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A post-politics earnings penalty? Evidence from politicians' lifetime income trajectories (1970–2019)

Benny Geys | **Rune J. Sørensen**

Department of Economics, Norwegian Business School BI, Oslo, Norway

Correspondence
Benny Geys, Norwegian Business School BI, Department of Economics, Nydalsveien 37, 0484 Oslo, Norway.
Email: benny.geys@bi.no

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Abstract

Politicians are commonly believed to gain financially from holding and/or having held office. We argue that there may often also be economic downsides to pursuing a political career and investigate whether and when politicians can (not) capitalize on their political experience. We thereby study *both* entry into *and* exit from political office and directly compare the returns to politics across government levels and types of politicians. Empirically, we build on detailed information from Norwegian administrative register data over the period 1970–2019 to study individual-level income developments before, during *and* after a political career at the national and local levels (covering nearly 22,000 individuals and 700,000 person-years). Using an event-study methodology, we show that politicians on average witness a significant income boost during their time in office. In sharp contrast, leaving political office is on average associated with a substantial drop in income, which generally *outweighs* the income gain from entry into office. These findings suggest that most politicians face a net present value loss from holding office.

> Had it not been for the fact that I was able to sell some property that my brother, sister and I inherited from our mother, I would practically be on relief.
>
> (Harry Truman, 1957)

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1 | INTRODUCTION

News headlines regularly depict current and former politicians as insatiably greedy (Watts, 2007; Yang, 2023). Exploiting their political knowledge and networks as a steppingstone, so the story goes, (former) politicians earn exceedingly well from speaking engagements, as CEOs and/or board members in non-profit, private-sector or government-owned corporations, or—after they leave office—in the consulting and lobbying industries. News headlines, however, tend to focus on particularly 'newsworthy' cases. In reality, most politicians at any level of government work in the media shadows and may be unable to benefit from name recognition or valuable appointments (Byrne & Theakston, 2016; Weschle, 2021). Moreover, when political experience and/or networks are irrelevant for individuals' occupation (i.e., an issue of 'human asset specificity'; De Vita et al., 2011; Williamson, 1983), a career interruption to pursue political office may come with a considerable wage penalty afterwards (Speiser, 2021). Finally, exit from politics due to, for instance, a lost election, failure to be re-nominated by one's party or involvement in a scandal, may be viewed as negative signals by potential employers and hurt one's value in the labour market. As such, we argue that there may well be financial risks and downsides to pursuing a political career for at least some politicians, which makes it critical to investigate whether and when politicians can (not) capitalize on their political experience while in office and/or afterwards (as in the case of Harry Truman cited above). This article contributes to answering this question by investigating the returns to *both* entry into *and* exit from political office across government levels and types of politicians.[1]

The returns to political office have attracted considerable theoretical and empirical attention due to their selection and disciplining (or performance) effects (Besley, 2004; Carnes & Hansen, 2016; Caselli & Morelli, 2004; Dal Bó & Finan, 2018; Fedele & Giannoccolo, 2020; Fisman et al., 2015; Gagliarducci & Nannicini, 2013; Messner & Polborn, 2004). Even so, it remains a hotly debated issue to this day. Most empirical studies thus far have focused on the short- and/or long-term returns to *entering* or retaining political office (Berg, 2020a; Cirone et al., 2021; Dahlgaard et al., 2022; Diermeier et al., 2005; Eggers & Hainmueller, 2009; Fahey, 2018; Fisman et al., 2014; Peichl et al., 2013). Scholarship on what happens when politicians *leave* office is much less developed. Although some scholars observe that 'a smooth transition into lucrative private sector employment' is far from certain (Byrne & Theakston, 2016, p. 686; see also Claessen et al., 2021; van der Vlist, 2023; Würfel, 2018), we still know very little about what happens to politicians' income levels *after* their exit from the political scene. Likewise, we know very little about the mechanisms underlying post-office income trajectories. This study is the first to take into account income dynamics during the in-office *and* post-office periods and thus offers a more fine-grained, systematic picture.

Our empirical analysis exploits lifetime income trajectories for all elected members to the Norwegian parliament (*Stortinget*), (junior) ministers and mayors at the local and regional levels of government over the period 1970–2019. These are nearly all full-time, salaried politicians in Norway.[2] Our dataset allows us to follow individuals prior to entering a political position, during their term(s) in office, during transitions between political positions (e.g., from local mayor to Member of Parliament [MP]) and after their exit from politics. This enables the implementation of an event-study methodology to capture how individuals' income changes upon entry in, as well as exit from, specific political offices (Schmidheiny & Siegloch, 2023). To strengthen our causal claim, we rely on four complementary approaches: (i) We restrict the sample to individuals who enter political office at some point in their career, (ii) we extend the analysis to include marginally never-elected *candidates* as a reference group for individuals who did manage to obtain political office, (iii) we derive a counterfactual reflecting what individuals' income would have been had they not entered (or exited) political office, and (iv) we confirm our main inferences when including all politicians and unsuccessful electoral candidates in a standard regression-with-controls framework (full details below).

[1]There may also be non-financial benefits to holding or having held political office. Barfort et al. (2021), for instance, illustrate that narrowly elected politicians on average live 5–10 years longer than candidates narrowly losing an election. Our analysis focuses exclusively on financial returns in terms of income.

[2]Members of municipal and county councils are generally *not* remunerated as full-time politicians but merely receive compensation for attending council meetings. These positions are therefore not included in our analysis.

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Our results show that politicians on average witness a substantial increase in income when they enter a political office (compared to the *pre*-office period). This income boost ranges between 7% and 17%, which is comparable to recent findings in other Western democracies (Berg, 2020a, 2020b; Cirone et al., 2021; Dahlgaard et al., 2022; Kotakorpi et al., 2017). Moving to the post-office period, we find that politicians on average experience a *drop* in income of approximately 30%–40% upon leaving office (compared to the *in*-office period). This holds at both the local and national levels of government (with a partial exception for [junior] ministers at the national level) and is *not* due to potential retirement effects. Moreover, the income drop upon leaving office generally outweighs the income boost following entry into office, such that the vast majority of individuals face a net present value *loss* from pursuing a political career.

Our analysis and findings contribute to the extant literature in three main ways. First, as mentioned, we incorporate the effect of *both* entry into *and* exit from political office. Second, we offer a direct comparison of the returns to politics across government levels and types of politicians, which has not been done previously using one consistent dataset and methodology. Finally, we are the first explicitly to highlight and explore the potential economic downsides of pursuing a political career. In this respect, our findings highlight that entering the political arena may constitute a lottery where the 'lucky few' can earn a large prize (e.g., by becoming minister), but most politicians do not win this lottery. From this perspective, entering politics is not a rational decision for most people when regarded from a purely financial angle. We consider this an important message not only in the Norwegian context, but also in many other representative democracies where distrust in politicians is rising.

2 | PREVIOUS LITERATURE AND THEORETICAL EXPECTATIONS

The returns to political office may have important implications for political selection (Besley, 2004; Carnes & Hansen, 2016; Caselli & Morelli, 2004; Messner & Polborn, 2004; Poutvaara & Takalo, 2007), as well as politicians' performance in office (Besley, 2004; Fedele & Giannoccolo, 2020; Fisman et al., 2015; Gagliarducci et al., 2013). Hence, the empirical quantification of these returns has been a long-standing source of academic interest. Several path-breaking studies including Eggers and Hainmueller (2009) and Fisman et al. (2014)—using UK and Indian data, respectively—highlight substantial returns in terms of lifetime wealth accumulation from having (narrowly) obtained a political office at some point in life. In similar vein, Diermeier et al. (2005) show that a first *re*-election to the US Congress positively affects post-Congressional wages (relative to not achieving an additional term in office). In some cases, part of these positive returns to politics has been linked to more or less illicit rent-seeking activities (Guardado, 2022; Querubin & Snyder, 2009; Szakonyi, 2018; Truex, 2014), while in other cases, they derive in part from extra-parliamentary activities (Geys & Mause, 2013; Weschle, 2021). Highlighting one potential mechanism behind the high returns from having held office in the past, Palmer and Schneer (2016, 2019) show that a substantial share of former political officeholders in the United States receive generous compensations as board members in publicly traded corporations (for similar UK evidence, see Baturo & Mikhaylov, 2016).[3]

More recent work also shows that MPs in several European countries earn very well *during* their term(s) in office. Berg (2020a), Cirone et al. (2021) and Dahlgaard et al. (2022) show that Swedish, Norwegian and Danish MPs, respectively, on average witness a very considerable income boost when first elected. Peichl et al. (2013) and Fahey (2018) present similar findings for German MPs and US state legislators, respectively. The vast majority of politicians, however, serve at lower levels of government (e.g., region or municipality). From this perspective, it is interesting to observe that Kotakorpi et al. (2017), Berg (2020b) and Cirone et al. (2021) uncover at best very small returns to office in the short as well as long run for local politicians in Finland, Sweden and Norway, respectively. As recently argued by Dal Bó and Finan (2018) in a review of the available empirical evidence, these findings make it

[3]Access to such lucrative positions may, however, be feasible only for a small subset of politicians with specific characteristics (Byrne & Theakston, 2016; Claessen et al., 2021; van der Vlist, 2023; Würfel, 2018) and is strongly affected by both institutional and environmental factors (Theakston, 2012).

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critical to delve deeper into the question of which political positions induce positive and/or negative returns to office—and why.

Remarkably, most previous scholarship starts from the implicit assumption that a political career is likely to generate income-relevant benefits due to the generation of political knowledge, networks and skills (Baturo & Mikhaylov, 2016; Claessen et al., 2021; Eggers & Hainmueller, 2009; Fisman et al., 2014; Palmer & Schneer, 2016, 2019; van der Vlist, 2023). This leads to the expectation of a positive payoff for politicians *both* when holding office *and* upon leaving office. While we do not deny that such benefits exist, we contend that several amendments to this line of argument are in order.

First, any **benefits** to holding political office may not be equally attainable by, or valuable for, all politicians. For instance, most rank-and-file politicians remain out of the media limelight and may not be able to attract valuable appointments during and/or after office (Byrne & Theakston, 2016; Claessen et al., 2021; Weschle, 2021; Würfel, 2018). Moreover, political knowledge, networks and skills are unlikely to offer the same labour market value for every professional and educational background. That is, political work may provide a good match for lobbyists, entrepreneurs and journalists, but much less so for brain surgeons, craftsmen and farmers. This issue of 'human asset specificity' (De Vita et al., 2011; Williamson, 1983) implies that the financial benefits of holding a political office are likely to differ substantially across politicians with distinct occupational and educational backgrounds (all else being equal).

Second, we contend that holding political office can also come with important **costs** since being a full-time politician necessitates the interruption of one's professional career. Such career interruptions—whether due to unemployment spells, sick leave, parenthood or other reasons—are often found to induce a wage penalty (for a review, see Speiser, 2021). One reason is that employees acquire firm- and job-specific skills that maximize their productivity (Becker, 1964; Mincer, 1974). These job-specific skills deteriorate during a career break, which leads to a depreciation of human capital and lower incomes at re-employment (Becker, 1964; Mincer, 1974; Speiser, 2021). Obviously, we do not suggest that interrupting one's professional career to take up a political office is the same as an interruption due to unemployment, sick leave or parenthood. For one thing, politicians remain professionally active while in office, whereas this is much less the case during unemployment, sick leave or parental leave. Even so, individuals' job-specific human capital is likely to depreciate while holding a political office, particularly among occupation and education groups that do not rely on the skills, knowledge and expertise required in politics (see above). A political career thus may make it more challenging for such individuals to secure high-paying employment upon leaving office (Byrne & Theakston, 2016), and they may be forced to drop their reservation wage to increase the likelihood of finding a job (Deschacht & Vansteenkiste, 2021; Mortensen, 1986).

Naturally, if human capital depreciation affects the returns to holding political office, the length of individuals' political career becomes a relevant factor. A prolonged political career would be expected to induce a higher depreciation of job-specific human capital, while the marginal benefit of gaining additional political skills, knowledge and expertise may also be declining over time. Hence, longer political careers would become associated with smaller positive—or larger negative—returns to office. In similar vein, keeping in touch with the professional world during one's time in office via, for instance, outside interests and secondary employments would allow politicians to maintain (non-political) job-specific skills and human capital (Geys & Mause, 2013). Compared to politicians who exclusively concentrate on their political office, those with outside interests may then witness a reduced deterioration of such skills and human capital. This may ease their transition back into the labour market outside politics and lead to a higher positive—or smaller negative—post-office income shock.

Third, there may be **costs** not only to holding political office, but also to (the way of) exiting political office. Reminiscent of the difference between leaving an organization by one's own free will and being fired from one's position, leaving a political office may be either voluntary or forced.[4] While politicians may be more interested in leaving office voluntarily under the prospect of a (major) income boost (Egerod, 2022; van der Vlist, 2023), forced

[4]We are grateful to an anonymous referee for this insight.

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exits of any form may rather send negative signals to potential employers. Similarly, former mayors may be less sought after in the job market if they leave politics after their party (or coalition) lost the ruling majority in the local council under their leadership. Note that this line of argument is not incompatible with our—and the extant literature's—earlier focus on the potential income benefits of political knowledge, networks and skills. The reason is that politicians forced to leave office are unlikely to have much status or networks to make the most of on their way out. Hence, any negative effects of human capital depreciation or the stigma associated with the way they left politics may not be (fully or even partially) compensated by, for instance, income-relevant benefits linked to political skills.

Since it is hard to specify a priori whether the positive or negative effects described above dominate, we consider it an empirical question whether the returns to holding—or having held—political office are positive or negative. Nonetheless, our theoretical arguments also lead to the proposition that some politicians may risk a post-office earnings *penalty*. In fact, we argue that this is more likely to materialize (or constitute a larger penalty) for (i) those in occupation and education groups that do not rely on the skills, knowledge and expertise required in politics; (ii) those exiting after more prolonged political careers; (iii) those less exposed to the media limelight (e.g., local as well as rank-and-file MPs); (iv) those focusing exclusively on their political function while in office (relative to those maintaining outside employments); and (v) those forced to leave their position rather than leaving voluntarily.

3 | INSTITUTIONAL SETTING AND DATA

Norway has three levels of government: the local level with currently 356 municipalities, the regional level with 11 counties and the national level. Local as well as national elections take place every fourth year in September with a 2-year interval between them. At the local level, the election system is open-list proportional representation where the municipality consists of one election district. Political parties and independent groups offer ranked lists of candidates, and voters cast their vote for a party list and may provide preference votes for one or more candidates. The local council subsequently elects a mayor usually from among its own members. The (s)election process for mayors thus depends on the success of their party as well as the overall composition of the local council. Failure to obtain—or being ousted from—a mayoral office thus cannot necessarily be attributed to the individual incumbent's performance, or lack thereof, in the Norwegian setting. Local council members are compensated only for travel costs and meeting participation, while mayors (and some deputy mayors) have full- or part-time positions as elected politicians.[5]

At the national level, the 169 members of the national parliament (*Stortinget*) are elected using closed-list proportional representation. In such a setting, candidates' success is determined by their position on the party list (as assigned during [local] nomination conventions) and the overall success of the party, while their individual popularity within the electorate has minimal impact. This institutional framework also makes it less likely that private-sector employers would consider 'losing' an election as a very informative signal when assessing an individual's qualifications. MPs are full-time politicians, with additional compensation for costs related to living outside their election district (i.e., in the Norwegian capital of Oslo). While many ministers are chosen from among the elected MPs (though they resign this seat while being part of the government), it remains very common in Norway to appoint ministers that have no elected mandate. This is even more the case for junior ministers (*statssekretær* in Norwegian), who with very few exceptions are appointed directly by the minister from outside the Norwegian Parliament.

Our dataset combines information on Norwegian local and national politicians from three main sources. Data on local mayors over the period 1971–2019 are obtained from the 'Local Candidate Dataset' (Fiva, Sørensen, & Vøllo, 2021), data on national candidates and elected MPs are taken from the 'Norwegian Parliamentary Elections, 1906-2021' dataset (Fiva & Smith, 2022), while data on (junior) ministers are acquired from the 'Ministers archive' provided by the Norwegian Centre for Research Data (NSD). The various start and end dates of these sources imply

[5]For further details, see the Local Government Act in English at https://lovdata.no/dokument/NLE/lov/2018-06-22-83.

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TABLE 1 Matching information on Norwegian politicians with statistics Norway register data.

	Mayors	Candidates to parliament: All	Candidates to parliament: Elected	Ministers	Junior ministers	Total
Matched	2367	20,550	810	274	588	24,589
Not matched	809	9513	97	4	56	10,479
Total	3176	30,063	907	278	644	35,068

that our final dataset covers election candidates and politicians for the period 1970–2019. Naturally, we cannot track all individuals in our sample over their entire life cycle. Even so, we can observe the average individual for a period of 35 years (from the average entry age of 28 years up to the average exit age of 68 years). As a result, we can see when they (i) obtain their first political position, (ii) enter new political positions (if at all) and (iii) leave politics. Furthermore, the combination of all three data sources enables observing politicians with multiple positions across their political career. This is illustrated in Appendix S1, Table A.1, which presents the number of (unique) persons in 16 potential categories—ranging from never-elected candidates to parliament (the largest group in our dataset), over politicians holding just one type of political position, to politicians gaining experience in multiple positions. As might be expected, most politicians have only one type of position (with local mayors the largest group), while a significant number of MPs have also held mayoral positions ($N = 137$), and ministers tend to have been an ordinary MP ($N = 96$).

Using individual background characteristics (e.g., names, birthdates, and location of political office), Statistics Norway (SSB) added an anonymous identifier to each individual politician whenever possible. As illustrated in Table 1, it was not always feasible to find a match with SSB's individual-level register data—particularly among local politicians and parliamentary candidates (often due to incomplete and/or insufficiently discriminatory background information). Crucially, for those individuals that could be matched with register data (i.e., just over 70% of the original sample), we observe their income for each year in the sample period (in Norwegian kroner [NOK], with NOK10 ≈ 1 USD ≈ €1). We thereby obtained access to four income indicators from Statistics Norway. *Pensionable income* (i.e. income that qualifies for public old-age pension) covers all years in the 1970–2019 period, and includes wage and capital income plus selected subsidies designed to compensate for the loss of work income (i.e. sickness, maternity, disability and unemployment benefits and compensations for military service). This earnings indicator does not include old-age pensions. *Wage income*, *work income* and *total income* are only available for the period 1993–2019. Wage income comprises only remuneration paid by an employer as part of an employment relationship.[6] Work income extends wage income with net business income as well as sickness and maternity benefits. Total income extends work income with other sources of capital income as well as taxable and non-taxable subsidies (including old-age pensions). Throughout the analysis, these financial indicators are deflated by the consumer price index (2015 = 100). Summary statistics are provided in Appendix Table A.2, while Appendix Figure A.1 illustrates the nature of our annual pensionable income trajectories for four selected politicians.

The final sample of politicians matched to the register data consists of 23,732 unique individuals (877,470 person-years). This is lower than the total number of matched individuals mentioned in Table 1 because some individuals held more than one political position in our period of observation (see above). For this set of politicians, we observe non-missing income data for up to 696,361 person-years (21,841 unique individuals). Note, however, that in most of the analyses, we restrict the sample to persons who enter political office at some point in their work career (3479 unique individuals; 128,891 person-years). The reason is that the ability to become elected may be correlated with unobservable income-relevant individual-level characteristics, which could lead to biased inferences

[6]Politicians are not considered ordinary wage earners in Norway and are not subject to the same labour protection regulations as ordinary employees (Stortinget, 2021). Strictly speaking, they therefore also do not receive a 'wage', but rather a 'compensation' (*godtgjørelse* in Norwegian). For ease of reference, we refer to this as politicians' wage in the remainder of this article.

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FIGURE 1 The timing of political office and post-office. Notes: the top panels display the frequency distribution for the age at which politicians enter (left-hand side) and exit (right-hand side) political office. The lower-left panel shows the average number of years politicians maintain their political office (on the vertical axis) as a function of their age at entry into politics (on the horizontal axis; in 5-year age groups) (i.e. 18–22, 23–27, …). The lower-right panel displays the average number of years politicians continue to earn positive pensionable income after they left politics, as a function of their age at exit (in 5-year age groups) (i.e. 23–27, 28–32, …).

(e.g. conflating the effect of entry into politics with that linked to the underlying differences between politicians and non-politicians; Cirone et al., 2021; Dal Bó et al., 2017; Schmidheiny & Siegloch, 2023). Focusing only on politicians creates a like-for-like comparison that benefits the internal validity of the analysis. Still, in some extensions, we also exploit information on *marginally never-elected candidates*. These can credibly be argued to offer a sensible control group of individuals never 'treated' with holding political office (Berg, 2020a; Cirone et al., 2021; Dahlgaard et al., 2022). This is based on the notion that 'conditional on agents' actions and characteristics as of election day, the winner of a closely contested election would be determined as if by the flip of a coin if there exists a random chance element in elections' (Fiva, Geys, et al., 2021, p. 602).[7]

In Figure 1, the two top panels display the frequency distribution for the age at which politicians enter (left-hand side) and exit (right-hand side) political office—pooled across all types of political positions. This illustrates that most politicians in our sample achieve their first political office between their mid-thirties and mid-fifties, while they predominantly start to exit politics once they pass their mid-forties. The lower-left panel in Figure 1 depicts the average number of years politicians maintain a political office (on the vertical axis) as a function of their age at entry (on the horizontal axis). As would be expected, those who enter a political office for the first time at a younger age tend to remain in office somewhat longer. Even so, the average political career length at most ages hovers around 4–8 years, which reflects that both local and national elections in Norway take place every 4 years with a 2-year interval

[7]Furthermore, we will illustrate that our main findings persist even when we use the complete available sample (i.e. including all individuals that achieve political office at some point as well as all individuals included on an electoral list who never become elected).

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between them. Finally, the lower-right panel in Figure 1 displays the average number of years politicians continue to earn positive pensionable income after they left politics (on the vertical axis), in this case as a function of their age at exit (on the horizontal axis). Those who exit younger naturally remain economically active for a longer period.[8] Not immediately visible from Figure 1 is the fact that the average politician in our sample has 20.7 years of pre-office period, spends 7.0 years holding their political office and subsequently enjoys a post-office period of 18.1 years (starting, on average, at age 54 years).

4 | RESEARCH DESIGN: EVENT-STUDY ANALYSIS

Our analysis aims to investigate how income paths change around the time when politicians enter or exit different types of political office. Identifying causal effects of such events is far from straightforward since entry and exit from political office may be endogenously determined. Previous work attempts to address this concern via both difference-in-differences (DiD; Berg, 2020a; Cirone et al., 2021; Dahlgaard et al., 2022) and regression discontinuity designs (RD; Berg, 2020b; Cirone et al., 2021; Eggers & Hainmueller, 2009; Fisman et al., 2014; Kotakorpi et al., 2017; Querubin & Snyder, 2009). Both approaches have their strengths and limitations. In our setting, however, RD designs are unfeasible as ministers and junior ministers in Norway are regularly not elected MPs, while mayors are (s)elected by local council members (either unanimously or by supermajority). Hence, there are no close elections to exploit for most people in our sample. Furthermore, RD designs have strong interval validity for those who seek re-election, but are not well suited when politicians leave voluntarily. This is particularly problematic since politicians could anticipate their likelihood of (re-)election or take their earnings potential into account when deciding upon their (voluntary) exit from politics. One would indeed expect rational politicians to be more (less) keen to leave office voluntarily when it involves a wage boost (cut) (Egerod, 2022). Finally, DiD designs focus on the average treatment effect of entry or exit from political office and do not directly capture the dynamics of any income effects (which are of key interest to us).

Given these considerations, we implement an event-study methodology commonly used to study the dynamic impact of specific events (Schmidheiny & Siegloch, 2023). This approach looks at the development of an outcome variable of interest (in our case: politicians' income) during a specified period *before* and *after* an event occurs (in our case: entry in, or exit from, political office). Assume that we observe the outcome variable at time periods t ranging from $\underline{t}$ to $\overline{t}$ (i.e. our observation window) and that we want to observe what happens to this outcome from $\underline{k} < 0$ periods before an event up until $\overline{k} > 0$ periods after the event (i.e. our event window, with the event occurring at $t = 0$). As a starting point, we can then simply plot the mean (log) income for all periods $t + k < 0$ *before* the event occurred as well as for all periods $t + k > 0$ *after* the event took place (Schmidheiny & Siegloch, 2023). This would offer an accessible and transparent way to gain a first (purely descriptive) impression of the presence, direction and (relative) size of any shifts in income trajectories around the event under analysis.

From this starting point, we implement three distinct (though complementary) approaches to strengthen our causal claim. First, we restrict the sample to individuals entering political office at some point (i.e. 3479 unique individuals). This sample restriction addresses the fact that individuals achieving political office may be different from the rest of the population along multiple (un)observable characteristics (Cirone et al., 2021; Dal Bó et al., 2017; Schmidheiny & Siegloch, 2023) and thus leads us to a 'most-similar' research design.

Second, as an alternative approach, we exploit the fact that many candidates in national elections miss out on (ever) holding office by only a very narrow margin. Since such marginally never-elected *candidates* aspired to become

[8]Note that the lower-right panel in Figure 1 is affected by the fact that our dataset 'only' covers 50 years and thus does not capture the full lifespan of all individuals. Hence, a person we observe exiting politics at 23 years can—on average—only remain in the dataset for another 25 years (since this observed exit is equally likely to occur at any year in our 50-year time span). The same obviously holds for every other exit age, and thus any retirement effects only start 'biting' from around an exit age of 40–45 years (when adding 25 more years brings people to the official retirement age). This is why the downward slope kicks in at exactly that point. Still, it is possible to continue working in the private sector after the official retirement age in Norway (under certain conditions), which explains the bars on the far right of the lower-right panel.

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elected and only missed out due to the randomness inherent in close elections, we use them as a reference group for individuals that did obtain political office (Dahlgaard et al., 2022; Fiva, Geys, et al., 2021; Schmidheiny & Siegloch, 2023). More specifically, we first look for the candidates in an election to the national parliament that would have been elected if their party in a given district during a given election would have obtained just one more seat. We then select from this set of candidates only those that never enter any political position and calculate their average income by age and year (both in one-year intervals). Finally, we adjust observed individual-level income levels for all individuals in our dataset ($Income_{i,t}$) with this average income of marginally never-elected candidates ($Income_{never,t}$) by age and year. This effectively rescales the income of successful politicians of a given age at a certain point in time by the income of unsuccessful political candidates of the same age at the same point in time.

Third, we take inspiration from recent developments in imputation-based two-stage DiD models to derive a counterfactual reflecting what would have happened if an individual had not entered—or exited—political office (Butts & Gardner, 2022; Gardner, 2022). Specifically, returning to the subsample of politicians that enter political office at some point during our observation period (see approach 1 above), we regress the income level of individual i in year t ($Income_{i,t}$) against a full set of individual (α_i), age (Age_a) and year (γ_t) fixed effects *using only pre-event observations*:

$$Income_{i,t} = \alpha_i + Age_a + \gamma_t + \varepsilon_{i,t} \tag{1}$$

The residual values obtained from Equation (1) across the pre- and post-event periods effectively impute *counterfactual* income levels as if the event had not occurred. We do this separately for the entry and exit 'events', such that we obtain a counterfactual income as if (i) no entry into politics had occurred or (ii) no exit from politics had occurred. These then allow estimating causal effects of the treatment (i.e. either entry or exit) under the identifying assumption that the income trend of individuals who have not yet entered (or not yet exited) office is a valid counterfactual for the income trend of individuals who did (Butts & Gardner, 2022). More formally, this implies estimating the following second-stage model:

$$\widehat{\varepsilon}_{i,t} = \delta + \sum_{k=\underline{k}}^{\overline{k}} \beta_k Office_{i,t+k} + \mu_{i,t} \tag{2}$$

where $Office_{i,t+k}$ is a treatment event indicator variable for an event happening k periods away from t (with $\underline{k} < 0$ and $\overline{k} > 0$ for an event at $t = 0$). The parameters β_k reflect the dynamic treatment effect, conditional on being left with as good as random variation after the correction for individual-, age- and year-specific income profiles using Equation (1). As this condition would be reflected in parallel pre-event trends, its validity can be formally tested. Observe furthermore that it is *not* necessary to assume that the timing of entry and exit is random as long as this parallel pre-trends assumption is satisfied. In our setting, we can assess whether the pre-trends are parallel 'by replacing the second stage of the procedure with a regression of residualized outcomes onto the leads and lags of treatment' (Butts & Gardner, 2022). It is satisfied when pre-treatment effects are zero (i.e. $\beta_k = 0$ for all periods $t + k < 0$). We show the results from this validity check in Appendix Figure A.2. We perform the test in both levels and first differences to accommodate potential serial correlation in the income data. In both cases, the results suggest that the parallel pre-treatment trends assumption is satisfied.

5 | EMPIRICAL RESULTS

5.1 | Main findings

Our main findings using pensionable income (available from 1970 onwards) are graphically illustrated in Figure 2 (findings for wage, work and total income from 1993 onwards are in Appendix Figure A.4). The left-hand panels compare income levels during the 20 years before entering office and the 20 years in office, while the right-hand panels compare the 20 years in office to the 20 years after leaving office. The top panel displays findings using the raw income data for the entire sample of office-entering politicians, while the middle panel employs the difference in income between office-entering politicians and narrowly never-elected candidates (of the same age and time period). The bottom panel displays residualized income levels clearing out individual, year and age effects using only pre-office observations (in the left-hand panels) or only in-office observations (in the right-hand panels) by estimating Equations (1) and (2). All panels include 95% confidence intervals and a linear trend through the underlying data. While this analysis pools all types of political offices, we return below to extensions that differentiate between mayors, MPs, ministers and junior ministers.

Throughout Figure 2, we restrict the sample to individuals with one office and one post-office period.[9] Moreover, we include only individuals up to age 67 years, which is the official retirement age in Norway. Although since 2011 it is possible to continue working and be paid an income up until the age of 75 years while receiving old-age pension (Norwegian Tax Administration, 2022), one could expect that passing the official retirement age of 67 years has a dampening effect on most types of income (we experiment with alternative age limits below).

A first observation from Figure 2 is that holding political office is associated with a considerable boost in income *relative to the pre-office period*. Interpreting the difference in the natural logarithms before and after a political event as approximating the percentage change in income, the increase is estimated to be between 7% (panel III) and 17% (panel II). It is statistically significant well beyond the 99% confidence level in all three panels. This income boost is in part a reflection of the relative high remuneration of political offices in Norway—including the position of local mayors—at least since the mid-1990s. This high remuneration is intentional and aims to account for politicians' lower job security as well as their more limited employment rights compared to regular employees (Stortinget, 2021). Nonetheless, elected politicians may also have income sources beyond those from their political office, such as capital income, wage income from other employments or compensation as board members. The restrictions on such outside employments and pecuniary interests differ by the type of political position in Norway, but generally remain minimal except for (junior) ministers.[10] Consequently, it would be easy for politicians to supplement their income, and variation in annual incomes for the same politician holding a specific office (see, for instance, Appendix Figure A.1) suggests that outside incomes may play a role in the observed in-office income boost. We return to this below.

A second, and far more surprising, observation from Figure 2 is that exit from political office is associated with a considerable drop in income *relative to the in-office period*. This income drop ranges from −46% (panel I) to −39% (panel II) and strongly suggests that political careers on average do not lead to a major post-office pay-day. While this observation may initially appear surprising in light of popular perceptions and expectations (see above), our findings are consistent with van der Vlist's (2023) analysis of the positions taken up by 970 former Dutch MPs who left office between 1967 and 2017. His findings highlight that the *best-paying* position for a majority of exiting MPs paid a salary below that of their MP salary. This is the case throughout his 50-year time period (van der Vlist, 2023).

[9]Some individuals leave politics to work in the private sector and then re-enter politics after a while (possibly to exit again later). Such 'interrupted' political careers occur for 407 individuals in our sample and create difficulties in determining the relevant pre- and post-event periods. We therefore exclude these individuals from the sample throughout the analysis, such that all individuals in our sample are treated only once and remain in the treated state after the event (Gardner, 2022).

[10]For instance, the Norwegian Parliament operates a register where MPs are required to disclose their positions and financial interests within 1 month after the newly elected parliament has convened (https://www.stortinget.no/en/In-English/Members-of-the-Storting/Registered-Interest). Ministers and junior ministers cannot have interests or affiliations that could reasonably cast doubt on their impartiality or otherwise hinder the execution of their roles (see https://www.regjeringen.no/no/dokumenter/handbok-for-politisk-ledelse2/id2478689). Finally, local mayors face minimal formal restrictions on holding additional employments. For instance, it is widely recognized that some mayors manage their own business ventures in conjunction with their role as mayor. Most municipalities have, however, established ethical guidelines with respect to mayor's outside positions, often based on the suggestions developed by the Norwegian Association of Local and Regional Authorities (KS) (see https://www.ks.no/globalassets/fagomrader/for-deg-som-folkevalgt/handbok-for-ordforere-nettversjon-endelig.pdf).

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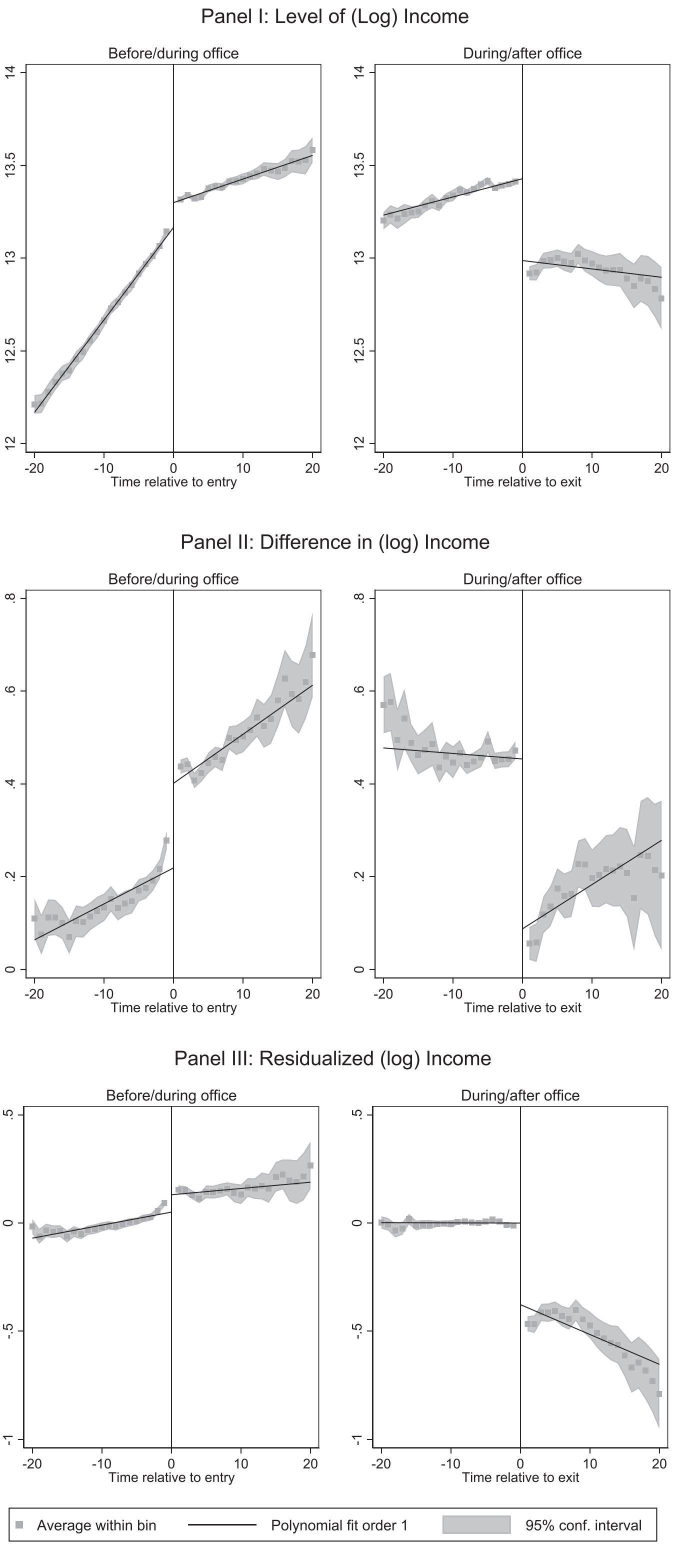

FIGURE 2 Legend on next page.

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FIGURE 2 Pensionable income developments in pre-office, office and post-office periods. Notes: the figure displays the average development in pensionable income measured in constant 2015 prices and on a log-scale. The top panel uses the raw income data for the entire sample of office-entering politicians, while the middle panel employs the difference in income between office-entering politicians and narrowly never-elected candidates (of the same age and time period). The bottom panel displays residualized income levels clearing out individual, year and age effects *using only pre-office observations* (in the left-hand panels) or *only in-office observations* (in the right-hand panels). The left-hand panels compare the 20 years before entering office to the 20 years in office, while the right-hand panels compare the 20 years in office to the 20 years after leaving office. All panels include 95% confidence intervals and a simple linear regression line through underlying data.

The results in Figure 2 suggest that the *net* gain from holding office is unlikely to be very large for the average politician. The reason is that the post-office income loss in most cases exceeds the in-office income gain, which will be particularly painful given that the post-office period on average is more than twice as long in our sample as the in-office period (i.e. 7.0 years vs. 18.1 years; see above). To assess these *net* gains (or losses) in more detail, we perform a simple back-of-the-envelope calculation to determine the net present value of holding political office (evaluated at the year before potential entry into politics). Assuming a real annual income growth of 1.67% (based on Statistics Norway data over the 1970–2020 period) and a discount rate of 4.0% (Lagakos et al., 2018), we can use the point estimates underlying panel III in Figure 2 to determine the number of post-office years at which the net present value of holding political office falls below the net present value of not engaging in a political career. In case individuals spend the average time holding a political office (i.e. 7.0 years), this prospective political career would on average lead to a net present value loss as soon as the post-office period exceeds 2–3 years. Since this is well below the average post-office period in our sample (i.e. 18.1 years), it would be very hard to argue that the average politician is 'in it for the money'.[11]

As discussed above, this net present value loss may reflect that political experience yields specialized human capital gains with limited labour market returns for most politicians (De Vita et al., 2011; Williamson, 1983), that the disruption of individuals' professional career is penalized in terms of earnings potential (Becker, 1964; Deschacht & Vansteenkiste, 2021; Mincer, 1974; Mortensen, 1986; Speiser, 2021) or that reputational costs are associated with (particularly involuntary) exits from politics. We return to—and offer some evidence in corroboration of—some of these arguments below. Furthermore, anecdotal as well as survey evidence suggests that former politicians may take considerable time to find a new position after leaving office (Byrne & Theakston, 2016). Although MPs and mayors in Norway usually receive a so-called 'after-income' for up to 12 months after leaving office, this equals at most 66% of MPs' parliamentary wage (while for mayors the exact level is decided by the local council). Finally, we should note that politicians in Norway are paid the same independent of their age or time in office (Stortinget, 2021), whereas returns to seniority have been estimated at 25%–50% at 10 years of seniority for labour markets outside politics (Buchinsky et al., 2010; Topel, 1991). This distinction is clearly reflected in the difference in the slopes of the two lines in the top-left panel of Figure 2, which highlights that (future) politicians would have seen their income rise more rapidly had they not become politicians. Hence, the differential treatment of seniority across sectors can also explain part of the net present value loss we observe, since any returns to seniority represent part of what the typical individual would stand to lose from interrupting their professional career.

Three further points are important to bring forward with respect to the results in Figure 2. First, a comprehensive pension reform in 2011 made it possible under certain conditions to retire from the age of 62 years rather than

[11]The same observation arises when we jointly estimate the income effects of entry into and exit from politics. This entails the estimation of Equation (1) followed by Equation (2) including separate in-office and post-office indicator variables. In that case, the income boost from entry into politics is estimated to be 14.8%, while the income drop after exiting politics equals 27.3%—*relative to the pre-office period in both cases*. The latter point estimate highlights once more the considerable income loss compared to what an individual would have earned had (s)he never entered politics (full details available upon request).

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at the official retirement age of 67 years. Retirement before the age of 62 years is not possible, and retirement between 62 and 67 years comes at the cost of a considerable percentage reduction in old-age pensions until one reaches the age of 67 years (https://www.nav.no/alderspensjon). Online Appendix Figure A.3 illustrates that our results are qualitatively unaffected by imposing an upper age limit for our estimation sample at 62 years. The post-office income loss becomes less pronounced (from −41% to −27%) but stays statistically significant well beyond the 99% confidence level. This indicates that (early) retirement is not driving our findings. Second, Appendix Figure A.4 highlights that our results are robust to using wage income, work income and total income (as defined above). The post-office income drop is lowest when looking at total income (which includes net business income as well as other sources of capital income and old-age pensions) but even then remains substantial at roughly −27%. This suggests that politicians in our setting do not appear to set up businesses to manage any post-office income flows (and thereby avoid the higher tax rates on personal income).

Finally, one might worry that focusing only on politicians-to-be creates a highly selective sample. Hence, we also estimated a regression model including all individuals that achieve political office at some point as well as all individuals included on an electoral list who never become elected (our dataset does not include information about all remaining 'non-political' citizens). Controlling for individuals' gender, age, education level, immigrant status and municipality of residence (as well as a full set of year fixed effects), we find significant positive returns from entry into political office for all types of politicians—consistent with the results in Figure 2 and Table 2. More importantly, however, exit from office again comes with a considerably drop in income relative to the in-office period for mayors and MPs. These groups of politicians fall back to an income difference with non-politicians at or even below that observed before entry into politics. The same is not true for (junior) ministers. They can largely maintain their political income boost also after exit from office and thus face little to no post-office income losses (again consistent with the results in Figure 2 and Table 2; full details in Appendix Table A.3). Overall, any post-office income penalty from politics relative to the *pre*-office period appears to be smaller in Appendix Table A.3 compared to Table 2. This

TABLE 2 Returns to office by political position.

	All (1)	Mayor (2)	MP (3)	Junior min. (4)	Minister (5)
	Panel I: Upper age limit at 67 years				
Office	0.072***	0.097***	0.023	0.054***	−0.030
	(0.008)	(0.009)	(0.019)	(0.021)	(0.033)
Post office	−0.408***	−0.443***	−0.650***	−0.005	−0.166***
	(−0.012)	(−0.015)	(−0.034)	(−0.017)	(0.043)
	Panel II: Upper age limit at 62 years				
Office	0.073***	0.095***	0.034*	0.056***	−0.029
	(0.008)	(0.009)	(0.019)	(0.021)	(0.033)
Post office	−0.286***	−0.309***	−0.496***	−0.026	−0.109***
	(−0.010)	(−0.012)	(−0.035)	(−0.016)	(0.041)

Notes: The table displays income dynamics during entry into and exit from four distinct political offices (with standard errors in parentheses). The dependent variable equals residualized pensionable income clearing out individual, year and age effects *using only pre-event observations* (i.e., the pre-office period when analysing the in-office effect and the in-office period when analysing the post-office effect). It is measured on a log-scale and defined in constant 2015 prices. The 'office' results compare the 20 years before entering office to the 20 years in office, while the 'post office' results compare the 20 years in office to the 20 years after leaving office. Both are estimated using separate regression models, as indicated by the dotted line separating both point estimates.
**p* < .1, ***p* < .05, and ****p* < .01.

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discrepancy is likely a result of a violation of the parallel trends assumption (see note 12). Otherwise, the findings are consistent with our main results reported previously.[12]

5.2 | Heterogeneous effects

Thus far, we have implicitly assumed that the income dynamics around political entries and exits arise similarly for all types of politicians. However, previous research suggests that only politicians in top executive positions may be able to gain financially from their political experience (Byrne & Theakston, 2016; Claessen et al., 2021; Weschle, 2021; Würfel, 2018) and that the returns to political office may be higher at the national compared to the local government level. From a theoretical perspective, such positions likely lead to higher benefits in terms of political knowledge, networks and skills while also being more exposed to the media limelight (which might increase one's labour market value outside politics). We assess this potential heterogeneity in the returns to political office in Table 2. Column (1) repeats the results for the entire sample of politicians for ease of comparison, while the remaining columns include only local mayors (column (2)), national MPs (column (3)), junior ministers (column (4)) and ministers (column (5)). The top panel in Table 2 restricts the sample to individuals up to age 67 years, while the bottom panel sets the age limit to 62 years.

Table 2 first of all indicates that politicians at all government levels witness an increase in income during their time in office (relative to the *pre*-office period). This income boost appears to be larger at the local level (approx. 10%) compared to the national level (up to 6%). Second, we find a very considerable post-office income drop relative to the *in*-office period for local mayors (31%–44%) and regular MPs (49%–65%) and a considerably smaller drop for ministers (11%–16%) and junior ministers (0%–3%). Clearly, comparing panels I and II suggests that things look less dire for prospective politicians once we account for potential (early) retirement effects. Nonetheless, the presence of a post-office income drop remains a consistent finding. Taken together, these findings confirm that serving as a local or national politician is unlikely to be beneficial from a future income perspective. Only the top executive positions in national politics appear to be partially insulated from a negative income shock after leaving politics.

As discussed in Section 2, our theoretical line of argument would predict considerable heterogeneity in the returns to political office along a number of dimensions. Although formally testing these mechanisms is empirically challenging and our data do not allow us credibly to address the involved endogeneity problems, the remainder of this section nonetheless provides some explorative analyses of these theoretical expectations.

We start with the proposition that the returns to political office may differ across occupational and educational groups. Particularly among groups more likely to rely on the skills, knowledge and expertise required in politics, the benefits from engaging in political activities may be higher and any declines in job-specific human capital lower. In the absence of information on individuals' occupation, we use information on individuals' highest educational degree as a proxy. The underlying reasoning is that politicians with higher education levels (i.e. Master, PhD or equivalent) are on the whole more likely to work in occupations requiring skills similar to those needed or acquired in politics. Table 3 therefore separates politicians with at least a master degree (panel I) and those with at most a bachelor degree (panel II). The results highlight that politicians with lower education levels indeed face a substantially larger income drop in the post-office period—in general as well as within three of our four political offices.

Second, we argued that job-specific human capital depreciation should lead to smaller positive—or larger negative—post-office income shocks after a more prolonged political career. Figure 3 displays results from auxiliary analyses estimating separate in-office returns by age of entry (left panel) and post-office returns by the number of years in office (right panel). The results in the right panel show that the post-office income drop is initially very

[12]The estimates in Appendix Table A.3 are *not* causal since the parallel trends assumption is very likely to be violated. Appendix Figure A.6 figure plots log income levels against age using data for never-elected candidates and the pre-office period of elected candidates, and indicates a markedly lower income increase for the never-elected group, particularly in the older age groups. Hence, a simple regression-with-controls approach with never-elected candidates as reference group may severely underestimate any post-office income penalty.

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TABLE 3 Returns to office by education level.

	All (1)	Mayor (2)	MP (3)	Junior min. (4)	Minister (5)
	Panel I: Master degree or higher				
Post office	−0.322***	−0.370***	−0.537***	−0.014	−0.034
	(−0.015)	(−0.021)	(−0.043)	(−0.019)	(0.047)
	Panel II: Bachelor degree or lower				
Post office	−0.574***	−0.557***	−0.826***	0.057	−0.451***
	(−0.021)	(−0.022)	(−0.064)	(0.061)	(0.127)

Notes: The table displays income dynamics following individuals' exit from four distinct political offices (with standard errors in parentheses). The dependent variable equals residualized pensionable income clearing out individual, year and age effects *using only pre-event observations*. It is measured on a log-scale and defined in constant 2015 prices. We focus on the 20 years in office and the 20 years after leaving office. Panel I includes only politicians with at least a Master degree as their highest education level, while panel II includes only politicians with at most a Bachelor degree as their highest education level.

$^{*}p < .1$, $^{**}p < .051$, and $^{***}p < .01$.

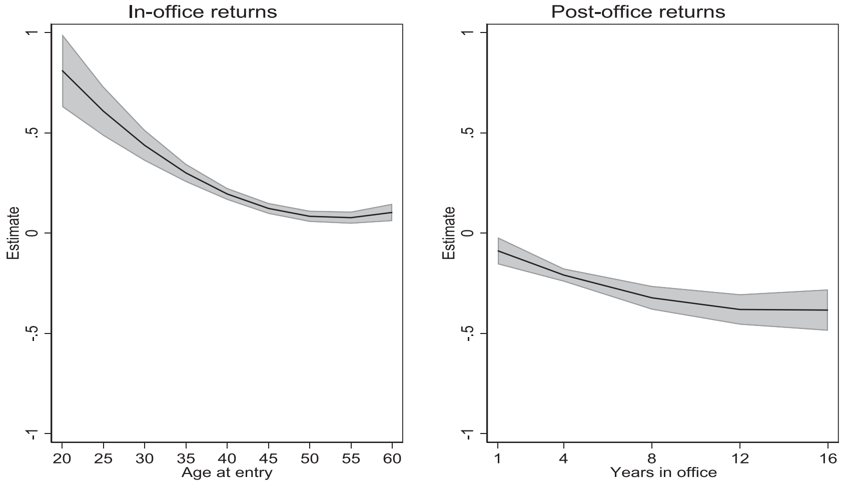

FIGURE 3 In-office return by age of entry and post-office returns by years in office. Notes: the left-hand panel displays estimated returns to political office during the in-office period as a function of politicians' age at entry. The right-hand panel displays estimated returns to political office during the post-office period as a function of the number of years politicians remain in office. The dependent variable equals residualized pensionable income clearing out individual, year and age effects *using only pre-office observations* (in the left-hand panel) or *only in-office observations* (in the right-hand panel). Both panels include the entire sample of politicians while imposing an age cut-off at 62 years. The grey area reflects the 95% confidence interval around the point estimates (given by the black line).

modest but increases in absolute terms with longer political careers. This is in line with our theoretical argumentation that job-specific human capital depreciation worsens over time and thus will tend to induce a larger negative income shock upon exit from politics. Nonetheless, this same finding is also consistent with the difference in how experience affects income developments inside (i.e. not growing with experience over time) and outside of politics (i.e. growing with experience over time). After all, this difference would create a growing gap between the remuneration in political and non-political positions for longer career trajectories. In fact, the left panel of Figure 3 shows that earlier entry into political office is associated with higher in-office returns, which would likewise be consistent with an age-

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independent income profile in politics (since young people then move from a low income in the experience-valuing labour market outside politics to a much higher income in the experience-neutral labour market inside politics). Hence, further evidence would be required to substantiate the role of job-specific human capital depreciation for the observed post-office income penalty.

Third, maintaining auxiliary employments and outside interests alongside one's political mandate could signal that politicians (aim to) keep in touch with the professional world outside politics. Such activities would lead to a slower deterioration (if any) of their non-political job-specific human capital and skills. As such, we maintained that this could enable a smoother exit from politics with a lower post-office income reduction (or higher post-office pay-out). While we unfortunately have no information about politicians' pursuit of financial interests and outside employments, a legal change implemented in 1996 implies that MPs in Norway all receive the exact same in-office income (with a fixed supplement for ministerial mandates). Earning more than this amount in a given year thus would suggest that the MP or minister also has other income sources (whether from work or capital). Hence, Table 4 splits our sample by politicians who do (panel I) or do not (panel II) have income exceeding the legally specified remuneration for their position. We furthermore distinguish between situations where this happens at least once while the politician holds a given office (columns 1–2), and a more restrictive operationalization where it holds on average across the in-office period (columns 3–4). In line with theoretical expectations, the results suggest that the post-office income drop is lower—and may even turn positive—for politicians with outside activities.

Finally, our theoretical line of argument implies that forced exits from politics are likely to be associated with more pronounced post-office income penalties compared to voluntary exits. Indeed, politicians' anticipated earnings in the private sector can influence the timing of their exit from politics, with those expecting higher income outside politics gaining an incentive to leave office voluntarily. Forced exits of any form may furthermore come with additional costs by sending negative signals to potential employers. Although we cannot observe the exact reasons for a politicians' exit from office, we do know for the subset of MPs whether they stood for re-election immediately prior to their post-office period. Although many of those *not* appearing on an election list may also have suffered an involuntary exit (e.g. due to the party not re-nominating them or a scandal), we use this information to investigate the income trajectories of two categories of MPs: (i) those who ran for re-election, but were not re-elected (henceforth 'involuntary exits') and (ii) those who did not run for re-election ('voluntary exits').

Appendix Figure A.4 summarizes the key findings. MPs with 'voluntarily' exits are shown to have somewhat better earnings prospects if they departed in their early 40s (consistent with some self-selection into better-paying non-political jobs), but worse prospects if leaving after their 60s (consistent with self-selection into early retirement late

TABLE 4 Returns to office by outside income.

	MP (1)	Minister (2)	MP (3)	Minister (4)
	Panel I: With outside income			
Post office	−0.486***	−0.232**	0.141***	0.180***
	(−0.037)	(−0.109)	(0.040)	(−0.109)
	Panel II: Without outside income			
Post office	−0.927***	−0.143***	−0.801***	−0.255***
	(−0.063)	(−0.045)	(−0.038)	(−0.049)

Notes: The table displays income dynamics during exit from political offices (with standard errors in parentheses). The dependent variable equals residualized pensionable income clearing out individual, year and age effects *using only pre-event observations*. It is measured on a log-scale and defined in constant 2015 prices. We focus on the 20 years in office and the 20 years after leaving office. Panels I and II differ by including only politicians who do (panel I) or do not (panel II) earn more than the legally specified remuneration for their position. In columns 1–2, this should be observed at least once while the politician holds a given office, while in columns 3–4, it should hold on average across the in-office period.
**p* < .1, ***p* < .05, and ****p* < .01.

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in the career).[13] Overall, however, we find at best modest income differences conditional on (in)voluntary exits throughout most of the relevant age span, which suggests that any income-based self-selection out of politics is not a major concern for our main results. In similar vein, the right-hand panel in Appendix Figure A.4 shows that politicians with 'voluntary' exits are observed leaving politics at a slightly older age on average (consistent with self-selection into early retirement). Yet, the 'age at exit' distribution for both groups of politicians is otherwise strikingly similar, which again provides at best meagre evidence to suggest that economic incentives have a major impact on the timing of politicians' exit from the political arena in our Norwegian setting.[14]

6 | CONCLUSION

A common concern is that politicians may be keen to exploit their status, networks and experience for personal economic gain. This article's key message is that this is *not* a general pattern. In fact, we find that political experience on average is *not* a career booster and may in the majority of cases even have the opposite effect. Particularly local mayors and ordinary MPs would on average have been financially better off (and often considerably so) had their professional careers not been interrupted by their political activity. Only top executive positions at the national level (i.e. junior ministers and ministers) appear to be largely insulated against negative income shocks after leaving politics. These results are consistent with observations beyond our Norwegian setting that only few former politicians manage a smooth and lucrative transition to post-office employment in the private sector (Byrne & Theakston, 2016; Claessen et al., 2021; van der Vlist, 2023; Würfel, 2018).

Our results may have important implications for selection into politics as candidates cannot run for office in the expectation of a profitable post-office career (Besley, 2004; Gagliarducci & Nannicini, 2013; Messner & Polborn, 2004; Poutvaara & Takalo, 2007). In effect, most MPs never become promoted to (junior) minister positions (less than 16% in our sample), while most local politicians will never become mayor (less than 9% in our setting). Entering politics thus is not a rational financial decision for most people as it does not seem to pay off in the long run in terms of earnings.

On a more positive note, the combination of significant in-office returns and negative post-office returns observed in our analysis may act as a disciplining device on (most) politicians' behavior while in office (Besley, 2004; Fisman et al., 2015; Gagliarducci & Nannicini, 2013). Extending one's political career by catering to voters' wishes and/or aggressive electoral campaigning may indeed postpone the drop in income that arrives after leaving office. Even so, it remains for future research to specify these selection and disciplining effects in more theoretical detail and to test empirically how in- and post-office returns affect the quality of the political elite. At this stage, our findings lead us to interpret a generous in-office salary as a compensation for the uncertainty of political office and a disrupted working career (and the future income loss associated with this disruption). From this perspective, our findings can have practical implications for how we think about the remuneration of politicians. That is, they suggest that we must take into account the entire earnings path over the life cycle rather than just the payment politicians receive while in office.

Finally, from a more general policy perspective, our findings demonstrate that politicians who enter and leave office relatively early in their careers experience higher income gains upon entering office and lower losses upon leaving. This is partly a consequence of in-office compensations not tied to seniority in our setting. Although this might give politicians with substantial returns in the private sector an incentive to exit at a younger age, our findings

[13]The data refer to different election periods, and we therefore check whether de-trending the income variable affects the results. This is not the case, and we present the 'raw' income data for ease of interpretation.

[14]We also explored one additional dimension of heterogeneity, that is, safe versus marginal seats. We thereby separate between those obtaining the last seat of their party and those holding any other seat (under the assumption that the last seat is less safe). The results in Appendix Table A.4 show no evidence of significant differences in the post-office income penalty by the safety of an MPs' seat in Parliament.

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provide at best limited empirical support for this proposition. This implies that a uniform compensation structure for politicians does not create detrimental incentive effects.

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CONFLICT OF INTEREST STATEMENT

The authors declare none.

DATA AVAILABILITY STATEMENT

The analyses presented in the paper exploit registry data managed by Statistics Norway under the Norwegian Statistics Act. The Act does not allow us to make the data available to other users, and all authors have signed confidentiality agreements with the data provider to that effect. That being said, researchers in approved research institutions can apply to Statistics Norway for access to the relevant micro data, cf. https://www.ssb.no/en/omssb/tjenester-og-verktoy/data-til-forskning. Researchers must document sufficient confidentiality under the General Data Protection Regulation (GDPR), and submit a Data Protection Impact Assessment (DPIA). Naturally, we will do our best assist researchers wanting to replicate our findings. The current analysis merge Statistics Norway micro data with a separate dataset on candidates standing for the local and national elections. This dataset is publicly available at http://www.jon.fiva.no/data.htm.

ORCID

Benny Geys https://orcid.org/0000-0003-4524-1820

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