Political Elites
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TERM PAPER

This is an extremely nice title that is quite long to be honest: And this is an equally impressive subtitle with very big words

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Abstract

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Introduction

After repeated cost-overruns, in 2023, then prime minister of the United Kingdom, Rishi Sunak announced that the country's high speed rail project High Speed 2 (HS2) would be scaled down considerably, claiming that £36 billion in funds would be redirected to other transport projects (Sunak, 2023). It is not uncommon for large infrastructure to run over-budget (Flyvbjerg et al., 2003), but, arguably, though hard data are difficult to come by, this was a rare occurrence of a large-scale infrastructure project being abandoned (for an attempt see Cornelio et al., 2021), despite funds having been appropriated with cross-party support (Topham et al., 2023) and construction having already begun on some parts of the project. In addition to HS2, a number of large-scale infrastructure projects in western developed democracies – sticking with rail projects, Stuttgart 21 in Germany and California high-speed rail in the US come to mind – have become somewhat notorious for their cost-overruns and construction delays, but, for now, HS2 remains an exception for funds being removed from the project. So-called *megaprojects*, such as these, "are increasingly used as the preferred delivery model for goods and services across a range of businesses and sectors", at the same time they are considered "inherently risky due to long planning horizons and complex interfaces" (Flyvbjerg, 2014, pp. 6, 9). Considering this, from a traditional economic point of view, in the presence of cost-overruns and higher return alternatives, project cancellation should then be the norm, as every additional pound to be spent should be evaluated on its marginal return alone. Instead of cutting their losses, however, politicians will often *escalate their commitment* (Staw, 1976) — megaprojects continue to be funded, even if they might not have been funded in the first place, had the final costs and construction time been known to be the actual costs in the initial decision scenario.

Of course, there is a plethora of plausible theoretical explanations for why some policy or funding appropriation might be maintained or expanded, even in the face of suboptimal outcomes, e.g. path dependency (e.g. Pierson, 2000), or different political economy approaches. Taking a closer look at the politicians themselves, who, in political science and elsewhere, are regularly viewed as rational agents (Downs, 1957), this prima facia "irrational economic behavior" (Arkes & Blumer, 1985, p. 124), is noteworthy. Now, there is a breadth of research on individual-level cognitive and decision biases that

lead people to suboptimal decision-making, and as individuals, elite decision-makers like politicians are, in principle, liable to exhibiting choice anomalies like escalation of commitment, like anybody else. At the same time, as Sheffer et al. (2017), for instance, point out, politicians likely to differ systematically from the general population, e.g. on account of personality (see e.g. Best, 2011) and an idiosyncratic decision environment. Intuitively, one might assume that politicians, as elite decision makers, may be less likely to exhibit decision biases and choice anomalies, but Sheffer et al. (2017) find evidence that elected politicians are overall *more prone* to escalation of commitment that the general population. The idiosyncrasy Sheffer et al. refer to relates to the mental shortcuts democratically elected political elites may be uniquely incentivized to take in the face of public opinion and retrospective voting (i.e. blame avoidance, see Weaver, 1986), as compared to, say managers. Megaprojects serve to illustrate that politicians' decision environment is idiosyncratic compared to that of regular economic agents in general: In politicians' minds, large public infrastructure projects are not necessarily expected to pay for themselves directly, in the same way, say, a private real estate development would be expected to recoup its initial capital investment as quickly as possible. Rather, diffuse societal effects such as increased economic activity, emissions savings, etc. are are likely on politicians' minds when deciding on them. Similarly, politicians may have different outlooks on the financial return of other kinds of government programs, such as welfare spending. Due to their aging populations, the pension systems of many developed democracies, especially those that operate on a pay-as-you-go basis, increasingly face problems with long-term financial sustainability and even insolvency (Congressional Budget Office, 2024). On the one hand, for contributory programs, such as government pensions programs, it is easier to evaluate their cashflow – does more come in in contributions than goes out in obligations? But contrary to the rationalist expectation, pension reform is rare and the general trajectory of relative government pension spending has been invariably upwards for the last four decades (see Figure 1 in the appendix). On the other hand, once again it is not self-evident why politicians should ever be expected to strive towards a positive cash-flow from the pension program – many expensive government services are never expected to generate a positive cashflow, the Fire Department, sewage systems, public education, the policy, the military etc, country-specific exceptions notwithstanding.

While escalation of commitment is readily studied in political science, it is rarely done with a focus specifically on elected politicians, and it is more often, or even predominantly, studied through an organizational behavior lens (see Sleesman et al., 2012). As a result the concept is usually operationalized in terms of managerial performance and *investment decisions* in a commercial context, with research often conducted on convenience samples of students or the general population, which, as shown, may not necessarily be representative of the kinds of decision environments politicians find themselves in. Some researchers specifically conducts experiments on samples of decision making elites like CEOs (e.g. List & Mason, 2009), but politicians are not CEOs. Moreover, even if politicians were rational utility maximizers, in the same way managers, investors, CEOs, or any number of economic agents in other contexts are assumed to be, *they are not investors or managers*, so they may not derive utility form a decision in the form return on their investment, but from making the world a better place, or less idealistically, from being reelected (Mayhew, 1974). Considering this, I ask, *how doe the idiosyncrasies of politicians' decision environments affect escalation of commitment?*

One prominent instance of research on escalation of commitment in an exclusively political context has been regarding international relations, specifically armed conflict, e.g. why a conflict is escalated despite bad news from the battlefield (the Vietnam war being the go-to example, see e.g. Staw, 1976), or sunk costs as a tool of international politics (see e.g. Fearon, 1997). Doubtless, international politics is a special decision environment, in most cases idiosyncratic to politicians, however, it is also usually

the sole domain of the executive, usually a small number of high-ranking politicians, some of whom are elected officials like heads of state or government, while others may be political appointees (e.g. a foreign minister) and career diplomats and national security officials (e.g. generals, intelligence officers, etc.), the latter of whom aren't necessarily politicians. This paper is only interested in elected politicians' behavior, more specifically the population of interest for this paper is politicians who are democratically elected to a legislative body. Furthermore, because much of the literature on escalation of commitment is from an organization behavior lens, even studies that do set out to more narrowly investigate escalation of funding among elected members of a legislative body, understandably, draw on the established catalogue of, almost standard, survey instruments from that organizational behavior literature (e.g. Sheffer et al., 2017), which will invariably frame the decision environment as an *investment decision*. Linde & Vis (2016) conduct an experiment on a sample of Dutch MPs and do present them with some well-known politician-specific decision scenarios (e.g. the asian disease scenario), however the experimental vignettes they employ are more narrowly designed to testing hypotheses on risk behavior of politicians, derived from prospect theory (Kahneman & Tversky, 1979). As will be discussed later, escalation of commitment is also usually conceptualized as decision making under conditions of risk and/or uncertainty. However in this case, the transposition to escalation of commitment is not straightforward, because Linde & Vis (2016) ask politicians to chose among different courses of action that have probabilistic outcomes, but the probabilities are known/given to the politicians. This a substantially different scenario from escalation of commitment,which would probe politicians' behavior in scenarios in which they must decide if they should abandon or maintain a course of action, after they are presented with information that the course is suboptimal. Conversely, escalation of commitment is regularly analyzed within a prospect theory framework, i.e. conceptualized as a decision among risky alternatives, but usually in studies with a non-politician population and sample (e.g. Schoorman et al., 1994).. There currently exists a politician-shaped gap in the literature on escalation of commitment, in which escalation of commitment among politicians in its own right is left insufficiently addressed. More precisely, there has been no synthesis of the following elements: (1) a (sufficiently large) sample of elected legislator and (2) a targeted theoretical framework of politician behavior and (3) instruments that take into account the idiosyncrasy of legislators' decision environment. I argue this will be the value-added contribution of this paper.

In the sections that follow, I will layout a the latter two elements. I will first develop a theoretical framework of legislator decision making under risk. For this, I will assume that politicians do not seek monetary return on investment, but rather electoral return on investment. Proceeding from this assumption, I will present a baseline model of escalation commitment based on standard economic model of decision making under conditions of uncertainty, modified and adapted to the case of reelection-seeking politicians. In a next step, I will further modify the baseline economic model to take into account loss-aversion and the endowment-effect, as predicted by prospect theory. I will first show, that under standard economic models of decision under risk, politicians are expected to de-escalate their commitment in the face of negative outcomes, when they expect a high probability of losing a large number of votes as a result of maintaining the course, and vice versa for when they only expect a low probability of losing a small number of votes. I will then show that, taking into account loss aversion and the endowment effect, this expectation is reversed. More specifically, I expect that politicians, when presented with information that a course of action they have taken has negative outcomes, and they believe that maintaining the course is likely to cost them a large number of votes, they will tend to escalate their commitment more than when they believe maintaining the course carries a low probability of losing voters. Finally, I

develop an empirical strategy to test my hypotheses, proposing a new survey instrument that is more tailored to the research question.

Theory, literature, and hypotheses

To give a summary description of the seminal experiment conducted by Staw (1976): Subjects were presented with a hypothetical scenario, wherein they were made an officer of a technology company tasked with, in a first stage, allocating research and development funds to *either* one of two company divisions and, in a second stage (5 years later in the hypothetical scenario), to evaluate their first-stage decision and allocate further research and development funds, freely distributable among the two divisions. In the second stage some subjects were informed that the division they had chosen in the first stage was underperforming, others that their chosen division performed well. Though not stated explicitly, but presumably drawing from classical principles of economic decision making, the author states that "intuitively, one would expect individuals to reverse decisions or to change behaviors which results in negative consequences" (Staw, 1976, p. 27). However, he finds, when subjects were informed in the second stage that the department they had chosen in the first stage performed worse than the alternative, those subjects, on average, chose to allocate a sum 25% higher to their first-stage choice compared to subjects that were informed their first-stage choice had outperformed the alternative. The finding is notable since, prima facia, this behavior appears incongruent with basic, both empirical and normative, principles of classical economic theories of decision making (e.g. Marshall, 2013), in particular marginal thinking, i.e. individuals evaluate decision alternatives on the *change in utility* resulting from that decision versus the additional cost incurred – previous investment decisions should (empirically and normatively) therefore not affect future decisions. Subjects who received negative feedback in the Staw (1976) experiment violated this principle in the second stage, as the amount invested in the second stage as they did not change course, even though the additional utility gained from investing more funding in the other corporate division would have been greater than sticking with the division chosen at the first stage.

Since this seminal contribution, a robust body of research has emerged,replicating and expanding on this behavioral phenomenon, wherein individual decision makers continue a course of action in the face of negative outcomes (see Sleesman et al., 2012, for an overview and meta-analysis). Maintaining a course of action in the face of negative outcomes conceivably conceptually extends to many kinds of decisions situations, including interpersonal relationships (see e.g. Olivola, 2018; Rego et al., 2016). Organizational behavior researchers, psychologist, economists and political scientist, are primarily interested in the phenomenon where it clashes with the aforementioned basic expectations and intuitions of classical economic theory. As a consequence, many studies on the issue employ a similar setup to the one the seminal paper by Staw (1976), and put respondents in the position of a manager, or other economic agents, who is tasked by upper management with making a decision on whether to maintain a particular course of action, like making a R&D investment (the basic Staw, 1976 case, e.g. Berg et al., 2007), reviewing a hiring decision (also know as the *Heeley's Stores case*, e.g. Bazerman et al., 1982). Alternatively, other economic activities like oil-well-exploration (Garland et al., 1990) and inventing (Åstebro et al., 2007) are also employed. As I argued in the introduction, however, politicians are not investors, managers or CEOs, therefore, to adequately address escalation of commitment, it is necessary to adapt the theoretical framework and instrument employed to the context of elected legislators. One such attempt is undertaken by Sheffer et al. (2017). They present a sample of Belgian, Canadian and

Israeli lawmakers ($N = 382$), as well as members of the general population in those countries, with the following vignette:

> Please consider the following scenario: five years ago the government invested $500 million in a small business loan program to help those businesses create more jobs a program that was projected to fully return the investment. The program is now about to end, and it turns out that after five years, the return has been only [$300 / $450] million. That is, [$200 / $50] million less than what was originally projected. The government department running the program now asks to extend the program in a year and invest another $100 million in government funds, in order to assist business facing difficulties returning their loans. The department officials project that by the end of the year, these measures will recover the remainder of the original investment [$200 $50] million), plus return the additional $100 million asked for (see online supplemental material for Sheffer et al., 2017, p. 16).

and found that lawmakers in Belgium and Canada, but not Israel, were significantly more likely to escalate their commitment and invest the additional $100 million, and the difference is statistically significant across all countries pooled together. While this vignette is clearly more representative of a legislator's decision environment, it still envisions politicians as investors, who seek to quickly recoup capital expenditures, even though, I argue, there is no good a priori reason to believe politicians conceptualize their decisions this way, and there is good reason to believe, they do not. To wit, consider the following case: Decades after a strict drug enforcement policy is introduced, a report on the policy's impact is commissioned by the legislature and it becomes clear the policy was not effective in reducing drug related health issues and crime, and may additionally have exacerbated other social issues like racial inequality. The release of the report becomes headline news and there is major political pressure on the legislative body to act. Stated this way, it is not clear why politicians would conceptualize the country's drug policy as an underperforming investment. May contention is not that is unconscionable that any politician would ever conceptualize such a decisions in terms of investment, but by the same token I argue it is implausible to assume this be the default. For the sake of argument, one could imagine a headline along the lines of: *Country has spent over a trillion dollars fighting the war on drugs – 50 years later, drug use is climbing again* (see e.g. Lee, 2021), emphasizing the sunk cost of the investment and the lack of return, presumably increasing the salience of the idea of investment and return in the minds of politicians. But a politician from a conservative district may still not be sensitive to the news of the negative return on investment, perhaps because a hard on crime and drugs stance has been a successful electoral strategy in their district.

Since this paper is motivated by the limitations of existing approaches in explaining escalation of commitment among legislators, adopting a more appropriate theoretical framework of politician behavior is crucial. While those limitations of the existing literature specifically relate to conceptualizing politicians as managers and investors, in a first step I will adopt a view of politicians as economic agents in broader sense. By that I mean, I will first develop a baseline economic model of legislator behavior, wherein politicians are assumed to be utility maximizers, but unlike investors an managers, their utility is not derived from material returns, but, because they are politicians, from votes. Assuming politicians are, first and foremost, reelection seeking is a parsimonious starting point. Since politicians, like managers, investors, etc., often allocate funds for projects whose outcomes are not fully certain and foreseeable at time of investment, e.g. whether a large construction project will be completed in-time and in-budget, or whether a pension reform will be able ensure an adequate standard of living to retirees in ten years time, it will, furthermore, be efficient to look towards the well-developed canon of economic theories of decision making for a baseline of decision making *under conditions of uncertainty*, which much of the existing research, both economic and psychological, also in some way references. It should be noted, due to its apparent violation of classical economic theories of decision making, escalation of commitment has

been referred to as "irrational" economic behavior by some researchers of the phenomenon (Northcraft & Neale, 1986, p. 349; Åstebro et al., 2007, p. 254), again others refer only specifically to sunk cost effects as irrational (Arkes & Blumer, 1985; Garland & Newport, 1991; Schmidt & Calantone, 2002), both implying that economic theory alone cannot address the phenomenon. In any case, the standard textbook economic decision making paradigm under uncertainty (e.g. Mas-Colell et al., 1995), namely Subjective Expected Utility (SEU) (see Anscombe & Aumann, 1963; Savage, 1972), does allow for, and has been used to model escalation of commitment in different ways (see Sleesman et al., 2012). That is to say, Subjective Expected Utility Theory does not do away with marginalism, rendering sunk cost effects rational, but it takes into account individuals' *subjective* beliefs about an uncertain future. SEU has many critics and empirical support is mixed (see Allais, 1953; Ellsberg, 1961; Friedman et al., 2014; Tversky, 1975), still, it will serve a springboard role for further theoretical discussion. To wit, in what follows, decision making under uncertainty according to SEU will be illustrated in some detail for the idiosyncratic types of decisions politicians face, in order to precisely locate breakpoints of the theory as they relate to other competing or complementary theories and formulating hypotheses for escalation of commitment dynamics for politicians.

Decision under uncertainty

A decision under uncertainty, in a broader sense, is any decision in which the outcome is not deterministic, i.e. there is a stochastically determined distribution of possible outcomes (Edwards, 1954). Some economists then further differentiate uncertain from risky decisions (see Edwards, 1954, pp. 390-391), wherein for risky decisions that distribution is, in principle, observable, i.e. the odds of the possible outcomes can be straightforwardly computed, e.g. a game of roulette, and for uncertain decisions that distribution is not objectively knowable, e.g. horse race betting, or "horse lottery" Anscombe & Aumann (1963, p. 200). More often than not, politicians (like managers) must make decisions under uncertainty in the stricter sense. According to Subjective Expected Utility, under conditions of uncertainty, individuals envision the possible outcomes of their decision situation, or "states of the world" (Savage, 1972, p. 13), to which they assign a likelihood of obtaining, or "personal probability" (Savage, 1972, p. 30). Individuals in a decisions situation choose among "acts" (see Savage, 1972, p. 14), or courses of action, which for each possible state of the world are associated with some payoff. The total utility of an act is given by the cumulative utility of each state of the world, weighted by its subjective probability to obtain, and decision makers choose that act with the greatest expected utility. Below follows a sketch of the two idiosyncratic decision scenarios politicians face mentioned before under SEU[1]. In keeping with the economic paradigm, for the purpose of the following vignettes, assume voters vote purely economically (e.g. Meltzer & Richard, 1981). Payoffs can then be conceptualized in terms of votes gained or lost by an act.

In a first scenario, assume midway through construction, the national railway operator reports that the high-speed rail line currently being built will be delayed and over-budget. This first scenario is not dissimilar to the Staw (1976) experiment. In a first stage, legislators are initially asked to approve the funding and timeline of the rail project. Though there are technically infinite possible outcomes (states s of the world), for example sake assume legislators envision four states of the world: The project is (1) completed on-time and in-budget, (2) completed a little over-budget and late, (3) severely over-budget

[1]In the following section I will employ some mathematical notation for purpose of illustration and conciseness. This paper does not intend to give a full formal logical treatise of SEU, within this limited scope, the notation will not be rigorous or following any particular convention, rather, where appropriate, it will take inspiration from Anscombe & Aumann (1963) and Savage (1972)

and very late, (4) never completed. Legislators assign each state a likelihood of occurring (personal/ subjective probability p), e.g. $(60\%, 20\%, 15\%, 5\%)$ in order, where the probabilities sum up to 100%. Legislators can choose between two acts a: Assume they choose between voting in favor appropriating the funds (act a_f) and voting against (act a_g). Each act is associated with some value or payoff A, with A_f the votes gained by voting for the project, if act a_f is chosen, and A_g the votes gained if act a_g is chosen, i.e. the legislator votes against the project. Finally, each payoff is assigned a utility $u(A_f)$ and $u(A_g)$, according to some utility function u that is idiosyncratic to the legislator. A utility function u separate from the value A is used to allow for diminishing marginal utility (see Edwards, 1954; Savage, 1972). Put briefly, in a 100,000 voter constituency the 50,001st vote gained is more important than the 99,999th. The total payoff fore each state is given by Table 1. For instance, under purely economic voting, supporters of act a_f, approving the project, may include land lords in the cities, which the the new rail line will connect, as they expect an increase in housing demand. Supporters of voting against the project (a_g), may include airline executives, who expect a new long-distance rail service to cut into their bottom line. In those states, in which the rail project is chosen, but is delayed and over-budget, the legislator is additionally penalized (pen.) with losing voters for incompetence, anticipated increased taxes to fund the cost overrun, etc. The penalty is accordingly taken into account as additional votes for legislators, who voted against the project (arithmetically expressed as fewer voters lost). Finally, to choose among the alternatives, legislators will/should calculate the expected utility of each act, so in this case by $E(u(a)) = 0.6 * u(s_{1a}) + 0.2 * u(s_{2a}) + 0.15 * u(s_{3a}) + 0.05 * u(s_{4a})$, substituting a for the respective act, and choose the act with the higher expected utility. In the second stage, with the news of the delay and cost overrun, the possible states of the world may now include: The project will be (1) completed with the specified delay and cost increase, (2) further delayed and over-budget, and (3) never completed, and a possible distribution of subjective probabilities for one legislator may be $(30\%, 60\%, 10\%)$, in order, with acts a_{ff} voting to continue the funding and a_{gg} voting to stop the project (see Table 2). Expected utility is calculated as before. Crucially, at this stage SEU does not strictly necessitate that the project be abandoned.

TABLE 1 Decision scenario 1: Stage 1

s	p	Payoff act a_f	Payoff act a_g
s_1	.6	$A_f - A_g$	$A_g - A_f$
s_2	.2	$A_f - (A_g + \text{pen.})$	$A_g - (A_f - \text{pen.})$
s_3	.15	$A_f - (A_g + \text{pen.})$	$A_g - (A_f - \text{pen.})$
s_4	.05	$-\left(A_f + A_g\right)$	A_g

TABLE 2 Decision scenario: Stage 2

s	p	Payoff act a_{ff}	Payoff act a_{gg}
s_1	.3	$A_{ff} - A_{gg}$	$A_{gg} - A_{ff}$
s_2	.6	$A_{ff} - (A_{gg} + \text{pen.})$	$A_{gg} - (A_{ff} - \text{pen.})$
s_3	.1	$-\left(A_{ff} + A_{gg}\right)$	A_{gg}

Now, for a second scenario: the national audit authority releases a report, forecasting that spending on pensions will increase by 100% in 5 years time, if current payment levels are maintained and no action is taken. Uncertainty arises from the fact that the audit authority's report is a forecast. Their projections could, therefore, be accurate (s_1), significantly overestimated (s_2), e.g. due to exogenous shocks, higher than anticipated immigration, a pandemic, etc., or significantly underestimated (s_3), e.g. due to overly optimistic assumptions in the aforementioned categories. A legislator may put chances at $(50\%, 30\%, 30\%)$, in order. Assuming government revenue stays constant for 5 years (inflation adjusted) and a balanced budget, in the face of the report politicians may find themselves choosing among these acts (for simplicity sake, only 2 acts are presented): Maintain current payment levels and cut other programs (a_s), or reduce payment levels (a_c) In this simple case, the payoff matrix is the same as Fo this decision scenario, assume further that the three relevant economic classes are retirees, those at or

around retirement age, who have not yet retired, and the young, far away from retirement. It is beyond the scope of this paper to develop a full matrix for all the payoffs, Table 3 gives a sketch of a conceivable electoral payoff structure, given the previous assumptions.

TABLE 3 Decision scenario 2

s	p	Payoff act a_s	Payoff act a_c
s_1	.3	$A_s - A_c$	$A_c - A_s$
s_2	.6	$A_s - (A_c + \text{pen.})$	$A_c - (A_s - \text{pen.})$
s_3	.1	$-(A_s + A_c)$	A_c

Without developing the a full formal model, it is clear that under SEU and some simple rationalist assumptions of politicians' behavior, personal probability and the size of the vote penalty legislators assign each state is decisive for whether politicians choose to escalate commitment.

Research Design

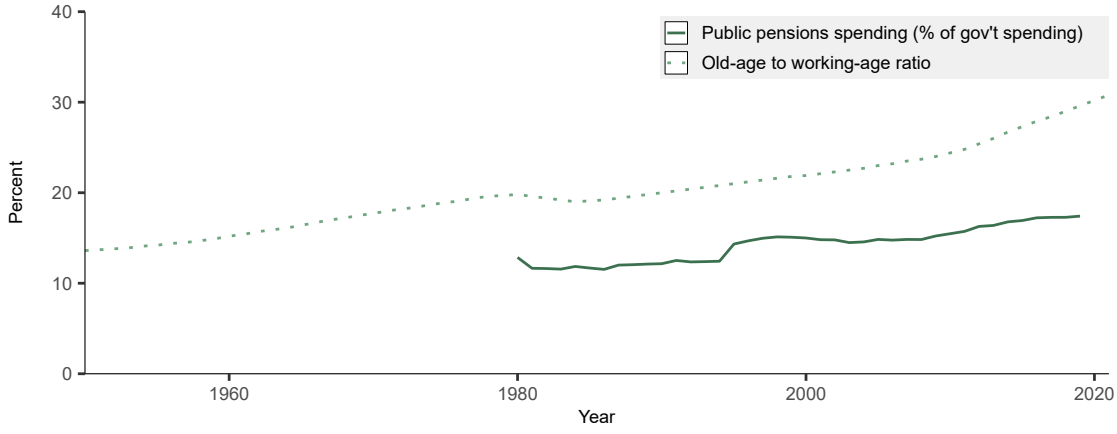
Design: Survey experiment

Case selection:

Survey vignettes

Appendix

FIGURE 1 A nice graphic (OECD, 2023; UN Department of Economic and Social Affairs, 2024)



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