

Common Good Institutions, Identity in the Workplace, and Value Dynamics

Athias, Laure

University of Lausanne

30 March 2024

Online at https://mpra.ub.uni-muenchen.de/120588/MPRA Paper No. 120588, posted 06 Apr 2024 14:20 UTC

Common Good Institutions, Identity in the Workplace, and Value Dynamics*

Laure Athias[†]
March 30, 2024

Abstract

The theory of social choice stresses that the general interest determined through the aggregation of individual preferences implies interpersonal utility comparisons and hence necessarily a notion of common good beyond individual preferences. The pursuit of the common good falls to all services of the state and drives their individual decisions. Economic model of identity in the workplace predicts that outsider public sector workers may internalize the common good value to minimize cognitive dissonance. To test this hypothesis, I study the dynamics of preferences for workers in public versus private sector jobs. For identification, I use panel data and exploit within-individual variations, alleviating endogeneity concern related to selection into occupation. Further addressing the dynamic omitted variable concern, I find that switching into the public sector increases by one third the likelihood of exhibiting the common good value while having a negative effect on public trust and left-wing ideology. By contrast, switching into the private sector crowds out common good value. Examining causal mechanisms, I show that the public sector effect is most pronounced for workers with higher dissonance costs. Furthermore, I find that workers adopting the common good value in the workplace adopt a general behavior consistent with active participation in the public realm, pointing to value internalization. Overall, this paper provides empirical evidence of a rich and rapid, dynamic interaction between individual preferences and economic institutions.

Keywords: Value dynamics; Identity in the workplace; Cognitive dissonance; Common good; State; Public versus private sector; Crowding out effect; Workplace socialization; Institutional narrative.

^{*}I thank Yanos Zylberberg, Mathias Thoenig, Robert Gibbons, and Olivier Schöni for very helpful comments.

 $^{^\}dagger Laure$ Athias, University of Lausanne, Quartier Unil-Mouline, CH-1015 Lausanne, Switzerland. Email: laure.athias@unil.ch. Phone: +41 21 692 68 21.

"This is publick spirit; which contains in it every laudable passion, and takes in parents, kindred, friends, neighbours, and every thing dear to mankind; it is the highest virtue, and contains in it almost all others; steadfastness to good purposes, fidelity to one's trust, resolution in difficulties, defiance of dangers, contempt of death, and impartial benevolence to all mankind. It is a passion to promote universal good, with personal pain, loss, and peril: it is one Man's care for many, and the concern of every man for all."

Cato's Letter No. 35 (1721) by Thomas Gordon, "Of Publick Spirit"

"The commonwealth seems to me to be a society of men constituted only for the procuring, preserving, and advancing their own civil interests. Civil interests I call life, liberty, health, and indolency of body; and the possession of outward things, such as money, lands, houses, furniture, and the like."

A Letter Concerning Toleration by John Locke (1689)

1 Introduction

In the face of multiple global challenges, the pursuit of the common good has become an essential objective. To achieve it, tools that have been implemented so far are predominantly related to price incentives. While there is an emerging recognition in the economics literature of the need for complete societal change (Besley and Persson (2023)), in this paper I pay attention to the dynamics of values and investigate whether economic institutions could induce a shift in individual preferences to favor the common good. Specifically, I study the dynamics of preferences for workers in public versus private sector jobs. My aim is to explore the hypothesis that the public sector could make its workers internalize the common good value through its intrinsic institutional goal, that is, the pursuit of the common good beyond individual preferences.

My hypothesis builds on the insight from Akerlof and Kranton (2005) that, beyond the wage, identity is a component of a worker's utility. Organizational goals carry values, workers have also their own values, hence they can be either insiders (they identify with the firm) or outsiders (they do not identify with the firm). In this framework, insider workers select organizations that share their values. But outsider workers may also change on their own their identity and adopt their organization's value to minimize cognitive dissonance. The divide between the public and private sectors in their organizational goal has long been and is still among the most hotly debated issues. Advocates of the divide think of governments as essentially benevolent maximizers of social welfare motivated by the pursuit of the general interest, while the private realm is concerned with particular interests. Opponents of the divide consider governments as self-interested revenue maximizers¹. However, the theory of social choice stresses that the only way to determine the general interest through the aggregation of individual preferences is to allow for interpersonal utility comparisons and hence necessarily a notion of common good beyond individual preferences. Thus, technically, regardless the state's objective function, the pursuit of the common good falls to its services and drives the regulation they enact, their individual decisions and public services administration. My hypothesis is then that

¹As suggested by John Locke, each state seems to be captured by a group of men serving their own interests. See also Brennan and Buchanan (1980)'s description of governments as revenue-maximizing Leviathans, as well as Tilly (1975), Tilly (1985) and North (1990) on states serving the objectives of elites.

the intrinsic public-private differential in institutional goal as regards the pursuit of the common good beyond individual preferences leads to a public-private differential in workers' common good value through the selection and, most importantly, change in identity mechanisms.

The data used in this paper come from the Swiss Household Panel Survey (SHPS), a panel survey interviewing all household members of a random sample of around 5000 households, covering more than 12,000 individuals in Switzerland since 1999. These data are unique in four ways. First, they include a precise measure of individuals' preference for the common good. While at the institutional level the pursuit of the common good implies the primacy of the common good over individual preferences, at the individual level the preference for the common good measures the propensity to prioritize universalism over self-interests, with universalism referring to the propensity to expend a given budget more uniformly across people that are close to or more socially distant from them (Enke et al. (2022a) and Enke et al. (2022b)). The surveys include a precise measure of individuals' common good preference through the following question: "Are you in favour of Switzerland offering foreigners the same opportunities as those offered to Swiss citizens, or in favour of Switzerland offering Swiss citizens better opportunities?". For Swiss respondents, there is a clear choice between one pie to share equally with socially distant people (foreigners) but with smaller pieces for themselves (hence prioritizing universalism over self-interests), and one pie to share unequally with socially distant people with bigger pieces for themselves (hence prioritizing self-interests over universalism)². This question hence explicitly elicits the individual's disposition to prioritize universalism over self-interests, that is, her preference for the common good. Second, the SHPS also provides information on respondents' occupational choice between institutional (public versus private) sectors as well as on their sectors of activity. Importantly, the 1999 to 2003 surveys include information on the individual's type of public organization, which allows introducing public sector-type controls. Third, these individual-level panel data allow to exploit longitudinal variation within individuals to isolate the impact of the institutional sector. The within estimator strongly alleviates the selection into occupation concern. However, if workers choose the time spent in an institutional sector as a function of their own dynamics in preferences, then workers who have a shock to their common good value may switch sector. I develop the strategy to address this dynamic omitted variable concern further below. Fourth, there is a key advantage of exploiting Swiss data as regards the high permeability between the public and private sectors in Switzerland due to similarity in hiring procedure and requirements, income levels and workers' status³. Another specificity of the Swiss setting comes from its federal structure with most policies and markets regulation set at the state (cantonal) level. As the SHPS also provides information on respondents' commune of residence, it is possible to control for state-specific time dummies to account for time-varying confounders that operate at the local (state)

²Another way to comprehend this question is to consider universalism boundaries. The question then captures the individual's disposition to extend the boundaries of her universalism at the price of individual losses.

³The term 'open' civil service is used when there is no specific competitive exam to enter the civil service (Audier and Bacache-Beauvallet (2007)). Heterogeneity of workers' profiles within the public sector is consequently more important. In the particular case of Switzerland, Emery et al. (2014) underline that, due to its open civil service, public sector workers from the private sector are quite frequent at any hierarchical level. Guido Schilling AG (2023) finds that in a sample of 1045 top executives in the public sector (at the federal and cantonal levels), one third has at least one experience in the private sector. In addition, the civil servant status has been abolished in Switzerland in the 1990's in all states except two.

level (e.g. economic distress, which drives both the odds of working in the public sector and preferences). I find that the likelihood to exhibit the preference for the common good increases when the same individuals work in the public rather than private (for-profit and nonprofit) sector, and the effect size is large: the estimated causal effect of switching into the public sector is about 30%. Results also indicate that workers lose this preference when they quit the public sector for the private sector, unveiling a crowding out effect of the private sector. Overall, these findings are consistent with the fact that the primacy of the common good over individual interests is intrinsically bound up with the public sector, defining the identity of public sector workers.

An alternative explanation for my finding is that working in the public sector drives a change in workers' other preferences, potentially correlated with the preference for the common good. For example, workers in the public sector may become more inequality averse or more benevolent and therefore more in favor of the common good. In the same way, workers in the public sector may acquire a preference for big governments and then a preference for the common good as a means of increasing governments size. Alternatively, working in the public sector may make workers have higher confidence in the state or in political institutions and hence in its capacity to pursue the common good. Therefore, I run the same fixed effect estimations but on workers' attitudes towards benevolence (through preferences over expenditure on welfare), inequality aversion (through preferences on taxes on high incomes), state size (through ideological preferences, "left" versus "right"), and public trust (through reported level of trust in the federal government and of satisfaction with democracy). I find that working in the public sector negatively affects these preferences.

After establishing that working in the public sector turns individuals into advocates of the common good, I turn to the task of distinguishing between channels of causality. One mechanism, which is the article's focus, is that the public sector fosters the congruence between institutional and workers' common good value through cognitive dissonance reduction, that is, through a change in identity. However, there is also a second potential channel. Because the public sector has a specific institutional setup (e.g. incentives and constraints), its workers may acquire – but not internalize – the preference for the common good.

I undertake four exercises to identify the relative importance of these channels. First, I investigate how the estimated causal effect of the public sector changes when controlling for specific incentives and constraints, namely extrinsic incentives (through individual's yearly income) and social incentives (through reported level of satisfaction with work colleagues). I find that the treatment effect increases instead of being attenuated with respect to the baseline counterpart and that the controls have a coefficient very close to zero. These estimation results are not consistent with a mediating effect of the public sector's specific institutional setup.

In the second and third exercises, rather than controlling for the specific public sector setup, I investigate whether the public sector effect varies with cognitive dissonance costs. Indeed, if the public sector effect on workers' common good value channels through workers' change in identity to reduce dissonance costs, its effect should be larger for workers facing higher dissonance costs. In the second strategy, I focus on workplace socialization (Schein (1965), Van Maanen and Schein (1979)) as a driver of cognitive dissonance costs through its impact on organizational goal salience at a given principal. Specifically, I exploit exogenous cultural shifters at the individual level of the share of co-workers for whom the salience of the public sector's common good pursuit is more important and

test whether the public sector's impact is stronger for workers with a larger share of such co-workers. To this aim, I build upon French history to argue that the perception of the state as advocate of the common good is particularly salient in the French culture. In particular, the actual French Constitution is both the result of the republican and universalist ideals of the French revolution as regards the primacy of the common good beyond individual preferences⁴ and state capture by the Council of State, who, to consolidate their legitimacy, appropriated public services under the Third Republic. Thus, France offers a particular case for Mukand and Rodrik (2018)'s model in which ideas and vested interests feed into each other and created a factual institutional narrative according to which the state is provided with some tutelary power in order to guarantee the common good. I also provide empirical evidence that there are spillover effects on French-speaking Swiss culture. I hypothesize then an increased public sector effect through workplace socialization at a given principal for workers with a larger share of French-speaking Swiss co-workers. This is exactly what I find.

In the third exercise, I build upon Athias and Ventelou (2024), who investigate heterogeneity in common good value, to identify the potential outsider workers in the public sector. In particular, they develop a survey-based measure of common good value, based on Enke et al. (2022b)'s survey-based measure of moral universalism, to which they associate in some items a personal cost. They find that, conditional on moral universalism, the college educated and the right-wingers exhibit less the common good value, that is, they prioritize less universalism over self-interests. More precisely, they find that the right-wingers systematically prioritize less universalism over self-interests but the college educated exhibit a domain-dependent common good value: they are disposed to prioritize universalism over self-interests when the money spent is in public services, such as in health services. Thus, while right-wingers are very likely to be outsider employee in the public sector, it is less clear for college educated insofar as they are able to exhibit common good identity in a specific context. I find that the public sector effect is indeed most pronounced for right wingers but there is no significant differential effect of the public sector for college educated individuals.

My final strategy considers behavioral outcomes. The dissonance reduction channel implies that the preference for the common good is internalized, that is, becomes generalized reason for behavior⁵. In particular, the pursuit of the common good has been associated with the existence of an active, public-spirited citizenry⁶ and with a denial that society should be composed of atomized individuals. I expect then individuals adopting the preference for the common good in the workplace to adopt active behavior in the public realm and to be more deeply embedded in social relationships. Using self-reports of public-spirited commitments and social behaviors, I find in the fixed effects regression with the sample of public sector workers that those acquiring the common good preference think they have a higher influence on government policy, are more likely to take part in

⁴ "The French Revolution changed subjects into citizens" Akerlof and Kranton (2000) p.727, that is, into members of the political body able to transcend their particularities and interests in order to determine the interest of the people as a whole.

⁵For evidence of preference internalization explaining behaviors in novel situations, see Athias and Macina (2022) with respect to the impact of ancestor's exposure to the slave trade on descendants contemporary behavioral health outcomes through internalization of mistrust.

⁶For instance, Adam Smith linked common good value to citizenry in *The Theory of Moral Sentiments*: "Man [...] ought to regard himself, not as something separated and detached, but as a citizen of the world, a member of the vast commonwealth of nature. To the interest of this great community, he ought at all times to be willing that his own little interest should be sacrificed." Smith (1790), p. 123.

demonstrations and strikes but less likely to have voluntary activities in an association. In terms of social networks, they meet more frequently their friends and feel less lonely but they are less satisfied with their personal relationships. In terms of global satisfaction, they are more satisfied with life but less with themselves. These results point to value internalization, that is, public sector workers have internalized the common good value, taking on the status of general motive or constraint on behavior.

All in all, this paper shows that states are the only possible common good institutions, that is, institutions whose goal is to pursue the common good beyond individual interests, and as such they may induce a rapid shift in common good value of public employees searching for identification with their organization to minimize cognitive dissonance. Evidence suggests that public sector workers further transmit this value within the society.

The causal identification challenge lies in the potential dynamic omitted variation that explains why a worker switches sector. If workers choose the time spent in an institutional sector as a function of their own dynamics in values, then workers who have a positive shock to their common good value may switch to the public sector. One way of dealing with this issue is to investigate pre-existing trends in common good value of switchers, comparing switchers' initial common good value (before they switch) with the one of stayers in the same sector. I do find that switchers' likelihood to exhibit the common good value before they switch is significantly higher from the stayers' one when they switch from the private to the public sector. I further build upon the existing theoretical (see Francois (2003)) and empirical (see Gregg et al. (2011)) literature that formalizes and finds that agents who have a civic-minded interest in service and consider the level or quality of service important self-select into caring services (defined as health, education and social care; HES hereafter), which are delivered by both the public and private sectors but more likely by the public sector. I should then observe that the self-selection mechanism based on common good value is at the service-type level rather than at the public sector level. This is exactly what I find. It is then possible to address the dynamic omitted variable concern in the fixed effects estimation by considering the public sector effect for workers in non-HES industries. I find that the estimated causal effect of working in the public sector on the likelihood to exhibit the common good value increases from 20% to 30%. This increase suggests that individuals who self-select into the public sector for matching on common good value lose their value once in the public sector, which could be explained by cognitive dissonance: workers who believe that public sector employment should be common-good based suffer a loss in utility from being employed in an environment where they are monitored and/or rewarded based on other output, and then decide to not hold this value anymore to reduce dissonance costs.

This paper contributes to several strands of the literature. First, this work speaks to the literature on states. While the literature has largely highlighted that for much of history states have served the objectives of elites (e.g. Tilly (1975), Tilly (1985) and North (1990)), or have behaved as Leviathans (e.g. Brennan and Buchanan (1980)), or are mere bureaucracies (e.g. Bowles (1998)) or substitutes to trust (Aghion et al. (2010)), this paper stresses that states are common good institutions (as in Dittmar and Meisenzahl (2020)), and by definition the only possible ones as for the primacy of the common good over individual interests. Furthermore, since preferences are endogenous, in particular due to cognitive dissonance, states generate common good value – instead of being a substitute to it. Paradoxically enough, this paper further unveils that state capture does not have only a "dark side" (see Slinko et al. (2004) for associated economic outcomes), unintended

desirable outcomes are possible if associated with public-spirited ideals, as illustrated by the French state capture in association with Republican ideals. This paper hence also speaks to studies on the structure and consequences of institutional narratives (Mukand and Rodrik (2018), Shiller (2017), Cantoni et al. (2017), Bénabou et al. (2018), Akerlof and Snower (2016), Esposito et al. (2023)). Finally, this paper unveils how Acemoglu and Robinson (2022)' "Shackled Leviathan" may emerge. State's pursuit of the general interest necessarily implies the pursuit of the common good beyond individual preferences, that is, some state's tutelary powers. However, this paper shows that this state's role also generates active, public-spirited citizenry, leading to a balance between the state's and society's capacities, that is, to a Shackled Leviathan: "a simultaneously powerful state and still accountable and responsive to society" (Acemoglu and Robinson (2022) p.324).

Second, this paper is inspired by the literature on identity in economics (Akerlof and Kranton (2000), Akerlof and Kranton (2010), Bénabou and Tirole (2011), Kranton (2016)) and relates more specifically to the literature on the importance of values and identity in the workplace (Akerlof and Kranton (2005)). It is the first paper to identify a causal effect of an organizational goal on workers' value – and general behavior – and to show that the channel of causality is dissonance reduction, hence contributing to the literature on the consequences of cognitive dissonance in economics (Hirschman (1965), Akerlof and Dickens (1982), Konow (2000), Bénabou and Tirole (2006)). In particular, as identity in the public sector is equated to the ideal of prioritizing the common good over individual interests, identification with the organization leads workers to self-select into the public sector based on their common good value. But the drive for self-consistency leads public employee with lower identification to quite rapidly change their identity and become in favor of the common good, and to behave accordingly. Alternatively stated, since the choice to work in the public sector has already been made, reduction of dissonance can be achieved by changing one's values in the direction of greater harmony with the organizational goal, so that value change is a consequence of behavioral change, rather than its precondition. To Akerlof and Kranton (2005)'s model, this paper suggests that dissonance costs could be independent of the principal and function of workplace socialization. It is particularly the case for the public sector insofar as the pursuit of the common good is intrinsic to it. An implication of this result is that organizational values may persist over time even if they are not shared by the principal, which might impede changes in organizational goals desired by the principal and create tension in identity between the previous and new values. This echoes the Weberian view of social order constructed at the individual level through the meaning which individuals attribute to their actions taking account of the behavior of others (Weber (1968)). Furthermore, states as common good institutions and workers identification with this institutional goal even outside mission-oriented services points specifically to common-good motivation – rather than mission-oriented motivation (Rose-Ackerman (1996), Francois (2000), Francois (2003), Besley and Ghatak (2005)) – as the defining feature of public sector workers' motivation, further distinguishing the public sector from the private nonprofit sector. Therefore, it departs from this literature by unveiling the importance to use an identity-oriented incentive scheme, that is, to combine incentives with moral messages centred on the pursuit of the common good, exploiting complementarities between the two (Kranton (2019)).

Third, my research contributes to the literature on the impact of economic institutions on the formation and dynamics of values (Bowles (1998), Alesina and Fuchs-Schündeln (2007), Aghion et al. (2010), Di Tella et al. (2012), Maystre et al. (2014), Davies (2023)). This paper underlines that economic institutions differ in terms of organizational goals

and therefore their impact on individual preferences in the whole society may channel through the workplace. Highly importantly, this paper shows that the feedback effect is of important size and above all not slow (as in Alesina and Fuchs-Schündeln (2007)) but quite rapid. To Bisin and Verdier (2001), my work unveils potential effects of market versus public institutions on cultural evolution, which might explain the different equilibria observed across countries with different incidence of the public sector. It also suggests the peculiar importance of public employee as horizontal vector of value transmission. Overall, my research participates in rebooting welfare economics (Atkinson (2001), Coyle et al. (2023)) as it unveils where the motivation, value and preference essential for society's survival come from. It entails therefore important normative implications while mitigating the standard equity-efficiency tradeoff insofar as identification with the pursuit of the common good may increase public sector's cost efficiency (see Athias and Wicht (Forthcoming) for first empirical evidence).

Finally, my contribution can also be situated relative to the growing economics literature that studies the determinants and consequences of moral boundaries (Ashraf et al. (2020), Enke (Forthcoming) for a review). This research unveils the importance of a new value, the common good value, which corresponds to the prioritization of moral universalism (Enke et al. (2022a), Enke et al. (2022b)) over self-interests (Athias and Ventelou (2024)), to explain economic and political behaviors. Furthermore, in contrast to those studies in which moral values are considered as static features of individuals, I am concerned with the process through which values may develop within the same individual. I highlight the prominent role of the public sector to induce a shift in individual preferences from the primacy of self-interests towards the primacy of the common good.

The outline of the paper is as follows. In Section 2, I begin my analysis by first laying out the conceptual framework. I discuss the economic theoretical literature on the general interest determination as well as on identity in the workplace. Section 3 discusses the empirical strategy. Section 4 contains details on the data, before reporting my estimates in Section 5. In Section 6, I examine specific mechanisms and test whether the public sector induces a change in workers' common good value through cognitive dissonance reduction. Section 7 provides evidence for the role of public sector workers in the transmission of common good value within the society and discusses the implications of the results in the context of the debates about public-sector reforms. Section 8 concludes.

2 Conceptual Framework

2.1 The state and the pursuit of the common good

In economics, the general interest is defined on the basis of the individual interests of the society. Even when there is a divergence between individual interests and the general interest, especially in the allocation of resources for public goods, education, health, and national defence, any allocation of resources is evaluated on the basis of all individual interests. The pareto-optimal allocation which maximizes the general interest is then obtained through the aggregation of all individual preferences on the allocation of resources. However, such an aggregation is faced with important difficulties (see Condorcet paradox and Arrow (1951)'s theorem) that the theory of social choice has attempted to solve (see Sen (1970)). Their conclusion is clear-cut: the only way to determine the general interest through the aggregation of individual preferences is to allow for interpersonal utility comparisons. Thus, the determination of the general interest depends in the end

on ethical general considerations: in which kind of society individuals want to live, should it be in terms of social justice, social cohesion, spatial or regional equality, environmental protection. Alternatively stated, the general interest cannot emerge uniquely from the consideration of individual preferences. It is necessarily the reflection of a level of societal justice, that is, of common good, which has nothing to do with individual preferences, and which is by definition pursued by the state⁷.

Furthermore, an important issue with this economics approach is related to the identification of the members of the society to be considered when determining the general interest. They could be not only the future generations but also, in a global interconnected world, people present in other societies⁸. None of these – geographically or time-related distant – people are present in the society in question to defend their interests while being affected by the pursuit of interests of its contemporary members. If contemporary citizens integrate the well-being of those distant people into their own well-being, then the general interest could be defined on the basis of individual preferences. In the opposite case, the general interest should not result from the aggregation of individual preferences. Tutelary powers could then be given to the state to achieve the general interest, that is, the state would be in charge of formulating and imposing this general interest on the whole society. If states are benevolent maximizers of social welfare, the general interest defined by these wise men could lead to the best. But if states are captured by a group of men pursuing their own interests, the tutelary powers given to them could lead to the worst, however under the constraint imposed by the Constitution⁹ and the control of active citizens.

Overall, the pursuit of the general interest is bound up with the state, and this general interest, even when we want it to be determined uniquely through the aggregation of individual preferences, implies common good considerations beyond individual preferences. An interesting question that emerges then is whether public sector workers, in charge of embodying and implementing this common good, could acquire and internalize the disposition to go beyond their particular interests to promote and prioritize the common good.

2.2 Public sector workers' identity

In their economic model of identity in the workplace, Akerlof and Kranton (2005) highlight that, beyond monetary incentives, identity¹⁰ is a fundamental source of motivation in organizations. In particular, they develop a principal-agent model in which workers have identities that lead them to be either insiders or outsiders according to whether they

⁷The private sector could also follow some general interest objectives, as reflected by the concepts of corporate social responsibility (CSR) or Benefit corporations (B-corp), but there is no primacy of the general interest over individual interests. Consequently, as Besley and Ghatak (2007) formally show, firms that use CSR will produce public goods at exactly the same level as predicted by the standard voluntary contribution equilibrium for public goods. Similarly, Dewatripont and Tirole (2022) show that corporate choices are more ethical than owners would wish if and only if agents enjoy rents.

⁸For instance, climate change is associated with death toll due to exposure to unprecedented heat predominantly in countries where emissions today are around half of the global average (Lenton et al. (2023)).

⁹Constitutions determine the general rules of functioning of the society as a society to ensure the preservation of the common good.

¹⁰The term identity corresponds to a person's self-image, ideals, values (Tabellini (2008)), commitments (Sen (1977)), moral preferences (Harsanyi (1982)), that constitute the moral motivations for behavior, that is, that guide behavior across situations.

identify with their organization¹¹. In their model, worker's identity affects the utility she gets from her job in two ways. First, a worker's identity determines the utility she gets from belonging to one of these two categories (insider or outsider). Second, a worker's identity determines whether she gains or loses in utility from behavior that conforms or deviates from the values for her category. For instance, a worker who identifies with being insider in her organization loses utility if her behavior differs from the organization's ideal. On the other hand, a worker who identifies with being outsider in her organization loses utility if her behavior conforms to the organization's ideal. Thus, the model predicts that not only a lower overall pay is needed for an insider to be willing to work, but also less monetary rewards are needed to induce an insider worker to take the activity that is in the organization's best interest. By contrast, a higher pay and more monetary rewards are needed to induce an outsider worker to work for and in the interests of the organization. Interestingly, in this model, outsider workers may become insiders through two channels. A first channel lies in firms' investment to change a worker's identity from an outsider to an insider, since the latter is associated with lower overall pay and less variation in wages. The second channel is internal to the individual. Outsider workers may change their identity on their own to minimize cognitive dissonance between their behavior in the workplace and values 12 .

The previous section demonstrates that even when the general interest is equated with the aggregation of individual preferences, there is still a notion of common good distinct from individual preferences that the public sector should embody. In other words, even with no willingness to emphasize the pursuit of the common good as institutional goal, this goal is intrinsic to the public sector. This common good is carried by all services of the state and drives the regulation they enact, their individual decisions and the way they administer public services. There is considerable evidence that public sector workers share a common moral motivation or identity that comes from the primacy of the common good over particular interests. In their pioneer work, Perry and Wise (1990) identify norm-based motives associated with public sector employee. In particular, building upon Lasson (1978)'s book Private Lives of Public Servants, they mention that one of the most commonly identified normative foundations for public employment is a desire to serve the general interest. They take the example from Lasson of the "physician who joined the Food and Drug Administration to protect the public from inadequately tested drugs and who provided the following reflection about his motivations: "I realize, intellectually, that I have accomplished far more in my years at Food and Drug than I could have in private practice. When I helped take 'MER/29' off the market I did more good than a life time of seeing individual patients" (Perry and Wise (1990), p. 369). Furthermore, Karl (1979) takes the example of Brownlow's career to highlight that public employee are

¹¹These two types of identity reflect the fact that people think of themselves in terms of social category, which is central in sociology and psychology.

¹²Cognitive dissonance theory, central in psychology, suggests that the drive for self-consistency can lead individuals to adjust on their own their values and hence social category to better match their behavior. This concept, first introduced by Festinger (1957), emphasized in Oxoby (2004), captures the fact that individuals seek to avoid the psychological burden (*i.e.* the cognitive dissonance costs) of having behavior dissonant with their social category. Festinger (1957, pp. 271–73) gives the following example of identity change subsequent to a change in behavior: "A worker in a factory, for example may be promoted to the job of foreman. Suddenly he finds himself giving orders instead of receiving them . . . these new actions will be dissonant in many instances with opinions and values which he acquired as a worker and still holds. In pursuit of dissonance reduction, one would expect this person to quite rapidly accept the opinions and values of other foreman, that is, opinions and values which are consonant with the things he now does." (as quoted in Bowles (1998), p. 81).

dedicated to the pursuit of the general interest over their self-interests¹³. In the same vein, Heckman et al. (1996) found that case workers in Job Training Partnership Act (JTPA) training centers were motivated to help the least well-off, even though this gave their center a worse placement record, and reduced the performance payments it received. Public administration scholars have hence created a specific term 'Public Service Motivation' to refer to "a general, altruistic motivation to serve the interests of a community of people, a state, a nation or humankind, ..." Rainey and Steinbauer (1999) (p. 20), even when doing so runs counter to self-interest¹⁴. Most importantly, Francois (2000) has formally shown that, even though outcome-oriented, this public service motivation can only occur in the public sector insofar as it is the only sector that can credibly commit not to make up for any shirking by adjusting other inputs¹⁵. Therefore, members of the public sector make an important distinction between insiders and outsiders, that is, between public sector workers and private sector workers. They have the ideal of how a public sector worker should behave, by exhibiting the "public spirit" in Thomas Gordon's words.

This distinction between public sector and private sector workers has been even more strengthened by the specific labour contract of public employee. Indeed, to provide the conditions for the fulfilment of the public sector's pursuit of the common good, a specific institutional setup has been implemented in most countries through the civil servant status. This status ensures stability and independence for public sector employees. Stability in order to guarantee the continuity of public sector services independently of macroe-conomic conditions. Independence in order to prevent public employee from being at the mercy of ideologies and capture going against public sector's pursuit of the common good. As a consequence, this specific status, in particular the associated job security and lack of incentives, explains why civil servants are considered as being lazy by the other workers (Wilson (1989), Delfgaauw and Dur (2008)). However, since the 1980's and the New Public Management reforms, this status has been reformed, even abolished in some countries, following the implementation of management and incentive practices from the private sector. Francois (2000) formalizes when such reforms can diminish employee effort based on public service motivation.

The identity and economics of organization model predicts that insider workers (who exhibit the preference for the common good) self-select into the public sector based on this ideal. The extant theoretical (see Francois (2003)) and empirical literature (see Gregg et al. (2011)) highlights that this selection mechanism is at work in caring services, defined as health, education and social services, in which service providing workers have a civic-minded interest in service and factor the value of the output they produce into the amount of effort that they put in.

By contrast, an outsider in the public sector is a worker who thinks that her decisions should be based solely on individual interests and arbitration between individual interests. In particular, Athias and Ventelou (2024) find that heterogeneity in common good value is significantly related to college education and political ideology. Specifically, college educated people and right-wingers exhibit less the common good value, hence are more likely to be the outsider workers in the public sector. However, once in the public sector,

¹³Brownlow himself is well-known for describing people working in the public administration as individuals with "a passion for anonymity". In the same vein, Mollé (2006) describes the bureaucratic ethic in the following way: "Detachment from any personal interest, self-denial, ideally announce the purity of those responsible for the management of public affairs." (Mollé (2006) p. 13)

¹⁴See Ritz et al. (2016) for a systematic literature review on evidence that such a motivation exists.

¹⁵Indeed, "the worker must believe that, were she not to provide the effort, the level of service would fall" (Francois (2000), p. 277).

outsider workers experience the institutional goal and may have to behave differently to embody this goal. In other words, they have to depart from the one price/efficiency criteria they are willing to consider to make their decisions to encompass multiple criteria ¹⁶. Furthermore, the Constitution as well as citizenry impose a constraint on outsider public sector workers not disposed to the primacy of the common good over individual interests. All this implies that outsider public employee may face a cognitive dissonance issue. The cognitive elements in dissonance here are the worker's behavior – pursuit of the common good – in the workplace, or her choice to work in the public sector for other reasons than its institutional ideal (for instance for better work-life balance), which is inconsistent with her values that she still holds. In pursuit of dissonance reduction, one would expect this person to quite rapidly change her identity and internalize the common good value, becoming generalized reason for behavior ¹⁷.

My analysis tests for this change in identity effect of the public sector, examining the dynamics of values for workers in public versus private sector jobs.

3 Empirical Design

My aim is to assess the impact of working in the public sector on the probability that an individual exhibits the common good value (CGV). Specifically, I look at what happens when individuals switch sectors, in particular from the private to the public sector.

3.1 Econometric equation

I estimate a fixed effects regression, controlling for individual fixed effects, where the sector effect is identified only from individuals who change sector. Hence, my generic approach consists of estimating the effect of the binary variable PublicSector (i.e. the coefficient β) using a linear probability model¹⁸ in the following econometric equation:

$$CGV_{it} = \beta \times PublicSector_{it} + X'_{it}\delta + \alpha_i + \epsilon_{it}. \tag{1}$$

The unit of observation is an individual $(i) \times \text{year}(t)$ cell, where α_i is a constant individual specific effect, the variable PublicSector is equal to 1 if the individual works in the public sector and 0 if the individual works in the private (both for-profit and nonprofit) sector, X_{it} is a vector of public sector-type controls (state dummies and federal-level dummy, capturing public sector specificities in terms of ideology, capture, or efficiency), time dummies, and state-specific time dummies to account for time-varying confounders that operate at the state level (e.g. economic distress, which drives both the odds of working in the public sector and individual preferences). The variable CGV is equal to 1 if the individual exhibits the common good value and 0 otherwise. I explain below how

¹⁶The literature in public procurement is in this respect very illustrative. Public procurement has been increasingly recommended as a crucial instrument to drive environmental and social change. Many related studies have then investigated the impact of the consideration of multiple criteria – which by definition increases the discretionary power of procuring authorities – instead of price-only criteria on various procurement outcomes. Recent findings point to the benefits of bureaucratic discretion and multiple criteria (Bosio et al. (2022), Bandiera et al. (2021), Coviello et al. (2018), Andreyanov et al. (2023), Athias and Fraga de Andrade (2024)).

¹⁷Note that alternatively, outsider workers could change jobs and switch from the public into the private sector depending on the importance of switching costs.

¹⁸The results using a logistic regression are similar but it does not allow to adjust standard errors for potential clustering.

each variable is constructed and provide the related estimation results. In the baseline analysis, standard errors are clustered at the individual level.

In Equation (1), the main estimation challenge relates to the endogenous nature of the institutional sector choice $PublicSector_{it}$. Balancing tests (Appendix B Table 10) quantitatively confirm that individuals working in the public sector are different from those working in the private sector. They are typically older, they have more children, they are more likely to be female, married, union member, to live in a urban area, and to be college educated. Importantly, these factors are also susceptible to correlating with CGV_{it} .

The within estimator alleviates this endogeneity concern and provides consistent estimates of β even with endogenous regressor PublicSector provided that PublicSector is correlated only with the time-invariant component of the error, α_i , and not with the time-varying component of the error, ϵ_{it} (that is, provided that the so-called parallel trend assumption holds). Thus, identification assumes that factors affecting selection into occupation exert a time-invariant influence on the outcome variable that can be filtered out by the battery of fixed effects at the estimation stage. However, if workers choose the time spent in an institutional sector as a function of their own dynamics in preferences, then workers who have a shock to their common good value may switch sector. I develop the strategy to address such a concern in the next section.

3.2 Addressing the dynamic omitted variable concern

To address the potential dynamic omitted variable challenge, I build upon the existing theoretical and empirical literature (Francois (2003) and Gregg et al. (2011)) that formalizes and finds that motivated agents self-select into caring services (defined as health, education and social care (HES)). In such industries, workers often have a public-spirited interest in service and consider the level or quality of service important. Such services are present in both the public and private sectors but more likely in the public sector. Thus, if there is a dynamic selection of workers into the public sector based on dynamic common good value, I should observe that it is driven by workers who self-select into such services. Alternatively stated, I expect no dynamic omitted variable bias for workers who switch to the public sector but stay in non-HES services (that is, they switch for reasons that are not related to their common good value; it could be for instance for a better work-life balance). As a result, the causal effect of the public sector could be obtained by considering its effect for these workers.

To test this hypothesis, I adopt the following strategy. First, I investigate switchers' pre-existing trends in common good value, comparing switchers' initial value (before they switch to the public sector) with the one of stayers in the private sector:

$$CGV_{it}^{Private} = \phi \times Switch_i^{Public} + X_{it}'\delta + Z_{it}'\gamma + u_{it}$$
 (2)

where $Switch_i^{Public}$ is an indicator variable equal to one if the individual switches into the public sector at any point in the future. In addition to the vector X_{it} as before, I include a set of control variables for individual characteristics (gender, number of children, age, religion, culture, college education, marital status, health status, urban) in Z_{it} . The coefficient on the switching indicator therefore captures systematic differences in common good value between those who stay in the private sector and those who switch out of the private sector into the public sector at some future point. I do find that individuals who switch from the private to the public sector at some point in the future are systematically

more in favor of prioritizing the common good over individual interests than individuals who stay in the private sector, but the coefficient is not significant when controlling for Z_{it} (see columns (1) and (2) in Table 1).

My prior is that this sorting is driven by switches into HES (health, education and social care) industries. I then consider four binary indicators representing the public and private non-HES sectors and the public and private HES sectors and estimate the following model:

$$CGV_{it}^{PrivateNonHES} = \phi \times Switch_{i}^{PublicHES} + X'_{it}\delta + Z'_{it}\gamma + u_{it}$$
 (3)

where PublicHES stands for occupations in health, education and social care services in the public sector and PrivateNonHES all other occupations in the private sector. I find that the coefficient on the switching indicator doubles and is highly statistically significant, even when including Z_{it} (see columns (3) and (4) in Table 1). Specifically, I find that workers who switch out of non-HES private sector occupations into public sector HES occupations are 15 percentage points more likely to exhibit the common good value when they are in non-HES private sector occupations than the stayers in those occupations.

I then check whether there is no selection into the public sector based on CGV for those staying in non-HES occupations estimating the following model:

$$CGV_{it}^{PrivateNonHES} = \phi \times Switch_{i}^{PublicNonHES} + X_{it}'\delta + Z_{it}'\gamma + u_{it}$$
 (4)

I provide below, in columns (5) and (6) in Table 1, the related results. In particular, I find that the difference in common good value between workers switching from the private non-HES to the public non-HES sector and stayers in the private non-HES is insignificant and that the coefficient on the switching indicator decreases – instead of increases – when additional controls are included. While it is highly doubtful that this result is due to small sample size (see Table 2 for information on switches in my sample), I consider in columns (7) and (8) switches from the private HES to the public non-HES sector to show that workers who self-select into non-HES occupations – even though in the public sector – are less likely to exhibit the common good value than stayers in private sector HES occupations.

In columns (9) and (10), I consider switches across institutional sectors within HES occupations. Since the HES private sector is very likely to be non-profit, it allows to test whether switchers from the private non-profit to the public are different in terms of common good value. I do find that individuals who switch from the private HES to the public HES sector at some point in the future are systematically more likely to exhibit the common good value than individuals who stay in the private HES sector, and the coefficient highly increases when controlling for Z_{it} . These results corroborate my hypothesis that common-good motivation is the defining feature of public sector workers' motivation, distinguishing the public sector not only from the private for-profit sector but also from the private nonprofit sector.

To address the potential dynamic selection of workers into the private sector based on CGV, I consider switches in the other way. Estimates are reported in Table 9 in Appendix A and corroborate that the selection is driven by HES occupations. Interestingly, in columns (5) and (6), I also find a positive insignificant coefficient on the $Switch_i^{PrivateNonHES}$ switching indicator in the public non-HES sector regression, confirming the absence of workers' selection into the public or private sector based on their

common good value within non-HES occupations.

4 Data

The data used in this paper come from the Swiss Household Panel Surveys (SHPS), a unique longitudinal survey interviewing all household members of a random sample of around 5000 households, covering more than 12,000 individuals, in Switzerland since 1999. The SHPS collects information on the demographic and socio-economic characteristics of respondents and interviews individuals on a wide range of topics. In this paper, I use the individual-level panel data from SHP I (1999) to SHP V (2003), the only waves with all the necessary information. I select Swiss individuals with Swiss as a first nationality (as the question used to elicit individuals' common good value involves a tradeoff between universalism and self-interests only for Swiss individuals) aged 20-54 (to focus on voluntary job-to-job mobility (Groot and Verberne (1997)) who are employed in the public or private sector (excluding the self-employed). My final sample contains 3777 individuals (9849 person observations).

4.1 Occupational choice

I define individuals' institutional sector on the basis of the following question: "Are you employed by a private company or a state organization?". I construct then the binary variable *PublicSector* which equals to 1 when the individual works in the public sector and 0 if she works in the private sector. As I adopt a within-individual estimation strategy to identify the role played by the public sector on the common good value, the source of identification is the switchers in the sample, that is, individuals who either switch out of the public sector to the private sector or the other way. Information on my sample is summarized in Table 2. In all, 72% of the 9849 individual-year observations worked in the private sector, 28% in the public sector. Of the 3777 individuals, 10% worked some of the time in the private sector and some of the time in the public sector (in my data, I do not observe any individual to switch more than once).

Furthermore, respondents are also prompted with a list of options within state organizations: International organization, Confederation/Swiss Railways/Post office, Canton, Commune. As international organizations are not state organizations but nongovernmental organizations, I removed these observations (there are only 112 of the respondents who answered international organization). Furthermore, for meaningful public sector-type controls, I exclude from my sample workers in the public sector at the municipal level. Public sector-state controls are inferred using SPHS information on respondents' commune of residence, knowing that commuting is mostly local in Switzerland¹⁹.

As discussed, it is also important to have information about the occupational choice at the service level. Specifically, I use respondents' choice in the nomenclature of economic

¹⁹Using data from the Federal Statistical Office, the average commuting distance in 2000 was 12,9 km. Among commuters, 36,3% worked within the commune of residence, 49% in different communes but within the canton of residence, and 14,7% outside the canton of residence. This is consistent with Eugster and Parchet (2019)'s estimation of the cumulative frequency of commuting distances for all employed Swiss individuals in the three bilingual cantons, using individual data from the 2000 Federal Population Census. They find that more than 80% of all individuals reside within 20 kilometres of their workplace. Furthermore, some public-service missions impose an obligation of residence in the canton or even in the municipality (this was the case for teachers for example).

Table 1: Linear model, common good value (CGV), by sector

	CGV private se	CGV among private sector workers	CGV private non	CGV among private non-HES workers	CGV private non	CGV among private non-HES workers	CGV private H	CGV among private HES workers	CGV among private HES wor	CGV among private HES workers
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)	(10)
Workers who switch	*970.0	0.061								
to the public sector	(0.044)	(0.044)								
Workers who switch			0.144***	0.153***						
to the public HES			(0.051)	(0.053)						
Workers who switch					0.092	0.052				
to the public non-HES					(0.082)	(0.075)				
Workers who switch							-0.084	-0.088		
to the public non-HES							(0.080)	(0.078)		
Workers who switch									0.053	0.081
to the public HES									(0.050)	(0.060)
Control variables	$ m N_{o}$	Yes	$ m N_{o}$	Yes	$_{ m O}$	Yes	No	Yes	m No	Yes
Observations	3,425	3,425	2,452	2,452	2456	2456	575	575	497	497

Notes: All regressions control for public sector-type (state dummies and federal-level dummy), year, state-year fixed effects. Robust standard errors are clustered at the individual level. CGV stands for common good value. HES stands for occupation in Health, Education and Social care. Additional control variables are gender dummy, number of children, age, religion type, culture, college education, marital status, health status, urban. *p < 0.05, ***p < 0.01.

Table 2: Switches across sectors

	Sector, time t			
$\begin{array}{c} Sector \\ time \ t-1 \end{array}$	public	private	public non-HES	private non-HES
public	2582	189		
private	185	6893		
public non-HES			1018	105
private non-HES			98	4946

Notes: This table shows destination and origin sectors for individuals observed in consecutive periods (very few for individuals observed in non-consecutive periods).

activities to distinguish workers in caring services, defined as health, education and social care in the literature, from the others. Individuals working in these services comprise 26% of my total sample. Note that while the survey does not allow to distinguish between the non-profit and the for-profit sectors within the private sector, it is highly likely that HES services within the private sector are delivered by nonprofit private organizations. Table 3 also summarises the distribution of non-HES services across sectors. Non-HES services are concentrated in the private sector but 18% of individuals employed in non-HES industries work in the public sector.

Table 3: Distribution by sector

	Percentage
Public HES	$15,\!61\%$
Private HES	$10,\!57\%$
Public non-HES	$13,\!29\%$
Private non-HES	$60,\!52\%$
Sample size	8,352

Notes: Private refers to not-for-profit and for-profit private organizations.

HES refers to health, education and social care industries.

Non-HES refers to all other industries.

4.2 Individual common good value

The common good value corresponds to the individual's propensity to go beyond her interests and particularities to prioritize the common good, that is, "goods" (whether material or not) to which there is a commitment to collective and uniform provision. Such a value implies then not only to exhibit the disposition to expend a given budget more uniformly across people that are close to or more socially distant from them (corresponding to the definition of universalism given by Enke et al. (2022a) and Enke et al. (2022a)), but also to prioritize universalism over self-interests. Specifically, the surveys include a precise measure of such a value. They encompass the following question: "Are you in favour of Switzerland offering foreigners the same opportunities as those offered to Swiss citizens, or in favour of Switzerland offering Swiss citizens better opportunities?". For Swiss respondents, there is a clear choice between one pie to share equally with socially distant people referred as foreigners in the question but with smaller pieces for themselves, and one pie to share unequally with socially distant people but with bigger pieces for themselves. This question hence explicitly elicits the individual's disposition to prioritize universalism over self-interests.

In my sample, 32% of the individuals do not exhibit the common good value. Table 4 shows a clear distinction in the prevalence of the common good value between the public and private sector. 76% of people working in the public sector exhibit the common good value, compared to only 66% in the private sector. The difference reflects a general public sector effect since the proportion of individuals holding this value within HES industries and within non-HES industries varies significantly and similarly between the public and private sectors. Figure 2 in Appendix C shows that the differences remained relatively constant over time. Importantly, the within standard deviation of the CGV dummy variable is of 0.21 within the public non-HES sector.

Table 4: Common good value, by sector

		Pub	lic sector	Priva	ate sector	
Common good value	N	(1) Mean	Within s.d.	(2) Mean	Within s.d.	(3) Difference
all industries	8,672	0.759 (0.427)	0.19	0.664 (0.473)	0.23	0.096*** (0.010)
within HES	1,917	0.825 (0.380)	0.17	0.772 (0.420)	0.20	0.053*** (0.019)
within non-HES	5,436	0.696 (0.460)	0.21	0.649 (0.477)	0.23	0.046*** (0.016)

Note: HES refers to health, education and social care. Non-HES refers to all other industries. Column (3) presents the difference in the mean value of the common good value between the public and private sectors. Columns (1) and (2) standard deviation in parentheses. Columns (3) robust standard errors in parentheses. *p < 0.10, ***p < 0.05, ****p < 0.01.

5 Empirical Results

5.1 Fixed effects estimation results

Estimates of Equation (1) are reported in Table 5. In the first column, the public sector effect is identified from individuals who change sectors, either from the private to the public sector or the other way around. The estimated coefficient for the public sector, β , is positive and statistically significant. This is consistent with the hypothesis that working in the public sector positively affects individuals' common good value. Because the private sector could adversely affect such a value by laying more emphasis on particular interests, in column (2), I report estimates considering only switches from the private to the public sector. The estimated coefficient for the public sector is still significant and increases, pointing to the positive public sector impact being more driven by value creation in the public sector than by value loss in the private sector. As discussed in Section 3, to address the potential dynamic omitted variable bias I shall consider only switches from the private to the public sector within non-HES occupations. Column (3) displays the corresponding estimation results. They confirm that the public sector has a strong and significant effect on the common good value. In terms of magnitude, I find that working in the public sector rather than in the private (either for-profit or nonprofit) sector brings about a 30% increase in the likelihood to exhibit the common good value for the same individuals.

Interestingly, the coefficient expansion between columns (2) and (3) suggests that individuals who self-select into the public sector for matching on common good value lose

their value once in the public sector. This could be explained by cognitive dissonance. Workers who believe that public sector employment should be common-good based suffer a loss in utility from being employed in an environment where they are monitored and/or rewarded based on other output, and then decide to not hold this value anymore to reduce dissonance costs. These results are in line with the evidence found in columns (7) and (8) of Table 9 in Appendix A related to selection into the private non-HES sector from the public HES sector workers. I find that these switchers are highly significantly different from the stayers in the public HES sector: they are 11 percentage points less likely to exhibit the common good value. They could be those individuals who self-selected into the public sector based on their common good value but decided to change identity to reduce dissonance costs. However, since the public sector has no specific identity anymore for those individuals, they can get a higher payoff from outside employment opportunities, in particular from a job in the private for-profit (the private non-HES) sector where income could be higher.

Results in column (4) also indicate that workers lose their common good value when they quit the public sector for the private sector. When controlling for the potential selection concern in column (5), the estimated coefficient for the private sector decreases as expected. These results are in line with the large theoretical and experimental literature (see Bowles and Polania-Reyes (2012) for a review) that shows that financial motives and social motives are substitutes.

Overall, these findings are consistent with the fact that the pursuit of the common good is intrinsically bound up with the public sector, inducing common good value realignment in public sector workers.

CGV	All switches (1)	Switches only from private to public sector (2)	Switches only from private non-HES to public non-HES (3)	Switches only from public to private sector (4)	Switches only from public non-HES to private non-HES (5)
Public sector	0.0458** (0.0202)	0.0683** (0.0293)	0.0987** (0.0488)		
Private sector	()	(= = = = /	()	-0.0587* (0.0309)	-0.0695 (0.0595)
Observations Number of individuals	8,672 $3,590$	6,374 $2,800$	4,531 $1,960$	2632 1,112	1,084 441

Table 5: Linear fixed effects model, common good value

Notes: All regressions control for individual, year, state-year fixed effects, and include public sector-type controls. Robust standard errors are clustered at the individual level. *p < 0.10, **p < 0.05, ***p < 0.01.

5.2 Public sector effect on other preferences

An alternative explanation for my finding is that working in the public sector, which pursues other goals than the common good, drives a change in workers' other preferences, potentially correlated with the preference for the common good. Therefore, I estimate the treatment effect (i.e. the coefficient β) of the variable PublicSector (where the treatment effects are identified only from individuals who switch from the private non-HES into the public non-HES sector) with other individual preferences – potentially correlated with the common good value – as dependent variables in Equation (1).

In particular, workers in the public sector may become more inequality averse or more benevolent and therefore more in favor of the common good. I measure attitudes towards benevolence and inequality aversion using respondents' opinion on social expenses and on taxing on high incomes, whether they are in favor of a diminution, status quo or increase. Not only are the coefficient estimates in columns (1) and (2) of Table 6 statistically not significant, but they are also either negative or close to zero.

Furthermore, workers in the public sector may acquire a preference for big governments and then a preference for the common good as a means of increasing governments size. I use respondents' ideological preferences, from "right" to "left" (that is, from 0 to 10), that I then aggregate into three categories (right: from 0 to 3; center: from 4 to 6; left: from 7 to 10) as measures for attitudes towards big government. The estimated public sector coefficient is statistically significant but negative (column (3) of Table 6), meaning that working in the public sector makes individuals become less left-wing oriented.

Alternatively, working in the public sector may make workers have higher confidence in the state or in institutions and hence in its capacity to pursue the common good. I use information on respondents' reported level (from 0 to 10) of trust in the federal government and of satisfaction with democracy as proxies for public trust. I find that working in the public sector affects negatively these preferences (columns (4) and (5)).

Overall, these results suggest that "reality" can change beliefs (Di Tella et al. (2012)): individuals who have first-hand experience working in the public sector have a worse opinion of the public sector than when they do not have such an experience, and become in favor of less state.

	(1) Opinion on Social exp.	(2) Opinion on Taxes on high incomes	(3) Political position: Right to left (3 cat.)	(4) Trust in Federal Gov.	(5) Satisfaction with democracy
Public sector	-0.105 (0.107)	0.0289 (0.122)	-0.142** (0.0657)	-0.300 (0.263)	-0.380* (0.226)
Observations Number of individuals	$4,980 \\ 2,030$	5,036 $2,040$	4,451 $1,898$	5,091 $2,052$	5,046 $2,039$

Table 6: Linear fixed effects model, other preferences

Notes: The sample includes only switches from the private non-HES to the public non-HES sector. All regressions control for individual, year, state-year fixed effects, and include public sector-type controls. Robust standard errors are clustered at the individual level. *p < 0.10, **p < 0.05, ***p < 0.01.

6 Testing for Channels of Causality

Up to this point, I have asked whether the public sector caused its workers to adopt the common good value due to its specific institutional goal, that is, the pursuit of the common good. The evidence I presented is consistent with my hypothesis that the public sector induces a shift in its workers' identity: those working in the public sector whose values are not aligned with the organizational common good goal bear cognitive dissonance costs that they reduce by changing identity, that is, by internalizing the common good value. However, a second explanation is also possible. Public sector workers may acquire – but not internalize – the preference for the common good because of the public sector's specific institutional setup in terms of incentives and constraints. In this section, I pursue four strategies to distinguish between the two channels. The first strategy investigates how the

estimated causal effect of the public sector varies when controlling for external factors. The three other strategies instead focus on the internal channel and explore whether the public sector effect is more important for workers facing higher dissonance costs (second and third strategies) and whether individuals adopting the common good value in the workplace adopt a general behaviour consistent with such a value (fourth strategy).

6.1 Effects of the public sector through external factors

With the aim of documenting the extent to which the public sector's incentives and constraints favor the acquisition of the common good value, I first estimate the baseline Equation (1) controlling for external factors.

The fact that extrinsic rewards may affect preferences is acknowledged in the literature. For instance, Enke et al. (2022a) and Cappelen et al. (2022) find a highly significant negative individual-level correlation between income and universalism not only in the US but also in any group of countries. Numerous well-designed experiments show that the desirability of an activity may be reduced by inducing individuals to engage in the activity as a means toward an extrinsic goal, such as being paid. Differences in payment between public and private sector workers are well documented (Dixit (2002)). Under Akerlof and Kranton (2005)'s identity model in organizations, these differences in payment are thought to be compensated by a non-pecuniary benefit for public employee, i.e. having an identity aligned with their organization (that is, public sector employees, who are motivated by the pursuit of the common good, volunteer a portion of their services for free). Thus, the salience of intrinsic reward in the public sector could then have effects on the preference for the common good to the extent that when people are induced to behave in line with the pursuit of the common good with little or no extrinsic incentive, they may come to believe that their common good behavior was intrinsically motivated. To test for this channel, I include the log of the individual's yearly work income as a control, yet an endogenous control since it could reflect the selection of extrinsic-oriented individuals into high-paying occupations. However, the fixed effects estimation alleviates this concern. I find in column (1) of Table 7 that the control is not statistically significant and has a coefficient very close to zero rather than negative.

Furthermore, if workers' utility function are augmented by a parameter that takes into account colleagues' utility, workers in the public sector may adopt the common good value through social incentives (Ashraf and Bandiera (2018)). Specifically, if the worker cares about her colleagues and if the worker's effort affects colleagues' welfare, the influence of social interactions with co-workers exhibiting more likely the common good value in the public sector due to the self-selection mechanism on the worker's own marginal benefit of effort shapes her motivation to pursue the common good. To test for this channel, I include a control for respondents' reported level of satisfaction with colleagues (using the following question: On a scale from 0 "not at all satisfied" to 10 "completely satisfied" can you indicate your degree of satisfaction for the atmosphere between you and your work colleagues?). This control captures the social incentives parameter, that is, the weight that the worker puts on the utility of her co-workers. If the public sector effect channels through social incentives, we expect then a positive impact of such a variable on the propensity to adopt the common good value. I find that the control is not statistically significant with a coefficient very close to zero.

Overall, column (1) in Table 7 shows that not only the public sector effect increases instead of being attenuated with respect to the baseline counterpart but also the controls

have a coefficient very close to zero. Thus, these estimation results are not consistent with a mediating effect of the public sector's specific institutional setup.

6.2 Effects of the public sector through cognitive dissonance reduction

In this section, I focus on the cognitive dissonance reduction channel and test whether the public sector's impact is stronger for individuals for whom we know cognitive dissonance costs associated with working in the public sector are more important.

6.2.1 Workplace socialization and dissonance costs

Organizational psychologists have long emphasized the importance of the influence of workplace socialization in shaping cultural change (see Schein (1965)). According to Van Maanen and Schein (1979), workplace socialization or "organizational socialization refers... to the fashion in which an individual is taught and learns what behaviors and perspectives are customary and desirable within the work setting as well as what ones are not" (Van Maanen and Schein (1979), p. 4). Thus, co-workers, instead of affecting the marginal cost or benefit of effort of the agent with social preferences, affect the meaning which the agent attributes to her actions through their behaviors (Weber (1968)). This implies that workplace socialization could impact on the agent's cognitive dissonance costs by making the organizational goal more or less salient at a given principal. In this second exercise, my aim is to exploit exogenous cultural shifters at the individual level of the share of co-workers for whom the salience of the public sector's common good pursuit is more important to test whether the public sector's impact is stronger for outsider workers with a larger share of such co-workers, that is, for outsider workers incurring higher dissonance costs.

Specifically, French history led to a superior conception of the state by French citizens. The French revolution and associated republican ideals interacted with state capture by the Nobles of the Robe (that is, the actual Council of State) created a factual institutional narrative according to which the state is provided with some tutelary power in the production of collective goods in order to guarantee the republican ideal of the primacy of the common good over individual interests (Bourdieu (1989), Cohen and Henry (1997), Michel (1999), Suleiman (1999), Bourdieu (2000), Brillet (2004), Bosvieux-Onyekwelu (2020))²⁰. Thus, France offers a particular case for Mukand and Rodrik (2018)'s model in which ideas and vested interests feed into each other. The overall consequence is that in the French culture, the perception of the state as advocate of the common good was and is still²¹ particularly salient. This has created a spirit of idealism in civil services in

²⁰The Nobles of the Robe, in order to consolidate their legitimacy under the Third Republic, bound up public services with the state. In particular, the tutelary power given to the state is explicitly written in the 9th paragraph of the preamble to the French Constitution of October 27, 1946, which still has constitutional validity today: "All property and all enterprises that have or that may acquire the character of a public service or de facto monopoly shall become the property of society". This state's appropriation of collective goods explains why they are called public services in France, insofar as they have to be owned by the state. By contrast, in order to distinguish between collective goods and the public sector, the European Union, under the influence of Germany, does not mention the term 'public services' but 'services of general interest'.

²¹See Acemoglu and Robinson (2022) who theoretically highlight the importance of political culture in determining distribution of political power and in leading to their self-reinforcing path. Furthermore, the Covid pandemic crisis offered contemporary evidence of the capacity of the French state to impose

France that is mentioned in Dixit (2002), but also in French-speaking cultures exposed to the French culture. In the particular case of Switzerland, Athias and Wicht (Forthcoming) provide contemporary empirical evidence for the persistent association between public services and the state. Leveraging the language border in Switzerland that sharply separates cultural groups at identical actual institutions, they find that contemporary French-speaking border municipalities are 60% more likely to provide in-house their services than German-speaking adjacent municipalities. Furthermore, another evidence of the salience of the public sector's pursuit of the common good in the French-Swiss culture is provided by a drawing published in the front cover of the most important French-speaking newspaper, displayed in Figure 1.

Figure 1: Salience of the public sector's pursuit of the common good in the French-Swiss culture



Chapatte, Le Temps, August 23, 2016, p.1

This drawing was published in the newspaper *Le Temps* on August 23rd, 2016, on its front cover. We can see the head of the national airline of Switzerland *Swiss*, which belongs to the private German company Lufthansa and operates at Geneva airport – a public sector company belonging to Geneva state on the French-Swiss side –, saying: "Geneva has to be profitable!" (knowing that Swiss was threatening to leave Geneva airport), leading to the following comment of one of the state company's employee: "What a bad knowledge of the French-Swiss spirit".

Thus, I hypothesize that cognitive dissonance costs are higher for public sector outsider workers in workplaces with a large share of French-speaking co-workers at a given principal, leading to an increased effect of the public sector on the probability to become in favor of the common good for those workers. To test this hypothesis, I estimate Equation (1) augmented with the interaction term $PublicSector_{it} \times French_i$ as an explanatory variable

$$CGV_{it} = \beta \times PublicSector_{it} + \theta \times PublicSector_{it} \times French_i + X'_{it}\delta + \alpha_i + \epsilon_{it}.$$
 (5)

The French variable takes the value 1 if the individual is French-speaking and 0 otherwise. Knowing that language groups in Switzerland are located in separate regions with a sharp geographic border (within a distance of 5 km, the fraction of French-speaking Swiss

drastic measures, widely accepted by the population, to protect the general interest.

residents falls from more than 90% to less than 5%, and vice versa for German native speakers), this variable interacted with the PublicSector variable captures the influence of working with French-speaking co-workers in the public sector as compared to working with non-French speaking co-workers (recall that individual fixed effects and public sector-type controls are included in the econometric equation). I find that the differential effect is considerable: the public sector effect is almost twice more important when the outsider public sector employee has French-speaking co-workers (See column (2) of Table 7), confirming that my hypothesis is empirically relevant²². I further estimate whether the previous differential effect decreases when the share of French-speaking co-workers decreases using the unique setting of bilingual states (i.e. German- and French-speaking states) in Switzerland²³. More specifically, I estimate Equation (5) augmented with the interaction term $PublicSector_{it} \times French_i \times Bilingual_i$

$$CGV_{it} = \beta \times PublicSector_{it} + \theta \times PublicSector_{it} \times French_{i} +$$

$$\psi PublicSector_{it} \times French_{i} \times Bilingual_{i} + X'_{it}\delta + \alpha_{i} + \epsilon_{it}.$$

$$(6)$$

where the variable $Bilingual_i$ is a variable taking the value 1 if the individual's state is bilingual and 0 otherwise. This variable hence captures for French-speaking public sector workers a reduced share of French-speaking co-workers as compared in non-bilingual states (recall that in my sample the public sector encompasses public entities at the state and federal levels). My prior is hence that ψ is negative, that is, that the positive effect of having French-speaking co-workers in the public sector decreases as the share of French-speaking co-workers decreases. This is exactly what I find. The estimates reported in column (3) of Table 7 indicate that the previous differential effect is reduced by half, knowing that the share of French-speaking individuals in the three bilingual states was 32% in 2010 (using data from the Swiss Federal Statistical Office).

Overall, these results confirm the role for workplace socialization as a driver of the magnitude of dissonance costs, independently of the principal, mirroring the Weberian view of social order constructed at the individual level through the meaning which individuals attribute to their actions taking account of the behavior of others (Weber (1968)).

6.2.2 Heterogeneity in common good value and outsider workers in the public sector

In the third strategy, I build upon Athias and Ventelou (2024), who investigate heterogeneity in common good value, to identify the potential outsider workers in the public sector. In particular, they develop a survey-based measure of common good value, based on Enke et al. (2022b)'s survey-based measure of moral universalism, to which they associate in some items a personal cost. They deploy this survey in a large, representative sample of the French population to study heterogeneity. They find that, conditional on moral universalism, the college educated and the right-wingers exhibit less the common good value, that is, they prioritize less universalism over self-interests. More precisely, they find

 $^{^{22}}$ Note that the difference in the mean value of the reported level of satisfaction for the atmosphere with colleagues between French-Swiss and German-Swiss in my sample of workers of interest is statistically significant under the 1% threshold and 0.4 point higher for German-Swiss. When I include this variable in Equation (5) as a control, the coefficient of the interaction term $PublicSector_{it} \times French_i$ increases slightly. This result confirms that the satisfaction with colleagues variable captures the extent to which the welfare or the behavior of co-workers is considered.

²³There are three bilingual states in Switzerland: Bern, Fribourg, Valais.

Table 7: Linear fixed effects model, common good value, mechanisms

Common Good Value	(1)	(2)	(3)	(4)	(5)
Public sector	0.104*	0.0671	0.0537	0.0966*	0.0642
	(0.056)	(0.0548)	(0.0606)	(0.0524)	(0.0456)
Ln yearly income	0.005				
	(0.024)				
Sat. with work colleagues	-0.004				
	(0.006)	0.105**	0.190*		
Public sector x French		0.127**	0.138*		
Public sector x French x Bilingual		(0.0631)	(0.0737) -0.0714		
Fublic sector x French x Dillinguar			(0.127)		
Public sector x College			(0.121)	0.00927	
Tubile sector it conege				(0.0479)	
Public sector x Right				(0.01.0)	0.159**
					(0.0727)
Observations	3,981	4,531	4,531	4,531	4,531
Number of individuals	1,809	1,960	1,960	1,960	1,960

Notes: The sample includes only switches from the private non-HES to the public non-HES sector. All regressions control for individual, year, state-year fixed effects, and include public sector-type controls. Robust standard errors are clustered at the individual level. *p < 0.10, **p < 0.05, ***p < 0.01.

that the right-wingers systematically prioritize less universalism over self-interests but the college educated exhibit a domain-dependent common good value: they are disposed to prioritize universalism over self-interests when the money spent is in public services, such as in health services. This in line with the self-selection mechanism highlighted and found in Section 3: workers exhibiting the common good value self-select into public services, not into the public sector. Thus, while right-wingers are very likely to be outsider employee in the public sector, it is less clear for college educated insofar as they are able to exhibit common good identity in a specific context, implying that dissonance costs are lower for them. I expect then that the public sector effect is more pronounced for right-wingers and also potentially for college educated but to a lesser extent. The estimates reported in columns (4) and (5) show that the public sector effect is indeed highly more important (more than twice) for right wingers but there is no significant differential effect of the public sector for college educated individuals.

Overall, the results are clear-cut and confirm the internal channel of causality: those working in the public sector whose values are not aligned with the organizational common good goal bear cognitive dissonance costs that they reduce by changing identity, that is, by internalizing the common good value. Thus, the public sector induces a deep shift in identity towards the primacy of the common good that should engender shifts in behavior outside the workplace.

6.3 Common good value internalization and behavior

My final strategy considers behavioral outcomes insofar as internalized – but not acquired – preferences in the workplace may become generalized reason for behavior and hence explain behaviors in novel situations. The notion of the common good has been a constant theme in Western political philosophy and has been most clearly developed in the political theory of republicanism. It is consistently associated with an active, public-spirited commitment of citizens. For instance, in Book I of the Politics, Aristotle asserted that it is

only through participation as citizens in the public realm that men may achieve the common good of community safety. For Rousseau, the notion of the common good, achieved through the active and voluntary commitment of citizens, was to be distinguished from the pursuit of an individual's private will. Adam Smith in turn linked common good value to citizenry in *The Theory of Moral Sentiments*: "Man [...] ought to regard himself, not as something separated and detached, but as a citizen of the world, a member of the vast commonwealth of nature. To the interest of this great community, he ought at all times to be willing that his own little interest should be sacrificed." Smith (1790), p. 123. Thus, proponents of the common good have asserted that people should live their lives as citizens deeply embedded in social relationships. The notion of common good is therefore a denial that society is and should be composed of atomized individuals. We could then expect individuals who adopt the common good value in the workplace to adopt active behavior in the public realm and to be more deeply embedded in social relationships.

To test this hypothesis, my approach consists of estimating, in the sample of public sector workers, the treatment effect (i.e. the coefficient μ) of the binary variable CGV through OLS in the following econometric equation :

$$outcome_{it} = \mu \times CGV_{it} + X'_{it}\delta + \alpha_i + \epsilon_{it}. \tag{7}$$

The unit of observation is a public sector worker $(i) \times \text{year } (t)$ cell, where α_i is a constant individual specific effect, X_{it} is a vector of public sector-type controls (state dummies and federal-level dummy, capturing public sector specificities in terms of ideology, capture, or efficiency), time dummies, and state-specific time dummies to account for time-varying confounders that operate at the state level (e.g. economic distress, which drives both the odds of working in the public sector and individual preferences). The variable CGV is equal to 1 if the individual exhibits the common good value and 0 otherwise. The common good value effect is therefore identified only from workers in the public sector who change their identity. The variable *outcome* varies across specifications depending on the individual-level outcome I am investigating, either related to public-spirited commitment or social networks.

Behavioral outcomes in the public realm are captured through reported level of self-influence on government policy (if 0 means "no influence", and 10 "a very strong of influence"), participation in federal polls (how many they usually take part in 10 federal polls), certainty to take part in the future in a demonstration, a strike, or a boycott (if 0 means "never" and 10 "certainly"), and whether they have voluntary activities within an association. Columns 1 to 6 of Table 8 show that workers who internalize the common good value significantly think their political influence is stronger, are less likely to participate in federal polls but more likely to take part in strikes and demonstrations, but not in boycotts, and are significantly less likely to have voluntary activities in an association. These results are overall consistent with the important role of common good value for active participation in the public realm.

Social networks outcomes are captured using information on whether respondents feel that they live a lonely life (from 0 means "not at all lonely" and 10 "extremely lonely"), how frequently they meet their friends (between never, less than once monthly, monthly, weekly) and their degree of satisfaction with their personal relationships (from 0 to 10). As expected, I find that public employee becoming in favor of the primacy of the common good report feeling less lonely and meeting more frequently their friends. However, they are less satisfied with their personal relationships. In the same way, they are more satisfied with life but less with themselves.

Although these analyses are built off of respondents' self-reports, they point to common good value internalization, taking on the status of general motive or constraint on behavior. Thus, overall, dissonance reduction provides the explanation for how the public sector induces its workers to internalize the common good value and why the new value might become general reasons for behavior.

7 Discussion

In this section, I attempt to provide empirical evidence for the transmission of public sector workers' common good value within the society. I also discuss the implications of the previous results in the context of the debates about public-sector reforms.

7.1 Public sector workers' common good value transmission within the society

To investigate the role of public sector workers in the transmission of the common good value within the society, I depart from the previous individual-based analysis and compare how the share of individuals exhibiting the common good value evolves over time for three distinct groups: public sector workers, private sector workers, and non workers, while distinguishing within non workers, young (inactive), old (inactive) and unemployed people groups. The idea is to investigate whether non workers, and which groups within non workers, share parallel trends with the public sector workers' one. Specifically, old and unemployed people highly rely on the state for their pension and unemployment insurance. They are hence clearly individuals whose self-interests are more important in the tradeoff that the common good value entails. Thus, we expect the share of individuals exhibiting the common good value to be lower in these two non workers groups. However, they are also typically individuals who are the most in contact with public sector workers, whether caregivers or caseworkers for instance. Knowing that values are also transmitted horizontally (Bisin and Verdier (2001)), and building upon the street level bureaucracy literature, I hypothesize that their common good value is influenced by their direct contact with public sector workers. Indeed, this literature stresses the important discretionary power of street level bureaucrats in the day-to-day implementation of public programs even when they are controlled (Lipsky (1980)). In particular, there are two opposite views on the use that street-level bureaucrats make of their discretion. One view describes street-level bureaucrats as state agents and emphasizes that self-interest guides street-level choices. Street-level workers would then use their discretion to make their work easier, safer, and more rewarding. By contrast, the other view describes street-level bureaucrats as citizen agents who act in response to individuals and circumstances, whose decisions and actions are not based on their self-interests but on normative choices, that is, on their "judgement of the worth of the individual citizen client" (Maynard-Moody and Musheno (2000)). It appears then that street-level bureaucrats are typically workers whose day-today decisions reveal their common good value, that is, whether they base their decisions according to the primacy of their self-interests or of their universalism.

To test this hypothesis, I use the same SHP data as before, focusing also on Swiss nationals but with no age constraints, and compute the yearly average of the variable CGV for the various groups. The time trends are displayed in Figure 3. I do observe that the share of individuals exhibiting the common good value is lower in the old (inactive)

Table 8: Linear fixed effects model, behavorial outcomes

		Ъ	Public-spirited commitment	ommitment				Social network	~	Gen. satisfaction	isfaction
	(1) 0-10 Feeling about politic. Influ.	(2) 0-10 Part. over 10 fed. polls	(3) 0-10 Take part in a demonstr.	(4) 0-10 Take part in a strike	(5) 0-10 Take part in a boycott	(6) dummy Voluntary in an asso.	(7) 0-10 Feel lonely	(8) 1-5 Freq. meet. friends	(9) 0-10 Sat. pers. rel.	(10) 0-10 Sat. life	(11) 0-10 Sat.
CGV	0.500***	-0.122	0.315	0.355	-0.254	-0.130**	-0.206	0.0635	-0.222 ⁺	0.152	-0.182
Observations Number of indiv.	2,437 $1,094$	2,449 $1,095$	2,446 $1,098$	(2,440) $(1,097)$	(2.156) $2,436$ $1,092$	1,617	$\frac{1,327}{159}$	2,456 $1,099$	1,327 759	1,869 934	1,324

Notes: All regressions control for individual, year, state-year fixed effects, public sector-type. Robust standard errors are clustered at the individual level. The sample includes only workers in the public sector. $^+p < 0.15$, $^*p < 0.10$, $^**p < 0.05$, $^***p < 0.01$.

and unemployed groups. For the young inactive group, as expected their trend is between the public sector and private sector workers trends, who as parents vertically transmit their own values, but converging towards the public sector workers trend, which could be explained by an increasing difference in the number of children between these two groups. Interestingly, Figure 3 also unveils clear parallel trends between the old (inactive) and unemployed groups and the group of public sector workers, corroborating the hypothesis that public sector workers, as street-level bureaucrats, constitute an important horizontal vector of transmission of common good value in the society.

7.2 Implications for public-sector reforms

7.2.1 Public services delivery

As highlighted in Section 2.2., the model of identity in organizations predicts that not only a lower overall pay is needed for an insider to be willing to work but also less monetary inducements are needed to induce an employee who identifies himself as an insider in an organization to perform his job well. Alternatively stated, the ability of organizations to generate value alignment is central to organization's efficiency. Besley and Ghatak (2005) and Prendergast (2007) argue similarly that production is enhanced when organizations select workers who share their mission.

This paper demonstrates the ability of the public sector not only to hire workers who share its intrinsic pursuit of common good goal but also to turn outsiders into insiders. We can then infer that common good value alignment in the public sector generates efficiency gains comparatively to the private sector which relies more on extrinsic rewards. This questions the efficiency gains generally assumed with contracting out to the private sector the provision of public services. In particular, Athias and Wicht (Forthcoming) provides the first empirical evidence for the cost advantage of public provision as compared with private provision when this identity mechanism is at work.

Furthermore, competition in public service delivery has led to market segmentation with the private sector cream-skimming the good types (see Estache and Litaj (2023) for a review of the evidence in the healthcare sector). Such a market segmentation could indirectly have adverse effects on the identity mechanism at work in the public sector by eroding the pursuit of the common good goal insofar as the public sector becomes in charge of the less profitable part of the market instead of the whole market (universal provision ensuring the common good).

7.2.2 Work incentives in the public sector

Another important implication of the results is that it can be worthwhile for the public sector to invest in its identity, that is, in the pursuit of the common good. Indeed, Akerlof and Kranton (2005)'s model indicates possible interactions between identity and monetary incentives. In particular, to elicit even higher effort of an insider worker, the firm can increase rather than decrease the variation in compensation used to motivate this employee. In this sense, monetary incentives and common good motivation can be complements rather than substitutes. To achieve this objective, it would be important to relate incentives to the common good. This raises the issue to find quantitative indicators of the common good. However, instead, incentives could be combined with messages centred on the pursuit of the common good, exploiting complementarities between the two (Kranton (2019)). It would then be important to run field experiments to uncover

the right messaging in the various contexts of the public sector, being attentive to the details and tinkering with the implementation (Duflo (2017)). This could also allow to overcome the bureaucratic conservatism and resistance to innovations that the public sector's identity could entrench.

These policy recommendations depart from New Public Management reforms which introduce management and incentive practices from the private sector. My results suggest the potential counter-productive effects of such reforms insofar as I find that insider public sector workers who believe that public sector employment should be common-good based lose their common good value. As highlighted, this can be explained by cognitive dissonance reduction: those workers suffer a loss in utility from being employed in an environment where they are monitored and/or rewarded based on other output, and then decide to not hold the common good value anymore to reduce dissonance costs, hence jeopardizing the cost advantage associated with identification with the institutional goal.

7.2.3 Public sector incidence

We know that states can be captured by particular interests at the expense of the general interest and that in democratic systems, the willingness to get elected or re-elected may prevail over any other preoccupation. My results suggest that individuals who have first-hand experience working in the public sector are indeed disappointed by the state. Their trust in the state and their satisfaction with democratic institutions decrease, and they become in favor of less state.

However, as the pursuit of the common good is technically intrinsic to the public sector, public sector workers can identify with this goal even when the state is captured. Alternatively stated, the pursuit of the common good is a goal followed at the bottom of the public sector, strengthened by workplace socialization, and allows to run counter to state's capture from inside the public sector. But public sector workers exhibiting the common good value transmit their value in the society and take actively part in the public realm, that is, run counter to state's capture also from outside the public sector.

Thus, while scholars, especially in the economic literature, have assimilated the public sector to the (captured) state and hence considered public sector workers as (self-interested) state agents, this paper suggests instead that public sector workers should be considered as common good agents. As a consequence, it unveils a new reason for State intervention in the economy as vehicle of the common good value. Common good value is essential for society's survival. Thus, a society can choose a higher public sector incidence to guarantee a higher common good value incidence within the society.

8 Conclusion

Technically, the general interest cannot be determined uniquely through the aggregation of individual preferences. It implies necessarily a notion of common good beyond individual preferences that falls to all services of the state and drives their individual decisions. This paper provides evidence that the pursuit of the common good defines public sector workers' identity, inducing outsider workers to quite rapidly depart from self-interest primacy and internalize the common good value. Dissonance reduction provides the explanation for how the public sector induces its workers to internalize the common good value and why the new value becomes general reasons for behavior. Thus, while the pursuit of the common good gives states some tutelary powers, it also generates advocates of the

common good who accordingly adopt an active behavior in the public realm that shackles the (captured) state, leading to a balance between the state's and society's capacities. Institutional narratives affect the salience of the state's pursuit of the common good.

While common good value acquired working in the public sector is then generalized outside the workplace and transmitted within the society, I find that the persistence of this value is compromised once the initiating environment is substituted with the private sector. The common good value entails not only universalism value but also the disposition to accept personal losses, which the private sector, with extrinsic rewards, erodes.

My findings suggest that successful public-sector reforms must combine incentives and messages centred on the pursuit of the common good, exploiting complementarities between the two. I leave to future research the study of the interplay of incentives and common good motivation in the public sector to design policies that, instead of backfiring, amplify identity in the public sector, and attract more workers exhibiting common good value and turn more workers into advocates of the common good.

References

- Acemoglu, Daron and James Robinson (2022) "Non-Modernization: Power-Culture Trajectories and the Dynamics of Political Institutions," *Annual Review of Political Science*, 25 (1), 323–339, 10.1146/annurev-polisci-051120-103913.
- Aghion, Philippe, Yann Algan, Pierre Cahuc, and Andrei Shleifer (2010) "Regulation and Distrust," *The Quarterly Journal of Economics*, 125 (3), 1015–1049, 10.1162/qjec. 2010.125.3.1015.
- Akerlof, G. A. and R. E. Kranton (2010) *Identity economics*: Princeton University Press.
- Akerlof, George A. and William T. Dickens (1982) "The Economic Consequences of Cognitive Dissonance," *The American Economic Review*, 72 (3), 307–319.
- Akerlof, George A. and Rachel E. Kranton (2000) "Economics and Identity," The Quarterly Journal of Economics, 115 (3), 715–753.
- ———— (2005) "Identity and the Economics of Organizations," *Journal of Economic Perspectives*, 19 (1), 9–32, 10.1257/0895330053147930.
- Akerlof, George A. and Dennis J. Snower (2016) "Bread and bullets," *Journal of Economic Behavior & Organization*, 126, 58–71, https://doi.org/10.1016/j.jebo.2015.10.021.
- Alesina, Alberto and Nicola Fuchs-Schündeln (2007) "Good-bye Lenin (or Not?): The Effect of Communism on People's Preferences," *American Economic Review*, 97 (4), 1507–1528, 10.1257/aer.97.4.1507.
- Andreyanov, Pasha, Francesco Decarolis, Giancarlo Spagnolo, and Riccardo Pacini (2023) "Past Performance and Procurement Outcomes," Working Paper 22814, National Bureau of Economic Research, 10.3386/w22814.
- Arrow, K. (1951) Social Choice and Individual Values: Cowles Foundation.
- Ashraf, Nava and Oriana Bandiera (2018) "Social Incentives in Organizations," *Annual Review of Economics*, 10 (1), 439–463, 10.1146/annurev-economics-063016-104324.

- Ashraf, Nava, Oriana Bandiera, and Alexia Delfino (2020) "The Distinctive Values of Bankers," *AEA Papers and Proceedings*, 110, 167–71, 10.1257/pandp.20201065.
- Athias, Laure and Leonor Fraga de Andrade (2024) "Green Public Procurement: For Greener or for Browner?" working paper.
- Athias, Laure and Moudo Macina (2022) "Demand for vaccination in Sub-Saharan Africa: The vertical legacy of the slave trade," *Social Science and Medicine*, 293, 114640, https://doi.org/10.1016/j.socscimed.2021.114640.
- Athias, Laure and Bruno Ventelou (2024) "Universalism *versus* Common Good Value: Who are the Advocates of Individual Interests?" working paper.
- Athias, Laure and Pascal Wicht (Forthcoming) "Make or Buy for Public Services: Does Culture Matter?" Quarterly Review of Economics and Finance.
- Atkinson, Anthony B. (2001) "The Strange Disappearance of Welfare Economics," *Kyklos*, 54 (2-3), 193–206, https://doi.org/10.1111/1467-6435.00148.
- Audier, F. and M. Bacache-Beauvallet (2007) "Emploi dans la fonction publique et fonctions "d'intérêt public": Que nous apprennent les comparaisons internationales?" Revue de l'OFCE, 103, 323–350, 10.3917/reof.103.0323.
- Bandiera, Oriana, Michael Carlos Best, Adnan Qadir Khan, and Andrea Prat (2021) "The Allocation of Authority in Organizations: A Field Experiment with Bureaucrats*," The Quarterly Journal of Economics, 136 (4), 2195–2242, 10.1093/qje/qjab029.
- Besley, Timothy and Maitreesh Ghatak (2005) "Competition and Incentives with Motivated Agents," *American Economic Review*, 95 (3), 616–636, 10.1257/0002828054201413.
- (2007) "Retailing public goods: The economics of corporate social responsibility," *Journal of Public Economics*, 91 (9), 1645–1663, https://doi.org/10.1016/j.jpubeco.2007.07.006.
- Besley, Timothy and Torsten Persson (2023) "The Political Economics of Green Transitions*," *The Quarterly Journal of Economics*, 138 (3), 1863–1906, 10.1093/qje/qjad006.
- Bisin, Alberto and Thierry Verdier (2001) "The economics of cultural transmission and the dynamics of preferences," *Journal of Economic theory*, 97 (2), 298–319.
- Bosio, Erica, Simeon Djankov, Edward Glaeser, and Andrei Shleifer (2022) "Public Procurement in Law and Practice," *American Economic Review*, 112 (4), 1091–1117, 10.1257/aer.20200738.
- Bosvieux-Onyekwelu, Charles (2020) Croire en l'État : une genèse de l'idée de service public en France (1873-1940), Cambridge: Éditions du Croquant, Sociologie historique.
- Bourdieu, Pierre (1989) La Noblesse d'État, Paris: Editions de Minuit.
- ——— (2000) Propos sur le champ politique, Lyon: PUL.

- Bowles, Samuel (1998) "Endogenous Preferences: The Cultural Consequences of Markets and Other Economic Institutions," *Journal of Economic Literature*, 36 (1), 75–111.
- Bowles, Samuel and Sandra Polania-Reyes (2012) "Economic Incentives and Social Preferences: Substitutes or Complements?" *Journal of Economic Literature*, 50 (2), 368–425, 10.1257/jel.50.2.368.
- Brennan, Geoffrey and James M. Buchanan (1980) The Power to Tax: Analytical Foundations of a Fiscal Constitution: Cambridge University Press.
- Brillet, Emmanuel (2004) "Public Service "French Style": a National Myth through the Lens of Europe," L'Économie politique (24), 20–42, 10.3917/leco.024.0020.
- Bénabou, Roland, Armin Falk, and Jean Tirole (2018) "Narratives, Imperatives, and Moral Reasoning," Working Paper 24798, National Bureau of Economic Research, 10.3386/w24798.
- Bénabou, Roland and Jean Tirole (2006) "Incentives and Prosocial Behavior," American Economic Review, 96 (5), 1652–1678, 10.1257/aer.96.5.1652.
- ———— (2011) "Identity, Morals, and Taboos: Beliefs as Assets," *The Quarterly Journal of Economics*, 126 (2), 805–855, 10.1093/qje/qjr002.
- Cantoni, Davide, Yuyu Chen, David Y. Yang, Noam Yuchtman, and Y. Jane Zhang (2017) "Curriculum and Ideology," *Journal of Political Economy*, 125 (2), 338–392, 10.1086/690951.
- Cappelen, Alexander W, Benjamin Enke, and Bertil Tungodden (2022) "Moral Universalism: Global Evidence," Working Paper 30157, National Bureau of Economic Research, 10.3386/w30157.
- Cohen, E. and C. Henry (1997) Service public, secteur public, Paris: Rapport auprès du Conseil d'analyse économique, La Documentation Française.
- Coviello, Decio, Andrea Guglielmo, and Giancarlo Spagnolo (2018) "The Effect of Discretion on Procurement Performance," *Management Science*, 64 (2), 715–738, 10.1287/mnsc.2016.2628.
- Coyle, Diane, Mark Fabian, Eric Beinhocker, Tim Besley, and Margaret Stevens (2023) "Is it time to reboot welfare economics? Overview," *Fiscal Studies*, 44 (2), 109–121, https://doi.org/10.1111/1475-5890.12334.
- Davies, Emmerich (2023) "The Lessons Private Schools Teach: Using a Field Experiment to Understand the Effects of Private Services on Political Behavior," Comparative Political Studies, 56 (6), 824–861, 10.1177/00104140221115178.
- Delfgaauw, Josse and Robert Dur (2008) "Incentives and Workers' Motivation in the Public Sector," *The Economic Journal*, 118 (525), 171–191, https://doi.org/10.1111/j.1468-0297.2007.02108.x.
- Dewatripont, Mathias and Jean Tirole (2022) "The Morality of Markets," Working Papers ECARES 2022-35, ULB Universite Libre de Bruxelles.

- Di Tella, Rafael, Sebastian Galiani, and Ernesto Schargrodsky (2012) "Reality versus propaganda in the formation of beliefs about privatization," *Journal of Public Economics*, 96 (5), 553–567, https://doi.org/10.1016/j.jpubeco.2011.11.006.
- Dittmar, Jeremiah E and Ralf R Meisenzahl (2020) "Public Goods Institutions, Human Capital, and Growth: Evidence from German History," *The Review of Economic Studies*, 87 (2), 959–996, 10.1093/restud/rdz002.
- Dixit, Avinash (2002) "Incentives and Organizations in the Public Sector: An Interpretative Review," The Journal of Human Resources, 37 (4), 696–727.
- Duflo, Esther (2017) "The Economist as Plumber," American Economic Review, 107 (5), 1–26, 10.1257/aer.p20171153.
- Emery, Y., D. Giauque, and F. Rebmann (2014) "La lente mutation des élites administratives fédérales suisses," Revue Internationale des Sciences Administratives, 80, 725–747, 10.3917/risa.804.0725.
- Enke, Benjamin (Forthcoming) "Moral Boundaries," Annual Review of Economics.
- Enke, Benjamin, Ricardo Rodriguez-Padilla, and Florian Zimmermann (2022a) "Moral Universalism and the Structure of Ideology," *The Review of Economic Studies*, 10.1093/restud/rdac066.
- ——— (2022b) "Moral Universalism: Measurement and Economic Relevance," *Management Science*, 68 (5), 3175–3973, https://doi.org/10.1287/mnsc.2021.4086.
- Esposito, Elena, Tiziano Rotesi, Alessandro Saia, and Mathias Thoenig (2023) "Reconciliation Narratives: *The Birth of a Nation* after the US Civil War," *American Economic Review*, 113 (6), 1461–1504, 10.1257/aer.20210413.
- Estache, Antonio and Ardit Litaj (2023) "Is Private Equity Good for Health? Regulation and Competition Policy Lessons from a Survey of the Evidence," Working Papers ECARES 2023-01.
- Eugster, Beatrix and Raphaël Parchet (2019) "Culture and Taxes," *Journal of Political Economy*, 127 (1), 296–337, 10.1086/700760.
- Festinger, L. (1957) A theory of cognitive dissonance: Stanford University Press.
- Francois, Patrick (2000) "Public service motivation' as an argument for government provision," *Journal of Public Economics*, 78 (3), 275–299, https://EconPapers.repec.org/RePEc:eee:pubeco:v:78:y:2000:i:3:p:275-299.
- ——— (2003) "Not-for-Profit Provision of Public Services," *The Economic Journal*, 113 (486), C53–C61.
- Gregg, Paul, Paul Grout, Anita Ratcliffe, Sarah Smith, and Frank Windmeijer (2011) "How important is pro-social behaviour in the delivery of public services?" *Journal of Public Economics*, 95 (7), 758–766, https://EconPapers.repec.org/RePEc: eee:pubeco:v:95:y:2011:i:7:p:758-766.
- Groot, Wim and Maartje Verberne (1997) "Aging, Job Mobility, and Compensation," Oxford Economic Papers, 49 (3), 380–403.

- Guido Schilling AG (2023) "Schilling report 2023: Transparency at the Top The Management Boards of Switzerland's Private and Public Sector," Technical report.
- Harsanyi, John C. (1982) "Morality and the Theory of Rational Behavior," in Sen, Amartya and Bernanrd Williams eds. *Utilitarianism and beyond*, 39–62, Cambridge: Cambridge U. Press, https://doi.org/10.1017/CBO9780511611964.004.
- Heckman, James, Jeffrey Smith, and Christopher Taber (1996) "What Do Bureaucrats Do? The Effects of Performance Standards and Bureaucratic Preferences on Acceptance into the JTPA Program," NBER Working Papers 5535, National Bureau of Economic Research, Inc.
- Hirschman, Albert O. (1965) "Obstacles to Development: A Classification and a Quasi-Vanishing Act," *Economic Development and Cultural Change*, 13 (4), 385–393.
- Karl, Barry D. (1979) "Louis Brownlow," Public Administration Review, 39, 511–516.
- Konow, James (2000) "Fair Shares: Accountability and Cognitive Dissonance in Allocation Decisions," *The American Economic Review*, 90 (4), 1072–1091.
- Kranton, Rachel E. (2016) "Identity Economics 2016: Where Do Social Distinctions and Norms Come From?" *American Economic Review*, 106 (5), 405–09, 10.1257/aer. p20161038.
- Lasson, Kenneth (1978) Private Lives of Public Servants, Bloomington, Ind., and London: Indiana Univ. Press.
- Lenton, Timothy M., Chi Xu, Jesse F. Abrams et al. (2023) "Quantifying the human cost of global warming," *Nature Sustainability*, 6, 1237–1247, 10.1038/s41893-023-01132-6.
- Lipsky, Michael (1980) Street Level Bureaucracy: Dilemmas of the Individual in Public Services: Russell Sage Foundation.
- Maynard-Moody, Steven and Michael Musheno (2000) "State Agent or Citizen Agent: Two Narratives of Discretion," *Journal of Public Administration Research and Theory*, 10 (2), 329–358.
- Maystre, Nicolas, Jacques Olivier, Mathias Thoenig, and Thierry Verdier (2014) "Product-based cultural change: Is the village global?" *Journal of International Economics*, 92 (2), 212–230, https://doi.org/10.1016/j.jinteco.2013.10.005.
- Michel, Hastings (1999) "Les constellations imaginaires du service public," in Decreton, S. ed. Service public et lien social, Paris: L'Harmattan.
- Mollé, Frédéric (2006) Généalogie de l'ascèse bureaucratique, Rennes: PUR.
- Mukand, Sharun and Dani Rodrik (2018) "The Political Economy of Ideas: On Ideas Versus Interests in Policymaking," Working Paper 24467, National Bureau of Economic Research, 10.3386/w24467.

- North, D. C. (1990) Institutions, Institutional Change and Economic Performance, Cambridge: Cambridge UniversityPress.
- Oxoby, Robert J. (2004) "Cognitive Dissonance, Status and Growth of the Underclass," *The Economic Journal*, 114 (498), 727–749.
- Perry, James L. and Lois Recascino Wise (1990) "The Motivational Bases of Public Service," *Public Administration Review*, 50 (3), 367–373.
- Prendergast, Canice (2007) "The Motivation and Bias of Bureaucrats," American Economic Review, 97 (1), 180–196, 10.1257/aer.97.1.180.
- Rainey, Hal G. and Paula Steinbauer (1999) "Galloping Elephants: Developing Elements of a Theory of Effective Government Organizations," *Journal of Public Administration Research and Theory: J-PART*, 9 (1), 1–32.
- Ritz, Adrian, Gene A. Brewer, and Oliver Neumann (2016) "Public Service Motivation: A Systematic Literature Review and Outlook," *Public Administration Review*, 76 (3), 414–426, https://doi.org/10.1111/puar.12505.
- Rose-Ackerman, Susan (1996) "Altruism, Nonprofits, and Economic Theory," *Journal of Economic Literature*, 34 (2), 701–728.
- Schein, Edgar H. (1965) Organizational Psychology, Englewood Cliffs, NJ: Prentice-Hall.
- Sen, A. (1970) Collective Choice and Social Welfare: Holden Day, San Francisco.
- Sen, Amartya K. (1977) "Rational Fools: A Critique of the Behavioral Foundations of Economic Theory," *Philosophy & Public Affairs*, 6 (4), 317–344.
- Shiller, Robert J. (2017) "Narrative Economics," *American Economic Review*, 107 (4), 967–1004, 10.1257/aer.107.4.967.
- Slinko, Irina, Evgeny Yakovlev, and Ekaterina Zhuravskaya (2004) Effects of State Capture: Evidence from Russian Regions, 119–132, New York: Palgrave Macmillan US, 10.1057/9781403981103_7.
- Smith, Adam (1790) The Theory of Moral Sentiments, Oxford: Clarendon Press, sixth edition.
- Suleiman, Ezra (1999) "Le service public : changement du concept ?" in Chevalier, Jean-Marie, Marie-Anne Frison-Roche, and Ivar Ekeland eds. L'idée de service public est-elle encore soutenable?, Paris: Presses universitaires de France.
- Tabellini, Guido (2008) "The Scope of Cooperation: Values and Incentives," The Quarterly Journal of Economics, 123 (3), 905–950.
- Tilly, C. (1975) The Formation of national states in Western Europe, Princeton: Princeton University Press.
- ———— (1985) War Making and State Making as Organized Crime, Cambridge: Cambridge University.

- Van Maanen, John E. and Edgar H. Schein (1979) "Toward a theory of organizational socialization," Research in Organizational Behavior, 1, 209–269.
- Weber, Max (1968) Economy and Society: an Outline of Interpretative Sociology, New York: Bedminster Press.
- Wilson, James Q. (1989) Bureaucracy: What Government Agencies Do and Why they Do It, New York: Basic Books.

A Appendix: Switches into the private sector

Table 9: Linear model, common good value (CGV), by sector

(1) (2) (3) Workers who switch -0.048 -0.033 to the private sector (0.038) (0.037) Workers who switch (0.038) (0.037) (0.073) Workers who switch to the private non-HES	public sector workers public non	CGV among public non-HES workers	CGV public non-	CGV among public non-HES workers	CGV s public HE	CGV among public HES workers	CGV among public HES worl	CGV among public HES workers
-0.048 -0.033 (0.038) (0.037) ES ES		(4)	(5)	(9)	(7)	(8)	(6)	(10)
(0.038) (0.037) ES ES	-0.033							
ES ES								
ES ES	0.028	0.048						
Workers who switch to the private non-HES Workers who switch to the private non-HES Workers who switch	(0.073)	(0.076)						
to the private non-HES Workers who switch to the private non-HES Workers who switch			0.012	0.025				
Workers who switch to the private non-HES Workers who switch			(0.058)	(0.058)				
to the private non-HES Workers who switch					-0.108**	-0.110**		
Workers who switch					(0.051)	(0.050)		
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -							-0.074	-0.057
to the private HES							(0.066)	(0.062)
No Yes		Yes	$_{ m O}$	Yes	$_{ m O}$	Yes	m No	Yes
Observations 1607 1606 673		673	711	711	875	874	716	715

Notes: All regressions control for public sector-type (state dummies and federal-level dummy), year, state-year fixed effects. Robust standard errors are clustered at the individual level. CGV stands for common good value. HES stands for occupation in Health, Education and Social care. Additional control variables are gender dummy, number of children, age, religion type, culture, college education, marital status, health status, urban. *p < 0.05, ***p < 0.01.

B Appendix: Descriptive Statistics

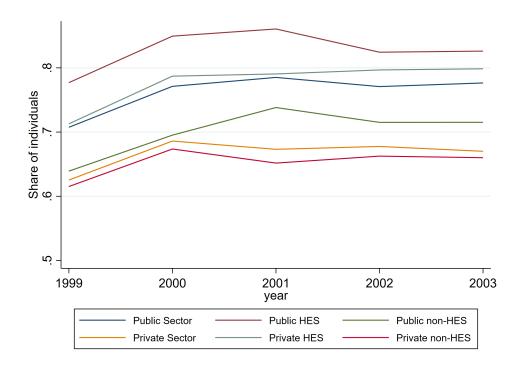
Table 10: Workers in public and private sectors

	(1)	(2)	(3)
Variable	Private Sector	Public Sector	Difference
Share of female	0.477	0.571	0.094***
	(0.500)	(0.495)	(0.011)
Share of married	0.561	0.609	0.047***
	(0.496)	(0.488)	(0.011)
Share of separated	0.091	0.091	0.000
	(0.287)	(0.287)	(0.006)
Share of widow	0.006	0.008	0.002
	(0.075)	(0.089)	(0.002)
Number of children	1.431	1.596	0.165***
	(1.271)	(1.304)	(0.029)
Age	37.641	39.198	1.557***
_	(9.343)	(9.065)	(0.205)
Share of Educ.: college level	0.102	0.237	0.135***
	(0.302)	(0.425)	(0.009)
Share of living in urban area	$0.552^{'}$	0.601	0.050***
_	(0.497)	(0.490)	(0.011)
Share of union members	0.162	0.391	0.229***
	(0.368)	(0.488)	(0.010)
Share with health impediment	1.079	$1.101^{'}$	$0.022^{'}$
-	(2.027)	(2.013)	(0.045)
Observations	7,082	2,767	9,849

Note: The table displays socio-demographic characteristics of workers in the public and private sectors. The last column presents the difference in the mean value of each variable between the two sectors. Columns (1) and (2) standard deviation in parentheses. Columns (3) robust standard errors in parentheses. *p < 0.10, **p < 0.05, ***p < 0.01.

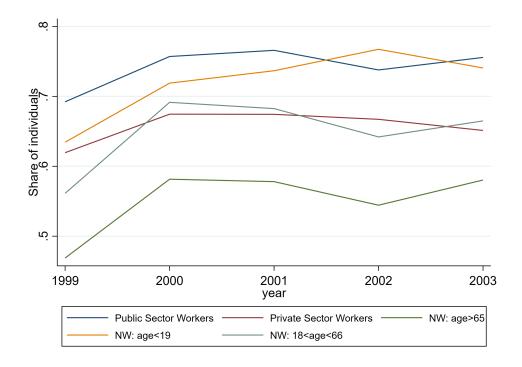
C Appendix: Common Good Value

Figure 2: Common good value over time and across sectors



NOTE: The figure depicts the share of Swiss individuals in my sample exhibiting the common good value over time and across sectors, corresponding to the yearly average of the variable CGV at the sector level.

Figure 3: Common good value across groups of workers and non workers (NW)



NOTE: The figure depicts the share of Swiss individuals exhibiting the common good value over time across groups, corresponding to the yearly average of the variable CGV for non workers (NW) groups, in comparison with public and private sector workers groups.