Mahmut Zeki Akarsu

ORCID: 0000-0002-8140-4124

University of Wrocław

Danny Assad

ORCID: 0000-0003-4700-3471

University of Wrocław

Kacper Kurek

ORCID: 0000-0002-3464-9786

University of Wrocław

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# The Pension Fund System in Turkey and Sweden

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**Abstract:** Pension Funds are handy systems in every country because the life quality of older adults should be maintained in the right conditions. Retirees who have worked for years deserve to have a good quality of life during their retirement. Every country has its unique pension scheme and pension fund that taxes current workers in order to be able to pay retired people's salaries. However, pension schemes are not perfect anywhere in the world. Some countries have a better system than others. That is why two countries (Turkey and Sweden) will be compared with each other in terms of their respective pension schemes. Firstly, each country's pension scheme will be examined individually, and then they will be compared based on their positive and negative sides. This research paper aims to find an excellent example of a pension scheme or the best combination between countries.

# Systemy emerytalne Turcji i Szwecji

**Abstrakt:** Bardzo ważnym zagadnieniem dotyczącym funkcjonowania każdego kraju jest jego system emerytalny. To od niego zależy bowiem utrzymanie jakości egzystencji osób starszych na odpowiednim poziomie. Ludzie, którzy przez wiele lat pracowali, zasługują na to, aby na emeryturze

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prowadzić godne życie. Każdy kraj ma własny system emerytalny oraz fundusz, z którego są wypłacane emerytury, jednakże żaden z występujących na świecie systemów emerytalnych nie jest doskonały. Dlatego też w przedmiotowym artykule zostaną porównane dwa z nich — szwedzki i turecki. System emerytalny każdego z tych krajów zostanie poddany analizie, a następnie zostaną one porównane z uwzględnieniem ich słabych oraz silnych stron. Dodatkowym celem artykułu będzie znalezienie dobrego przykładu systemu emerytalnego lub stworzenie możliwie najlepszej kombinacji spośród rzeczywiście funkcjonujących systemów.

#### Introduction

Under-saving for retirement is a common phenomenon; most people do not limit their consumption during their working years, not even to enjoy a higher and guaranteed lifetime income during retirement. Before their working life, people invest time in school and some special education to find an excellent job. After finding a job, they would like to enjoy the moment and buy goods they had dreamed about before starting to work.

After people come up in the world; in other words, an increase in wealth, they may not leave their consumption habit quickly. Conspicuous consumption is one of the issues of why people cannot save money for their retirement. Therefore, in most cases, government taxes current workers to fund the pension systems, which pay for recent retirees, who were already taxed before, and when the current workers retire, the younger generation will pay for their pension. Namely, it is a cycle that every generation funds the older generation's retirement. It is a single issue in the pension scheme. The number of young population has been decreasing sharply, contrary to the older population.

This article mostly focuses on the working population, which directly influences the pension scheme system. The working population in Turkey and Sweden will be analyzed, and in the comparison section, the pension scheme system of Sweden and Turkey will be compared to each other.

The pension matrix is a model that contains different types of systems that pension models can be categorized into some subcategories. In the first category, a pension scheme can either be public or private. The public pension system includes social security and similar schemes where the public institutions (for instance, central government, municipalities, or social security institutions) administers pension benefits. The private pension system is a pension plan where an institution, other than the general government, administers pension benefits.

In the next category, a pension scheme can be voluntary or mandatory. A voluntary pension system is where workers can determine whether to engage in a pension program provided at their workplace. An employer's contribution can provide an opportunity to participate in such a program because only workers who want to participate receive the employer's contribution. Whereas in a mandatory pension system, employees must participate in a pension plan at their workplace.

The following category of a pension scheme can be pay-as-you-go (PAYG) or a funded pension system. A pay-as-you-go pension system is a pension scheme where the retirement pensions are paid from current contributions. A pay-as-yougo pension scheme involves a direct transfer from the working to the retired. A funded pension system, on the other hand, is one that has the financial stability to make current and future benefits payments to pensioners. The plan depends on capital contributions and returns on its investments to achieve stability.

A pension scheme can be individual or group-oriented. This means that in an individual pension system, a registered retirement plan is intended for one person. However, a group pension scheme is a collective pension managed by an employer. The most popular form of group pension is a fixed benefit plan that a business provides to its workers in accordance with the government's compulsory workforce pension enrolment duty — often known as a group personal pension.

Last but not least is the defined benefit or defined-contribution pension system. The defined benefit pension system is a type of pension scheme in which an employer or sponsor offers a prescribed annual compensation contribution, lumpsum or variation thereof, which is predetermined by a calculation based on the employee's salary history, career duration, and age, rather than explicitly relying on actual investment returns. In the defined-contribution pension system, this is primarily funded by the employee. However, often, workers require matching contributions of any level.

#### Turkish Pension Fund

Table 1. The Pension System in the OECD and Turkey in 2017

		Turkey	OECD
Average Worker Earning	TRY	36,806	129,219
	USD	10,438	36,622
Public Pension Spending	% of GDP	8.1	8.2
	At birth	76.1	80.9
	At age 65	17.2	19.7
Population over age 65	% of working- age population	13.4	27.9

Source: http://dx.doi.org/10.1787/888933636358 (accessed: 20.03.2020).

The Pension Fund scheme in Turkey is now mandatory for every worker and has three pension fund corporations. Until 2006, Pension Funds were autonomous social security institutions. After 2006, these three (listed below) independent institutions were emerged into one institution to manage efficiently;

- SGK, for private and public sector workers (blue-collar workers),
- Emekli Sandigi, for civil servants (white-collar workers),
- Bag-Kur, for self-employed workers and farmers.

All three pension systems use the defined benefit system, and pensioners know how much money they will have annually. Besides, they get rises every year by at least the inflation rate (the government decides every year).<sup>2</sup>

The ministry of finance manages the SGK and Emekli Sandigi, department of labor and social security, for workers who work for government companies and private conglomerates. So, the government and conglomerates pay for their pensions, taxes, and health insurance.<sup>3</sup> Also, Pension systems, Emekli Sandigi and SGK, fund-raise and promise the workers a set payout when they retire.<sup>4</sup>

These two systems, Emekli Sandigi and SGK, are a mandatory individual public system constituted by the government by transferring money from government officers and labor's salaries. The Turkish government takes tax monthly at a rate of 20% from minimum wage workers and 35% from others (blue and white color workers); therefore, these two systems are based on the "pay-as-you-go" and income substitute pension system.<sup>5</sup>

Bag-Kur is an individual voluntary pension system. Generally, business owners and farmers take out a pension insurance policy for themselves, and that pension policy is not mandatory, as well as being no down payment limit monthly. They will receive pension during the retirement period, and in order to receive the Bag-Kur pension fund, business owners and farmers must have paid into it for at least 30 years (360 months).<sup>6</sup>

## System and inadequacies

Every worker in Turkey has a pension right and system given by the constitution of Turkey. Employers of laborers and officers (legal entities, company owners, or the government) should pay the workers' health insurance and retirement insur-

<sup>&</sup>lt;sup>1</sup> G. İsverenoglu, Z. Hatunoglu, "Swot Analysis Of the Private Pension System Under The Effect Of Macro Dynamics In Turkey", *Muhasebe and Finansman Dergisi* 2012, no. 56, pp. 155–174, here: pp. 156, 157.

<sup>&</sup>lt;sup>2</sup> M. Altay, "Private Pension System in Turkey", *Adnan Menderes University Journal* 5, 2013, pp. 1–120, here: pp. 11, 13, 14, 16.

<sup>&</sup>lt;sup>3</sup> In Turkey, health insurance is paid by employers, based on the workers' salaries.

<sup>&</sup>lt;sup>4</sup> OECD, Turkey: Pension system in 2016, Istanbul 2017, pp. 31–33.

<sup>&</sup>lt;sup>5</sup> OECD, Pensions at a Glance, Paris 2017, pp. 27, 28.

<sup>&</sup>lt;sup>6</sup> O. Erdem, *Actuarial Modelling of Public Pension Schemes in Turkey*, Ministry of Development of Republic of Turkey, Ankara 2017, pp. 5, 8, 9, 34.

ance to the stated organizations, such as SGK or Emekli Sandigi, depending on their number the laborers' salaries.<sup>7</sup>

Namely, the payment of health insurance and retirement insurance (including income tax) changes, depending on the salary. This law causes some other issues, in that company owners are not willing to pay more for health and retirement insurance, even if they accept an increase in workers' salaries.<sup>8</sup> After that, to trick the government, employers forge a document to show that workers are paid the minimum wage, though the workers earn higher than the minimum wage. These circumstances affect the workers' retirement period because the pension fund corporations render payment by predicating on the workers' salaries that they earned during their working life. In short, workers might have small pensions during their retirement. In this case, there are two losers; the first is the government that loses due to tax losses. It does not collect enough in taxes; the second is the workers who do not receive enough retirement salaries, which they deserve. 9 That is why Turkey's pension fund scheme has many systematic and regulative problems that should be fixed to make employees' lives more comfortable and enhance the quality of retirees' lives.

## A new system

A new mandatory individual system entered into force in 2016 with a 20% state subsidy<sup>10</sup> to help people have a higher quality of life. This pension scheme uses a defined contribution plan. People who are under 45 and have worked for less than 20 years must pay for their pension insurance. The plan was that workers, both blue and white collar, would pay at least 100 Turkish Liras every month for 20 years to have savings for their retirement. So, the government would fund the current retirees' wages with the incoming capital from current workers. That is why this scheme is a funded pension system.<sup>11</sup>

However, the new system (pension plan system) was valid until 2018. Nevertheless, it collapsed in the second half of 2018 due to the devastating currency crisis.

<sup>&</sup>lt;sup>7</sup> For instance, if a worker earns monthly 2100 TL (minimum wage), his/her employer pays about 1000 TL for her/his health insurance (approximately 200 TL) and retirement insurance, including income tax (roughly 800 TL).

<sup>8</sup> S.S. Oran, "Analysis of the Turkish Pension System in the context of Financialisation: The Individual Pension System", Mülkiye Dergisi 41, 2017, no. 3, pp. 49–81, here: pp. 69, 70.

<sup>&</sup>lt;sup>9</sup> Ibidem, p. 74.

<sup>&</sup>lt;sup>10</sup> That means that the government gives 20% of financial support to individuals for every Turkish Lira (on the understanding on a promise to the government to keep the account active for 20 years) who have an individual pension account paid monthly in order. For instance, if a person pays 100 Turkish Liras every month for the next 20 years, then at the end of the payment, the government adds 20% on it; namely, the person reaches 57,600 TL (the sum of the 20-year payments + 20% financial aid given by the government).

<sup>11</sup> S. Serdar, New legislation in Turkey requiring automatic enrolment in the voluntary funded individual pension scheme, European Commission, Ankara 2017, pp. 1, 2.

The Turkish Lira tumbled sharply by 30%, and as a consequence of the crisis, the Turkish Central Bank increased the annual interest rate to 25%, so people withdrew their total savings from the new system in order to deposit into their bank accounts to take advantage of the high-interest rate. For this reason, the individual pension insurance system (the new system) became history.<sup>12</sup>

#### Survivor benefit

In death, the pension fund is transferred to one's spouse (husband or wife), who should not be an insured employee, or to children who are under 25 years old. In this case, there is a different application for unmarried daughters who can have the pension benefit, which comes from the parents, for a lifetime if they do not have any insured jobs. For example, if the breadwinner (in this case, let us say "family man") working for the government or a company loses his life, his social security is taken over by his wife (non-worker) on behalf of his family. After the mother of the family loses her life, the pension can be taken over by a daughter under the age of 25 years old, unmarried, and a non-worker. Namely, one pension might be taken over by three generations, which is approximately 70 years. Consequently, this situation imposes an extra financial burden on the state budget. However, due to political concerns such as the next election, the ruling party could not change the law.<sup>13</sup>

### Turkish pension matrix

The Turkish pension matrix, which was mentioned in the sections "Turkish Pension Fund" and "new system", is briefly summarized below. SGK, Emekli Sandigi, and Bagkur are individual public pensions, and they use defined benefit and pay-as-you-go systems. SGK and Emekli Sandigi are mandatory pensions, while Bag-Kur is a voluntary pension system. The new pension system is a mandatory, individual pension system, and it uses a defined contribution and funded pension system.

### Summary of the Turkish Pension Fund

The generous government support to the pension scheme currently operates without any problems now because the population demography structure is mostly composed of young people. About 62% of people are between the ages of 15 and 45, and 7.79% of people are 65 years and over. Thanks to young generations who still work and pay taxes to the pension scheme, retired people can have a pay-as-you-go system that provides high salaries and many different social benefits. However, the Turkish pension scheme needs some reforms to be prepared for

<sup>&</sup>lt;sup>12</sup> KPMG, Individual Pension Systems in Turkey and in the World, Istanbul 2018.

<sup>&</sup>lt;sup>13</sup> Ministry of Labor and Social Security, Social Security Office of Retirement, *Social Security Programs Throughout the World: Europe 2018 (Turkey)*, Washington 2018.

the future, as population demography will change dramatically and those current young people will constitute the elders in the long term, and many people will want high retirement salaries as currently retired people have. That is why the public pension system should be promoted with an individual pension system, creating a source of income for future retired people.<sup>14</sup>

#### Swedish Pension Funds

There is a pension fund scheme called "Allmänna Pensions fonder", also known as AP-fonderna (Public Pension Funds) in Sweden. It has been in use since the year 1960. However, there have been frequent changes in the fund's system character, numbers, and alignment. There are six categories of pension funds, and the five most essential AP-funds are the "first (API), second (AP2), third (AP3), fourth (AP4), and sixth (AP6)". They are assets that constitute the so-called "buffer funds", and each manages the funded capital in the "income pension system". The "seventh" AP-fund (AP7) manages the capital funds in the "premium pension system". The goal for the first to the sixth AP-funds is to maximize the profit to the pension scheme. These funds have authorization to invest their capitals in a way to attain high profits over a long period with low risk. The meaning of "buffer funds" is that the government puts money aside to help ease the unfavorable short-term effects in the economy. The capital is transferred here in surplus. Subsequently, the capital is taken in the case of a deficit in pension payments. However, this is the case with the "buffer funds", except the "sixth" AP-fund. The income pension is a distribution system where the year's paid pension contributions from the employed are used to pay pensions to the same year's pensioners. Each month, the employer pays 18.5 percent of the employee's pensionable income into the income pension (16 percent) and the premium pension (2.5percent).<sup>15</sup>

#### The five buffer funds

The "first" AP-fund (AP1) is an integral part of the Swedish pension scheme since it is the first AP fund to be introduced when the national pension fund system was introduced in 1960. However, the structure of the "first" AP-fund has frequently been changing since 2001. It manages approximately 333 billion Swedish Krona (31.1 billion Euro), and it corresponds to about 3-4 percent of the total assets. Although the other AP-funds account for roughly an equal proportion, they can be said to value all future payments to the system. The "first" AP-fund places its assets mostly in equities, bonds, currencies, and alternative investments worldwide. The "first" AP-fund assets are divided into four different sub-funds

<sup>14</sup> T.U. Kuzubas et al., "Performance evaluation of the Turkish Pension Fund System", Journal of Capital Market Studies 3, 2019, no. 1, pp. 18-33, here: pp. 18, 19, 22.

<sup>&</sup>lt;sup>15</sup> J. Greenhaus, G. Callanan, *Career Development*, Thousand Oaks, CA 2006, pp. 247–251.

for the reason to spread the risks in asset management. There are some differences between the sub-funds regarding how the investments are allocated to different asset classes since each board of funds makes its own decision in allocation within the AP-Fund Act framework. <sup>16</sup>

When it comes to the "second" AP-fund (AP2), it is considered as one of Northern Europe's most significant pension funds. It manages just over 346 billion Swedish Krona (32.4 billion Euro) in virtually all asset classes worldwide. This fund is secure and stable asset management with an urgent assignment from the Riksdag (the Swedish parliament), to maximize the long-term return on Swedish national pension capital. This should be done with a low risk of outgoing pensions. They target the return level of 4 percent. This fund is a "committed manager" who invests worldwide and has contributed to the returns that exceed the long-term expectations of the fund through its consistent and responsible management. Together with the other "buffer funds", the "second" AP-fund has the task of contributing to as high and even pension level as possible, even in times of a massive retirement wave or economic downturns. The fund must be long-term in its actions since the "buffer capital" will be available for a long time to come. The "second" AP-fund investment is mostly focused on real-estate businesses and having real-estate properties.<sup>17</sup>

The "third" AP-fund (AP3) is more or less the same as the "second" one. The AP-fund is also investing globally and in various asset classes. The capital in the fund amounts to 345 billion Swedish Krona (32.3 billion Euro). Their mission is the same as the rest of the "buffer funds", meaning that they manage the buffer capital to get the highest possible benefit to the state income pension scheme. Through the excellent development of fund capital, since the start of 2001, they contributed to the system's long-term stability. Together with the other AP-funds, the buffer capital currently accounts for just over 15 percent of the pension scheme's assets and is used when annual payments to the system fall below disbursements. This means that the amount of capital in the pension scheme will be high in times of massive pension retirements, and projections show significant deficits until 2040. These places demand on good long-term returns, as buffer capital will be needed for a long time to come. This is the ultimate responsibility for the "third" AP-fund and the other AP-funds as well, to strengthen and secure pension payments for the Swedish people and subsequent generations. A remarkable amount of the "third" AP-funds capital goes to the Stockholm School of Economics, which contributes financially to the university and its research and development work. In other words, the "third" AP-fund focuses a lot on investment in research and development. 18

<sup>&</sup>lt;sup>16</sup> C. Shore, S. Wright, D. Pero, *Policy Worlds*, New York 2011, p. 200.

<sup>&</sup>lt;sup>17</sup> H. Straßheim, S. Beck, *Handbook of Behavioural Change and Public Policy*, Cheltenham 2019, pp. 200, 201.

<sup>&</sup>lt;sup>18</sup> J. Midgley, M. Tracy, M. Livermore, *Social Policy*, London, 2000, pp. 63, 64, 70 and 83.

When it comes to the "fourth" AP-fund (AP4), it is also very similar to the "second & third" AP-funds. They are also managing the pension scheme's buffer capital worldwide with the capital of 343 billion Swedish Krona (32.1 billion Euro). Likewise, they have a long-term perspective, a responsibility as "owners", and a commitment to create a sustainable opportunity for high returns at low cost. However, unlike the other "buffer funds", their investment is focused much on environmental aspects. They believe that a sustainability perspective is a requirement for long-term management success. Therefore, the "fourth" AP-fund integrates with a focus on climate and environment in the investment processes. In this way, they are achieving a well-balanced risk. But they also seize business opportunities in diversifying their investments and achieving a high return over time. The "fourth" AP-fund was the earliest fund to reduce the climate risk in the equity portfolio and environment.<sup>19</sup>

The "sixth" AP-fund (AP6) is, as well, a "buffer fund" in the income pension scheme, but it is a closed fund, meaning that nothing is transferred to or from the pension scheme. Unlike the other AP-funds, the "sixth" is entirely focused on investments in unlisted assets, which differs from investing in listed companies that are traded on the stock exchange. The corresponding process for unlisted companies takes a considerably long time, placing a high demand on the expertise of an experienced company. The investors' role requires a long-time horizon experience, consensus with other owners, and access to capital to manage the necessary investments to develop the company. The way that the "sixth" AP-fund invests in unlisted companies could be described in two ways: directly buying shares in an unlisted company and indirectly by investing in a fund, which in turn invests in unlisted companies. In the first example, the "sixth" AP-fund has direct ownership in the company and the second indirect ownership. Since this is a closed fund, the "sixth" AP-fund carries its costs, and profits from investments are continuously reinvested. This fund was introduced in 1996, and they are currently managing the capital of 24 billion Swedish Krona (2.2 billion Euro)<sup>20</sup>.

#### Seventh AP-fund

The "seventh" AP-fund (AP7), which is the last category of pension funds, is the state management alternative, and as previously mentioned, it manages the capital funds in the premium pension scheme. The premium pension scheme is a minor part of the retirement pension in Sweden. The 2.5 percent of the salary allocated to the premium pension each month becomes a form of pension credit for everyone. The premium pension is based on the number of gathered pension credits that

<sup>&</sup>lt;sup>19</sup> K. Baker, J. Nofsinger, Behavioral Finance: Investors, Corporations, and Markets, New Jersey 2010.

<sup>&</sup>lt;sup>20</sup> G.L. Clark, A.H. Munnell, M. Orszag, The Oxford Handbook of Pensions and Retirement Income, Oxford 2006, pp. 640, 641.

depends on the number of contributions made, and the returns of the investments are made on the fund assets. Interestingly enough, the individual savers can choose how they want their premium pension credits to be invested. In other words, this system offers the individuals to personally influence their own investment of pension credits by choosing the investment funds or placement that they want and wish to invest their money in. However, if the individual saver does not want to choose their own funds, their money is automatically invested in the "seventh" AP-fund. However, there is no certainty that the pension will be more excellent if the individual saver selects their fund on their own. The premium pension scheme was introduced in 2000.<sup>21</sup>

# Survivor benefit

Inthecaseofdeath, there is a protection that can be applied, which is called "survivor benefits". The protection means the payment of the pension salary will go to a selected person that has been living to get her with the individual saver. Usually, it is the spouse, registered partner, orco habitant. The payment will be lower since it must last longer, till the day the partner dies. The Swedish pension scheme includes automatic balancing or the so-called "broms" (brake). Each year, it is determined whether the pension scheme has a surplus or is in financial imbalance. The "broms" means that the pension scheme automatically responds to how many children are born, immigration and emigration, when and how much the inhabitants work, and the compensation for this work, when the individuals retire and how long they live during their retirement. If the scheme is in financial imbalance, pension funds are not calculated with the growth in average income, and outgoing pensions are lowered. 22

The culture of saving in funds is widespread and unique in Sweden. There is no other country in the world where the people are saving in funds to the same extent as they do in Sweden. Almost 98 percent of Swedish people (at the age of 18–74) currently save in funds. By excluding the premium pension savings, the number of Swedish people owning shares in a fund would be 76 percent. Currently, 78 percent of women in Sweden and 73 percent of men in Sweden own shares in a fund, and 67 percent of all children in Sweden have fund savings.<sup>23</sup>

### Swedish pension matrix

The first AP-fund, as well as all the other AP-funds, are public pension systems. AP's name is a short word for AllmännaPensionsfonder, which means Public

<sup>&</sup>lt;sup>21</sup> A. Paulsson, *Pension Information in Sweden*, Stockholm 2015.

<sup>&</sup>lt;sup>22</sup> G. Schyman, *Sveriges Riksdag slogotyp, tillbaka till startsidan*, 2002, https://www.riks-dagen.se/sv/dokument-lagar/dokument/motion/buffertfonden-bromsen-ochaterstallandet-i\_GQ02Fi288 (accessed: 13.11.2019).

<sup>&</sup>lt;sup>23</sup> Ministry of Health and Social Affairs, *The Swedish old-age pension system: How the income pension, premium pension and guarantee pension work*, Stockholm 2016.

Pension Funds translated into English. The first AP-fund is a voluntary fund, and so are the second, third, fourth, and sixth AP-funds. This means that people can voluntarily choose if they want their pension fund to be placed in these AP-funds. However, the AP7's funds are also voluntary options within the premium pension scheme. Although However, the AP7 is the default option and the state alternative to the private investment funds for all those pension savers within the premium pension scheme who does not choose any other fund. Today more than four million Swedes have their premium pension placed in the AP7 fund portfolio. Their work is to responsibly manage these funds and provide a return that is at least as good as the average of the private investment funds in the system. The Swedish public pension system is largely a pay-as-you-go system, which means that the people who work pay the pension for retired people. This, together with the buffer capital, allows the system to withstand current changes in the population pyramid. This makes the Swedish system cost-effective and sustainable. The distribution system means that today's working part of the population pays today's pensioners' pensions. In other words, they are distributed from one generation to another. Therefore, most of the AP-funds are a pay-as-you-go pension system.

As mentioned earlier, the first five AP-funds (AP1-4 and AP6) are typically referred to as buffer capital and they account for approximately 10-15 percent of the pension scheme. Unlike the other AP funds, AP6 is entirely focused on investing in unlisted assets, which is different from investing in listed companies that are traded on the stock market. AP6 is a closed fund, which means that there are no inflows or outflows to the pension scheme. AP6 covers its own costs and the profits from its investments are continually reinvested.

The Swedish public pension system, with a flexible retirement age, includes everyone who works or receives other taxable benefits, such as unemployment benefits and parental benefits. In addition, those who have had little or no working income receive basic protection in the form of a state pension guarantee. The fact that a large proportion of the salary is allocated to the public pension also means that the Swedish model performs well in comparison with other countries. The 18.5 percent, which is deducted each year from the salary or other benefits to the public pension, is a high proportion compared to, for example, the Netherlands and England. Most Nordic and Anglo-Saxon countries do not want the state to have such a great influence and instead advocate that responsibility be placed on the individual and that the state should only contribute pensions up to the minimum. Additional pension income is arranged via occupational pension or individual pension benefits. The Swedish pension scheme is designed to be self-balancing. If economic development in Sweden is worse than expected everyone shares the pain, as a young person it means fewer pension rights and for the older generation a lower pension.

The first, second, third and fourth AP-funds are fully funded with individual accounts for the individual. However, AP6 & AP7 is based as a group account. Some of the retirement pension contributions must be entered into individual premium pension accounts. This part is called the premium pension system. The premium pension system is designed as a unit-linked insurance scheme, where asset management takes place in mutual funds managed by independent fund managers. When the premium pension entitlement is first established, the pension saver can choose a fund. The funds that they can choose are between AP1, AP2, AP3 and AP4. As mentioned earlier, for those who make no choice of fund, so-called non-voters, a seventh AP-fund has been set up within the AP Funds. According to current rules, the board of AP7 shall manage the funds available to non-voters.

All the AP-funds are a defined contribution system. This means that the AP-funds indicate that each individual fund is used to buy assets. The growth of the assets in the individual's account are financed for his or her consumption during retirement over an income. By having a defined contribution, it allows the Swedish pension scheme to be more flexible, especially regarding some concerns such as the threat of unsustainable cost increases in the coming years, issues related with inter- and intra-generational fairness, and a steady long-standing concern about the effect of tax and benefit rules on the labor force exit of older workers. The goal is to create a system with a confidentially managed individual investment account, where the worker makes their own investment decisions within a broad range of alternatives.

All the AP-funds are income substitutes, which means that the pension depends on how much money is put into the pension fund. A higher amount of money represents a higher pension. A part of the taxes that are taken from the workers' salaries goes to the AP7. This means that if a given person has a high salary, then the person is most likely to receive a high pension. However, if an individual with a low salary is willing to place more money in his or her pension fund, then they have the full right to do so and it will also affect their pension by increasing it. The alternative they have is between AP1, AP2, AP3, AP4 and AP7. However, there is also a subsistence level system in the AP7. This is usually used for individuals who had little or no working income, or individuals who received other taxable benefit, such as unemployment benefit, disability benefits or an early retirement pension. These individuals receive the considerably basic protection in the form of a state pension guarantee.

The Swedish national pension scheme works much like ordinary savings at the bank. The comparison applies to both earnings-related parts of the system, the inkomst pension (*income pension*) and the premium pension. Each year pension contributions are paid by the insured, their employers and in certain cases the central government. Contributions are recorded as pension credit in the "bankbook"

of the insured — i.e., the respective accounts for the inkomst pension and the premium pension. Savings accumulate over the years with the inflow of contributions and at the applicable rate of "interest". The statement sent out each year in the Orange Envelope enables the insured to watch their own inkomst pension and premium pension accounts develop from year to year. When the insured individual retires, the stream of payments is reversed, and the inkomst pension and premium pension are disbursed for the remaining lifetime of the insured.

According to Barr, <sup>24</sup> Sweden has an exceptionally good pension scheme. Nevertheless, some marginal adjustments are needed. The system is in good condition, so radical reform in the system would cause significant mistakes. The changes that might be needed are the changes of social circumstances and values, such as registered partners or same-sex marriages. There are a lot of lessons that other Anglo-Saxon and Nordic countries can learn from Sweden. The Swedish pension scheme has a good initial design, and they could take a long-run view in the form of a pension group. The Swedish pension scheme also has the capacity for thoughtful consideration of reform and a system in such a good shape that only small adjustments are needed.

The Swedish pension scheme's strengths are that the scheme involves all interested parties and is run consensually. Thus, there is a long-run support for the strategy, and the system marks well in terms of adequacy for most people. The Swedish people's coverage towards the pension scheme is high, mainly because the guaranteed pension is based on residence and because the employment rates are high for both women and men. The sustainable tendency is built into the scheme's strategic design; thus, it provides the capability to cope with the turbulence caused by the economic crisis.

However, Barr mentions that the Swedish pension scheme has its weaknesses. Since the Swedish pension design places all adjustment on the benefit side, sustainability takes priority over adequacy, apart from poverty reduction through the guaranteed pension. Another weakness of the Swedish pension scheme is the adaptation to rising life expectancy relies heavily on rational behavior. If people continue to retire at roughly the same age as at present, the benefits over time will be less adequate. The design of the scheme does not take enough account of changes in the family structure. Occupational pensions can hinder workers' mobility with more flexible pensions.<sup>25</sup>

# Summary of the Swedish Pension Fund

The Swedish pension scheme is remarkably diverse. A Swedish person can choose between several options on where their wants their pension to be located. They can choose whether they want their pension savings to increase by allowing

<sup>&</sup>lt;sup>24</sup> N. Barr, *The Pension System in Sweden*, Stockholm 2013, p. 44.

the AP-fonderna to invest their pension in various funds, or they can hold on to the pension savings as it is with no loss nor gain as mentioned in the seventh AP-fund. Giving this opportunity to the Swedish people will not only increase the safety of their pension, but it will also help various institutions in Sweden to use the money in order to invest in projects that will benefit both the state of Sweden and the Swedish people. Examples are the investments in research and development, environment, infrastructure and so on. As previously mentioned, savings in funds is quite common in Sweden and because of this, it allows the Swedish people to increase their wealth and their pension savings for the future.

In comparison, we can see that every country has its own pension scheme, institutions, and rules; even the retirement age is different in every country, as in Sweden, it is 67; 65 in Turkey. However, retirement age does not make any sense without life expectancy because if life expectancy is 55 in a country where retirement age is 65, then people are not motivated to work more and to have pensions. That is why retirement age and life expectancy should be parallel with each other.

## Comparison

Table 2. Life expectancy between the two countries

	Turkey	Sweden
Men	75	81
Women	81	84
Average	78.1	82.5

Source: https://data.oecd.org/healthstat/lifeexpectancy-at-birth.htm (accessed: 20.03.2020).

As can be seen in Figure 4, life expectancy differs from country to country due to differing living standards. Turkish people who retire at age 65 live on average for 78.1 years; in other words, they have 13 years once they are retired. Swedish people retire at the age of 69 and have a life expectancy of 82.5; namely, people have approximately 13 years to enjoy their retirement. Namely, pensioners in Sweden and Turkey have an average of 13 years of retirement benefits.<sup>26</sup>

The government mostly funds Turkish and Swedish pension companies in order to offer people a more comfortable standard of living during retirement. In the Turkish and Swedish pension scheme system, people do not lean towards the idea that they will save money for retirement because human nature is to spend every single penny coin they earn. Therefore, pension funds being funded by the government on behalf of workers are much better for employees and personnel like Swedish, Turkish, and many other European governments.

<sup>&</sup>lt;sup>26</sup> OECD, Pensions at a Glance..., pp. 25, 26.

Women's participation in the economy is 66.1% in Sweden, 29% in Turkey, which means that while Sweden benefits from the women labor force, Turkey does not benefit. This causes some problems in Turkey. As shown in Table 3, women's life expectancy is higher than men's in Turkey. If women do not participate in economy, mostly men work and take care of families. When men lose their lives, the government puts the women on a salary because they are related to their husbands and do not have any other income. Therefore, the pension scheme system spends more capital than it should normally do. However, the system in Sweden works better because in Sweden, women also actively participate in economy, so that the pension scheme system reacquires from both men and women. Therefore, the system might not spend more capital than it should.<sup>27</sup>

To sum up, as has been seen in the previous paragraphs, two countries, Sweden and Turkey, have unique pension schemes with pros and cons. Pension schemes in these countries still need to be improved to supply their pensioners with more comfortable lives. The pension scheme of these countries is that young working generations still defray the cost of the pension scheme by giving some percentage of their wages as an income tax. This is a severe issue for the future of pension funds due to a decreasing number of young populations. In recent years, every country's population has been getting older, and the fertility rate has been decreasing sharply. That means that the young population must work more than ever to cover the pensions of the elderly.

# The biggest problem of the pension system

One of the problems determined in this research paper is that pension schemes are local and national.<sup>28</sup> This global world that hosts many international conglomerates does not have a robust international pension scheme or agreement to make an employee's life easier. Many people who work in many different countries during their working lives have pension problems during their golden age.<sup>29</sup>

#### Conclusion

In these two countries, most people retire at similar ages; workers have many social security rights with merits and demerits aspects; in case of death, families of employees are under the guarantee of the pension scheme. Namely, workers of developing and developed countries hold better pension standards, which is still developed by a labor union and policymakers. Pension funds and schemes are still improved in favor of both employees and employers, bringing into balance.

<sup>&</sup>lt;sup>27</sup> J. Greenhaus, G. Callanan, op. cit., pp. 312, 478, 565.

<sup>&</sup>lt;sup>28</sup> S. Collard, N. Moore, Review of international pension reform, Department for Work and Pensions, Bristol 2010, p. 30.

<sup>&</sup>lt;sup>29</sup> G.L. Clark, A.H. Munnell, M. Orszag, op. cit., p. 300.

Should developing and developed countries set up an international pension scheme, then in the global economy, blue and white color workers could move quickly to other places.

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