**Behavioral part:**

Numerous prior studies have examined the importance of defaults associated with employer-provided retirement savings plans, but most of them were limited to estimating the impact of automatic enrollment and automatic escalation policies adopted by private sector 401(k) plan sponsors. This research area was launched with the influential Madrian and Shea (2001) case study on the impact of automatic enrollment in a 401(k) plan offered by a single large corporation; subsequent research also focused mainly on the private sector workforce (Choi, Laibson, and Madrian 2004a; Choi et al. 2004b; Choi et al. 2005; Beshears et al. 2009; Carroll et al. 2009; Sialm, Starks, and Zhang 2014).3 In general, the findings from that analysis indicated that automatic enrollment in 401(k) plans prompted substantial increases in participation, and that employee contributions tended to concentrate on default contribution rates. These studies imply that workers did not subsequently opt out of the plans and that once in the plans, they seldom changed their contribution rates from the default. Accordingly, the conclusion was that private sector employees covered by these plans accepted the default option and did not try to reverse the decisions imposed on them.

**(Clark & Mitchell, 2020) s.1134**

Investors prefer less risk 🡪 The strategy also seems to be consistent with investor preferences. In a survey of over 500 defined contribution plan participants, ING (2012) finds that 93% of TDF investors expect the fund to provide strong protection against losses when approaching and in retirement. The survey also finds that, when approaching and in retirement, if asked to choose between stronger protection against losses or a stronger growth potential, 80% of TDF investors (and 66% of non-

TDF investors) prefer the former. (Estrada, n.d.)

We find that more risk averse and less knowledgeable members tend to invest in the default fund – a fund that is, however, one of the riskiest options on the choice menu. (Böhnke et al., 2019)

Fallacies:

engagement and financial literacy

A default is an option that will be selected if no active choice is made. Defaults are one of the most powerful elements of choice architecture because there is considerable evidence showing that people often choose the default (Jachimowicz, Duncan, Weber, & Johnson, [**2019**](https://onlinelibrary-wiley-com.vu-nl.idm.oclc.org/doi/full/10.1002/bdm.2122#bdm2122-bib-0048); Johnson et al., [**2012**](https://onlinelibrary-wiley-com.vu-nl.idm.oclc.org/doi/full/10.1002/bdm.2122#bdm2122-bib-0051); Johnson & Goldstein, [**2003**](https://onlinelibrary-wiley-com.vu-nl.idm.oclc.org/doi/full/10.1002/bdm.2122#bdm2122-bib-0050)), particularly in the context of retirement savings (Dobrescu et al., [**2018**](https://onlinelibrary-wiley-com.vu-nl.idm.oclc.org/doi/full/10.1002/bdm.2122#bdm2122-bib-0024)). For example, making enrollment in a company's retirement savings program the default tends to increase retirement plan enrollment rates (Beshears, Choi, Laibson, & Madrian, [**2009**](https://onlinelibrary-wiley-com.vu-nl.idm.oclc.org/doi/full/10.1002/bdm.2122#bdm2122-bib-0011)). Moreover, those enrolled in a retirement savings program tend to remain with the default contribution rate and default fund allocation (Madrian & Shea, [**2001**](https://onlinelibrary-wiley-com.vu-nl.idm.oclc.org/doi/full/10.1002/bdm.2122#bdm2122-bib-0060)). The *Save More Tomorrow* pension program created by Thaler and Benartzi ([**2004**](https://onlinelibrary-wiley-com.vu-nl.idm.oclc.org/doi/full/10.1002/bdm.2122#bdm2122-bib-0075)) used defaults to help people save for their retirement by automatically increasing pension contributions with pay raises until a preset maximum. In one implementation of the program, the average saving rates for participants increased from 3.5% to 13.6% over 40 months. (Camilleri et al., 2019)

Litigations

The Employee Retirement Income Security Act of 1974 (ERISA) … establishes fiduciary duties for those who manage and control these plans, and gives participants the right to sue plan fiduciaries for breach of their duty (Cusano, 2019)

If performance is worse than in the benchmark, or the asset classes in the portfolio deviates from the rest… Motivates to follow the rest even though that would mean worse investment decisions. At least, don’t get sued.

Default can be a risky option

 Analyzing plan-level data, we find little evidence that 401(k) plan sponsors consider, to any economically meaningful degree, the risk profiles of their firms when choosing among TDFs.

(Balduzzi & Reuter, 2019)

The concept of “choice architecture” refers broadly to the design of the decision framework governing consumer choice (Thaler and Sunstein, 2008). (Mitchell & Utkus, 2012)

First, pension investors are involuntary investors (pensions being mandatory) and some of them may simply not care about their locked‐in savings, or discount them excessively. Second, since pension assets tend to be smaller and locked in until retirement, investors might have them on a different mental account that is not as important for them, triggering the observed inertia and inattentiveness. Finally, it is likely that the average investor in the PPS is simply less sophisticated than the average investor in the retail mutual fund market (a self‐selected group of investors).

(Dahlquist & Martinez, 2015)

Investor inertia and inattentiveness are well‐documented phenomena in pension plans (see Samuelson and Zeckhauser, 1998; Madrian and Shea, 2001; Agnew et al., 2003; Ameriks and Zeldes, 2004; Mitchell et al., 2006) (Dahlquist & Martinez, 2015)

## Investors’ behavior affecting the riskiness of Target-Date Funds

First, we need to examine, how the current system works.

**Choice architecture**

The concept of “choice architecture” is broadly defined as a design of the decision framework governing consumer choice (Thaler and Sunstein, 2008). The behavioral elements related to the pension setting, such as automatic enrolment and re-enrolment to a pension plan, and default funds, are all related to this concept. Several prior studies have examined how defaults influence workers’ saving decisions (c.f. Carroll, Choi, Laibson, Madrian and Metrick, 2009; Choi, Laibson, and Madrian, 2004;Choi, Laibson, Madrian, and Metrick, 2003, 2006; Nessmith, Utkus and Young, 2007). Defaults are one of the most powerful elements of choice architecture because there is considerable evidence showing that people often choose the default (Jachimowicz, Duncan, Weber, & Johnson, [**2019**](https://onlinelibrary-wiley-com.vu-nl.idm.oclc.org/doi/full/10.1002/bdm.2122#bdm2122-bib-0048); Johnson et al., [**2012**](https://onlinelibrary-wiley-com.vu-nl.idm.oclc.org/doi/full/10.1002/bdm.2122#bdm2122-bib-0051); Johnson & Goldstein, [**2003**](https://onlinelibrary-wiley-com.vu-nl.idm.oclc.org/doi/full/10.1002/bdm.2122#bdm2122-bib-0050)), particularly in the context of retirement savings (Dobrescu et al., [**2018**](https://onlinelibrary-wiley-com.vu-nl.idm.oclc.org/doi/full/10.1002/bdm.2122#bdm2122-bib-0024)). Also, when people choose a default, they will tend to it and only rarely deviate from it. Defaults can be a useful tool to guide employees to invest into less-risky retirement target-date funds. However, according to Balduzzi et al (Balduzzi & Reuter, 2019), there’s a little evidence that the 401(k) plan sponsors consider the different risk profiles (for example their employees), when they choose among the target-date funds. It is possible then that the default option is chosen based on some other criterion than safety, for example short-term returns (Böhnke et al., 2019). In this case, the default option contributes to the increase of riskiness of the target-date funds.

**Investors’ inertia**

Investor inertia and inattentiveness are known phenomena in pension plans, and there’s a lots of prior studies available (see Samuelson and Zeckhauser, 1998; Madrian and Shea, 2001; Agnew et al., 2003; Ameriks and Zeldes, 2004; Mitchell et al., 2006) (Dahlquist & Martinez, 2015) According to Dahlquist and Martinez, (Dahlquist & Martinez, 2015), there are three distinct reasons for investor’s inertia and inattentiveness. First, since pension investors are automatically defaulted to the pension plan, some of them might simply not care about the their locked-in savings. Second, the pension assets tend to be smaller and they are locked-in in the fund until the retirement. Investors might have a different mental account for the savings that is perceived not as important, thereby triggering inertia and inattentiveness. Third, the average investor might not be ‘financially literate’ enough, meaning the investor lacks financial knowledge to make the investment decisions. In addition to these reasons, the perceived safety of the investment may also play a role. Since the retirement investments are categorized as a “safe harbor” and they’re offered by the employer, the investors might perceive them as risk-free or low-risk investment, and not pay much attention of their riskiness.

**Agency problems**

Investors inertia can lead to agency problems. Investors tend to stick to the default investment option, regardless of the result or the safety concerns. They are not punishing poorly-performing funds by withdrawing their funds, or rewarding well-performing funds by moving their assets into them. This is evident by the increasing cashflows into both poorly- and well-performing funds (Kilgour, 2019) (Dahlquist & Martinez, 2015). This behavior can potentially lead to agency problem, where fund managers have a weak incentive to outperform their peers (Sandhya, n.d.).

Another problem regarding the riskiness of the funds is that funds can be susceptible to litigations if their investment style deviates too much from others. The Employee Retirement Income Security Act of 1974 (ERISA) establishes fiduciary duties for those who manage and control these plans, and gives participants the right to sue plan fiduciaries for breach of their duty (Cusano, 2019) If fund’s performance is worse than the benchmark, or the asset classes in the portfolio deviates from the rest. Less-equity heavy or hedged investment portfolio can have lower returns than the peers, which can trigger a litigation. This can lessen the motivation for less-risky investment and encourage herding effect, where funds have similar investment strategies, since it is safer to follow the rest.

**What next?**

**Mini-conclusion**

Cashflows growing, investors don’t punish or reward

* Weak incentive
* A potential reason for agency problems in TDFs is that flows do not respond to past performance indicating that investors neither reward good performance nor punish poor

performance. (Sandhya, n.d.)

net cashflows growing (Kilgour, 2019) (Dahlquist & Martinez, 2015)

Litigation risks, if deviate too much

* The Employee Retirement Income Security Act of 1974 (ERISA) … establishes fiduciary duties for those who manage and control these plans, and gives participants the right to sue plan fiduciaries for breach of their duty (Cusano, 2019)

If performance is worse than in the benchmark, or the asset classes in the portfolio deviates from the rest… Motivates to follow the rest even though that would mean worse investment decisions. At least, don’t get sued.

* Safer to follow the pack

**What next?**

Financial literacy and member engagement to the rescue? (combatting inertia and inattentiveness)

Member engagement and better financial literacy are suggested ways to combat investors inertia and inattentiveness.

* Pension products are complex
* Financial literacy varies a lot, there are groups who have high knowledge
* More literate ppl are more active (Deetlefs et al., 2019)
* … but can make mistakes (Dahlquist & Martinez, 2015)
* Lots of ppl who have very limited knowledge of finance, and don’t know even the basic concepts such as compounding interest (Nijboer & Boon, 2012)
* Hard to inform if the basics are missing
* More literate ppl are more engaged much (Deetlefs et al., 2019)
* Retirement savings can be severely affected by this failure of members to make important choices much (Deetlefs et al., 2019)
* Member engagement works only if there’s a high distrust, otherwise don’t affect much (Deetlefs et al., 2019)
* High engagement can actually lead to worse investment decisions (Dahlquist & Martinez, 2015), (Nijboer & Boon, 2012)
* Defaults work usually better (Dahlquist & Martinez, 2015), (Nijboer & Boon, 2012)

Better defaults

* Since ppl stick to the defaults and increasing financial literacy and member engagement has only limited effect, then the attention should be directed to create better defaults.
* Pension plan sponsors choose the funds
* Regulator could emphasis the risk criterion more
* Tax benefit smore per safety

(Nijboer & Boon, 2012)

**Default**

default-based choice architecture (Mitchell & Utkus, 2012)

People are defaulted to the retirement fund, limited choice. Also, re-enrollment when changing jobs

Defaults are very powerful! Very few deviates from it

Default is not necessarily a low-risk option!

**Financial literacy and engagement**

Financially ‘illiterate’ people don’t know how

Financially literate people don’t necessarily care

People perceive the risk lower than it is (it’s a safe harbor after all, and employer is offering it..)

**No punishment or reward for target-date funds as a consequence**

Investors don’t keep funds in check – they don’t reward or punish them

Risk of litigations if deviating from the rest

**What to do?**

Financial literacy and engagement as a solution?

Better default