all the early social contract theories developed by well-known philosophers such as Hobbes, Locke, and Rousseau. As the theories had different perceptions on what was considered the "state of nature," it also determined the different expectations from the state, rights of individuals and the conditions for rebellion. Nonetheless, all three had a general focus on elaborating the reflection on social cooperation in relation to political obligation. The moral dimension also constituted an essential part of this political theory, as well as the balance of rights and obligations (Paz-Fuchs 2008: 30).

Back in 1651, Hobbes argued that the state of nature was a state of war and that the human social interaction was characterized by repeated fighting and constant fear of battle (Lessnoff 1990). In 1689, Locke argued that the state of nature should be reflected as a social state. According to Locke, "no one can be subjected to the political power of another, without his own consent" (Lessnoff 1990: 3). It was emphasized that abiding the political authority becomes legitimate if it was a result of a man's natural freedom. Nonetheless, as there are limits within the laws of nature, humans should respect the social contract to receive protection. His argument was concerned with the value of morality, and how this characterizes the entire arrangement of society, making it legitimate (Lessnoff 1990: 3).

In 1762, Rousseau introduced a different opinion on the "state of nature." It was not a state of war, but instead, the man was in the process of developing senses of morality and responsibility. By creating laws and government, humans establish mutual protection in exchange for giving up individual freedom of action while creating moral and public duties. Véron et al. (2007) claim that Rousseau's work was the first one to introduce the expression "social contract" but explains that his definition was inspired by his own experience and readings. Lessnoff (1990: 2) also argues that Rousseau visibly advanced and contended the earlier ideas of the social contract. Rousseau was, just as Hobbes and Locke, concentrated on the establishment of political or civil society but viewed the community as the outcome of a spontaneous process and not from a contract. But perhaps, due to his celebrity, Rousseau's definition came to be viewed as the standard one (Lessnoff 1990: 2-3).

Amongst several critics of the early social contract theories, David Hume has become wellknown for his contributions. Hume criticized the theory in three aspects, first is the argument that no such "contractual moment" occurred in history. The second critic was concerned with the discovered flaws in the "arguments of reason" in relation to the logic of social contract. For instance, with regards to Locke's definition, Hume believed that it was not appropriate to argue that people staying in the country also gave a direct consent to its state's movements. Lastly, Hume criticized the theory as he did not agree with the assumption that people are born to submit through consent but rather through education and practice. Nonetheless, years later the theory was renewed by Rawls's efforts in 1971, and as Paz-Fuchs (2011) explains, his work concentrated on a hypothetical social contract which assumes that an agreement revolves around rational people participating. Also, the contract was applied to

"justify social institutions and policies that reflect justice as the basic virtue in political society" (Paz-Fuchs 2011: 3-4).

Rawls's work, "a theory of justice," along with other modern social contract theorists, developed the social contract into a powerful platform for establishing rights and responsibilities of the modern welfare state. Rawls managed to revive the theory by emphasizing social justice, and the way in which the major social intuitions distribute fundamental rights and duties. It was considered more suitable to view as a social contract, which was more than what could be said for the earlier definitions (Paz-Fuchs 2008: 31; Lessnoff 1990: 3). More recent theories on social contracts take the modern state for granted and therefore is defined more as a mechanism of "identifying proper social institutions and policies that reflect justice as the basic virtue in society" (Paz-Fuchs 2008: 29).

These past decades, discussions on contractual thinking have revived and are focused within the frame of political philosophy, social policy and legal relations between citizen and the state. And Paz-Fuchs (2008: 10) suggests, to elaborate the relationship between welfare theory and social contract is fascinating as many programs in today's welfare system build on a contractual dimension. Today, social contracts have received more concrete indices and reflect, for instance, the relationship between the person and the state on a contractual basis. Such an agreement could revolve around certain conditions required to receive benefits (Paz-Fuchs 2008: 12).

Paz-Fuchs (2011) describes the social contract as revolving around reasonings within a society that can be used to provide an understanding of its legal, political and economic systems. Notwithstanding the numerous definitions of social contract theory, all of them seem to share an essential core value and purpose, namely legitimacy.

4.3 Modernity

Modernity encompasses broad views and perceptions, but nevertheless, it is fundamental for understanding the development of societies. Demographic change is expected to require significant social changes in countries and its policies thus modernity can be used to identify driving forces that determines and controls developments. Aside from the fact that modernity represents a persistent process with the pursuit of optimum productivity, newer definitions have introduced perceptions that emphasize uncertainties produced by modernity. As Daatland och Lowenstein (2005) explains, modernity and individualism have been identified as the main

reasons for the decreasing solidarity. For instance, most people feel that families were more caring in the past, but that features of modernity have made people more self-centered (Daatland and Lowenstein 2005:174). Therefore, numerous consequences of modernity can be used to understand the implications that the demographic structure can have on society and politics, but above all, it can reinforce the technological aspect of the analysis.

Weber and Marx are considered "fathers" of modernity theory and notably recognized for their thoughts on the developments from feudal to industrial society. Both have stressed the institutional perspective of modernity. However, Marx focused on the core distinctions in the economic construction of society between the modern and the premodern era. In particular, how production relations controlled the structure along with the occurring changes when productive forces developed faster. According to Weber, the Protestant work ethic produced the possibility for the capitalist economic system and the industrial community to emerge. Rationalization became increasingly crucial as capitalism was profit-based, and it allowed the outcomes to be measured for developing methods that increased effectiveness and efficiency. Therefore, rationalization was a unique component of modern society, and it came to be the "widespread acceptance of rules, efficiency, and practical results as the right way to approach human affairs and the construction of a social organization around this notion" (Misa et al. 2004: 40).

Weber saw that rationalization had two sides. On one hand, it did allow humanity to be liberated from traditional limitations thus allowing people more freedom. But on the other hand, a new form of oppression was introduced. Weber referred to the "iron cage" of a modern bureaucratic system that created constraints for human potential. Weber developed a view of rationalization that came to be a significant component of modernity (Misa et al. 2004: 41).

Since Weber and Marx, many have developed theories of modernity and what it means. More recent thoughts on modernity have been offered by Berman (1983). According to Berman (1983), to fully capture modernity and all of its essences, has become impossible without battling its most powerful features. Berman (1983: 13-14) explains furthermore:

"To be modern is to live a life of paradox and contradiction. It is to be overpowered by the immense bureaucratic organizations that have the power to control and often destroy all communities, values, lives; and yet to be undeterred in our determination to face these forces, to fight to change their world and make it our own. It is to be both revolutionary and conservative: alive to new possibilities for experience and adventure, frightened by the nihilistic depths to which many modern adventures lead, longing to create and to hold on to something real even as everything melts."

Back in 1992, Beck introduced the notion of "risk society" as the new modernity (Misa et al. 2004). Beck separated modernization in two phases, whereof the first stage was concerned with the transition from feudal society to industrial one while the second stage was referred to as "reflexive modernization." According to Beck, this stage initiated during the second half of the twentieth century and reflected negative outcomes that the modern society was facing. Now, there was not so much a conflict structure based on the distribution of goods but a distribution of risks. The society produced a "risk society" that through its many institutions, created hazards all over (Misa et al. 2004: 43). Dodd (1999) explains how Beck, as well as Giddens, wished to exceed the contrast between modern and postmodern social theory with their strategies. Both approaches can be summarized using three basic elements. Primarily, both Giddens and Beck are dedicated to universal values as they find this to be pragmatic, and not due to the universal concept of reason. The second basic element in their strategies is concerned with the concept of reason and its impact on society, more specifically, how it acts as a recurring foundation of doubt in terms of what we think we know. Finally, both theorists did not apply large-scale model but adopted core theoretical concepts that portray globalization through the notion of interconnection between progressions at the global and local level (Dodd 1999: 213).

Wagner (2012) explains that back in the 1960s, the world was distinguished by three categories: The First World of Liberal-Democratic industrial capitalism, the Second World of Soviet-style socialism and the Third World which consisted of the developing countries. While the First world was considered superior to all, consisting of modern societies with institutionalized freedom, the Second World applied a flawed strategy in its desire to establish an own and specific future. The Third world, however, strived to develop and modernize to reach standards and living that existed in the First World. During this period, sociologist attempted to understand the present by adopting concepts of modern society and modernization. Bearing in mind the global changes these past years, Wagner (2012) argues that this is no longer our time nor our modernity. Wagner (2012) attempts to offer a new reflection about modernity, one that can better describe our present time as old definitions are not fit to generate an understanding of modern societies today. Fifty years back, modern societies were characterized by the inventions of the Second Industrial Revolution, such as electrical and chemical engineering. Today, however, there are discussions on 'knowledge societies' emerging as the Third Industrial Revolution has arrived, which has introduced new information and communication technologies that aim at boosting global interconnectedness. Looking back in history, the Keynesian management techniques were believed to avoid crises in national economies.

However, due to the global capitalism and belief in market self-regulation, old economic institutions and its policies have dissolved. The emergence of regional economic entering global competition, such as Taiwan and China, shows that the cultural context of Protestantism and its social ethic is not a condition that must be fulfilled. The major powers in the world, such as Brazil or South Africa, shows that their own modernity has been formed according to particular experiences and choices as all global powers carry diverse historical backgrounds and experiences.

Wagner (2012) believes that the world will only change if global modernity becomes actually grounded on collective self-determination. Compared to 1960s, collective self-determination is not restricted within the boundaries of nation-states today. Back then, it was believed that collectives, as separate societies, could decide and control their own future. Today, despite the emergence of more democratic societies, global interdependence entails that these societies have not much to say nor determine. Without providing any specific definitions on the theoretical term, Wagner (2012) argues that connecting the experience of modernity "to human ways of situating their own lives" is certainly fruitful. Fundamentally, modernity represents the belief of being modern meaning to be "in one's own time - and extending their relations to others in space" (Wagner 2012: 228). Wagner (2012) believes that there are numerous forms of modernity rather than just one solitary model, and questions what this means for our progress and strive to generate a future that is better than the current one. Therefore, Wagner (2012) attempts to discover how it can be possible to establish a world-sociology of modernity. Wagner (2012: 237) concludes that development of concepts and practices of global justice must be supported by an innovative "understanding of the ties that make human being commit themselves to the fate and destiny of other human beings." Also, re-interpreting the term 'solidarity,' which was allegedly built on equality and not paternalistic hierarchy. However, the term found its reversal "into concrete historical forms in concretised versions of national solidarity and class solidarity as well as its institutional translation into the welfare state" (Wagner 2012: 237). Therefore, solidarity came to represent the social formation of organized modernity which according to Wagner (2012), due to its ongoing re-structuring, demands new interpretations of social ties with a political perspective.

Haferkamp and Smelser (1992) explain that all theories of modernity encompass structural determinants, processes, mechanisms, and outcomes. Due to these components, theories of modernity are describing social change. Haferkamp and Smelser (1992) discusses the

researcher Berger's arguments on modernity, and how it should not be equated with capitalism as it only constitutes one form of modernity. Instead, Hafterkamp and Smelser (1992) explains how Berger emphasizes liberation and increasing independence of association of action as characteristics of modernization which are responsible for shaping the economy, nations, religion and local societies. Haferkamp and Smelser (1992: 15) argue that "to give salience to social movements in connection with social change and modernity is to give salience to the notion of process." Both authors state that either modernity makes major contributions to the emergence of social movements, or these movements create and establish modernity.

5. Analysis

5.1 Effects of the Demographic Shift

There is a wide range of studies that attempt to identify potential consequences of the demographical changes. Scholars are trying to foresee what outcomes can be expected politically, socially and economically. It is, undeniably, very critical as discovering the effects will provide us with the information necessary to identify potential solutions. One cannot simply neglect this, as it gives us answers on what type of strategies hold the highest probability of succeeding.

5.1.1 The Economic Aspects

Some scholars have concentrated on investigating the future economic effects of an aging population by implementing a life-cycle perspective. Thus, the authors emphasize variations in people's economic needs and contributions during the entire life-span. Due to this, a certain weight is placed on the ratio of consumption to production, which is suggested to be high for young and old individuals but low for working individuals. When analyzing the consumption behavior among children, adults and old citizens, one could say that the vast majority of children are consumers as they most commonly are taking part in health and education, two large areas in which the state invests. Working adults produce much more than they consume while the elderly remains highly dependent on the government's financial support for pensions, health care, and elderly care. This relationship is considered relevant as economic growth is determined by components such as the cumulative labor supply, productivity, consumption, and savings which all are, in turn, controlled by "where most people fall in the life cycle" (Bloom et al. 2010: 593, Duvander 2017).

As a prominent feature of modernity, it seems relevant to discuss consumption as it is determined mainly by people's needs which according to Bloom et al. (2010) holds vital importance when analyzing the potential outcomes. As the economic effects are mainly controlled by different needs depending on various stages in life, and an aging population is associated with a higher demand for health care, several studies conclude that countries will experience economic pressures. As elderly at the age of 80 and above have an increasing need for fulltime care as their health conditions get worse, to meet their needs, they often rely on social pensions if not on government resources, familial resources, and personal savings. However, private savings vanish fast along with longevity thus increasing the demand for financial support (Bloom et al. 2010: 588-589).

As briefly mentioned, due to these factors, many studies conclude that slower economic growth is a likely consequence of the demographic shift. The primary assumption is that nations with large proportions of young and older adults will have slower growth in contrast to countries with a more substantial part of the population comprised of working-age people. Again, this argument is grounded on the assumption that a larger proportion of elderly demands more support, thus producing barriers to economic growth. According to these assumptions, the elderly's contributions to the economy is a determining factor as one essential claim revolves around the specific age group offering less to the growth as they provide not as much of labor nor capital.

It seems as healthcare developments are closely related to the overall economic impact of the demographic shift. Scholars such as Bloom et al. (2010) and Kulish et al. (2006) rely on technological advances to produce better health care conditions for elderly. It is seen as an essential factor when analyzing the future implications of an aging population as much relish on the possibility of elderly gaining even better health. First, if this would be the case, one hope is that this group would be able to participate longer in the labor force thus contributing to the country. As argued by Kulish et al. (2006: 28), "longer lifespan provides more years over which to accumulate capital from compounding interest income." However, according to Bloom et al. (2010: 589), if the health conditions stay the same, elderly will experience "more years of poor health and will burden their societies with additional years of health-care costs." Secondly, there would be a decreasing need for health care. Compression of morbidity, referring to the decline of time spent in chronic illnesses in relation to life expectancy, has according to most of the studies occurred thus claiming that an aging population does not imply as big of a burden projected (Bloom et al. 2010). Now, if this is the case, then the economic implications for the

healthcare system would not be as significant as expected. With even further developments with compression of morbidity, the proposed "burden" should be alleviated. With regards to the proposed technological advances, it is reasonable to assume that healthcare systems will experience improvements thus becoming more effective. Development of new medicines and modernizing techniques can help to improve the living conditions of all members of society. Nevertheless, despite this producing several positive implications for the entire society, it is evident that the demographic shift demand policy transformation in many other areas as well.

Although previous studies have offered important arguments on the potential economic effects, they seem limited to acknowledging other aspects. When analyzing the future economic impact, it would seem relevant to discuss other elements that are expected to improve besides health care. The effects of automatization are believed to have significant implications for factors such as productivity, labor, and skills. The central claim revolves around elderly not contributing to the economy thus having a negative impact on productivity, which does not have to be the case. Despite many old-age people leaving the labor market, productivity levels might remain unchanged or even better as technological advances improve thus conducting tasks more efficiently. While many remain pessimistic about the technological advances, the process of modernity tells that societies are continuously changing and by using a reflexive stance- we continually seek ways to improve operations, developing better and more efficient ways to produce goods. The strive to enhance productivity will be higher than ever if there is a lack of workforce, as each worker is expected to produce more. However, to compensate for the lacking labor force will require a significant investment in human capital and automation.

Finally, it seems far too simplistic to look at the economic effects without acknowledging some social aspects. It is easy to focus on the consumption of individuals but what about people's functions and relationships in society? It is essential to recognize the diverse roles people obtain in the community depending on their age, as this gives them different meanings in society. Young people are large consumers of education, and in turn, contribute to the society with the knowledge offered to them. As the social contract dictates, working adults pay taxes to ensure that the state can provide services for their children and elderly parents, which allows them to produce for the economy. Older adults might be large consumers of health, but they are also support, both socially and economically, for their children and grandchildren. Rechel et al. (2013: 2) even explain how 'younger' old people are major supporters for their parents. Véron, Pennec, & Légaré (2007: 2) claim that due to these facts, one must consider "all of the relationships between family, work, aging and social welfare must be taken into account to

conceive possible changes in social protection systems." Old-age people offer work ethics, culture, wisdom and skills that can inspire the younger generations. People are stressing the need for changing the portrayal of elderly, as the aging population should not only be seen as beneficiaries of pensions, health -and long-term care but as individuals who can support family members (Rechel et al. 2013, Véron, Pennec, & Légaré 2007). Due to this, the following chapter will analyze furthermore the potential social implications of the demographic shift. Furthermore, it discusses vital pillars that could be important for establishing a new, and suitable, social contract.

5.1.2 The Social Aspects

The demographic challenge is expected to have numerous social implications in terms of housing arrangements, family care, and policies etc. So far, effects of an aging population seem closely associated with increased welfare spending thus considered an economic burden. Nonetheless, there are those that stress the importance of the positive contributions offered by the elderly which affect the overall economic perspective. As elderly, especially "younger" oldage people, are considered to be a major source of support for their parents and grandchildren, one must look deeper into the potentials of introducing a family-based social contract. The family bond must be considered as it involves "transfers of money and goods and in caregiving across generations" (Tinker 2002: 731). Historically, the role of families has been neglected when designing social contracts despite its significant meaning. For instance, Longman and Gray (2008: 10) attempt to explain how the demographic challenge, from a social aspect, can pose a cost to society as well. As birth rates are low, many in the next generation will not have the benefits of an extended family. In the lack of extended families, people will depend more on the state or charity in need of help, especially with aging.

Longman and Gray (2008) also explain how children, before the industrial revolution, executed important economic tasks to their families while the adults were massive support for their aging parents. Back then, the family was an institution that was self-dependent and took care of itself. This has transformed tremendously, as children today are no longer seen as economic assets but costly responsibilities. At the same time, the aging population depends on social security and pension schemes as working adults are burdened by both their parenthood and demand on them to produce the necessary human capital to keep the system functioning. Working adults are torn between providing care and financial support for their children and elderly parents, simultaneously as attempting to keep up with their working life. Therefore, many are not able

to care for their elderly parents (Longman and Gray 2008). Also, one must consider the risks faced by working adults when deciding to take care of their elderly full-time, as this today would require many to leave their jobs thus jeopardizing their economic stability.

While there is a common claim that elderly are viewed as a burden by the younger population, it simply does not seem to reflect the reality according to Biggs (2018). Several studies claim that this is not true, and instead, find that young adults do not feel bitter about taking care of the elderly relatives but rather wish for working conditions that allows them to do so. Furthermore, studies find that the younger generation does not feel aggravated for financing pensions or health care for older adults but that they hope to receive "the same commitment for themselves when their time comes" (Biggs 2018: 13). It implies that one must look beyond the debate of "intergenerational rivalry and towards measures that reinforce a life course-based contract between citizens and the state." (Biggs 2018: 14). These findings indicate that modernity has not necessarily made the modern human selfish but simply created an environment that does not provide opportunities for people to take care of their close ones.

To deal with the demographic shift successfully will require identifying the diverse contributions that each age group bring to the society, and as Cruz Saco and Zelenev (2007) explain, we must be more encouraged to acknowledge synergies among generations rather than the differences. It is not only desirable to strengthen solidarity among generations through equity and reciprocity, but it is considered essential for maintaining peace and cohesion. Intergenerational solidarity, also identified as a social contract, can be described as social cohesion or integration among generations (UN 2007). It allows transferring knowledge and culture forward through *interdependence* and *interactions* among all age groups. Generational interactions refer to matters such as bondedness and closeness or consensus and conflict. It can also refer to all exchanges, not only in economic terms. Interdependence can be analyzed on both the macro and micro level, of which the first refers to generational unity among age groups which relate to particular situations. At the micro level, one can analyze generational solidity among grandparents, parents, and grandchildren within families. This level comprises members of nuclear as well as extended families such as aunts, cousins, etc (UN 2007).

It is suggested that a revived intergenerational contract must be characterized by intergenerational solidarity and interconnectedness that is promoted through means of education, households, health and community services (UN 2007). It is evident that the demographic shift will put pressures on welfare management, but the extent to which it is

manageable will depend on family caregiving and the responsibilities that families will obtain. As Cruz Saco and Zelenev (2007) explain, the strength of intergenerational ties can come to function as a cornerstone for welfare programs. Welfare management will depend upon combining a formal system that provides social protection but also on promoting family care for making the best use of "human and social capital invested in the care of older persons." (Cruz Saco and Zelenev 2007: 214).

Daatland och Lowenstein (2005) have questioned the responsibility of the welfare state, and whether it acts as a resource for family care or posing a risk for it. It is not uncommon for the welfare state to get blamed for decreasing the necessity as well as motivation for solidarity (Daatland and Lowenstein 2005:174). However, the study conducted by Daatland and Lowenstein (2005) found that welfare states with generous services did not decrease the role of families but more likely just decreased the dependence on the family. The welfare state has provided elderly with opportunities to have more interdependent relationships. Therefore, Daatland och Lowenstein (2005) conclude that it is difficult to imagine familialist policies as a solution for the aging population. These policies do not simply fit with present preferences of people at all ages, nor is this expected to change with future generations. However, this does not entail that solidarity between young and old should be neglected, as it is considered important that they are "encouraged and supported in their mutual concern for each other" (Daatland och Lowenstein 2005: 181). It simply means that this development should not occur through "imposed norms or outright necessity, because these are risks too, rather than resources, for family cohesion" (Daatland and Lowenstein 2005: 181).

Nevertheless, Thang (2011) has been inspired by the national and local efforts conducted in Singapore as they are faced with a fast-growing demographic transition. The nation has for years aimed to strengthen the intergenerational ties through family-centric policy. Thang (2011) lists some interesting suggestions on establishing stronger intergenerational ties on both the local and national levels. In relation to education, courses can be organized with the aim to "increase awareness of the need for generational understanding and bonding among the youth." (Thang 2011: 9). Also, more opportunities should be established that allows interactions across all ages, such as motivating schools to open up for engagement with other generations in society. It would demand expanding teacher's knowledge so that it can help young people to connect with different age-groups. As Thang (2011) explains, aside from implementing intergenerational service learning in school curriculums, teachers can promote an intergenerational perspective in the learning process. Similar recommendations were offered by

the UN Expert Group Meeting (2007), which argued that intergenerational matters should be incorporated and mainstreamed in education. Through mentoring, the transferring of knowledge can help to produce even greater outlook for both generations in terms of employment and other important tasks. For instance, UN (2007) suggest that much knowledge about information, communication and technology can be exchanged.

UN (2007) states that in order to ensure that the new social contract has these intergenerational ties, it is a strong belief that solidarity across all ages gains attention in media, and above all, a positive portrayal. Besides having leaders speaking about the importance of solidarity, debates in media that raises matters relevant for intergenerational solidarity should be opened for all ages (UN 2007). This proposal is important considering the role of the media in modern society. It's nothing new that media constantly influence us and with the emergence of social media, such as Facebook, it is even easier to share opinions, information and organizing activities. As a product of modernity, this can be used to discuss the demographic meaning and what role it has for our continued development, as we strive to characterize it by social cohesion and stability. In spite of our efforts to achieve this, the world is far from conflict-free and harmonious in many respects. But social media has provided much information on what's happening today thus managed to involve and engage many people in making a difference. The same can be done regarding intergenerational ties, as this has not yet received the attention it should have. While it has been widely discussed in research and policy, it has mainly remained a remote subject among citizens.

There seems to be a strong consensus that intergenerational solidarity must characterize the new social contracts. It entails that people, regardless of age, takes in to account as well as supporting interest of other age groups. Therefore, as suggested by Longman and Gray (2008), the importance of the social contract within families should not be ignored, as it would not only be damaging to individuals but society as a whole. However, as scholars have emphasized, one should not neglect that differences in ideological and moral beliefs effect on intergenerational solidarity and how these diversities can create ambiguity in expectations. But despite differing opinions, the majority of people believe that the family is the fundamental unit of society that justifiably should receive support from the state and civil society (Cruz Saco and Zelenev 2007). While promoting more family responsibility for elderly care, the state must create policies that aim at easing the burden placed on working adults. It can be financial support, less working hours or more flexible daycare services. It will be impossible to introduce a system that can sustain a large proportion of elderly if working adults continue to experience pressuring choices

such as providing care for their close ones or maintaining the economic security gained through work. Even at the UN's Expert Group Meeting (2007), it is stressed that policies must be designed to help families to manage family care and work. For instance, it entails establishing policies that allow workers more flexibility in terms of scheduling work that fits with their circumstances. Even supportive programs that assist adults to balance care for young children, elderly and work are considered vital as it allows women and mothers to participate in the labor market (UN 2007). Also, despite the fiscal strain on workers to pay for each retiree, there is no certainty that there will be enough to support institutional care for everyone, nor can there be any guarantees that there will be a sufficient working force to ensure that these institutional care organization will operate as they do today. There is little attention being devoted to the fact that there is a decline in those of working age and that there is already a major competition for doctors, nurses and other professions within care (Tinker 2002).

Reflecting on these arguments, one might question whether working adults will feel even more pressure to take care of their elderly along with everything else. However, to avoid confusion, it should be emphasized that the focus is on establishing more support from the state and community if people choose family care, and to feel free to make this decision without having to face more risks. It is about offering a safety net so that families can take care of their family and relatives. If there is going to be more job-sharing in the future and less working hours due to technological innovations, then adults may have more time to support their close ones particularly as studies show that many wish to do so if possible. But on the other hand, a secure financial system is required that can continue to assure people that they and their families have access to their basic needs. A potential solution to this matter will be analyzed more thoroughly in the third part of the analysis.

One can conclude that social institutions should aim at relieving the strain on working parents while fighting the many negative stereotypes of the elderly population. It is even more stressing as studies show that both in health and employment, there is evidence of age discrimination (Tinker 2002: 730). Due to this, scholars emphasize the power of policies as it can encourage desirable behaviors. For instance, Bloom et al. (2010) argue how laws against sex discrimination and increased support for child care have helped women in the workplace in many countries regardless of these being high, middle or low-income economies. This development can be used to inspire policy thinking, especially when attempting to address the challenges of an aging population.

Although much in this section highlights the family's important value for demographic development, one should not conclude that we have to return to having a traditional family structures to manage the demographic shift. The emphasis is on intergenerational ties, and strengthening the opportunity for people to make choices without facing hazards. As argued, in the absence of people working in sectors that are necessary for elderly care, this solution must be considered. While technological improvements can be expected to improve health for the elderly, it is expected to make further improvements in modern society. That is, streamline tasks that relieves people from the stress of conducting time-consuming tasks. The same should be expected in the workplace as well. However, this will be discussed in greater detail later in the analysis, but it remains important to bear in mind what role modernity has in this discussion and how it continuously shapes and promotes both the social contract and technological development.

5.1.2 The Political Aspects

Much of the previous literature on the aging population's impact on welfare focuses on the claim that the aging population has been accountable for increasing spending in the welfare budget. It has become a "conventional economic wisdom," as the motivation for this argument is rooted in the belief that the aging part of the population results in a growing share of beneficiaries from social security and healthcare, the two largest welfare programs (Galaso & Profeta 2007: 1). According to this motivation, the growing aging population will lead to increased spending if the conditions of eligibility for these welfare programs is not altered. Nonetheless, some studies have contradicted this assumption and find that aging does not increase welfare spending. These studies argue that aging population is related to less welfare spending. This research includes political and electoral components when analyzing the effects of the aging population in relation to the welfare state and is praised for discovering "important transmission mechanisms from aging to welfare spending that deserve to be discussed in a broader prospective" (Galaso & Profeta 2007: 1-2).

The study by Razin et al. in 2002, claiming that an ageing population corresponds with decreasing welfare spending, reached this conclusion by developing a theory using a simple two-period overlapping generation model. The empirical part of the study claims that "the former, economic effect of aging dominates the latter, political effect" and therefore produces a negative relationship between aging and welfare spending (Galaso & Profeta 2006: 3). To be more specific, the empirical analysis consisted of data from the United States and 12 European

countries over the period 1965 to 1992 and aimed to "examine the relationship between the dependency ratio and the tax burden and the generosity of social transfers." (Razin et al. 2002: 14). While the data was found broadly consistent with the main suggestions of the theory, the study did not test the specific structural model of it. Therefore, the empirical evidence should be viewed as suggestive (Razin et al. 2002). However, it would be interesting to see further research that examines whether this relationship between a greater aging population and decreasing welfare spending exists. Also, Razin et al. (2002) study did not consider any intergenerational link among policies which could be included in the further research.

Overall, it is easy to assume that the political impact will be major. The main argument is that as an aging population would constitute a large part of the community, the group will obtain higher influence on politics. Thus, cutting health and pension support could become problematic (Bloom et al. 2010: 588). Nonetheless, intergeneration solidarity could encourage elderly to protect interests of young people through their political power. If this were to be achieved, then such decisions would not bring upheaval nor contradictions.

5.1.4 A Crisis or Challenge?

The effects of the demographic shift will look different across countries. Not only are there significant differences in nations financial and institutional abilities to address this shift, but household structures and responsibilities differ as well. Usually, families are responsible for elderly care in the developing world which is a responsibility that, in wealthier countries, has shifted from families to the state. Bloom et al. (2010) believe that despite there being an expanding and growing proportion of elderly all over the world, the developing countries are more urgently confronted with the demographic challenge. Wealthier nations have a more extensive ability to address the predicted challenge financially while some developing countries are facing the problem of becoming "old before become rich" (Bloom et al. 2010: 609). Due to this, establishing financially viable pension systems will be much more difficult for developing countries that are experiencing an aging population in comparison to the wealthier nations. Besides lacking basic resources, the prevalence of informal-sector labor in the developing world creates difficulty when planning and implementing such systems (Bloom et al. 2010: 609).

Hills (2006: 668) believes that policymaking is expected to become very challenging due to increasing demand for future needs. But since the scale is still uncertain, it makes it even more difficult to design suitable policies. According to Hills (2006: 668), by putting the trends together, it is possible to see a "current outlook" of 15-20 years from now. If no changes are

made, perhaps some retirees will be as "well off in relative terms as their equivalents today" (Hills 2006: 668). For instance, this refers to individuals with good positions in the public sectors as well as employees within private sectors which have chosen to continue to be members of substantially defined benefit schemes. Nevertheless, one should note that there are groups of people that have a deprived pension provision due to interrupted paid work careers such as women as well as low–median employees working for small and medium-sized organizations. Even beyond these groups, there are those that think that they will be equally taken care of as previous generations, but these people will get a disappointing surprise. No one can be certain of what to expect and mainly hope that it will be solved some way. Due to this, Hills (2006: 668) argues that in the absence of changes and we just go along, the level of political pressures would lead to an unplanned rise in state pensions. The option of doing nothing will not be fair nor economically desirable (Hills 2006: 668).

Myles (2002) places the importance of introducing a new social contract as the demographic shift occurs. Corresponding with many other studies on this topic, Myles (2002) acknowledges that economic growth will be slower than it would be without the demographic shift but that it will not, in any way, be catastrophic for the prosperous democracies. There is no concern about whether retirement will survive these challenges as Myles (2002) is convinced it will. Myles (2002) strengthens this argument by presenting the OECD scenario which argues that despite the aging population, the real living standards in Europe, North America, and Japan could be 80 to 100 percent higher by 2050. However, there is a higher concern on the matter of democratization of retirement, and whether its progress during the post-war decades is about to wear away. Myles (2002) is also worried whether further democratization, such as ensuring equal retirement opportunities for men and women, is threatened. The author questions whether the pressures on the public budget of an aging population will result in becoming an additional source of dualism and polarization in the 21st century. Myles (2002) explains that since the 1980s, the major force for reform was triggered due to the intensifying pressures on the public budget, which led to policy-makers to put the retirements costs on firms and individual workers instead.

Duvander (2017: 174) use South Korea as an example of a country that managed to handle a rapid shift in its demographic structure. They managed to increase economic growth in the country through investments in health programs, education, and manufacturing industries. Duvander (2017) points out that the lack of such investments can lead to unrest politically, and in some cases, revolution as the outlook is uncertain for the young population. The Arab spring

is used as an example of such development (Duvander 2017). These arguments indicate that there is a possibility of some situations triggering crises if not appropriately addressed.

In general, the analysis finds that many scholars agree that the changing demographic structure will be a challenge but that portraying it as a major crisis is highly exaggerated. Nevertheless, the majority agrees that different policies must be adapted and embraced due to the importance of ensuring good health and long-term care for the older generation. It does not seem to be a question whether this challenge demand the societies and welfare systems to adapt, but how and what solutions will be possible. As stated by Bloom et al. (2010) the demographic shift is not a problem itself, but it depends on the extent of the ability to replace inflexible and old-fashioned policies as this will determine the implications of having a growing proportion of elderly in society. As expressed by Véron, Pennec, & Légaré (2007), the central questions concentrate on who should have the responsibility for this challenge, and who should pay for it? Above all, the decisions and strategies should be designed with caution to avoid more substantial social inequalities, as the importance of equity between generations is vital. This chapter has demonstrated the necessity of introducing a new social contract, and the next chapter aims at analyzing different strategies and whether these can support a contract that is functional with future circumstances.

5.2 Managing the Challenge

The term welfare is primarily used when actions become essential for enhancing the well-being of individuals or groups. Due to this, the welfare system has designed policies to address the needs of citizens as this is seen as a primary element for enhancing the welfare of people. This does not only concern needs for survival, but those considered reasonable for an adequate life within the society. Therefore, one of the greatest accomplishments within public policy development was pension and benefits to the elderly. Since ancient times, elderly have considered deserving of support thus, in comparison with other groups, the rules have not been as strict for them. As the demographics are shifting, scholars are questioning the level of assistance that should be given to retirees, more specifically, what amount should be offered beyond that which keeps retirees over the limits of poverty and hardship. Some believe that the previous and manageable amount of 60% pre-retirement income for all elderly is not possible in many countries nor is it realistic to achieve (Paz-Fuchs 2011). The central question revolves around who's responsibility this should be, which comprise an essential part of creating the social contract which decides whether the duty lies with the government, the employers, or the

retirees. These past years, there has been a visible "paradigm shift in risk-sharing" (Paz-Fuchs 2011: 21). In the first phase of the advanced welfare states, these were the responsibilities of the government which these past couple years have been shifting due to increasing privatization of services. It has entailed an increasing emphasis on "ability to pay, rather than upon need." (Dictionary of Sociology 1998). Individuals, young and old, are faced with hazards which can be more damaging if family commitments are weak, as it limits sources of support. Now, the paradigm-shift is reflected as employers are dismissing their involvement in pension schemes, or the government is stressing a 'personal responsibility' narrative that increases the burden that employees are expected to bear in saving for their retirement. There is a need for challenging traditional social policy thinking due to changing structures and shifting of risks (Paz-Fuchs 2011: Myles 2002). Therefore, the first chapter of this analysis will discuss "the market solution" and what it entails.

5.2.1 The Market Solution

In relation to the shifting of risks, Paz-Fuchs (2011: 21) emphasize a policy transformation that has had major significance, namely the alternation from Defined Benefits (DB) systems to Defined Contribution (DC) systems. These are examples of risk-sharing arrangement, and Paz-Fuch (2011) explains their function in the US. DB schemes, usually employer-sponsored, implies that the worker's benefits are measured based on methods consisting of, for example, history of wages and the time-frame of employment. This entails that the employer solely manages the investment risk, funding losses, and portfolio. DC schemes, however, entails that the level of worker's contribution is fixed in contrary to the assistance amount, which is not. A fixed amount or percentage is transferred from the employer to the worker when entering upon retirement, but the entire amount is not guaranteed nor decided upon. Due to this, workers depend on being informed on the most desirable investment strategies for them in relation to retirement funds. However, many have difficulty with making such decisions thus becoming unable to guarantee a pension without any economic hardship. Paz-Fuchs (2011) explains that evidence shows that savings using the DC schemes in the US are significantly lower than the capital necessary for a solid pension fund. However, informing workers about their funds is not believed to be a sufficient solution, but it does not make it any less important. Scholars believe that something more has to alter the "state of affairs" but what can be done?

Paz-Fuchs (2011) explain how Friedman had inspired Chile to face the challenge by using the market solution. The suggestion entailed enforcing privatization, replacing the PAYG model as

this would benefit the retirement funds that were invested in the country. The first decade of this reform showed a direct positive outcome of the fund as it strengthened the economy as well as produced a high profit on pension portfolios. Despite this positive outcome, as the privatization solution left social security vulnerable to the changes in the market, the following decade signified a drop in the pensions. This is what Paz-Fuchs (2011: 22) have to say about the Chilean reform:

"It seems safe to assume that some sophisticated employees-cum-investors will manage to take advantage of the schemes. Others, due to imperfect knowledge of their rights or the best way to maximize them, may lose coverage completely. Lastly, privatization may increase competition, but it may also lead to monopolies or oligopolies. In the case of Chilean pension funds, for example, the competition was very limited, the portfolio was hardly diversified, and transaction costs were very high."

Paz-Fuchs (2011) explains that although the Chilean example does not demonstrate success, it managed to recognize pressing issues that the country was facing such as workers retiring early and the inability of political powers to encourage people to work longer. Another problem was that young workers were selected over the older ones by employers, as they were considered less expensive. Paz-Fuchs (2011) is clear with stating that Chile was not alone in introducing a paradigm shift of which the governments transfers its duty to the people as Western countries also needed to conduct reforms in light of the problem. For instance, Sweden's strategy during the late 1990s involved a part-privatization system. The reform entailed that benefits were divided into two processes, one still following the PAYG system and one where the DC system is managed with a retirement fund. It was considered a sophisticated solution especially as the market-based scheme was taken into consideration and due to this, the Swedish government did not completely stop to regulate the privatized funds. Instead, the regulation was administered by a government agency that aimed at assisting the insured on the optimal strategies to manage their investments, which produced a both "unique combination of competitive market and government regulation and intervention" (Paz-Fuchs 2011: 22-23).

According to Hills (2006: 669), governments see private sectors as a solution with the mind that they can "take more of the strain, keeping public spending in check by linking the basic State pension to prices rather than to earnings." The risk of having lacking careful regulations when shifting costs to the private sector can very possibly assign a larger role of markets thus weakening democracy in the distribution of retirement opportunities (Myles 2002).

5.2.2 The State System

This chapter focuses on the UK, and more specifically, how the state system could be developed to address the demographic challenge. Considering the estimates on the increasing longevity and growing proportion of elderly, Hills (2006) presented the four options given in the UK Pensions Commissions first report in 2004. The first and the less desirable choice is to let pensioners become poorer relative to the rest of the population. The second solution would be later retirement while a third, is to create a larger amount of tax and national coverage contributions as a share of national income devoted to state pensions. Last but not least, the fourth option is concerned with generating greater savings for retirement. As Hills (2006: 666) puts it, the first option is very "unattractive" which leaves a combination of the three options found mostly wanted and reachable.

When designing proposals and suggestions, Hills (2006) argues that focusing on the state system is the easiest. The changing demographics indicate that there will be higher public spending and increased state pension age in the long run, and to what extent each of these increases, is a trade-off. According to Hills (2006), structural reform will demand public spending to increase after 2020. The arrangements on increasing women's retirement age to 65, between 2010 and 2020, is expected to generate a decrease in spending as a share of GDP which allows some leeway for adaptations for creating long-term reforms as the spending share of GDP up to 2020 would then remain constant.

The primary lesson offered by Hills (2006) is the power of simplicity, which is believed to give us the right tool to succeed. We should not ignore that this is a complex challenge, but it gives all the more reason to "evolve from where we are than to face what turn out to be huge transitional complexities of a revolutionary introduction of a new system" (Hills 2006: 674). Bearing this in mind, Hills (2006) has introduced five possible suggestions. The first suggestion aims at developing on recent reforms to the state system, quickening the transformation of the State second pension comprising of a flat rate. It entails that retirees are receiving a sum that does not vary but stays fixed in all situations. Hills (2006) suggest this to be enforced but with better acclaims for those caring for children, elderly or disabled people. The second suggestion is concerned with "indexing the basic state pension to average earnings growth rather than prices over the long term so that it stops losing relative value" (Hills 2006: 674). Also, the current contributory basis should shift to assigning rights on a universal residence-based basis. The third adaptation concentrates on keeping the positive development on the declining rates

of poverty for retires and continue to do so by introducing pension credit but avoid meanstesting "by freezing the real value of the maximum savings credit." (Hills: 2006: 674). The fourth strategy suggests to slowly increase the legal retirement age after 2020 in proportion to growing life expectancy which is expected to reach between 67 and 69 years by 2050. Last but not least, the fifth suggestion is to conduct payments of the basic State pension to people halfway through retirement, for instance, those ages over 75 years. This suggestion should occur on a universal basis to all people within this age group, as it hopes to address "with the way in which older generations of women in particular were able only to build up partial rights to it" (Hills: 2006: 674).

Hills (2006) acknowledges that there have been compelling arguments on increasing the retirement age in proportion to the expected life expectancy to remain equity between generations, but increased longevity is not the only change we will be affected by. Otherwise, raising the legal retirement age would probably prove to be effective as then we would not have to worry about the fixed spending as a share of GDP. The case, in reality, is that we are expected to experience numerous effects of declines in fertility after the baby booms. And due to this, it would be highly unjust to put all the pressures of cost on the generation that are now close to retirement by increasing their legal pension age far faster than the life expectancy. Therefore, Hills (2006) states that the "least aggressive" strategy would be to retain the proportions of adult life spent as a retiree constant until the legal pension age for men and women are equal at 65 years in 2020. Even though it is hard to imagine that both retirement age and spending would have to increase, it should be noted that this development will be slow (Hills 2006). This solution would probably be more politically acceptable by the society, it both acknowledges the importance of justice and the meaning of introducing a sophisticated transformation that does not entail being rapid and swift. A new social contract cannot be enforced though rash decisions as this can only lead to mistrust towards the state, as well as other members of society. Succeeding in establishing a new social agreement builds on the basis on which people and state can cooperate.

5.2.3 Pay as you go Vs. Fully Funded

Bloom et al. (2010) argues that a country that simultaneously has a growing proportion of elderly while adopting pay-as-you-systems would have small groups of working-age individuals making transfers to the growing and larger group consisting of an elderly population. Therefore, another policy implementation would have to be concentrated on

solving the "funding gap caused by the intergenerational transfers implicit in pay-as-you-go health and pension systems" (Bloom et al. 2010: 608). It is argued that an aging population inclines to reduce the sustainability of welfare states that adopt a pay-as-you-go pension system. For instance, Galaso & Profeta's (2007: 14) own theoretical model has focused on the structure of the welfare state, both "between a pure income redistribution scheme and a pension system-and on the redistributive design of PAYG pension schemes." This model claim that aging has a stronger negative economic effect in a welfare state with a predominant social security scheme as aging decreases the sustainability of the Pay-as-you-go arrangements (Galaso & Profeta 2006: 14).

Additionally, Bloom et al. (2010: 608) believe that reducing the old age dependency can be addressed through policies that focus on "adjusting premiums and benefits or making a transition to full funding or a system of private accounts." This way, individuals could efficiently take a portion of their pensions from the investments made under their careers. Fully funded systems entails that older people that continues working, and eventually when entering retirement, obtain the advantage of getting a larger sum (Bloom et al. 2010). Bloom et al. (2010) explain that adopting such system would demand vigorous institutions that can both attract adequate savings and invest them efficiently and securely, as well as financial reserves to pay the transition for the older generation with insufficient private savings. Nonetheless, some are worried that abandoning the pay-as-you-go system will require large increases in savings thus producing scarcer investment opportunities as well as reduced returns (Bloom et al. 2010).

The problem is that, as the majority of schemes depend on the transfer of taxes from workers to retirees, as the aging population grows, the more each worker must pay to maintain the level of benefits (Longman and Gray 2008: 8). One of the leading challenges is concerned with intergenerational fairness, as it will become more and more difficult to maintain the balance between the portion of working people and non-working. We are witnessing a shift in transfers, which previously have occurred from the old to young but changed to the quite opposite today. Overall, systems with intergenerational ties will struggle to function due to overall balance if no changes are conducted. Regardless of whether the system is PAYG or fully funded, the success of the selected system will demand all social groups in society to be heard when creating policies. Cruz Saco and Zelenev (2007: 211) argue that adopting a pay-as-you-go system is enforcing the "institutional embodiment of solidarity among generations, with younger workers paying payroll taxes to sustain public pensions of the current generation of seniors," but one must remember that this must be balanced due to the political power obtained by elderly.

Therefore, as Cruz Saco and Zelenev (2007) suggests, elderly must demonstrate the ability and wish to consider young people's interest such as in terms of education or development programs.

5.2.4 Reducing Benefits Vs. Raising Contribution Rates

One suggested reform is to reduce pension benefits. According to Karam et al. (2011), this would have a direct adverse effect on consumption especially for families with little or no savings at all as they are forced to consume out of their given income. It is not difficult to assume what implications this would have. First, it probably would not be widely accepted by old-age citizens who can cause much resistance due to the higher political influence. Not only is retirement one of the major democratic achievements, but its social contract rests on the assumption that working people that have contributed their entire life to pensions expect to be taken care of when unable to work. By reducing pension benefits, retirees will become limited due to economic limitations and not be able to live as they wish. Not only will this affect the given social contract, between state and citizen, but this will probably affect the GDP extensively as a large proportion of citizens will not able to consume as much. As highlighted by Karam et al. (2011), it would be wrong to suggest that household with low incomes would be the only affected as even households with better economic conditions would experience similar backlash but just at a slower rate. Karam et al. (2011) argue that this solution would imply a decline in government debt thus increasing the global net savings. But this seems difficult to imagine as if people start to consume less and start to save up more to manage their situation; the economic growth would be directly negatively impacted.

Raising contribution rates is the third potential reform and is corresponding to an increase in the labor income tax rate. Karam et al. (2011:13-14) adopt an IMF model called global integrated monetary and fiscal model to measure "the effects of reforms to pay-as-you-go public pension systems worldwide." This model comprises two different types of household, one that is constrained and one with better economic conditions that have some form of savings. According to Karam et al. (2011), higher labor taxes reduce the overall income households have to spend, and this reduction is stronger in regions where homes with little or no savings constitute a larger share of the economy as they solely consume out of their after-tax income.

Karam et al. (2011) explain how the better-off households can adjust their flow of income based on their pool of savings. Overall, the produced outcome of this reform is not far from different from the second reform, thus implying a decreasing consumption for households. Karam et al.

(2011) claim that the entire productivity level thus the real GDP will decline due to increasing tax which causes the household to become less willing to work.

The assumption that tax increases will make households less willing to work, thus reducing the productive capacity of the economy and producing a lower GDP, is not an uncommon argument. Nonetheless, this assumption reflects the Laffer Curve which has received much criticism. The model claims that increasing taxes will automatically give smaller incentives for people to work, thus affecting productivity levels negatively. Instead, cutting taxes gives higher revenue in the economy. Many scholars have argued that this assumption should be abandoned, but despite several attempts, it has continued to be used as a tool for initiating political programs. In many countries with high taxes, the social contract dictates that the taxes are used for the public good. Tax increases can imply better education or health care, which in turn contributes to the society. One must also consider that prices for some services could become more affordable with higher taxes. There is no evidence, to my knowledge, that increasing taxes will make individuals less willing to work. Sweden, for instance, is used as an example of a country with high taxes but it is also used as an example on how these taxes are contributing in the society's best interest, for instance through social investment in education, improving healthcare and strengthening welfare programs. It does not entail that the system is flawless but it simply does not prove to be an issue for the country's productivity and the overall contributions to the economy.

5.2.4 Raising the Legal Retirement Age

Many consider increasing the legal retirement age to be the most desirable solution as all present retirement systems have been shaped to fit a different working life than we are witnessing today. Previously, people stayed in retirement for five to seven years which has now increased to twenty years in the majority of advanced countries. The reform is believed to produce fewer lifetime benefits to retirees while encouraging people to stay in the labor force longer. Some even argue that this will enhance the domestic demand in the short run while relieving the government pressure of having to cut benefits. The long-term impact on GDP growth would be affected positively due to the combination of higher fiscal savings from fewer pension payments, declining costs of capital and encouraging investments. Another common argument is concentrated on the expanding labor directly increasing the productivity of the country, hence boosting the economy's GDP. If people work longer, the household income rises thus creating constant pressure on consumption (Karam et al. 2011, Paz-Fuchs 2011, Bloom et al. 2010). One

can conclude that this policy would address the importance of intergenerational ties as it has the potential to create a better balance between working people and non-working people. By extending working years, the size of the labor force gets immediately more stable in relation to the people that are retired.

However, other essential factors should be embraced more in this discussion. Increasing the retirement age will not directly "encourage" people to stay in the labor force. One must recall the produced impacts as elderly gain more political influence thus recognizing how such decisions can bring upheaval and mistrust towards the government (Bloom et al. 2010). While the demographic shift explicitly calls for a new social contract, it is vital that it is found acceptable by all groups in society for maintaining a balance. One proposed policy adaption involves affecting retirement motivation, resulting in people realizing their needs and wishes to stay longer in the labor force as a response to the expectations of longevity. For instance, this can be gained with a more flexible old-age pension arrangement. However, one should not ignore the necessity of legal and cultural efforts to address the risk of employers discriminating workers based on age. Bloom et al. (2010) suggest that the potential risk could, however, be eliminated through lifelong education which concentrates on developing people's expertise and knowledge accordingly to the altering demands produced by an aging society. It is evident that the success of implementing such reform will depend upon strong policies that fight discrimination as well as people's encouragement to work longer.

Regarding people's willingness to stay in the labor market, modernizing workplaces could have a great significance. Modernity drives a society forward and is continuously reflected in our attempts and strives to make everything more efficient and more comfortable. As we are always in the process of identifying new methods and solutions to our everyday problems, technological innovations can provide us with the necessary tools for establishing better workplaces. Unfortunately, many workers today are overworked and suffering from both bad health and pain, thus wishing and longing to enter retirement. Several working environments are not remotely age-friendly, which is an evident problem considering the amount of time spent by each worker in those settings. Companies should not turn a blind eye to the features of technology which can positively alter workplaces, but instead, start investing in providing more pleasant working conditions. The efforts by the German car-company BMW is referred to as a successful example of workplace-transformation as they "successfully adapted their Bavarian production line to make it mature-age friendly and found that productivity increased, and absence rates dropped, as did the defect rate." (Biggs 2018: 14). Investments in everything from

comfortable chairs to better reading screens can improve the atmosphere and productivity at work. Making the work-place more age-appropriate demands factors such as allowing more flexibility and developing the workers capacity through lifelong training and learning. Therefore, it should be taken into account when promoting more widespread work participation.

A majority of studies stressing this reform, seem to share the international consensus that remains completely concentrated on employment for compensating for the additional years produced by longevity (Biggs 2018: 13). Due to this, the demographic shift is calling for better policies that can make longer working life possible, such as medical innovations and other health aspects. The reform is argued to be fair and sustainable for all generations, however, as Biggs (2018: 13) puts it, "whether there are jobs available and ageism can be reduced in the workplace," seems to be another matter. While raising the legal retirement age could be effective, the problem is that the solution rests on one pre-condition - that there will be enough jobs for everyone. The majority of studies are overlooking the impact of technological innovation, which is a development that could alter our labor markets and the nature of work. Even today, many countries have major difficulties with unemployment rates, and according to some findings, we might witness far higher rates of unemployment in the future. Additionally, the available jobs in the future are believed to demand higher physical ability as these tasks are not so easy to be automated. How can we expect that elderly will have the capacity to execute this form of physical labor?

Although raising the retirement age is well-motivated from an economic perspective, it does not consider the prospects that can affect the efficiency or sustainability of such decision. Hence, the next chapter will cover and discuss more extensively on how and whether the technological change could affect the future of work. Furthermore, there is a great interest in recognizing what has been suggested to meet these particular circumstances.

5.3 Future of Work

As stated previously, the ongoing debate about technology's potential and development consists mainly of two fields. On the one hand, we have scholars that claim that the technology of the future will not threaten jobs but create new ones. According to this assumption, it is far more likely that we will witness a shift in job sectors rather than losing some of them entirely. On the other hand, there are many experts at the core of the technology industry, that claim that the innovations will not have the same effect as the previous developments the world has undergone. They believe that this time, it could be different. The improvements in artificial

intelligence and algorithms will alter our modern societies and its labor markets tremendously, changing the nature of work as we know it. And all this could happen in the near future.

Pistono (2014) does not believe that this topic should be characterized by feeling or belief but data and facts. He explains that people might think that our human tasks are impossible to replace, but that there are millions of algorithms that are currently developed by computer experts that attempt to prove otherwise. Although much of the technological prognosis sounds like a futuristic fantasy, Pistono (2014) explains that the expected changes could be far too rapid for the market to establish new opportunities for people that will become unemployed. In one of Pistono's presentations, he questions what occupations or sectors have been invented these past fifty or sixty years, as there is a common claim that this is exacly what technology innovation does. He found that one occupation has been created - computer programmers. On the other hand, Pistone (2014) explains how many unskilled and uneducated workers seek employment in establishments such as Walmart. Hence, Pistono (2014) takes Walmart as an example, explaining that if it were a country – it's GDP would constitute the 25th largest economy in the world. If Walmart would initiate an automation strategy with automated restocking, shopping and delivery, then it would without any difficulties, run its business with less than 100.000 employees. Pistono (2014) believes that this will happen eventually which would leave 2 million workers unemployed, the majority of them having limited options in terms of skills and education. What will happen with these people and their families? Also, this process would be irreversible and does not allow the replaced jobs to come back. In the past, automation would replace human workers, but there was always something else to do. Workers would find new occupations, mainly due to two factors. First, people had sufficient time to learn and adopt new skills. Second, either some tasks were too complicated for machines to execute or, the financing of a machine that was capable of doing so was far too expensive. Due to this, human labor has been considered optimal as long it requires fewer expenses. However, human labor is not considered so cheap today as machines are becoming more affordable to build, even the more complex ones (Pisono 2014). Many would agree that this development reflects a common feature of modernity as the progress is shaped by the means considered most profitable. However, this assumption could be challenged by the belief that modernity should not be equated with capitalism, as capitalism constitutes only a form of it. But then the question is, what other forms could modernity produce or design which would suggest different development than the one described above?

Wajcman (2017) remains strongly suspicious of the technological transformation being "really different this time." Wajcman (2017) believes that, despite all the literature covered on the automation, there is not much convincing evidence that technological unemployment is occurring or will occur in the future. Instead, Wajcman (2017: 126) concludes that "the homogeneity of the Silicone Valley creators is a more dangerous threat to the future than any perceived robotic apocalypse." These advocates, according to Wajcman (2017), have their backs to society as they are captivated by the technological potential thus remaining blind to the surrounding issues. However, Wajcman (2017) is optimistic about Brynjolfsson and McAfee's emphasis on establishing a collaboration between machines and humans, as this will be the key to securing a successful future.

While Brynjolfsson and McAfee (2012) firmly believe that the positive effects of technological innovation is providing us with a rich territory and will continue to do so, they emphasize that technological unemployment will occur. The technical industry is continuously designing elaborate techniques that will not leave the labor market unimpacted. One study conducted by the OECD has found that only 9 percent of jobs are susceptible to automatization, which is a significant drop from the previous 47 percent stated by Frey and Osbourne (2013).

It feels profoundly relevant to discover why OECD's (2016) and Frey & Osbourne (2013) findings differ. First and foremost, OECD believes that a better approach to analyzing potential job losses demands one to investigate "the task content of individual jobs instead of the average task content of all jobs in each occupation." (OECD 2016: 2). It is argued to be highly unlikely for occupations to be automated as there is a major variety of the tasks of each job. While Frey and Osbourne (2013) findings were grounded on the specific tasks of each occupation, the OECD (2013) selected approach provided a remarkably lower number of jobs being prone to automatization. Due to this, the OECD (2016) believes that mass technological unemployment can be precluded due to three main reasons. First, despite that the new occupations produced by the information and communication technology cannot fully account for jobs being replaced, there is a far greater likelihood that new jobs will be created as technological innovations create other sectors as costs drop and income and wealth increases. Furthurmore, OECD (2016) argues that some even suggest that five additional jobs are established for each job created in the "hightech" industry. Secondly, evaluations on automatization of jobs mostly rely on the theoretical possibility of technology relocating current occupations while neglecting whether the advances are truly implemented. According to OECD (2016), this would produce an exaggeration of the technological impacts with regards to the total numbers of jobs in the country. The central claim is concerned with the time-consuming factor of implementing technological advances due to economic, legal and societal reasons. Therefore, these substitutions do not always occur. Finally, OECD (2016) states that regardless whether there will be decreasing demand for labor in some economies, it does not mean a reduction in occupations but the total amount of working hours. This development has already occurred in the European countries the past couple of years.

Although there seems to be a tremendous disagreement on how to conduct studies to analyze the actual impact of technological change, all reviews seem to agree that labor markets and the nature of work will be impacted. Despite whether its 47 percent or 9 percent of jobs vulnerable to automation, all seem to agree that the future labor market will be affected one way or another. The difficulty is that no one can be sure on how this will play out in the future primarily due to the demographic challenge, but the high demand for cognitive skills that can solve non-standard problems will be inevitable (OECD 2016: 1). However, this will have different effects across countries depending on its industries, organization and skill variations among people. The impacts will be hard on those that will not have the ability to shift to new jobs. Along with labor market polarization, some employees will be "stuck in low-skill, low-paying jobs with little possibility of crossing the growing divide into jobs that provide sufficient income and wellbeing." (OECD 2016: 3). The development will even be evident in wage structures, as some will have high-paying jobs and other low-paying ones. The demand for middle-skilled employees will be reduced, thus increasing the competition for lower-paid occupations. There is already evidence on the hollowing out of occupations with mid-level skills simultaneously as the demand for high-skilled, and non-routine occupations have increased remarkably in most advanced countries. This refers to occupations where employees must work with new data, interpersonal skills and solving unstructured complications. A similar development can be seen in low-skilled occupations that are non-routine, caring or personal services due to the difficulty with automating these tasks (OECD 2016). Due to this, there is a high possibility of producing in-work poverty and growing inequality. While new jobs will be located in large cities, especially those demanding high-skilled labor, regional disparities might grow as well. Besides having to establish a stable income from work that avoids poverty traps, tax and benefit schemes need to be changed in order to fit with these circumstances (OECD 2016).

Wajcman (2017) comments on automation in the workplace, stressing that it is not right to argue for introducing robots for "empathetic" elderly care as real empathy and true personal interaction is essential in elderly care. Although the importance of personal and social

interaction for elderly, and all humans, is undeniable - it seems logical to introduce more automation in workplaces that are experiencing labor shortages. Nonetheless, Wajcman (2017: 123) believes revaluating and increasing salaries in elderly care would solve the problem of labor deficiencies. Despite this being a reasonable suggestion, there are no guarantees that there will be enough working people to support the number of elderly. Neither is it possible to know if there will be a financial ability to increase wages. Wajcman (2017:123) does, however, discuss potentials in re-designing housing and cities so that the elderly are not placed in distinct places but instead "integrated into the wider society." This suggestion serves the purpose of strengthening the intergenerational solidarity and social interaction, which as previously emphasized, can be promoted through a new social contract. UN (2007) recommends establishing living arrangements for elderly within multigenerational housing communities, such as those existing in the Netherlands. This arrangement entails two or three generations living close that can without any difficulty take care of each other. All these suggestions consider how the social isolation of older adults can be avoided and addressed, which is essential for every individual well-being as well as the overall cohesion among people.

We cannot turn a blind eye to the possibility that it really could be different this time. As expressed by many, we have political scientists that believe in different scenarios, but those raising the alarm are experts in the field of technology. People, at the core of the technology industry, are stressing that we will face a remarkable technological transformation. Should we not be able to rely on the experts that have devoted their careers to the field, building and creating algorithms for these innovations? We must ask ourselves whether we are willing to prepare for the possibility at least that it really could be different this time, by investing in trials and experiments. Because at this moment, many seem to simply brush aside the thought quickly due to historical accounts, which seems difficult to solely rely on as we are always changing as a society.

Summing up, it can be said that regardless of whether there is a high or low possibility of witnessing mass unemployment – the majority of the sources seems to agree the nature of work will change. We cannot apply all lessons of the past to the future as the expected technological advances are believed to challenge high-routine occupations and conduct a wide range of tasks that has ever previously been carried out by human labor. Regardless of the percentage of potential job losses, there will be a "significant redistribution of work" that will demand adaptions in areas such as skill-set, caring obligations and safety nets (Painter and Thoung 2015: 10). We must address problems that can occur in terms of working hours as this determines the

extent to which workers can meet their family's needs. Some that have considered this have also suggested one possible solution - universal basic income. The following chapter will, therefore, analyze the motivations for introducing universal basic income, and hopefully, provide an understanding to why it has gained so much attention.

5.3.1 Universal Basic Income

This proposal is referred to as a universal strategy in terms of income support and can be defined as an income that is "unconditionally granted to all permanent members of society on an individual basis, without any means test or work requirement" (Birnbaum 2012: 3). Universal Basic Income entails that every citizen or permanent resident, despite economic standards, is offered a tax-free basic income in which income from other sources can be added. A universal welfare state can be explained as a form of the welfare state that, based on citizenship or permanent residence, offer rights to income security. The idea for welfare universalism focuses on the great responsibility of covering members of society with these essential rights (Birnbaum 2012: 3).

Today, it has become evident that advanced welfare states are becoming more and more concerned with higher unemployment rates and inequality of resources (Birnbaum 2012: 43). The broad discussions on the potential effects of technology, and in conjunction with other changes in society such as the aging population, has evoked many suggestions on how these challenges should be met. Therefore, Universal Basic Income has received a large amount of attention as it is stressed to be an alternative to address the effects of technological change and an aging population. It has become even more stressing as some believe that high unemployment rates will not be a temporary result of the technological transformation, but that we rather are about to enter a new way of living and working. Wajcman (2017) comments the suggestion of implementing basic income with suspicion. According to her, the proposal directly "conjures up a vision in which the Silicon Valley tech crowd continue to thrive on 24/7 working hours, while those left behind are paid to watch TV and sleep (judging by what the unemployed do now)". While it is reasonable that basic income-system is met with doubt, it is far more difficult to understand the portrayal of unemployed people as lazy when it simply does not reflect reality. Instead, this assumption represents a very narrow and simplistic view that is, unfortunately, shared by many. It is sad to depict individuals as only choosing to do unmeaningful tasks when offered the opportunity to do so, thus neglecting humans as creative and caring beings. The truth is that many people's struggle to find an occupation today, and long for getting a job or any pursuit at all. If people do not wish to do so for the economic incentives, they will most likely do it to increase their well-being. As Csoba (2010) explains, laziness does not derive from human nature but is rather an outcome produced by social and economic factors. It is strongly argued that reasons for unemployment is a result of factors that exist within the system, and therefore, is not fixed at the individual level. Csoba (2010: 92-93) continues to explain that causes for higher unemployment rates are globalization, demographic change and the market approach "which prevails over everything." However, calling unemployed people for lazy or pretend job seekers in the media was, according to Csoba (2010: 93), a perfect strategy for "releasing pressure from an otherwise stressful social atmosphere." As Csoba's (2010) study finds, people don't remain unemployed due to their lack of incentives or laziness to work but rather due to recurring problems found in the economies. It is true that the right to laziness is not given to man living in society and that everyone should have the right to a life with human dignity, a decent income, and greater freedom in the world of work (Csoba 2010: 105).

Nonetheless, opponents of universal basic income are increasingly showing fear of people becoming lazy, feeling empty and without purpose. Bearing this in mind, the next section is attempting to understand how universal basic income could affect the people's values and way of living.

5.3.1.1 Human Fulfillment and Creativity

Many are concerned with the implications of a low-working society and its effects on human fulfillment and self-identity, which is considered essential for the well-being of individuals. People have for a long time defined themselves through their careers or particular skills and, in lack of this, people might start to lose purpose in life. Nonetheless, many argue for the numerous means and possibilities through which people can still gain their self-worth. For instance, Painter and Thoung (2015: 4) view basic income as a necessary tool for allowing people to reach their creative potential, stressing the need to "underpin freedom with the right social, economic and institutional foundations." Painter and Thoung (2015: 4) emphasize the possibility for people to thrive in their ambitions due to the sense of security while supporting others in the pursuit of developing ideas for society. According to them, this possibility is not produced by the present welfare states but through universal basic income. Welfare states are becoming even more complicated, bureaucratic and intrusive through benefits systems – which, unfortunately, has left many people with terrible conditions (Painter and Thoung 2015: 4).

Wajcman (2017) explains that Brynjolfsson and McAfee believe that with the right policies, it can be possible to promote more creative activities and even greater human freedom. Therefore, there is a strong urge to race with technological development, and not against it. It would allow us to use human creativity and its many unique qualities to establish more jobs such as creative writers, digital scientists, and entrepreneurs (Wajcman 2017). Simultaneously, government investments in schools and infrastructure must be encouraged to deal with the effects of the technological change (Painter and Thoung 2015: 10). According to Painter and Thoung (2015), basic income could be a foundation for building and developing these elements, as it can smooth work transitions while providing a sense of security.

Painter and Thoung (2015: 7) argue that through basic income, young people between 16-25 can declare publicly on how the support can be used to help them with learning, occupation, caring responsibility, entrepreneurship or volunteering. Additionally, experiments with basic income in less developed countries can be used as evidence that it actually encourages entrepreneurship. Pilots in the developed countries demonstrate that it enhances individual wellbeing (Painter and Thoung 2015: 7). Therefore, it is considered of great interest to test Universal Basic Income on a broad group of people so that its impacts can be adequately analyzed. Trials have already been initiated in Netherlands, Finland, and Canada. However, the project in Finland was recently shut down but its results will be presented in 2019. Experiments with basic income is essential, as these can discover the capacity of the strategy thus recognizing whether it has true potentials.

Universal Basic Income will most likely demand a tremendous social shift and in human behavior. However, considering the demographic change and technological innovations, it is difficult to neglect its possibilities as it would allow people to take care of their older relatives without having economic pressures. Universal Basic Income is argued to have plenty positive effects in comparison to the current welfare system, for instance in terms of decreasing benefit fraud as it is not dependent on income and false reports serve no purpose. There are no disadvantages of living together as basic income is given regardless of every individual thus considered more supportive of the family (Painter and Though 2015). According to Painter and Thoung (2015: 7), values of freedom, equity, and creativity demands us to reorganize the relationship between the individual and the government. Therefore, the new social contract will build upon securing "the creative capacities of each individual" while rewarding contribution, caring, and citizenship (Painter and Thoung 2015: 42).

5.3.1.2 Universal Basic Income and the Social Contract

Birnbaum (2012) has mainly discussed basic income proposals through John Rawl's social contract theory, "a theory of justice" as he believes this to be the most influential definition of social justice. Birnbaum (2012: 63) draws on three main aspects when discussing basic income. Primary, an economically feasible basic income, without poverty traps, would have to be quite modest for the predictable future. Nonetheless, it is important to establish functioning economic initiatives as these are considered necessary for those that desire to achieve "a more comfortable standard of living" (Birnbaum 2012: 63). Birnbaum (2012) explains that no one can neglect the aspirations of the individuals to discover, as well as an embrace, opportunities that offer them a stimulating life filled with social richness.

The second suggestion stresses the necessity of acknowledging modifications and coordination within education, wage-controlling mechanisms, norms of social participation and legal conditions. These are considered necessary for the adaptations within "work-like civil society activities" that go in line with opportunities produced by basic income (Birnbaum 2012: 63). If basic income is considered acceptable on the basis of self-respect as well as supportive "to the set of capacities and virtues on which a just society depends" on, then it must be coherent with the social structures of participation and contribution (Birnbaum 2012: 63).

In relation to the third proposal, Birnbaum (2012: 63) states that "the ethical objections about self-respect against basic income help to remind us of the importance of attending to the ways in which public expectations help shape the conditions for social recognition." It entails that attitudes through public institutions must be altered correspondingly with mechanisms produced by the potentials of basic income, such as allowing greater participation and equalizing opportunities. It is considered essential for the process of generating and embracing the scope of meaningful choices beyond the wage-based economy. Based on all three arguments, founded upon Rawl's theory of justice which investigates on equity of status and basic autonomy, Birnbaum (2012: 63) find that there is a strong case for basic income.

Overall, Birnbaum (2012) argues that proposing a basic income demands careful considerations of political legitimacy, sustainability, and gender equity. Overall, proposals of basic income that focus on building social insurance and existing welfare benefits are much more likely to succeed than suggestions involving radical replacement ideas. The modest basic income would probably not entirely solve the poverty traps or stigmatization produced with traditional forms of social assistance but it could, according to Birnbaum (2012), be a major step in the right

direction. To introduce a permanent and full basic income is considered radical and very costly by many, and would most likely produce political and economic challenges, as well as unexpected difficulties within the policy area. Bearing in mind these considerations, it is not difficult to understand why the majority of basic income advocates tend to suggest, for an initial period, to create a partial or mildly conditional form of basic income transfers. Partial basic income can replace a broad range of means-tested benefits or even tax exemptions – integrating these "into one individualized and universal scheme" (Birnbaum 2012: 201, Painter and Thoung 2015).

Regarding the long-term implications of basic income, the central question seems to revolve around whether it should be a radical alternative for the welfare state or just a part of its existing structure (Birnbaum 2012: 198). Some people would argue that basic income would replace a broad scope of present arrangements, thus reflecting a restructuring more than replacing. Those that believe in a more "replacing" alternative to basic income view the transfers as an approach to shifting many welfare services to voluntary associations. The suggestion would imply that some individuals could receive "well-funded" basic income in exchange for offering to be volunteers or "providing for their welfare at home" (Birnbaum 2012: 199). However, more modest suggestions and ideas have revolved around establishing a powerful foundation using basic income as a compliment or tool to adjusting the current arrangements, or contracts that are closely linked with social democratic tradition. It would entail moving beyond the present state thus renewing it. Politically, a basic income would demand to abandon some present arrangements but this does not necessarily imply adverse outcomes. A basic income would replace recipients of pension, student support, unemployment benefits, disability benefits. Birnbaum (2012) argues that same applies for wage subsidies or supports to agriculture, regional development, and cultural areas. Therefore, basic income is seen as an alternate solution for securing labor market for all people. As other scholars have argued, basic income can give initiative for some people to start their own business as well as protect the income of people in vulnerable positions, such as students or people experiencing low demand of their services (Birnbaum 2012).

When speculating and thinking of possible economic implications, one could assume that a basic income could increase consumption as everyone, even those previously belonging to the excluded group of poor, could consume products and participate in the market system. However, it seems easy to agree that implementing it to restructure the welfare state would probably more successful, perhaps mainly because society would find it more acceptable. At

the present, many people usually get confused about the concept of basic income and find it difficult to grasp. However, basic income can be introduced as a gradual change, very modest at its primary stage but with potentials to evolve stronger. Today, it's far more difficult to understand why there is growing attention for basic income, but considering the discussions above regarding changes within labor markets and demographic structure, it may be easier to grasp as the current system is not believed to be able to cope with these pressures.

Jordan (2013) emphasizes sharing, co-operation, and democracy when discussing basic income, as he believes that this can correct some imbalances found in liberal theory. According to Jordan (2013), the case for a basic income thrives on two elements. The first is this: as basic income would address poverty traps, it would allow access to those previously excluded from the "market system of fairness by reward for effort, and hence to savings, property and other private goods" (Jordan 2013: 70). Secondly, introducing universal basic income to all citizens reflects a mechanism that includes all for the common good. Nonetheless, one must understand that justice will not be produced in the absence of strong, and above all, equal policy commitments to collective resources that ensures sharing thus a good quality of national and local life (Jordan 2013). Many have argued for basic income by stressing the principles of justice, and how it can be morally justified, Jordan (2013) however, has focused on finding ethical principles that correspond with our social conditions in Western Europe. Thus, Jordan (2013: 70) argues that basic income is a policy measure that together with others, have the highest ability to "allow the implementation of those principles." Jordan (2013) concludes that basic income is both inevitable as well as desirable, as it assigns people an equal distribution of resources and increases their independence.

Although much of the arguments above sound promising, one must acknowledge the raising concerns in terms of introducing universal basic income. Many believe that basic income will not eliminate poverty rates but increase it. For instance, Greenstein (2017) argues that it is troubling, as advocates on the right hopes that basic income will replace the present welfare state. In other words, the financing of this proposal would entail removing all programs that was established to support people with low incomes. Greenstein (2017) asks us to reflect over this notion, and what it really entails. Income would get redistributed upward, thus increasing both poverty and inequality. While advocates on the right argue that large organizational savings would be generated by removing present welfare programs, Greenstein (2017) states that this is not accurate as the biggest means-tested programs only cost 1 to 9 percent of program resources in the US. Greenstein (2012) believes that for basic income to eliminate poverty, it

would have to be a sufficient amount which enables peoples to be above the poverty line without removing important welfare programs. Additionally, it is argued that basic income would have to include citizens that are unemployed and have a record of low earning which no universal program actually does in the US. Greenstein (2017) acknowledges that universal basic income could become a real opportunity, just not in terms of how the world looks today. But looking forward a few years when all baby-boomers are retired, then it will become a different matter (Greenstein 2017).

With regards to the demographic shift, there has been a strong emphasis on intergenerational ties as "the caring economy will expand" (Painter and Thoung 2015: 5). By allowing basic income, people gain more incentive to take care of their closed ones without having to explain their choices to the state. Intergenerational solidarity can be of great value in numerous aspects of society. It is not only believed to strengthen social cohesion but allows "transmission of experience and multiple skills, facilitating socialization of children", and it could be the key to a more healthy society in the future where people of all ages shares knowledge and resources (Cruz Saco and Zelenev 2007: 212). It is obvious that the demographic shift calls for moral responsibility and strong social cohesion. Elderly are not a burden, so we should not keep having a narrow vision of opportunities. Better longevity should be celebrated and not depicted as a problem. Although we cannot be certain of the demographical prognosis, we must prepare a system that is sustainable and strong enough to support the new conditions. As Bloom et al. (2010) states, developing new policies for this challenge will not be easy as these policies must be designed in a way that satisfies the needs of the elderly as well as being functional with the economic conditions (Bloom et al. 2010: 607-608). Due to this, "humility is required" when creating the new policies and decisions. However, we should not be afraid of the demographic shift and as Bloom et al. (2010: 610) put it:

"Although drawing lessons from the past may not be possible for an aging future, we can take comfort in the fact that some societies have coped well with large-scale population growth in the past century. The world economy has had the flexibility to absorb and in general benefit from dramatic increases in population numbers. If today's policy-makers take prompt action to prepare for the effects of ageing, the next major shift is likely to cause much less hardship than many anticipate" (Bloom et al. 2010: 610).

As a society, we should also take comfort in our ability to continuously adapt, develop and evolve through the best means possible. We are determined to achieve the most optimal results

regardless of what we do. For many years, modernity has been applied and used theoretically for understanding and investigating social and cultural formations, but still, we have no clear answers on what it entails to be "modern." Instead, it has been diffused by "overlapping and controversial notions about the imperatives of change and progress, of rationality and purposeful action, of universal norms and the promise of a better life." (Misa et al. 2004: 5). But perhaps we already know partially what it means, as being "modern" entails having the driving force that aims at continuously developing for the better. Technology has simply become a tool that has made modernity possibly, "shaping and propelling it forward" (Misa et al. 2004:33). As technology is a social construct and product of modernity, there is no doubt that societies will continue to use innovations for establishing a stronger and sustainable society. As previously emphasized, our best hope is to race with the technological development and not against it. However, we are witnessing another consequence of modernity. People are faced with more insecurities and forced to take individual responsibility with a limited amount of resources and support. According to Beck (1992), in order for modernity to evolve, actors must distance themselves from the structural limitations which allows them to actively design the modernization process. Maybe this is something which universal basic income could allow. As Beck (1992) argues, risks and hazards effects can come to affect future generations if something does not change. The ways we decide to address the demographic shift will have tremendous impact for future generations. Difficult periods with increasing pressures on the welfare state, and even more so on the developing countries, indicates that people in society must strive to establish cohesion and strong commitments with our members of society as well as the state.

6. Concluding Remarks

While it is stressed that the demographic shift will challenge our current systems and societies, there is a general understanding that advanced nations obtain the necessary capacity to address it adequately. However, the key is to prepare for it and not letting chance decide the outcome. Shifting our attention away from this development might entail losing precious time that can cost us the perpetual balance and social cohesion we continuously strive to maintain. Aside from emphasizing the necessity of introducing a new social contract, this thesis finds that it should be characterized by intergenerational ties and solidarity due to its positive effects on society.

Although the field of research disagrees on the ramifications of technological innovations and unemployment, the majority are certain that nature of work will change. Alternations in the

labor market will require investment, cooperation, and sustainable structure to ensure that the working environments are enjoyable and comfortable for people of all ages. Today's nations are struggling with unemployment rates, which stresses the need to prepare for job-sharing and work flexibility so that everyone — young and old- can participate in the labor market. In case there are limited employment opportunities for all eligible people, it is important to encourage other forms of activities that makes people stay creative and engaged in society. These activities could include voloneering or elderly care.

While previous studies offer a broad spectrum of opinions, many seem far too limited on recognizing prospects and context that can come to affect our societies. Today, technologies interact profoundly with society and culture, and it is continuously embedded in our way of living. This analysis find that this relationship should be examined more extensively, as it will be necessary for establishing a successful management. If we remain far too limited on recognizing certain potentials, we might end up creating solutions which cannot be implemented to fit the societal conditions.

Due to this, the discussion on universal basic income has proven to be of value as it argued to be an alternative to ensure that everyone has access to their fundamental needs – in case the system becomes limited on providing these. Rather restructuring the welfare state than replacing it, universal basic income could potentially promote more family care and entrepreneurship. Universal Basic Income, although probably quite modest in its initial stage, could be the last piece of the puzzle to our changing society. However, to discover its true potential, more research and experiments on a larger scale needs to be conducted.

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