Generational Equity in Democracy: A Case for Neutralizing the Participation Gap Through Weighted Voting

Niels Boissonnet & Nathanael Colin-Jaeger*

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Abstract

The aging demographic of Western democracies leaves us with an unsolved political challenge: On the one hand, older voters are more in number and tend to participate more, transforming the political process to their advantage; on the other hand, democratic equality seems to imply the "one person, one vote" principle, which renders infeasible any possibility to change this situation. Societies run the risk of becoming gerontocracies, i.e., societies governed by the interests of older voters. This article offers a twofold contribution: first, it shows that voting weight compensations are in order when the electoral process leads to intergenerational structural exploitation; second, it proposes a voting rule correcting for demographic unbalance and participation differential, capturing the essence of the normative claim, and shows what effects such a rule would have on the electoral competition.

Keywords— Age-weighted voting; political competition; Fair-Play Principle; Exploitation

*Niels Boissonnet is a post-doctoral researcher in Bielefeld Universität, Germany, Center for Mathematical Economics; Nathanaël Colin-Jaeger is a post-doctoral researcher at the American University of Paris, Center for Critical Democracy Studies.

In theory, the principle of "one person, one vote" upholds the ideal that all individuals are equal and capable of expressing their own political voice, rather than serving merely as instruments of more powerful citizens. In practice, however, demographic imbalances in Western societies—combined with low political participation among younger generations—contributes to the rise of a gerontocratic system, in which the preferences of older voters dominate the electoral process due to their disproportionate influence (Berry, 2012; Baskaran *et al.*, 2021; Bidadanure, 2021; Magni-Berton & Panel, 2021; Vlandas, 2023). The COVID-19 crisis has made this concern particularly salient. Despite the significant efforts of the younger generation to protect the elderly, the consequences of which are still being uncovered today, the implementation of intergenerational transfers or any form of compensation scheme has scarcely been debated among Western democracies. As noted by various scholars, similar dynamics could be the case in areas like climate policies, pension systems, or the accumulation of wealth by older citizens (Bidadanure, 2021; Valente, 2022; Mulkeen, 2023b). Intergenerational inequalities are, therefore, widely recognized as problematic (Bognar, 2024; Bidadanure, 2021; Vanhuysse & Tremmel, 2018). In this situation, treating individuals the same and granting an equal voting weight, irrespective of their cohort, reinforces the status quo.

Various scholars have advocated for age-weighted voting to mitigate this inequality, a system where vote weights are adjusted based on age. Yet these approaches face both conceptual and practical challenges. From a conceptual point of view, granting different voting weights would undermine democratic equality (Christiano, 2008) as well as the basis for self-respect (Gosseries, 2022). Moreover, many existing proposals hinge on the Affected-Interest Principle or All-Subjected Principle, which suggests that an individual's influence should reflect how much a decision affects them. This approach fails because it depends on subjective factors like life expectancy, which can lead to arbitrary and illogical outcomes. (Van Parijs, 1998; Bengtson, 2022; Poama & Volacu, 2023; Bengtson & Albertsen, 2023; Goodin, 2007; Goodin & Arrhenius, 2024; Angell & Huseby, 2020). Finally, the idea that one could grant different voting weights based on age (rather than another possible variable) seems unconvincing. Practically, a central challenge persists: determining a fair and defensible method for allocating these weights across generations.

This article aims to answer these challenges. First, we propose a novel justification for age-weighted voting rooted in the concept of intergenerational exploitation within the political process. We argue that the combination of demographic imbalances and turnout disparities creates a structural condition where older generations exploit younger ones by shaping policies to their advantage. In this context, we particularly emphasize the importance of turnout correction. Age corrections in voting emerge as

a corrective tool to prevent such exploitation and are supported in the name of democratic equality among generations, providing a pro tanto argument for its adoption. This justification departs from the existing justification based on the All-Affected and All-Subjected principle and is, as we hope to demonstrate, superior.

Second, we develop a vote accounting method to implement this correction, accounting for both demographic imbalances and abstention rates. Our methods adjust voting weights based on a society's population pyramid and age-specific abstention levels, ensuring each generation's influence is proportionate and non-exploitative. We introduce two specific approaches: demographic adjustment, which aligns weights with the demographic balance, and "one generation one vote," which further corrects for both abstention and demographic factors.

1 Influence asymmetries

At first sight, the "one person, one vote" principle, together with universal suffrage, reflects a commitment to political equality, which purpose is to "advance the interests of all members of society equally" (Christiano, 2008). It guarantees that each citizen is regarded as equally important as their counterpart within the electoral process, and ensures that individual right is the driving principle behind voting. Any deviation from the one-person-one-vote principle seems to undermine the individual roots of voting, to the extent that it grants individuals a weight based on their group membership. Accordingly, Christiano (2008) argues that Van Parijs (1998)'s suggestion to partially disenfranchise older voters contradicts the principle of political equality, as individuals should have the right to participate in decisions that affect them at all times. Disenfranchising older voters, would send the public signal that their interests are unequally regarded. This objection is potent and needs to be considered carefully. However, there are many reasons to consider that unequal voting weights need not run against political equality.

A first reason is that equal voting weight can reinforce existing inequalities. A primary reason is that it fails to account for the varying incentives individuals have to participate in the current electoral process. Underlying such neglect is the assumption that political supply is exogenous, or more precisely, that it adjusts spontaneously in response to shifts in public opinion.[1] If ultimately a large range of voters' preferences tends to be ignored by parties, an outsider or even an incumbent can adjust its

[1]This is largely the case in economic theories of democracy after Downs (1957). See, for a substantial extension Roemer (2009).

proposal to capture these votes. This simple process ensures that, in the long run, any citizen can find a voice to support their political claims. As intuitive as it may seem, the prevalence of such adjustments is dubious both in theory and in practice, and this justification for taking the political supply to be representative is flawed.

On the purely theoretical side, it must be emphasized that even with a highly simplified game-theoretic framework in which the preferences of voters are fixed, models of electoral competition have generally no Nash equilibrium, i.e. for every strategies profile there exists a party that would be them would be better off deviating from its strategy.[2] We do not mean to suggest that such adjustment strategies do not occur. Rather, the claim is that it is a pure act of faith to argue that political competition will inevitably lead parties to adopt strategies that fully encompass the entire spectrum of political preferences. Adding the complexity of opinion dynamics to this picture is unlikely to help. Some parties deliberately choose not to follow the mainstream opinion in the hope of convincing new voters, such as abstainers, while others focus on their base. These choices are historically dependent. Yet, nothing ensures that they lead to a perfectly representative supply.

In practice, the formation of political supply is likely to be biased toward some segments of the population; that is, there exist what we refer to as *influence asymmetries*. Citizens do not have direct access to policymaking, and their ability to be informed and to organize around shared interests is limited. The process of articulating and structuring their opinions to shape the political landscape is typically carried out by various institutions—including political parties, administrations, and media organizations. Since both attention and funding are scarce, access to these institutions is inherently unequal for two main reasons.

Political institutions reflect existing political and social norms, which are unevenly internalized across the population. As a result, they often fail to engage individuals from certain social or economic backgrounds, unintentionally amplifying some voices while sidelining others. This concern has been articulated by feminists such as Young (2020), and lies at the heart of the defense of affirmative action and specific representation (Mansbridge, 1999), which aims to give a voice to those who are often marginalized by the standard electoral process.

Belonging to a younger age cohort entails significantly less political influence. Younger individuals are notably underrepresented in parliaments, where leaders tend to be older than the average voter Stockemer & Sundström (2018). In 2024, the average age of parliamentary members worldwide was

[2]This is notably the case when voters' preferences are multidimensional or when there are than two candidates (see Roemer (2009)).

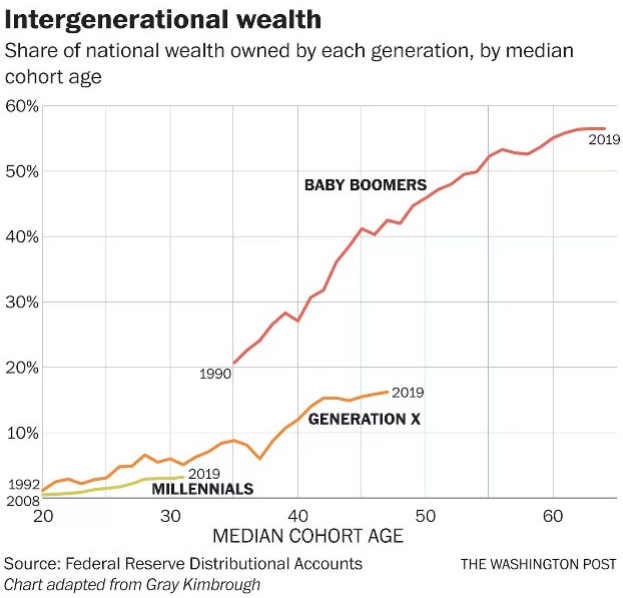


Figure 1: Distribution of wealth between generations in the US between 1989 and 2019

55.5 years, with only 14.95 percent under 40 and 50.38 percent between 40 and 60.[3] In contrast, the mean voter age was approximately 44 in 2018 Stockemer & Sundström (2018). Yet the gap in representation is, in part, a product of social norms that tend to privilege age over youth in political candidacy. This bias can be attributed to the stronger and more influential networks in which older politicians are often embedded, as well as to their longer resumes—an essential asset in a profession where advancement frequently depends on the length of prior experience (Magni-Berton & Panel, 2021, see p. 8).

The second reason is that political institutions often require financial resources, which are typically unevenly distributed. They, therefore, tend to be more responsive to the private interests of affluent individuals or organized lobbying groups. A stark example is the influence wielded by powerful media tycoons, whose ability to shape public discourse is difficult to ignore.[4] A structural pattern in Western democracies is that older citizens tend to be wealthier on average than their younger counterparts. In 2024, 73 percent of all wealth in the U.S. was owned by Americans older than 55 (see also Figure below 1).

Political institutions, by shaping the political supply, can exclude certain voices and create asymmetries of influence among citizens. Crucially, voting rules are tied to this process to varying degrees and can be blamed for failing to address political asymmetries. Political science has long established

[3] See https://www.warpdataset.com/dataset.php.

[4] Robeyns (2025) offers a sustained analysis of the influence of the richest individuals in society.

that electoral systems play a key role in shaping the composition and responsiveness of political supply. A well-known example is Duverger's laws, which suggest that plurality voting tends to produce a two-party system, whereas proportional representation encourages multi-party competition (Duverger, 1959). Similarly, it can be expected that giving more weight to underrepresented individuals would incentivize political institutions to address the concerns of previously excluded citizens, thereby reducing influence asymmetries. The principle of one person, one vote can be criticized for acting as a barrier to realizing this potential.

A conclusion that emerges from this is that the principle of "one person, one vote" can be said to ensure equality only under the flawed assumption that influence asymmetries do not exist or are insignificant. Failing that, if some individuals have greater capacity to shape or influence the political supply——and thus, indirectly, electoral outcomes——then democratic equality no longer follows naturally from equal voting weight and may, in fact, constitute a violation of the individual foundation of voting rights. As a consequence, for Brighouse & Fleurbaey (2008) and Bengtson & Albertsen (2023), this observation would be sufficient to justify giving greater weight to certain individuals, particularly when they belong to marginalized groups.

However, we should be cautious here: it does not follow from this conclusion——that the one person, one vote only imperfectly meets the ideal of democratic equality——that unequal voting weights would better address this concern. It does not seem to be the purpose of voting to correct for influence asymmetries, and weighted voting may, in the end, fail to correct existing them and instead create further injustices.

2 Is Weighted Voting Fit to Correct Asymmetries?

Support for the one-person, one-vote principle can stem from the belief that shaping political preferences through voting rules is inherently problematic and should only be considered as a last resort. If inequalities exist in societies, other measures can be used. In this section, we defend that, while these measures are important, they are either insufficient or have detrimental effects that unequal voting weight has.

A first argument states that influence asymmetries result from flawed political institutions rather than from the political process. Therefore, the focus should shift to regulating political institutions through constitutional rules. Specifically, this involves protecting fundamental rights, as outlined in the constitution, to balance majoritarian pressures and prevent the "tyranny of the majority". Christiano

(2008) typically advocates for the enshrinement of liberal rights as a counter-measure for the "tyranny of the majority", and demonstrates that these rights stem from the same origin are our defense of the one person, one vote principle, i.e., equality of consideration.

However, these answers are unsatisfying for two reasons. First, fundamental rights are typically safeguarded only when substantial threats emerge, such as threats to individuals' lives and property. This applies in cases of extortion, where individuals' choices are severely constrained and their security is at risk. In contrast, while influence asymmetries may disadvantage some individuals, they do not necessarily constitute extortion. Second, excessive regulation of political institutions is both inadequate and democratically counterproductive. The formation of the political supply depends on a broad range of institutions whose primary role is to facilitate public debate and connect citizens to the policymaking process. These institutions must remain adaptable to evolving contexts, ensuring that democracy remains responsive rather than rigidly constrained. Addressing influence asymmetries can be so challenging that only excessive regulation of political institutions would achieve it, likely at the cost of undermining their crucial democratic role. This is especially visible in the case of political parties, which should only be banned under the most extreme circumstances. Imposing constitutional constraints on political institutions would, therefore, require a strong justification, as they would significantly narrow the scope of democratic decision-making. Unequal voting weights are less demanding than constitutional constraints, as they leave open the range of issues that the citizenry can decide upon. While some regulations of political institutions are necessary, they are unlikely to fully correct for influence asymmetries without threatening other democratic principles, such as the openness of the agenda and the scope of democratic decision-making. Some other policies that would solve the issue are not actionable with equal voting weight if individuals vote according to their interests. As the influence of inequality occurs through the voting procedures, it is justified to correct the voting procedure itself. This is why a significant portion of the recent contributions focused on age-weighted voting, albeit with some skepticism (Gosseries, 2022; Poama & Volacu, 2023; Bengtson & Albertsen, 2023; Angell, 2024).

Other policies, such as guaranteeing a proportion of young representatives in parliament and implementing public policies that support youth employment and resources, could be proposed (Mycock & Tonge, 2012; Bidadanure, 2021). This proposal appears valuable, yet insufficient. It is valuable insofar as it may create greater opportunities for young leaders—who are presumably more attentive to the concerns of their generation—, as well as it may help young voters identify more closely with their representatives. However, this does not guarantee the end of gerontocracy, as older voters' interests

may well dominate the political process even when fewer older representatives are elected. If control over the political agenda continues to be dominated by older party elites, the inclusion of young representatives may amount to little more than a symbolic measure. While young representatives chosen at random might be more attuned to the concerns of their generation, selection bias could easily emerge in the long and complex process of candidate recruitment. Additionally, these propositions bypass the democratic process, as they limit the range of possible democratic outcomes. This should, prima facie, be avoided.

Finally, for some issues — such as the economic inequalities between voters — other policies could potentially be implemented, such as redistributive policies. This solution is insufficient, unstable, and ultimately more demanding than weighted voting, particularly the version we are about to propose. It is insufficient for two reasons. First, it treats wealth as the only proxy for measuring power. Yet power often operates within a symbolic framework that only partially depends on wealth. For instance, certain social norms tend to grant younger citizens less credit than older ones, and older voters generally possess wider social networks that strengthen their ability to influence others. Secondly, redistributive policies do not necessarily entail equality of resources across generations. Such a solution, therefore, either provides only a partial correction or requires complete equality——a condition far too demanding to achieve the level of consensus needed. Hence, redistributive policies are unlikely to eliminate influence asymmetries. Such policies would, moreover, be inherently unstable. If older voters continue to have greater opportunities to express their views, they could more easily challenge and overturn these measures. The only way to prevent such instability would be to enshrine them constitutionally. However, as discussed above, it is not clear that such a radical solution should be more appealing than weighted voting. In particular, there are legitimate reasons why older citizens may be wealthier: they may have different needs or may have accumulated savings throughout their lives. Therefore, ultimately, this solution would be far more demanding than weighted voting.

The second reason to reject the modification of the voting rule to struggle against influence asymmetries is based on epistemic concerns. Given our limited understanding of influence asymmetries——both in identifying and addressing them ——it is difficult to ensure that deviating from the one person, one vote principle would not unintentionally create new asymmetries and moral hazard, e.g., overweighting a majority within the minority, such as well-educated and wealthy young people. This concern is significant, as simply overweighting the votes of a population that appeared to have low influence at time $t-1$ may dynamically reshape the political landscape in such a way that, at time t, a different population becomes underrepresented. This, in turn, could necessitate further adjustments to voting weights,

creating uncertainty about how votes count without necessarily resolving the underlying asymmetries. In the vocabulary of economic theory, such a method of assigning voting weights may be dynamically inconsistent. Suppose one amplifies the voting power of socioeconomically disadvantaged groups with a reform that grants additional weight to the votes of low-income citizens based on evidence that their preferences were historically underrepresented. While well-intentioned, this adjustment could shift party strategies, prompting political elites to disproportionately cater to this newly empowered group—potentially at the expense of others, such as middle-income voters.

This is a strong argument against the weighted voting rules that have been proposed in the literature so far, and it motivates the introduction of a rule in which weights are adjusted. Indeed, a way out of this difficulty would be to commit ex-ante to an *adjustment mechanism* for voting weights at time t that depends solely on *relevant patterns* of the vote at t. To effectively correct influence asymmetries, such a relevant pattern must be reasonably correlated with the presence of influence asymmetries at t. One may argue that no pattern of that kind can be found; however, the extent of our ignorance regarding influence inequalities should not be overstated. As we will argue, a natural candidate for this is turnout levels, which both indicate and reinforce the presence of influence asymmetries. Beforehand, we need to clarify the kind of motive that encourages citizens to participate in an election.

3 Participation and the Psychology of Voting

It is well known that actual voter participation cannot be explained solely by consequential motives. The probability that a single vote will be decisive is far too small to outweigh the costs most citizens face when turning out to vote. This so-called *"paradox of voting" therefore suggests the existence of additional, non-consequential motives for participation. In this section, we highlight several such motives that we consider particularly important, to illustrate how they interact with influence asymmetries and help explain why certain groups of citizens—most notably younger voters—tend to participate less than others.

Firstly, consequential motives. Consequential motives do play a partial role. Evidence consistently shows that higher voting costs are associated with lower participation rates.[5] Moreover, different

[5] Blais (2019) demonstrate that citizens' subjective perceptions of voting costs—such as time and effort—discourage turnout. Goodman (2020) find that introducing Internet voting in Ontario reduced logistical costs and increased participation by roughly 3.5%. McCoy *et al.* (2024) show, using the *Cost of Voting Index* across U.S. states, that higher administrative barriers are associated with lower turnout.

groups of citizens face unequal voting costs. For instance, Hill (2020) shows that younger voters systematically encounter higher barriers to participation, which helps explain their comparatively lower turnout rates. These disparities in voting costs can also shape electoral competition and representation: as Sasso & Judd (2022) theoretically demonstrates, higher costs for some groups may lead to lower representation for those citizens. In turn, when individuals perceive that their interests are less represented, the perceived stakes of elections decline, further reducing their motivation to vote.

Secondly, ethical and reputational motives. Ethical and reputational motives also guide voting behavior. Many theoretical models assume that voters are motivated by a sense of civic duty or moral obligation (Feddersen & Sandroni, 2006). Skitka & Bauman (2008), for instance, propose that individuals vote because they view participation as a moral imperative—a notion empirically supported by Blais & Dobrzynska (1998). However, such moral motives are unlikely to be purely altruistic: they also involve expectations of reciprocity. A citizen who feels unrepresented is therefore less likely to perceive a duty to reciprocate collective participation. They may instead rationalize abstention through cognitive dissonance—what Bandura (1999) describes as the belief that "the system is unjust, so abstaining is right." Others may view participation as futile due to low internal or external political efficacy, that is, a lack of belief either in one's ability to influence politics or in the system's responsiveness to citizens (Campbell *et al.*, 1954; Craig *et al.*, 1990). Evidence also indicates that younger citizens today are less likely to endorse a sense of civic duty. This generational gap is typically explained in three ways: (1) shifting social norms—often described as the rise of an "apathetic and individualistic generation" (Dalton, 2006; Schnaudt, 2024); (2) a perception among younger voters that they are poorly represented; and (3) the idea that voting reinforces civic duty through habituation, such that participation itself helps cultivate the sense of obligation (Goerres, 2009). Distinguishing which of these explanations best accounts for the trend is a challenging task. Nevertheless, the second interpretation—underrepresentation as a driver of disengagement—is frequently emphasized in the literature as a corrective to overly cultural explanations (Kiisel *et al.*, 2019).[6]

Thirdly, identity motives. Identity-based motives also shape political participation. As Huddy & Khatib (2007) notes, "people not only vote for what they want, but also for what they are." When citizens have difficulty connecting their own identities or concerns with the issues that dominate public

[6]It is also widely noted that younger citizens can be characterized as "standby citizens" (Amnå & Ekman, 2014): while they participate less in formal politics, they remain politically aware, often focus on specific issues, and can mobilize under certain conditions.

debate, they are less likely to be motivated by identity considerations to turn out. The same is true about the identification to representatives. A report by CEVIPOF & INSEE (2022) shows that non-voters are significantly more likely to agree with the statement "no one represents people like me." Yet identity-based motives can also create self-fulfilling dynamics: prejudices circulating in political discourse about the disengagement of certain groups can ultimately materialize in lower turnout. Citizens whose social category is cast as unlikely or illegitimate in expressing political voice are consequently less inclined to view themselves as legitimate voters—and thus less likely to vote. Because young people lack representation and are not a main focus for politicians, political discussions often reproduce prejudices about their supposed disengagement.

We do not claim that our classification fully captures all possible motives for voting, nor that it allows for perfectly distinguishing among them. However, we believe that the combination of consequential, moral, and identity-based motives covers an important subset of these drivers. Moreover, the literature suggests that for each of these motives, a lack of recognition or concern from political actors—an asymmetry of influence disadvantaging certain segments of the population—may discourage individuals from voting. This leads to a key prediction: if political actors were to better address these concerns for these specific population groups, individuals would be more likely to act on these motives and, consequently, to participate more in the political process. Hence, institutions—and among them, voting rules—that incentivize political actors to reach out to these voters would likely increase participation. As we will argue, the voting rule we propose is designed primarily with this purpose in mind.

The question now, however, is whether it is legitimate to view unequal participation as a problem. After all, why should a voting system be blamed when some citizens intentionally choose to abstain from voting?

4 Influence asymmetries and unequal participation

Unequal participation is a prima facie factor of influence asymmetries. Under the "one person, one vote" principle, an abstainer is arithmetically disadvantaged, as are those who share her interests, since they lose a voice in advocating for their concerns.[7] More generally, being part of group N, whose members massively abstain is detrimental. Especially when another group M whose members' shared

[7]Economists have demonstrated that under certain voting rules, a voter might benefit from abstaining (Fishburn & Brams, 1983; Moulin, 1988). However, this "No Show Paradox" occurs in specific contexts and under particular voting rules.

interests are distinct if not antagonistic to N's interest abundantly votes.

The mere possibility of this scenario is not sufficient to disqualify the "one person, one vote" principle. If members of N have a shared interest in preventing members of M from imposing their views but do not actively assert this interest, the issue remains contentious. Ultimately, abstainers might be held accountable for their lack of participation. Why should we be concerned if a group of citizens chooses not to exercise their voting rights? If someone possesses a right but chooses not to exercise it, those who benefit from this lack of participation should not be blamed.[8] Some citizens are passive. They don't want to get involved in the complexities of political issues, or they do not trust their judgment in political matters. As such, they would like to delegate their voice to other voters they consider more educated or informed.

Hence, unequal participation poses a problem only if institutions, rather than individual voters, can be held responsible. This is possible if electoral competition under a voting rule incentivizes members of N to abstain more than members of M. In that case, the latter are unduly favored. Unequal participation is enhanced by the political strategies of institutions such as the parties or the media company. Securing the votes of regular abstainers is particularly challenging for a political party. This task not only demands significant resources but also requires adopting unpopular political positions with regular voters.[9] The "party of non-voters" forms an opaque and heterogeneous group of the population. It is compounded by citizens who sometimes show strong disinterest in and lack of knowledge of political issues. It is, therefore, costly and potentially unattractive for media organizations to attempt to amplify the voices of those who tend to abstain, particularly for political journalists. When combined with the mechanics of electoral competition, excessive variation in abstention across the population both leads to and signals the marginalization of certain voters.

In turn, these voters are pushed toward political alienation. Political scientists have long established that influence asymmetries are likely to produce political alienation among underrepresented citizens—that is, a sense of disconnection from politics among citizens. As the political supply and its surrounding institutions increasingly fail to represent their concerns, some citizens feel progressively

[8]One possible counterargument is that individuals who abstain harm themselves and their group, with whom they share interests. Although this argument is valid, we find it relatively weak and, more importantly, not aligned with structural exploitation. For a more sustained critique of this argument, see Lever (2010).

[9]An extensive range of evidence confirms that political parties are more responsive to those they mobilize. For instance, Bertocchi *et al.* (2020) shows that in the US, States that implemented preregistration have not only favored the participation of younger voters (who abstain more) but have also fostered shifts in state government spending toward higher education. As they document, a 1% percent increase in youth voter turnout generates a 0.77% increase in higher education spending.

disconnected from the political system.[10] This disconnect manifests in various negative attitudes toward politics or simply by a sense that politics is not meant for them. Finifter (1970) unpacks the psychological description of political alienation into four different components.[11]

An alienated abstainer cannot be held entirely responsible for experiencing this sense of disconnection. While bad faith may often be a psychological factor, there is nothing inherently immoral about mistrusting political institutions. When these institutions, sometimes inadvertently, collude to focus on the specific interests of a narrow set of individuals, they can generate significant disappointment and erode citizens' trust in democratic processes. Political parties may find it more advantageous to overlook the interests of a citizens' group that, despite sharing common concerns, fails to participate in elections due to feelings of alienation. This neglect, in turn, can heighten their sense of alienation, creating a vicious cycle between alienation-driven abstention, the mechanisms of political competition, and the presence of influence asymmetries.

Such a vicious cycle is central to our argument. It shows that abstention, influence asymmetries, and alienation are interconnected through a non-linear web of implications, making of unequal participation a correlate of influence asymmetries. Given that it is observable as well, the abstention gap within the population can serve as a particularly relevant pattern for adjusting the weights of citizens' votes.

In the light of what has been established, the "one person, one vote" principle can be blamed for being blind to influence asymmetries. It implicitly reflects and perpetuates the social relations between groups, on top of failing to prevent the widening of the gap through the vicious cycle of abstention and influence asymmetries. Equally weighting individuals' interests may lead to unequally representing these interests. In contrast, a voting rule based on an adjustment mechanism neutralizing abstention is required to tame the vicious cycle between abstention and political asymmetries.

Age is a key socio-demographic characteristic that creates a gap in participation, as young voters tend to vote significantly less than the elderly. Such a gap is consistently observed, regardless of the country and the election. This turns out to be the most robust participation gap established (Wolfinger & Rosenstone, 1980; Gallego, 2009; Smets, 2010; Van der Brug & Kritzinger, 2012). It has, for instance, consistently been at least as high as 10% in the United States since 1988 in favor of older voters.

[10] Psychologists often define political alienation by this set of attitudes. Lane (1962, 162) describes it as "an individual's disapproval of the way political decisions are made". At the same time, Neuman (1957, 290) refers to it as "a conscious rejection of the whole political system, expressed through apathy."

[11] First, *political powerlessness* is the feeling of being unable to influence the political process. Second, *political meaninglessness* is when politics is interpreted as completely random and, thus, senseless. Third, *political normless* arises when norms are no longer recognized as shared and accepted. Fourth, *political isolation* consists of rejecting the norms that ground the political system. Crucially, even after controlling for demographic factors, alienated citizens are less likely to vote (Nownes, 1992; Teixeira, 2011).

Political scientists distinguish two explanations for this gap: a life cycle effect or a cohort effect (Goerres, 2009). According to the life cycle view, citizens progress through different life stages that come with specific interests and different exposures to political ideologies. The taste for political engagement tends to develop through this process as individuals begin to consider a wider range of political issues. Younger citizens participate because they have experienced early stages only (Smets, 2010). For instance, starting work is a crucial predictor of participation. Before reaching that stage, a citizen is less likely to grasp concretely many political issues, such as taxation or labor regulation. Under this view, the voting gap is, therefore, a structural feature of the formation of political behavior. It has always existed and will prevail in the future. With the cohort effect, in contrast, the lower participation of the youth results from generational trends. Today's older citizens are more likely to vote due to their educational background and their politicization context. They have internalized the right to vote as a civic duty, one they perceive as an inherent part of their identity. This understanding of civic duty is nowadays subject to change, and younger citizens do not entertain the same relationship with voting. From this perspective, the participation gap might not appear problematic: young people simply participate less because their political interests are ill-defined.

However, many studies contradict that younger voters display a lack of political interest. Despite their decreasing participation rate, young citizens continue to participate in civic behavior through associative engagement, protests, and other forms of civil activities (Henn *et al.*, 2002; Quintelier, 2007). They typically engage more with parallel political activities, such as associations, online contestation, and non-traditional political activities. Since this suggests they may not be less politicized, their lesser participation ought to be explained by their alienation from the electoral process.

5 Structural exploitation through voting

When some citizens can take advantage of influence asymmetries at the expense of others, exploitation is at play. The blame, however, does not lie within inter-individual relationships. Rather, it lies with the institutions that enable this scenario: exploitation lies not at the individual level, but at the structural level (Wollner, 2019).

The concept of *structural exploitation* refers to background injustices that are created by institutions. It focuses on the capacity of a group in a given society to take advantage of the rules of the game at the expense of other groups, even though individuals may not be doing anything wrong at their level, since they are voting for their interests or what they believe to be just. This may emerge from the

institutional shaping of political options, serving the interests of more influential social actors, which typically occurs when a group M with shared interests leverages asymmetries of influence to constrain the range of eligible policies, thereby shaping the political supply (McKeown, 2016; Zwolinski *et al.*, 2022).[12] Importantly, this does not require that members of M deliberately manipulate the political supply. It is sufficient that they possess and use greater opportunities to influence. The voting rule is concerned when it fails to prevent—or at least mitigate—the consequences of influence asymmetries.[13] Structural exploitation, therefore, entails that, within a given polity, a group M can regularly, if not systematically, leverage the political process to its advantage at the expense of some other group N, that does not possess the capacity to defend its interests or is prevented from doing so. If this situation occurs, we may say that M wrongs N.

One may object that the possibility of structural exploitation need not translate into unfair policies. For instance, a group of individuals forming a structurally winning coalition may not abuse its power to defend specific interests. They can exhibit a form of altruism or a sense of duty, making them averse to unfair favoritism, even to their group interest. Alternatively, they could fail to take advantage of the voting system, as attested by the empirical literature (Brennan & Hill, 2014, 41). For instance, poor people oppose the estate tax as much as the rich, and the inheritance tax is widely opposed, even by individuals with few chances of inheriting anything. As we emphasize in section 3, citizens' participation is driven by what they regard as the common good, not merely by self-interest—as introduced by Downs (1957).

However, the objection fails. First, conceptually, people may think they vote for the common good, but their conception of the common good still depends on their interests and social position. Second, and as a consequence, the empirical case for age-based voting is stronger than for other categories, such that the older voters' cohort significantly influences the political process (as developed below). Third, on the normative side, while such individuals do not exploit their counterparts, they dominate them, thus violating the principle of non-domination, meaning that they *could* exploit other groups (Pettit, 1997). Non-domination's violation highlights an institutional weakness: The voting process allows such systematic exploitation. Even if individuals did not vote for their self-interest or depending on their age—which they do partly—there would still be an argument for restricting their voting power.

[12]Before Wertheimer (1999), most of the discussions on exploitation focused on Marx's analysis of exploitation as the extraction of surplus-value. Wertheimer (1999) shifted the focus towards the activity of taking wrongful advantage of someone, based on asymmetries of power and the possibility of a counterfactual situation in which individuals arebetter offf.

[13]For helpful distinctions on different theories of exploitation, including agent-based versus structural and relational versus distributive approaches, see Ferguson & Zwolinski (2024).

6 Intergenerational structural exploitaion

The main result of our argument so far is that exploitation occurs through voting when it is structural, specifically, when it creates an electoral competition that unfairly shapes influence asymmetries, systematically disadvantages a group of voters. Our empirical illustrations have highlighted the relatively weak influence of young voters on the formation of political supply, suggesting that their vote must be overweighed. To confirm this, we now need to extend our analysis of structural exploitation to intergenerational concerns.

Extending the intergenerational aspect requires specifying what kind of harm is done to younger voters. It not only consists of harm based on age-group but above all on age-cohort.[14] This distinction is fundamental because inequalities—which may result in exploitation—can be synchronic as well as diachronic. When inequalities are synchronic, the harm is done to an age group (say the 65-100 years old voters), while when they are diachronic, the harm is done to an age cohort (say the generation born in 1940-1950). At any given moment t, it may seem unfair that younger citizens have less political influence than their older counterparts. However, they will eventually acquire similar advantages, making their position diachronically symmetric. Thus, synchronic asymmetries are not necessarily unjust (McKerlie, 2013). As Daniels (1988) argues, it can be just for wealth to be unequally distributed across generations, given that individuals have different needs at different stages of life. If *throughout their lifetime* individuals are equal, synchronic inequalities may be justified.[15] Applying a similar reasoning to the distribution of political power——whether by analogy or due to the role of wealth inequality in shaping political asymmetries——one might conclude that some degree of political asymmetry across generations is not only acceptable, but potentially beneficial. Older voters may, for instance, have more experience with the different periods of a lifetime and be in a better position to rank the needs of individuals.

However, this line of argument poses two problems. First, and as argued by Bidadanure (2021), even synchronic inequalities can be harmful, as they reflect a social hierarchies between groups.[16] Second, when they entail an excessive concentration of power, synchronic inequalities become incompatible with diachronic inequalities. The result of an election, predominantly determined by the influence

[14] For this distinction, see Gosseries (2024).

[15] Gosseries (2022) faces this objection too. This line of argument also appears implicitly in Poama & Volacu (2023) to challenge the possibility of age-weighted voting.

[16] Interestingly, the same argument is the bulk of Christiano (2008) rebuttal against Van Parijs (1998) proposition of partial disenfranchisement, arguing that even if individuals would have a life-time equality in favor of when they are younger, there would be an argument for synchronic equality in virtue of the respect of persons and the change of their life plans.

of a dominant age group, entails long-term and often irreversible consequences. This means that opportunities once denied to a group may never resurface. They may have to suffer consequences that could never be undone—harms that no amount of power or privilege later in life could ever make up for. More concretely, the greater political influence of older voters enables them to secure policies that prioritize their immediate needs, such as increased pension spending, which reached 5.1% of GDP across OECD countries in 2023 and up to 14% of GDP in some countries, such as France or Italy, while overlooking issues that primarily matter for young citizens and that require immediate investment (Bognar, 2024). Such issues can only occur regarding the future, as the arrow of time goes only in one direction, making younger citizens particularly vulnerable to such inter generational dynamics.

At least three sets of issues render the case for inter-generational exploitation plausible. Firstly, older voters would benefit less from investments in future-oriented policies such as education, which, if poorly funded, could undermine the future of younger generations. A qualitative education system is known to be a major factor of growth, as well as a necessary condition for democracy (Dewey, 2024; Acemoglu *et al.*, 2005). Yet in aging societies, the support for education spending tends to erode. This is confirmed by empirical studies, which find that a higher proportion of elderly citizens is associated with a reduction in the support for educational spending (see (Brunner & Johnson, 2016) for references). Similarly, despite a growing number of students, the proportion of public expenditure allocated to education in EU countries has declined from 10.4% to 9.6% between 2002 and 2023 (Eurostat, 2026). This modest decrease disproportionately affects higher education, where students must study longer than older generations to achieve comparable productivity and social status.

The second set of issues consists of policies that, by definition, impose costs on the future. One example is Climate Change policies. The lack of consistency of that matter, such as the EU's failure to meet 2030 emissions targets, imposes irreversible costs, such as €200 billion annually in damages by 2050, that younger citizens will disproportionately bear (Mulkeen, 2023a). Older voters, with lifespans averaging 15-20 years post-retirement, face minimal exposure to these consequences, creating an asymmetry where younger generations endure worse outcomes across their entire lives than their predecessors did (Bidadanure, 2021). Another notable example is the creation of debts for future generations, particularly if the debt structure does not consist of investment but of welfare programs advantaging past generations.

Third and finally, older citizens, who hold the majority of wealth, often use their political influence to oppose capital taxation, whether on real estate or financial assets. In contrast, the pressing needs of younger voters —— such as student debt relief (affecting 45 million Americans in 2023) and access to

affordable housing (with national median rent rising nearly 20 percent from January 2021 to early 2025, according to the Apartment List National Rent Report) ——are frequently marginalized (Wattenberg, 2015). This dynamic creates an age-based hierarchy in which political power and economic benefits disproportionately favor older generations, harming entire age cohorts rather than just individuals. As illustrated in Figure 1, this may ultimately result in the impoverishment of a generation. [17]

These observations echo the *all affected interest principle* defense of age-weighted voting, which serves as the fundamental basis for the defense of age-weighted voting in the literature. As Poama & Volacu (2023) suggests, this principle is based on two premises: (i) older voters have shorter life expectancies than younger voters, and (ii) life expectancy serves as a reasonable proxy for affectedness. While we are sympathetic to this principle, we also agree with Poama & Volacu (2023) (p. 56) in acknowledging its serious limitations.[18] Indeed, the All-Affected Interests Principle entails counterintuitive results. By using life expectancy as a proxy (premise (ii)), it may justify the overweighting of social categories that are already overrepresented in the political process, such as highly educated or wealthy individuals, who tend to live longer on average. Conversely, if premise (ii) does not hold, the defense of age-weighted voting becomes *self-defeating*, as it could advocate for granting more weight to older voters, who have less opportunity to influence future electoral outcomes. Indeed, if the argument is grounded in the idea that all individuals should have equal influence on the political process, older voters should have their votes overweighted, given that they have less time to influence the future political landscape, meaning that their present votes have a greater effect on them than those of younger individuals.

Our argument does not entail that young citizens' votes must be overweighted in any circumstances—as the all-affected interest principle entails—because they are more concerned than the elderly by current political decisions. We rather defend that synchronic inequalities of influence may render their exploitation possible and that a normatively grounded voting rule must attempt to avoid this when the circumstances command it. The All-Affected Interest Principle would lead us to give more weight to younger citizens even in a society in which older citizens would be completely marginalized, an outcome we would equally perceive as democratically unfair.

[17] The three sets of issues are different. Some policies have an inherent temporal nature, e.g., climate policies, debt, and education, and necessarily concern younger individuals. Other policies, such as housing policies or capital taxation, are incidentally harming younger individuals because of the distribution of wealth in societies. The second category is reversible depending on empirical factors; the first category is not.

[18] Recently, Angell proposed a defense addressing these issues. He suggests justifying age-weighted voting based on the all-affected interest principle within the framework of a lifetime egalitarian theory Angell (2024). This argument relies on the idea that affectedness is proportional to life expectancy.

In that, we follow Mulkeen (2023a) in her understanding of intertemporal exploitation between groups. She posits that exploitation occurs in a given polity when (i) earlier generations use structural and institutional processes so that debts against a later generation exceed the advances/ benefits made by the former generation and (ii) members of the former generation fail to honor their intergenerational political responsibilities. Integrating influence asymmetries would take place if an earlier generation used the political system—here, the voting system—to its advantage, exceeding the benefits they offered, which undermines the possibility of the next generations reaching a similar level of advantage.

As a result of our previous sections, a correction is justified when the following conditions are met:
FAIR CORRECTION IN VOTING A voting rule can justifiably be revised when

1. there are at least two groups M, N each of them compounded of citizens that share a shared interest and such that M whose interest is antagonistic to N ;

2. M can structurally exert a decisive influence on the vote in the sense that:

   (a) members of M consistently abstain less than members of N and N's excessive abstention is, at least partly, due to a vicious cycle between political alienation and the fundamental mechanism of political competition (Decisive influence through abstention).

   (b) or members of M are numerically greater than members of N, such that they can be decisive in elections and structure political competition to fit their concerns (Decisive influence through demographic imbalance).

7 Correcting the Two Driving Features of Exploitation: Abstention and Demographic Unbalance

Our argument demonstrates that the abstention gap between generations is both a driving force and a signal of influence asymmetries, leading to the structural exploitation of younger citizens and intergenerational injustice. This insight supports a principle we call Fair Correction in Voting, which calls for adjustments to the voting system. Specifically, we design a new vote-counting method that addresses both the abstention by giving greater weight to underrepresented generations at the time of the vote.

To formalize our vote accounting method, let the population be divided into generations indexed by $\mathcal{G} = \{1, \ldots, G\}$, where $(g_i)_{i \in \mathcal{G}}$ denotes the proportion of individuals in each generation. We can assume that $\mathcal{G}$ is organized such that for $i, j \in \mathcal{G}$, if $i > j$, then $g_i \geq g_j$. The goal of an election is to determine

a policy $p \in P$ that receives the broadest support from voters. Each policy p is assigned a score $s(p|\mathbf{v})$, which depends on the vector $\mathbf{v} \equiv (v_p^i)_{p\in P}^{i\in\mathcal{G}}$, where v_p^i represents the proportion of individuals within generation $i \in \mathcal{G}$ who voted for p—hence, $\sum_{p\in P} v_p^i < 1$ if some of them abstain. The policy that maximizes this score is elected. Under the plurality rule, the score for each policy is simply

$$s(p|\mathbf{v}) = \sum_{i\in\mathcal{G}} g_i \cdot v_p^i,$$

which corresponds to the global proportion of individuals who voted for p. Consequently, no individual or subgroup is given special weight in this approach: each individual possesses the same weight.

By contrast, the literature on weighed voting considers a scoring function of the form $s(p|\mathbf{v}) = \sum_{i\in\mathcal{G}} \phi_i \cdot g_i \cdot v_p^i$ where $\phi_i \in (0, 1)$, may assign additional political weight to individuals based on their membership in specific groups.[19] The question remains, however, of how these weights have to be proportioned.

In this regard, our proposal differs from the weighted voting literature in that it does not impose that weights are arbitrarily fixed regardless of circumstances. Our vote accounting method seeks to neutralize the abstention gap between generations. Contrary to weighted voting proposal, it is based on an adjustment mechanism which immunizes it from the dynamic inconsistency problem (see our argument at the end of Section 2).

Before pursuing the formal elaboration of the rule, let us address a potential objection. One alternative approach to mitigating the influence asymmetries caused by abstention is to make voting compulsory (Lacroix, 2007; Brennan & Hill, 2014; Umbers, 2020). While this approach is consistent with our claim so far, we would also like to emphasize that it can be viewed as self-defeating.

To see why, note that compulsory voting introduces a form of coercion that requires further justification. Forcing individuals to vote can only be justified if voting is recognized as a civic duty (Brennan & Hill, 2014, 11), specifically as a duty to publicly express one's preference. However, as Volacu (2020) argues, voting alone may not be sufficient. An uninformed citizen may, in practice, vote for a policy that contradicts their own preferences. This, therefore, calls for an extension of civic duty to include a duty to vote *well*—that is, to vote while being informed and competent about the issue at hand. However, advocating for such a duty in practice is highly problematic for at least two reasons. First, the required level and type of knowledge necessary to fulfill this duty remains fundamentally unclear.

[19] For a defense of proportionality and weighted voting see Brighouse & Fleurbaey (2008) and Rasmussen (2013)

To some extent, no citizen or institution can claim to be fully informed about all political issues. Second, even if a minimal level of knowledge were agreed upon, enforcing its acquisition would be both highly coercive and costly. Some citizens may have neither the inclination nor the resources to acquire such knowledge, and they might better fulfill their civic duty by delegating their vote to more informed individuals. This is precisely the opportunity that abstention provides. Ultimately, the very notion of civic duty required to justify compulsory voting paradoxically ends up providing a strong argument in favor of allowing abstention. This suggests that the defense of compulsory voting can be self-defeating.

This leads us to advocate, not for eliminating abstention ex ante, but for compensating for it ex post—by allowing each generation's weight to depend on its actual participation rate. We therefore explore the possibility that the score of $p \in P$ be given by $s(p|\mathbf{v}) = \sum_{i \in G} v_p^i \cdot g_i \cdot \phi(a^i)$ where $a^i \equiv 1 - \sum_{p' \in P} v_i^{p'}$ represents the proportion of individuals who abstain in group $i \in \mathcal{G}$ and $\phi : [0,1] \mapsto \mathbb{R}_+$ a weighing sytem, i.e. function assigning a weight to group i based on its abstention rate a_i. Note that we implicitly require that the weights only depends on abstention: it applies identically to groups and to each candidates.

A more substantial, thought natural, requirement if a policy obtains the same share of voters within a group, then its the weighed share of voters must remain unchanged.

Definition 1. *A weighting system satisfies* ***Proportions Invariance*** *if for all $i \in \mathcal{G}$, all $p \in P$ and all $\{v_p^i, \tilde{v}_p^i\}_{p \in P}$, $\frac{v_p^i}{\sum_{p \in P} v_p^i} = \frac{\tilde{v}_p^i}{\sum_{p \in P} \tilde{v}_p^i}$, $v_i^p \cdot \phi(a_i) = \tilde{v}_i^p \cdot \phi(\tilde{a}_i)$.*

The following Proposition, which we prove in Appendix, establishes that the only kind of weighing system satisfying this requirement is such that for all $x \in [0,1]$, $\phi(x) = \frac{k}{1-x}$ for some $k > 0$.

Proposition 1. *A weighing system $\phi : [0,1] \mapsto \mathbb{R}_+$ satisfies* ***Proportions Invariance*** *ϕ if and only if there exists $k > 0$ such that $\phi(x) = \frac{k}{1-x}$ for all $x \in [0,1[$.*

If, in addition, one requires that $\phi(0) = 1$—i.e. in absence of abstention no correction is required—we obtain that the only weighing system satisfying **Proportions Invariance** is defined by $x \mapsto \phi(x) = \frac{1}{1-x}$. However, if one would find desirable to add further correction such as a weight to correct for demographic imbalance within the population this can be done by specifying a parameter k_i and a weighing system $x \mapsto \phi_i(x) = \frac{k_i}{1-x}$ for each group $i \in \mathcal{G}$.

It must also be emphasized that the same ϕ applies similarly even in the case a changing political supply.

Note also that such a weighing system does not produce undesirable property such as the incentive to abstain, for the function

$$v_p^i \to v_p^i \cdot \phi(a^i) = \frac{v_p^i}{\sum_{p' \in R} v_{p'}^i}$$

Decreases when v_p^i does, and there is no room for increasing the score for a candidate by abstaining.

What would this rule produce? As an example, picture three groups: Young (18-35): 30% of people ($g_1 = 0.3$), 50% vote ($a_1 = 0.5$), Middle-aged (36-55): 30% of people, 70% vote, and the seniors (56+): 40% of people, 80% vote. If they're voting on a climate policy, the rule gives young voters a bigger weight because fewer of them vote, ensuring their 30% population share isn't drowned out by seniors' higher turnout.

Implementing this rule would help correct exploitation in voting. First, with younger voters' voices amplified, political parties would be compelled to address their concerns. This might lead to more funding for education. Comparing the effects of electoral reforms across U.S. states, (Bertocchi *et al.*, 2020) found that where youth participation was facilitated, participation among young people increased, which in turn led to a 3% rise in education spending. This may also entail stronger pushes for climate action, as young people care deeply about the environment (Rüdig & Bennie, 1993). Finally, tackling housing unaffordability—cited as a key source of frustration and intergenerational inequality by members of the so-called "rent generation" (Willetts, 2010; Howker & Malik, 2013)—may also climb higher on the policy agenda.

Second, we expect such a correction to increase turnout among young citizens—both by bringing greater attention to issues that matter to them and by reinforcing the perception that their votes can make a meaningful difference LaCombe & Juelich (2019). In the long run, this could help break the vicious cycle linking the participation gap and political alienation, ultimately narrowing the difference in turnout levels between generations. Since our vote accounting method adjusts weights based on participation levels, this mechanism could help align the influence of different generations—even without any demographic correction. In that sense, our rule avoids overcorrection by not penalizing specific groups or disproportionately boosting young people's votes.[20]

Third, a dominating influence of older voters may lead to an inconsistent decision that favors their interests. They may push for big pensions or healthcare now, leaving younger generations to foot the

[20]This marks a key difference from vote-weighting proposals grounded in the all-affected interests principle, where correction tends to move in only one direction. Under our rule, virtually *any* group could see its share adjusted if it gains an unfair advantage over others.

bill later. This rule evens things out, encouraging policies that spread costs and benefits across all ages—like sustainable budgets or investments that pay off down the road (Bidadanure, 2021).

Fourth, the reader may be concerned that our vote accounting method misclassifies a ballot cast by a citizen who chooses to delegate her vote. This citizen may wish to maintain the status quo by not transferring her vote to a specific cohort. However, if she abstains, our method would inadvertently increase the weight of her own generation, to the detriment of others. This issue would be resolved if blank ballots were not affecting the overall weight distribution. Casting a blank ballots would no longer be merely symbolic—this would convey the intention to delegate one's vote to the whole population. Moreover, this approach would introduce an additional delegation option: a citizen could deliberately delegate her vote to members of her own generation by abstaining——an option not available under the one-person-one-vote principle.

In conclusion, the vote accounting method we propose is grounded in the recognition of multiple subgroups of voters and the need to weigh each group in a way that compensates for underrepresentation, whether due to demographic imbalances or differences in participation. It is worth noting that this principle is not new to democracy; for example, mechanisms like the electoral college or senatorial elections in many Western democracies embody similar approaches. However, our proposal suggests basing this method on generational divisions rather than geographic ones.

8 Compensating structural and diachronic exploitation by empowering the youth

In this article, we defend age-weighting as the least intrusive institutional safeguard against intergenerational exploitation, especially in long-horizon policy domains. The aim is not to privilege a cohort but to prevent agents with short remaining horizons from externalizing durable costs onto agents with long remaining horizons. We call a decision exploitative when (a) a coalition can impose net costs that are largely shifted to others (temporal externalization), while (b) insulating itself from those costs due to horizon asymmetry (limited remaining lifespan, reduced exposure to irreversibilities), and (c) doing so without compensating or obtaining genuine consent from those who will bear them. This tracks familiar egalitarian and republican concerns—non-domination, fair reciprocity, and no-free-riding on the future. A bounded age-weight is a minimal safeguard that restores reciprocity: no group should be able to pass measures whose downstream costs fall mainly on others.

The main argument against our proposal is that age is just one of the factors that one could correct. Our societies are characterized by many imbalances of power, and age is just one of them: social class power differential, educational levels, sexual and racial inequalities, and so on. If we have to correct for age, then we should also correct for these other important features, which render the voting rule impracticable, since it would require correcting many variables, making our weighting rule more complex and hardly understandable.

First of all, one should note that our argument justifies weighting voting according to structural exploitation with an intertemporal aspect. Age tracks this feature in a way that class, gender, or education does not. As stated in section 2, a remedy should modify the mechanism that creates the harm (vote aggregation in long-horizon decisions), not repurpose the ballot to redress other injustices already addressed by other instruments (tax-transfer, anti-discrimination, education policy).

We want to state here that age is the best candidate for correction in voting. First, it should be noted that age is the most universal variable: everybody ages, and the older individuals have been younger before; it therefore does not favor particular individuals at the expense of others. As such, and notwithstanding their merits, it is less normatively demanding than other corrections. An age correction is minimalist and symmetrical, since age concerns everybody, and is therefore a strictly egalitarian correction. Indeed, everybody would receive the advantages of the young and the disadvantages of old age. If anything, having a declining weight based on age possesses desirable features from other normative angles: less affluent and less educated individuals tend to live shorter lives, and unlucky individuals die younger.

Moreover, our claim is domain-specific: cohort timing is a case of brute luck that uniquely interacts with electoral aggregation to enable long-run externalization. We agree that many brute-luck disadvantages exist, yet our claim is narrower. Cohort timing uniquely combines with numerosity and turnout to enable time-shifted externalization via elections. A bounded age-weight is therefore the minimal, non-stigmatizing fix to that specific exploitation channel, while gender or class injustices are perhaps more effectively addressed by targeted, non-electoral instruments.

Second, the case for age is robust empirically and can lead to feasible policies. Indeed, when compared to gender, for instance, age is observable, non-manipulable, and relatively transparent, enabling low intrusion. Furthermore, to avoid double-counting inequalities already addressed by taxation, anti-discrimination, or education policies, age remains the primary criterion for aggregation without needing individual-level sensitive datas.

A second worry is that age-weighting denies equal recognition. This concern appears in Christiano

(2008) and Gosseries (2022). Our proposition seeks to preserve equality of influence between groups, therefore securing that every member of society has the possibility to meaningfully influence the political process and the policy outcome. It does not seek to disvalue the votes of older voters *because* they are older, hence implying that older individuals have less value. The rule reflects this concern and does not seek to overweigh younger voters, giving more power than older voters. When effects are predominantly future, equal concern requires a minimal, transparent, and bounded adjustment so that no group can impose lasting costs it will barely bear. This may require to (i) restricting age-weighting to long-horizon domains; (ii) cap weights (as shown in the previous section); (iii) preserve equal civic status (1 person = 1 ballot; weighting occurs at aggregation); and (iv) calibrate weights so that lifetime influence is approximately equal. This is a proportional response to an asymmetric conflict of interests, not a denial of equal recognition.

This article focused primarily on the normative justification of age-based weighted voting, authorizing corrections based on abstention levels and demographic unbalance. To strengthen the case for such a correction, it would be useful to possess a deeper understanding of how such corrections would transform the political process,i.e., modifying political offers and outcomes. Furthermore, the issue of empirical feasibility is still indeterminate, as older voters would probably oppose such corrections. Yet, this proposition aims at solving one of the most fundamental injustices, i.e., the injustice of not being born at the right time, allowing others to pass on costs to you. This is by no means the only inequality theorists should be worried about, but it deserves careful scrutiny.

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A Proof of Proposition 1

Let $\phi : [0,1] \mapsto \mathbb{R}_+$ such that $\phi(x) = \frac{k}{1-x}$ for some $k > 0$ and pick $\{v_p^i, \tilde{v}_p^i\}_{p \in P}$ such that for all $p \in P$ $\frac{v_p^i}{\sum_{p \in P} v_p^i} = \frac{\tilde{v}_p^i}{\sum_{p \in P} \tilde{v}_p^i}$. Hence, we have

$$v_i^p \cdot \phi(a^i) = v_i^p \cdot \phi(1 - \sum_{p \in P} v_p^i) = \frac{k \cdot v_i^p}{\sum_{p \in P} v_p^i} = \frac{k \cdot \tilde{v}_p^i}{\sum_{p \in P} \tilde{v}_p^i} = \tilde{v}_i^p \cdot \phi(1 - \sum_{p \in P} \tilde{v}_p^i) = \tilde{v}_i^p \cdot \phi(\tilde{a}^i)$$

and therefore ϕ **Proportions Invariance**.

Assume ϕ satisfies **Proportions Invariance**. Let $i \in \mathcal{G}$ and $p \in P$. By **Proportions Invariance** for all $\{v^i_{p'}, \tilde{v}^i_{p'}\}_{p' \in P}$ such that $\frac{v^i_p}{\sum_{p \in P} v^i_p} = \frac{\tilde{v}^i_p}{\sum_{p \in P} \tilde{v}^i_p}$,

$$v^i_p \cdot \phi(a_i) = \tilde{v}^i_p \cdot \phi(\tilde{a}_i) \implies \frac{\tilde{v}^i_p}{\sum_{p' \in P} \tilde{v}^i_{p'}} \cdot \phi(1 - \sum_{p' \in P} v^i_{p'}) = \frac{\tilde{v}^i_p}{\sum_{p' \in P} v^i_{p'}} \cdot \phi(1 - \sum_{p' \in P} \tilde{v}^i_{p'}) \tag{1}$$

$$\implies \frac{1}{\sum_{p' \in P} \tilde{v}^i_{p'}} \cdot \phi(1 - \sum_{p' \in P} v^i_{p'}) = \frac{1}{\sum_{p' \in P} v^i_p} \cdot \phi(1 - \sum_{p' \in P} \tilde{v}^i_{p'}) \tag{2}$$

Note first that for all $x, y \in [0, 1[$ there exists a pair of weighing systems $\{v^i_p, \tilde{v}^i_p\}_{p \in P}$ such that $x = \sum_{p \in P} v^i_p$, $y = \sum_{p \in P} \tilde{v}^i_p$ and $\frac{v^i_p}{\sum_{p \in P} v^i_p} = \frac{\tilde{v}^i_p}{\sum_{p \in P} \tilde{v}^i_p}$. To see this note that there clearly exists $\{v^i_p\}_{p \in P}$ such that $x = \sum_{p \in P} v^i_p$ since $x \in [0, 1[$. Then set $\tilde{v}^p_i = \frac{y}{x} v^p_i$ and the results obtains.

Combining this with the fact that (2) holds for all $\{v^i_p, \tilde{v}^i_p\}_{p \in P}$ such that $\frac{v^i_p}{\sum_{p \in P} v^i_p} = \frac{\tilde{v}^i_p}{\sum_{p \in P} \tilde{v}^i_p}$, we obtain that for all $x, y \in [0, 1[$, ϕ must satisfy $x \cdot \phi(1 - x) = y \cdot \phi(1 - x)$. Hence, the function $x \mapsto x \cdot \phi(1 - x)$ is constant and there exists $k > 0$—since $\phi > 0$— such that $x \cdot \phi(1 - x) = k$, proving that $\phi(x) = \frac{k}{1 - x}$ for all $x \in [0, 1[$.