EXPLORING AGENCY PROBLEMS IN THE TURKISH PRIVATE PENSION SYSTEM: PENSION SECTOR EMPLOYEE PERSPECTIVES

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DECLARATION OF ORIGINALITY

I, Remziye Gül Aslan, certify that

- I am the sole author of this thesis and that I have fully acknowledged and documented in my thesis all sources of ideas and words, including digital resources, which have been produced or published by another person or institution;
- this thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;
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ABSTRACT

Exploring Agency Problems in the Turkish Private Pension System:

Pension Sector Employee Perspectives

The existing literature on Turkey's private pension system highlights the limited financial literacy of its participants, which may lead to agency problems. Through a qualitative exploratory study on pension sector employee perspectives, this thesis examines agency problems in the Turkish private pension system in the context of its governance structure. The study relies on semi-structured in-depth interviews with 16 employees from eight pension companies, three portfolio management companies, and one of the regulatory and supervisory organizations. The analysis relies on a thematic content analysis of the interview data. The thesis finds that pension sector employees believe agency problems are prevalent in the private pension system, particularly in the relationship between pension companies and participants. It identifies four major agency problems: the provision of insufficient information to prospective participants, offering pension funds that mismatch participants' risk preferences, the provision of insufficient information to participants about the performance of their funds, and making investments to their group companies at the expense of participants' interests. The thesis suggests that these problems may negatively affect the rate of returns for participants and the efficiency of the system. It concludes that the state's regulatory role of the in the private pension system is more critical in the Turkish case than in countries where secondary pillars are partially monitored through industrial relations in the absence of collective voice mechanism and contract-based governance structure.

ÖZET

Türkiye'nin Özel Emeklilik Sistemindeki Vekâlet Sorunlarının İncelenmesi: Emeklilik Sektörü Çalışanlarının Görüşleri

Türkiye'nin özel emeklilik sistemi üzerine yapılan çalışmalar katılımcıların finansal okuryazarlık eksikliğini vurgulamaktadırlar. Bu bilgi eksikliği sistemde vekâlet sorunlarına yol açabilmektedir. Bu tez, emeklilik sektörü çalışanlarının bakış açıları üzerine niteliksel bir araştırma yaparak, Türkiye'nin özel emeklilik sistemindeki vekâlet sorunlarını sistemin yönetim yapısını da göz önünde bulundurarak incelemektedir. Bu tez toplamda sekiz emeklilik şirketi, üç portföy yönetim şirketi ve denetleyici ve gözetleyici kurumların birinden on altı çalışanla yapılan yarı yapılandırılmış görüşmelerin tematik içerik analizine dayanan nitel bir çalışmadır. Bu tezin bulguları görüşme verilerinin tematik içerik analizine dayanmaktadır. Bu tezin sonuçlarına göre sektör çalışanları vekâlet sorunlarının Türkiye'nin bireysel emeklilik sisteminde, özellikle katılımcılar ve emeklilik şirketleri arasındaki ilişkide, sıklıkla meydana geldiğini düşünmektedirler. Bu tez dört temel vekâlet sorunu tanımlar: aday katılımcılara yetersiz bilgi sağlanması, katılımcıların risk tercihleriyle uyumsuz emeklilik fonları sunulması, katılımcılara fonlarının performansı hakkında yetersiz bilgi sağlanması, katılımcıların çıkarları pahasına grup şirketlerine yatırım yapılması. Bu tez, sistemdeki vekâlet sorunların katılımcılar için getiri oranını ve sistemin verimliliğini olumsuz etkileyebileceğini göstermektedir. Bu tez, bireysel emeklilik sisteminde devletin üstlendiği düzenleyici rolün Türkiye örneğinde, kolektif sese sahip olma mekanizması ve sözleşme temelli yönetim yapılarının mevcut olmaması sebebiyle ikinci basamakların çalışma ilişkileri aracılığıyla kısmen kontrol edilebildiği diğer ülkelere kıyasla daha kritik olduğu sonucuna ulaşmıştır.

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CHAPTER 1

INTRODUCTION

Providing social protection against the income losses for people who are not able to work is one of the main areas of social policy. Pensions are a type of social protection schemes that are designed particularly for those who become excluded from the labor market due to age restrictions. Pensions as social protection schemes were provided publicly from government budgets around the world until the 1970s (Hujo, 2014). Yet factors like an aging population, rising informality, changing family patterns, and increasing domestic and international migration put pressure on the government's ability to provide pensions from government budgets and led to the establishment of private pension pillars in many countries since the 1970s. Although the establishment of private pension pillars is considered as privatization of the pension systems, pensions have been provided by public-private mix systems rather than fully private systems in many countries since the 1980s (Orenstein, 2011). Additionally, the existing economic, political and institutional structures of countries led to path-dependencies in the establishment of private pillars and thus pensions are provided by public-private mix systems with different characteristics in many countries nowadays (Ebbinghaus, 2015; Ebbinghaus & Wiß, 2011).

The social policy literature on private pension systems focuses mostly on the differences between private vs. public pension systems and the consequences of welfare retrenchment caused by an increasing number of public-private mix pension systems in many countries for their populations. These studies mainly manifested the state as an actor, considering only its role as a provider. States have also lost their roles as the only provider of pensions in many countries as a result of the establishment of public-private mix pension systems. However, states are not only providers but also regulators and supervisors of both public and private pension systems. Although the states are no longer the sole providers of pension schemes in many countries, their role as regulators and supervisors are still intact (Ebbinghaus & Wiß, 2011). Moreover, many states have also strengthened their regulatory and supervisory authorities for increasing their governance capacity over private pension systems over the last decade, particularly after the financial crisis of 2008 (Antolin & Stewart, 2009). For this reason, the extent of the controlling power of the state over private pension systems needs to be examined by considering its sufficiency for protecting participants from vulnerabilities of private pension systems. One of the main areas where participants need protection is agency relations in a system in which participants are the principals.

Agency relations are relationships in which the right to manage a subject is given to a person different from its owner (Jensen & Meckling, 1976). Agency relations have become prevalent as a result of an increasing need for specialized knowledge for management in many sectors, including the pension sector. Control of agency problems is necessary for protecting the interests of stakeholders. Agency problems preclude Pareto optimality and efficiency because in an agency problem one of the parties i.e. the principals make themselves better by making the other party—the principal—worse off (Eisenhardt, 1989). Moreover, stakeholders in pension funds are the participants, so agency problems in the pension sector will lead to financial costs and will also affect the economic wellbeing of the elderly.

The literature on the agency relations in pension systems developed mostly after the crisis although there are studies that predate the financial crisis of 2008. In one of the preliminary studies, Ambachtsheer, Capelle, and Scheibelhut (1997) conducted surveys with pension executives in the UK, Australia, Canada, New Zealand, and the USA and found that the most persistent problems in the private pension systems were agency problems. Moreover, they underlined that such problems were prevalent because of the poor pension governance structures and led to low pension fund performances. Ambachtsheer made a follow-up study with Capelle and Lum (2006) and this follow-up study with pension sector employees presented that uncompetitive compensation structures for fund managers made them more prone to misbehavior and thus led to agency problems. Non-competitive compensation policies were also mentioned as a cause of conflict of interest between participants and pension fund managers in the last follow-up study made by Ambachtsheer and McLaughlin (2015). In this study, Ambachtsheer and McLaughin argued that there is an improvement in the governance qualities of pension funds in Australia, New Zealand, Canada, the United States, and some European countries since the last study (2006). This improvement might be a result of the increasing effectiveness of the regulation and supervision of pension funds after the financial crisis.

The governance structure of a pension fund is an important determinant of the extent of agency problems because the structure defines the set of possible acts of actors in the systems and their governance capabilities. The governance structure of a pension fund represents the actors that are responsible for the fulfillment of certain tasks in the system: the 'initiators' who makes pension arrangement, the 'overseers' who makes the rules of governance and controls them, 'sponsors' who makes payments, and 'beneficiaries' who gets benefits in a pension system. The same actor may be responsible for multiple tasks in a pension fund (Ebbinghaus & Wiß, 2011). So, the governance structure of a pension fund compromises the operations and parties that are involved in the establishment and management of pension funds so as the relations between these parties (Stewart & Yermo, 2008).

Pension funds are classified according to their governance structures by Stewart & Yermo (2008) as institutional type, contract-based type, and trust-based type. First, the pension funds that belong to the institutional type have pension funds which are independent entities with their legal personalities and capacities and their internal governing boards. The institutional type of trust funds appears in countries like Denmark, Norway, and Germany. Second, in the funds with contract-based (i.e. contractual) governance, the assets are segregated, and such funds do not have their internal governing bodies but rather managed by external entities such as banks and pension fund management companies. This type is found in Turkey, Mexico, and Portugal. Third, pension funds with trust-based governance structure share some characteristics with the both abovementioned types. Trust-based schemes are similar to the institutional type of pension funds because they are managed by independent legal entities. And, similar to contract-based pension funds, trust-based pension funds are also established by a party, who are mostly the providers, and then the provider appoints a trustee company for the management of the pension funds. Although trustees legally own the legal title to manage the pension funds, they cannot be a part of the pension fund. The trust-based type pension funds are mostly common in Anglo-Saxon countries. A detailed overview of the governance structures of pension funds will be provided in the literature review chapter. For now, it is important to keep in mind that private pension systems may have multiple pension schemes so as multiple pension funds, which may have different governance structures. The governance structure of both Individual Pension System and Auto-

Enrollment System in Turkey falls into the contract-based type according to the OECD's categorization (Stewart & Yermo, 2008).

Supervisory and regulatory state organizations play a role that needs to be underlined in the control of agency problems in private pension systems although they may not be the only "overseers" of pension fund governance structures. States are not only responsible for designing "ideal" institutional structures for their private pension systems as lawmakers but also responsible for ensuring good governance of these structures by monitoring and regulating according to Clark and Urwin (2008). So, states become one of the most important actors in private pension systems due to their supervisory and regulatory roles by which they can limit agency problems to some extent and protect participants (Ebbinghaus & Wiß, 2011; OECD, 2009). Therefore, regulative and supervisory authorities may have a significant effect on the prevalence of agency problems in a pension system. Although the importance of supervisory and regulative agencies is realized particularly after the financial crisis of 2008 as a result of the severe losses in the pension funds of many countries, Turkey established its private pension system just the 2001 financial crisis in which many banks and life insurance companies went bankrupt. As a result, the state authorities understood the importance of strict regulation and the key role of supervisory authorities in ensuring good governance in Turkey. Therefore, the private pension system of Turkey was established legal bindings earlier than its counterparts and had a supervision agency since its establishment date.

The participants' level of knowledge is also expected to affect the prevalence of the agency problems in the pension system due to higher levels of information asymmetry between participants and their agents. The participants' level of knowledge on the Turkish private pension system is very low (man as the level of information asymmetry between information agents (i.e. pension sector) employees and principals (i.e. participants) is high. This high level of information asymmetry between participants and their agents increases the probability of higher occurrences of agency problems in the private pension system of Turkey. Although these studies do not examine the agency problems within a solid theoretical framework, their results demonstrate some prevalent agency problems in the private pension system of Turkey together with the consequences of these agency problems. These studies show that there is a relationship between enrollment rates, early withdrawal rates, and the level of financial knowledge. According to Özer and Gürel (2014), people with higher financial literacy are likely to participate in the Individual Pension System more and the duration of their participation is expected to be longer. Yıldız, Karan, and Salantur (2017) found a negative correlation between withdrawal probability and financial literacy. Moreover, the differences between the financial performances of pension funds are non-negligible, which implies that differences between the financial returns of the participants should not be overlooked. There is a difference between the performances of different fund types and pension companies, which demonstrates the importance of the careful selection of both the pension company and pension firm to which a person will join. Then, choosing a pension fund with high performance, which requires financial literacy, becomes crucial for dealing with the financial risks on old age savings.

Pension companies and pension intermediaries are responsible for determining and offering the most suitable funds to their customers in the private pension system of Turkey. Despite this legal obligation imposed upon companies and intermediaries, the literature on the Turkish private pension sector has not yet explored if the practice in the sector is in line with its legal obligations. In other words, the previous literature falls short of explaining the behaviors, motivations, and perceptions of private pension sector employees in situating them within the governance structure of pensions in Turkey. To address this gap in the literature, the thesis examines the pension sector employees' perspectives on the agency problems in the private pension system of Turkey in the context of its governance structure.

Understanding the perceptions of the employees towards supervisory and regulatory public authorities are also important for understanding the efficiency of these authorities in controlling the agency problems in the system. In line with this purpose, Antolin and Stewart (2009) researched the pension fund supervisors rather than pension fund managers to explore the agency problems in pension funds. Understanding the positions of supervisors is particularly important because the probability of having a conflict of interest with participants is lower for them compared to managers. Antolin and Stewart (2009) asserted that transparency and information sharing were the issues pension fund supervisors were most worried about. The most common solution offered by their respondents for dealing with such issues is increasing the supervisory capacities of the governance.

Against this background, this thesis explores the following research question: What are the most prevalent agency problems in the private pension system of Turkey from the perspectives of pension sector employees? In addition to this main question, this thesis also works on the following questions: What are the probable risks agency problems impose on the participants in the system? How does the governance structure of the private pension system of Turkey affect the agency relations in the system? How does the regulatory and supervisory state organizations affect the extent of agency problems in the system?

1.1 Research methodology

The thesis relies on qualitative exploratory research that includes thirteen semi-structured interviews with sixteen people for exploring the perspectives of pension sector employees toward the agency problems in the private pension system of Turkey. Two were group interviews. I prefer to conduct interviews only with the sector employees within the scope of this research for two reasons. First of all, the previous research on the asymmetric information and agency problems in the private pension system of Turkey mostly investigated the issues from the viewpoint of participants and I want to contribute to the literature by exploring such issues from another point of view. Secondly, pension sector employees are the agents in their relationships with their participants and therefore their capacity for understanding the prevalence of the agency relations is expected to be higher than the participants. The sample includes a variety of companies such as international pension companies, domestic pension companies, state-owned pension companies, and companies that conforms to Islamic investment rules.

The majority of interviews (eleven) was conducted in Istanbul, where the headquarters of all pension companies and portfolio management companies are located. Ten interviews were carried out with the employees of pension companies and agencies they work with. Interviews with these groups form the core of the research as they have unmediated access to the participants. Portfolio management companies are responsible for the management of pension funds in Turkey and thus their misbehaviors may also lead to agency problems in the system. Therefore, I conducted interviews with three employees from portfolio management companies. I also interviewed with three officials from one of the regulatory and supervisory organizations to understand their perceptions towards the effect of the supervisory and regulatory role of the state on agency problems in the system. Finally, two interviews were carried out with the sales managers of the branches of pension companies in Malatya to check if they perceive any impact of working in a branch on their relations with their participants and their relations with the portfolio management companies. The research relies on purposive sampling (Guest, Bunce & Johnson, 2006) as the thesis aims to present perspectives of a hard-to-reach certain occupational group, which is pension sector employees. I reached out to nine of my respondents by making specified searches on career websites. I used my contacts and some other websites for connecting with seven of my respondents from pension companies and portfolio management companies.

Interview data were analyzed using thematic (or semantic) analysis method. This method is suitable with the aim of this research, which is to understand the perspectives of the pension sector employees towards the agency problems in the private pension system of Turkey and how its extent effected by the governance structure. Analyzing the explicit meaning of the responses is sufficient to fulfill the aims of this research. Respondents were invited to answer the questions provided in Appendix A (see Appendix B for Turkish version), which mostly functioned as tools for discovering the earlier experiences of the pension sector employees together with their perceptions about the functioning of the sector. All respondents were provided with consent forms which informed them about the scope of the research and ensures the protection of their data (see Appendices C and D).

Coding the data set by dividing them into themes is considered as a foundational method in qualitative data analysis (Braun & Clarke, 2006). A deductive coding strategy was used.

I preferred to employ Autenne's framework (2017) on the vulnerabilities of pension fund governance structures as themes because the items that are mentioned as vulnerabilities of pension fund governance structures by Autenne (2017) are the conditions that prepare the ground for agency problems. These themes are as follows:

(1) Operations and transactions decided by governing bodies which that puts beneficiaries under risk,

(2) Conflicting interests of fund managers that make them act on behalf of any other interests than the interests of their beneficiaries while managing funds,

(3) Having a governing body that consists of directors of sponsoring companies who may have a conflict of interest with participants,

(4) Having a governing body whose members who do not have adequate qualifications for dealing with the complexity of the pension system,

(5) Insufficient information disclosure to participants,

(6) Having external bodies that are responsible for fund management such as portfolio management firms, banks or custodians,

(7) Making arrangements that may make fund managers inclined to excessive risk-taking such as implementing a reward system.

Using deductive thematic analysis in coding the data is suitable for this research due to the specificity of the research questions (Braun & Clarke, 2006). Moreover, this analysis method allowed me to link the findings of this thesis to the broader literature on pension system governance.

The interviews were conducted between Aug 2019 and Apr 2020. Four of the interviews were carried out via phone or video calls due to the 2020 Coronavirus pandemic. The full list of respondents together with their departments, workplaces, and location of their workplaces are provided in Table 1.

Table 1. The Profiles of the Respondents in the Field Study

	Departments	Workplace	City
R1	Internal Audition	Pension Company Headquarters	Istanbul
R2	Sales	Pension Company Headquarters	Istanbul
R3	Strategy	Pension Company Headquarters	Istanbul
R4	Fund Management	Pension Company Headquarters	Istanbul
R5	Fund Management	Pension Company Headquarters	Istanbul
R6	Fund Management	Pension Company Headquarters	Istanbul
R7	Fund Management	Pension Company Headquarters	Istanbul
R8	Sales agent	Agency of a Pension Company	Istanbul
R9	Sales	Branch of a Pension Company	Malatya
R10	Sales	Branch of a Pension Company	Malatya
R11	Pension Fund Management	Portfolio Management Company	Istanbul
R12	Fund Management	Portfolio Management Company	Istanbul
R13	Risk & Performance and Internal Audition	Portfolio Management Company	Istanbul
R14	Strategy	Regulatory & Supervisory Organization	Istanbul
R15	Reporting	Regulatory & Supervisory Organization	Istanbul
R16	Research and Survey	Regulatory & Supervisory Organization	Istanbul

The study was approved by The Ethics Committee for Master and Ph.D. Theses in Social Sciences and Humanities at Boğaziçi University in July 2019. The ethics committee approval form is available in Appendix E.

1.2 Outline of the chapters

The second chapter provides an overview of the literature on agency relations in the private pension systems within the context of their governance structures and the presence of regulatory and supervisory state organizations. It firstly presents the literature on agency problems to clarify the conceptual tools used throughout the thesis. Then, it presents a general picture of the agency problems in private pension systems. This chapter continues by providing an overview of the OECD's pension fund governance framework to place the pension fund governance structure of Turkey within this framework. Then, this chapter provides a literature review on the relationship between agency problems in the private pension systems and pension fund governance structures. It concludes by presenting a literature overview on the effect of regulatory and supervisory state organizations on the agency problems in the private pension systems.

Chapter 3 offers the legal and institutional background of the Turkish case. The chapter is organized under two broader sections. First, it starts with presenting a review on the governance structure of the private pension system of Turkey together with its historical background and the role of state authorities in the private pension system of Turkey. A detailed review of the legislation that defines the governance structure of the private pension system together with the elements of the system is presented in this chapter. Second, it provides a review of the earlier studies on the asymmetric information in the private pension system in Turkey.

Chapter 4 presents the findings of this research. The probable agency problems that may occur in the private pension system of Turkey are examined under seven themes, which are borrowed from Autenne's earlier work (2017). I used the data I collected through my interviews for presenting the perspectives of the respondents on these probable agency problems in the system. The theme on the insufficient information disclosure is divided into two subthemes as insufficient information disclosure on the pension plans and insufficient information disclosure on pension funds. The chapter concludes by highlighting the general findings.

The thesis concludes with Chapter 5 in which the findings of this research are discussed with the existing literature.

CHAPTER 2

LITERATURE REVIEW

Old age protection schemes in which the state was the only provider became prevalent in the 20th century in most industrialized countries particularly after the Second World War although the initial examples of such schemes were seen in the late 19th century (Hujo, 2014). Public pension schemes were also established in the early 20th century in Latin American countries but their coverage was much more limited than their European counterparts even in the 1970s (Mesa-Lago, 1978).

The aging population, rising informality, changing family patterns, and increasing domestic and international migration together with changes in the economic structures are deemed responsible for governments' inability to provide adequate income protection in the old age. Increasing pressure on public pensions became the basis of the campaigns of pro-privatization lobbies, especially in Europe. Due to the deficits in the public pension systems and financial instability, pensions are provided by a public-private mix since 1980 in many countries, which is a trend that is considered as welfare retrenchment (Orenstein, 2011). Privatization reforms in the pension systems are expected to enhance efficiency, increase savings in the overall economy and contribute to the development of the domestic financial markets echoing the increased importance of financial markets since the 1980s (World Bank, 2010).

Pension schemes can be separated into two categories as defined benefit pension schemes and defined contribution pension schemes. In defined benefit (DB) schemes, the amount that will be paid as pensions to individuals is predetermined and has no direct relationship with the amounts contributed by the individual. DB schemes are common among the occupational and public pension systems of many countries. The benefit a participant will get is pre-defined by the law in these systems and thus the changes in the economic structure affect the burden on the government budgets rather than that of the retired people or retiree-to-be's. In defined contribution (DC) schemes, participants only have control over the amount of money they contribute as premiums and their benefits depend on financial market returns of their contributions. Therefore, participants are expected to choose which fund to invest their money wisely. However, participants generally do not have the necessary financial knowledge for fund selection and this fact imposes a risk for their future benefits. As a result, defined contribution schemes sometimes face poor performance and unsuitable investments (Stewart & Yermo 2008). This informational problem is aggravated when the defined contribution plans are individual and there is no oversight over the system for protecting the interests of participants (Stewart & Yermo 2008).

States' capability of protecting the old-age savings of their citizens is more limited in private pillars than in public pillars. Indexation rules, which are common in DB plans and mixed schemes, protect beneficiaries from inflation-related risks that do not exist in DC schemes and as a result, both financial market risks and inflation risks are shouldered by participants in such schemes (Ebbinghaus & Wiß, 2011). 26 OECD and 25 non-OECD countries have defined benefit plans in their pension systems by 2018. Some Latin American and Central and Eastern European countries even did not have any occupational DB plans at all. The relative size of occupational DB (defined benefit) plans was smaller than occupational DC (defined contribution) plans in most countries except countries like Canada where 60% of all pension assets were still in DB plans and Switzerland where 90% all pension assets were in DB plans (OECD, 2019). The increase of the shares of private DC schemes in pension systems demonstrates the increase in the risks shouldered by the participants in pension systems.

The establishment of private pension schemes led to different kinds of relations in these newly founded pillars. A pension system and relationships formed within a system can be analyzed by naming the actors in these relationships with their roles. Governance structures of pension systems can be analyzed by considering who fulfill the main tasks in the system: there must be ‘initiators’ (who make pension arrangements), ‘overseers’ (who make the rules of governance and controls them), ‘sponsors’ (who make payments), and ‘beneficiaries’ (who get benefits) in a pension system. The same actor may perform more than one of the tasks mentioned above such as the roles of employers in a firm arranged pension plan where the employer becomes the initiator, the overseer, and the sponsor at the same time (Ebbinghaus & Wiß, 2011). Agency theory can be utilized for explaining the vertical relationships in a pension system like the relationship between a participant and pension fund manager in an individual pension scheme or the relationship between an employee and an employer in an employer-sponsored pension scheme (Shapiro 2005; Tonks, 2006). Participants can use their right to exit from the system or change their fund and fund manager in the case of agency problem as economic theory suggests. Yet, most participants are “the individuals and organizations acting on behalf of those whom the asymmetries of information, expertise, access, or power are so great that they cannot pretend to control their agents” as Shapiro (2005, p.277) underlines and they cannot control if they are abused. Therefore, state intervention for protecting the interests and rights of participants is crucial for dealing with agency problems such as trust which is also underlined by Ebbinghaus and Wiß (2011). Other mechanisms such as supervisory agencies, whistle-blowing procedures, and dissemination of best practice models and information rights are proposed by the EU, OECD, and other international organizations for minimizing the agency costs in private pension systems (Ebbinghaus & Wiß, 2011). Therefore, analyzing the agency problems in a private pension system within the context of its governance structure is important for understanding the vulnerabilities of pension fund governance structures that prepare the ground for agency problems. This research examines how the governance structure of the private pension system of Turkey affects the extent of agency problems in the system.

This chapter focuses on the agency problems in the private pension systems and the effect of the governance structure of a pension fund on agency problems. The chapter starts by providing a brief literature review on the multi-pillar pension systems. Then, it continues with a summary of the literature on agency theory as a background that will be used for explaining agency problems in private pension systems. Then, the chapter offers an overview of the literature on the diverse types of pension fund governance structures. This section also provides an insight into the agency problems in private pension pillars around the world and then concludes by explaining how states as overseers undertake regulation and supervision in private pension systems.

2.1 An overview of multipillar pension systems

Pension systems, by definition, were established for providing old age protection. In private pension schemes, participants become their pension providers through personal savings. And, the state has lost its role as the only provider of the old age income security as a result of the increasing number of private pillars in pension systems. And, the risks related to the costs of old-age income protection transferred to the parties other than the state, particularly to the participants. Rather than complete privatization of pension systems, public-private pension mix systems became prevalent among many countries and these public-private pension mix systems differ greatly among countries in a path-dependent way i.e. economic, institutional and political differences between countries lead to the differences in structures of their public-private pension mix (Ebbinghaus & Wiß, 2011).

Public-private pension mix systems are multi-pillar systems which may consist of four different types of pillars. The first pillar (unfunded contributory pension system) is a system in which benefits are financed through the contributions of current workers and their employers. Earlier contribution to the system is an eligibility criterion for being a pensioner. These systems are also known as Pay-As-You-Go (PAYG) systems. The second pillar (funded systems) differs from the first pillar by depositing contributions of each worker in individual accounts rather than a collective pool and giving back what they saved through their active years compounded with the investment returns of their savings. One of these two pillars is compulsory in most countries with multi-pillar pension systems. Differently, the third pillar is a system based on voluntary contributions for higher pensions in old age. Lastly, zero pillar is referred to as noncontributory benefits given at a flat rate, which are financed from the general tax revenues, and there is no link between benefit eligibility and labor market participation unlike all the other pillars described above (Ebbinghaus, 2011; World Bank 2010). There are some unconventional quasi schemes in some countries such as Finland where there is a quasi-public scheme that is mandatory for everyone is partly administrated by social partners (Ebbinghaus & Wiß, 2011).

Pension schemes in these pension pillars can be separated into three categories according to the parties involved as collective schemes, single-employer schemes, and individual schemes. Collective schemes are those in which employers and labor unions come together for designing the structure of the pension scheme and defining the terms of a pension plan. The level of information is more symmetric in collective schemes than single-employer schemes and individual schemes (Ebbinghaus & Wiß, 2011. Collective schemes pool financial risks and provide better portfolio management with lower costs than single-employer and individual schemes (Trampusch, 2009). Collective schemes can be arranged as sector-wide and nationwide schemes and such arrangements allow workers to change their workplaces without any losses from their future retirement benefits. Collective schemes in France and Finland are quasi-public ones that are managed by social partners. The second pillars of the Netherlands, Denmark, and Switzerland are also collective schemes. The popularity of collective schemes is increasing in countries with Bismarckian tradition such as Germany, Belgium, and Italy recently (Ebbinghaus & Wiß, 2011). An employer-sponsored (single-employer) pension scheme is another type of scheme which has higher management costs to the employer than a collective scheme, but employers can use such plans for binding their employees by providing them fridges in their retirement plans. Such employer-sponsored plans are common in Britain, the Netherlands, Switzerland, Belgium, and Germany (Ebbinghaus & Wiß, 2011). The third type is individual pension schemes which make individuals responsible for saving for their old age. Individuals also become an actor of a plan-making process in such schemes by deciding the company they work with, the composition of their portfolios, the longevity of their plans, etc. States are important actors in such schemes. States set the terms of voluntary individual schemes legally as regulators and set tax codes and rules for subsidies for encouraging people to save for their old age in their plans. Voluntary personal plans are most common in the third pillars of Denmark, Sweden, Germany, and Britain (Ebbinghaus & Wiß, 2011).

The differences between the pension schemes of countries can be explained by the varieties of capitalism approach (Hall & Soskice, 2003). Liberal Market Economies in varieties of capitalism approach expected to rely more on pension fund capitalism while Coordinated Market Economies expected to depend on patient capital such as book reserves either reserved by firms or the state itself. Although some insights can be obtained from this approach, there are not only path-dependencies but also path-departures in pension regimes of many countries such as mature multi-pillar pension systems of the Netherlands and Switzerland (Ebbinghaus, 2006, 2009). The Netherlands only has a basic level public pension which accompanied by sector-wide or larger firm-level occupational supplementary private pensions. There are mandatory occupational and voluntary personal private pension pillars in Switzerland in addition to its public system (Ebbinghaus, 2011). Belgium has a multi-pillar system that is still mostly Bismarckian: there are basic minimum level public pensions and also earnings-related occupational public pensions in Belgium, but the voluntarist and cooperative supplementary pillars are underdeveloped in there (de Deken, 2011). France is another country that has underdeveloped secondary and third pillars as a result of the strong occupational fragmentation of its public pillar which caused the popularization of voluntary secondary and third pillar pensions only among high-income people (Naczyk & Palier, 2011). Italian government tried to use developing a multi-pillar pension system as a way for decreasing the financial burden of the Bismarckian public pension system on the government by praising supplementary private pensions but failed and their private pillars are also underdeveloped yet. Germany shows the most path-departing movement from its Bismarckian tradition among all. The government made participation in voluntary pension plans a necessity for status maintenance in the 2000s. Occupational supplementary private pensions have also become compulsory through collective agreements that are administrated by the collective pension institutions (Ebbinghaus, Gronwald & Wiß, 2011).

The positive returns of pension assets that are sustained since the financial crisis of 2008 have become a new basis of pro-privatization lobbies around the world until another downturn in 2018. Yet, 26 of 31 OECD countries had negative real pension asset returns and 14 of 29 non-OECD countries also had negative real pension asset returns in 2018. The average real return rate of pension plans was -3.2% in the OECD countries and below 0 also in non-OECD countries in 2018. In 2018, most countries had their worst financial performance since the 2008 financial crisis. Poor financial performance of pension assets in 2018 is linked with the downturn on equity markets in 2018 which led to the highest declines in stock prices since the 2008 financial crisis. The rates of real investment returns of pension assets were as low as -11.6% in Hong Kong, -11.1 % Poland, and -9.4% in Turkey which were the countries with lowest real return rates in 2018. Yet, these lowest rates are not only caused by low nominal investment returns of pension assets in these countries. Inflation was the main driver of the losses in pension assets in Turkey. The nominal rate of investment return was 9.0% in Turkey where the inflation rate was 20.3% in 2018. Inflation also caused negative real returns in Chile where the nominal rate of return was 1.5% and the inflation rate was 2.6%. Both downturns demonstrate the vulnerability of pension funds against the changes in the financial markets and thus underlines the importance of designing the institutional structure for minimizing the negative outcomes of economic instabilities on the returns of pension funds.

Other than 2018, the nominal rate of growth was positive for the significant number of pension assets for all OECD countries over the last decade except Hungary according to OECD (2019). 45 of 51 countries that covered in OECD's pension market overview (2019) witnessed positive real returns for at last five years except 2018. The positive real returns trend for longer periods is important for demonstrating pension markets because of long-term oriented designs of private pension pillars (OECD, 2019). There are countries such as Poland and the Czech Republic that transferred some of their pension assets in their private pillars to their public pillars since 2008 but the rate of nominal growth of private pension assets remained positive even in such countries between 2008 and 2018. The rate of increase is greatest in countries with newly established and relatively small pension markets such as Armenia, Albania, and Malawi (OECD, 2019).

Private pension plans can be also divided into three categories according to their participation methods: participation in a private pillar can be mandatory, voluntary or entrance to the system may be mandatory with free exit option (auto-enrollment). Some countries such as Finland, Norway, and Switzerland have mandatory occupational plans in which employers are obliged to make pension plans for their employers. 17 countries have mandatory occupational pension plans which cover 70% of the total work-age population in these countries according to OECD (2019). The coverage rate among the working-age population is highest in Finland, where it is 93%, and in Iceland, where it is 88% (OECD, 2019).

Some countries such as Denmark, Netherlands, and Sweden have quasi-mandatory plans which are made at industry or branch level collective agreements.

The coverage rate among countries with quasi-mandatory plans is highest in the Netherlands which is 90% of the working-age population (OECD, 2019).

Chili, Colombia, and Mexico are examples of countries with mandatory personal plans in which people are as individuals have to choose and join to personal plans, not as employees. The coverage rate of mandatory individual personal plans is highest in Chili, which equals to 87% for the working-age population. Yet, there is a substantial difference between Chili and other countries with mandatory personal plans. For example, the working-age population coverage rates of mandatory private personal plans are 45% for Colombia, 65% for Mexica, and 33% for Peru. The reason behind the low participation rates might be that people can choose between joining private and public systems in these countries (OECD, 2019).

The United Kingdom, Italy, New Zealand, and Turkey have a rather soft compulsory method for increasing participation rather than making participation mandatory, which is known as the auto-enrolment system. Employers are obliged to make pension plans for their employees in these countries, but employees can opt-out of these private plans without any loss within a certain period. Coverage rates particularly increased in countries with auto-enrollment plans and newly established mandatory schemes. For example, the participation rate increased from 32% to 80% from 2008 to 2018 in New Zealand (OECD, 2019).

The private pension plans of Austria, the Czech Republic, and Portugal are examples of countries with voluntary personal plans that are another type of plan where the choice of participation in a pension system is completely voluntary. Voluntary personal plans have lower participation rates. Only voluntary personal plans of Belgium (51%), the Czech Republic (64%), Germany (57%), Japan (50%), Lithuania (75%), and Poland (66%) succeeded to cover more than half of their work-age populations. The coverage rate in Hungary decreased in the last decade where mandatory plan transformed as a voluntary plan (OECD, 2019).

The low coverage rates keep down the size of pension funds which particularly becomes a problem in countries where participation in a private scheme is mandatory with free exit options. For this aim, actors in the pension sector may act in a way that is not in the best interest of their prospective participants like misinforming or underinforming participants about their plans. The instances in which pension sector employees can use their superior knowledge and control power over operations and transactions in the system can be analyzed by utilizing agency theory which explains the dynamics of relationships where the ownership right of a subject belongs to one of the parties and the control right belongs to the other one.

2.2 Agency theory and agency problems in private pension systems

Agency theory is developed by Jensen and Meckling (1976) for explaining the relationship between the managers and shareholders within the framework on the standard theory of the firm. With the advancements in the capitalist mode of production, competition between the producers increased dramatically since the late 19th century. The practice of transferring the managerial rights to the specialists who are expected to operate on behalf of the owners of firms i.e. shareholders has become common because of this increasing competition. The divorce of ownership from control necessitated a new theory for the understanding of this new setting, which is also known as “the principal-agent theory”. In this scenario, shareholders are “the principals” who have the assets yet lack the necessary knowledge for the best use of that assets, and managers are “the agents” who have control over the assets but have no right over their ownership. In other words, “agency relationship” exists whenever the ownership of a subject belongs to one party, while decision-making power and control over that subject were delegated to the other party by either explicit or an implicit contract by the owner (Jensen & Meckling, 1976). These relationships mostly occur when the party who has the ownership rights, which is known as “the principal”, is incapable of controlling the subject for their best interest due to lack of knowledge and delegates the control over the subject to the more informed party i.e. “the agent”. In an agency relationship, Pareto efficiency can be obtained only if neither the principal nor the agent can make themselves better off without making the other party worse off.

Establishing an agency relationship is beneficial for a principal because an agent is expected to have skills, information, qualifications, knowledge, and experience that are necessary for the best use of the subject. Yet, the informational superiority of “the agent” provides an opportunity for potential conflicts of interest (Bendor, Glazer, & Hammond, 2001). The agents mostly misbehave and make decisions in favor of their own best interest, especially when the interests of both parties, i.e. the principal and the agent, conflict. The misbehavior caused by “the conflict of interest” leads to a “principal-agent problem” in this relationship (Jensen & Meckling, 1976). The theory is established for determining how to organize such relationships ideally which is a complicated task considering the incomplete information and uncertainty embedded in most business settings (Eisanhardt, Kahwajy & Bourgeois, 1997). Jensen and Meckling (1976) also work on the ways of controlling the problems that arise due to agency problems. They claim that decisions of agents can be effectively controlled by not giving control of the decisions to the people who are responsible for the management of decisions. This can be realized by hiring some middle-level managers who are responsible for different tasks and controlled by the top director who is responsible for controlling the decisions made by the middle lever managers i.e. separation of the monitoring and management.

Other scholars enhanced their theory by defining types of the principal-agent problem that occurs in businesses due to incomplete information and uncertainties, which are an adverse selection and moral hazard (Brigham & Gapenski, 1993; Eisenhardt, 1989; Eisenhardt, Kahwajy, & Bourgeois, 1997). Adverse selection is defined as a situation when the principal party has incomplete information to correctly evaluate if a contract made with an agent represents their best interests. Adverse selection precludes “Pareto optimality” because it is possible for one party, the agent, to get better by making the other party, the principal worse off, as argued by Eisenhardt (1989). Moral hazard is defined as a situation when the principal cannot know if their agent who is obliged to act in line with their best interest according to their contract fulfills their obligations. So, the main difference between the adverse selection and moral hazard is that adverse selection occurs before the contract making process while moral hazard occurs after a contract is made (Eisenhardt, 1989; Eiesenhardt et al., 1997). There are ways of taking agency problems under control such as monitoring, ratification, restraining the ability of agents for misbehavior, and restricting the possible actions of agents via legal contracts, etc. However, all these mechanisms bear additional costs on the businesses, which may even exceed the ex-post costs of the principal-agent problem. In other words, the costs of controlling agency problems may be higher from the benefit of controlling them (Eisenhardt et. al, 1997). All the costs incurred as a result of the misbehavior of an agent are defined as agency costs by Brigham and Gapenski (1993). An agency control mechanism should be used only if the cost is less than its benefit. Another mechanism for solving the principal-agent problem was offered by Jensen (1993) which calls for granting some of the subjects they control to the agents or giving them premiums based on the returns of the subjects they managed. By doing this, the principal can solve the conflict of interest with the agent because their interests will converge.

Eliminating asymmetric information from an agency relationship is not possible by definition because when a principal will not establish a relationship with an agent if the principal has all the information an agent has. Therefore, all the measures taking to organize an agency relationship in the most efficient way are aimed at minimizing the negative consequences of asymmetric information, not the asymmetric information itself. Conflict of interest is another problem that is also inescapable in such relationships because the interests of the agents are not related to the value of the subject that they control so the interests of both parties are not tied together (Eisenhardt, 1989).

And there are agency relationships with more than two actors where the principals or the agents may have different roles. Moreover, actors can be both the principal and the agent at the same time in these complicated relationships. For example, in the standard theory of the firm, a middle-level manager is the principal and the agent at the same time (Lambert, 2002). Agency relations in pension systems are generally more complex than the simplest version due to the multiplicity of actors in governance structures of pension systems.

Agency problems are one of the most critical issues in private pension systems. Unlike the firms in the standard theory with stakeholders, pension funds are subjected to less market pressure than the firms in standard theory and thus the agency relations in pension funds have different characteristics. For example, pension funds do not issue any assets but trade the assets of other firms. As a result, pension fund managers face the consequences of their decisions such as the threat of takeover, ad nutum revocation, direct shareholder control of assets, or exit of shareholders less often managers of traditional companies. Thus, mechanisms of a competitive market are less efficient in minimization of agency costs in pension funds in compresence with traditional firms. Therefore, public regulation is necessary for minimizing agency costs and sustaining efficiency (Autenne, 2017).

There are multiple agents (such as fund managers and pension intermediaries) in a private pension scheme, who may potentially act on behalf of their interests instead of the participants. First of all, pension intermediaries may insufficiently inform their prospective participants about the costs related to pension accounts for increasing the number of contracts they made, which mainly determines their premium payments, lead to an adverse selection problem in a pension system. Moreover, the contributions made by participants, employers, or sponsors must be invested in funds that are most suitable for the expectations of the participants in a private pension system ideally. In other words, the interests of the participants must be a priority for all the actors in the system, particularly whenever a conflict of interest occurs. This is particularly important as the decisions of the agents may endanger the financial returns of participants (Baker, Logue & Rader, 2004). For example, offering a fund with higher fund expense rates which does not meet with the financial risk profile of a participant is an example of moral hazard in a pension system. In most of the private pension schemes, multiple agents act as both an agent and a principal in different relationships. These multiple roles of actors in the system may lead to different agency problems in pension systems (Fields & Tırtıroğlu, 1991).

As stated earlier, there are multiple mechanisms for minimizing the extent of agency problems and related costs, but these mechanisms may even bear costs that suppress their benefits (Brigham & Gapenski, 1993). In the standard principal-agent theory, it is expected to not take any measures whenever the costs of taking a measure surpass its benefits. Tracing is one of the mechanisms that can decrease the instances of agency problems, but it contradicts the privacy rights of firms and tracing become complex when funds are mixed (Njuguna, 2010). Decreasing the extent of asymmetric information through information flows is another mechanism for controlling agency problems. However, most participants do not analyze the performance of their accounts even when their pension company provides regular reports on their funds because of their lack of financial knowledge (Njuguna, 2010). Therefore, information flow will be a useful mechanism to tackle agency problems only for countries with high financial literacy. Other mechanisms include auditing, inspecting, supervising, and regulating.

All these mechanisms are designed for restricting the agents' room for maneuver. Government bodies are generally responsible for the implementation of such mechanisms. The role of the state as a regulator in the pension sector may differ from its role in other sectors because private pension systems are established to serve a social purpose, which is securing income protection in the old age. The agency costs incurred in a private pension system may also bear political costs on a government in addition to its financial costs. As a result, it is important to understand the effect of the governance structure of pension funds on agency problems in private pension systems and the role of states as overseers in pension fund governance structures.

2.3 An overview of the literature on pension fund governance

Chohan (2018) defines pension fund governance as “the series of procedures, rules, and mechanisms that help to ensure transparency and accountability in the function and regulation of pension funds, along with a further emphasis on mitigating principal-agent problems and providing security and returns to principals”(p.1). The governance of private individual pension schemes entails the managerial control of pension companies and the legal body that determine how companies are regulated, which includes how these companies are monitored and supervised. The basic intention of pension fund governance is minimizing the problems caused by asymmetric information including conflicts of interest between the agents and principals (Stewart & Yermo 2008). In most private pension schemes, there are actors other than the pension companies, which act as advisor or delegator in the management of pension funds such as advisory boards and market boards assigned by the government. The principles of good governance are summarized by Clark and Urwin (2008) as “organizational coherence, including an institution’s clarity of mission and its capacities; people, including who is involved in the investment process, their skills and responsibilities; and process, including how investment decision- making is managed and implemented (p.2)”.

Autenne (2017) name the main vulnerabilities of pension fund governance structures as; operations and transactions decided by governing bodies which that puts beneficiaries under risk (1), conflicting interests of fund managers that make them act in behalf of any other interests than the interests of their beneficiaries while managing funds (2), having a governing body that consists directors of sponsoring companies who may have a conflict of interest with participants (3), having a governing body whose members who do not have adequate qualifications for dealing with the complexity of pension system (4), insufficient information disclosure to participants (5), having external bodies that are responsible for fund management such as portfolio management firms, banks or custodians (6), making arrangements that may make fund managers inclined to excessive risk-taking such as implementing reward system (7).

Clark (2004) argues that it is important for pension funds to be embedded in institutional structures that facilitate good governance, accountability, and transparency. Otherwise, problems like unsatisfactory financial returns on pension funds, bad investment decisions, loss of reputation and trust, internal and external shocks, and inability to getting prepared for shocks will likely occur in private pension schemes (Chohan & Jacobs, 2017). Therefore, regulations are useful for preventing such negative economic implications for participants. States have a key role in minimizing the set of actions that actors can take and the set of possible agency problems that can arise in private pension systems as lawmakers by designing "ideal" institutional structures for their pension systems (Clark & Urwin, 2008).

A proper governance structure for a pension fund can be established by considering the financial ecosystem of a country with special reference to the depth of financial markets, the level of financial literacy, the level of demand for transparency and the level of existing regulations over financial markets (Chohan, 2018). The financial ecosystem of many countries changed as a result of the 2008 crisis and citizens demanded reforms in pension fund governance structures. The 2007/8 financial crisis evinced that private schemes are not immune to crises. Chile, the most prominent country with its privatization reforms, lost nearly 12% of its GDP accumulated in pension assets between 2007 and 2008 (OECD, 2009). According to OECD, the 2008 financial crisis led to around 20-25 % losses on the financial values of pension savings in the world overall. Yet, the rate of loss differed greatly among countries due to differences in their portfolio compositions and regulative institutions (OECD, 2009). Chohan (2018) claims that the financial crisis of 2008 reshaped attitudes towards reforms on pension fund governance as follows. First, the financial crisis underlined that all financial markets are interdependent and therefore any systemic risk will affect the entire financial system including pension funds. Second, the financial crisis showed that poor governance and lack of accountability enabled fund managers to misbehave, and that caused significant losses for participants. Third, as a result of the financial crisis, doubts about the efficiency of the "free market" theory arose, especially for financial markets. Lastly, the conflict between the short-termism that dominates most of the financial markets and the long-term nature of pension fund management was perceived after the crisis (p.2).

2.3.1 Types of pension fund governance structures

Pension schemes may have internal or external organization structures. Public PAYG schemes and employer commitments financed by book reserves have reserves assigned for financing retirement benefit payments and thus have internal organization structures. In such schemes, the party that provides the scheme is also the party that governs it because the sustainability of such schemes will affect the financial assets of the provider directly. Agency relations and problems caused by them have little or no effect on the future benefits of individuals in such schemes due to their internal organization which decreases the extent of asymmetric information (Ebbinghaus & Wiß, 2011).

In externally organized schemes the party that provides or channels money to the schemes is not its governor. For example, different than paying retirement benefits from the book reserves of the company, employers may set single-employer schemes in which employers make contributions to pension funds of their employees. When an employer opens a pension fund for its employers and manages it, there may occur a conflict of interest between the employer (sponsor) and its employees (beneficiaries). In some cases, employees have representatives of the board of these funds which increase the control of employees on their pension funds to some extent. British multi-pillar pension system consists of externally organized pension funds. In Britain, pension funds are no required to have any employee representatives at their board, but the fund is monitored by trustees work for the firm which somehow gives beneficiaries access to information on their funds that shows whether their interests are secured. Moreover, one-third of trustees are chosen by the votes of employees and current beneficiaries of a pension fund (Ebbinghaus & Wiß, 2011). These schemes are also classified as trust-based pension funds by OECD (2008). Pension funds that fall into trust type in governance are common in countries in the Anglo-Saxon legal tradition such as (single) employer-sponsored pension schemes of UK, Ireland, the USA, and Australia. In this type, trustees are responsible for keeping fund records making decisions and transactions in consultation with professionals. Trustees own the legal title to manage the pension funds although they may not be professionals in fund management, for example, the employer or employee assigned by the employer can be the trustee of firm-level pension funds in these systems. Moreover, there are also corporate trustees, and funds managed by such trustees have similar characteristics with contractual pension funds. (Autenne, 2017; Ebbinghaus & Wiß, 2011; Stewart & Yermo, 2008).

There are collectively negotiated schemes that sustain a balance between the interest of the sponsor and the interest of beneficiaries. Assets are managed by bipartite governing boards made by employers and employees or can be contracted out to financial organizations and the then bipartite board becomes advisory board for investment decisions of financial institutions. The voice of stakeholders i.e. beneficiaries affects the management of such funds. There is a space for demanding social and ecological oriented pension funds particularly in collective pension funds (Ebbinghaus & Wiß, 2011). These schemes are also classified as institutional pension funds by OECD (2008). Institutional type pension funds are independent entities with their legal personalities and capacities. They also have their internal governing boards. The second pillars of Denmark, Finland, Hungary, Italy, Japan, Norway, Poland, the Netherlands, and Switzerland, as well as corporations such as the ―Pensionskassen in Austria and Germany, are examples of such schemes. There is a single governing board that consists of both employers and employees or their representatives in these countries. Yet, some countries like Germany and the Netherlands have two boards one of which is supervisory and responsible for selecting and monitoring the other (management) board, while the other one acts as the management board (Ebbinghaus & Wiß, 2011; Stewart & Yermo 2008).

Employers can also outsource the organization of pension funds to pension or insurance companies and make contributions to the accounts of its employees in such companies. Employers have no regulative or administrative role in such schemes and therefore public supervision and regulation of such schemes become crucial for securing the interests of sponsors and beneficiaries in such schemes. Providing pensions through contracting out to pension and insurance companies is common in Germany, France, Belgium, and Britain (Ebbinghaus & Wiß, 2011). Individual pension schemes are also externally organized schemes in which individuals (beneficiaries) are both the sponsor and the beneficiary of a pension plan. Yet, individuals have no power over administration and regulation of their pension funds and thus individuals have little or no control over their funds except changing their funds and composition of their assets. There are no participatory rights given to individuals in personal pension plans thus individuals do not also have collective power on their funds and therefore the risk of agency problems is highest. Personal pension schemes are common in Britain and mandatory in Sweden and Denmark (Ebbinghaus & Wiß, 2011). Both contracted-out schemes and personal schemes fall into contract-based pension funds according to OECD's typology (2008). The assets in the contractual type pension funds are segregated and do not have their own legal personality and capacity but rather governed by a separate entity, typically a financial institution such as a bank, insurance company or a pension fund management company. Spain, Czech Republic, Mexico, Portugal, Slovakia, Turkey, some funds of Italy and Poland have contractual pension fund governance schemes (Ebbinghaus & Wiß, 2011; Stewart & Yermo, 2008).

2.3.2 Agency problems and pension fund governance

The problems related to asymmetric information are prevalent especially among the trust type and contractual type schemes, which they are rarely observed in the institutional type schemes. The uniqueness of institutional type schemes originates from their public fund feature, which limits the urge for misbehaving and possible conflicts of interest (Stewart & Yermo, 2008). In trust-based systems, trustees do not have to be professionally trained pension fund managers and thus trustees may not have adequate knowledge that is necessary for good-governance of pension funds. In the contractual types, pension managers are expected to be professionally trained experts, but people may not have sufficient expertise but can still be hired due to a lack of specialized human resources in a country.

Conflict of interest leads to agency problems often as a result of the for-profit nature of these structures. Institutions or people that are responsible for managing pension funds may have conflicting interests with participants. Conflict of interest may also lead to problems whenever a board member who has the power over a pension fund misbehaves. Another type of conflict of interest occurs when the beneficiary and the sponsor are not the same (i.e. employer-sponsored pension schemes) and sponsor make decisions by putting their interest before the interests of beneficiaries. These potential incidences of conflict of interest create serious challenges to the pension fund management particularly when the “overseers” i.e. the party that is responsible for the supervision of the system is incapable to prohibit agents from acting on behalf of their own interests or interests of parties other than participants whenever beneficiaries are not capable of monitoring their agents. For example, there is an incentive for pension fund managing companies to engage in expensive marketing campaigns particularly for reaching out to the population with a low level of education who shows low interest in pension matters. Such marketing campaigns often offer little benefit in terms of improved investment performance but result in high administrative costs and fees paid by plan members. Members are never informed about the costs of these campaigns and pay for the marketing costs of their pension fund managing company (Stewart & Yermo 2008).

The following incidences lead to increasing awareness about the seriousness of agency problems associated with bad governance of pension funds: governance failures in Switzerland’s Pensionkassen (where pension fund managers and the pension fund they work traded the same shares), the mismanagement of pensions funds in Hungary (where there are pieces of evidence of misbehavior of fund managers due to conflict of interests) and the resignation of the directors of The Teachers Insurance and Annuity Association of America-College Retirement Equities Fund (TIAA-CREF) in the US (Stewart & Yermo 2008, pg.10). Outcomes of bad-governance practices in private schemes have become more visible in 2008 with the effect of the financial crisis. According to an OECD report, in 2008 financial crisis real returns on funds fell between 26 and 38 percent in Ireland, Australia, and the USA, all of which have trust type systems. In Germany, Norway, and Switzerland all of which have institutional type systems, the rate of decline was between 9 to 13 percent (OECD, 2009). These results show that the institutional type is more immune to the negative effects of the financial crisis than the trust type. Because of increasing awareness of the failures of private pension funds, the literature on the governance problems in the private pension systems has been expanded since the 2008 crisis. Responses to the crisis were also different among the countries. Some Central and Eastern European countries together with Argentina nationalized their private pension pillars after the financial crisis. Some countries such as Iceland, Spain, and Iceland let their citizens opt-out from the private pension pillars without a significant penalty for reducing the effect of the financial crisis on their living conditions by providing early access to pension savings. Some countries replied to the financial crisis by reshaping their regulatory and supervisory agencies. BaFin (The German Federal Financial Supervisory Authority) strengthened the stress testing and started to prepare a weekly report that includes the key elements. Portugal and Slovakia are other countries that implied stricter scenario testing. Thailand and Spain improved their monitoring activities on overseas assets and other risky assets.

Sweden also increased the frequency of its monitoring reports. Lithuania developed a new technology system for information gathering in the private pension pillar. Costa Rica, Albania, Poland, and Kenya preferred a risk-based approach for dealing with the governance problems in their after-crisis pension pillars. Increasing the communication and coordination between the pension industry and the supervisory and regulative institutions is another method for strengthening the pension funds implemented by many countries such as Canada, Sweden, Spain, Norway, Poland, Romania, Bulgaria, Mexico, and the UK after the crisis. These countries increased their monitoring capacity as a result of the enhancement of the dialogue with the pension industries (Antolin & Stewart, 2009).

2.3.3 The role of states as overseers in pension fund governance

Despite losing their role as primary providers in pension systems, states are still important actors in the public-private pension mix systems as overseers due to their regulatory and supervisory roles which has a crucial effect on increasing the coverage rates and for minimizing the risks the finance sector imposes on the participants of private pillars that may endanger their old-age savings (Ebbinghaus & Wiß, 2011). The extent of state regulation and supervision together with the social control (i.e. the 'voice' mechanism) have gained importance (Hyde & Dixon, 2009) simultaneously with the retrenchments in public pension systems in many countries, which paradigm is defined as the "paradox of privatization" by Leisering (2005). Regulation of a pension system is crucial for protecting the interest of current and future beneficiaries from the negative consequences that may arise due to conflict of interest between them and other actors in the system. Private pillars of pension systems can be regulated by both state and non-state (social) actors whereas organizing and regulating power is always the state in public pillars. Non-state actors generally regulate the system by using their voice i.e. they can negotiate with the provider or organizer on the terms of pension plans.

States, as regulators, have a right to control the relationships between the elements of private pillars for minimizing the occurrences of principal-agent problems because participants lack the information for making the best decisions for themselves and protecting themselves from the financial risks of the market. States use their regulatory power by making laws for protecting the interests of beneficiaries by imposing investment restrictions on liquidity, security, profitability, diversification, and dispersion of pension assets (Ebbinghaus & Wiß, 2011; OECD, 2008). State regulations on controlling the region and sector of investment, the minimum rate of investment return, minimum interest rate, maximum shares of different assets in a plan, direct insurances, and superannuation are some of the mechanisms state used for investment restriction. (Ebbinghaus & Wiß, 2011). The literature on pension fund governance mainly underlines the importance of good governance for minimizing the agency problems in a private pension system (Chohan, 2018; Clark, 2004; Ebbinghaus & Wiß, 2011; Stewart & Yermo, 2008).

Supervision is also important for protecting beneficiaries from agency problems and related risks. Public authorities such as central banks or federal agencies are responsible for pension fund supervision in many countries. Supervision authorities are responsible for monitoring pension companies, pension funds, portfolio management countries, and so on. The main aim of supervision is protecting financial sustainability and controlling the consistency with the law. These agencies may undertake different tasks in different countries such as controlling solvency and transparency, consumer protection, certification of private pensions, collecting information, and preparing reports for informing beneficiaries and sponsors (Ebbinghaus & Wiß, 2011). According to the IOPS Principles, pension supervision authorities must strive for avoiding problems before they take place and intervene as soon as possible whenever a problem occurs. So, the supervisory authorities expected to have a proactive role which also complies with the regulatory authorities (Antolin & Stewart, 2009).

2.4 A review of the studies on the effect of the quality of pension fund governance on the agency problems

The prevalence of agency problems in pension funds with trust-based governance structures shows that these structures are more vulnerable to the negative outcomes of agency problems. As a result, the scholars who investigated the effect of the quality of pension fund governance on the agency problems in the private pension systems mostly focus on the countries with trust-based pension schemes.

In one of the preliminary studies, Ambachtsheer, Boice, Ezra, and McLaughlin (as cited in Ambachtsheer & Ezra, 1998) analyzed the issues that decrease the organization's capabilities and the effect of such problems on the investment performances from the perspectives of 50 senior pension fund executives in the US with a survey in 1995. Their study shows that executives perceived a positive correlation between the organization's excellence and pension fund performances. Their results show that poor decision-making processes, inadequate resources, unclarity of missions and lack of focus were the main organizational problems in the system.

In another preliminary study, Ambachtsheer, Capelle, and Scheibelhut (1997) made a survey with 80 executives from pension organizations for analyzing the pension fund governance structures of Australia, Canada, New Zealand, the UK, and the US, all of which have pension funds that fall into the trust type. They found out that although there was an improvement in the governance of pension schemes over time in these countries, several problems, mostly those related to asymmetric information, were persistent.

Ambachtsheer, Capelle and Lum (2006) conducted a follow-up survey to compare with the results of the 1997 survey to see the changes in pension fund governance since then. They found out that there was a positive correlation between the quality of pension fund governance and the performances of pension funds. Their study demonstrates that agency-related problems were the most important problems in the oversight of pension funds according to 81 pension sector executives from Australia, Canada, New Zealand, the UK, and the US. Agency problems led to challenges in balancing stakeholder interests due to the conflict of interest between parties in the system and understanding the legal/regulatory environment of the system according to this study. Self-evaluation of board performance was a common practice that harms the quality of governance. Most of the executives underlined the importance of a clear division of management and overseeing tasks for increasing the quality of governance in this instance. Moreover, the process of selection into boards was also problematic which also decreases the governance quality. The respondents asserted that trustees i.e. people who are responsible for managing funds must be capable of understanding the legal structure of pension contracts and pension funds and also measuring and measuring risks. This study proposes six recommendations for increasing the quality of governance for the states. The first recommendation is redesigning pension contracts for making them more complete, fair, and simple. The second one is creating board skill and experience matrixes for assigning the people to the tasks that suit their competencies. The third one is initiating a protocol for determining the weaknesses of the board. The fourth one is clarifying the differences between roles for minimizing organizational gaps. The fifth is making a regulation for making pension organizations to ensure human and technical resources a pension fund needs for high performance. The last recommendation was adopting regulations that require having effective boards for pension organizations.

Ambachtsheer conducted another follow-up study in 2015 together with McLaughlin with 81 pension fund executives in Australia, Canada, New Zealand, the UK, and the US. This study shows that although there were considerable improvements in the board effectiveness in the last 20 years, there was still ample room for improvements in the pension fund governance for increasing the performances of pension funds. The 2015 study also shows the positive correlation between governance quality and fund performance. Moreover, their results show that there was a positive correlation between the quality of pension fund governance and long horizon investing quality. They also found out that board selection and evaluation processes, together with the training of board members were still problematic in most cases and there was a need for a more lucid definition for the oversight function of the boards in many organizations. They also underlined that the uncompetitive compensation structures for investment managers made many managers more inclined for abusing their position as agents. They also claimed that the necessity of long-term investment design in pension funds are widely accepted since 1997. However, the design and application for long-term investment strategies were not well developed yet. The conflict between long- vs. short-termism together with the lack of training of the managers were the most common problem in their study, a finding that supports the arguments of Stewart & Yermo (2008).

Rusconi (2008) analyzed the pension fund governance in South Africa, which belongs to the trust type in Stewart and Yermo's (2008) typology. Rusconi found that the major problems in the system are trustees' lack of knowledge, conflict of interest between the consultants and trustees, lack of delegation, and the lack of clear division of labor between the board and other managers. Similar problems were also common in Australia, Canada, New Zealand, the UK, and the US, which also have trust type systems (Ambachtsheer et al. 2005). These problems in the South African case, according to Rusconi (2008), lead to an imbalance between assets and liabilities and high management fees in South Africa. In the case of Ireland –which is also a trust type model-, the review of the Pension Boards of Ireland lists the following most common problems: Small size of some schemes, trustees' lack of training, trustees' lack of awareness on their responsibilities and the conflict of interest among trustees and members are the most common problems in the pension scheme (Pension Boards, 2006).

The study conducted by Tan and Cam (2015) examined the agency costs accrued in the not-for-profit pension funds in Australia through an investigation of the impact of internal governance structures of these funds on fund costs. The originality of this study lies in its focus on the not-for-profit pension funds rather than the for-profit pension funds in Australia. Their study shows that there is an efficiency loss caused by agency costs in Australia, which has a trust type of pension fund governance. Therefore, the non-profit feature of the fund was not enough for decreasing the agency costs related to the trustees.

A survey for understanding the perceptions of supervisory and regulatory organizations about the private pension governance was conducted by the International Organization of Pension Supervisors (Antolin & Stewart, 2009) among the OECD countries. Their results imply that pension fund supervisors were most anxious about the informational issues. The study found that the supervisors were most worried about transparency and information sharing with their fund members. Other issues that were mentioned in the survey were the lack of expertise of people in the governing board and bad selection into the governing body. Adjustments for complying with legislative requirements and increasing supervision by the government were the other common responses mentioned in the survey.

The study conducted by Bridgen and Naczyk (2019) studies the consequences of the conflict of interest between the participants' preference of long-termism and managers' preference for short-termism. Bridgen and Naczyk (2019) analyzed the effect of labor organization and labor activism on pension fund governance in the United States, the United Kingdom, and France. Their results show that gaining leverage over pension funds was higher in the US where labor activism on pension funds was also highest. Yet, the labor activists in the US acted as shareholder activists rather than labor activists i.e. they claimed their rights as pension fund shareholders not as prospective pension beneficiaries and even become allies with the shareholders. The reason behind this position setting was the hospitality of the country on labor acts. Labor activists could succeed in positioning against short-termism by defining themselves as shareholders. Bridgen and Naczyk (2019) explained that the alliance labor activists established with shareholders were a strategic move. As a result of the strength of the Labour Party in the UK and its strong political alliances with the unions, labor activism was much less developed as an independent area for gaining leverage in the UK. Labor activism on the pension fund governance developed even less in France due to the relative novelty of pension funds. They claimed that labor activists in France also supported shareholder activism similar to the US, but their reasoning to engage in such activism was different. The support for shareholder activism arose in France as a creative form of activism for protecting the legacies of preexistent economic order. A similar pattern was observed in the case of Germany (van der Zwan, 2013). These examples evidence the effects of economic and political context on the actor perceptions, strategies, and policymaking about pension fund governance.

The effect of labor activism on pension fund governance was also examined in the study conducted by McCarthy, Sorsa, and van der Zwan (2016). The study compared business and labor preferences about pension fund governance in Finland, The Netherlands, and the USA. This research shows that in the USA, not only firms but also lawmakers had preferred impatient (short-term oriented) pension capital investment and made regulations that precluded labor activists from demanding their occupational pension capitals to be more patiently (long-term oriented) invested and push labor activists and to act like shareholder activists in the USA mostly. This study claims that the positioning of labor in the USA does not mean a move from their preferences for long-term management. This positioning was a result of dynamic political relations between the state, businesses, who may also be sponsors, and unions (beneficiaries), which was also argued by Bridgen and Naczyk (2019). Patient pension capital investment was possible only in public funds or multi-employer funds in the governance of which unions succeed to gain control over. In the Netherlands, the most commons form of pension capital investment was long-term bonds and loans, which were patient, till the 1990s. Different from the USA, both business and labor preferred patient investments due to a lack of strong competition between businesses as it was in the USA. So, there was no conflict between the business and labor over their patience preferences. In the 1990s, on the other hand, both parties started to seem impatient pension capital investment as a tool for increasing their governance capacities over the pension system in response to increasing competition between businesses. Both business and labor also preferred patient investments in mandatory pension system earlier in Finland. The patient capital investment in Finland worked in the best interest of businesses by providing businesses access to long-term loans and thus businesses were willing to have lesser governance capacity over the pension system. Later on, impatience investment was initiated jointly by social partners due to changes in economic patterns which led to increases in financial needs and increases doubts over the legitimacy of paritarian pension governance. So, the shift towards too impatient investment was also preferred by both businesses and labor yet this shift decreased governance capacities of both parties in Finland (McCarthy, Sorsa, and Zwan 2016). This research shows us that their pension fund governance was not immune to the changes in the economic structures since the 1990s. Stewart and Yermo (2008) suggest that agency problems were rarely seen in pension funds with institutional governing boards, the pension governance type that both Finland and the Netherlands belong to. This research (McCarthy, Sorsa, and Zwan 2016) shows that pension fund governance structures depend on the interests and governance capacities of their main actors. The parties with higher governance capacities could change the terms which pension systems were built on. Yet, this research also shows that the party with the least governance capacity, which was the labor in the USA, could increase its voice which was mentioned as one of the main mechanisms to deal with agency problems in pension fund governance so as its governance capacity through building alliances.

The studies mentioned above clearly states that there are many agency problems in the pension funds which are also perceived by the pension sector employees. These studies show that trust type pension fund governance structures are most prone to agency problems than other types, even in the cases when the trust type is a public fund (Tan & Cam, 2015). The studies also demonstrated cases where there are differences in the prevalence of agency problems among pension schemes with the same governance structure type. Therefore, understanding the governance structure of the pension schemes a fruitful endeavor for understanding the effect of different mechanisms in the control of agency problems. The studies reviewed through this part demonstrate the positive correlation between pension fund governance and the prevalence of agency problems while offering different mechanisms for increasing the quality of governance. The quality of governance can be increased through regulations like making the legal structure more understandable, increasing the level of competency of pension sector employees, or separation of bodies responsible for managing and overseeing are some of the recommendations for decreasing the prevalence of agency problems in pension schemes which requires government action. Reputation, trust, and collective voice are other mechanisms that have a positive effect on the protection of the interests of participants and thus positively affect the pension fund governance.

2.5 Conclusion

I presented the literature on agency problems in pension funds and pension fund governance structures through this chapter. Theoretical background on agency relations and agency problems are provided in this chapter for making the audience familiar with the topic. The chapter gives an overview of the development of private pension pillars around the world and their current situations. As stated earlier, pension assets witnessed lower average real investment returns in 2008 since the financial crisis of 2008 (OECD, 2019). The trajectories that drive this downturn were the fall of stock prices in financial markets and high inflation rates according to OECD (2019). Along with causing economic losses, this downturn also jeopardizes the retirement savings of people. As stated in the beginning, pension systems were established for protecting people from old-age related risks. Therefore, private pension schemes' ability to meet the promises of providing social protection for the elderly is limited. This downturn underlines that pension fund governance structures and relationships within pension systems need to be explored more for minimizing the effect of financial risks on the people's old age savings. The literature on pension fund governance has been growing since the 2008 crisis. The OECD (2008) set up a framework for pension fund governance analysis in which pension funds are divided into three according to their governance bodies: institutional type, contract-based type, and trust-based type. Agency problems were claimed to be more common in trust-based and contract-based schemes than institutional schemes according to OECD's report (Stewart & Yermo, 2008). This argument is repeated by many other studies in the literature as shown in this chapter. The reason behind that was that the inequality of power in vertical relationships in institutional type was lowest due to the bipartite organization structures of them. This chapter concludes by analyzing regulation and supervision mechanisms in pension systems which were strengthened after the financial crisis. The following chapter will present a desk review on the governance structure of the Individual Pension System of Turkey and the regulation and supervision authorities. This desk review will provide a background for understanding the extent of asymmetric information together with potential agency problems in this system.

CHAPTER 3

BACKGROUND OF THE PRIVATE PENSION SYSTEM OF TURKEY

The literature review chapter shows that differences in governance structures in pension funds lead to differences in the extent of agency relationships in the system. Thus, understanding the legal structure and organization of the private pension system with its details is crucial for exploring the extent of agency problems in the system. Before analyzing the agency problems in the private pension system of Turkey, the thesis provides a desk review of the private pension system of Turkey in this chapter. It starts by giving a brief historical background on the social security system of Turkey. The chapter continues by presenting the historical background of Turkey while mentioning the conditions that led to the implementation of new regulations in the system. The chapter then provides a review of the studies on asymmetric information in the private pension system of Turkey. A detailed overview of the governance structure of the system is also provided in which the elements of the system and the role of regulatory organizations within the system together with the procedures and principles on which the relation between pension companies and participants are based. Considering the vulnerability of participants, exploring the rules of their relationship with the only party that has a direct relation with them is important for understanding the capability legal structure for dealing with the agency problems in which participants are the principals. Lastly, the chapter provides a review of the pension funds in the system and a review of the studies that discussed the performances of pension funds for presenting the importance of the fund selection for protecting the contributions of participants in the system.

3.1 Historical background of the multipillar pension system

3.1.1 Historical background of the public pension system

The earliest version of the social security system in Turkey was established by the Ottoman Empire as a compulsory social security system for military men and bureaucrats in the middle of the 19th century (Talas, 1992). The social security system in the Ottoman Empire never became a comprehensive and universal one due to the lack of economic and organizational resources at that time. After the overthrow of the Ottomans, the newly established state formed many new policy agendas and the social security system was one of them. The 1921 Labor Law is taken as the first instance of a modern social security approach in Turkey, which was implemented only in the mining sector in Eregli. A solidarity fund with at least one percent wages of the workers was established by this law and these workers together with their families benefit from this fund at the events of sickness, accidents, and deaths (Talas, 1992). In 1946, a comprehensive social security scheme, which is named as "Sosyal Sigortalar Kurumu (SSK)" (Social Insurance Institution), was established for blue-collar workers and all private-sector employees. "Emekli Sandığı", which is another social security scheme, was established in 1949 for government employees. "Ordu Yardimlasma Kurumu" is another social security scheme which was founded in 1961 just after the military coup d'état. There was no scheme for protecting the self-employed people and traders. As a result, BAG-KUR (the Social Security Institution for Craftsmen, Tradesmen, and other Self-employed People) was founded in 1971. In 1976, the government introduced an additional scheme for those without any social security, disabled, and over 65-years old (Elveren, 2008). There were three occupational PAYG schemes (BAG-KUR, SSK and Emekli Sandigi) and one non-occupational scheme for providing health care and old-age protection to citizens in Turkey, and government contributions are only made in the Emekli Sandigi, which is the pension scheme for government employees. This multiplicity of social security schemes led to the differences in levels of health services and pensions obtained from these institutions (Buğra & Keyder, 2006).

There was an early retirement program by then. People preferred to get retired and then find new jobs for keeping their standards high. So, the early retirement program together with the high informality in Turkey led to a tremendous increase in the cost of pensions through the 1990s. Unlike its European counterparts, however, the social security system of Turkey did not go into a crisis because of the aging population but rather because of structural problems such as high informality in employment and the young retirement age (Buğra & Keyder, 2006). The young retirement age is problematic due to the same reasons related to aging populations: when contributions made by people who work and contribute to the schemes (actives) are not sufficient for paying the pensions of retired people (passives), schemes will incur deficits (Buğra & Keyder, 2006). Yeldan (2004) added that using the public sector for enhancing the private sector also led to deficits in the social security system in this period.

Due to fiscal deficits in the social security system and financial instability of the system through the 1990s (Sayan, 2006), the government proposed a new social security system reform package in which the three occupational schemes were unified, and a new voluntary private pillar was introduced in 1999. The reforms in this package implemented in later years: The Individual Pension System became enacted in 2003 with the implementation of Law. No: 4632 and occupational social security schemes were merged in 2008 with the implementation of Law No: 5510.

Although the 2008 reform improved the system to an extent, the pension system of Turkey is still hierarchic and fragmented due to its occupational nature.

3.1.2 Historical background of the private pension system

The reforms that paved the way to the establishment of the Turkish private pension pillar were firstly implemented in the period between 1997 and 1999. Undersecretariat of the Treasury carried out studies on social security reform under coordination with organizations such as World Bank, ILO, and TUSIAD for that purpose. Policy impacts of international financial institutions have influenced the directions of the policy reforms made in this era (Güleç, 2014). A recommendation package on the social security system (SSI, Social Security Organization for Artisans and Self-Employed, Pension Fund) that included compulsory second-phase individual pension system, the voluntary third-phase individual pension system; and the national social welfare and services system was submitted as a result of these efforts. The social security reform put into practice by the enactment of Unemployment Insurance Law No. 4447 dated August 25, 1999 (Republic of Turkey, 1999).

Efforts for implementation of the voluntary third-phase private pension system have also been initiated in this period (Emeklilik Gözetim Merkezi [EGM], 2017). On August 1, 1999, The Individual Pension Board established within the body of The Grand National Assembly of Turkey (GNAT). On May 16, 2000, the Draft Law on the Individual Pension Savings and Investment System Law, which was prepared by the Individual Pension Board and reviewed by the cabinet, was presented to the GNAT. On March 28, 2001, the Individual Pension Savings and Investment System Law was enacted by the GNAT which was published in Official

Gazette No. 24366 on April 7, 2001. With the enactment of this law, Individual Pension System of Turkey is established as a supplementary system for public social security system with the aim of “giving individuals an additional income during their retirement by encouraging investment in pension accumulations, to create employment by supporting the economy with long-term resources, and to contribute to economic growth by regulating and supervising the individual pension system's voluntary participation and set contributions” (Republic of Turkey, 2001, Article 1). On July 10, 2002, Official Gazette No. 24458 published the Law on the Amendment of Certain Tax Laws. Tax incentives were provided for employers who pay contributions on behalf of their employees and for participants in the system by this law. The law also introduced tax practices that offer benefits when investing contributions and reimbursing the accumulations as a lump-sum payment or salary.

The Individual Pension System entered into service finally following the approval of first pension plans in 2003 when Turkey’s social security system deficit as high as 2.95 % of its GDP (Fırat, 2016). The reason behind this deficit is claimed to be a lack of state contribution to the pension funds especially to Bagkur and SSK (Yenturk & Yılmaz, 2018) and informality not the aging population unlike Europe (Elveren, 2015). One of the three workers is in the informal market in Turkey (Türkiye İstatistik Kurumu [TUİK, 2015). Informality can trigger a deficit in the social security system by decreasing the tax collection capacity of a state. Then, the state increases the tax rates to increase revenue to clear the deficit in the social security systems. In the end, increasing tax rates will result in higher levels of informality in the economy. High rates of informality thus may lead to the popularization of pension privatization (Elveren, 2015). The establishment of private pension pillars as a response to the deficits in government budget deficits is a clear demonstration of the changing role of the state in the social security system from provider to regulator. The Individual Pension System did not bear any other cost than its management and regulation costs to the government in this period.

The tax income deduction method is replaced with the state contribution system that was put into effect through the amendments in the Individual Pension Savings and Investment System Law (Republic of Turkey, 2012). The state made contributions to pension fund contracts since Jan 1, 2013. The state contributes to each individual and group contract. The amount of state contribution must be equal to the 25 percent of the contributions made by participants as long as the amount of the yearly state contribution stay below the 25 percent of the annual gross minimum wage (Republic of Turkey, 2012, Additional Article 1).

The conditions for the state contribution eligibility are stated as: (1) a participant could receive the 15 percent of the overall state contribution only if they stays in the system for at least three years, (2) a participant could receive the 35 percent of the overall state contribution only if they stays in the system for at least six years, (3) a participant could receive the 60 percent of the overall state contribution only if they stays in the system for at least 10 years, (4) a participant could receive full state contribution only if they stays in the system for at least 10 years and gets the retirement status officially (after the age of 56) or becomes disabled or dies. If a participant leaves the system before retirement except for the cases of death and disability, the unvested amounts in their state contribution accounts will be recorded into the general budget or will be entered in the state contribution accounts (Republic of Turkey, 2012, Additional Article 1).

Only 3.128.130 people participated in the IPS between 2003 and 2012. From 2012 to 2016, as a result of the introduction of government subsidies for IPSs, 3.497.629 new people joined to the system (EGM, 2017). So, the system could succeed to tempt more people in the last three years than the earlier years, but the number of participants did not increase as much as expected by the government. Saydam (2018) argues that the number of participants did not rise as much as expected because it only tempted the higher income groups. Moreover, the cost of the IPS on government budget has been increased as a result of this reform. In addition to its role as overseer, the government became a partial provider in the private pension system. This reform caused the financialization of some of the government revenues while increasing the number of participants.

Overall, 6.625.759 people had joined the IPS from its implementation in 2003 till 2016 (Akpınar & Demirci, 2018). Low enrollment and high withdrawal rates together threaten the sustainability of the system (Yıldız, Karan & Salantur, 2017). The rate of early withdrawals was 7.4% in 2005, which reached 25 % in 2014, 81.98% of which were voluntary withdrawals. To increase the liquidity and sustainability of the private pension funds, the Turkish government made a reform that auto-enrolls every formally working person under 45 to a new pillar of the private pension system of Turkey, which is named as Auto-Enrollment System (Akpınar & Demirci, 2018). Similar reforms have been implemented in countries like the UK and Italy. Preliminary reports on their effectiveness assert that due to the high passivity in decision-making, either in enrollment or in withdrawal, people stay in the system once they enrolled automatically (Guardiancich, 2010; Price & Liysey, 2013; Rinaldi, 2011).

On August 10, 2016, principles on automatic enrollment of employees to a pension plan by employers are added to the law by the Law No: 6740 (Republic of Turkey, 2016). People under the age of 45 and formally employed are entered automatically into a pension plan linked with a pension contract made with their employer (Republic of Turkey, 2016, Additional Article 2). The Cabinet is entitled to determining the businesses to be included in the pension plan and the employees, as well as the principles of implementation. Those who entered the system through automatic enrollment are also entitled to the state contributions under the same conditions as the individual pension contracts. The level of contributions to the automatic enrollment pension contracts is determined as the three percent of the employee's earnings. If employees do not opt-out within the two months, they will be granted with a one-time additional contribution at the amount of 1000 TL, which can be increased or decreased by half by the state, into their state contribution accounts at their first entrance to the system (Republic of Turkey, 2016, Additional Article 2).

3.2 An overview of the multipillar pension system

Turkey is clustered as Southeastern Europe type according to its welfare regime (Buğra & Keyder, 2006). The Southern European welfare regimes are a mixture of the Beveridgean and Bismarckian regimes (Bonoli, 1997). The pension systems of the Southern European welfare regime countries generally have Bismarckian pension system. In such countries, public pension systems are mostly Pay-As-You-Go systems with occupational eligibility criteria (Natali & Rhodes, 2004). The public pillar of Turkey is an occupational PAYG system and thus the current pension regime of Turkey can be clustered as a reminiscent of Southeastern Europe's welfare regime (Aysan, 2013).

Turkey has a public-private mix system with four pillars. Its first pillar is its occupational public pillar under the Social Security Institution. There are 21,383,415 people insured under the coverage of the first pillar by April 2020, which consists of 25% of the population. The pillar has 13,098,592 pensioners that equal to 16% of the population who vested from the system and receive payments. Including the dependents of the insured and pensioner people, the system covers 85% of the population. All the revenues of SSI are 424,228 million TL, 11% of GDP, for 2019. The amount of premium payments paid by insured people is 290,197 million TL which equals 7.7% of GDP for 2019 (Sosyal Güvenlik Kurumu [SGK], 2020; TÜİK, 2020).

The noncontributory old-age benefit program which is funded through the taxes and compromise of the zero pillar of Turkey's pension system. The Turkish state provides noncontributory benefits at a flat rate, which was 711 TL for 2020 and equals to one-third of the minimum wage, to those elderly who are over 65 and not covered under any other social security program if the monthly income per person is below the one-third of the minimum wage for their households. 601,793 people benefited from the program in 2015, which makes 0.7% of the population, and the government spent 1,275,183,231 TL from the program which only accounted for 0.06% of GDP (Aile ve Sosyal Politikalar Bakanlığı, 2017; TÜİK, 2020).

The second and third pillars of the pension system of Turkey are its private pillars. Auto-Enrollment System is its second pillar which is an occupational private pillar. There are 6,322,519 people (7.6% of the population) in the Auto-Enrollment System by the end of June 2020. The size of pension funds in the AES is 9,983,232,467 TL, which equals to 0.2% of GDP, and 7,990,472,713 of those contributions channeled into investments while the rest is lost due to managerial and other systemic costs (EGM, 2020a; TÜİK, 2020).

The third pillar of the system is its voluntary private pillar which is named as Individual Pension System. By the end of June 2020, 6,837,292 people, which makes 8% of the population, participate in the Individual Pension System. 126,605 of participants vested out from the system and entitled to their pensioner rights. The size of pension funds in the IPS estimated as 118,791,260,069 TL, which equals to 3% of GDP, but only 73,771,396,504 is channeled into investments. The rest is spent as managerial and other expenses (EGM, 2020a, TÜİK 2020).

The rate of pension fund assets to GDP is much higher for countries with developed pension markets and even higher than 100% in countries like the Netherlands, Switzerland, the USA, the UK, and Australia. In comparison to these developed pension markets, the size of pension fund assets in Turkey is much smaller and thus effects of pension fund assets on the economy may be much lower. It is important to keep in mind that some of these countries have funded public pillars and some of them have nearly no public pillars and thus these numbers are not capable of considering the full picture. Still, the pension fund market of Turkey is underdeveloped and deficits in the government budgets created by social security spending signal the unsustainability of the unfunded scheme in Turkey.

The public pillar of the pension system of Turkey has created a 50,102 million TL deficit in the first quarter of 2020. The year-end deficits were -39,945 million TL for 2019 and -15,751 million TL for 2018. The compensation rate of pension and health payments by premium income is 68.2% for 2020. Budgetary transfers to Social Security Institution from the government budget was over 4% of the GDP since 2016 (SGK, 2020). These deficits manifest the financial unsustainability of the system which endangers the old-age protection schemes of current contributors.

Additionally, the Turkish state recently introduced a new occupational private scheme in which severance pay funds of employees accumulated in pension accounts and invested in pension fund assets. This new scheme can be also read as an attempt of state for increasing the size of the pension fund market for decreasing the burden of social protection spending on the government budget. So, the state aims to increase the size of the pension market actively, and therefore agency problems in the private pension system of Turkey require attention despite its current underdevelopment.

The state has different roles in different pillars of the pension system in Turkey. The state is the initiator, the sponsor, and the overseer of the public pillar in Turkey. In private pillars, on the other hand, beneficiaries are the sponsors of their pension plans and pension companies initiate pension plans therefore the state is only left with its role as the overseer and partial sponsor via government contributions in the governance structures of private pillars in Turkey. As a result of these differences in the role of the state in different pillars, the interest of the state so as its position in agency relations in those pillars also differs.

Similar to the private pillars of the system, regulations and legal structure of this public pillar is also too complex and thus cannot be understood by many of its contributors. This complexity and financial unsustainability of the system may pose serious risks to the contributors of the system as it did for the people who cannot retire due to the age restrictions in the near future. The state used its legal superiority and did not entitle those people with their retirement rights by using the changes in the law for reducing the pressure social security spending created on the government budget. This example proves that agency problems are not unique to private or funded pension pillars but can also exist in public PAYG systems.

Different from the private pillars, the state is both sole provider and regulator of the public schemes and thus its interest in decreasing the social security spending may conflict with the interests of current and future beneficiaries of the system while in private pillars state is the only partial provider which costs much lesser than the public social security spending. Government contributions to IPS plans cost 19,582,569,714 TL which equals to 0.5% of GDP (EGM, 2020a; TÜİK, 2020). In addition to its low cost, increasing the size of pension fund assets will increase the size of financial markets in general and bring economic growth via providing funds for investments. Therefore, the interest of the state is expected to be favoring an increase in the size of pension fund assets. Therefore, the interest of the state in the private pension market is favoring the participants' interests for keeping them in the system and for convincing prospective participants to join the system and thus the interests of the state and participants are not conflicting in the private pillars. Due to this divergence in the interests of the state in different pillars, the state is expected to have a more proactive position towards control of the agency problems in the private pillars compare to the public pillar. As literature review shows (Autenne, 2017; Chohan, 2018; Stewart & Yermo, 2008), the governance structure of pension funds has a significant impact on the prevalence of agency problems in private pension systems. Hence, government regulations and supervisions are crucial for controlling agency problems in pension funds.

3.3 An overview of agency relations and asymmetric information in the private pension system

The literature examining the problems in the Individual Pension System of Turkey, particularly caused by information asymmetry, is limited and mostly focuses on the participants. For example, Özer and Gürel (2014) analyzed the level of knowledge of participants on the IPS and the effect of government contributions on participation rates. They found out that government subsidies have positive effects on IPS enrollment. They also underlined that the knowledge about the IPS is too low and they expect enrollment rates to increase if people are better informed about the IPS. Income level is another factor that affected participation decisions according to their study: those with higher incomes are more likely to be in the IPS. They claimed that government subsidies together with information campaigns would have a positive effect on enrollment rates (Özer & Gürel, 2014). Çetin and Sevüktekin (2015) investigated the factors affecting people's decision to enroll in the IPS in Bursa. They found that marital status, risk-taking character, financial knowledge level, and investment/spending ratio are the variables that have statistically significant effects on decision-making.

Kayam, Çeliktopuz, and Parkın (2013) examined the withdrawal decisions from the IPS and concluded that people become less likely to leave the system if they stay long enough. Staying in the system for a longer period increased familiarity with the system and thus increase the knowledge of participants. They also claimed that demographic variables, financial literacy, and liquidity constraints affected the withdrawal decisions. Those with higher financial literacy and lesser liquidity constraints stayed longer in the system. Yıldız, Karan, and Salantur (2017) investigated the early voluntary withdrawals from the IPS and they also alleged that there was a negative correlation between withdrawal probability and financial literacy. They also found out that men and youth were the groups with a higher tendency for early withdraw. They also underlined that liquidity constraints and income shocks had a significant effect on withdrawal decisions. Financial literacy is the most mentioned factor in the literature that affects both enrollment and withdrawal decisions of individuals. Yıldız, Karan, and Salantur (2017) claimed that most people withdraw when they get unsatisfied with their pension plans, which was a result of financial illiteracy. Gülmez (2018) also claimed that lack of trust and lack of knowledge lead to opt-outs in the IPS together with immediate financial needs. All the studies mentioned above prove the people's lack of information about the IPS and efficiency losses this has caused. As a result, understanding the reasons behind the lack of information among the prospective, current, and previous participants becomes important.

However, only a few studies analyze the governance structure of the IPS, which results in asymmetric information and related problems. The limited literature on this dimension may also limit policy efforts to establish a good governance structure by designing mechanisms that would minimize the possible conflict of interests. One entry point to the study of the governance structure of the IPS to understand the actions and motivations of "agents". İlhan (2016) conducts one of the studies that examine the reasons behind the problems in the IPS. This study found that the most prevalent problems in the IPS that decrease its efficiency are participants' tendency for choosing a low and medium risk profile in asset diversification of pension funds, short stay of the participants in the system, and participants' lack of knowledge about the system and funds. The time spent in the system is shorter for participants who made contracts with banks rather than individual intermediaries or intermediary agencies. İlhan (2016) claims that the shortness of duration is resulted by the lack of knowledge because participants who enter the system through the bank made their contract after an insufficient informing process. This study also underlines that participants are underinformed or even misinformed by intermediaries intentionally in the IPS. This intentional manipulation originates from the working conditions of and incentive structures for intermediaries. Intermediaries have low wages with sales premiums that depend on the monthly contract sales, which causes a conflict of interest between the participants whose best interest is having sufficient information about the system and the intermediaries whose best interest is increasing the sales volume. The most common information problems are related to management fees, risk structure, and real return potentials of the pension funds. As a result, participants often leave the system in one to two years. The research conducted by İşseveroğlu and Hatunoğlu (2012) also shows participants' lack of information about the IPS. They underline the insufficiency of the funds for meeting the financial expectations of their inadequate actuarial analysis and insufficient mutual fund diversification. They claim that transparency seems to be benchmarks of the system when considering the significance of the Pension Monitoring Center (Emeklilik Gözetim Merkezi), which is expected to provide adequate information to participants. Yet, most participants content themselves with the information given by their intermediaries who may inform incompletely or incorrectly them due to the abovementioned conflict of interest.

The studies mentioned above demonstrate that there are agency problems in the IPS, which bring inefficiency to the system. Given the contractual type pension fund structure of the Turkish IPS, these problems are expected as discussed by Stewart & Yermo (2008). However, considering the demographic and economic factors that affect the pension fund governance structure for Turkey is also important in examining the particular ways that these agency problems manifest themselves in unique ways.

3.4 Pension fund governance structure of the private pension system

The recent economic downturn in Turkey has shown how fragile is the Turkish private pension system, which can be identified as the contractual type of pension fund governance (as this type is defined in Stewart & Yermo, 2008) and therefore expected to have agency problems in its private pension system. The report in Appendix F (EGM, 2020c) shows that many pension funds had negative real gains due to high inflation that year, which got even worse in the year after (see Appendix F).

The set of actions of the actors in the private pension system of Turkey is strongly pre-determined by the code of law because the private pillar of the Turkish pension system was established right after the 2000 financial crisis in Turkey. Therefore, many politicians and technocrats who took part in drafting the 2001 law were careful and prudent about the unwanted consequences of possible improper actions of the agents in the private pillar and thus structured the law in a way to minimize the risks uncertainties and incomplete information may bear. However, no matter how well-designed, agency problems are present in every private pension system due to asymmetric information.

3.4.1 The elements of pension fund governance structure

Like many other private pension systems, the private pension system of Turkey compromises many different institutional and individual actors with different roles that affect the governance of pension funds such as advising, regulating, managing, etc. The elements of the private pension system of Turkey are participants, pension companies, individual pension intermediaries, portfolio management companies, the Undersecretariat of the Treasury, the Individual Pension Advisory Board, Capital

Markets Board of Turkey, Istanbul Settlement and Custody Bank Inc., and Pension Monitoring Center. Appendix G presents these elements and how they interact with each other (EGM, 2020b).

Among these elements, participants are both sponsors and beneficiaries in the system other than employer-sponsored group contracts. Initiators of private pension schemes are pension companies that give the management rights of pension funds to portfolio management companies. The other elements like the Undersecretariat of the Treasury, the Individual Pension Advisory Board, Capital Markets Board of Turkey, Istanbul Settlement and Custody Bank Inc., and Pension Monitoring Center serve oversight function in the system.

3.4.1.1 Participants

People who are over 18 with a legal capacity to act and opened an individual pension account with a pension contract pursuant to the Individual Pension Savings and Investment System Law No. 4632 dated April 7, 2001.

3.4.1.2 Pension companies

Pension companies are established pursuant to the Law on Individual Pension Savings and Investment System No. 4632 dated April 7, 2001. Pension companies can also acquire life and personal accident insurance license, yet they must have separate accounts for each branch (Republic of Turkey, 2001, Article 8) (Official Gazette No: 28338, 29 June 2012).

Pension companies are responsible for getting services from banks pursuant to the principles of the pension contract, transferring the contributions to the funds in compliance with the pension contract and keeping the individual pension accounts and all other records up to date, ensuring that the fund portfolio is managed compatible with the company's general fund management strategy and decisions by the portfolio management company, assuring that information on the individual pension accounts are made accessible for the participants daily, ensuring that periodic information on fund portfolio assets, fund performance and financial statements are provided to participants, making sure that all the information, documents, and statements demanded by the Undersecretariat of the Treasury and the Capital Markets Board and the Individual Pension Registration System are revised pursuant to procedures and principles, executing internal audits of the company pursuant to principles and procedures set by the Undersecretariat and the pension mutual fund in compliance with the principles and procedure set by the Capital Markets Board, taking all the precautions for the protection of the records and assets for maintaining the individual pension accounts and pension accounts and for protecting fund assets, avoiding actions which may endanger the participants' rights and interests and the operations of the individual pension system, for operating in accordance with the legislation and business plan principles, for providing proper recommendations, for behaving in line with principles of goodwill and for taking precautions to make sure that the individual pension intermediaries in accordance with these principles (Republic of Turkey, 2001, Article 11). The year-end financial statements of each pension company must be audited by independent audit companies. Moreover, all the fund accounts and transactions must be audited by an independent external auditor at least once a year (Republic of Turkey, 2001, Article 21).

Both pension companies and individual pension intermediaries are precluded from making false, misleading, or deceiving statements to the participants, third parties, and organizations. Such statements must not be in the announcements, advertisements, brochures, and other operations of pension companies and individual pension intermediaries (Republic of Turkey, 2001, Article 10).

3.4.1.3 Individual pension intermediaries

Intermediaries either act as an intermediary of pension companies for the pension contracts that are offered to participants or sponsoring organizations or work as self-employed people. Intermediaries must be registered into the individual pension intermediaries' registry, which is kept under record by the Pension Monitoring Center pursuant to the principles set by the Undersecretariat. The Undersecretariat determines the requisite qualifications and conditions for individual pension intermediaries and their operations, any prohibited activities, registry entrance and removal, and the procedures and principles on other matters.

The individual pension intermediaries are responsible for acting in accordance with the requirements of the profession, principles of goodwill, and legislation, abstaining from actions which can endanger the participants' rights and interests and the operations of the individual pension system, providing proper recommendation relying on the ages and expectations of participants while considering the system's long-term structure and tax regulations to the participants, attending to the supplementary professional competency training program (Republic of Turkey, 2001, Article 11). A pension intermediary is also obliged to provide a non-binding risk profile survey to those who do not want to join the standard fund and those who want to leave it for offering the funds most suitable with risk profile participants.

3.4.1.4 Portfolio management companies

Portfolio management companies manage pension mutual funds within the frame of the portfolio management contract with an operating license from the Capital Markets Board of Turkey. Portfolio managers are responsible for managing the fund portfolio pursuant to Capital Markets Law No. 2499, fund bylaw, pension contract, and the provisions of other relevant legislation. The portfolio management contract which is made between a pension company and a portfolio management company must include the principles on the demanded portfolio management service in line with the minimum requirements set forth by the board (Republic of Turkey, 2001, Article 18).

A pension company has a right to cancel the portfolio management contract and make a new contract with other portfolio managers approved by the Board when portfolio managers fail to exercise due diligence in fund management or when the board transgresses the portfolio management principles or when the financial structure is weakened. The Board can request the replacement of the portfolio managers in such cases (Republic of Turkey, 2001, Article 18).

3.4.1.5 The Undersecretariat of the Treasury

The Undersecretariat is responsible for enforcing the legislative regulations and undertaking necessary measures for the IPS system improvement. The Undersecretariat issues licenses to companies that plan to operate in the pension system. It also has a right to temporally suspend or cancel the sales license of an individual pension intermediary when it acts inappropriately to the provisions or when an intermediary cannot comply with the qualifications and conditions. The Undersecretariat is liable for determining procedures and principles concerning public disclosures, disclosure periods, and duration and on announcements and advertisements upon approval of the Capital Markets Board. The Undersecretariat is also responsible for checking the compatibility of a pension plan with the legislations and requesting changes when there is a noncompliance that poses a risk on the participant, sponsor, or employer.

The institution also has a right for asking information on-demand spending and profitability analysis in addition to the pension plan for protecting the rights of parties. Insurance Supervision Board of the Undersecretariat of the Treasury is responsible for overseeing the operations of pension companies and the Pension Monitoring Center.

The Minister associated with the Undersecretariat of the Treasury has a right for requesting the followings from a company board, if a company has been detected for being involved in practices that can endanger the rights and interests of participants or failed its contractual obligations, or its financial structure is declined to a level that risks the rights and interests of the participants, the Undersecretariat is responsible for taking precautions which are necessary for improvements of the company`s business processes, technical infrastructure and practice: raising the capital: paying the unpaid capital; asking the shareholders for making payments on account of the capital or stopping paying the dividends; selling or stopping the sale of affiliates and fixed assets partially or completely and holding up making new affiliates and fixed assets; blocking the free assets in bank and obliging the company not to take any actions related with these assets without permission; taking precautions for improving the financial structure of the company (Republic of Turkey, 2001, Article 15).

If a pension company fails to implement the measures recommended in the improvement plan, which is made in line with the provisions above, or its financial condition cannot be improved even when the company implemented the measures, the minister has the right for taking back the company's authority for making a new contract or renewing, assigning members to the company's board by displacing all or some of the board, members or by raising the number of members, transferring company's funds and portfolios from other branches to the other companies if at all possible, taking back company's operating licenses, declaring bankruptcy, and taking any other measures which are approved to be necessary (Republic of Turkey, 2001, Article 15)

3.4.1.6 The Individual Pension Advisory Board

The Advisory Board is founded as part of the Individual Pension Savings and Investment System Law No. 4632. The Board was established to support individual pension policymaking and giving recommendations on measures to be taken for the implementation of these policies and on legislative regulations. Each of the Ministry of Finance, the Ministry of Labor and Social Security, the Undersecretariat of the Treasury, and the Capital Markets Board must have at least one representative at the general manager level in the Board while being led by the Undersecretariat of the Treasury (Republic of Turkey, 2001, Article 3).

The Undersecretariat is responsible for establishing the operational principles and procedures of the Board by regulation with the approval of the Board itself. The Board is obliged to convoke meetings at least once every quarter and with an agenda recommended by the Undersecretariat of Treasury (Republic of Turkey, 2001, Article 3).

3.4.1.7 Capital Markets Board

The Capital Markets Board is responsible for determining the principles on fund establishment, proposing the funds of other companies to participants and on fund portfolio limitations, and the procedures and principles on investment of assets in the fund portfolio with approval of the Undersecretariat (Republic of Turkey, 2001, Article 17). Regulations on the contracts between pension mutual funds, portfolio management companies, and pension companies and custodies are made by the Capital Markets Board and the Board is responsible for monitoring their operations so as monitoring of any unusual changes in price or amount of pension mutual funds. The Capital Markets Board is also liable for auditing the account and transactions for company funds, portfolio managers, and custodians (Republic of Turkey, 2001, Article 20).

3.4.1.8 Istanbul Settlement and Custody Bank Inc.

Istanbul Settlement and Custody Bank Inc. is liable for monitoring the purchase-sale and clearance of pension mutual funds, holding fund shares on participant basis, and enabling fund-based monitoring of contribution according to the Individual Pension Savings and Investment System Law No. 4632 dated April 7, 2001.

3.4.1.9 Pension Monitoring Center

On July 10, 2003, The Pension Monitoring Center Inc. was established within the frame of the Individual Pension Savings and Investment System Law No. 4632 dated April 7, 2001, and relevant legislation under the authorization and commissioning of the Undersecretariat of the Treasury. The headquarters of the Pension Monitoring

Center Inc. are located in Istanbul. Pension Monitoring Center works under the audit scope of the Undersecretariat and the Undersecretariat determines the procedures and principles of operation for the Pension Monitoring Center (Republic of Turkey, 2001, Article 20/A).

Pension Monitoring Center is responsible for administering the efficient and secured operation of the IPS; monitoring the operations of pension companies and individual pension intermediaries for protecting the rights and interests of participants; building the infrastructure for monitoring and supervision and reporting the results to the public authorities; maintaining and consolidating the information on individual pension accounts; pension plans; participants and contracts in an electronic environment; informing the public and participants, conducting transactions related to the registration and examination of individual pension intermediaries; performing the other tasks appointed regarding life insurance and other insurance branches; ensuring that the participants, employers or sponsors are informed properly through the transfer process and also obliged to report the results of those calls to the Undersecretariat of the Treasury (Republic of Turkey, 2001, Article 12).

3.4.2 The regulatory role of state organizations in the governance structure of the private pension system

The Undersecretariat and the Board are entitled to imposing administrative fines on natural and legal persons, which are stated in the Article 22 of Individual Pension Savings and Investment System Law No. 4632 dated April 7, 2001. The administrative penalties for undue operations of pension companies are provided in Appendix H.

People who are responsible for the implementing and overseeing the implementation of these regulations must not disclose to their associates and institutions as well as the participant to anybody except the authorized persons or benefit from the secrets they obtain during their duties about to real and legal persons that work under the scope of this law. The liability of those people will not last even after leaving the office. The penalty for failing to comply with this liability is determined by Article 239 of the Turkish Criminal Code.

People who are subject to these regulations as members and other officials of these organizations should not reveal the secrets about the institutions or people related to pension contracts, which they acquire because of their roles and duties, to anybody except the authorized persons. The liability of those people will not last even after leaving the office. The penalty for failing to comply with this liability is determined by Article 239 of the Turkish Criminal Code. If the people subject to this law reveal that secrets for the benefit of themselves or others, their penalty will be increased by half pursuant to Article 239 of the Turkish Penal Code (Republic of Turkey, 2001, Article 23).

Investigation and prosecutions regarding the offenses mentioned above must be hinged upon the written request by the Undersecretariat or the Board to the Chief Public Prosecutor's Office. The written request from the Undersecretariat or the Board is a necessary condition for procedure. If the public prosecutor decides that there is no need for prosecution, the Undersecretariat or the board becomes entitled to object the decisions declared to them pursuant to the Code of Criminal Procedure. The Undersecretariat or the Board becomes the plaintiff in the public cases, which are opened as a result of the applications of the Undersecretariat or the Board (Republic of Turkey, 2001, Article 24). If any of the offenses mentioned above also require punishment according to all laws, the heaviest punishment must be applied (Republic of Turkey, 2001, Article 25).

3.4.3 The procedures and principles that affect the relationship between participants and pension companies

The part above demonstrates that the only elements that have direct relations with participants, who are the providers and beneficiaries of their pension plans, are pension companies and individual pension intermediaries that work linked with pension parties. The literature review on the agency problems in the pension schemes over the world demonstrated the higher vulnerability of participants against agency problems in pension schemes than other actors particularly of those participants with low levels of financial literacy. The literature review on the asymmetric information and agency relations in the private pension system of Turkey presents that the level of information asymmetry is high in private pension schemes due to the financial literacy of the population. Considering these two findings together, understanding the dynamics of the relationship between these two parties i.e. participants and pension companies becomes crucial for exploring the agency problems in the system.

Pension contracts must include the procedures and principles on the opening of an individual pension account with the company, contribution payments to the account, investments of paid contributions to preferred funds, and payments of total savings in the account to the beneficiaries, as well as the parties' other rights and obligations within this scope (Republic of Turkey, 2001, Article 4). A pension contract must include information on the offered funds in the plan, entrance fee, administrative expense fees, and fund expense fee total, reimbursement, and on related calculations and other technical principles on the implementation of the pension contract (Republic of Turkey, 2001, Article 8). The distribution ratios and amounts between funds included in a pension plan can be changed six times per year at most if the right for fund preference and changes are not transferred to a portfolio management company. Through the process of fund distribution change, companies are responsible for completing the process in the shortest possible time while minimizing the residual value (Republic of Turkey, 2001, Article 10).

A pension contract comes into effect only if the company approves it and all the money contributed to the account is paid back if the company rejects the pension contract. After a contract enters into effect, the contributions paid by participants, employers, or sponsors are put into individual pension account opened in the name of the participants by the pension company. Pension companies are responsible for investing the amount contributed on the second day after receiving it at the latest (Republic of Turkey, 2001, Article 5-11). Pension companies are obliged to send printed or online copies of the contract to the participants entering the system within 10 business days from the contract effective date. Each participant, sponsor or employer, has a right to withdraw from his or her pension plans without any loss within two months following the approval of the contract and the contribution made to the plan through this phase must be paid back within 10 business days after notification of withdrawal (Republic of Turkey, 2001, Article 11). A pension plan can be changed four times per year at most upon the request of participant, sponsor or employer writing, or through the company's call center, or the secure page created for the relevant participant, or the company's corporate website (Republic of Turkey, 2001, Article 11).

A pension plan and contract can be transferred with the accumulations arose from that contract if the contract stays in the same company that made it at least two years from the effective date with exception of the state contributions account and accumulations related to it. A contract must stay in the transferred company at least for a year before transferring to another one (Republic of Turkey, 2001, Article 12). The transferring company is obliged to transfer the accumulations of the plan including the state contributions in the following 10 business days otherwise day must compensate any loss caused due to late transfer (Republic of Turkey, 2001, Article 5-12).

Pension companies are obliged to keeping records of years of participation, the participant's instructions on fund distribution change, pension plan change, accumulation transfer, investment plan choices, on similar transactions, and all other transactions regarding similar procedures performed at least five years. The companies are also responsible for keeping the proposal form and the pension contract, and any changes made after the contract enters into force and during the term of the contract in any case for at least 10 years and this responsibility to keep records remains until the two years after the termination of the contract (Republic of Turkey, 2001, Article 25).

3.4.3.1 Procedures on voluntary enrolment to the system

Pension contracts are classified as individual or group pension contracts. An individual pension contract is a contract that has an individual participant as an entering party. Group pension contracts are divided into two: group individual contracts and noncontributory group contracts. Group individual contract is a contract where the entering party is an individual, but the contract is drawn up by their employer or sponsor with a group pension plan. The participants in such contracts make contribution payments where the employer/sponsor only acts as an intermediary as in the case of the contracts made in the Auto-Enrollment System. A noncontributory group contract is a type of contract where entering party is the employer or the sponsor, which is also responsible for making contribution payments on behalf of the participants (Republic of Turkey, 2001, Article 2). In all three types, the pension company is the party that is responsible for providing information to the entering party on matters that may affect their decision-making process.

3.4.3.2 Procedures on retirement and early withdrawal from the system

Participants will become entitled to their pensions after the age of 56 and at least 10 years must be passed after the entrance to the private pension system while the duration of contracts does not matter for getting entitled. Participants, sponsors, and employers are entitled to contractual rights such as changes in funds and plans whenever they want within the given limits without any loss, but they cannot exercise their right to retire before the end of their vesting period (Republic of Turkey, 2001, Article 13). If a participant decides to leave the system before getting entitled to a pension or without exercising right for retirement even when being entitled to a pension, that participant will lose the rights related to the entrance to the system (Republic of Turkey, 2001, Article 6-15). When a participant has multiple pension contracts with different companies, their accounts will be consolidated at the company in which they request retirement (Republic of Turkey, 2001, Article 16). If a participant decides to rejoin the system after exercising their rights for retirement, this new contract must remain in the system at least 10 years for retirement eligibility with exception of contracts drawn up through transfer from another company (Republic of Turkey, 2001, Article 16). Pension companies are obliged to provide withdrawal information, request forms, and account statement within five business days after withdrawal notice. After the approval of withdrawal request, the pension company should transfer the accumulations in the individual pension account and the accumulations in the state contribution account to an account stated by the ex-participant within 20 business days (Republic of Turkey, 2001, Article 6-15).

A vested participant can choose to get the accumulations in individual pension account and the state contribution account as a lump-sum payment, as a programmed withdrawal or the annuity options or mix of the earlier and the pension company must fulfill their demand within 10 business days after when a participant requests to exercise their right to retire. Payment periods and methods can be changed only two times each year in programmed withdrawals and annuity options while a participant has a right to withdraw all the remaining money in their account at any time (Republic of Turkey, 2001, Article 6-16). If any beneficiary does not claim the amount accumulated within 10 years, this amount will be transferred to the Central Bank of the Republic of Turkey, with a statement that shows the beneficiaries' names, last names, and the amount due to the beneficiaries. If the money transferred to the Central Bank has not been claimed also in the next two years, the amount will be accorded as revenue to the Treasury (Republic of Turkey, 2001, Article 6).

3.4.3.3 Types of deductions from participants' contributions

There are several types of deductions that can be made from the pension accounts. Pension companies may demand an entrance fee when a participant enters the system for the first time and opens a new individual pension account i.e. at the time of entrance to the system or transfer to another company. Entrance fees must be managed and collected separately from the contributions, which can be paid in installments into the pension account within one year. Still, a company can deduct the entrance fee from the pension account when a participant transfers to another company. Such a fee can be taken in the form of cash or form of deferred payment at the time of withdrawal or transfer to another company. Those who retired from the private pension system and those who leave the system due to death or disability are exempt from the entrance fee. A pension company can only charge the first two of the contracts when a participant has multiple individuals or group contracts at the same company (Republic of Turkey, 2001, Article 7-20).

A pension company can apply a management fee on the contributions made by a participant at a maximum rate of 2%. When a participant suspends payments, the pension company can deduct two TLs management expenses for each month from the contributions of the participant. The Pension Monitoring Center can also deduct the fixed costs made for that account from the accumulations in the account whenever this suspension of payments endures more than a year (Republic of Turkey, 2001, Article 21). If such deductions make the amount in the account to go below zero, then the part that causes to go below zero will not be collected (Republic of Turkey, 2001, Article 7-21).

Fund expenses are another type of deductions that can be made on the participant's accumulations by the pension company for covering the fund-related expenses including the fund management expenses which are set by according to the maximum ratios determined by the Ministry and stated in the fund bylaw. There also exist performance deductions for the revenues over the benchmark for some fund types. The exceeding amount from should be refunded to the fund within the five business days at the end of the calendar year if any (Republic of Turkey, 2001, Article 22).

3.4.3.4 Information disclosure in the private pension system of Turkey

During the pre-entrance phase, those prospective participants are informed about all the fund types and pension companies are responsible for offering a suitable pension plan to their prospective participants in line with their pension expectations, income levels, and ages. If the prospective participant has no preference among the funds, their contributions will be invested in the standard fund of the company. Moreover, in situations where the contract is drawn up with an employer or sponsor on behalf of individuals, employers/sponsors also become responsible for providing necessary information to the participants about their rights and obligations for making them accommodated for making the right decisions about their pension accounts.

All the information related to deductions such as entrance fee, administrative expense fees, fund expense fee total must be stated explicitly in the proposal form, the pension contract, promotions, and advertisements (Republic of Turkey, 2001, Article 7). In each accounting period, pension companies must send informational notes on the important changes to the parameters in the pension plan and the legislation, along with an account statement to their participants or their sponsors/employers within 10 business days.

Pension companies are also responsible for providing quarterly reports that include general information on investment instruments, current financial market developments, investment and performance information on the funds proposed, and the investment and other risks the participants may be exposed to for assisting their participants for making informed fund choices. The companies are responsible for reaching their participants within 30 days when a participant does not make a due contribution payment after the due date. The pension companies are also obliged to make proposals in which they offer a transition to low-risk funds to their participants at least two years before their pension entitlement for minimizing the effect of financial market risk on their accumulations (Republic of Turkey, 2001, Article 23).

3.5 An overview of the pension funds in the private pension system

Pension funds are set up based on Provisional Article 20 of Law No. 506 dated July 17, 1967. Only the funds established under the provisions of Turkish Civil Law No. 743 amended by Law No. 903 dated July 13, 1967, are included in the scope of IPS. All the natural and legal persons that are not covered in the scope of this law are not eligible for using terms such as “Pension,” “Pension Plan”, “Pension Fund” or “Pension Mutual Fund” or the terms that serve the same meaning (Republic of Turkey, 2001, Article 11). In the private pension system of Turkey, a pension mutual fund is defined as a fund that includes assets, which are created for managing the contributions that a pension company receives through pension contracts and controls in individual pension accounts according to the principle of risk diversification and fiduciary ownership by the law (Republic of Turkey, 2001, Article 15). Pension funds are set up based on Provisional Article 20 of Law No. 506 dated July 17, 1967. Only the funds established under the provisions of Turkish Civil Law No. 743 amended by Law No. 903 dated July 13, 1967, are included in the scope of IPS. All the natural and legal persons that are not covered in the scope of this law are not eligible for using terms such as “Pension,” “Pension Plan”, “Pension Fund” or “Pension Mutual Fund” or the terms that serve the same meaning (Republic of Turkey, 2001, Article 11). In the private pension system of Turkey, a pension mutual fund is defined as a fund that includes assets, which are created for managing the contributions that a pension company receives through pension contracts and

controls in individual pension accounts according to the principle of risk diversification and fiduciary ownership by the law (Republic of Turkey, 2001, Article 15).

Fund assets cannot be used for any intention other than exercising the legislative obligations and responsibilities set by the Capital Markets. Such assets cannot be confiscated by third parties, pledged as collateral other than the portfolio-related transactions, or calculated into the bankruptcy assets (Republic of Turkey, 2001, Article 17). Each pension company is obliged to establish at least three funds with different portfolio structures composed of money and capital market instruments along with precious metals and other investment instruments. Unlike other mutual funds, pension mutual funds can be only bought by pension members. Returns to these funds are exempt from withholding tax.

Pension mutual funds are not legal entities and managed by the portfolio management companies assigned by the pension company that owns the fund. There are also group pension mutual funds that are created for certain businesses, occupations, and industries with the approval of the Capital Markets Board (Republic of Turkey, 2001, Article 11). Portfolio management companies are obliged to manage pension mutual funds following long-term investment strategies. Each member has a right to make changes to the distribution ratios and amounts of their accumulation to the pension mutual funds six times every year. These changes can be made through a written request, through a request to the pension company's call center, through the website or other electronic communication tools created in the name of the member, sponsor or employer (Republic of Turkey, 2001, Article 11). Members are expected to choose the most suitable pension mutual fund for their risk profile among the pension mutual funds offered by pension companies (Republic of

Turkey, 2001, Article 11). Pension mutual funds are classified according to the investment instruments in their pools such as precious metals, stocks, and so on. A pension member could invest their money on the pension funds their pension company has without a minimum or maximum limit. Yet, pension plans may have investment limits based on the risk-return expectations of the participants. Therefore, a member can only choose among the funds in line with the stated limits of their pension plans. Contributions will be invested in the standard fund of the company if a member does not choose among the funds (Republic of Turkey, 2001, Article 11).

3.5.1 Types of pension mutual funds

The principles and procedures on the pension mutual funds are set by the Capital Markets Board and were published in Official Gazette No. 28586 on March 13, 2013, based on the amendments made with Law No:6327 on Law No:4632. Fund types and their principles are defined by the law as follows.

3.5.1.1 Bonds and bills funds

At least 80 percent of the money in those funds should be continuously invested in domestic and/or foreign government and/or private sector bonds and bills. This type of fund can be also classified as reverse repo funds, which is a term for defining funds containing pools of repurchase agreements where fund owners buy some shares of the large financial institutions, large business banks (including central banks) for a specified period and then sell the asset back for a higher price through which the business/bank/government can increase their liquidity and the fund owner can gain interests.

3.5.1.2 Stocks funds

At least 80 percent of the money in those funds should be continuously invested in the stocks issued by domestic and/or foreign corporations. Stock funds are also known as equity funds.

3.5.1.3 Money market funds

The money in those funds should be continuously and fully invested in high-liquidity monetary and capital market instruments that have a maximum of 184 days to maturity and have a daily-calculated maximum weighted-average maturity of 45 days.

3.5.1.4 No-interest pension funds

The money in those funds should be continuously and fully invested in no-interest instruments that are approved by the relevant pension company's Advisory Board. These funds are created for people who are conscious of interest and thus compliant with the Islamic finance rules.

No-interest financial instruments are determined as the participation accounts in Turkish lira, Euro or US dollar opened in participation banks; no-interest Turkish lira, Euro or US dollar assets, and capital market instruments that do contain precious metals such as gold and silver; stocks that are suitable for the participation index and participation banking principles gold and precious metals; no-interest securities mutual funds (e.g., venture capital investment funds, real estate mutual investment, etc.); no-interest bonds and bills such as sukuks (lease certificates) that are issued in Turkey or abroad.

3.5.1.5 Participation funds

The money in those funds should be continuously invested in rent certificates, participation accounts, partnership shares, gold and other precious metals, and the non-interest monetary and capital market instruments approved by the Board.

3.5.1.6 Composite funds

At least 80 percent of the money in those funds should be continuously invested in at least two of the partnership shares, bonds and bills, gold and other precious metals, and rent certificates while shares of each should be kept above 20 percent of the fund portfolio.

3.5.1.7 Precious metals funds

At least 80 percent of the money in those funds should be continuously invested in gold and other precious metals, and monetary and capital market instruments based on them.

3.5.1.8 Contribution funds

Those are the funds that the money contributed as state contributions in the Individual Pension System invested on behalf of the pension members.

3.5.1.9 Life cycle / target funds

Those are the funds that created with an investment strategy by taking into account the participant's retirement date, risk perception, age, and other specifications.

3.5.1.10 Fund basket funds

At least 80 percent of the money in those funds should be continuously invested in mutual funds and stock market mutual funds, which consists of repo funds. The stock market mutual fund participation shares traded in foreign stock markets and the investments made in foreign fund participation shares that approved by the Board are included in the 80 percent limit. Internal Regulations of the Fund Basket Fund must include strategies for the planned mutual fund and stock market mutual fund investments.

3.5.1.11 Index funds

At least 80 percent of the money in those funds should be continuously invested in all, or a part selected through sampling, of the assets from a Board-approved index, and that aims to achieve at least 0.9 coefficient of correlation between the basis index and the fund's unit share value and yield a return that equals the increase in the index.

This type of funds should satisfy the following conditions:

- The index that consists of the shares of the issuers it follows and the fund portfolio that follows the index must have of at least shares of six issuers and the weight of shares of each issuer in the index/fund portfolio must not be more than 30 percent of the total index/fund value,
- The index that consists of the government bonds and bills or private bonds it follows and the fund portfolio that follows the index must have no weight more than 35 percent for each share of the government bonds and bills or private bonds in the index/fund portfolio value,

- The index that consists of the real estate certificates or private sector real estate certificates it follows and the fund portfolio that follows the index must have at least four real estate certificates and the weight of each of the real estate certificates or private sector real estate certificates in the index/fund portfolio must not be more than 35 percent of the total index/fund value.

3.5.1.12 Standard funds

This is the fund where the accumulation of the participants who do not mention any fund preference for their investments while joining the system and this fund is managed according to the regulations of Ministry, which are written in Article 2 in the Provisions on the Pension Plan section of the Circular on the Private Pension System No. 2016/39. A fund portfolio that classified as standard fund must fulfill the following conditions:

- At least 60 percent of the money in those funds should be invested in TL-denominated domestic government bonds and bills, revenue-sharing certificates or the real estate certificates,
- At most 40 percent of the money in those funds should be invested in;
- Government bonds and bills that are issued in Turkish Lira by banks or other issuers that have an investment-grade rating provided that they are traded on the Stock Exchange,
- Real estate certificates, the fund user is a bank, or he or the fund user has a rating of investable level, provided that it is traded on the Stock Exchange in Turkish Lira,

- Mortgage and asset-backed securities, mortgage and asset-backed securities, promise contracts,
- At most 30 percent of the money in those funds should be invested in contribution index shares that are calculated by BIST 100, BIST Sustainability Index and Borsa İstanbul A.Ş.,
- At most 25 percent of the money in those funds should be invested on participation accounts in time deposits issued in TL,
- At most two percent of the money in those funds should be invested in reverse repurchases and Takasbank money market and domestic organized money market transactions.

3.5.1.13 Flexible funds

Those are the funds that do not fit into any of the aforementioned types in terms of portfolio limitations.

3.5.2 A literature review on the performances of pension mutual funds

The latest data on the financial returns of pension mutual is provided in Appendix F (EGM, 2020c). As their rate of returns demonstrates, the pension funds with higher risk levels will bring much better or much worse returns than the pension funds with low or moderate risk levels. The band of fluctuation so as the volatility is higher for the returns of funds with higher risk levels such as stocks funds, index funds, and precious metals funds. On the other hand, the pension funds with low or moderate risk levels in Turkey could not succeed to bring positive real returns in the latest years due to the high levels of inflation. So, a participant either face the financial market risks and take a risk over ending up with great losses or end up with moderate real losses that could only succeed to slow down the monetary depreciation of their savings. The growing literature on the pension funds in Turkey focuses on the financial performances of the pension funds. The financial performance of a fund is determined by the real returns it brings to its shareholders who are the participants of IPS for our research. Due to the dramatic rise in the number of participants after the implementation of the Auto-Enrollment System (AES), I will mainly focus on studies conducted after the introduction of AES.

The preliminary studies that investigate the financial performance of the pension funds are made by Korkmaz and Uygurtürk (2007). Korkmaz and Uygurtürk compared the performances of 46 pension funds for the period between January 2004 and June 2006 by using different technics. Their results demonstrated that pension funds show better performances than investment funds (2007).

In another study, Korkmaz and Uygurtürk (2009) compared the performances of stocks funds and pension stock funds and they concluded that financial performances of those fund types were very close to each other. The higher financial performances of pension funds compared to investment funds might be a result of the differences between their governance structures. The set of actions of fund managers are much more limited in pension funds by the law. Moreover, in addition to Capital Markets Board which monitors the activities in both pension and investment funds, there are other organizations such as Pension Monitoring Center and Insurance Supervision Board for monitoring the operations and transactions in the pension funds. Bayrakçı and Aksoy (2019) measured the performances of pension companies by using COPRAS and ARAS methods. They found out that top three pension companies with best performances were Anadolu Hayat ve Emeklilik, Allianz Yaşam ve Emeklilik and, Avivasa Emeklilik ve Hayat according to both methods while the worst three being Aegon Emeklilik ve Hayat, Groupama Emeklilik, and Fiba Emeklilik ve Hayat according to the results of both methods (p.430).

İskenderoğlu, Arslan, and Çelik (2019) showed that 16 of the 19-stock pension mutual funds in the IPS outperformed the BIST-100 indexes for the period between 2014 and 2017 by using Sharpe, Treynor, Jensen methods. The funds that were ranked as unsuccessful belonged to Halk Hayat ve Emeklilik, Metlife Emeklilik ve Hayat, and Vakıf Emeklilik ve Hayat and the average returns of the stocks these funds were lower than the average return in the BIST-100. The authors explained the underperformance of these funds based on the failure of portfolio managers to diversify the fund portfolio well. Their study also showed that there was no particular group of pension companies that could be classified as successful because there were successful stock-pension mutual funds, which belonged to different companies (İskenderoğlu, Arslan, & Çelik , 2019).

Kuzubaş, Saltoğlu, Sert, and Yüksel (2019) showed that the most pension funds in Turkish IPS were unable to create excess returns compared to the corresponding asset class returns, which is defined as "the difference between the average of annual geometric returns (i.e. cumulative average growth rate (CAGR)) for the fund index and the corresponding asset class index (p.20)". They also underlined that active fund management almost did not affect the generation of excess returns. They claimed that the reason behind this situation was the volatility of the Turkish economy that made pension fund investors more inclined for offering less-risky funds, which were also less likely to generate excess returns.

Arslan and Çelik (2018) measured the performances of 157 pension mutual funds for the period between January 2014 and December 2017 by using Sharpe Ratio, Treynor Ratio, and Jensen Criteria technics. They also compared the results they obtained for the pension funds with the BIST-100 index in the same period (Arslan & Çelik, 2018, p.65). Their study is particularly important as they compared both the performances of different pension companies and different pension funds. Only 48 out of the 157 pension mutual funds performed better than the BIST-100 for this period according to Sharpe Ratio's performance results, which is based on standard deviation. According to Sharpe Ratio's performance results, 90 percent of the successful pension funds were the public external borrowing pension mutual funds, which are instruments that consist of Eurobonds issued by the government in foreign currency. This situation shows that returns on the public external borrowing instruments are high. On the other hand, all of the remaining 109 pension mutual funds underperformed the BIST-100 index. Looking at the content of the pension funds that have failed, it is understood that 90 percent of these funds are liquid and money market funds. This showed that returns of the money and capital market lower than expected (Arslan & Çelik, 2018, p.70). Arslan and Çelik's study (2018) showed that 21 pension mutual funds outperformed the performance of the BIST-100 index while the remaining 136 pension funds underperformed the BIST-100 index according to the results of the Treynor Ratio. Arslan and Çelik (2018) argued that the portfolio managers of those funds must be following the markets well as well as managing the market dynamics more carefully than other fund managers (Arslan & Çelik, 2018, p.67). Almost all of the successful mutual funds according to Treynor Ratio are stock-based pension mutual funds which consisted of the stock instruments listed in the BIST-100. This situation showed that the return of the BIST-100 index was high during this period. Looking at the content of the pension funds that have failed, it is understood that most of them consisted of money and liquid investment instruments, similar to the Sharpe ratio results (Arslan & Çelik, 2018, p.71).

According to the results of Jensen Criteria, which is also based on systematic risk, 51 out of 157 pension funds were rated as successful because they outperformed zero, while the remaining 106 pension mutual funds were rated as unsuccessful because their Jensen Benchmark stayed below the zero. Arslan and Çelik claimed that the success of those funds showed the good management performance of their portfolio managers (2018, p.68). The successful pension mutual funds according to Jensen Criteria were public foreign borrowing and equity pension mutual funds, while the funds related to public debt instruments performed unsuccessfully. This situation showed that public debt instruments provided fewer returns than the BIST-100 (Arslan & Çelik, 2018, p.71). Arslan and Çelik's study showed that 90 percent of the successful pension funds were stock-based pension mutual funds. They concluded that the return of the stock market was higher than the other investment instruments in this period. Their results also showed that successful pension mutual funds consisted of funds belonging to different companies generally. Therefore, success cannot be attributed to a specific group of companies (Arslan & Çelik, 2018, p.70). The fact that fund returns remained below the BIST-100 index implies that 85 billion TL in IPS has not well managed. This situation indicates that the return of the BIST-100 index is higher for the study period. Pension mutual funds, which were found successful in all methods, are generally composed of stock pension mutual funds. In addition, the successful results of stock-based pension mutual funds supported the notion that the stock market would have high returns in the long term as advocated by the investment experts (Arslan & Çelik, 2018, p.71).

This review shows us that there are many determinants of pension fund performance. Among these determinants, the structure and performance of the financial sector and the structure and performance of the overall economy are exogenous. Performances of fund managers, on the other hand, are endogenous, which also compromise an important element of this research. This review clearly shows that the behaviors of fund managers affect the performances of pension funds by showing the diversity among the fund performances that belong to the same type but owned by different companies. So, not only the type of pension mutual fund but also the performances of their managers affect the real returns the funds bring to the participants. Therefore, understanding how fund managers carry out their management activities and how they navigate within the institutional context that the state regulation sets is important to understand the impact of IPS on beneficiaries.

3.6 Conclusion

This chapter presents us with a desk review of the private pension system of Turkey. The literature review on the performances of pension funds demonstrates the effect of the financial market fluctuations on the performances of pension funds. These reviews demonstrate that a pension plan can bring favorable returns to a participant if the changes in pension funds within the plan are kept in track and changed in line with the changes in financial markets. Unfortunately, many participants in the private pension system of Turkey are financially illiterate and thus cannot keep up with the changes in their plans effectively. Thus, two main mechanisms mentioned in the literature is needed to be used effectively for protecting participants from financial market risks and the other risks they may face due to their financial illiteracy, including agency problems caused by misbehaviors of their agents. These two mechanisms are the collective voice and state regulations. Although not having a collective voice is common among the voluntary pillars as shown in the literature review chapter, this chapter shows us that the second pillar of the system i.e. Auto-

Enrollment System also does not have a collective voice mechanism. Unlike the second pillars in many countries, employers do not make any contributions to the accounts of their employees in the Auto-Enrollment system but only act intermediaries between their employees and pension companies. Their positioning as an intermediary rather than a sponsor together with the easiness of withdrawing from the system may be the reason behind the lack of collective voice mechanism in the private pension system of Turkey because Auto-Enrollment participants would be less likely to early withdraw from the system if their contributions were not deducted from their incomes or they were stuck in the system. By considering the effect of partial sponsoring of the state via state contributions on the rates of early withdrawals, participation in the system is expected to be for longer durations for many people if there were any employer contributions to their accounts. And, as the literature review on the asymmetric information in the system shows, the longevity of participation leads to higher interest in the pension plans and increases the financial knowledge of people. Thus, people could establish a collective voice mechanism and could gain some leverage over the governance of their pension funds importance of which over the effective management of pension fund management is demonstrated in the literature review chapter. So, the only mechanisms for controlling the agency problems other than the internal mechanisms used by the companies are the regulatory and supervisory organizations in the system the roles of which demonstrated in this chapter.

This chapter presents that the state as a regulator attained multiple organizations for controlling the private pension system which expected to decrease the prevalence of agency problems in the system. The chapter shows us the efforts of state for prohibiting the agency problems via legal structure, yet the restrictions put on the pension companies and portfolio management companies by the law could only be secured if the regulatory and supervisory organizations could fulfill their tasks effectively. Therefore, the capacity of the state as an overseer depends on the effectiveness of regulatory and supervisory state organizations in the system.

This limited body of research demonstrates the legal structure of the private pension system together with the regulatory and supervisory authorities which have a role in the control of agency problems. Yet, these overviews are not capable to explain the prevalence of agency problems in the system and their consequences to the capability of the governance structure of the system together with the overseeing mechanisms in the control of the agency problems in the system. This chapter also shows that the studies on the asymmetric information in the system focus on the perspectives of participants and thus incapable of showing the occurrence of agency problems in the system. In addition to these studies, the next chapter will analyze the results obtained from the interviews conducted within the scope of this thesis with the sector employees for exploring the prevalence of the agency problems in the system.

CHAPTER 4

FINDINGS AND ANALYSIS

This thesis aims to explore and identify the prevalent agency problems in the private pension system of Turkey in light of pension sector employee accounts. Autenne (2017) offers a comprehensive framework on the agency problems that likely to occur in a private pension system. This framework suggests that agency problems are consequences of operations and transactions decided by governing bodies which that puts beneficiaries under risk (1), conflicting interests of fund managers that make them act in behalf of any other interests than the interests of their beneficiaries while managing funds (2), having a governing body that consists directors of sponsoring companies who may have a conflict of interest with participants (3), having a governing body whose members who do not have adequate qualifications for dealing with the complexity of pension system (4), insufficient information disclosure to participants (5), having external bodies that are responsible for fund management (6), making arrangements that may make fund managers inclined to excessive risk-taking (7).

The results obtained from the analysis of 16 semi-structured in-depth interviews carried out with ten employees from eight pension companies, three employees from three portfolio management companies, and three officials from one of the regulatory and supervisory organizations will be presented in this chapter. This chapter will demonstrate the points of crossover and differences between the respondents' perceptions of diverse companies and their attitudes towards the most common problems in pension fund governance. This chapter will utilize the information on the financial performances of the pension funds that the background chapter provides for examining the relationship between the pension fund performance and pension fund governance quality.

This chapter presents my findings. In addition, the chapter also offers an analysis of agency problems in the Turkish private pension system considering the effect of the governance structure of the private pension system of Turkey on those problems. The analysis here is organized in accordance with the seven factors identified by Autenne (2017) that make a pension system more prone to agency problems.

4.1 Risky operations and transactions decided by the governing bodies

The governance structure of the private pension system determines the set of actions of responsible bodies i.e. pension sector institutions such as pension companies and portfolio management companies. These structures vary between countries as presented in the literature review. The permitted set of actions may result in many agency problems in private pension sectors. One such agency problem is that the agents take advantage of their position and engage in some risky transactions and operations without informing their principals i.e. participants.

To explore the set of risky transactions and operations an agent can engage in the context of the private pension system of Turkey, all of the respondents were asked about the range of operations and transactions they can perform without the consent of their participants. Respondents mostly responded this question by claiming that the possible actions of sector employees are very much limited by the law and the extent of their activities are clearly stated in the pension contracts and they need the approval of their participants for engaging in any operation and transaction that does not fall within the boundaries of the pension contracts.

Moreover, each pension company is obliged to inform its participants whenever there is an operation that affects the pension plan of a participant. Such operations, for instance closing down of a fund or changes in the fund expenses due to the changes in the regulation, cannot depend on the approval of the participant. Apart from these exceptional operations, almost any operations and transactions that are not written in the pension contracts of the participants cannot be performed by the pension companies. As a result, operations and transactions that are riskier than the risk level preferred by a participant are expected to be uncommon in the private pension system of Turkey according to the views of most respondents. Therefore, the legal structure of the private pension system of Turkey mostly precludes operations and transactions that do not fit with the risk preferences of participants, as many respondents alleged.

Whenever a change that does not require the consent of a participant accrues, such as the closure of a fund, pension companies generally report it in their monthly reports rather than making calls for informing the participants. When I asked the respondents from pension companies what they think about this information policy, most of them reported that many participants do not read such reports and thus they do not have a good understanding of their plans including the operations and transactions allowed within their plans. Yet, they also added that calling each participant after each change requires an immense human resource and thus inefficient. A few of them further argued that informing participants about such changes through SMSs or emails and asking them to reconsider their plans in consideration of these new changes is more efficient than calling them whenever there is a change that affects their plans because frequent calls may disturb the participants.

Still, many respondents claimed that pension intermediaries can take advantage of the financial illiteracy of participants and may convince them to take actions that do not fit with their risk profile. So, participants may give consent to the operations they did not know, and supervisions mechanisms remain incapable of controlling such occasions, as reported by a salesperson from headquarters of a pension company. Another operational problem emerges whenever an intermediary works in a bank selling pension plans by offering benefits like lower interests on credit payments. This practice leads to higher numbers of uncollectible plans, as alleged by all respondents from pension companies. Moreover, as asserted by all salespersons, because the intermediaries in the banks do not provide adequate information on the pension plans, most participants recede from making contracts when they are reached by the pension company and got detailed information on the pension plans.

Benchmarks and the benchmark-setting processes are mentioned as another source of operational and transactional problems by most respondents. The strategy departments of pension yearly benchmarks for the pension funds and portfolio management companies are asked for bringing returns at least these benchmark ratios for that year. Whenever a pension company dictates an unrealistic benchmark ratio, this may make portfolio management companies willing to attain some risky transactions, as stated by all respondents from portfolio management companies. On the other hand, a respondent from a strategy department of a pension company reported that they consider the returns of the same fund type of each pension company for the latest year together with their fund’s return, so the benchmarks set by them are not unattainable. This respondent added that there would be no problem when the returns of a fund fall behind the benchmark ratio if the portfolio management company reports valid causes for this situation. Moreover, strategy departments of pension companies also determine the benchmark number for making new pension plans to their salespersons. These benchmarks may impel salespersons to misinform their prospective participants for making contracts or selling more than one plan to some people, particularly to their relatives, for increasing their number of sales, as reported by salespersons from a branch of a pension company and the headquarters of a different company. To address this problem, most companies limited the number of plans that a participant may have to four or five at most. As reported by a respondent from a strategy department, performance-based premiums also led to the same consequences as the unattainable benchmarks for the salespersons and employees of other departments. Officials from one of the supervisory and regulatory organizations also suggested that uncollectible plans became one of the most important problems affecting the system's efficiency. Therefore, setting benchmarks for increasing the numbers of collectible plans rather than new pension plans may be a solution for such problems, as proposed by the officials.

The respondents were questioned about the control mechanisms their company implemented for monitoring if their employees consider the best interest of their participants and what measures they take if any employee misbehaves. All of them had internal auditing departments responsible for tracing the operations of the company. Moreover, some of them also hire specialized external audits that audit the internal auditors. Despite such well-established monitoring mechanisms, their attitudes toward misbehaviors were quite vague. All of them underlined that they covered all the losses of participants caused by the misbehaving agents while at the same time abstaining from notifying the external state organizations about the misbehavior as that would harm their reputation. Only a few of them said that they inform external authorities just after any incident. Most companies preferred to keep such reports in their company records against the risk of being sued but do not share such reports unless they are sued. Furthermore, a salesperson claimed that the internal auditing department in one company does not properly function in monitoring the operations conducted by the sales and customer services departments because every operation conducted by them requires written or verbal approval of the customers. The internal audit department, however, only controls if all the information in the forms are accurate and all the signatures are complete. As a result, they claimed, such operations and transactions are prevalent in their company. The respondent also asserted that this is a problem because this approach of the internal auditors make salespersons think that as long as they have all the information about a new participant together with signatures on all the pages, failing to provide adequate information on their pension plans to participants would not pose any problem. Therefore, all salespersons reported that they do not mention some of the information about the plans such as the expenses and minimum durations for state contribution while making contracts. Therefore, as long as the signatures on a pension contract are complete, the participant cannot prove the misinformation.

These findings underline the importance of the role of external organizations such as Pension Monitoring Center, Capital Markets Board, and Insurance Supervisory Board in tackling agency problems and protecting pension participants. Many respondents mentioned the financial crisis of 2001 in Turkey as the main reason behind the strict regulations in the private pension system of Turkey. They reported that the private pension system of Turkey was established right after the crisis and somehow seemed like a follow-up of the life assurance system which was mostly collapsed after the crisis and this is why the state was very careful in the design of the Turkish private pension system and assigning external organizations for supervising and regulating the system. One respondent who is responsible for tracing risks and performances of pension funds managed by their portfolio company underlined that it is not possible for those who are not familiar with the functioning of pension companies to understand the role of these organizations completely. Each respondent mentioned at least one of these organizations as external mechanisms that are effective in the monitoring of their employees when I asked them what control mechanisms are effective for monitoring their employees. The respondent who is a risk and performance internal audit in a portfolio management company even claimed that internal auditing is only complementary for these external organizations for their company. All the companies declared that these external organizations work carefully in controlling the operations of the private pension companies. As a result, the risk of misbehavior is claimed to be very low for the sector employees due to the fear of legal sanctions. Yet, the risk of unrecording is also very high due to the fear of reputation loss as stated earlier. So, although almost all respondents claimed that the external supervision mechanisms are effective for monitoring the operational problems in the system, the knowledge on such problems is very limited and insufficient for making any judgments.

Moreover, the complexity of and frequent changes in regulations was also blamed for problems in operations and transactions by most respondents. First, most respondents claimed that the complexity of the code of law results in many sector employees engaging in risky operations and transactions without realizing the risky nature of such operations due to their misunderstanding of the law. Second, as claimed by nearly all respondents, the state frequently makes amendments to the regulations, the pace of which is hard to keep up with. Moreover, such changes may also change the set of actions that is permitted for sector employees. And, these new probable set of actions may embed higher risks than the previous set for a pension fund. As a result, a pension plan that was used to fit with a risk preference of a participant may not fit after an amendment. For example, the state may change the minimum and maximum rates for an asset type that must be included for a specific fund type, and if the maximum rate allowed for a risky asset type is increased, fund managers may buy more assets from this type which in turn expose more risk on the participants in this pension fund. The information on the amendments is provided at the monthly reports on the situations of pension funds, which were barely read by any participant. Yet, again, any participant cannot claim any misbehavior on the part of the pension company by claiming they were not informed about the changes in their pension funds in such instances as long as the companies can prove they provide the information.

4.2 Fund managers who act on behalf of any other interests than the interests of their beneficiaries while managing funds

The relationship between the fund managers and the owners of the funds they manage are agency relations in which fund managers can abuse their control power over the funds. The abuse of power can occur by engaging in risky transactions with the money in the pension funds that will bring personal financial returns to managers while endangering the financial returns of the participants. For instance, a fund manager can buy a share in their personal account and then also buys the same share with the money in the pension fund for stimulating the price of that share and then sells the shares in their personal account for a higher price. Given that transactions made in the market are irreversible, the loss caused by the malpractices of the fund managers cannot be recovered easily. Although most pension companies employ competent people tracing the transactions made by fund managers, pension companies are not allowed to see the transactions made in their funds due to the laws that protect the privacy rights of portfolio management companies. Therefore, the information asymmetry between the pension companies and portfolio management companies lays the ground for the moral hazard of fund managers. I only present the views of the employees of the portfolio management companies for this theme because employees from pension companies were unclear and they were self-doubting about the accuracy of their views on this theme due to their inferior position in this agency relation.

The respondents from the portfolio management companies were asked if they ever have had a conflict of interest with their clients i.e. pension companies and their participants. All of them said that they generally do not because the share from they get from the fund management expenses are based on the returns of the fund, so companies tied the interests of the fund managers with participants by paying returns-based premiums to their fund managers. I then asked them about their perceptions toward the prevalence and the probable consequences of agency problems in the relations where fund managers are the agents and misuse their power. These respondents claimed that such occasions are not common in the private pension system of Turkey thanks to strict supervision and regulations of state authorities. Among all the regulations, they particularly underlined the provisions of the license issued by the Capital Markets Board of Turkey that required for being a fund manager. The conducts of this license prohibit fund managers to act on behalf of their interest and obligate them to treat all their clients equally. Whenever the interests of two client conflict, the fund manager is required to transfer one of the clients to another fund manager according to the conduct of this license. They alleged that; therefore, no fund manager can perform such transactions because that would draw the attention of the regulatory authorities to the fund manager. In return, that manager would not only be fined or face cancellation of their licenses. Such a fund manager would not be hired in any company in the sector due to their bad reputation even if the Board would not cancel their license. The Capital Markets Board of Turkey monitors the personal accounts of both fund managers and their relatives. The Board also traces any suspicious operations in the capital markets to detect if any fund managers are related to such operations. All the fund managers must accept this monitoring and share the information about themselves and their relatives for getting their license by Board. And, any fund manager or their relatives cannot have any of the shares in the fund managed by the manager in their personal accounts. All these supervisory activities are mentioned as mechanisms that preclude fund managers from taking advantage of their power of control over the funds according to the responses.

Then, the employees of portfolio management companies were asked if they think that such supervisory and regulatory activities are effective in preventing malpractice of fund managers. All of them agreed that the strictness of regulations and supervisions over the personal transactions of the fund managers are effective in preventing misbehaviors both to protect the financial returns of the participants and ensuring the stability of the financial market. A pension fund manager, for example, stated that some managers manage large funds, misbehavior of whom would destabilize the financial market. The respondent also added that there are too many idle rumors about the performances of fund and asset types, and about the capital markets in general almost all the time and such controls prevent the negative outcomes these idle rumors may create in the sector. Moreover, another respondent indicated that the regulations and supervisions are less strict for investment funds than the pension funds, so they have much more room for maneuver in the management of investment funds. The same respondent added that not having this room for maneuver is good considering that people in the pension system are mostly risk-averse and aim at saving for their old age, unlike those in investment funds interested in taking risks and gaining excessive returns in the short term.

Some other sources of potential malpractices are also mentioned during the interviews. For example, one fund manager reported that making too many transactions means too high fees to pay to stockbrokers and thus they try to minimize the number of transactions. So, fund managers do not manage pension funds actively for minimizing the costs and, as a result, participants may get lower returns due to the lack of proactive management of their funds caused by cost minimization purposes of portfolio management companies. Unlike trading the same shares in both personal accounts and pension funds, any fund manager cannot be legally accused of not being proactive enough in managing their funds. To tackle this problem, the Turkish government introduced a fund performance assessment system through which they will reward or penalize the funds based on their performance for decreasing the negative impact of such problems on the returns of participants.

All in all, the findings demonstrate that despite the possibility of a conflict of interest between fund managers and their clients, the external regulations and supervisions together with the fear of penalties and losing reputation decrease the prevalence of such problems so as the negative effects of those on returns.

4.3 Having a governing body that consists of directors of sponsoring companies who may have a conflict of interest with participants

There are instances in which pension funds are invested in the equities of the sponsoring companies which may bring lower returns to participants while providing a higher dividend payout ratio to the stakeholders of the sponsoring company (Cocco & Volpin, 2007). Such instances are particularly common in trust-based systems in which sponsors establish pension funds and thus they become directors of pension funds. In Turkey, on the other hand, pension companies cannot have people that have more than ten percent shares in any other company that is active in the capital markets, and fund managers cannot trade any equity in which they have personal stakes. Thus, such conflict of interest between a governing body and participants is limited by the law to an extent. Yet, there are no mechanisms implicated for checking if a portfolio management company trades the shares of a company that makes auto-enrollment contracts with them or that belongs to the same capital group. So, although there may not be a single person who has stakes on both companies i.e. the pension company and the sponsoring company, the effect such actors may create in a private pension system are still visible in the private pension system of Turkey.

There is a law that aims to minimize the effect of such alliances on the system by obligating pension companies to work with more than one portfolio management company. Yet, pension companies can still work with the portfolio management companies with which they have business alliances. As a result, the law does seem to be insufficient for precluding the portfolio management companies from providing capital to the companies they have alliances by trading their shares. However, this practice may lead to the conflict of interest and endangers the financial wellbeing of the individual participants as well as other corporate customers.

The respondents from pension companies were asked what they think about the effect of such business alliances on the functioning of the private pension system. Answers were quite tentative and obscure because they do not perform any transactions in the capital markets. Moreover, most of them were timid about talking on the topic. The ones who work in a company that belongs to the domestic capital group mostly asserted that the obligation for working for more than one company somehow released them from their ties with the capital group. Otherwise, they noted, they would have worked with the allied portfolio management company to trade such shares. Still, making such transactions is totally up to the portfolio management company because these transactions are barely traceable. Those respondents from pension companies that belong to the international capital group reported that such practices are not prevalent in the international insurance sector as the resulting loss of reputation will harm them at the international level more than any penalty fine. The ones that work in pension companies that have no organic links with any domestic or international capital group noted that they believe such transactions frequently occur in other companies that belong to a capital group and this is why their fund size stays relatively small and they are left behind in the competition.

The same question was asked to portfolio management company employees and I get more detailed answers from them because they are the party who controls pension funds. All the respondents from portfolio management companies agreed that such practice is risky but possible. It is risky not only because it may bear legal sanctions but also due to the reputation losses caused by such practices as stated by an employee that works in a Turkish branch of an international company. The respondent claimed that the reputation of their company is more important than forming alliances with domestic capital groups and they would not risk losing their reputation all over the world by forming such alliances at the domestic level. An employee from a portfolio management company that belongs to a family corporation told that trading the shares of that family corporation for providing them investment capital is a common practice but that trades are made only if the best interests of the participants also protected. They underlined that as a result of the pension companies' obligation of working with more than one portfolio management companies, a pension company can realize if there is a mismanagement of funds by comparing the fund returns of their allied companies with the fund governed by the other companies and can transfer the management rights of their funds to another company.

Examining this issue becomes more interesting in the case of pension funds of public companies that become a part of the Wealth Fund of Turkey. When I asked the same question to an employee from a public portfolio management company, they replied that such practices are common in their fund management practices and explained this common practice using a different causal explanation. They claimed that they are compelled to trade the stocks that are part of wealth fund or trade government bonds because they are not allowed to invest in interest-bearing assets and most of the interest-free assets fall under these two types of assets.

Many respondents claimed that they believe trading the shares of companies that made auto-enrollment contracts with them is not a common practice. However, this is not because of the concerns about effective governance. It is rather a result of the fear of losing reputation due to possible rumors about them not treating all their customers equally. Portfolio management companies have no direct relations with any customers of the pension company they work with so they would not benefit from such practices even if there is an agreement between the pension company and their customer. Therefore, the respondents mostly concluded that they do not think their company will engage in such activities that will harm their reputation.

All in all, the findings mainly underline that the governance structure of private pension system of Turkey and its regulatory and supervisory institutions cannot successfully control the transactions that favor some capital groups that have alliances with the company, which may harm the financial returns of the other customers. Still, the regulation enforcing pension companies to work with more than one portfolio management company allowed these companies to act relatively autonomously from their existing alliances. Additionally, unwritten rules and protecting reputation are perceived as effective in preventing such activities.

4.4 Having a governing body whose members are not qualified enough for acting as agents

All of the respondents from pension companies and portfolio management companies were asked what qualifications are necessary for recruitment by a pension company/portfolio management company and whether these qualifications differ among departments. I will present the findings for different groups separately to explore if there exists an important difference between the required competencies of employees of pension companies and pension management companies.

Respondents from the pension companies asserted that their company is very demanding while hiring new people to their headquarters, particularly for their fund management and auditing departments. One reporter working in the fund management department of a pension company alleged that all the people in their department are qualified as much as the fund managers that work in the portfolio management company. The same respondent claimed that the company hires such qualified people for decreasing the information asymmetry between them and the portfolio management companies they work with, which otherwise may abuse the power of control they have over the funds. A respondent from a pension company asserted that their company hires new graduates from the high-ranked universities who preferably have relevant experience and then give training for six months to all the new employees and rotate them around the departments for making them competent about a wide range of operations of the company.

Respondents, however, also asserted that the same selection criteria do not apply to other departments, particularly for marketing and sales departments. An internal audit from a pension company furtherly added that these less qualified employees are clumsier in general and thus such employees lead underperformance in the operations of their company. This fact is also asserted by the most of other respondents from pension companies who reported that all of their managerial and actuarial staff are well-qualified, but this is not valid for the other departments. As a result, most employees fail to keep up with the changes in the law and to inform the participants about the changes in their pension plans. Hence, most participants end up underinformed due to the lack of competence of the people who work in the sales and marketing departments of the pension companies. The customer relations department is another department that was mentioned in the interviews as one of the departments whose employees are not competent enough. The analysis indicates that their perceived incompetence together with the complexity of the system makes it difficult for a participant to access accurate and understandable information on their pension plans. A salesperson from the headquarters of a pension company added that it is harder to preserve high standards for employee competence in departments such as sales, marketing, and customer relations due to the need for a larger human workforce in such departments. However, these departments have direct relations with participants, which makes their competence key in ensuring healthy information flow to participants. This salesperson also underlined that all these departments mostly hire the least qualified employees, who accept to work for lower wages. As a result, these employees are inclined to do anything for increasing their performance to keep their job and increase the performance-based components of their earnings. For salespersons, this means an inclination towards misinforming the prospective participants.

Respondents from the portfolio management companies asserted that their company is very careful about hiring competent candidates and even more careful in promoting them to fund manager positions. According to the respondents' views, having related work experience is the most important qualification for finding jobs in the sector, particularly for becoming a fund manager. First, any person who wishes to become a fund manager must get licensed by the Capital Markets Fund after completing the training and examinations for being eligible for making operations in the capital markets. Then these persons must work in the sector for at least five years, after acquiring their licenses, for being a suitable candidate for fund management. Although five years is the minimum statutory requirement, all the employees from the portfolio management companies asserted that working in the sector for at least ten years is deemed necessary for being a fund manager in Turkey. One of the respondents underlined that their company does not hire any person without at least two-year experience in the sector to any position and gives training for six months to these less experienced employees before starting work. Moreover, having experience is not sufficient for managing all types of funds. According to the respondents from portfolio management companies, a person with previous experience in the management of stock funds will not be assigned to the management of bonds and bills fund in any company. Furthermore, the newbies are assigned to the working teams together with more experienced people for minimizing the effect of their lack of expertise on the operations of the company. Other qualifications such as graduating from a high-ranked university, having advanced levels of financial and economic knowledge are other assets that companies seek while they are recruiting. One respondent mentioned that having previous work experience in the US or European countries also strengthens the chance of candidates in the hiring process due to the larger scale of the financial markets in those countries.

One fund manager furtherly noted that the technologization of the fund management led to changes in the qualifications that are necessary for working in the sector. The fund manager claimed that the best fund managers will be the computer or software engineers with adequate economic and financial knowledge rather than economists or finance specialists in the sector in very near future which will also diminish the demand for human resources in the sector because one engineer can make quarks that will make the work of many fund managers by themselves.

The findings show that the employees of the portfolio management companies are generally perceived well-qualified whereas the employees of the pension companies are not at the same standards as them most of the time. Many respondents claimed that the qualification standards required for employment are very low particularly for sales, marketing, and customer departments in pension companies. These departments are the departments that have a direct connection with the participants and responsible for providing sufficient and transparent information to participants. Therefore, these employees may lead to misinformation or unintentionally because they are not equipped adequately for understanding and explaining the system.

4.5 Insufficient information disclosure to participants

Information disclosure is mentioned repeatedly by many respondents as one of the main areas in which agency problems are prevalent. Problems such as insufficient information sharing, and opacity of the information are frequently mentioned in the literature as the causes of many agency problems together with the lack of financial knowledge of participants.

Both the returns of different pension funds in the same year and the returns of the same fund for different years differ considerably in Turkey (EGM, 2020c). As a result, monitoring the returns of pension funds and changing their pension funds become necessary for participants to protect themselves from financial risks. However, most participants lack financial knowledge for undertaking such tasks. As a result, participants' lack of knowledge may result in their apathy, which causes inefficient outcomes in the system, as claimed by many respondents.

When I asked respondents from the pension companies and the officials about the participants' level of knowledge about the private pension system of Turkey, all of them agreed that the society's level of knowledge on the private pension system has been increased in the last decade, particularly after the introduction of the state contribution and the auto-enrolment system. But still, they think that their level of knowledge is insufficient to understand the functioning of the system. On this point, the officials from one of the regulatory and supervisory organizations added that the asymmetric information problem in the private pension system of Turkey is not caused by the lack of publicly available information but by the financial illiteracy of the population.

I grouped the findings of the problems caused by the insufficient information disclosure in the private pension system of Turkey into two: the content of information disclosures as those related to the pension plans and those related to the pension funds. The former category includes problems caused by the lack of information on matters such as expenses, fees, and state contribution. The latter category investigates the problems caused by the lack of knowledge on the pension funds.

4.5.1 Information disclosure on pension plans

All respondents from pension companies agreed that informing participants is crucial for making them capable of understanding the system and keeping participants in the system longer. One respondent who works in a sales department of a pension company's headquarters underlined the importance of sufficient information disclosure by claiming that only a few participants have accurate information about the system before the contract-making process and this lack of knowledge affects the efficiency of the system by leading a low number of participants because only those who are adequately informed become willing to participate and stay longer periods in the system.

When I asked my respondents what the most prevalent asymmetric information problem is in the sector, all mentioned that the perception of the system as a saving system rather than a pension system is the most common misunderstanding that affects the system badly. The perception of the system as a saving system leads to shorter durations of participation. Whereas they accepted that such misunderstandings are prevailing because of the selling strategies of many pension companies that focus on increasing participation rather than informing participants appropriately to stay for longer durations, Moreover, such strategies also result in participants' misinformation on the expenses and cuts that would be deducted from their contributions in cases of early withdrawal. Such cuts are the most common complaints filed to customer services according to the respondents. Therefore, many respondents claimed that such marketing strategies should be changed, and participants should be made aware of the necessity for staying longer in the system for obtaining the most efficient results even though such awareness may result in the dropping the number of new participants.

I will first present the findings on the procedures and operations related to the entrance to the system. According to the law, each company is obliged to provide all the basic information related to pension plans such as information on expenses, deductions, government contributions, vesting period, and early withdrawals in pension contracts to the participants. Moreover, every prospective participant must be also verbally informed about the essentials of their pension plans before the completion of the contract. Such contracts can be made by not only pension companies but also insurance agencies, individual pension intermediaries, and banks, and therefore monitoring the information disclosure processes at this stage is a complicated process for pension companies. Moreover, the earnings of agencies and individual pension intermediaries generally rely on premium based payments, which creates an incentive for misinforming the participants. Therefore, my respondents were requested for providing information about the procedures and activities their company requires for the activation of a new pension plan to see if they implemented any monitoring mechanism for checking the sufficiency of the information provided to the new participants while joining the system.

The activation of pension plans takes place almost in the same way in each pension company, as I learned through my interviews. At the beginning of the contract making process, prospective participants are asked to read and sign their contracts after they are informed verbally by their intermediary. The intermediary is also responsible for providing a copy of the pension contract to new participants. All contracts must include an eleven-page long standard template, which is developed by the Pension Monitoring Center. Pension companies may insert additional articles that do not conflict with the regulations in force. All new pension contracts will be reported to the Settlement and Custody Bank after the completion of all operational steps such as the affirmation of the personal information of the participants. The contract is activated right after the transfer of their first contribution to the Settlement and Custody Bank.

Most respondents were aware of potential information problems that may arise in the contract making process between intermediaries and participants. And, such instances are expected to be common because most companies lack the capacity for monitoring the adequacy of information disclosure made by intermediaries. In addition, information disclosure through pension contracts is not efficient because pension contracts like other contracts are not read fully by any person. Still, all respondents from the pension companies underlined that the costs of producing and disseminating the information are the most important obstacle to sufficient information disclosure to participants rather than intentional malpractices of sector employees. Almost all respondents from pension companies asserted that their company strives for minimizing the negative effects on inadequate information disclosure in the contract making period through providing adequate information after contracts are made. Most respondents also underlined that this asymmetry is not always intentional. In other words, insufficient information disclosure is not always caused by intent but sometimes caused by the complexity of the legal structure of the system and it would prevail as long as the basics of the system are not simplified. The respondents claimed that pension intermediaries may not intentionally misinform the participants but rather they could not inform participants about all the details of the system due to its complexity.

There are also additional efforts for monitoring the information disclosure in the contract making stage in a few pension companies, as reported by their employees. These respondents from different pension companies suggested that their pension company had a strict information policy and they do not approve any new contracts without making calls for controlling if the new participants are sufficiently informed by their intermediary/bank/agency during the contract making process. When I asked them why they called each participant, one respondent replied that they are part of an international insurance company, and the headquarters of their company places emphasis on the quality of information disclosure of their branches. An employee from another company suggested that the cost of hiring people is negligible when compared to the potential cost of dissatisfied consumers and losing their reputation. Making randomized control calls is another mechanism used by one of the companies. Their employee reported that their company is relatively small compared to its counterparts and spending their financial resources for increasing the size of assets they manage is their primary object for now. In this regard, they cannot employ enough people for calling all the new participants but rather they make random calls.

All of the employees from these companies that use additional mechanisms for monitoring the information disclosure in the contract making stage underlined the importance of making control calls for not getting disenchanted with the supervisory and regulative authorities. These companies could defend themselves easily whenever a participant makes a complaint about insufficient information disclosure by sending the voice record of the control call made with the participant. Respondents also added that improving their call center and consumer services is on their five-year plans.

Additionally, some other respondents reported that although they did not make control calls, they make welcoming calls to their new participants in which they check if the participants are adequately informed on the basics of the system which were determined by the monitoring center. They claimed that such calls are also as efficient as control calls in preventing the information related problems because participants could leave the system easily and without any loss at that stage. Yet, their preference of making calls after the activation of the contracts increases the number of procedures and operations required for their withdrawal which may increase their tendency to stay in the system, as the nudge theory suggests.

There were also a few employees who did not mention any monitoring mechanism for checking the sufficiency of information disclosure. They argued that it is impossible to preclude such informational problems in the system completely and thus taking immediate measures for dealing with the complaints of their participants is sufficient for dealing with the problems caused by asymmetric information. While this practice does not decrease the level of information asymmetry, it is deemed to decrease the costs that occurred due to such problems. In addition, they claimed that the positive returns of monitoring information disclosure processes are lower than its costs. Therefore, these companies only take action about informational problems when they receive negative feedback from their participants rather than pursuing a preemptive strategy.

I then ask all my respondents from pension companies what they do whenever they get complaints from their participants. In response, all of them reported that whenever there is a problem either reported by a customer or caught by the internal audit department, it would be reported and investigated by the company. Then, the department and the people who were part of these misinformation process are penalized. In addition, companies cover all the alleged financial losses of participants to dissuade their participants from filing claims to protect their reputation. Covering all alleged financial losses of complainants is especially important in cases where companies could not prove they informed the participant sufficiently. One respondent noted that some participants make false complaints about claiming compensations for their losses whenever they heard a company compensates for the losses caused by informational problems. So, they create another type of cost while trying to avoid the costs of making control calls.

Although all companies are obliged to inform their participants, the statutory responsibility of information provision transferred from pension companies to the employees in auto-enrollment plans. As a result, the problems caused by insufficient information disclosure is expected to be more common in the auto-enrolment system in Turkey. To explore if this is indeed the case, the respondents from pension companies were asked if they take any measures for informing the participants that join the system through the auto-enrollment. Only a few said their company has additional policies for informing auto-enrollment participants. One noted that they make presentations for informing only the representatives of the company they made contracts with and these representatives can share these presentations with their employees. The other respondent reported that their company made group presentations for informing all employees of a company when they made an auto-enrollment contract. The employees from other companies that do not have additional mechanisms for informing auto-enrollment participants reported that their companies did not provide any information to their auto-enrollment participants other than the information on the contracts and information letters.

Then I asked them if their pension company had any problems whenever a business that made an auto-enrollment contract with them did not sufficiently inform their employees about their auto-enrollment plans. The problem that was mentioned by nearly all the pension company employees is that businesses tell their employees these auto-enrollment contracts are only made due to their legal obligations and they should withdraw right after the activation of their contracts. Some of the respondents also added that a few of the businesses directly told them they would tell their employees to leave the system if the pension company did not take over the responsibility of informing their employees from them. As a result, respondents from pension companies advocated that these businesses that made auto-enrollment contracts not only misinform their employees but also discredit the system most of the time. A few of them added that such claims are more common in small or middle size businesses. As a result, the rate of early withdrawals is higher in the auto-enrollment system than the individual pension system as reported by many respondents, which shows the importance of adequate and transparent disclosure of information for the sustainability of the system.

I also asked respondents if they think their participants are interested in their pension plans, keep up with the changes in their pension plans, and to what extent their participants contact the pension company. When I asked my respondents from pension companies how frequently participants contact with them and on what issues, they reported that their participants call their company one or two times each year if there is no problem about their pension plans and their participants mostly consult them about the possible outcomes of the changes in the law on the fund performances. Many of them also reported that people's interest in and confidence in the private pension system also increased together with the increase in the level of knowledge on the system. Respondents think that those with a higher level of financial knowledge are more interested in the changes in their pension plans. Yet, a few respondents alleged that the claims about the disinterestedness and low level of financial literacy of the participants are ungrounded. They claimed that the reports sent to participants are not comprehensible by most participants and thus such participants search for different ways of accessing more comprehensible information such as calling their companies or intermediaries. They reported that such participants call their company to receive information about the performances of their funds particularly in the times of economic instability because instability increases the level of risk a participant is exposed to.

Some respondents claimed that pension companies and their intermediaries must have tailored information disclosure strategies for people with different backgrounds and companies must do this not for increasing their sales but rather providing comprehensible information to all participants on equal grounds. For example, one respondent asserted that trying to increase the level of financial literacy of a primary school graduate agriculture worker is a null task. In such instances, pension companies should only explain the basics in a way that is understandable by the participant and then should manage their funds according to the expectations of the participant.

An intermediary added that their participants are not disinterested at all and ask for recommendations for changing their funds regularly to them because they trust the intermediary. This respondent pointed out that establishing a trust relationship with their intermediary or agency may also be an important tool for keeping participants interested in their pension plans even whenever they lack the knowledge to understand the reposts.

A few respondents particularly underlined the importance of the introduction of state contributions for increasing the level of confidence in the system. On the other hand, other respondents reported that many of their participants have suspicions about the system due to the involvement of the state because they think the state would not get involved unless it financially benefits from. As a result of these suspicions, such participants follow the changes in their plans and demand detailed information from the company more.

All respondents from pension companies argued that the legal regulations around the private pension system of Turkey are too complex and thus even their own employees fail to understand it. As a result, they could not provide sufficient information to their participants. In other words, not all the informational problems arose due to problematic behaviors of agents but rather sometimes agents themselves are not capable of understanding how the system should work. They added that frequent changes in the regulations made transparent and adequate information disclosure impossible for the pension companies due to the high costs of providing information on these changes simultaneously with the changes.

All in all, most respondents claimed that no matter how well they informed their participants, participants would forget such information after a while, and thus participants must be kept informed about the system regularly. Thus, they claimed that increasing the level of knowledge of participants may bear more costs than benefits to pension companies. One respondent who works as an internal auditor claimed that the cost of adequate information disclosure to all participants in the system may be bearable if all pension companies establish a system for information provision together but many of the companies will not approach to this idea because they think that adequate and transparent information disclosure to all participants will affect their sales negatively. As an example, the respondent told that many intermediaries only underline that the state contributes to their accounts equal to 25 percent of their contributions while contract making. And many participants will not join the system if they know that they can only get all of these contributions if they stay in the system at least for ten years and all-state contributions are invested in the assets of the treasury that are the most vulnerable in countries with high inflation.

These findings demonstrate that the regulations aimed for information disclosure are not adequate and thus many companies provide insufficient information to their participants for various reasons such as high cost of providing sufficient information, increasing the number of sales, etc. So, there are problems in the information disclosure at the contract making stage that prohibit participants from increasing their level of knowledge which would be used by them as leverages in their relationship with their agents. Although every pension company is obliged to provide adequate information to their participants about the basics of the Individual Pension System according to the law, the law does not clearly define the proper ways of sufficient information. Pension companies can claim that they provide all the necessary information on the contracts to their participants and can prove it while being aware of that these contracts were not read by the participants as stated by many respondents, Thus, the regulations implemented on the adequate information disclosure seems ineffective for protecting the participants from the insufficient information disclosure. Whereas there are companies that have their own additional information disclosure policies such as making control calls or welcoming calls. The reason behind implementing such policies was increasing customer satisfaction and protecting their good reputation according to the respondents from companies that have additional monitoring mechanisms. So, the fear of losing reputation plays a more effective role than the written regulations in sufficient information disclosure for some companies. Moreover, many respondents alleged that customer complaints on the informational issues are more common in the auto-enrolment system. Unlike individual pension plans, the responsibility of informing participants belongs to their employers in auto-enrollment plans and thus companies are not held accountable for the insufficient information disclosure to the participants. This instance shows us the importance of the regulations on the protection of the participants.

4.5.2 Information disclosure on pension fund types

Selecting the appropriate fund type and changing it for maximizing returns are the most complex tasks for most participants due to the financial knowledge these tasks require. In the Individual Pension System, a new participant will automatically join the standard fund if they do not select any other fund. In the auto-enrollment system, participants directly join the beginning fund and stay in that fund at least for two months. Standard and beginning funds are the largest funds of many companies, as shown in the background chapter (EGM, 2017) and the larger volumes of these funds also offer evidence to the disinterestedness of most participants in fund selection. This fact jeopardizes the future financial wellbeing of the participants when considering the high inflation rates in Turkey. Standard funds are designed for imposing the lowest financial risks to their shareholders. As a result, the range of the possible nominal returns of standard funds are constricted and, therefore, the real returns of standard funds expected to be negative in an economy with high inflation rates.

The complexity of selecting the appropriate fund type or changing it for financially illiterate people also increases the risk of agency problems by leaving participants vulnerable to misinformation and misdirection of their agents. Deductions such as entrance fees, administrative expense fees, and fund expenses, which were explained in the background chapter, are the main earning sources for the sector. All these deductions are calculated based on different measures such as contribution amount, the longevity of participation, type of fund, and assets. In addition, participants are subjected to fund management expenses, the maximum ratio of which differs among the fund types. As a result, both pension companies and portfolio management companies may have stakes in the fund selection process due to the conflict of interests with their participants, which makes fund selection process another operation that may put participants in a position where they undertake a level of risk that is higher than their preferred level. Fortunately, fund managers have no direct relationship with the participants in the private pension system of Turkey and thus cannot affect the fund type chosen by a participant. Therefore, the potential for agency problems between the fund managers and participants are somehow limited in the private pension system of Turkey in their relations with the portfolio management companies. Yet, pension companies have direct relations with the participants so they may encourage their participants for choosing funds with higher deductions, which are generally also risky. As a result, the risk of agency problem arises between the pension intermediaries/companies and the participants through the fund selection process.

The respondents from pension companies were requested to provide information about the fund suggestion policies of their companies if they have any. All of them reported that they use the risk analysis tests for determining the funds that fit the risk preferences of their participants. The respondents from pension companies were asked if they think the risk analysis tests, they use work well, almost all of them alleged that they did not think so, because such tests are narrow-scoped and cannot analyze the risk preferences of participants other than financial risks. The perceived ineffectiveness of these tests is explained based on the financial illiteracy of most participants providing answers that do not represent their risk preferences well. For example, these tests use earlier experiences with the financial markets such as having investment accounts as a determinant for risk preference, but such earlier experiences only indicate the financial literacy of the participants rather than their risk preferences, as argued by a respondent. Yet, these tests are prepared by the state and each company is obliged to use these tests and thus no company can use any other risk analysis test even if they believe the new test is more capable of analyzing the risk preferences of the participants. Although they were not entitled to make any personal statements about the performances of funds, a few respondents reported that some of the pension intermediaries offer funds to their participants when they think such funds are more suitable for their risk preferences than the funds offered depending on their risk preference test results. There arises a high risk of agency problems whenever an intermediary can offer a fund with higher expenses and deductions while claiming such funds are better for their participants.

Additionally, a few salespersons both from headquarters and branches reported that they consider not only the risk preferences of participants but also their planned duration of participation in the fund selection process. For example, they would not offer stock funds to those participants who plan to stay in the system for five years at most due to the higher riskiness of stock funds for shorter periods even if they are not risk averse.

Some respondents reported that their companies have fund robots, which offer funds to their customers by considering their risk profile and demographic characteristics regularly. And, some robots even change the funds automatically if the participant permits while considering the risk preferences and demographics of the participants. Moreover, a few respondents alleged that their company works on developing their robots for making them capable of showing participants what would be their return if they transferred to the fund offered by the robot.

There is an increasing trend for the technologization of fund selection in Turkey like the rest of the world. As mentioned by one of the respondents, the technologization trend is good for minimizing the agency costs which may incur through the fund selection process. Fund management expenses and related administrative costs are different for different fund types. Therefore, pension intermediary of a participant may offer the fund that is beneficial for themselves, not for the participant. Therefore, replacing people with artificial intelligence in the fund selection process will possibly decrease the agency cost because artificial intelligence has no personal interest. Yet, this technologization is quite new its use, as well as its impact on decisions, remained limited so far.

I then asked my respondents from pension companies how frequently and on what topics they inform their participants about their pension funds. All respondents reported that all their customers are informed by regular monthly reports that include detailed information on their pension plans, which are sent to their email addresses. Many of them also alleged that their company adds the returns of all pension funds of the company to make participants able to compare the returns of their fund with the others and make them willing to transfer their contributions to funds with higher returns. Encouraging such transfers are also important for pension companies because they get higher payments for higher returns.

When I asked whether they think the information they provide on the fund returns is sufficient, all respondents from pension companies gave affirmative answers. Yet, all mentioned that their pension companies provide the rates of gross-returns of pension funds to the pension members in monthly reports, while rates of real-returns are only available on the reports of Pension Monitoring Center. The respondents from the pension companies were questioned on why they prepared reports that only include nominal returns instead of real returns. All answers somehow encapsulated the idea that they do it because providing nominal returns shows companies more successful on paper and there is no obligation for providing information on real returns. One of them mentioned that if they would send the real numbers, they would lose their members because other pension companies would continue to send the nominal returns and most members would not understand the underlying reason and would blame them for underperformance. Another one reported that the reports on financial returns were prepared by the portfolio management companies and thus providing nominal returns was the choice of portfolio management companies, not pension companies. When I asked the respondents from portfolio management companies why they send the reports with nominal rates rather than real rates, all claimed that their clients are pension companies that have their own fund management departments and have financially literate employees. Therefore, there is no need for preparing reports with real returns for them. To sum, they claimed that preparing reports for informing participants are not their responsibility and does not fit with their reporting standards.

The respondents from pension companies were asked if they do anything for increasing the level of financial knowledge of their participants. Many respondents claimed that they could not do anything other than providing reports on fund performances because informing each participant on the performance of funds in the context of the financial environment is too costly considering the human resource it requires. Nearly all of them claimed that increasing the level of financial knowledge all over the society by adding financial literacy courses to curriculums of high schools and universities would be the best measure that could be undertaken for decreasing the asymmetric information between the participants and pension companies and such measures can only be undertaken by the state. Using mainstream media and social media as mechanisms for increasing both financial literacy and the level of knowledge on the private pension system is also mentioned as a way of decreasing the level of information asymmetry by some respondents.

I then asked my respondents from pension companies how many of their participants change their funds and on what issues regarding their pension funds their participants consult to them. Each respondent from pension companies approved that at most 5% of their participants made changes in their funds. This rough estimate was also confirmed by the officials from one of the regulatory and supervisory organizations. A few respondents claimed that their participants do not change their funds and choose to stay in the standard funds because they do not trust the capital markets due to their lack of financial knowledge. Many other respondents claimed that the reason for the low rates of pension fund changes is due to the ignorance of the participants and thus pension intermediaries should be able to make changes on behalf of their participants, which they believe will also increase the efficiency of the system. Yet, pension companies and intermediaries cannot change the pension fund of a participant without the approval of the participant. The law protects participants from possible agency problems that may arise when pension intermediaries make changes in the funds that will be beneficial for them, not for the participants. A few respondents from pension companies, who particularly underlined the importance of the artificial intelligence in private pension systems, claimed that fund selection and fund changes all together must be transferred to robots, which have no personal interests and the decisions should not require the consent of the participants if the financial returns are higher. Still, robots are programmed by people who may have personal interests and thus such proposals may not eliminate the risk of agency problems in fund selection and fund changes. Still, supervision authorities can also monitor the codes of a fund offering robot easily and thus it can be more efficiently monitored than monitoring human beings due to the calculability of their actions.

When I asked my respondents from pension companies about how often and on what issues they are consulted by or had feedbacks from their participants on their pension funds, their answers show that the dissatisfaction of participants about the returns of their funds is another information related problem prevailing in the system. Many respondents underlined that participants cannot understand fully when their funds bring negative returns and blame the company without considering the changes in the economic and financial environments in general. This dissatisfaction leads to early withdrawals in many cases, as alleged by most respondents. Some of them also added that such accusations of bad management and early withdrawals are more prevalent in funds which used to bring high returns but can bring only moderate returns due to the shifts in capital markets such as BRICS funds. A few of them also reported that they inform their participants with high contributions about the performances of their funds regularly through phone calls in addition to reports sent to their emails because negative changes in the performances of funds will affect such participants more than others. They added that such participants often invest in riskier funds. Because human resources of their companies are not adequate for informing each participant verbally, they only inform those with higher risks, as they claimed. Still, such instances can be read as manifestations of bestowing a privilege on such participants upon information disclosure processes. Some other respondents who reported that their company asks their intermediaries and agencies to inform their participants about the changes in the economic conditions when there are fluctuations in the financial markets. This shows that there are differences in the information disclosure strategies of companies about fund performances.

4.6 Making external bodies responsible for fund management

Pension funds in Turkey are established by pension companies and managed by portfolio management companies. As a result, pension fund managers become agents in their relations with pension companies. When I asked my respondents from the pension companies about their relationships with the portfolio companies, most of them claimed that the division of labor between the portfolio management companies that is based on outsourcing the management of funds to the portfolio management companies increases the efficiency in the management of pension funds due to the transfer of the management to the more specialized agents. Pension companies cannot specialize in fund management operations particularly because they have to carry out different types of operations. They claimed that if pension companies could manage their own funds, they could neither efficiently manage the funds nor properly fulfill their other operational tasks, and therefore outsourcing the fund management to specialized companies positively affects not only fund performances but also operational tasks of pension companies.

One of them claimed that there are no problems in the relationship between pension companies and portfolio management companies. Yet, others were more suspicious, and their answers also show that most respondents from pension companies believe that a pension company should always be watchful about the operations of the portfolio management company. Pension companies have fund management departments that make decisions on investment strategies and monitors if the operations made by portfolio management companies are in accordance with the strategies they developed. A respondent from a fund management department of a pension company asserted that they make daily controls on the operations of the portfolio management companies and they can consider the changes in the financial markets because their department is not only responsible for monitoring the portfolio management companies but they are also responsible for managing the equities of their own company. Yet, this is not the case for all pension companies, as reported by other respondents from pension companies, in which the pension companies also delegated the management of its own equities to a portfolio management company. This decision is often explained based on the belief that the fund managers in the portfolio management companies are more qualified than the fund managers in the fund management departments of pension companies. So, employing well-qualified people to the fund management departments and making them responsible for the managing the equities of the company may be a good strategy that a pension company can use for decreasing the level of information asymmetry between the portfolio management company and itself.

The respondents from portfolio management companies were requested for explaining their general perspectives towards the relationship between their company and pension companies they work with. Almost half of the capital pool any portfolio management company consists of pension funds, as stated by the respondents, whereas only one-third of the funds are investment funds and the remaining one-sixth is the discretionary portfolios. So, pension companies are important clients for them due to the great shares of pension funds over their assets and also over the capital Markets of Turkey in general. The underdevelopment of capital markets in Turkey, compared to those of the US and European countries, creates liquidity constraints for portfolio management companies. Therefore, pension funds are the most important stakes for the portfolio management companies and any company would risk losing the pension funds they manage by making their clients i.e. pension companies unsatisfied as reported by all respondents from the portfolio management companies.

All respondents from portfolio management companies asserted that fund management departments of the pension companies are always cautious in their interactions with them and monitors their activities daily. Unlike the standard principals in the agency theory, pension companies have their own fund management departments, which oversees the performances of their funds. One of them suggested that one of the pension companies they work with sent them an ultimatum for closing the fund when they fail to send reports that they wanted three days ago. These show that the verticality between the information asymmetry is much lower in this relationship. Pension companies are not only the owner of the pension funds but they also maintained having high monitoring capacity over their funds, thanks to their fund management departments. As a result, fund managers know that they are at high risk of getting caught by the fund departments of pension companies whenever they malpractice, and this malpractice would cost to losing management of pension funds and their reputation. Therefore, having a well-performing fund management department is crucial for pension companies to decrease the risk of agency problems in their relations with portfolio management companies.

The respondents from portfolio management companies were asked how they inform the pension companies. Their answers demonstrate that all pension companies are informed daily about the operations in their funds. Additionally, pension companies and portfolio management companies establish fund boards that have meetings at least once a month for keeping both parties informed about the operations of each other and enhancing dialogue between them. Respondents from portfolio management companies reported that they tried to do their best for all their customers not only by increasing the value of their assets but also by being accessible and transparent in their relationships with the pension companies. Therefore, for portfolio management companies, accessibility and transparency are seen as the key factors they mostly care about in their relationships with the pension companies they work with. All portfolio management companies underlined that their clients even have personal mobile phone numbers of managers of their funds and can reach them 7/24.

Yet, as reported by a fund manager, there might be some problems in such relations. As an example, they told that there may incur some misoperations, which are not reported to the pension companies in daily reports such as making mistakes in the number of shares while trading and another type of miscalculations. Still, they argued that such instances do not create any problems between the companies because the portfolio management company immediately detects and resolves such problems thanks to their internal audit departments and counterbalances any losses caused by such misoperations for being on good terms with the pension company.

I also asked my respondents how the investment policies for pension funds are made and if the pension company or the portfolio management company has the last word on the investment decisions of pension funds. This question was asked for understanding if portfolio management companies can manipulate the pension companies and manage the pension funds on behalf of their own interests. In many companies' fund boards in which the representatives from portfolio management companies and pension companies come together for making investment policies for a pension fund yet, these written policies only comprise basics and many operations made in the pension funds generally accrue in more dynamic processes. A respondent from a portfolio management company reported that although pension companies have the last word on the investment decisions, portfolio management companies have more effect on the investment decisions of pension funds due to the superiority of their knowledge on financial operations. In other words, the pension companies have the de jure power the decisions on pension fund management. De facto power of managing pension funds, however, is mostly enjoyed by fund managers. Other respondents from portfolio management companies also confirmed this by suggesting the specialization they have in the operations and processes of the financial transactions increased their dominance over the decisions in the management of pension funds. Yet, they also added that although the pension companies often lack the skills in the operations and transactions, they have adequate knowledge for understanding the financial environment in general. As a result, pension companies could effectively evaluate if the decisions made by portfolio management were in the best interests of their participants. All respondents from portfolio management companies more or less concluded that although putting their own interests ahead of the interests of pension companies is within the bounds of possibility for the portfolio management companies, they would mostly avoid such decisions due to the high risk of losing their trustworthiness among pension companies.

Almost all respondents found positive the regulation that made working with more than one portfolio management company an obligation for each pension company by setting the limit of a maximum rate of the assets managed by one portfolio management company to forty percent. Respondents consider this regulation positive due to its reducing effect on the prevalence of agency problems. Those from pension companies told that the total risks they faced in fund management are decreased as a result of diversification of funds to more than one company. Working with more than one company also allows comparing their performances and transfer their funds to the companies with better performances. The portfolio management companies would not want to lose the funds they manage because the fees they get are based on the size of the funds they manage. This incentive was especially underlined by the respondents from pension companies that used to work with only one portfolio management company that belongs to the same capital group. Most of them underlined that as a result of being able to compare the performances of different companies, they could transfer some of their funds to the other companies they have contracts when the portfolio management company of their capital group underperforms. In other words, the analysis here indicates that this regulation strengthened the hand of pension companies against the portfolio management companies that belongs to the same group and succeeded in breaking inefficient alliances in the sector. There are also a few respondents from pension companies who favored working only with the portfolio management company belonging the same group to working with other companies due to the easiness collaboration.

Although working with more than one portfolio management company is still obligatory for the individual pension system funds, the state lets companies work with only one portfolio management company for the management of auto-enrollment system's funds due to the complexities that arose within the companies, banks, and custodians. These complexities are thought to arise as a result of the contribution payment method in this system, which is directly deducting the contributions from the salaries of participants. Such deductions require too many transfers when more companies are involved. Most businesses preferred to make auto-enrollment contracts with the pension company of the same capital group whose banks they used for bank payments. Therefore, letting the portfolio management company of the same group manage all these funds decrease the complexity so as the number of transactions and bulk costs these create, as alleged by respondents. Many businesses transferred all of their auto-enrolment funds to the portfolio management company from the same capital group. As a result, according to the views of respondents from different companies, managing auto-enrolment funds of a company from another group became an important demonstration of the quality of the portfolio management company. Similarly, one respondent from a portfolio management company asserted that working with a pension company from a different capital group for a long period is an important indication for the trustworthiness of a pension company and, thus, they are more careful in their relationship with these companies including information sharing processes.

When I asked the employees of portfolio management companies what the policies of their company towards the agency problems that jeopardize the financial returns of participants, their responses underlined the importance of regulative and supervisory organizations. Each respondent described very similar processes while explaining the working of their internal monitoring mechanism: back offices of their company monitor every trade by the fund managers, report any anomaly, and ask for an explanation. If fund managers cannot give a reasonable explanation and, thus, there exists misbehavior, the misbehavior is reported to Capital Markets Board (CBD) and the losses caused by the misbehavior on the fund returns are covered ultimately and the people responsible for the malpractice are penalized by the CBD. Yet, the penalties that can be imposed by the CBD, which were presented in the background chapter, are seen low and not deterrent compared to the possible returns a portfolio management company can obtain by abusing their power as agents. Then, I asked them how the CBD can control them despite the low amount of the penalties it can impose, one respondent agreed that the penalties are low while claiming that it is not about the amount of the penalty, but the fear of reputation loss deters misbehaving. Similarly, another respondent also reported that the fear of losing a fund makes them worried about the penalties imposed by CMB mostly rather than the actual sanctions of penalties. Differently, an internal audit from a portfolio management company claimed that the penalties are not low considering the small size of the pension fund market in Turkey and the prevalence of operational problems. The respondent added that misbehavior can even lead to the imprisonment of a fund manager whenever they make transactions that exceed the limits decided by the CMB for a fund type.

Another state organization that has an important preventive role in agency problems according to the respondents from both types of companies is the Pension Monitoring Center. The center has been calculating the performances of pension funds and preparing reports on the comparative performances of funds since 2007 despite such tasks were not their statutory responsibilities. With a regulation introduced in 2018, they became responsible for calculating and preparing comparative reports on the fund performances. As alleged by respondents from all groups, companies trust reports prepared by the Pension Monitoring Center. As a result, the center enjoys high leverage in the sector originating from their organizational character that brings together the public and private sector, neutrality, and transparency. Their reports on the performances of pension funds became primary sources for pension companies in their assessment of the performances of the portfolio management companies they work with as reported by many respondents from pension companies. In these reports, pension companies could see the performances of the pension funds, which are managed by the portfolio management companies they work with but owned by a different company. Thus, these reports decrease the level of information asymmetry and the prevalence of agency problems to a certain extent, as reported by many respondents from pension companies.

One official asserted that not the agency relations and information asymmetry create problems but rather their negative outcomes that badly affect the overall system. Thus, the official stated that regulations should aim to minimize the negative effects of asymmetric information rather than decreasing the level of information asymmetry in the relations. The respondent expects that such a new penalty and reward system will succeed to decrease such negative outcomes. The respondent added that such comparative results together with the punishment and reward system will decrease the agency costs i.e. the possible negative consequences of agency problems on the returns of pension funds.

4.7 Making arrangements that may make fund managers inclined to excessive risk-taking

Deductions made from the contributions are a source of earnings for the portfolio management companies as stated earlier in this chapter. Fund management expenses and related deductions depend not only on the fund type and fund size but also are affected by the performance of the fund. Accordingly, portfolio management companies give performance-based premiums to their fund managers and these fund managers get higher performance premiums when they bring returns higher than the benchmark returns. Methods such as premium based payments or reward systems are used by companies for increasing the performance of the employees.

Payments methods such as premium based payments or reward systems are used by companies for precluding the conflict of interest between the participants and fund managers by binding the interests of fund managers with the interests of the participants. Yet, such mechanisms may lead to problems whenever personal risk preferences of these two parties do not match i.e. when fund managers take excessive risks for increasing their premiums while managing funds. In other words, portfolio managers may involve in risky transactions that may harm the fund returns of participants for increasing their performance premiums.

All respondents from portfolio management companies answered in the affirmative when I asked them if their company pays its employees' performance-based premiums. Then I asked them if there is any mechanism for monitoring if the fund managers are taking excessive risks for getting higher premiums, all respondents underlined the importance of the legal structure and the role of external and internal supervisors such as auditors, fund management departments of pension companies or state organizations like Capital Markets Board of Turkey, for controlling such incidents.

First, legal limitations on the funds and assets are written in the fund prospectuses, which consist of the minimum and maximum ratios of assets that each fund type can have. These prospectuses limit the range of transactions available for fund managers as underlined by the respondents. Each fund is required to have a prospectus that complies with the law and these prospectuses must also correspond to the limitations set by the law for each fund type and additional limitations that may be added by the pension company that owns the fund. All these fund prospectuses are publicly available, and all portfolio management companies are obliged to make transactions that comply with these prospectuses. Portfolio management companies are not allowed to make any changes to these prospectuses or the benchmarks without getting written approval from the pension companies. All they can do is offering changes in the prospectuses to the pension companies. As a result, the range of transactions is much more limited in the pension funds than the investment funds, which controls the potential for excessive risk-taking of fund managers to some extent, as reported by a fund manager.

Second, all respondents from portfolio management companies also declared that they send reports to the pension companies at least weekly, which include information on the assets and performances of funds that are carefully checked by fund management departments of pension companies. These departments are responsible for controlling if the assets in a fund are managed in line with the law and reporting it to Capital Markets Board whenever there is a limit excess in the assets of a fund. As stated earlier in this chapter, pension companies particularly hire qualified employees to these departments for increasing their power of control over their funds by decreasing the level of information asymmetry between them and portfolio management companies. Therefore, it is hard taking excessive risks without getting caught by either internal auditors or external auditors because all the people responsible for supervising the fund managers have high levels of financial literacy. In addition, engaging in excessive risk-taking activities by not respecting the limits determined by the laws may endanger the career of a fund manager. Moreover, whenever they get caught, they will not only face legal sanctions such as losing their jobs or paying pecuniary penalties, but they will also have a bad reputation in the sector that makes finding another job difficult for them. To sum up, as alleged by fund managers, self-control due to the fear of losing their jobs together with supervisions made by internal auditors, the board of management of the firm, fund management departments of the pension companies they work with and inspectors from the Undersecretariat of Treasury and Capital Markets Board all together diminish the potential of excessive-risk taking behavior of fund managers.

Then, the employees from the portfolio management companies were asked whether they find such limitations and controls beneficial for the overall functioning of the system. Their answers conclude that they find these limitations and supervisions beneficial for the overall functioning of the system, but they also mentioned some negative outcomes of such limitations and supervisions. For example, one respondent reported that these supervisions lead delays in their operations most of the time. Another respondent reported that such limitations decrease the rate of real returns for some fund types. Still, they all agreed that the abovementioned potential negative outcomes remain unimportant when compared to the possible agency problems that may arise in the absence of such limitations and supervisions.

Lastly, a fund manager underlined the importance of the impact of the technologization of fund management on the control of agency problems including those related to excessive risk-taking. The fund manager asserted that portfolio management companies started hiring people for designing artificial intelligence and quarks that will manage the funds instead of hiring fund managers particularly in the countries developed financial markets. This trend expected to lower agency problems in the sector.

4.8 Conclusion

This chapter presents the thematic analysis of interview data collected from sixteen respondents from pension companies, portfolio management companies, and one of the regulatory and supervisory organizations. In the interviews, respondents presented their perceptions about a wide range of issues including asymmetric information and agency relations that shape the functioning of the private pension market in Turkey. Before starting to present my analysis, I like to mention that the employees from Malatya asserted that working in a branch does not have any effect on their relations with portfolio management companies or supervisory and regulatory organizations as salespersons because salespersons do not have direct relations with the portfolio management companies supervisory and regulatory organizations no matter if they work in the headquarters or in a branch. The only significant difference between working in a branch and the headquarters is the lower level of financial literacy among participants in the branches as reported by respondents from the branches.

This thesis demonstrated that making any transaction or operation riskier than the risk level allowed by the participant in the pension contract endanger the career of employees if they get caught by leading to the cancellation of their licenses or reputation loss. So, sector employees would be less likely to engage in such risky activities if they think that external supervisory institutions are effectively working. The findings presented that there are instances whenever a pension sector employee as an agent may abuse their superior positions in behalf of their own interest without the fear of getting caught due to the incapacity of supervisory institutions in monitoring the behaviors of agents as it happens in many cases when an intermediary convince participants to join funds riskier than their risk preference level due to higher management fees such funds bring or underinforming participants for convincing them to join the system for increasing the number of sales. The latter becomes more common when a pension company sets unattainable benchmarks on the number of sales. Such benchmarks put salespersons under pressure and that may lead them to engage in problematic actions. So, determining attainable benchmarks are also important for prohibiting risky operations and transactions in the system. Performance-based premiums also have the same effect as the unattainable benchmark on the attitudes of the salespersons according to the interviews conducted within the scope of this thesis. Moreover, the complexity of the structure of the private pension system of Turkey together with the frequent changes in the law is blamed for insufficient information disclosure. And, these factors might be used as excuses by employees for hiding the intent of their misbehaviors.

The thesis indicates that although no respondents admitted that their company engages in such relations, the probability of building alliances with companies that have equities in the capital markets is very high for pension companies and no monitoring mechanism effectively averts the building of such alliances. Although the regulations on the private pension system are not perceived sufficient for prohibiting alliances between companies for protecting the interests participants, respondents evaluated the regulations on the private pension system effective in dissuading fund managers from malpractices by tracing their personal accounts and accounts of their fund managers and penalizing them whenever an asset in the pension fund is traded in the personal accounts of fund managers or the accounts of their relatives. Tracing also prohibits them from risky transactions.

The thesis points out that there are differences between the competencies of employees from different departments in many pension companies. Departments like sales, marketing, and customer relations do not require higher standards for employment due to the extensivity of labor force such departments require. And, the employees of these departments have direct relations with participants and their lack of competency may lead to unhealthy information flows to participants. On the other hand, fund management departments of pension companies demand very high qualifications for employment. The fund management department only hires the people who are competent enough for monitoring the operations and transactions executed by the portfolio management companies to decrease the level of asymmetry between pension companies and portfolio management companies. This thesis reveals that the agency relations, in which pension companies are the principals and portfolio management companies are the agents, are less prone to agency problems than relations in which participants are the principals and pension companies are the agents due to the lower information asymmetry between parties in the former type. Pension companies could succeed to decrease the level of information asymmetry between them and portfolio management companies by employing people who are capable of monitoring the activities in the pension funds. So, employing most qualified people in the fund management departments is used as a strategy by pension companies for increasing their power of controlling the operations and transactions in their pension funds.

This thesis points out that providing sufficient information about the pension funds is important for making participants capable of choosing fund types that suit their risk preferences. Yet, providing understandable and sufficient information about pension funds is not an easy task because the language used in the information texts can be understood by financially literate people and the level of financial literacy is very low among Turkey's population. Thus, inventing mechanisms for explaining pension funds by using words that are understandable for the financially illiterate people is important for protecting participants against their misinforming or misdirecting agents. Otherwise, intermediaries can easily misdirect people to the pension funds with higher expenses which may not fit with the risk preferences of participants.

The thesis also shows that most respondents appreciate the strictness of the regulatory and monitory activities of the state, although most times such activities lead to decelerations and defects in their works. The internal audition mechanisms, on the other hand, not perceived as effective as external mechanisms according to the views of respondents. The establishment of the private pension system right after the

2001 financial crisis is claimed to be the reason behind the effectiveness and strictness of external regulation and supervision mechanisms. The effect of the governance structure on the agency problems in the private pension system of Turkey will be explained more in the following chapter. The following chapter will be the concluding chapter in which the findings obtained in this chapter will be analyzed considering the literature on the agency relations in the private pension system and governance structures of the pension system.

The thesis underlines that pension sector employees are aware of the importance of sufficient information disclosure for increasing the efficiency in the system. Yet, pension companies are not willing to deliver sufficient information on the pension plans to prospective participants because that would decrease their sales. And, only a few of them took additional measures for checking if the information provided to the participants by their employees are adequate for understanding the system due to the cost of monitoring mechanisms and the protection pension contracts provide them in the sight of the law against the complaints of participants about insufficient information provision. The thesis demonstrates that information disclosure is even less sufficient in the Auto-Enrollment System in which pension companies have no liability for information provision and have no direct relations with the participants. So, the regulations are not effectively dealing with the insufficient information disclosure in the system and sufficient information disclosure can be assured for all pension companies only by implementation of the effective regulations because otherwise, pension companies would not provide sufficient information for making more sales or keeping participants in the system.

To sum up, the first theme of this chapter shows that there are only a few operations and transactions that are decided by governing bodies and puts participants under risk due to the legal structure of the system prohibits any operation and transaction that are not mentioned in the pension contract and thus not suits with the risk preference levels of participants and strict monitoring over the operations and transactions in the system. Yet, participants are still under risk due to their financial literacy because their agents i.e. pension companies can get their approval for the operations and transactions that do not fit with their risk preference levels by manipulating their participants. Unattainable benchmarks and performance-based premiums are claimed to be the reason behind the agents' proneness to misbehaving. The complexity of the code of law together with the frequent changes in regulations is also reported as reasons behind some of the problematic bur rather unintentional behaviors of agents. Only a few of the respondents of this thesis perceive the efforts of their internal audit mechanism effective in the control of such problems. This situation shows the importance of external overseeing mechanisms in the control of such problems.

The second theme of this chapter discusses that legal structure and the oversight mechanisms of the state are much more effective in controlling the agency problems in the system that may arise between the pension fund managers and participants due to conflict of interest. Each transaction made by a fund manager in their personal accounts of pension fund managers and their relatives is traced by the Capital Markets Board. By doing so, the Board prohibits the transactions which may be realized by fund managers on behalf of their own interests which may endanger the interests of participants. The board is entitled to cancel the licenses of fund managers who act on behalf of their interests or do not treat all their clients equally. In addition to the risk of losing their licenses, pension fund managers also face the risk of losing their reputation which also stated as a mechanism that decreases the instances of agency problems caused by fund managers.

The third theme of this chapter, on the other hand, presents that the governance structure of the Turkish private pension system is incapable of controlling the operations that made on behalf of a party, generally a business that has alliances with pension companies. Pension companies may use the pool of pension funds for generating capital to particular businesses and such transactions may endanger the interests of participants. The thesis points that such operations are expected to be more common among pension companies that belong to a domestic capital group because their control over the investment decisions over the portfolio management companies would be higher than their counterparts and the last decision about the investments is made by the portfolio management companies. The state aims to reduce such occasions by limiting the share of pension funds that can be managed by a single portfolio management company to forty percent for each pension company. By doing so, the state succeeded to limit the control power pension companies have over the portfolio management companies to an extent. The fear of reputation is again mentioned as a mechanism that controls the agency problems that caused by the capital alliances.

The fourth theme of this chapter demonstrates that many employees work in the departments that have direct relations with the participants but lack the necessary qualifications for protecting the interests of the participants. On the other hand, there are also some highly qualified people in the pension companies that work in the fund management departments. Respondents asserted that employing qualified fund managers in pension companies is strategy pension companies that use for increasing their leverage over the control of pension funds by increasing their monitoring capacity over the activities of portfolio management companies. This shows that pension companies are aware of the agency problems in the system and use mechanisms to protect themselves from the negative consequences of agency problems when they are the principals but act less actively against the agency problems in which they are the agents and leave participants vulnerable against the malpractices of their employees.

The fifth theme of this chapter highlights that the information disclosure dimension is the one in which agency problems are most prevalent due to the difficulty of implementing effective monitoring mechanisms and due to participants' lack of financial knowledge which would allow them to monitor their agents. This theme shows that neither legal structure nor the overseeing state mechanisms could efficiently prevent the agency problems in the system which worsens the vulnerable situation of participants against the abuses of their agents.

The sixth theme of this chapter manifests that the division of the separation of management and ownership of pension funds between portfolio management companies and pension companies has a positive effect on the pension fund governance quality of the system despite the agency relation established between these parties due to this separation. The legal structure limited the possible agency problems that may arise in the relationship between these parties by clearly determining the roles and responsibilities of each party separately in the law and monitoring their activities. Fund management departments of pension companies have importance in this instance trough which pension companies could monitor the activities in their pension funds which increase the governance capacity of pension companies.

The seventh theme of this chapter states that assets each fund type may include are defined by the law in detail and fund managers were forbidden to make any transactions that do not suit the law. The suitability of the transactions with the law is controlled by both the owner pension company of a pension fund and the Capital Markets Board. So, fund managers cannot engage in excessive risk-taking activities in pension funds. Moreover, they cannot use their informational superiority for manipulating participants and convincing them to join risky funds that have higher management fees because they have no direct access to the participants. This case again shows the importance of the governance structure of the private pension system of Turkey in controlling agency problems.

The next chapter will be the last chapter of this thesis in which the findings obtained through this chapter will be discussed in the light of the existing literature on the agency problems in the private pension schemes and the relationship between the pension fund governance structures and the agency problems in the system, which is provided in Chapter 2.

CHAPTER 5

CONCLUSION

This thesis explores the perceptions of pension sector employees towards the agency problems in the system within the context of its governance structure. For this aim, the thesis presents the most common agency problems in the Turkish private pension system which are identified through a qualitative analysis of pension sector employee accounts. In addition, the thesis also examines the influence of the legal structure and the regulatory and supervisory state organizations on the prevalence of agency problems in the system. This thesis relied on a thematic content analysis of thirteen semi-structured interviews conducted with sixteen respondents from pension companies, portfolio management companies, and a supervisory and regulatory organization. The respondents were recruited by a purposive sampling method from eight pension companies, three portfolio management companies, and a supervisory and regulatory organization.

The 2008 financial crisis led to severe losses in the retirement savings of the participants of private pension plans in many countries which drew attention to the weakness of the governance structures of pension funds (Chohan, 2018). The literature on the pension fund governance furtherly points that the malpractices of the pension fund managers and other sector employees and their lack of accountability are the main reasons behind the severity of losses in pension funds during the financial crisis (Ambachtsheer & McLaughlin, 2015; Chohan, 2018). As a result, the losses in the pension funds lead to lack of confidence about the efficiency of free-market mechanisms in pension fund governance and thus changed the attitudes towards the regulations on pension fund governance, which also lead to an increase in the number of studies on the practices of good pension fund governance (Chohan, 2018). There are a few studies (Antolin & Stewart, 2009; OECD, 2005; Stewart & Yermo, 2008) focusing on the pension fund governance structures of pension schemes around the world while figuring out which mechanisms are suitable for tackling the problems, particularly the agency problems which pose an internal threat to the governance structures of pension funds. Antolin and Stewart (2009) argue that different pension fund governance types have different capacities of controlling agency problems and thus it is important to investigate agency problems in a pension fund while considering its governance structure. Previous literature on the pension fund governance fails to explore agency problems in a contractual type pension fund despite the vulnerability of such funds against agency problems.

This thesis presents that the prevalence of agency problems is higher in Turkey when compared to institutional type pension funds as expected due to its external organization structure (Stewart & Yermo, 2008). The thesis also points that agency problems are expected to be more prevalent in the private pension system of Turkey than other contract-based pension funds due to the lack of collective voice mechanism, which results in the absence of representation of the participants' interests. This situation manifests the importance of collective voice mechanisms for externally organized pension funds in which risks are not internalized by the governing organizations. In comparison to trust-based type pension funds, the private pension system of Turkey experience lesser agency problems thanks to the clear division of responsibilities among the actors in the system by the law. The governance structure and the division of responsibility among actors are often unclear in trust-based systems and this lack of clarity is claimed to be one of the reasons behind agency problems in these systems (Ambachtsheer, Capelle & Lum, 2006). Therefore, the legal and regulatory environment of contractual type pension funds protects against the agency problems to a certain extent by defining roles and responsibilities more clearly and restricted. Moreover, this thesis presents that although there are sector employees with inadequate qualifications, the people responsible for the management of pension funds often have sufficient qualifications in Turkey alongside with other contractual systems and unlike trust-based systems.

This research shows that the conflict of interest may occur between a participant and pension sector employee not only whenever personal interests of sector employees differ from those of participants but also whenever the interests of pension companies or portfolio management companies have corporate interests that conflict with the interests of participants. In other words, pension sector employees do not only misbehave for their interests but also misbehave on behalf of the interests of their employers. So, we can divide the agency problems in which pension sector employees act as agents into two as the problems where agents act on behalf of their interests and problems where agents act on behalf of the interest of the organization they work for.

Agency problems, particularly those led by the conflict between the personal interests of sector employees and interests of participants, can be controlled by binding the personal interests of sector employees with the participants' interests together with the supervisory and regulatory mechanisms as stated in the literature review part (Jensen, 1993). Still, efforts for binding interests of two parties may trigger agency problems as in the cases where fund managers get higher premiums for higher fund performances and thus take excessive risks for higher returns to participants that may put participants under risks higher than the risk level preferred by participants (Autenne, 2017). Due to such occasions, the effect of pension fund governance structure on the agency relations must be explored in detail. This research is only capable to show agency relations in a contractual type pension fund with no collective voice and compares it with the existing literature on the agency problems in private pension systems focusing mainly on the trust-based systems. As a result, the role of overseers as regulators and supervisors are crucial in controlling this type of agency problems.

Agency problems led by corporate interests are expected to be less common in countries with institutional type pension funds compared to other types due to the unity of interests. The unity of interests in these systems originates from the fact that pension funds have their internal governing bodies and thus the corporate interest of the pension fund organizations is designed in a way to represent the interest of participants. The agency problems in these systems arise due to conflict of interests between the participants' interests and personal interests of pension sector employees.

In contractual and trust-based types, pension funds are initiated and managed by external organizations (Stewart & Yermo, 2008) and as a result, there might be agency problems that emerge due to the conflict of interest between the participants and corporate interests of initiators/managers. Such problems expected to be more prevalent and complex in pension fund structures where initiators and managers are two separate parties i.e. when the initiator of a pension fund outsource the management of pension funds to another organization — a common practice in contractual type pension funds. The separation of initiation and management rights leads to the formation of new agency relations in the system. Therefore, agency problems may occur in such systems not only whenever there is a conflict between the interests of participants and the personal or corporate interests of pension sector employees but also in instances when there is a conflict of interest between initiator and manager parties. For example, this research shows that in the case of Turkey fund managers are allowed to trade the shares of businesses that have alliances with their company. Such trades do not only endanger the financial returns to the participants but also endanger the reputation of initiators i.e. the pension company that owns the fund. Therefore, the pension fund governance structure of Turkey, which is a contractual one without any collective voice representation mechanism, has weaknesses that make it vulnerable against such agency problems.

Increasing share of the defined-contribution plans in Turkey, which are managed by pension companies, also imposes a risk on the participants in Turkey. The financial risk participants face due to the defined-contribution characteristics of their private plans remain unclear for most participants due to their lack of financial literacy as this thesis suggests. In defined-contribution schemes, participants are vulnerable against not only the risks imposed by financial markets but also the risks imposed by the real markets such as high inflation rates, according to Ebbighaus and Wiß (2011). The thesis points out that the financial illiteracy of Turkish participants, which is found in the literature on Turkey (Gülmez, 2018; Özer & Gürel, 2014; Yıldız, Karan, & Salantur, 2017), makes them prone to staying in the standard funds, which brought negative real returns in the latest years due to the high inflation rates in Turkey. Principally such funds are designed for protecting the risk-averse participants from the financial market risks and are supposed to bear the lowest losses on the contributions of participants, but their design is unable to protect participants against the risks borne by high inflation. Thus, this thesis points to the need for rearranging pension fund types and pension fund governance structure in a way to determine the risk levels of pension funds in line with the expectations on financial markets and inflation rates.

The thesis shows that pension sector employees in Turkey are aware of the negative consequences of the complexity of the private pension system that makes it incomprehensible not only for participants but also sometimes for sector employees. Although previous studies explored the low level of financial literacy among the participants in the private pension system of Turkey together with the effects of asymmetric information (Gülmez, 2018; Özer and Gürel, 2014; Yıldız, Karan, & Salantur, 2017), these studies are unable to provide a complete picture of how the high level of asymmetric information leads to agency problems in the system. This thesis aims to fill this gap in the literature by identifying the agency problems in the system while considering the effect of the legal structure of private pension systems and regulatory and supervisory organizations on the control of these agency problems.

The thesis points out that agency problems in private pension schemes of Turkey more likely to occur in the agency relations between participants and pension company employees than the agency relations between pension companies and portfolio management companies. This finding relies on the respondents' accounts that underline the higher monitoring capacity of pension companies over the portfolio management companies. This finding is in line with Shapiro (2005) that claimed agency problems are likely to occur in agency relations in which principals cannot pretend to control their agents. Therefore, pension companies are in a more advantageous position compared to the participants in controlling their agents. However, participants are mostly perceived as people without a public voice and lacking financial literacy, which limits their ability to control their agents.

This thesis shows that the participants in the private pension system of Turkey cannot even pretend to monitor their agents due to their financial illiteracy and this situation negatively affects the pension fund governance as officials from one of the regulatory and supervisory organizations reported in this research. These officials also perceived that compliance problems result mainly from the complexity of the legal structure. The complexity of the legal framework for private pensions was also cited as a key issue that leads to poor pension fund governance according to the study of Antolin and Stewart (2009). Antolin and Stewart (2009) demonstrated that supervisory and regulatory bodies are mostly worried about the transparent and sufficient information dissemination with participants about the private pension systems. On this issue, this thesis finds that providing transparent and adequate knowledge to participants does not automatically resolve the informational problems. In addition to being transparent and sufficient in disseminating information, pension companies must provide the information in a way that is accessible and understandable by all the participants.

This thesis presents that balancing stakeholder interests in the system and understanding the legal environment of the system are two agency-related issues that pose challenges to the Turkish private pension system as a result of the incompetency of the governance structure in preventing these challenges. Still, the legal structure of the private pension system of Turkey is somehow capable of balancing the stakeholder interests by making an external body i.e. fund managers from portfolio management companies responsible for fund management and monitoring the transactions made in the personal accounts of these fund managers. As a result, the system somehow succeeds in limiting the problems that occurred as a result of a conflict of interest to a certain extent. Nevertheless, there are no attempts for controlling problems related to the complexity of the legal structure of the system in Turkey. Ambachtsheer, Capelle, and Lum (2006) also named the dimensions agency problems to pose challenges on the governance of pension funds as balancing stakeholder interests in the system and understanding the legal environment of the system in their study.

A negative consequence of the agency problems in the system is the absence of long-term investment horizons of participants in Turkey according to this thesis. In other words, participants in the private pension system of Turkey often lack long termism in their investment horizons in Turkey and the sales strategies of many pension companies contribute to this problem. This finding is in line with Ambachtsheer and McLaughlin's study (2015) which shows that the incompetency of the employees in the sector has negative effects on the system. Their results also show that there was a positive correlation between the quality of pension fund governance and long-horizon investing quality. Yet, the mechanisms for ensuring long term investment strategies were absent in the pension sector of trust type pension funds according to their study, which is also relevant for Turkey. Developments for increasing the long-termism over the preferences of participants are also necessary for Turkey's context. This is particularly important in consideration with the low level of financial literacy of participants and their lack of collective voice.

The importance of collective voice mechanisms in control of agency problems has been acknowledged by many studies. The studies conducted by Bridgen and Nazyck (2019) and McCarthy, Sorsa, and van der Zwan (2016) show the different techniques participants used for increasing their governance capacity over pension funds in various countries like the USA, Finland, The Netherlands, the

UK, and France. Unlike these countries, participants do not have any collective voice within the private pension system of Turkey even in collective contracts like auto-enrollment contracts in Turkey. As a result, unlike their counterparties in these countries, participants in Turkey cannot build alliances or define other strategies for increasing their governance capacity. Therefore, the participants' governance capacity over pension funds is very limited in Turkey. Studies on countries where participants’ voice is stronger show the positive effect of labor activism on the protection of the interests of labors i.e. participants by demonstrating different cases.

This thesis concludes that the pension fund governance structure of Turkey is expected to be incapable of representing the interests of participants adequately due to the absence of any collective voice mechanism. In fact, some of the problems related to balancing the stakeholder interests are caused by this insufficient representation of the participants in the system because parties with higher governance capacities may be enjoying an undue power to change the terms of pension plans without considering the effects of such changes on participants. Participants have no power over the management of their pension funds except making an individual decision such as changing their plans or funds due to their lack of collective voice. Although it is expected for the IPS, the participants may demand and acquire some controlling power of their funds in the Auto-Enrollment System by gaining a collective voice, similar to the secondary pillars of Denmark, Finland, Hungary, Italy, and Japan were the employers are a provider. The lack of collective voice in both pillars of the private pension system of Turkey increases the vulnerability of participants against agency problems. As a result, state regulation and supervision are important for the protection of the participants in the system from financial losses including those originating from the misbehaviors of their agents. The thesis presents that in areas where state regulations are stricter, the prevalence of agency problems are perceived by pension sector employees at a lesser extent.

Based on an analysis of pension sector employee perspectives, this thesis shows that the legal structure of the private pension system of Turkey succeeds to preclude many agency problems in the system, particularly those related to financial transactions by clearly restricting the set of possible actions for all agents in the system by the law. Although legal structure clearly defines the contents of information disclosure, it does not determine how the information should be provided to the participants to ensure that the participants are well informed about their pension plans. Therefore, the thesis suggests that the legal structure is not as effective in the preclusion of the problems in the information disclosure. Moreover, supervisory and regulatory organizations are also not capable of controlling the agency problems that lead to misinformation or underinformation of the participants in the system due to their lack of monitoring capacity.

The thesis shows that the restrictions imposed on the agents in the system via legal structure and the regulatory and supervisory organizations must be compatible with the aim of controlling the agency problems in the system. On this issue, the thesis demonstrates that there are differences between the prevalence of the agency problems in the different dimensions of the private pension system of Turkey. For example, occurrences of insufficient information disclosure, which would mislead the participants about their pension plans are much more common than the occurrences of operations and transactions that put participants under risk more than the risk level approved by the participant in their contracts. Moreover, there is some evidence suggesting that pension intermediaries may sometimes misinform participants for directing them into riskier funds and plans than their risk preference level. Such occasions are less common in transactions and operations than the information disclosure processes. The operations and transactions can be monitored by the supervision authorities as long as pension companies provide the reports on their operations and transactions regularly to these authorities and any practice that is contrary to the law can be detected and penalized by authorities easily. The ways of controlling the agency problems are mentioned as monitoring, ratification, restraining the ability of agents for misbehavior, and restricting the set of agents via legal contracts, etc. by Eisenhardt et al. (1997). This thesis shows that effectivity of such mechanisms in the control of agency problems may differ between the different dimensions and thus the dimension of agency problem must be considered while selecting proper mechanisms in the control of agency problems.

Efficient monitoring of the information disclosure processes is a more difficult task due to the protection pension companies have thanks to the pension contracts under the law. Pension companies are only obliged to provide information on the issues that are only written in the pension contracts. Therefore, in cases of verbal misinformation and underinformation, they could claim they provided all the information on the pension plans by contracts. This shows the loophole in the regulations and monitoring mechanisms for controlling misinformation or underinformation participants may be subjected to. On the other hand, increasing the capacities of supervisory and regulatory mechanisms are costly for both internal and external levels (Eisenhardt et. al, 1997) and such agency costs could only be acceptable if the benefit of incurring such costs are higher than them (Brigham & Gapenski, 1993). This research demonstrates that pension sector employees acknowledge that their company does not effectively monitor the sufficiency of information disclosure but employing more effective measures such as calling every new participant before activating their contracts is costly and thus only a few of the companies preferred to and in fact, could imply such measures. So, the diversity of perception of benefits of sufficient information disclosure among the pension companies leads to differences in the implementation of the different monitoring mechanisms.

In this study, a comparison of performances of the companies that have additional mechanisms for monitoring information disclosure with the companies that do not have any additional mechanisms for monitoring information disclosure was carried out using the review on the performances of pension funds provided in the background chapter. This comparison shows us that companies that implement additional measures of information disclosure have better performances than their counterparts on average. Although this comparison cannot imply that implementing additional measures would lead to higher performances, pension companies that have additional measures may be more careful in every aspect of their businesses, including controlling the operations and transactions made by portfolio management companies.

Internal mechanisms for auditing, inspecting, supervising, and regulating are also used in the private pension system of Turkey. However, in this study, external oversight is found more effective than internal operations. The strengthening of the oversight function of the state in other private pension systems occurred in the aftermath of the 2008 financial crises in other countries. Although the state may not be the only responsible body for regulating and monitoring pension funds, it becomes the most active one in many countries particularly after the financial crisis of 2008 (Chohan, 2018). Differently in Turkey, this thesis suggests that the state has been active in regulating and supervising the private pension system since its establishment and its proactive approach controls the agency problems in the system to some extent. The state and its organizations supervise and regulate every non-state actor in the system and due to their roles as regulators, supervisors, and disciplinaries, which underlines the importance of governance structure for a pension fund.

This conclusion is quite unexpected considering the rather inactive role of the Turkish state as the overseer in other welfare sectors such as in healthcare and education. Mentioning a few of the studies that examine the role of the state as a regulator in these sectors will be helpful for that purpose. For example, Yılmaz (2020) investigated the patient experiences in private hospitals and concluded that patients faced serious challenges due to their lack of information about the system. The patients' vulnerability to asymmetric information is worsened by the lack of effective government regulation in the healthcare sector. According to Yılmaz (2020), there is no mechanism for prohibiting private healthcare providers from using their information superiority for their economic interests. In another example, Yetiz and Özekicioğlu (2020) investigated the effect of asymmetric information on the financing of higher education in Turkey and concluded that risk averseness of banks together with the lack of control mechanisms led to inefficient outcomes in the education loans. They, therefore, claimed that there is a need for adding pre-control mechanisms for decreasing the level of asymmetry between parties. In another study, Aran, Munoz Boudet and Aktakke (2016) investigated the impact of regulations on private childcare and the preschool market and they concluded that regulations limited the accessibility of such services for the poor. Aran, Munoz Boudet and Aktakke's research (2016), therefore, concludes that the insufficiency of regulations does not only make beneficiaries more vulnerable but regulations themselves may even directly make beneficiaries worse off. These three pieces of research mentioned above pointed the inadequacy of the regulatory role of the state in welfare sectors bringing together private and public sector providers. Alternatively, this thesis presents a successful case of state regulation in another welfare sector. This thesis demonstrates an alternative role of the state in the case of pensions as state organizations actively regulate and monitor the system for controlling agency problems.

This thesis offers two possible explanations for the active role of the state in regulating private pensions in Turkey. The first explanation is that the private pension system of Turkey is built right after the 2001 financial crisis in Turkey and many life insurance companies bankrupted in this process ("Binlerce sigortalı mağdur", 2003; Öniz & Aydın, 2019). As a result, social attitudes towards the private pension system were expected to be negative at the time. In response, state authorities acted prudently and carefully while designing the pension system for building trust toward the system and for protecting the economy from a new failure. In addition, pensions are different from other welfare sectors as the level of integration of pensions to the financial markets is higher from those of the healthcare and education sectors. The success of pension funds is important not only for their participants but also for the national economy which would go into crisis due to failures in such systems. Therefore, the state founded a supervision center for the private pension system alongside with this system's establishment and obliged pension companies to be a part of the supervision center (EGM, 2020b). To sum up, the state has realized the importance of supervision and regulation of the private pension system in Turkey due to the financial crisis which arrived much earlier than the 2008 global financial crisis.

The second explanation is that the state may have economic stakes in the private pension sector more than private health or private education sectors. The state has control over a great share of the accumulations in pension funds due to a few situations. First, as repeatedly mentioned in this thesis, most participants preferred to stay in standard pension funds which invested in low-risk assets including domestic government bonds and bills (Republic of Turkey, 2001). Second, all contributions which are made by the government to pension accounts of participants are invested in funds that mainly consist of domestic government bonds and bills and other debt instruments in TL (Republic of Turkey, 2001). Last but not the least, the pension companies that belong to the state banks recently were acquired by the Turkey Wealth Fund ("Varlık Fonu satın aldı! Tek çatı altında birleşti", 2020). Therefore, an important share of the accumulations in pension funds is used for funding state-led investments and for increasing the financial stability of the domestic economy by increasing liquidity, which is a benefit that cannot be provided by the private parts of other public-private mix welfare systems and this may explain the more prudent approach of the state to the pension sector than the others.

Although performance-based premiums are offered as a solution to agency problems by tying the interests of agents with the interests of principals by Jensen (1993), such premiums are not capable of tying the interests of both parties in the private pension system of Turkey due to its governance structure. Pension intermediaries, either as personal intermediaries, agencies, or bank sellers, are only responsible for selling pension plans, and thus paying performance-based premiums only triggers more agency problems, as this thesis shows. Premium-based premiums for pension fund managers, on the other hand, have a positive effect on the control of agency problems. Still, such premiums have a positive effect thanks to the strict restrictions on the maximum and minimum ratios of asset types a pension fund can include and the strict supervision over the transactions made by pension fund managers. Otherwise, pension fund managers can make transactions that are above the risk level of a pension fund whenever they think such transactions will bring high returns to the pension fund. The fund managers' ability to make such transactions will put participants under a risk level that is higher than their preferred risk level unless there are such restrictions. Moreover, fund managers can make such transactions whenever they think the monitoring institutions will not recognize when they exceed the limits. These findings point that the capabilities of monitoring and regulatory mechanisms and legal structure should be considered together for designing efficient mechanisms in controlling different agency problems in the private pension system.

Tracing is only effective in controlling agency problems if all the operations and transactions are completely traceable. For example, all the personal accounts of pension fund managers and their relatives are traced by the Capital Markets Board of Turkey, and allowing this tracing is a prerequisite for getting fund management licenses. The board controls if fund managers malpractice by trading any asset in the fund they managed also in their personal accounts by tracing activities. As a result, fund managers are less likely to get involved in questionable transactions that are traceable by the boards in their personal accounts due to the high probability of getting caught by the CMD. On the other hand, tracing all the operations and transactions in a fund to control if the pool of a pension fund is used for financing an investment that belongs to a business group the pension company has alliances with is not as feasible as tracing the personal transactions made by fund managers separately due to the complexity of transactions and privacy rights of pension management companies (Mwangangi, 2006; Njuguna, 2010). Moreover, there is no restraint on making such transactions by the law and fund manager could claim these transactions were made at the best interests of the participants of pension funds. So, tracing is a more suitable method for precluding fund managers from acting in their own best interests but insufficient for controlling if fund managers act on behalf of the interests of parties other than participants (e.g. the capital group they work for) in the private pension system of Turkey.

The thesis underlines that the spread of rumors would be more intense in countries with relatively small pension sectors, the fear of reputation loss and trust loss would be more effective in such countries, including Turkey. Compatible usage of written and unwritten mechanisms may lead to effective control of agency problems in the system together. Therefore, according to this thesis, reputation emerges as one of the controlling mechanisms for agency problems in the Turkish context. The studies by Clark (2004) and Chohan and Jacobs (2017) underlined the effect of the fear of reputation loss on the prevalence of agency problems in private pension schemes. This thesis shows the fear of reputation loss appears as a self-checking mechanism that makes many agents avoid suspicious actions even in situations when the legal penalty is low, or the provability of the malpractice is very low.

The literature on the participants' relations with the private pension system of Turkey (Çetin & Sevüktekin, 2015; İlhan, 2016; Özer & Gürel, 2014; Yıldız, Karan, & Salantur, 2017) highlights the participants' lack of financial knowledge in Turkey. Working in another country case where financial literacy is low, Njuguna (2010) asserted that providing adequate information on pension plans and fund performances is a not useful mechanism to tackle agency problems. Parallel to Njuguna's findings (2010), this thesis also suggests that although both pension companies and supervisory and regulator organizations provide detailed reports on the pension plans and performances of pension funds, these reports do not seem to be effective enough in decreasing the agency problems in the Turkish system because most participants are unable to make meaning of such reports. The need for making such reports understandable for people with low levels of financial knowledge is asserted as a way of decreasing the prevalence of agency problems in the system by many respondents within the scope of this study.

Similarly, a different view on the control of agency problems states that controlling the negative consequences of misbehavior of an agent may bear on the principal is more important than monitoring and controlling all the agency relations in a system (Eisenhardt, 1989). Agency relations only become problematic when agents are capable of using their power originating from their informational at the expense of endangering the interests of principals. Baker, Logue and Rader (2004) argue that this is the most common negative outcome of agency problems in pension systems. Thus, the agent's capability of making decisions that may endanger the financial wellbeing of participants can be limited without increasing the participants' level of financial literacy. A new regulation made by the state made a supervision organization responsible for the implementation of a reward and punishment system which depends on the comparison of the performances of pension funds in Turkey, as this research reported, which is line with Eisenhardt's proposal for controlling the negativity of agency problems. This regulation aims to decrease the negative consequences of the pension fund and pension company selections of participants that are misled by agents. So, the regulation focuses on the negative outcomes of agency relations rather than the asymmetry in the relationship. As reported by a state official, such relations are useful and needed in many systems due to the specialized knowledge requirements. And, working for making principals capable of monitoring their agents would be less efficient and unrealistic than finding ways of protecting participants from the malpractices of their agents without increasing their financial knowledge is a necessity for systems that require specialized knowledge such as private pension systems.

Ambachtsheer, Boice, Ezra, and McLaughlin named poor decision-making processes, inadequate resources, the lack of clarity of missions, and lack of focus as the main indicators of the poor pension fund governance in the US (as cited in Ambachtsheer & Ezra, 1998). The thesis shows that although there are problems resulted from poor decision-making processes, inadequate resources in the private pension system of Turkey, this system could succeed to prohibit problems related to the unclarity of missions and lack of focus thanks to its legal structure. There are different authorities for establishing, managing, and overseeing pension funds and their missions are clearly defined by the law.

The thesis argues that three recommendations stated in the study of Ambachtsheer, Capelle and Lum (2006) may be also useful for improving the pension fund governance structure in Turkey. Firstly, this thesis shows that there is a need for simplifying the pension contracts for making the legal structure more understandable and accessible for participants in Turkey. Secondly, the competency of pension sector employees, particularly those that have direct relations with the participants, are not adequate for ensuring sufficient information disclosure and thus a regulation can be made for setting different requisites on experiences and skills compatible with the positions for employment. Thirdly, the thesis shows that many respondents see the relative cost of implementation as an excuse for not implementing additional mechanisms for controlling agency problems. Therefore, making a regulation to make pension organizations obliged to ensure human and technical resources a pension fund needs for high performance may contribute to an increased efficiency also in Turkey. Uncompetitive compensation structures and unclear division of management and oversight functions are two problems named by the executives in this study and the study of Ambachtsheer and McLaughlin in 2015 which were not prevailing the private pension system of Turkey due to the differences in its governance structure.

To conclude, this thesis firstly shows us agency problems are prevalent in the private pension system of Turkey, particularly in the relationship between pension companies and participants. The thesis identifies four major agency problems: providing insufficient information to prospective participants for increasing the sales, offering pension funds that mismatch with the participants' risk preferences for higher management expenses, providing insufficient information to participants about their funds for keeping them in the system, making investments for providing capital to their capital alliances at the cost of participants' interests. Second, the thesis claims that focusing on decreasing the level of information asymmetry between the parties may not be a suitable and efficient solution -at least in the medium term- for dealing with the negative consequences of agency problems between pension companies and participants considering the low level of financial literacy among the society. Third, there is no collective representation mechanism available for participants in the private pension system of Turkey. This is especially striking as a collective voice for participants in the Auto-Enrollment system is often present in other countries and reduces the agency problems in the system. Lastly, the differences between the prevalence of agency problems in different dimensions of the system manifest the importance of the governance structure in the elimination of agency problems because such problems were seen in lesser occurrences in dimensions that were more strictly regulated and monitored. Therefore, the role of the state as overseer may be used more effectively in the areas which are more prone to agency problems such as information disclosure process and fund selection process.

The original contribution of this thesis is its focus on the perspectives of pension sector employees, who are strategically situated in pension systems and can offer important insights into the prevalent agency problems in these systems. There is no research directly on the perspectives of the pension sector employees in Turkey. Moreover, this thesis also contributes to the literature on pension fund governance structures by exploring the governance structures of the private pension system of Turkey. Therefore, the thesis makes a modest contribution to the international literature on pension fund governance by bringing in insights about an understudies pension system context and provides a basis for a better understanding of principal-agent problems in the private pension system of Turkey. Moreover, most of the current literature on the private pension system of Turkey belongs to economics and management disciplines, which mainly approach the issue from the perspective of economic efficiency. My perspective not only considers the economic efficiency of the system but also its capability of protecting the participants in the system.

Still, it is important to remind that this thesis suffers from important limitations. First, the results of this thesis cannot be generalized to the broader private pension system of Turkey but only captures a part of its characteristics because both the number of respondents is very insufficient, and the qualitative methods used are not suitable for drawing a complete picture. Second, this thesis mostly examines the perspectives of employees from the headquarters and more respondents from branches from different regions are also necessary for a more detailed examination. Lastly, employees from only one of the supervisory and regulatory organizations are included in the sample of this thesis, and including respondents from all the elements of the private pension system is necessary for a better understanding of the processes of external auditions and penalizations. Therefore, I believe more comprehensive research with more respondents from different elements of the private pension system of Turkey will be useful for better exploration of the agency problems in the system

APPENDIX A

SEMI-STRUCTURED INTERVIEW QUESTIONS

A.1. Pension Company Employees

1. What company do you work for? Can you tell us a little bit about your company's operation in general?
2. Can you tell me a little bit about what you do? What are the problems that you most often experience in your work? Do you have a solution for these problems?
3. What are the most important problems in the private pension system of Turkey in general in your opinion?
4. Do you think if there is any opportunity cost caused by the complexity of the private pension system of Turkey?
5. How do you inform your participants about the system and their funds? Do you think that your company informs its participants sufficiently?
6. What are the most common problems related to asymmetric information in the system? Do you have a solution for these problems?
7. What are the most important problems in pension fund governance in your opinion? Do you have any solution for these problems?
8. When do past contributions are paid back to those who withdraw from the system?
9. Which procedures and activities require the approval of the participant? Which ones do not? Which ones should require in your opinion?

10. Does your company have any written investment policy with respect to private pension funds? If you have, how is it determined? Is there any professional you consulted while determining your investment policy?
11. Do you use any mechanism to ensure that your company and its employees are doing the best for the participants?
12. Do you use any mechanism to control if the interests of participants are protected whenever there is a conflict of interest between employees and participants? Which mechanisms do you use if there any?
13. Which are the methods used by your company use to solve any asymmetric information-related problem? (dismissal, performance-based contract, creating investment, audition, other)
14. How do you determine which fund your participants should join?
15. How frequently your participants change their funds? Do you think that your participants check over the performance of their pension funds?
16. In your opinion, what is the share of participants follow the status of their funds and change their funds when they are not satisfied with all participants?
17. How often are you consulted by your participants? What are the issues that are you consulted on? Do you think your recommendations are taken seriously?
18. How regularly are you informed by the portfolio companies you work with? Do you think that the portfolio companies you work with inform you well enough?
19. Do you monitor what the portfolio company does with the fund you provide? How?

20. What do you think are the most common problems caused by asymmetric information between your company and participants?
21. What do you think are the most common problems caused by asymmetric information between your company and portfolio management companies?
22. Is it your company or the pension fund manager who generally makes the final decision about a pension fund?
23. Do you have any general recommendations on the problems in pension fund governance?

A.2. Portfolio Management Company Employees

1. What company do you work for? Can you tell us a little bit about your company's operation in general?
2. How many pension funds do your company manage, which pension companies do you work with?
3. Can you tell me a little bit about what you do? What are the problems that you most often experience in your work? Do you have a solution for these problems?
4. How do you decide who will manage a pension fund in your company?
5. How do you inform your clients and on what issues? Does being an individual or corporate customer make any difference in the information provision process?
6. Which procedures and activities require the approval of your customers? Which ones do not? Which ones should require in your opinion?
7. What are the most important problems in pension fund governance in your opinion? Do you have any solution for these problems?

8. What are the most common problems related to asymmetric information in the system? Do you have a solution for these problems?
9. Do pension companies you work with have any impact on your company's operations, strategies, and investment decisions?
10. Do you use any mechanism to control if the interests of your customers are protected whenever there is a conflict of interest between employees and participants? Which mechanisms do you use if there any?
11. Do pension companies you work with have an effect on your operations, strategies, and investment decisions?
12. Which are the methods used by your company use to solve any asymmetric information-related problem? (dismissal, performance-based contract, creating investment, audition, other)
13. Is it you or the pension company that generally makes the final decision about a pension fund?
14. How often are you consulted by pension companies you work with? What are the issues that are you consulted on? Do you think your recommendations are taken seriously?
15. How do your company decide the charges for the operational costs of an IPS fund? (value of the investment, time spent on that fund, net earnings, other) Is there any difference between the pricing of IPS funds and the pricing of other funds?
16. What do you think about the adequacy of information provided to participants? Do you inform any you have any role in information of participants whose funds are managed by you or do you only provide information about the pension companies they work with?

17. Suppose there is company A which makes an auto-enrolment contract or employer-sponsored contract with a pension company that owns a fund managed by your company Is it possible to buy shares of that company A?
18. In your opinion, what is the share of the participants who follow the status of their funds and change their funds when they are not satisfied with all participants?
19. Do you have any general recommendations on the problems in pension fund governance?

A.3. Officials from a regulatory and supervisory organization

1. Can you tell us a little bit about your operations in general?
2. What do you think about the effect of regulatory and supervisory organizations on the private pension system of Turkey?
3. How are pension companies are audited and monitored?
4. Do you have any effect on the operations, strategies, and investment decisions of pension companies?
5. How often are you consulted by pension companies you work with? What are the issues that are you consulted on? Do you think your recommendations are taken seriously?
6. What are the most important problems in the system in general?
7. What are the most common problems related to asymmetric information in the system? Do you have a solution for these problems?
8. Dou you think the complex structure of the system has an impact on its regulation and supervision?

9. What are the most common and most important problems in pension fund governance in your opinion? Do you have any solution for these problems?
10. How are portfolio management companies are audited and monitored?
11. What are the problems that you most often experience in your work as a supervisory organization? Do you have a solution for these problems?
12. What mechanisms should be used for preventing asymmetric information related problems according to you?
13. Do you think that pension companies inform their participants sufficiently?
14. According to your observations, approximately what share of participants check over the performance of their pension funds? How many of them change their funds when they are unsatisfied?
15. In your opinion, how many participants follow the status of their funds and change their funds when they are not satisfied?
16. Do you have any general recommendations on the problems in pension fund governance?

APPENDIX B

SEMI-STRUCTURED INTERVIEW QUESTIONS (TURKISH)

B.1 Emeklilik Şirketi Çalışanları

1. Hangi şirkette çalışıyorsunuz? Biraz genel olarak şirketinizin işleyişinden bahseder misiniz?
2. Peki biraz ne iş yaptığınızdan bahseder misiniz? Çalışırken en sık karşılaştığınız sorunlar nelerdir? Bu sorunlar için bir çözüm öneriniz var mı?
3. Size göre Türkiye'nin özel emeklilik sistemindeki en önemli problemler neler?
4. Türkiye'nin özel emeklilik sisteminin kompleks yapısının herhangi bir fırsat maliyetine yol açtığını düşünüyor musunuz?
5. Katılımcılarınızı emeklilik sistemi ve emeklilik fonları hakkında bilgilendirmek için ne yaparsınız? Katılımcılarınızı yeterince iyi bilgilendirdiğinizi düşünüyor musunuz?
6. Sizce sistemde asimetrik bilgi kaynaklı en sık yaşanan sorunlar neler? Bu sorunlar için bir çözüm öneriniz var mı?
7. Sizce göre emeklilik fonu yönetimindeki en önemli sorunlar nelerdir? Bu sorunlar için bir çözüm öneriniz var mı?
8. Sistemden çekilenlere geçmişteki katkı payları ne zaman geri ödeniyor?
9. Bir katılımcının emeklilik sistemine girişinin onaylanması yapabilmek için hangi prosedürler ve işlemler gereklidir? Hangileri değildir? Size göre hangileri gerekli olmalı?

10. Yazılı bir yatırım politikanız var mı? Varsa nasıl belirlendi? Kamuya açık bir şekilde ulaşılabilir mi yoksa gizli mi? Eğer varsa işlemlerinizin hepsi bu politikaya uygun mu yapılıyor ya da yapılıp yapılmadığı denetleniyor mu?
11. Şirketinizin ve çalışanlarımızın katılımcılarınız için en iyisini yaptığından emin olmak için herhangi bir mekanizma kullanıyor musunuz?
12. Bir çıkar çatışması oluşması durumunda şirketiniz bir karar verirken çalışanlarınızın müşteri için en iyisini yaptığına emin olmak için herhangi bir gözetim mekanizması kullanıyor musunuz, kullanıyorsanız anlatabilir misiniz?
13. Şirketiniz asimetrik bilgi kaynaklı problemleri çözmek için hangi metotları kullanır? (işten çıkarma, performans temelli sözleşme, yatırım oluşturma, teftiş, diğer)
14. Katılımcılarınızın hangi fonlara katılacağına nasıl karar verirsiniz?
15. Katılımcılarınız ne sıklıkla emeklilik fonlarını değiştirirler? Katılımcılarınız fonlarının performanslarını takip ettiğini düşünüyor musunuz?
16. Sizce katılımcıların yaklaşık ne kadarı fonlarının durumunu takip ediyor? Peki ne kadarı memnun olmadıklarında fonlarını değiştiriyorlardır?
17. Katılımcılarınız size ne sıklıkla ve hangi konularda danışırlar? Tavsiyelerinizin ciddiye alındığını düşünüyor musunuz?
18. Birlikte çalıştığınız portföy yönetim şirketleri sizi ne sıklıkla bilgilendirirler? Birlikte çalıştığınız portföy yönetim şirketleri sizi yeterince iyi bilgilendirdiğini düşünüyor musunuz?
19. Sizin sağladığınız fonla portföy yönetim şirketlerinin ne yaptığını kontrol ediyor musunuz? Nasıl ediyorsunuz?

20. Katılımcılarınızla aranızda asimetrik bilgi kaynaklı yaşanan en büyük problemler neler?
21. Emeklilik fonu yöneticileriyle asimetrik bilgi kaynaklı yaşanan en büyük problemler neler?
22. Bir emeklilik fonuyla hangi işlemin yapılacağına dair son kararı kim verir? Siz mi, fon yöneticisi mi?
23. Emeklilik fonlarının yönetimiyle ilgili sorunlara ilişkin yapmak istediğiniz genel öneriler nelerdir?

B.2. Portföy Yönetim Şirketi Çalışanları

1. Hangi şirkette çalışıyorsunuz? Biraz genel olarak şirketinizin işleyişinden bahseder misiniz?
2. Şirketiniz kaç tane emeklilik fonu yönetiyor? Hangi emeklilik şirketleriyle çalışıyorsunuz?
3. Peki biraz ne iş yaptığınızdan bahseder misiniz? Çalışırken en sık karşılaştığınız sorunlar nelerdir? Bu sorunlar için bir çözüm öneriniz var mı?
4. Hangi fonu kimin yöneteceğine şirketinizde nasıl karar veriliyor?
5. Müşterileṙiniz hangi konularda ne sıklıkla bilgilendiriyorsunuz? Bireysel ya da kurumsal müşteri olmak bilgilendirme sürecinde bir farklılığa yol açıyor mu?
6. Müşterileriniz onayı olmadan yapamadığınız işlemler neler? Sizce hangi işlemler müşterinizin onayı olmadan yapılamamalıydı?
7. Sizce emeklilik fonlarının yönetiminde karşılaşılan en önemli sorunlar neler peki? Bu sorunlar için bir çözüm öneriniz var mı?

8. Sizce emeklilik fonlarının yönetiminde asimetrik bilgi kaynaklı en sık yaşanan sorunlar neler? Bu sorunlar için bir çözüm öneriniz var mı?
9. Yazılı bir yatırım politikanız var mı? Varsa nasıl belirlendi? Kamuya açık bir şekilde ulaşılabilir mi yoksa gizli mi? Eğer varsa işlemlerinizin hepsi bu politikaya uygun mu yapılıyor ya da yapılıp yapılmadığı denetleniyor mu?
10. Bir çıkar çatışması oluşması durumunda şirketiniz bir yatırım kararı verirken çalışanlarınızın müşteri için en iyisini yaptığına emin olmak için herhangi bir gözetim mekanizması kullanıyor musunuz, kullanıyorsanız anlatabilir misiniz?
11. Çalıştığınız emeklilik şirketlerinin sizin şirketinizin işleyişi, stratejileri ve yatırım kararlarınız üzerinde herhangi bir etkisi var mı? Varsa nedir?
12. Şirketiniz herhangi bir asimetrik bilgi dağılımı kaynaklı sorunla karşılaştığında çözmek için hangilerini kullanıyor? (İşten atma/uzaklaştırma, performans temelli sözleşme, yatırım kurulu oluşturma, teftiş etmek, diğer)
13. Bir emeklilik fonuyla hangi işlemin yapılacağına dair son kararı siz mi veriyorsunuz emeklilik şirketi mi?
14. Birlikte çalıştığınız emeklilik şirketleri size ne sıklıkla ve hangi konularda danışıyorlar? Verdiğiniz tavsiyelerin yeterince ciddiye alındığını düşünüyor musunuz?
15. Emeklilik fonlarının yönetiminde yapılan ücretlendirme nasıl belirleniyor? (Yatırım sayısı, yatırımın değeri, harcanan zaman, net kazanç, diğer) Peki emeklilik fonlarının işlemlerinin fiyatlandırmasıyla diğer fonların işletim fiyatlandırması arasında bir fark var mı?
16. Sizce emeklilik şirketleri katılımcılarını fonlar hakkında yeterince bilgilendiriyor mu? Yönettiğiniz emeklilik fonlarının katılımcılarının

bilgilendirme surecinde herhangi bir rol alıyor musunuz yoksa bilgilendirme tamamen birlikte çalıştığınız bireysel emeklilik şirketinin sorumluluğu altında mı?

17. Varsayalım ki A şirketi OKS ya da işveren destekli BES kapsamında müşteriniz. Fonların yatırıma dönüştürülme surecinde A şirketinin hisselerinin alınması gibi bir durum söz konusu olabilir mi?
18. Sizce katılımcıların yaklaşık ne kadarı fonlarının durumunu takip ediyor? Peki ne kadarı memnun olmadıklarında fonlarını değiştiriyorlardır?
19. Emeklilik fonlarının yönetimiyle ilgili sorunlara ilişkin yapmak istediğiniz genel öneriler nelerdir?

B.3. Denetleyici ya da Gözetleyici Kurum Çalışanları

1. Öncelikle biraz kurumunuz hakkında genel bilgi edinebilir miyiz?
2. Özel emeklilik sistemi üzerinde EGM ve SPK gibi kamu kurumlarının etkisinin ne olduğunu düşünüyorsunuz?
3. Emeklilik şirketlerinin denetlenme ve gözetlenme süreçleri nasıl gerçekleşiyor?
4. Emeklilik şirketlerinin işleyişi, stratejileri ve yatırım kararları üzerinde herhangi bir etkiniz var mı? Varsa nedir?
5. Emeklilik şirketleri size ne sıklıkla ve hangi konularda danışıyorlar? Verdiğiniz tavsiyelerin yeterince ciddiye alındığını düşünüyor musunuz?
6. Size göre sistemdeki en önemli problemler neler?
7. Sizce emeklilik sisteminde asimetrik bilgi kaynaklı en sık yaşanan sorunlar neler? Bu sorunlar için bir çözüm öneriniz var mı?

8. Sistemin kompleks yapısının denetlenmesi ve gözetlenmesi üzerine bir etkisi olduğunu düşünüyor musunuz?
9. Emeklilik fonlarının yönetiminde en çok karşılaşılan ve en önemli sorunlar nelerdir? Bu sorunlar için bir çözüm öneriniz var mı?
10. Portföy yönetim şirketlerinin denetlenme ve gözetlenme süreçleri nasıl gerçekleşiyor?
11. Kurum olarak işlerinizi yürütürken en sık karşılaştığınız sorunlar nelerdir? Bu sorunlar için bir çözüm öneriniz var mı?
12. Asimetrik bilgi kaynaklı problemleri çözmek için sizce hangi metotlar kullanılmalıdır?
13. Sizce emeklilik şirketleri katılımcılarını fonlar hakkında yeterince bilgilendiriyor mu?
14. Sizce katılımcıların yaklaşık ne kadarı fonlarının durumunu takip ediyor? Peki ne kadarı memnun olmadıklarında fonlarını değiştiriyorlardır?
15. Sizce katılımcıların yaklaşık ne kadarı fonlarının durumunu takip ediyor? Peki ne kadarı memnun olmadıklarında fonlarını değiştiriyorlardır?
16. Emeklilik fonlarının yönetimiyle ilgili sorunlara ilişkin yapmak istediğiniz genel öneriler nelerdir?

APPENDIX C

CONSENT FORM

Supporting institution: Boğaziçi University

Title of the research: Exploring Agency Problems in the Turkish Private Pension System: Pension Sector Employee Perspectives

Project Executive: Assist. Professor Volkan Yılmaz

E - mail address: xxx@boun.edu.tr

Phone: +90 212 XXX XX XX

Researcher's name: Remziye Gül ASLAN

E - mail address: xxx@gmail.com

Phone: +90 537 XXX XX XX

Dear respondent,

A scientific research project is being carried out by Boğaziçi University Social Policy Department faculty member Assist. Professor Volkan Yılmaz and Social Policy graduate student Remziye Gül Aslan under the name of "Exploring Agency Problems in the Turkish Private Pension System: Pension Sector Employee Perspectives". This research aims to examine how asymmetric information in the private pension system of Turkey perceived by the employees in the system and how this asymmetric information affects the operations of sector employees and the system overall according to sector employees by using existing literature on participants of Individual Pension System which underlines a lack of financial literacy among participants of the system. In other words, this research will focus on examining how the party who has more knowledge uses their informational superiority in relationships in which information is asymmetric and experiences and motivations of this party in these processes. To this end, sector employees will be asked many open-ended questions to understand both their relations with their customers and their in-company relations.

The duty of private pension companies is defined as selling pension plans to participants and informing participants about pension funds on a regular basis in the functioning of the private pension system in Turkey. Rights and responsibilities regarding the management of pension funds have been transferred by pension companies to portfolio management companies with legal contracts. Therefore, in-depth interviews will be conducted with private pension company employees, portfolio management company employees and employees from a regulatory and supervisory organization, including yourself.

This study is carried out in order to get your opinions about your position in the private pension system as an employee of a pension company / portfolio management company / regulatory or supervisory organization and to understand your relationship with the system as well as possible problems caused by asymmetric information in the system that come to your attention. The meeting will take approximately forty-five minutes. The questions are prepared in such a way that they do not pose any psychological or legal risk to the respondents. I will take the utmost care to avoid any discomfort during the interview. Participation in this research is completely voluntary and no fees or rewards will be awarded for your participation in the study. If you consent to participate in this study, you have the right to withdraw from the study without giving any reason at any stage of the study. You don't have to answer questions you don't want to answer.

Audio recording is needed for the correct reflection of your experiences and opinions. In order to protect privacy, names and personal information will be changed and coded anonymously while voice recordings are transmitted to the text. Audio recording files and the written versions of the audio recordings will be destroyed after the research is completed.

Please ask if you have any questions about the study before signing this form. If you want to get additional information about the research project later or have any further questions about the research project, please contact the project researcher Remziye Gül Aslan (e-mail: xxx@gmail.com; phone: +90 537 XXX XX XX) and / or project executive Volkan Yılmaz (e-mail: xxx z@boun.edu.tr; phone: +90 212 XXX XX XX). For your questions and complaints about the research project, please contact Boğaziçi University Social and Human Sciences Master's and Doctoral Theses Ethical Review Committee.

I understood what was told to me and what was written above. I have / do not want to receive a sample of this form (in this case the researcher keeps this copy).

Participant's Name-Surname: ....

Signature: ....

Date (day / month / year): .... / .... / ....

Researcher's Name-Surname: ....

Signature: ....

Date (day / month / year): ..... / .... / ....

APPENDIX D

CONSENT FORM (TURKISH)

Araştırmayı destekleyen kurum: Boğaziçi Üniversitesi

Araştırmanın adı: Türkiye'deki Bireysel Emeklilik Sistemi'ndeki Asimetrik Bilgi Dağılımının İncelenmesi

Proje Yürütücüsü: Dr. Öğretim Üyesi Volkan Yılmaz

E-mail adresi: xxx@boun.edu.tr

Telefonu: +90 212 XXX XX XX

Araştırmacının adı: Remziye Gül ASLAN

E-mail adresi: xxx@gmail.com

Telefonu: +90 537 XXX XX XX

Sayın katılımcı,

Boğaziçi Üniversitesi Sosyal Politika Anabilim Dalı öğretim üyesi Dr. Öğretim Üyesi Volkan Yılmaz ve Sosyal Politika Yüksek Lisans öğrencisi Remziye Gül Aslan tarafından "Türkiye'deki Bireysel Emeklilik Sistemi'ndeki Asimetrik Bilgi Dağılımının Boyutunun İncelenmesi" adı altında bilimsel bir araştırma projesi yürütülmektedir. Araştırma kapsamında BES katılımcıları üzerine hali hazırda yapılmış olup katılımcıların genel finansal okuryazarlık eksikliğini vurgulayan çalışmalardan faydalanarak bu bilgi eksikliğinin sistemdeki çalışanlar tarafından nasıl algılandığı, bu asimetrik bilgi dağılımının işlerine ve sisteme nasıl yansıdığı anlaşılmaya çalışılacaktır. Yani, bu araştırma asimetrik bilgi dağılımının olduğu ilişkilerdeki daha çok bilgiye sahip olan tarafın bu bilgiyi nasıl kullandığını, bu süreçteki deneyim ve motivasyonlarını incelemeye yoğunlaşacaktır. Bu amaçla çalışanlara hem müşterileriyle hem şirketleriyle olan ilişkilerini anlamak için açık uçlu pek çok soru yöneltilecektir.

Türkiye'deki Bireysel Emeklilik Sisteminin işleyişinde bireysel emeklilik şirketlerinin görevi katılımcılara emeklilik planları satmak ve katılımcıları düzenli olarak emeklilik fonları hakkında bilgilendirmek olarak tanımlanmıştır. Emeklilik fonlarının yönetimine dair hak ve sorumluluklarsa emeklilik şirketleri tarafından anlaşmaları olan portföy yönetim şirketlerine devredilmiştir. Dolayısıyla saha çalışmasında siz dahil olmak üzere bireysel emeklilik şirketi çalışanları, portföy yönetim şirketi çalışanları ve denetleyici ya da gözetleyici kurum çalışanlarıyla derinlemesine mülakatlar yapılacaktır.

Bu çalışma sizin bir bireysel emeklilik şirketi / portföy yönetim şirketi / denetleyici ya da gözetleyici kurum çalışanı olarak Bireysel Emeklilik Sistemi'ndeki yeriniz ve sistemde sizin gözünüze çarpan asimetrik bilgi kaynaklı olası sorunlar hakkında görüşlerinizi almak ve sistemle olan ilişkinizi anlamak amacıyla yapılmaktadır.

Görüşme yaklaşık kırk beş dakika sürecektir. Sorular katılımcılara yönelik psikolojik ya da hukuki herhangi bir risk oluşturmamasına özen gösterilecek biçimde hazırlanmıştır. Mülakat esnasında da herhangi bir rahatsızlık yaşamamanız için azami özeni göstereceğim. Bu araştırmaya katılmak tamamen isteğe bağlıdır ve çalışmaya katılımınız karşılığında herhangi bir ücret veya ödül verilmeyecektir. Bu çalışmaya katılmaya onay verdiğiniz takdirde çalışmanın herhangi bir aşamasında herhangi bir sebep göstermeden çalışmadan çekilme hakkına sahipsiniz. İstemediğiniz soruları cevaplamak zorunda değilsiniz.

Aktardığınız deneyimlerin ve görüşlerin doğru yansıtılması için ses kaydına ihtiyaç duyulmaktadır. Ses kayıtları yazıya aktarılırken gizliliğin korunması açısından isimler ve kişisel bilgiler değiştirilecek ve anonim hale getirilerek kodlanacaktır. Ses kayıt dosyaları ve ses kayıtlarının yazıya dökülmüş halleri çalışma tamamlandıktan sonra imha edilecektir.

Bu formu imzalamadan önce, çalışmayla ilgili sorularınız varsa lütfen sorunuz. Daha sonra araştırma projesi hakkında ek bilgi almak istediğiniz takdirde sorunuz olursa, proje araştırmacısı Remziye Gül Aslan (e-mail: xxx@gmail.com; telefon: +90 537 XXX XX XX) ve/veya proje yürütücüsü Volkan Yılmaz (e-mail: v xxx@boun.edu.tr; telefon: +90 212 XXX XX XX) ile temasa geçiniz. İlgili proje hakkında sorularınız ve şikayetleriniz için Boğaziçi Üniversitesi Sosyal ve Beşerî Bilimler Yüksek Lisans ve Doktora Tezleri Etik İnceleme Komisyonu ile iletişime geçiniz.

Bana anlatılanları ve yukarıda yazılanları anladım. Bu formun bir örneğini aldım / almak istemiyorum (bu durumda araştırmacı bu kopyayı saklar).

Katılımcının Adı-Soyadı:..

İmzası:..

Tarih (gün/ay/yıl):........./.........../.............

Araştırmacının Adı-Soyadı:...

İmzası:..

Tarih (gün/ay/yıl):...../......./..............

APPENDIX E

ETHICS COMMITTEE APPROVAL FORM

T.C.

BOĞAZİÇİ ÜNİVERSİTESİ

Sosyal ve Beşeri Bilimler Yüksek Lisans ve Doktora Tezleri Etik İnceleme Komisyonu

Sayı: 2019-59

2 Temmuz 2019

Remziye Gül Aslan

Sosyal Politika

"Türkiye'deki Bireysel Emeklilik Sistemi'ndeki Asimetrik Bilgi Dağılımının İncelenmesi" başlıklı projeniz ile ilgili olarak yaptığınız SBB-EAK 2019/58 sayılı başvuru komisyonumuz tarafından 2 Temmuz 2019 tarihli toplantıda incelenmiş ve uygun bulunmuştur.

....

Dr. Öğr. Üyesi İnci Ayhan

....

Prof. Dr. Feyza Çorapçı

....

Doç. Dr. Mehmet Yiğit Gürdal

....

Doç. Dr. Ebru Kaya

....

Dr. Öğr. Üyesi Şebnem Yalçın

APPENDIX F

PENSION FUND RETURNS IN TURKEY

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Allianz Hayat ve Emeklilik A.Ş. Katkı Emeklilik Yatırım Fonu - 02/05/2013	1.53	9.09	10.25	-0.57	36.62	2.63
Allianz Hayat ve Emeklilik A.Ş. Para Piyasası Emeklilik Yatırım Fonu - 27/10/2003	9.03	8.69	11.75	18.14	21.85	3.71
Allianz Hayat ve Emeklilik A.Ş. Standart Emeklilik Yatırım Fonu - 15/05/2013	0.47	7.71	11.60	2.90	28.44	2.28
Allianz Hayat ve Emeklilik A.Ş. İkinci Kamu Dış Borçlanma Araçları Emeklilik Yatırım Fonu - 27/10/2003	12.49	14.66	23.96	28.13	18.47	7.19
Allianz Yaşam Ve Emeklilik A.Ş. OKS Agresif Değişken Emeklilik Yatırım Fonu - 04/01/2018					25.29	-4.63
Allianz Yaşam Ve Emeklilik A.Ş. OKS Agresif Katılım Değişken Emeklilik Yatırım Fonu - 04/01/2018					39.28	13.32
Allianz Yaşam Ve Emeklilik A.Ş. OKS Büyüme Katılım Değişken Emeklilik Yatırım Fonu - 04/01/2018					30.02	10.28
Allianz Yaşam Ve Emeklilik A.Ş. OKS Dengeli Değişken Emeklilik Yatırım Fonu - 04/01/2018					23.04	1.28
Allianz Yaşam Ve Emeklilik A.Ş. OKS Dinamik Değişken Emeklilik Yatırım Fonu - 04/01/2018					24.90	-1.18
Allianz Yaşam Ve Emeklilik A.Ş. OKS Katılım Standart Emeklilik Yatırım Fonu - 04/01/2018					25.47	6.12
Allianz Yaşam Ve Emeklilik A.Ş. OKS Standart Emeklilik Yatırım Fonu - 04/01/2018					19.66	3.91
Allianz Yaşam Ve Emeklilik A.Ş. OKS Temkinli Değişken Emeklilik Yatırım Fonu - 04/01/2018					23.96	4.84

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Allianz Yaşam ve Emeklilik A.Ş. 2035 Hedef Fon Sepeti Emeklilik Yatırım Fonu - 10/07/2015		10.17	26.55	-1.73	28.82	-0.24
Allianz Yaşam ve Emeklilik A.Ş. Altın Emeklilik Yatırım Fonu - 07/05/2013	7.88	30.44	18.36	36.35	30.98	31.8
Allianz Yaşam ve Emeklilik A.Ş. Ata Finans Dinamik Değişken Grup Emeklilik Yatırım Fonu - 07/10/2015		11.07	25.51	-4.82	34.42	8
Fonu - 07/10/2015						
Allianz Yaşam ve Emeklilik A.Ş. Atak Değişken Grup Emeklilik Yatırım Fonu - 19/08/2011	10.16	12.31	34.48	0.89	34.89	1.06
Allianz Yaşam ve Emeklilik A.Ş. BIST Temettü Endeksi Emeklilik Yatırım Fonu - 01/03/2012	-12.01	12.71	40.27	-10.20	26.18	-1.46
Allianz Yaşam ve Emeklilik A.Ş. Başlangıç Emeklilik Yatırım Fonu - 26/01/2017				17.77	19.52	4.09
Allianz Yaşam ve Emeklilik A.Ş. Başlangıç Katılım Emeklilik Yatırım Fonu - 26/01/2017				14.70	18.94	3.6
Allianz Yaşam ve Emeklilik A.Ş. Birinci Kamu Dış Borçlanma Araçları Emeklilik Yatırım Fonu - 27/10/2003	21.94	17.32	15.05	30.72	25.63	9.53
Allianz Yaşam ve Emeklilik A.Ş. Borçlanma Araçları Emeklilik Yatırım Fonu - 27/10/2003	0.11	8.12	7.55	3.26	26.22	5.53
Allianz Yaşam ve Emeklilik A.Ş. Borçlanma Araçları Grup Emeklilik Yatırım Fonu - 08/05/2008	1.84	8.44	8.60	3.79	27.76	5.4
Allianz Yaşam ve Emeklilik A.Ş. Dengeli Değişken Emeklilik Yatırım Fonu - 27/10/2003	2.89	9.51	15.38	3.88	29.55	2.53
Allianz Yaşam ve Emeklilik A.Ş. Dengeli Değişken Grup Emeklilik Yatırım Fonu - 08/03/2004	0.97	11.90	21.25	10.31	26.48	-0.27
Allianz Yaşam ve Emeklilik A.Ş. Dinamik Değişken Emeklilik Yatırım Fonu - 03/01/2011	-5.07	13.91	19.04	-1.26	25.11	-4.3

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Allianz Yaşam ve Emeklilik A.Ş. Hisse Senedi Emeklilik Yatırım Fonu - 27/10/2003	-14.39	13.09	54.98	-10.90	38.19	-5.72
Allianz Yaşam ve Emeklilik A.Ş. Karma Emeklilik Yatırım Fonu - 27/10/2003	32.36	24.35	43.45	21.15	39.31	13.31
Allianz Yaşam ve Emeklilik A.Ş. Karma Grup Emeklilik Yatırım Fonu - 08/03/2004	22.32	21.72	15.45	23.64	40.76	14.64
Allianz Yaşam ve Emeklilik A.Ş. Katkı Emeklilik Yatırım Fonu - 02/05/2013	0.29	9.92	10.73	-1.44	34.75	2.47
Allianz Yaşam ve Emeklilik A.Ş. Katılım Katkı Emeklilik Yatırım Fonu - 14/05/2018					29.83	5.44
Allianz Yaşam ve Emeklilik A.Ş. Katılım Standart Emeklilik Yatırım Fonu - 15/05/2018					28.00	8.17
Allianz Yaşam ve Emeklilik A.Ş. Koç Holding Emekli Vakfı Birinci Değişken Grup Emeklilik Yatırım Fonu - 28/04/2017				18.30	23.22	4.98
Allianz Yaşam ve Emeklilik A.Ş. Koç İştirak Endeksi Emeklilik Yatırım Fonu - 01/03/2012	0.92	20.81	29.27	-22.40	46.75	-8.17
Allianz Yaşam ve Emeklilik A.Ş. Para Piyasası Emeklilik Yatırım Fonu - 27/10/2003	9.74	9.61	11.88	18.28	21.90	3.68
Allianz Yaşam ve Emeklilik A.Ş. Standart Emeklilik Yatırım Fonu - 08/05/2013	2.05	9.79	11.24	5.29	28.57	2.29
Allianz Yaşam ve Emeklilik A.Ş. Sürdürülebilirlik Hisse Senedi Emeklilik Yatırım Fonu - 27/12/2018					29.93	-13.7
Allianz Yaşam ve Emeklilik A.Ş. Temkinli Değişken Emeklilik Yatırım Fonu - 01/03/2012	7.92	10.19	11.07	16.42	20.84	3.62
Allianz Yaşam ve Emeklilik A.Ş. Temkinli Değişken Grup Emeklilik Yatırım Fonu - 19/08/2011	6.49	12.09	11.11	15.81	23.36	5.47
Allianz Yaşam ve Emeklilik A.Ş. Unilever Dengeli Değişken Grup Emeklilik Yatırım Fonu - 20/08/2014	4.31	11.49	11.48	11.34	28.73	5.08
Allianz Yaşam ve Emeklilik A.Ş. Unilever Dinamik Değişken Grup	0.25	9.16	26.73	4.68	35.48	2.56

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Emeklilik Yatırım Fonu - 20/08/2014						
Allianz Yaşam ve Emeklilik A.Ş. İkinci Kamu Dış Borçlanma Araçları Emeklilik Yatırım Fonu - 06/11/2006	11.69	15.41	24.64	28.38	18.34	11.82
Anadolu Hayat Emeklilik A.Ş. Agresif Değişken Emeklilik Yatırım Fonu - 30/04/2012	-1.31	9.05	23.25	-3.57	32.21	-1.44
Anadolu Hayat Emeklilik A.Ş. Altın Katılım Emeklilik Yatırım Fonu - 02/05/2013	9.80	27.84	18.30	37.25	31.85	30.86
Anadolu Hayat Emeklilik A.Ş. Atak Değişken Emeklilik Yatırım Fonu - 27/10/2003	-4.49	9.60	22.54	7.87	25.94	0.14
Anadolu Hayat Emeklilik A.Ş. B.R.I.C Ülkeler Yabancı Değişken Emeklilik Yatırım Fonu - 30/11/2010	3.38	54.78	30.82	27.75	36.77	-19.74
Anadolu Hayat Emeklilik A.Ş. Başlangıç Emeklilik Yatırım Fonu - 27/01/2017				18.25	20.13	3.78
Anadolu Hayat Emeklilik A.Ş. Başlangıç Katılım Emeklilik Yatırım Fonu - 27/01/2017				15.15	19.29	3.33
Anadolu Hayat Emeklilik A.Ş. Birinci Değişken Emeklilik Yatırım Fonu - 27/10/2003	17.44	26.24	23.14	19.02	31.19	0.04
Anadolu Hayat Emeklilik A.Ş. Birinci Kamu Dış Borçlanma Araçları Emeklilik Yatırım Fonu - 27/10/2003	20.76	17.90	16.14	28.38	24.87	9.5
Anadolu Hayat Emeklilik A.Ş. Borçlanma Araçları Emeklilik Yatırım Fonu - 01/09/2005	1.88	7.93	6.95	5.89	28.06	4.86
Anadolu Hayat Emeklilik A.Ş. Borçlanma Araçları Grup Emeklilik Yatırım Fonu - 25/08/2004	18.52	15.74	18.94	31.63	25.82	9.42
Anadolu Hayat Emeklilik A.Ş. Dengeli Değişken Emeklilik Yatırım Fonu - 27/10/2003	-3.74	8.31	14.59	6.78	23.42	1.37
Anadolu Hayat Emeklilik A.Ş. Hisse Senedi Emeklilik	-13.14	10.05	51.74	-16.50	35.68	-8.11

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Yatırım Fonu - 27/10/2003						
Anadolu Hayat Emeklilik A.Ş. Hisse Senedi Grup Emeklilik Yatırım Fonu - 27/08/2004	-11.76	12.08	54.29	-9.50	39.22	-5.38
Anadolu Hayat Emeklilik A.Ş. Katkı Emeklilik Yatırım Fonu - 02/05/2013	0.05	8.73	10.34	-1.89	32.88	2.02
Anadolu Hayat Emeklilik A.Ş. Katılım Katkı Emeklilik Yatırım Fonu - 02/05/2013	7.88	8.17	9.78	10.45	28.18	8.33
Anadolu Hayat Emeklilik A.Ş. Katılım Standart Emeklilik Yatırım Fonu - 30/11/2010	2.65	8.41	8.17	9.88	26.37	6.82
Anadolu Hayat Emeklilik A.Ş. OKS Agresif Değişken Emeklilik Yatırım Fonu - 09/01/2018					38.47	-1.82
Anadolu Hayat Emeklilik A.Ş. OKS Agresif Katılım Değişken Emeklilik Yatırım Fonu - 10/01/2018					53.86	17.27
Anadolu Hayat Emeklilik A.Ş. OKS Atak Değişken Emeklilik Yatırım Fonu - 9.01.2018					34.47	1.01
Anadolu Hayat Emeklilik A.Ş. OKS Atak Katılım Değişken Emeklilik Yatırım Fonu - 09/01/2018					43.30	13.21
Anadolu Hayat Emeklilik A.Ş. OKS Dengeli Değişken Emeklilik Yatırım Fonu - 09/01/2018					26.80	0.58
Anadolu Hayat Emeklilik A.Ş. OKS Katılım Standart Emeklilik Yatırım Fonu - 09/01/2018					21.30	5.93
Anadolu Hayat Emeklilik A.Ş. OKS Standart Emeklilik Yatırım Fonu - 11/01/2018					23.24	3.79
Anadolu Hayat Emeklilik A.Ş. OKS Temkinli Değişken Emeklilik Yatırım Fonu - 10/01/2018					22.50	4.78
Anadolu Hayat Emeklilik A.Ş. Para Piyasası Emeklilik Yatırım Fonu - 27/10/2003	9.68	9.65	11.86	18.68	21.60	3.66
Anadolu Hayat Emeklilik A.Ş. Standart	2.75	7.62	8.79	4.96	28.24	2.31

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Emeklilik Yatırım Fonu - 01/05/2006						
Anadolu Hayat Emeklilik A.Ş. Temkinli Değişken Emeklilik Yatırım Fonu - 27/10/2003	7.46	8.99	9.15	14.84	20.38	3.85
Anadolu Hayat Emeklilik A.Ş. Temkinli Değişken Grup Emeklilik Yatırım Fonu - 25/08/2004	8.67	10.39	10.64	16.27	21.91	4.42
Anadolu Hayat Emeklilik A.Ş. Özel Sektör Borçlanma Araçları Emeklilik Yatırım Fonu - 27/04/2012	7.88	9.28	12.36	16.01	20.29	3.67
Anadolu Hayat Emeklilik A.Ş. İkinci Borçlanma Araçları Emeklilik Yatırım Fonu - 27/10/2003	0.88	7.37	7.62	2.85	27.29	4.2
Anadolu Hayat Emeklilik A.Ş. İkinci Borçlanma Araçları Grup Emeklilik Yatırım Fonu - 25/08/2004	1.74	8.69	8.54	6.87	27.76	4.84
Anadolu Hayat Emeklilik A.Ş. İkinci Hisse Senedi Emeklilik Yatırım Fonu - 01/09/2005	-11.04	12.41	56.72	-9.30	38.09	-5.71
Anadolu Hayat Emeklilik A.Ş. İkinci Kamu Dış Borçlanma Araçları Emeklilik Yatırım Fonu - 27/10/2003	12.82	16.00	25.05	26.55	17.84	7.44
Anadolu Hayat Emeklilik A.Ş. İş Bankası İştirak Endeksi Emeklilik Yatırım Fonu - 01/10/2015		22.93	36.59	1.68	22.23	-3.63
AvivaSA Emeklilik Ve Hayat A.Ş. OKS Dinamik Katılım Değişken Emeklilik Yatırım Fonu - 03/01/2018					28.80	10.39
AvivaSA Emeklilik ve Hayat A.Ş. Başlangıç Emeklilik Yatırım Fonu - 12/01/2017				18.32	19.74	4.06
AvivaSA Emeklilik ve Hayat A.Ş. Başlangıç Katılım Emeklilik Yatırım Fonu - 12/01/2017				15.28	19.35	3.52
Avivasa Emeklilik Ve Hayat A.Ş. Altın Emeklilik Yatırım Fonu - 07/08/2013	9.56	29.91	18.37	37.03	30.95	32.51
Avivasa Emeklilik Ve Hayat A.Ş. Katkı Emeklilik Yatırım Fonu - 02/05/2013	0.30	9.34	10.14	-1.68	33.38	3.08

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Avivasa Emeklilik Ve Hayat A.Ş. OKS Agresif Değişken Emeklilik Yatırım Fonu - 03/01/2018					31.42	-4.74
Avivasa Emeklilik Ve Hayat A.Ş. OKS Agresif Katılım Değişken Emeklilik Yatırım Fonu - 03/01/2018					36.73	13.54
Avivasa Emeklilik Ve Hayat A.Ş. OKS Dengeli Değişken Emeklilik Yatırım Fonu - 03/01/2018					26.57	1.66
Avivasa Emeklilik Ve Hayat A.Ş. OKS Dinamik Değişken Emeklilik Yatırım Fonu - 03/01/2018					28.68	-1.34
Avivasa Emeklilik Ve Hayat A.Ş. OKS Katılım Standart Emeklilik Yatırım Fonu - 03/01/2018					25.83	5.98
Avivasa Emeklilik Ve Hayat A.Ş. OKS Muhafazakar Değişken Emeklilik Yatırım Fonu - 03/01/2018					22.03	4.81
Avivasa Emeklilik Ve Hayat A.Ş. OKS Standart Emeklilik Yatırım Fonu - 03/01/2018					21.67	3.98
Avivasa Emeklilik Ve Hayat A.Ş. Standart Emeklilik Yatırım Fonu - 03/05/2013	0.06	9.11	7.74	3.54	27.43	2.46
Avivasa Emeklilik ve Hayat A.Ş. Hisse Senedi Grup Emeklilik Yatırım Fonu - 22/02/2005	-13.62	12.48	54.89	-7.10	47.79	-9.43
Avivasa Emeklilik ve Hayat A.Ş. Agresif	-1.60	11.67	19.60	-3.29	28.88	-4.95
Avivasa Emeklilik ve Hayat A.Ş. Orta Vadeli Borçlanma Araçları Emeklilik Yatırım Fonu - 15/12/2003	1.53	8.31	7.82	6.98	27.19	5.39
Avivasa Emeklilik ve Hayat A.Ş. Temettü Ödeyen Şirketler Hisse Senedi Emeklilik Yatırım Fonu - 01/03/2007	-13.25	11.90	48.27	-15.00	33.08	-3.87
Avivasa Emeklilik ve Hayat A.Ş. Uzun Vadeli Dış Borçlanma Araçları Emeklilik Yatırım Fonu - 04/01/2006	18.19	17.75	20.33	29.84	24.41	8.78
Avivasa Emeklilik ve Hayat A.Ş. Özel Sektör Borçlanma Araçları Emeklilik Yatırım Fonu - 23/01/2015		10.52	12.94	19.26	21.35	3.95
Avivasa Emeklilik ve Hayat A.Ş. İkinci Değişken Emeklilik	16.84	18.17	11.71	32.30	19.85	14.14

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Yatırım Fonu - 15/12/2003						
Avivasa Emeklilik ve Hayat A.Ş. İkinci Para Piyasası Emeklilik Yatırım Fonu - 15/12/2003	9.74	9.79	12.05	18.36	21.66	3.8
Axa Hayat ve Emeklilik A.Ş. Altın Katılım Emeklilik Yatırım Fonu - 10/10/2013	9.33	27.26	18.27	36.69	32.87	30.68
Axa Hayat ve Emeklilik A.Ş. Başlangıç Emeklilik Yatırım Fonu - 07/02/2017				17.33	19.75	3.7
Axa Hayat ve Emeklilik A.Ş. Başlangıç Katılım Emeklilik Yatırım Fonu - 07/02/2017				14.67	18.70	3.25
Axa Hayat ve Emeklilik A.Ş. Değişken Emeklilik Yatırım Fonu - 19/12/2011	-3.58	9.40	21.32	4.88	33.06	1.91
Axa Hayat ve Emeklilik A.Ş. Hisse Senedi Emeklilik Yatırım Fonu - 19/12/2011	-12.05	10.65	49.62	-13.56	34.54	-7.67
Axa Hayat ve Emeklilik A.Ş. Kamu Dış Borçlanma Araçları Emeklilik Yatırım Fonu - 19/12/2011	18.14	17.27	20.05	29.66	24.43	11.12
Axa Hayat ve Emeklilik A.Ş. Katkı Emeklilik Yatırım Fonu - 02/05/2013	0.83	9.03	10.26	0.59	34.82	2.97
Axa Hayat ve Emeklilik A.Ş. Katılım Değişken Emeklilik Yatırım Fonu - 25/10/2013	2.80	7.73	15.17	6.54	41.75	10.33
Axa Hayat ve Emeklilik A.Ş. Katılım Katkı Emeklilik Yatırım Fonu - 25/10/2013	9.11	8.44	10.10	15.35	27.85	8.69
Axa Hayat ve Emeklilik A.Ş. OKS Agresif Değişken Emeklilik Yatırım Fonu - 13.03.2018					33.28	0
Axa Hayat ve Emeklilik A.Ş. OKS Agresif Katılım Değişken Emeklilik Yatırım Fonu - 13/03/2018					46.15	18.83
Axa Hayat ve Emeklilik A.Ş. OKS Atak Değişken Emeklilik Yatırım Fonu - 13/03/2018					20.53	-0.75
Axa Hayat ve Emeklilik A.Ş. OKS Atak Katılım Değişken Emeklilik Yatırım Fonu - 13/03/2018					43.59	13.89
Axa Hayat ve Emeklilik A.Ş. OKS Dengeli Değişken Emeklilik Yatırım Fonu - 13/03/2018					13.70	1.69

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Axa Hayat ve Emeklilik A.Ş. OKS Katılım Standart Emeklilik Yatırım Fonu - 12/02/2018					24.40	5.87
Axa Hayat ve Emeklilik A.Ş. OKS Standart Emeklilik Yatırım Fonu - 12/02/2018					21.07	4.03
Axa Hayat ve Emeklilik A.Ş. OKS Temkinli Değişken Emeklilik Yatırım Fonu - 13/03/2018					15.60	4.73
Axa Hayat ve Emeklilik A.Ş. Para Piyasası Emeklilik Yatırım Fonu - 19/12/2011	9.42	9.40	11.73	18.72	21.47	3.81
Axa Hayat ve Emeklilik A.Ş. Standart Emeklilik Yatırım Fonu - 19/12/2011	0.62	7.62	7.55	4.38	27.19	2.37
BNP Paribas Cardif Emeklilik A.Ş. Altın Emeklilik Yatırım Fonu - 04/07/2013	9.11	29.76	18.34	36.42	31.07	32.4
BNP Paribas Cardif Emeklilik A.Ş. Başlangıç Emeklilik Yatırım Fonu - 05/01/2017				17.20	19.48	3.68
BNP Paribas Cardif Emeklilik A.Ş. Başlangıç Katılım Emeklilik Yatırım Fonu - 05/01/2017				14.53	18.67	3.08
BNP Paribas Cardif Emeklilik A.Ş. Birinci Değişken Emeklilik Yatırım Fonu - 01/12/2003	-1.62	11.70	21.29	5.35	27.38	4.23
BNP Paribas Cardif Emeklilik A.Ş. Birinci Kamu Dış Borçlanma Araçları Emeklilik Yatırım Fonu - 01/12/2003	21.85	15.39	16.89	31.07	25.22	9.58
BNP Paribas Cardif Emeklilik A.Ş. Birinci Para Piyasası Emeklilik Yatırım Fonu - 01/12/2003	9.58	9.63	12.18	18.83	20.96	3.74
BNP Paribas Cardif Emeklilik A.Ş. Borçlanma Araçları Emeklilik Yatırım Fonu - 01/12/2003	0.78	8.12	7.66	4.96	27.09	5.75
BNP Paribas Cardif Emeklilik A.Ş. Borçlanma Araçları Grup Emeklilik Yatırım Fonu - 07/05/2008	1.65	9.02	8.66	6.35	28.74	6.19
BNP Paribas Cardif Emeklilik A.Ş. Değişken Grup Emeklilik Yatırım Fonu - 17/07/2013	-8.71	14.10	22.98	9.86	29.27	2.58
BNP Paribas Cardif Emeklilik A.Ş. Hisse Senedi Emeklilik Yatırım Fonu - 01/12/2003	-14.82	14.64	43.25	-12.80	36.72	-9.01

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
BNP Paribas Cardif Emeklilik A.Ş. Katkı Emeklilik Yatırım Fonu - 02/05/2013	0.33	9.82	10.66	2.30	32.59	4.4
BNP Paribas Cardif Emeklilik A.Ş. Mutlak Getiri Hedefli Değişken Emeklilik Yatırım Fonu - 01/07/2013	-7.05	12.99	14.58	19.77	21.75	4.94
BNP Paribas Cardif Emeklilik A.Ş. OKS Agresif Değişken Emeklilik Yatırım Fonu - 17/01/2018					27.08	-1.68
BNP Paribas Cardif Emeklilik A.Ş. OKS Agresif Katılım Değişken Emeklilik Yatırım Fonu - 05/02/2018					44.55	10.53
BNP Paribas Cardif Emeklilik A.Ş. OKS Dengeli Değişken Emeklilik Yatırım Fonu - 17/01/2018					20.64	-0.64
BNP Paribas Cardif Emeklilik A.Ş. OKS Dinamik Değişken Emeklilik Yatırım Fonu - 17/01/2018					19.62	-2.91
BNP Paribas Cardif Emeklilik A.Ş. OKS Dinamik Katılım Değişken Emeklilik Yatırım Fonu - 22/01/2018					31.15	6.93
BNP Paribas Cardif Emeklilik A.Ş. OKS Katılım Standart Emeklilik Yatırım Fonu - 18/01/2018					24.35	5.76
BNP Paribas Cardif Emeklilik A.Ş. OKS Muhafazakar Değişken Emeklilik Yatırım Fonu - 16/03/2018					22.09	3.63
BNP Paribas Cardif Emeklilik A.Ş. OKS Standart Emeklilik Yatırım Fonu - 18/01/2018					21.67	4.4
BNP Paribas Cardif Emeklilik A.Ş. Standart Emeklilik Yatırım Fonu - 17/05/2013	5.72	6.73	9.66	5.81	28.43	4.09
BNP Paribas Cardif Emeklilik A.Ş. İkinci Kamu Dış Borçlanma Araçları Emeklilik Yatırım Fonu - 01/12/2003	18.74	15.42	19.00	29.30	22.95	7.92
Bereket Emeklilik Ve Hayat A.Ş. OKS Agresif Katılım Değişken Emeklilik Yatırım Fonu - 13/03/2018					25.13	16.33
Bereket Emeklilik ve Hayat A.Ş. Altın Katılım Emeklilik Yatırım Fonu - 09/05/2013	9.07	29.93	18.63	36.64	32.87	30.8

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Bereket Emeklilik ve Hayat A.Ş. Başlangıç Katılım Emeklilik Yatırım Fonu - 02/02/2017				16.64	19.91	3.43
Bereket Emeklilik ve Hayat A.Ş. Büyüme Katılım Değişken Emeklilik Yatırım Fonu - 05/06/2012	6.86	3.79	15.29	7.12	33.77	12.28
Bereket Emeklilik ve Hayat A.Ş. Katılım Değişken Grup Emeklilik Yatırım Fonu - 12/06/2012	7.98	4.79	15.46	7.02	33.57	9.85
Bereket Emeklilik ve Hayat A.Ş. Katılım Hisse Senedi Emeklilik Yatırım Fonu - 28/05/2012	4.02	5.77	29.90	-12.69	59.10	21.86
Bereket Emeklilik ve Hayat A.Ş. Katılım Katkı Emeklilik Yatırım Fonu - 02/05/2013	9.27	7.64	5.74	1.52	33.33	8.35
Bereket Emeklilik ve Hayat A.Ş. Katılım Standart Emeklilik Yatırım Fonu - 27/05/2013	7.34	6.85	8.14	10.85	26.39	8.42
Bereket Emeklilik ve Hayat A.Ş. Muhafazakar Katılım Değişken Emeklilik Yatırım Fonu - 21/05/2012	9.18	6.19	14.64	15.76	21.36	10.46
Bereket Emeklilik ve Hayat A.Ş. OKS Dinamik Katılım Değişken Emeklilik Yatırım Fonu - 28/02/2018					25.50	16.79
Bereket Emeklilik ve Hayat A.Ş. OKS Katılım Standart Emeklilik Yatırım Fonu - 02/02/2018					23.96	7.5
Cigna Finans Emeklilik ve Hayat A.Ş. Başlangıç Emeklilik Yatırım Fonu - 25/01/2017				17.68	19.66	3.7
Cigna Finans Emeklilik ve Hayat A.Ş. Başlangıç Katılım Emeklilik Yatırım Fonu - 3.02.2017				14.97	18.61	3.58
Cigna Finans Emeklilik ve Hayat A.Ş. Birinci Hisse Senedi Emeklilik Yatırım Fonu - 07/11/2008	-14.10	17.08	65.39	-10.63	34.24	-4.01
Cigna Finans Emeklilik ve Hayat A.Ş. Dengeli Değişken Emeklilik Yatırım Fonu - 07/11/2008	3.58	7.39	15.21	8.64	22.50	2.17
Cigna Finans Emeklilik ve Hayat A.Ş. Dengeli Değişken Grup Emeklilik Yatırım Fonu - 26/03/2012	4.09	5.95	15.56	9.15	25.57	2.35

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Cigna Finans Emeklilik ve Hayat A.Ş. Dinamik Değişken Emeklilik Yatırım Fonu - 11/01/2013	-2.63	9.85	30.80	-0.73	29.52	1.08
Cigna Finans Emeklilik ve Hayat A.Ş. Kamu Borçlanma Araçları Emeklilik Yatırım Fonu - 07/11/2008	1.22	7.25	7.75	4.78	27.61	4.64
Cigna Finans Emeklilik ve Hayat A.Ş. Kamu Borçlanma Araçları Grup Emeklilik Yatırım Fonu - 26/03/2012	1.16	8.28	8.23	6.74	27.11	4.18
Cigna Finans Emeklilik ve Hayat A.Ş. Katkı Emeklilik Yatırım Fonu - 02/05/2013	5.78	9.02	10.83	3.24	33.75	3.3
Cigna Finans Emeklilik ve Hayat A.Ş. OKS Agresif Değişken Emeklilik Yatırım Fonu - 23/02/2018					36.41	2.8
Cigna Finans Emeklilik ve Hayat A.Ş. OKS Agresif Katılım Değişken Emeklilik Yatırım Fonu - 16/07/2018					39.35	21.12
Cigna Finans Emeklilik ve Hayat A.Ş. OKS Atak Değişken Emeklilik Yatırım Fonu - 02/03/2018					28.20	3.61
Cigna Finans Emeklilik ve Hayat A.Ş. OKS Dengeli Değişken Emeklilik Yatırım Fonu - 31/05/2018					26.18	3.47
Cigna Finans Emeklilik ve Hayat A.Ş. OKS Katılım Standart Emeklilik Yatırım Fonu - 22/02/2018					21.59	6.16
Cigna Finans Emeklilik ve Hayat A.Ş. OKS Muhafazakar Değişken Emeklilik Yatırım Fonu - 22/05/2018					22.46	4.16
Cigna Finans Emeklilik ve Hayat A.Ş. OKS Standart Emeklilik Yatırım Fonu - 22.02.2018					20.60	4.03
Cigna Finans Emeklilik ve Hayat A.Ş. OKS Dinamik Katılım Değişken Emeklilik Yatırım Fonu - 17/05/2018					29.01	15.39
Cigna Finans Emeklilik ve Hayat A.Ş. Para Piyasası Emeklilik Yatırım Fonu - 07/11/2008	9.10	8.74	10.83	18.15	21.42	3.76
Cigna Finans Emeklilik ve Hayat A.Ş. Standart Emeklilik Yatırım Fonu - 03/12/2013	4.17	7.39	11.47	8.01	26.48	4.73

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Fiba Emeklilik Ve Hayat A.Ş. OKS Agresif Değişken Emeklilik Yatırım Fonu - 04/01/2018					41.60	2.41
Fiba Emeklilik Ve Hayat A.Ş. OKS Agresif Katılım Değişken Emeklilik Yatırım Fonu - 04/01/2018					44.85	6.38
Fiba Emeklilik Ve Hayat A.Ş. OKS Atak Değişken Emeklilik Yatırım Fonu - 04/01/2018					31.44	1.65
Fiba Emeklilik Ve Hayat A.Ş. OKS Atak Katılım Değişken Emeklilik Yatırım Fonu - 04/01/2018					30.74	7.69
Fiba Emeklilik Ve Hayat A.Ş. OKS Katılım Standart Emeklilik Yatırım Fonu - 04/01/2018					25.75	8.43
Fiba Emeklilik Ve Hayat A.Ş. OKS Standart Emeklilik Yatırım Fonu - 04/01/2018					22.50	3.98
Fiba Emeklilik ve Hayat A.Ş. Altın Emeklilik Yatırım Fonu - 09/07/2013	9.61	29.70	18.38	37.40	34.27	28.93
Fiba Emeklilik ve Hayat A.Ş. Atak Değişken Emeklilik Yatırım Fonu - 07/11/2008	1.02	7.04	21.49	2.36	36.80	4.4
Fiba Emeklilik ve Hayat A.Ş. Atlas Portföy Değişken Emeklilik Yatırım Fonu - 07/05/2015		10.88	18.81	10.27	27.40	3.09
Fiba Emeklilik ve Hayat A.Ş. Başlangıç Emeklilik Yatırım Fonu - 01/02/2017				17.38	19.62	3.67
Fiba Emeklilik ve Hayat A.Ş. Başlangıç Katılım Emeklilik Yatırım Fonu - 01/02/2017				17.17	20.70	3.79
Fiba Emeklilik ve Hayat A.Ş. Borçlanma Araçları Emeklilik Yatırım Fonu - 7.11.2008	1.46	7.71	7.38	8.19	27.46	5.06
Fiba Emeklilik ve Hayat A.Ş. Borçlanma Araçları Grup Emeklilik Yatırım Fonu - 03/09/2008	2.32	9.40	8.32	5.53	26.73	3.56
Fiba Emeklilik ve Hayat A.Ş. Dengeli Değişken Emeklilik Yatırım Fonu - 01/12/2003	-1.29	10.24	21.01	5.03	35.50	7.26
Fiba Emeklilik ve Hayat A.Ş. Dengeli Değişken Grup Emeklilik Yatırım Fonu - 03/09/2008	-2.02	10.29	20.08	2.99	29.36	1.04
Fiba Emeklilik ve Hayat A.Ş. Değişken Grup Emeklilik Yatırım Fonu - 25/12/2013	-5.40	5.91	21.62	11.72	38.35	7.69

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Fiba Emeklilik ve Hayat A.Ş. Dış Borçlanma Araçları Emeklilik Yatırım Fonu - 07/11/2008	24.84	22.35	11.47	28.88	26.49	9.79
Fiba Emeklilik ve Hayat A.Ş. Fiba Portföy Borçlanma Araçları Emeklilik Yatırım Fonu - 01/12/2003	1.40	8.22	7.97	4.35	28.03	4.8
Fiba Emeklilik ve Hayat A.Ş. Global MD Portföy Değişken Emeklilik Yatırım Fonu - 23/01/2017				11.84	19.16	1.58
Fiba Emeklilik ve Hayat A.Ş. Hisse Senedi Emeklilik Yatırım Fonu - 01/12/2003	-14.35	11.35	48.08	-17.37	46.17	6.68
Fiba Emeklilik ve Hayat A.Ş. Hisse Senedi Grup Emeklilik Yatırım Fonu - 03/09/2008	-16.08	12.77	47.39	-15.24	30.80	3.1
Fiba Emeklilik ve Hayat A.Ş. Kamu Dış Borçlanma Araçları Grup Emeklilik Yatırım Fonu - 03/09/2008	18.96	18.37	21.00	30.80	25.22	8.52
Fiba Emeklilik ve Hayat A.Ş. Kare Portföy Fon Sepeti Emeklilik Yatırım Fonu - 23/08/2017				12.30	26.41	0.12
Fiba Emeklilik ve Hayat A.Ş. Katkı Emeklilik Yatırım Fonu - 30/12/2013	1.29	10.18	10.00	-0.01	37.08	3.02
Fiba Emeklilik ve Hayat A.Ş. Katılım Katkı Emeklilik Yatırım Fonu - 08/09/2017				14.43	29.40	6.62
Fiba Emeklilik ve Hayat A.Ş. Katılım Standart Emeklilik Yatırım Fonu - 23/01/2018					26.72	6.69
Fiba Emeklilik ve Hayat A.Ş. Mükafat Portföy Katılım Değişken Emeklilik Yatırım Fonu - 25/08/2017				5.91	37.60	10.43
Fiba Emeklilik ve Hayat A.Ş. OKS Dengeli Değişken Emeklilik Yatırım Fonu - 05/01/2018					23.70	7.18
Fiba Emeklilik ve Hayat A.Ş. OKS Muhafazakar Değişken Emeklilik Yatırım Fonu - 11/01/2018					17.74	3.51
Fiba Emeklilik ve Hayat A.Ş. Osmanlı Portföy Değişken Emeklilik Yatırım Fonu - 22/03/2017				10.18	42.32	6.3
Fiba Emeklilik ve Hayat A.Ş. Oyak Portföy Değişken Emeklilik Yatırım Fonu - 17/07/2009	2.04	7.47	13.40	14.23	35.70	5.03

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Fiba Emeklilik ve Hayat A.Ş. Oyak Portföy Hisse Senedi Emeklilik Yatırım Fonu - 07/11/2008	-6.73	6.39	46.03	-14.37	41.91	-9.83
Fiba Emeklilik ve Hayat A.Ş. Oyak Portföy Kamu Dış Borçlanma Emeklilik Yatırım Fonu - 07/11/2008	10.32	15.87	24.10	30.14	21.16	7.3
Fiba Emeklilik ve Hayat A.Ş. Oyak Portföy Standart Emeklilik Yatırım Fonu - 07/05/2013	3.74	7.67	7.35	9.08	29.30	3.58
Fiba Emeklilik ve Hayat A.Ş. Para Piyasası Emeklilik Yatırım Fonu - 20/12/2013	9.78	9.86	11.87	18.49	21.63	3.72
Fiba Emeklilik ve Hayat A.Ş. Perform Portföy Değişken Emeklilik Yatırım Fonu - 21/03/2017				10.58	7.38	8.68
Fiba Emeklilik ve Hayat A.Ş. Qinvest Portföy Değişken Emeklilik Yatırım Fonu - 16/01/2017				21.41	29.36	8.3
Fiba Emeklilik ve Hayat A.Ş. Standart Emeklilik Yatırım Fonu - 25/12/2013	-1.18	7.51	9.37	4.37	23.63	1.67
Fiba Emeklilik ve Hayat A.Ş. Tacirler Portföy Değişken Emeklilik Yatırım Fonu - 28/12/2016			14.65	8.78	26.58	17.72
Fiba Emeklilik ve Hayat A.Ş. Temkinli Değişken Emeklilik Yatırım Fonu - 23/12/2013	-6.50	6.67	14.25	15.41	21.65	4.45
Fiba Emeklilik ve Hayat A.Ş. İstanbul Portföy Değişken Emeklilik Yatırım Fonu - 23/05/2017				20.23	22.31	3.47
Garanti Emeklilik Ve Hayat A.Ş. Mutlak Getiri Hedefli Değişken Emeklilik Yatırım Fonu - 24/01/2011	-1.83	11.34	19.95	3.49	22.51	3.53
Garanti Emeklilik Ve Hayat A.Ş. OKS Agresif Değişken Emeklilik Yatırım Fonu - 03/01/2018					27.94	-8.46
Garanti Emeklilik Ve Hayat A.Ş. OKS Agresif Katılım Değişken Emeklilik Yatırım Fonu - 03/01/2018					42.75	7.71
Garanti Emeklilik Ve Hayat A.Ş. OKS Dengeli Değişken Emeklilik Yatırım Fonu - 03/01/2018					23.35	-3.23
Garanti Emeklilik Ve Hayat A.Ş. OKS Dengeli Katılım Değişken					30.65	4.51

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Emeklilik Yatırım Fonu - 03/01/2018						
Garanti Emeklilik Ve Hayat A.Ş. OKS Dinamik Değişken Emeklilik Yatırım Fonu - 03/01/2018					25.84	-4.2
Garanti Emeklilik Ve Hayat A.Ş. OKS Dinamik Katılım Değişken Emeklilik Yatırım Fonu - 03/01/2018					32.97	4.89
Garanti Emeklilik Ve Hayat A.Ş. OKS Katılım Standart Emeklilik Yatırım Fonu - 03/01/2018					26.13	7.26
Garanti Emeklilik Ve Hayat A.Ş. OKS Standart Emeklilik Yatırım Fonu - 03/01/2018					23.68	5.72
Garanti Emeklilik Ve Hayat A.Ş. OKS Temkinli Değişken Emeklilik Yatırım Fonu - 04/01/2018					21.69	3.94
Garanti Emeklilik Ve Hayat A.Ş. OKS Temkinli Katılım Değişken Emeklilik Yatırım Fonu - 04/01/2018					20.33	4.01
Garanti Emeklilik Ve Hayat A.Ş. Üçüncü Değişken Emeklilik Yatırım Fonu - 03/01/2013	9.38	9.94	10.99	16.38	18.80	19.27
Garanti Emeklilik ve Hayat A.Ş. Altın Emeklilik Yatırım Fonu - 02/07/2013	9.34	29.32	17.77	37.42	32.09	31.7
Garanti Emeklilik ve Hayat A.Ş. Başlangıç Emeklilik Yatırım Fonu - 01/02/2017				18.50	20.09	3.99
Garanti Emeklilik ve Hayat A.Ş. Başlangıç Katılım Emeklilik Yatırım Fonu - 1.02.2017				14.77	19.33	3.66
Garanti Emeklilik ve Hayat A.Ş. Borçlanma Araçları Emeklilik Yatırım Fonu - 27/10/2003	1.36	8.91	7.56	4.23	27.50	5.42
Garanti Emeklilik ve Hayat A.Ş. Borçlanma Araçları Grup Emeklilik Yatırım Fonu - 27/09/2005	2.71	10.05	8.59	4.57	28.79	5.68
Garanti Emeklilik ve Hayat A.Ş. Dengeli Değişken Emeklilik Yatırım Fonu - 27/10/2003	-0.43	12.39	20.12	7.70	27.25	1

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Garanti Emeklilik ve Hayat A.Ş. Dengeli Değişken Grup Emeklilik Yatırım Fonu - 27/09/2005	0.93	13.84	21.77	8.77	28.77	1.44
Garanti Emeklilik ve Hayat A.Ş. Değişken Emeklilik Yatırım Fonu - 27/10/2003	24.18	19.42	6.98	27.35	18.68	11.29
Garanti Emeklilik ve Hayat A.Ş. Dış Borçlanma Araçları Emeklilik Yatırım Fonu - 27/10/2003	20.62	16.67	17.37	30.88	25.89	10.23
Garanti Emeklilik ve Hayat A.Ş. Dış Borçlanma Araçları Grup Emeklilik Yatırım Fonu - 27/09/2005	21.10	17.22	17.69	31.27	27.07	10.45
Garanti Emeklilik ve Hayat A.Ş. Hisse Senedi Emeklilik Yatırım Fonu - 27/10/2003	-10.60	13.01	50.31	-13.07	37.97	-9.76
Garanti Emeklilik ve Hayat A.Ş. Hisse Senedi Grup Emeklilik Yatırım Fonu - 18/11/2011	-8.86	15.39	51.57	-11.77	39.66	-9.06
Garanti Emeklilik ve Hayat A.Ş. Kamu Borçlanma Araçları Emeklilik Yatırım Fonu - 02/11/2005	1.47	7.84	6.27	3.00	33.82	5.77
Garanti Emeklilik ve Hayat A.Ş. Katkı Emeklilik Yatırım Fonu - 02/05/2013	0.29	10.75	10.47	1.70	34.08	3.38
Garanti Emeklilik ve Hayat A.Ş. Katılım Değişken Emeklilik Yatırım Fonu - 25/06/2009	1.91	8.15	14.99	5.98	26.36	8.36
Garanti Emeklilik ve Hayat A.Ş. Katılım Katkı Emeklilik Yatırım Fonu - 02/05/2013	7.66	7.99	10.53	14.26	30.53	7.38
Garanti Emeklilik ve Hayat A.Ş. Katılım Standart Emeklilik Yatırım Fonu - 05/07/2013	6.69	6.15	6.91	10.80	27.21	6.28
Garanti Emeklilik ve Hayat A.Ş. Para Piyasası Emeklilik Yatırım Fonu - 27/10/2003	9.69	9.04	11.51	17.82	21.27	3.64
Garanti Emeklilik ve Hayat A.Ş. Standart Emeklilik Yatırım Fonu - 24/01/2011	-0.84	8.84	8.74	3.40	27.95	2.87
Garanti Emeklilik ve Hayat A.Ş. Sürdürülebilirlik Hisse Senedi Emeklilik Yatırım Fonu - 24/01/2011	-9.72	13.20	48.10	-18.17	28.65	-13.8
Garanti Emeklilik ve Hayat A.Ş. Temkinli Değişken Emeklilik Yatırım Fonu - 22/10/2004	9.16	9.97	10.47	16.89	22.18	4.69

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Halk Hayat Emeklilik A.Ş. OKS Agresif Değişken Emeklilik Yatırım Fonu - 04/01/2018					28.93	-3.16
Halk Hayat ve Emeklilik A.Ş. Altın Katılım Emeklilik Yatırım Fonu - 19/07/2017				36.44	32.19	31.01
Halk Hayat ve Emeklilik A.Ş. Başlangıç Emeklilik Yatırım Fonu - 03/01/2017				18.37	20.60	3.84
Halk Hayat ve Emeklilik A.Ş. Başlangıç Katılım Emeklilik Yatırım Fonu - 03/01/2017				16.56	20.16	3.44
Halk Hayat ve Emeklilik A.Ş. Dinamik Değişken Emeklilik Yatırım Fonu - 13/06/2012	-3.51	10.30	18.45	2.54	24.44	-2.71
Halk Hayat ve Emeklilik A.Ş. Hisse Senedi Emeklilik Yatırım Fonu - 13/06/2012	-15.09	9.16	40.16	-18.30	26.67	-9.75
Halk Hayat ve Emeklilik A.Ş. Kamu Borçlanma Araçları Standart Emeklilik Yatırım Fonu - 13/06/2012	0.47	8.58	6.86	4.63	25.12	3
Halk Hayat ve Emeklilik A.Ş. Kamu Dış Borçlanma Araçları Emeklilik Yatırım Fonu - 13/06/2012	17.03	16.31	19.67	30.41	23.00	9.32
Halk Hayat ve Emeklilik A.Ş. Katkı Emeklilik Yatırım Fonu - 02/05/2013	-0.58	9.73	10.02	-0.77	34.13	2.16
Halk Hayat ve Emeklilik A.Ş. Katılım Dinamik Değişken Emeklilik Yatırım Fonu - 22/11/2013	0.78	6.98	14.24	9.21	40.36	11.92
Halk Hayat ve Emeklilik A.Ş. Katılım Hisse Senedi Emeklilik Yatırım Fonu - 02/12/2013	-1.31	10.79	33.34	-13.51	47.99	24.71
Halk Hayat ve Emeklilik A.Ş. Katılım Katkı Emeklilik Yatırım Fonu - 22/11/2013	7.25	7.54	9.99	12.36	28.97	9.4
Halk Hayat ve Emeklilik A.Ş. Katılım Standart Emeklilik Yatırım Fonu - 22/11/2013	6.54	6.38	7.77	9.90	28.20	7.88
Halk Hayat ve Emeklilik A.Ş. OKS Agresif Katılım Değişken Emeklilik Yatırım Fonu - 04/01/2018					38.41	17.28
Halk Hayat ve Emeklilik A.Ş. OKS Atak Değişken Emeklilik Yatırım Fonu - 04/01/2018					27.29	-0.8
Halk Hayat ve Emeklilik A.Ş. OKS Atak Katılım Değişken Emeklilik					33.87	13.37

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Yatırım Fonu - 04/01/2018						
Halk Hayat ve Emeklilik A.Ş. OKS Dengeli Değişken Emeklilik Yatırım Fonu - 04/01/2018					24.95	0.62
Halk Hayat ve Emeklilik A.Ş. OKS Katılım Standart Emeklilik Yatırım Fonu - 03/01/2018					22.90	5.81
Halk Hayat ve Emeklilik A.Ş. OKS Standart Emeklilik Yatırım Fonu - 03/01/2018					23.12	3.92
Halk Hayat ve Emeklilik A.Ş. OKS Temkinli Değişken Emeklilik Yatırım Fonu - 04/01/2018					20.53	4.92
Halk Hayat ve Emeklilik A.Ş. Para Piyasası Emeklilik Yatırım Fonu - 12/06/2012	9.14	8.73	11.51	18.15	21.64	3.78
Halk Hayat ve Emeklilik A.Ş. Temkinli Değişken Emeklilik Yatırım Fonu - 18/07/2017				15.77	20.59	5.16
Katılım Emeklilik ve Hayat A.Ş. Agresif Katılım Değişken (Döviz) Emeklilik Yatırım Fonu - 18/01/2016			12.45	37.43	20.69	11.8
Katılım Emeklilik ve Hayat A.Ş. Altın Katılım Emeklilik Yatırım Fonu - 16/07/2014	8.32	29.36	18.40	37.49	30.33	30.46
Katılım Emeklilik ve Hayat A.Ş. Başlangıç Katılım Emeklilik Yatırım Fonu - 03/01/2017				17.70	20.27	3.63
Katılım Emeklilik ve Hayat A.Ş. Dengeli Katılım Değişken Emeklilik Yatırım Fonu - 16/07/2014	6.45	8.03	12.53	13.61	33.56	16.18
Katılım Emeklilik ve Hayat A.Ş. Kamu Kira Sertifikaları Katılım Emeklilik Yatırım Fonu - 01/11/2018					23.26	4.52
Katılım Emeklilik ve Hayat A.Ş. Katılım Değişken Grup Emeklilik Yatırım Fonu - 23/07/2014	7.27	11.15	13.63	16.00	25.47	10.7
Katılım Emeklilik ve Hayat A.Ş. Katılım Hisse Senedi Emeklilik Yatırım Fonu - 16/07/2014	2.24	11.17	26.13	-12.83	59.72	23.08
Katılım Emeklilik ve Hayat A.Ş. Katılım Katkı Emeklilik Yatırım Fonu - 22/07/2014	8.19	7.59	8.68	12.09	25.53	7.82

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Katılım Emeklilik ve Hayat A.Ş. Katılım Standart Emeklilik Yatırım Fonu - 16/07/2014	6.95	6.86	8.45	14.17	22.94	8.6
Katılım Emeklilik ve Hayat A.Ş. OKS Agresif Katılım Değişken Emeklilik Yatırım Fonu - 08/01/2018					49.54	31.56
Katılım Emeklilik ve Hayat A.Ş. OKS Atak Katılım Değişken Emeklilik Yatırım Fonu - 08/01/2018					37.64	14.69
Katılım Emeklilik ve Hayat A.Ş. OKS Katılım Standart Emeklilik Yatırım Fonu - 09/01/2018					23.33	6.69
MetLife Emeklilik ve Hayat A.Ş. OKS Agresif Değişken Emeklilik Yatırım Fonu - 12/01/2018					33.64	-4.46
MetLife Emeklilik ve Hayat A.Ş. OKS Agresif Katılım Değişken Emeklilik Yatırım Fonu - 18/01/2018					39.11	0.22
MetLife Emeklilik ve Hayat A.Ş. OKS Atak Değişken Emeklilik Yatırım Fonu - 10/01/2018					25.11	-5.31
MetLife Emeklilik ve Hayat A.Ş. OKS Atak Katılım Değişken Emeklilik Yatırım Fonu - 18/01/2018					30.01	4.49
MetLife Emeklilik ve Hayat A.Ş. OKS Dengeli Değişken Emeklilik Yatırım Fonu - 10/01/2018					19.64	-5.74
MetLife Emeklilik ve Hayat A.Ş. OKS Standart Emeklilik Yatırım Fonu - 08/01/2018					23.12	4.57
MetLife Emeklilik ve Hayat A.Ş. OKS Temkinli Değişken Emeklilik Yatırım Fonu - 05/01/2018					22.51	3.94
Metlife Emeklilik Ve Hayat A.Ş. OKS Katılım Standart Emeklilik Yatırım Fonu - 03/01/2018					20.37	4.4
Metlife Emeklilik ve Hayat A.Ş. Başlangıç Emeklilik Yatırım Fonu - 01/02/2017				17.73	20.00	3.73
Metlife Emeklilik ve Hayat A.Ş. Başlangıç Katılım Emeklilik Yatırım Fonu - 03/02/2017				13.84	18.67	3.57

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Metlife Emeklilik ve Hayat A.Ş. Dengeli Değişken Emeklilik Yatırım Fonu - 18/11/2009	-0.01	8.29	20.28	3.27	23.71	0.82
Metlife Emeklilik ve Hayat A.Ş. Dengeli Değişken Grup Emeklilik Yatırım Fonu - 18/11/2009	1.19	9.59	21.79	4.52	24.72	1.3
Metlife Emeklilik ve Hayat A.Ş. Hisse Senedi Emeklilik Yatırım Fonu - 18/11/2009	-15.11	9.52	43.43	-11.86	32.43	-11.88
Metlife Emeklilik ve Hayat A.Ş. Kamu Borçlanma Araçları Grup Emeklilik Yatırım Fonu - 18/11/2009	3.62	8.56	8.37	6.57	27.34	5.25
Metlife Emeklilik ve Hayat A.Ş. Kamu Dış Borçlanma Araçları Emeklilik Yatırım Fonu - 18/11/2009	18.85	15.57	17.26	33.24	19.25	9.29
Metlife Emeklilik ve Hayat A.Ş. Katkı Emeklilik Yatırım Fonu - 02/05/2013	2.76	8.86	9.53	3.26	35.09	3.74
Metlife Emeklilik ve Hayat A.Ş. Katılım Katkı Emeklilik Yatırım Fonu - 28/02/2014	5.63	6.69	7.75	7.47	28.02	6.64
Metlife Emeklilik ve Hayat A.Ş. Katılım Standart Emeklilik Yatırım Fonu - 13/01/2014	3.93	5.73	14.97	2.43	25.67	3.93
Metlife Emeklilik ve Hayat A.Ş. Para Piyasası Emeklilik Yatırım Fonu - 18/11/2009	9.37	8.72	11.15	17.96	20.72	3.57
Metlife Emeklilik ve Hayat A.Ş. Standart Emeklilik Yatırım Fonu - 18/11/2009	2.43	7.49	7.52	5.16	28.26	3.54
NN Hayat Ve Emeklilik A.Ş. OKS Dinamik Değişken Emeklilik Yatırım Fonu - 15/02/2018					25.12	-4.18
NN Hayat ve Emeklilik A.Ş. Agresif Değişken Emeklilik Yatırım Fonu - 22/09/2017				-6.83	29.92	-1.54
NN Hayat ve Emeklilik A.Ş. Altın Emeklilik Yatırım Fonu - 22/09/2017				35.38	30.43	32.4
NN Hayat ve Emeklilik A.Ş. Başlangıç Katılım Emeklilik Yatırım Fonu - 25/01/2017				16.25	19.36	3.29
NN Hayat ve Emeklilik A.Ş. Başlangıç Emeklilik Yatırım Fonu - 30/01/2017				17.96	20.00	3.65
NN Hayat ve Emeklilik A.Ş. Borçlanma Araçları Emeklilik Yatırım Fonu - 27/10/2003	6.08	9.20	8.10	7.22	26.28	5.45

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
NN Hayat ve Emeklilik A.Ş. Dengeli Değişken Emeklilik Yatırım Fonu - 05/04/2004	3.20	10.60	18.17	4.60	23.76	2.54
NN Hayat ve Emeklilik A.Ş. Değişken Emeklilik Yatırım Fonu - 27/10/2003	14.50	17.74	14.93	31.29	18.74	9.31
NN Hayat ve Emeklilik A.Ş. Dinamik Değişken Emeklilik Yatırım Fonu - 02/06/2008	-0.37	9.60	23.37	-3.87	22.51	0.23
NN Hayat ve Emeklilik A.Ş. Hisse Senedi Emeklilik Yatırım Fonu - 27/10/2003	-11.71	9.07	39.75	-16.11	33.42	-8.79
NN Hayat ve Emeklilik A.Ş. Karma Emeklilik Yatırım Fonu - 27/10/2003	-1.46	9.94	24.50	-4.84	33.26	-0.79
NN Hayat ve Emeklilik A.Ş. Katkı Emeklilik Yatırım Fonu - 02/05/2013	5.50	10.13	11.38	0.01	36.20	3.88
NN Hayat ve Emeklilik A.Ş. OKS Agresif Değişken Emeklilik Yatırım Fonu - 12/02/2018					28.63	-1.73
NN Hayat ve Emeklilik A.Ş. OKS Agresif Katılım Değişken Emeklilik Yatırım Fonu - 12/02/2018					29.10	15.64
NN Hayat ve Emeklilik A.Ş. OKS Dengeli Değişken Emeklilik Yatırım Fonu - 12/02/2018					22.78	-0.46
NN Hayat ve Emeklilik A.Ş. OKS Dinamik Katılım Değişken Emeklilik Yatırım Fonu - 14/02/2018					27.54	15.6
NN Hayat ve Emeklilik A.Ş. OKS Katılım Standart Emeklilik Yatırım Fonu - 24.01.2018					23.76	7.07
NN Hayat ve Emeklilik A.Ş. OKS Standart Emeklilik Yatırım Fonu - 24/01/2018					20.76	4.47
NN Hayat ve Emeklilik A.Ş. OKS Temkinli Değişken Emeklilik Yatırım Fonu - 12/02/2018					22.11	4.37
NN Hayat ve Emeklilik A.Ş. Para Piyasası Emeklilik Yatırım Fonu - 27/10/2003	9.37	8.83	11.08	18.10	20.94	3.79
NN Hayat ve Emeklilik A.Ş. Qinvest Portföy Temkinli Değişken Emeklilik Yatırım Fonu - 22/09/2017				18.90	23.73	6.44
NN Hayat ve Emeklilik A.Ş. Standart Emeklilik Yatırım Fonu - 24/10/2005	5.91	9.24	7.92	4.10	26.98	4.1

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Vakıf Emeklilik Ve Hayat A.Ş. Katılım Hisse Senedi Emeklilik Yatırım Fonu - 07/09/2018					54.17	24.66
Vakıf Emeklilik Ve Hayat A.Ş. OKS Agresif Değişken Emeklilik Yatırım Fonu - 03/01/2018					30.97	-3.98
Vakıf Emeklilik Ve Hayat A.Ş. OKS Agresif Katılım Değişken Emeklilik Yatırım Fonu - 03/01/2018					37.69	16.63
Vakıf Emeklilik Ve Hayat A.Ş. OKS Atak Katılım Değişken Emeklilik Yatırım Fonu - 03/01/2018					31.96	13.05
Vakıf Emeklilik Ve Hayat A.Ş. OKS Dengeli Değişken Emeklilik Yatırım Fonu - 03/01/2018					22.38	0.56
Vakıf Emeklilik Ve Hayat A.Ş. OKS Dengeli Katılım Değişken Emeklilik Yatırım Fonu - 03/01/2018					28.44	8.49
Vakıf Emeklilik Ve Hayat A.Ş. OKS Dinamik Değişken Emeklilik Yatırım Fonu - 03/01/2018					23.66	-0.38
Vakıf Emeklilik Ve Hayat A.Ş. OKS Katılım Standart Emeklilik Yatırım Fonu - 03/01/2018					22.06	5.56
Vakıf Emeklilik Ve Hayat A.Ş. OKS Muhafazakar Katılım Değişken Emeklilik Yatırım Fonu - 03/01/2018					20.86	4.24
Vakıf Emeklilik Ve Hayat A.Ş. OKS Standart Emeklilik Yatırım Fonu - 03/01/2018					23.24	4.47
Vakıf Emeklilik Ve Hayat A.Ş. OKS Temkinli Değişken Emeklilik Yatırım Fonu - 03/01/2018					21.74	5.32
Vakıf Emeklilik ve Hayat A.Ş. Altın Katılım Emeklilik Yatırım Fonu - 24/09/2013	9.29	29.31	18.25	37.10	32.14	31.36
Vakıf Emeklilik ve Hayat A.Ş. Başlangıç Emeklilik Yatırım Fonu - 02/02/2017				18.17	20.57	3.88
Vakıf Emeklilik ve Hayat A.Ş. Başlangıç Katılım Emeklilik Yatırım Fonu - 03/01/2017				16.66	20.39	3.5

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Vakıf Emeklilik ve Hayat A.Ş. Birinci Değişken Emeklilik Yatırım Fonu - 17/11/2003	18.06	19.58	11.81	26.82	23.79	8.15
Vakıf Emeklilik ve Hayat A.Ş. Birinci Kamu Borçlanma Araçları Grup Emeklilik Yatırım Fonu - 12/03/2007	1.63	9.82	9.30	10.53	23.44	6.53
Vakıf Emeklilik ve Hayat A.Ş. Borçlanma Araçları Emeklilik Yatırım Fonu - 22/02/2012	2.94	4.47	29.14	1.20	47.03	-4.02
Vakıf Emeklilik ve Hayat A.Ş. Dinamik Değişken Emeklilik Yatırım Fonu - 17/11/2003	-5.23	10.09	20.57	4.90	25.77	-3.14
Vakıf Emeklilik ve Hayat A.Ş. Dinamik Değişken Grup Emeklilik Yatırım Fonu - 12/03/2007	-4.90	9.83	27.26	3.61	25.77	-1.08
Vakıf Emeklilik ve Hayat A.Ş. Hisse Senedi Emeklilik Yatırım Fonu - 17/11/2003	-17.63	8.87	44.97	-14.48	28.28	-9.63
Vakıf Emeklilik ve Hayat A.Ş. Kamu Dış Borçlanma Araçları Emeklilik Yatırım Fonu - 17/11/2003	17.61	16.24	14.67	29.70	22.12	9.49
Vakıf Emeklilik ve Hayat A.Ş. Katkı Emeklilik Yatırım Fonu - 02/05/2013	0.18	10.18	10.35	-1.42	32.92	2.13
Vakıf Emeklilik ve Hayat A.Ş. Katılım Dengeli Değişken Emeklilik Yatırım Fonu - 23/02/2011	2.46	8.53	9.33	9.50	34.59	9.21
Vakıf Emeklilik ve Hayat A.Ş. Katılım Dinamik Değişken Grup Emeklilik Yatırım Fonu - 27/10/2010	4.33	9.07	10.95	7.92	32.16	12.97
Vakıf Emeklilik ve Hayat A.Ş. Katılım Katkı Emeklilik Yatırım Fonu - 02/05/2013	7.37	9.08	7.92	12.74	27.07	8.54
Vakıf Emeklilik ve Hayat A.Ş. Katılım Standart Emeklilik Yatırım Fonu - 01/03/2010	6.14	7.09	7.46	13.40	24.93	8.38
Vakıf Emeklilik ve Hayat A.Ş. Para Piyasası Emeklilik Yatırım Fonu - 17/11/2003	9.24	9.80	12.09	18.81	21.68	3.8
Vakıf Emeklilik ve Hayat A.Ş. Pera 1 Değişken Grup Emeklilik Yatırım Fonu - 20/09/2016			17.96	15.55	21.10	3
Vakıf Emeklilik ve Hayat A.Ş. Standart Emeklilik Yatırım Fonu - 17/11/2003	0.73	8.94	9.14	15.63	27.72	3.13

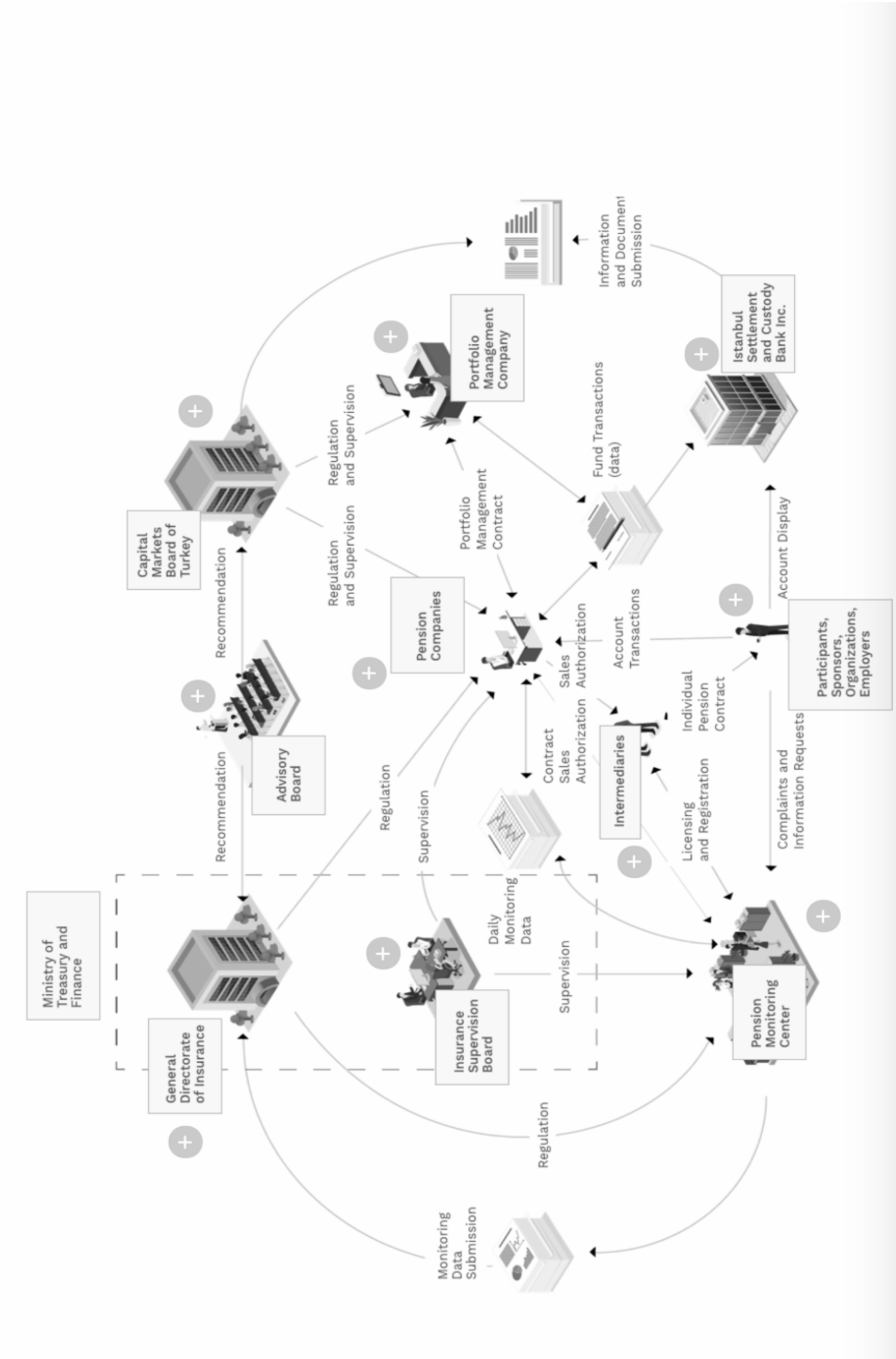
Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Vakıf Emeklilik ve Hayat A.Ş. Temkinli Değişken Emeklilik Yatırım Fonu - 17/11/2003	16.13	17.57	8.80	18.07	20.53	4.39
Ziraat Hayat Ve Emeklilik A.Ş. OKS Agresif Değişken Emeklilik Yatırım Fonu - 03/01/2018					28.43	-3.5
Ziraat Hayat Ve Emeklilik A.Ş. OKS Atak Değişken Emeklilik Yatırım Fonu - 04/01/2018					28.62	-0.85
Ziraat Hayat Ve Emeklilik A.Ş. OKS Dengeli Değişken Emeklilik Yatırım Fonu - 04/01/2018					25.89	0.77
Ziraat Hayat Ve Emeklilik A.Ş. OKS Katılım Standart Emeklilik Yatırım Fonu - 03/01/2018					22.68	6.12
Ziraat Hayat Ve Emeklilik A.Ş. OKS Standart Emeklilik Yatırım Fonu - 03/01/2018					24.54	4.28
Ziraat Hayat Ve Emeklilik A.Ş. OKS Temkinli Değişken Emeklilik Yatırım Fonu - 04/01/2018					23.12	4.85
Ziraat Hayat ve Emeklilik A.Ş. Altın Katılım Emeklilik Yatırım Fonu - 01/10/2013	9.03	29.67	18.19	37.23	32.17	31.23
Ziraat Hayat ve Emeklilik A.Ş. Başlangıç Emeklilik Yatırım Fonu - 03/01/2017				18.36	20.55	3.9
Ziraat Hayat ve Emeklilik A.Ş. Başlangıç Katılım Emeklilik Yatırım Fonu - 03/01/2017				16.87	20.21	3.45
Ziraat Hayat ve Emeklilik A.Ş. Değişken Emeklilik Yatırım Fonu - 01/07/2011	-2.15	8.32	20.55	4.55	26.15	-1.73
Ziraat Hayat ve Emeklilik A.Ş. Hisse Senedi Emeklilik Yatırım Fonu - 01/07/2011	-16.86	11.71	52.95	-12.18	26.48	-9.96
Ziraat Hayat ve Emeklilik A.Ş. Kamu Borçlanma Araçları Emeklilik Yatırım Fonu - 01/07/2011	0.44	7.85	7.17	4.34	23.30	5.29
Ziraat Hayat ve Emeklilik A.Ş. Kamu Dış Borçlanma Araçları Emeklilik Yatırım Fonu - 01/07/2011	17.75	18.56	15.88	36.83	16.38	8.6

Title of the Fund - Offering Date	2015-Year Returns (%)	2016-Year Returns (%)	2017-Year Returns (%)	2018-Year Returns (%)	2019-Year Returns (%)	* % Returns from the Beginning of 2020
Ziraat Hayat ve Emeklilik A.Ş. Katkı Emeklilik Yatırım Fonu - 02/05/2013	-0.31	9.55	10.14	3.55	34.26	2.22
Ziraat Hayat ve Emeklilik A.Ş. Katılım Değişken Emeklilik Yatırım Fonu - 18/11/2015		6.82	17.23	7.22	36.61	9.47
Ziraat Hayat ve Emeklilik A.Ş. Katılım Katkı Emeklilik Yatırım Fonu - 02/05/2013	8.14	9.57	10.68	14.29	29.09	8.57
Ziraat Hayat ve Emeklilik A.Ş. Katılım Standart Emeklilik Yatırım Fonu - 01/07/2011	6.80	7.70	9.39	12.20	25.16	8.34
Ziraat Hayat ve Emeklilik A.Ş. OKS Agresif Katılım Değişken Emeklilik Yatırım Fonu - 05/01/2018					42.31	17.14
Ziraat Hayat ve Emeklilik A.Ş. OKS Atak Katılım Değişken Emeklilik Yatırım Fonu - 05/01/2018					36.48	13.12
Ziraat Hayat ve Emeklilik A.Ş. Para Piyasası Emeklilik Yatırım Fonu - 01/07/2011	9.73	9.81	12.23	18.91	21.75	3.78
Ziraat Hayat ve Emeklilik A.Ş. Standart Emeklilik Yatırım Fonu - 24/05/2013	5.43	10.24	8.83	10.64	24.90	2.36

Source: Emeklilik Gözetim Merkezi, 2020c

APPENDIX G

ELEMENTS OF TURKEY'S PRIVATE PENSION SYSTEM



Source: Emeklilik Gözetim Merkezi, 2020b

APPENDIX H

ARTICLES OF THE PENAL PROVISIONS THAT EFFECT THE TURKISH PRIVATE PENSION SYSTEM

The administrative penalties for undue operations of pension companies are determined as the followings:

- The administrative penalty for making a pension contract that violates the principles and procedures stated in the law is 3000 TL.
- The administrative penalty for failing to fulfill the transfer obligations stated in the law is 2000 TL.
- The administrative penalty for failing to fulfill the distribution and investment obligations stated in the law is 2000 TL.
- The administrative penalty for failing to fulfill the payment and transfer obligations stated in the law is 2000 TL.
- The administrative penalty for entering the contracts into effect before complying with the approval obligation stated in the law is 3000 TL.
- The administrative penalty for failing to fulfill the notification obligation regarding the expenses and fees to be paid by the participant stated in the law is 2000 TL.
- The administrative penalty for misusing of the terms such as “Pension”, “Pension Plan”, “Pension Fund”, and “Pension Mutual Fund” or the terms that serve the same meaning is 7500 TL.
- The real persons or the officials of legal entities engaging pension branch without the required licenses or those using the business names, documents, promotions and advertisements, and public statements prohibited or those

using the words and expressions in a way that implies engaging in such operations will be charged with imprisonment from three to five years and an administrative fine from 300 to 2,000 days. Their related operations will also be seized as an administrative precaution (Republic of Turkey, 2001, Article 23). Moreover, their businesses could be shot down temporally, their advertisements and promotions could be stopped or removed by the governorates at the request of the Undersecretariat in a situation when a delay seems inconvenient.

- The administrative penalty for making false, misleading or deceiving statements in promotions and advertisements is 12000 TL.
- The administrative penalty for failing to fulfill responsibilities as pension service providers stated in Clauses 1 and 3 of Article 11 of the law is 3000 TL.
- The administrative penalty for conducting or providing intermediary services while violating the rules stated in the law is 6000 TL.
- The administrative penalty for recruiting people who do not meet the necessary qualifications stated in the law is 15000 TL.
- The administrative penalty for making false, misleading or deceiving statements in promotions and advertisements is 12000 TL.
- The administrative penalty for failing to fulfill the notification obligation regarding the changes in the CEO and deputy CEO position appointments to the Undersecretariat stated in the law is 3000 TL.
- The administrative penalty for appointing those who must not be employed as a board member, audit committee member, CEO, deputy CEO, or first-degree

signatory executive due to their criminal history to positions mentioned is 15000 TL

- If the chairman or members of the company's board, or its signatory executives or the chairman or members of portfolio management company's board or its signatory executives embezzle the money or other assets that are entrusted to them or under their responsibility for overseeing, supervising or management, the provisions of the Turkish Penal Code for that offense will be increased by one-fifth. When the real persons or the officials of legal entities that are subject to this law make false statements in documents that are made-up or published for addressing the authorities, the auditors, courts or other government agencies, their penalty for the crime of forgery according to Turkish Criminal l Code will be increased by one-fold.
- The administrative penalty for registering amendments to the company's articles of association without the approval of the Undersecretariat is 15000 TL.
- The administrative penalty for failing to fulfill provisions stated in the law through the transfer of assets or a merger with another company is 15000 TL.
- The administrative penalty for failing to fulfill the independent external audit obligation stated in the law is 15000 TL.
- The real persons or the officials of legal entities will be sentenced with a prison time from one to three years and an administrative fine of at least 100 days when they do not provide the information and documents requested by the authorities and auditors or they prevent auditors from performing their duties (Republic of Turkey, 2001, Article 23)

- The penalty for intentionally causing damage to the reputation or assets of the organizations that are subject to this law and spreading false news for that reason is punishable by a prison term from one to three years. The penalty for that offense will be increased by half if the act is committed through the media. The penalty for committing offenses mentioned above that may harm the financial structure of these organization even if there was no mentioning of the names of organizations is an administrative term from 400 to 3000 days (Republic of Turkey, 2001, Article 23).
- The administrative penalty for the failure to comply with the rulings, regulations and communique by the Ministry, the Undersecretariat and the board in instances which are not mentioned in the above is 2000 TL (Republic of Turkey, 2001, Article 22, 23).
- When there accrues an offense that necessitates an administrative penalty, related organizations or persons are asked for making a defense statement before imposing the administrative fine. If related organizations or persons do not provide their defense statement within one month after they requested, their right for defense would be considered as waived (Republic of Turkey, 2001, Article 22).
- When an offense that warranted an administrative fine repeated, the fine for that offense will be doubled. The fine will be tripled in the following repeats. Nevertheless, if the repeating offense accrues two years after imposing the fine, earlier fines will not be taken into consideration (Republic of Turkey, 2001, Article 22)
- People who are responsible for the implementing and overseeing the implementation of this law must not disclose to their associates and

institutions as well as the participant to anybody except the authorized persons or benefit from the secrets they obtain during their duties about to real and legal persons that work under the scope of this law. The liability of those people will not last even after leaving the office. The penalty for failing to comply with this liability is determined by Article 239 of the Turkish Criminal Code.

- People who are subject to this law as members and other officials of these organizations should not reveal the secrets about the institutions or people related to pension contracts, which they acquire because of their roles and duties, to anybody except the authorized persons. The liability of those people will not last even after leaving the office. The penalty for failing to comply with this liability is determined by Article 239 of the Turkish Criminal Code. If the people subject to this law reveal that secrets for the benefit of themselves or others, their penalty will be increased by half pursuant to Article 239 of the Turkish Penal Code (Republic of Turkey, 2001, Article 23). Investigation and prosecutions regarding the offenses mentioned above must be hinged upon the written request by the Undersecretariat or the Board to the Chief Public Prosecutor's Office. The written request from the Undersecretariat or the Board is a necessary condition for procedure. If the public prosecutor decides that there is no need for prosecution, the Undersecretariat or the board becomes entitled to object the decisions declared to them pursuant to the Code of Criminal Procedure. The Undersecretariat or the Board becomes the plaintiff in the public cases, which are opened as a result of the applications of the Undersecretariat or the Board (Republic of Turkey, 2001, Article 24). If any of the offenses mentioned above also require punishment with regard to other laws, the heaviest punishment according to all laws must be applied (Republic of Turkey, 2001, Article 25.

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