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The Class Ceiling in Politics

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Prior studies have documented that working-class individuals rarely become parliamentarians. We know less about when in the career pipeline to parliament workers disappear, and why. We study these questions using detailed data on the universe of Swedish politicians' careers over a 50-year period. We find roughly equal-sized declines in the proportion of workers on various rungs of the political career ladder ranging from local to national office. We reject the potential explanations that workers lack political ambition, public service motivation, honesty, or voter support. And while workers' average high school grades and cognitive test scores are lower, this cannot explain their large promotion disadvantage, a situation that we label a class ceiling. Organizational ties to blue-collar unions help workers advance, but only to lower-level positions in left-leaning parties. We conclude that efforts to improve workers' numerical representation should apply throughout the career ladder and focus on intra-party processes.

INTRODUCTION

orking-class people are largely absent from parliaments around the world (Best and Cotta 2000; Carnes and Lupu 2015a; 2023a; Esaiasson and Holmberg 2017). This absence is problematic for the functioning of democracy. It causes a deficit in issue representation that undercuts the democratic system's ability to address distributional conflicts between social classes (Carnes 2020; Carnes and Lupu 2015a; Hemingway 2020; O'Grady 2019). It also undermines government legitimacy and raises the risk of populist countermovements (Barnes and Saxton 2019; Mudde 2004). Studies indicate that the numerical underrepresentation of workers is larger than the underrepresentation of other political minorities (e.g., Best and Cotta 2000; Esaiasson and Holmberg 2017).

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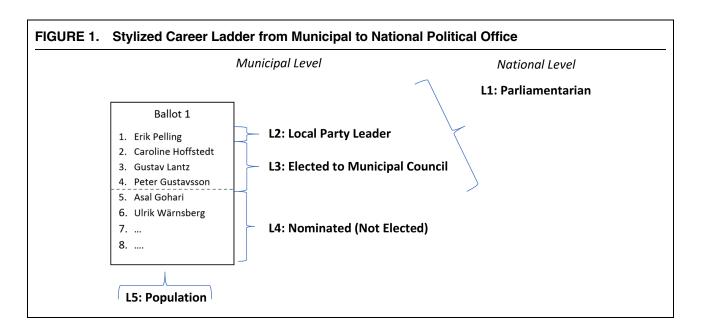
While workers' absence from parliaments has been well documented, we know less about *where* in the career pipeline to parliament they disappear—and *why* (Carnes and Lupu 2023a).² This article studies these two questions using new and detailed data. We combine multiple data sources to analyze career progressions toward parliament for the universe of Swedish politicians over a 50-year period. We compare workers' presence at various rungs of the typical parliamentarians' career ladder to analyze at what point this presence declines. We then test competing explanations for workers' slower career progression, focusing on voter preferences, individual resources, party promotion processes, and organizational ties to labor unions.

Our analysis requires defining the working class and operationalizing the political career ladder. We follow the growing empirical literature on workers' political representation and define the working class as having one's primary employment in a working-class occupation (e.g., Barnes and Saxton 2019; Carnes and Lupu 2015a; 2023a). We visualize the political career ladder as having five levels from entering local politics as a candidate to obtaining national political office (see Figure 1). Our results are insensitive to several alternative measurement choices.

The first set of results documents a gradual decline in the share of workers on each rung of the political career ladder. The share drops by a roughly equal margin on each step, from 50% in the voting-age population to 34% of nominated local politicians, further down to 28% of local councilors, 17% of local party leaders, and 13% of MPs. This pattern differs little between male and female working-class politicians. The analysis shows a modest improvement in workers'

¹ Policies and political programs are developed based on ideology—normative judgments about priorities between policies that have different distributional profiles. Given that social class determines voters' and politicians' ideologies and political preferences, a working-class politician is more likely to pursue policies preferred by working-class voters. The party system may embody this divide: left- and right-leaning parties tend to recruit politicians from different social classes and offer political platforms that appeal to their respective constituencies (Krouwel 2012; Lipset and Rokkan 1967; Section W1 of the Supplementary Material provides an extended literature review and a descriptive empirical analysis of the Swedish context).

² We follow the literature and use the terms "working-class" and "worker" interchangeably.



representation in parliament over time, but this improvement pales in comparison to the large gains in representation made by women, young people, and immigrants.

A comparison of political parties adds relevant insights. All parties have declining shares of workers on higher career steps, but this decline starts at higher shares in left-leaning parties (the Social Democrats and the Left Party) and in Sweden's radical right party (the Sweden Democrats). Once we compare parties' shares of workers to the share of workers among their *voters*, the Social Democrats no longer perform better than the centerright parties. This party plays a complex role in working-class representation. While having brought more than half of all working-class parliamentarians into office during our 50-year study period, it is also responsible for more than half the "missing" workers needed to align parties' proportions of working-class parliamentarians to their proportions of working-class voters.

We combine Norris and Lovenduski's (1995) supplyand-demand model with Carnes and Lupu's (2023a) outline of explanations for workers' underrepresentation to delineate potential explanations for the declining proportion of workers. Three aspects of our data permit more detailed evaluations of these explanations compared to previous research. It allows us to compare previously unstudied types of individual resources and competencies between workers and nonworkers. Second, our panel data for politicians' career promotions let us produce the first estimates (to the best of our knowledge) of workers' promotion disadvantages for each rung of the career ladder and test if gaps in observable competencies can explain these disparities (following methods previously used in sociology to study discriminatory promotion for women, e.g., Cotter et al. 2001). Third, our data provide a way to determine if politicians have organizational ties to labor unions and test if workers who have such ties are more likely to advance.

Some explanations of workers' disappearance find little support in our analysis. For example, voters do not appear to prefer nonworkers when casting their preference votes. In addition, we find that workers are less motivated than members of other classes to enter politics but are just as ambitious as their peers to move up the ranks after entry. We find no evidence of gaps in attitudes or personality traits highlighted by previous research as important for political office: public service motivation, honesty, and work effort.

Other explanations of workers' disappearance from the political career ladder have found more support. Workers experience what we call a *class ceiling*: parties are much less likely to promote them upward on the political career ladder conditional on their observable qualifications (e.g., high school grades, cognitive test scores from the military draft, and an earnings-based measurement of productivity in the private labor market). Sensitivity tests also indicate that skills learned in tertiary education or white-collar jobs also fail to account for the promotion gap. The results point to inflexible work conditions in working-class jobs as another relevant reason for workers' slower career progression, presumably because time-space inflexibility makes it harder for workers to invest time in political activities and lower-level offices. Finally, extending the analysis of promotions to study organizational ties with labor unions indicates that union ties are critical for workers' entry and lower-level advancement into leftleaning parties.

Several features make Sweden a relevant case for studying factors that might keep workers out of politics, as well as identifying potential ingredients for (relative) success in this area. In addition to offering detailed data, Sweden's multiparty system with closed-list proportional representation is the most common electoral system in the world, and its local-to-national political career pipeline is similar to that of other countries (see Section W2 of the Supplementary Material). While

Sweden's share of working-class parliamentarians is small compared to the share of workers in its labor market, it is still one of the largest in the Organisation for Economic Co-operation and Development (Carnes and Lupu 2023c). Perhaps most importantly, finding that social class remains a significant barrier to elected representation in one of the most equal societies in the world underscores the continued, powerful role of class in contemporary democracies.

Some contextual features place scope conditions on our results. First, parties may play an even more negative role in countries that lack Sweden's strong Social Democratic Party, which has roots in organized labor (Aylott 2003; Fouirnaies 2021; Sojourner 2013) or where parties place a higher value on elite education as a qualification for higher office (Nordvall and Fridolfsson 2019). Politicians' economic resources might also be more important for workers' political exclusion where public financing is not available to fund election campaigns (Carnes 2020; Hemingway 2020, but see, e.g., Carnes and Lupu 2023c for an opposing view on campaign finance and social class).

Our article advances the literature on workers' political underrepresentation by providing the most detailed case study to date. Its description of where in the candidate pipeline workers disappear provides valuable guidance for future research and interventions to improve representation. Our analysis reveals a large career disadvantage for politicians with a working-class occupation compared to previous findings of a much more equal playing field based on the social class of politicians' *parents* (Dal Bó et al. 2017).

Our largest contribution is that we test multiple explanations of workers' relative career performance. Some of these explanations have been examined previously. We corroborate previous findings that voter preferences are not an important explanation (e.g., Carnes and Lupu 2016; Wüest and Pontusson 2022; recently reviewed by Albaugh 2020; Carnes and Lupu 2023a) and contribute to the mixed findings about candidates' political ambitions (e.g., Allen and Cuts 2018; Carnes and Lupu 2023b; reviewed by Carnes and Lupu 2023a).

Explanations rooted in parties' promotion processes are largely untested. Some "smoking guns" in the literature include Norris and Lovenduski's (1995) finding that the British Labour Party has a higher share of workers among its applicants than among its politicians, suggesting a negative selection bias, and Carnes' (2016) finding that the share of workers in U.S. state legislatures cannot be explained by the qualifications of the working-class population in the state. In contrast with these articles, we compare workers' and non-workers career progression and whether any promotion disadvantage for workers can be explained by observable qualifications.

Our analysis of labor unions builds on previous work establishing positive correlations between unionization of the labor market and workers in political office roles (Carnes 2016; Carnes and Lupu 2023c; Sojourner 2013), as well as previous studies of unions' influence over candidate nominations in some parties

(Aylott 2003; Fouirnaies 2021; Høyer 2015). While this literature concentrates on levels of workers at specific career steps, we analyze the career developments of politicians with or without organizational ties to unions. Taken together, our article advances the understanding of the mechanisms behind workers' political exclusion by showing that parties play a central role in workers' failure to advance and that labor unions play a positive, albeit restricted, role in overcoming this disadvantage.

DATA

Our analysis draws on three types of data: politician data, administrative data for the whole Swedish population, and survey data.

Politician Data

Before each election, Swedish political parties are required by law to submit their ballot papers to the government with the personal identification (ID) code of every candidate. We digitize this information to generate a list of all nominated politicians in all municipal and national elections between 1973 and 2018, including their political party and list rank (Statistics Sweden 2022a). We link this list via each politician's ID code to Swedish Electoral Agency data on (i) whether a candidate was elected and (ii) how many preference votes they received. These political variables have little or no missing data. We exclude local politicians from parties not represented in parliament (~4% of the data).

Administrative Data

We further link the list of politicians to administrative data on individual traits (Statistics Sweden 2022b). These data combine individual-year panels for more recent decades with census data at 5-year intervals for 1970–1990. It includes all permanent residents in the country over 18 years of age.

Most administrative variables come from census data (prior to 1991) and from the longitudinal integrated database for health insurance and labor market studies (after 1991). These variables come from different government records, such as tax records, education records, birth records, and employer surveys. They include each permanent resident's demographic traits, education level, citizenship, and various traits of the job that constitutes their largest source of labor income in each year.

Occupation data for the person's main job come from the censuses (1970–1990) and the Swedish occupational register (2001–2018). Note here the 10-year gap in data availability for the 90s. Census data have complete coverage of the labor force, while the register data do not. The variable in the register data assembles information from a mandatory government survey administered each year to firms and workplaces, industry-specific surveys managed by employer

organizations, and other smaller data sources.³ Compiling these sources results in coverage of the entire public sector and all large firms, most medium-sized firms, and a subset of small firms, self-employed people, and individuals on short temporary contracts.

Two datasets provide additional information for our measurements of cognitive skills. One provides high school grade point averages (GPAs) for all graduates after 1973. The other provides scores from cognitive tests administered as part of Sweden's mandatory military draft for men born between 1951 and 1979. A third measurement of ability relies on the earnings data from tax records mentioned above (Besley, Persson, and Rickne 2017). Our measurement of organizational ties to labor unions uses an itemized taxation-based dataset to identify union representatives and union employees (further explained below).

Survey Data

We use data on the share of workers who voted for each party in the 1970–2018 national elections from the Swedish Election Survey. We use the national and Western regional versions of the Society, Opinion and Media Survey (SOM Institute 2022a; 2022b) to measure ambitions and political preferences in the population. We employ data on ambitions among local politicians from the 2012 Local and Regional Councils Survey (KOLFU, Karlsson and Gilljam 2014) and added new questions to the 2017 wave of this survey (Karlsson 2017) to measure certain aspects of competence. Response rates among local councilors were 80% in 2012 and 67% in 2017.

We use two nationally representative surveys collected by the Swedish government. The Swedish Work Environment survey is a biannual survey that measures work conditions (about 165,000 respondents in total between 1991 and 2019) and the Swedish Labor Force Survey tracks the business cycle in the labor market (about 8.4 million individual-quarter observations between 1987 and 2019). Section W3 of the Supplementary Material provides more details about all the surveys used in this article.

DEFINING WORKERS AND THE POLITICAL CAREER LADDER

The Erikson–Goldthorpe–Portocarero (EGP) class schema is the paradigmatic approach to class analysis in sociological research (Erikson, Goldthorpe, and Portocarero 1979; Smallenbroek, Hertel, and Barone

2022).⁴ We follow standard practice and define the working class as a combination of two categories in this schema: skilled and non-skilled manual workers. According to this definition, construction and manufacturing represent the most common working-class jobs for men, and nursing assistant and childcare jobs for women. Nonworkers mainly include white-collar professionals, small and large business owners, clerical workers, and managers.

Our main dataset consists of pooled cross-sections of population data—within which we can identify politicians—in each election year from 1973 to 2018. To categorize individuals as working class or not, we use the occupation in the election year (or in the most recent census year) for employed people aged 18-65 and for municipal politicians except the mayor.⁵ For four other groups, we use a backward-tracking method of searching occupation data to find the most recent employment experience: (i) mayors or parliamentarians whose political position is a full-time job, (ii) people who are not working due to situations like ill health or unemployment, (iii) working-age people with missing data on the occupation variable (23% of the sample), and (iv) people over the Swedish general retirement age of 65. We count college and university students as nonworkers due to their likely future in white-collar occupations.

Since occupation codes are missing for individuals between 1991 and 2001, we would need to use the backward-tracking method for every resident and politician in the 1994 and 1998 elections. We do so for the 1994 election but drop the 1998 election from the analysis to reduce the measurement error introduced by this approach.

Our categorization classifies more than 87% of eligible voters and politicians on each career rung as either workers or nonworkers. We validate the approach with survey data from 16 pooled yearly cross-sections (N = 61,221). Three-fourths of the people we categorize as workers also self-report being "working class." This share is below 25% in the other five EGP categories (statistics in Supplementary Table W4). Our definition correctly classifies 81% of workers and nonworkers according to their self-identified class using data from the SOM Institute (2022a). We can apply our definition to the main survey dataset for politicians, KOLFU 2017 (see Section W3 of the Supplementary Material for details about the other surveys).

³ For more information on the occupational register, see https://www.scb.se/en/finding-statistics/statistics-by-subject-area/labour-market/wages-salaries-and-labour-costs/salary-structures-whole-economy/.

⁴ Smallenbroek, Hertel, and Barone (2022) validate this scheme and its update, known as The European Socio-Economic Classification (ESEC), in data from 31 European countries with respect to its gender neutrality, associations with the underlying theoretical

construct of employment relations, and expected correlations with measurements of occupational advantage.

⁵ We use the occupation-based EGP classification provided by Statistics Sweden for the Census data (every fifth year between 1970 and 1990) and code occupations to the EGP scheme between 2001 and 2019 using code publicly provided by Martin Hällsten (Stockholm University).

⁶ Data are missing mainly for older individuals in the early elections and younger ones in the later elections. The descriptive patterns are robust to definitions of the working class based on education and income, which have fewer missing data due to birth cohort and year, and no period of missing data in the 1990s (Supplementary Figures W5 and W6).

Defining the Political Career Ladder

We propose a simplified political career ladder with five rungs that range from the local to the national level (Figure 1). Sweden has 290 municipalities, each with an elected assembly of 31–101 councilors. Municipal party systems mirror the national level and strictly local parties hold less than 5% of all council seats. The municipal branches of the national parties make highly autonomous personnel decisions.⁷

In our first career step, ordinary citizens (L5) start by being nominated as candidates in local politics (approximately fifty thousand people in each election). In the next step, they go from being an unsuccessful nominated candidate (L4) to winning an unpaid local elected seat (L3) (approximately thirteen thousand people). The third step consists of advancing to the top political position in their local political party, the local party leader who is ranked first on the ballot paper (L2).8 This person nearly always holds the top appointment afforded the party by its vote share, such as the chair of the council board if the party is the largest in the governing majority. The fourth step is advancing to one of the 349 seats in parliament (L1). We validate the model by calculating that about two-thirds of politicians at each career rung arrived on there from the one below. The robustness test replicates the results for alternative career ladders (details below).

Procedures for Career Advancement

The processes for selecting and promoting politicians are similar across parties and at the local and national levels (e.g., Buisseret et al. 2022; for detailed descriptions of the institutions summarized in this subsection, see Johansson 1999; Widenstjerna 2020). Election committees and party members are the main selectors. Such committees usually comprise prominent party members and play a key role in collecting nominations and organizing the ranking procedure at either the municipality or parliamentary district level. They often use advisory internal primaries among party members to gauge candidates' internal party support. Election committees usually suggest a rank order of candidates on the list, which is usually formally approved without changes in an at-large meeting.

An individual's political career usually progresses within a single party and municipality. Parties have strong seniority principles that operate mostly as norms rather than formal regulations (details in Brothén 2010). Longer service as an elected municipal councilor is strongly associated with becoming a local party

leader or parliamentarian in all parties (Supplementary Figure W3) and among both workers and nonworkers (Supplementary Figure W4). Labor unions occupy a specific organizational position within the Social Democratic Party and its candidate nomination procedure, which we discuss in more detail below.

THEORETICAL PERSPECTIVES ON WORKERS' POLITICAL ENTRY AND CAREERS

Social class is a fundamental organizing principle of economic and social relations. Theories on class and political interests explain the mechanisms behind collective interest formation among the working class. According to the theory underpinning the EGP class scheme, workers' subordinate occupational positions in the labor market and workplace create a "different economic world" characterized by greater economic risks and smaller economic prospects (Goldthorpe and McKnight 2006, see also Smallenbroek, Hertel, and Barone 2022). These and additional similarities such as lower levels of income, wealth, and education bolster the prediction that workers share left-ideological policy preferences (e.g., Lipset and Rokkan 1967). 10

Norris and Lovenduski's (1995) supply-and-demand model outlines three key actors that jointly determine upward advancement in politics: voters demonstrate support for politicians by casting their votes, individual politicians have career-relevant resources, and parties select from among willing candidates. Carnes and Lupu (2023a) build on this model to produce a more detailed set of explanations for workers' underrepresentation, including the roles of political ambition and labor unions. We combine these frameworks with sociology research on discriminatory promotions for organizational minorities (Cotter et al. 2001) to outline a set of explanations for workers' lower probability of political advancement.

Voters

Voters may have negative views about workers' competence or perceive them as too ideologically leftist or unlikely to understand the problems they face in their own lives. Such negative views may depress workers' vote counts and explain their political exclusion. Evidence from previous research has largely rejected this conjecture. Empirical studies using methods ranging from observational studies to conjoint survey experiments have found little or no evidence of negative voter bias (recently reviewed by Albaugh 2020; Carnes and Lupu 2023a; for a specific example from this literature, see Carnes and Lupu 2016).

We exclude Sweden's 21 regional assemblies due to their small size and political importance relative to municipalities. There are just one thousand regional councilors (compared to nearly fourteen thousand at the municipal level), and fewer than 5% of new parliamentarians have only regional-level political experience.

⁸ To make the position of local party leader meaningful, we only include those who lead a party with at least five elected councilors.

⁹ Previous research shows similar shares of workers among party members and the population (Widfeldt 1995).

¹⁰ Because children often remain in the same social class as their parents, workers' political socialization based on their own economic and social position is compounded by their childhood experiences.

Individual Resources

Working-class politicians may have lower levels of resources that generally increase the likelihood of political career advancement. As in most organizations, people who are more ambitious and possess competencies for a specific job are more likely to be promoted. We consider three such resources—political ambition, attitudes and personality traits (including cognitive skills), and time.

Workers might have less *political ambition* if the white-collar dominance in politics leads to negative beliefs about their career success (e.g., Lawless and Fox 2010). The same white-collar overrepresentation might also result in fewer social contacts with politicians or party organizers, leading to less exposure to role models and a lower likelihood of receiving personal encouragement. Prior research offers mixed findings about workers' political ambitions (reviewed by Carnes and Lupu 2023b; see also Allen and Cuts 2018).

Besley (2005) outlines types of competencies relevant to political office. One type describes *attitudes and personality traits*, such as public service motivation, honesty, and work effort. Another type describes a person's *cognitive skills*, or innate "ability" as the term is used in the economics literature. These traits broadly overlap with those that citizens and party leaders often say they want in a politician (Berg et al. 2015; Carnes 2020; Carnes and Lupu 2023b).

There is little reason to expect working-class politicians to have lower levels of desirable attitudes or personality traits. Cognitive ability is a trickier question. A higher payoff from tertiary education among high-ability people will produce sorting by ability into tertiary education and, in turn, an overrepresentation of high-ability people in white-collar occupations. However, ability-based selection into tertiary education has been exposed as imperfect at best, since structural life circumstances fundamentally determine these choices (e.g., Chetty, Hendren, and Katz 2016; Lynch and O'riordan 1998).

Previous research cautions against equating advanced degrees or white-collar jobs with political competence. Parliamentarians from different social classes display similar levels of policy efficacy and influence (Eriksson and Josefsson 2019), and politicians' education levels have been shown not to meaningfully affect the results they produce while in office (see, e.g., Carnes and Lupu 2015b; recently reviewed by Curto and Gallego 2023). We return to the issue of tertiary education and specific occupation-related skills in the sensitivity analysis.

The *time* demands of political participation put time-constrained individuals at a participation disadvantage (Brady, Sidney, and Schlozman 1995). Politics requires the flexibility to invest time in meetings and activities on evenings and weekends, as well as intense work around elections. Because political careers usually start along-side a person's regular job, the time–space flexibility of those jobs might matter for political career investments.

Political Parties

Sociology research defines a glass ceiling as a combination of two main empirical patterns that together

imply discrimination against women in job promotions. The share of women should decline in higher positions in organizations and observable job qualifications should fail to explain women's promotion disadvantage (Cotter et al. 2001; applied to politics by Folke and Rickne 2016). We apply this concept to the working class and change the label to a *class ceiling*. ¹¹

Empirical research on party selectors' bias against workers is rare (for exceptions, see Carnes 2016; Norris and Lovenduski 1995), but theory lets us outline several types of relevant negative beliefs that selectors might hold. Selectors might perceive workers to have lower popularity with voters for example if they use information shortcuts to equate a lower share of workers in politics with a lower level of electability (Carnes 2020; Norris and Lovenduski 1995). They might also perceive workers' ideologies as straying too far from the electorate, potentially because they overestimate the electorate's alignment with white-collar interests (e.g., Broockman and Skovron 2018).

Beliefs about appropriate qualifications for political officeholding constitute another relevant type of belief. These beliefs might be "classed" so that notions of "merit" and "fit" limit workers' career advancement (Friedman and Laurison 2020). Party elites may overestimate the value of tertiary education or degrees from specific elite universities. They may also underestimate the importance of life experiences resulting in overlapping issue priorities, values, and policy objectives by social class—perhaps leading them to downplay candidate ideology as a qualification for political office (Norris and Lovenduski 1995; Widenstjerna 2020).

A more subtle kind of negative belief might stem from psychological processes and human interactions based on social identity. Class is a social identity that delineates social circles in which people form positive opinions about their "in group" and negative opinions about their "out group" (e.g., Kraus and Keltner 2013; Tajfel and Turner 2004). This might result in negative presumptions about workers' competence among selectors, who are less likely to be working-class. Consistent with this theory, Rehmert (2022) finds that highly educated party selectors prefer highly educated candidates, while less educated selectors do not.

Beyond direct decisions about nominations and promotions, selectors' negative beliefs might shape the division of other career-relevant party decisions during the election period. This might include decisions about the assignment of tasks and roles or who to feature in the media or in political campaigns. Negative beliefs might extend to groups outside of politics in ways that affect working-class politicians' work environments and chances to build qualifications. They might exist, for example, among bureaucrats, the media, or unelected party officials.

¹¹ Our usage of this label differs from other research on upward mobility by people with a working-class *parental background* in high-paying occupations (Friedman and Laurison 2020).

Labor Unions

Organized labor may affect workers' political inclusion via broad-based unionization in the labor market, running training schools for political candidates, or economic and in-kind support to political campaigns. We focus on paid positions in blue-collar labor unions, for example, as a union representative. These positions build ideological and political knowledge as well as practical skills in leadership and negotiation, which are helpful in a political career.

Some labor parties, such as Sweden's Social Democrats, have strong historical roots in the labor movement and formalized organizational linkages that allow unions to directly influence political nominations (Aylott 2003; Fouirnaies 2021; Høyer 2015). Aylott (2003) describes how local union sections and workplace-based union clubs were traditionally affiliated with local Social Democrats' party organizations as "units," putting them on the same footing as units for women, youth, or neighborhoods in local and national candidate nominations. This structure shaped strong norms in support of having people with different labor union backgrounds on electoral ballots and including union representatives on nomination committees. Unions' influence remained significant after the practice of affiliating whole union sections ended in the 1990s and includes, in addition to local influence, union representation in the party's executive committee and collaboration to organize courses in political work methods and ideology.

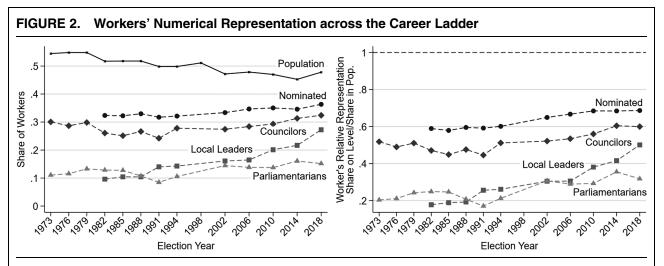
WORKERS' NUMERICAL REPRESENTATION THROUGHOUT THE CAREER TRAJECTORY

The left-hand side of Figure 2 depicts the share of workers at each career level in Swedish politics. The

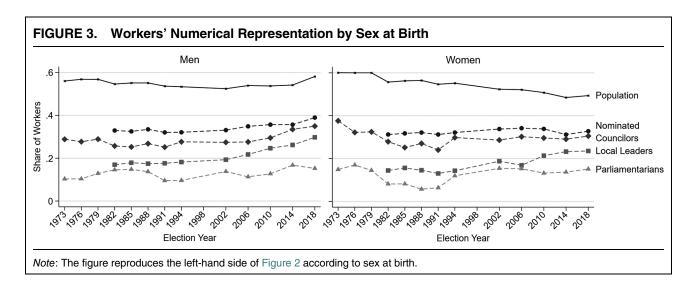
share clearly decreases on higher career steps. From 1973 to 2018, workers averaged 50% of the voting-age population but 34% of nominated local politicians, 28% of municipal councilors, 17% of municipal list-leaders, and 13% of parliamentarians. The right-hand side of the figure displays underrepresentation in the percent of the population share, that is, dividing the difference between the share of workers at a specific career level in the population by their share in the population. According to this metric, workers are underrepresented by 34% among nominated local politicians, 48% among elected councilors, 70% among local party leaders, and 75% among parliamentarians. This pattern differs little between women and men politicians (see Figure 3).

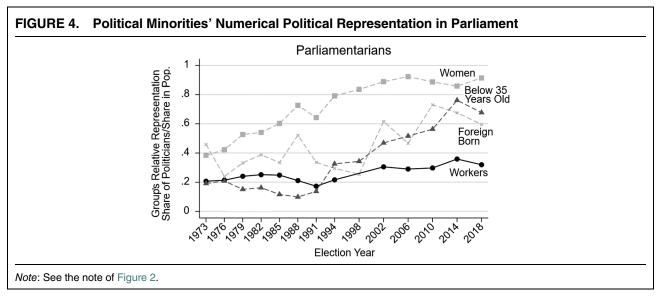
We replicate the impact of the gradual decline in the share of workers across political career levels for five alternative definitions of the working-class in Supplementary Figures W5 and W6. Alternatives are (1) the ISCO-based definition by Carnes and Lupu (2023c), which includes clerical workers in the working-class, (2) having below tertiary education, (3) having below median labor earnings, (4) using the person's most common worker or nonworker category across all observable years on our main variable, or (5) using the observations closest in time to the age of occupational maturity at age 37. Supplementary Figure W7 shows highly similar results when restricting the data to people with Swedish citizenship, which is a requirement for voting and office holding in national elections.

Figure 2 shows some improvement in workers' numerical representation over time. The share of workers in parliament rose from one-fifth of their share in the population in the 1970s and 1980s to one-third since the 2000s. Figure 4 contrasts this development with three other political minorities: women (female sex at birth), young people (under 35 years old), and



Note: A working-class person is defined based on their primary occupation in a working-class job according to the EGP class scheme. The population includes all permanent residents over 18 years. A local leader is the top-ranked politician on a municipal electoral ballot. The data on municipal politicians are restricted to parties represented in parliament. In the right-hand side graph, the share of workers in the population is measured at the municipal level for municipal positions and at the national level for parliament. N (population) = 59,760,437; N(nomiAnated) = 397,511; N(municipal councilors) = 159,743; N(local party leader) = 7,125; N(parliamentarian) = 4,068.





foreign born. It indicates that the gains in representation for workers pale in comparison with those made by these other groups over the last 50 years.

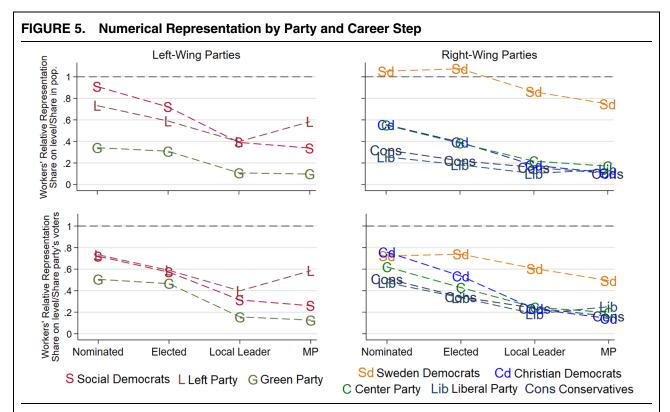
We split the analysis by political party in Figure 5. This analysis pools all elections and plots the share of workers at each rung of the career ladder in each party relative to the share of workers in the population (top) and relative to the share of workers among that party's voters (bottom, measurement details in the figure note). Lextended descriptions in the Supplementary Material show partyby-year developments (Supplementary Figure W8) and replicate the results in Figure 5 for an alternative career ladder that includes appointments to local executive positions (Supplementary Figures W9 and W10).

The share of worker declines at all career steps in all parties, except for parliamentarians in the Left Party. In left-ideological parties and the radical right, these

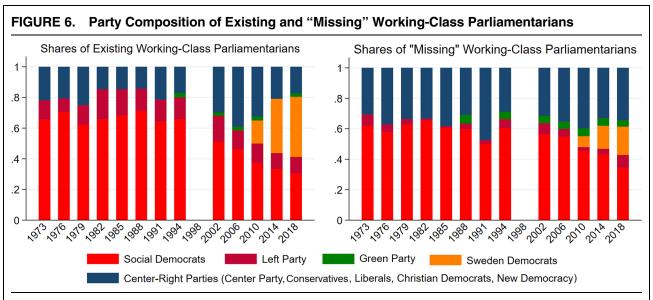
declines start from a higher level, which echoes findings from other countries where these party families have more politicians from the working class (e.g., Durose et al. 2011; Hemingway 2020; Matthews and Kerevel 2022; Norris and Lovenduski 1995).

The results change if we benchmark parties' share of working-class candidates against their share of working-class members (calculations in Supplementary Table W5). The Social Democrats now perform no better than center-left parties. The radical right (Sweden Democrats) performs the best; its rapid growth in recent elections has contributed to the improvement over time in workers' numerical representation observed in Figure 2. Previous research links the greater presence of working-class politicians in this party to patterns in candidate self-selection rather than conscious recruitment strategies (e.g., Art 2011; Dal Bó et al. 2023). Government austerity policies and economic shocks may have acted as a greater pull factor for workers, while the party's political and social stigma has reduced its relative attractiveness for highsocioeconomic status groups.

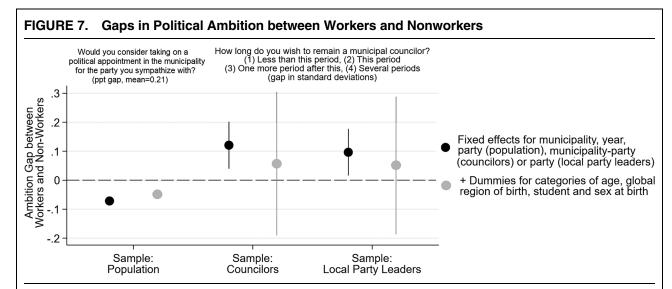
 $[\]overline{^{12}}$ National and local elections are held concurrently in Sweden. Turnout between 1973 and 2018 was 80–90% for parliamentary elections and 75–90% for municipal elections (www.scb.se).



Note: Pooled cross-sectional data for elections from 1973 to 2018. Data voter composition over time is data from Swedish National Election Survey reported in Hedberg (2020). We use these together with administrative data to impute the expected share of the party's voters who are workers. The share of workers among the voters of party p in election t and municipality t is given by $W_{ptm} = \left(Vs_{pt}^W + Pop_{mt}^W\right) / \left(Vs_{pt}^W + Pop_{mt}^W + Vs_{pt}^{NW} + Pop_{mt}^{NW}\right)$, where Vs_{pt}^W and Vs_{pt}^{NW} are national-level vote shares among workers and nonworkers, and Pop_{mt}^W are population shares. We divide the share of workers at each career level and in each party by these numbers for each municipality and election and report averages of these fractions in the figure. The calculation for MPs follows the same method at the national level.



Note: Shares of missing workers are calculated relative to a situation where each party's share of working-class parliamentarians equates its share of working-class voters. See the note of Figure 5 for a description of how the share among voters is calculated.



Note: The figure shows estimated coefficients from a regression of self-rated political ambition on a binary indicator for having a working-class occupation. Black and gray markers show estimates from two regression specifications (see legend) and vertical lines denote 95% confidence intervals. Full regression results are available in dataverse log-files (Folke and Rickne 2024). Demographic controls include a dummy variable for female sex at birth, dummise for five age categories, two dummies for being born in Europe (excluding Sweden) and outside of Europe, and a dummy for being a full-time student. Pooled annual survey cross-sections come from the Regional SOM survey in Western Sweden in 1995–2003. Data on politicians' ambition levels come from the 2012 KOLFU survey (Karlsson and Gilljam 2014). Working class is self-reported on a list of class categories (details in Section W3 of the Supplementary Material). N(population) = 18,325. N(councilors) = 6,268; N(local party leaders) = 976.

Figure 6 displays the extent to which different parties contribute to existing workers (left) and "missing" workers (right) in parliament. Missing workers are those who would be in office if each party's share of working-class politicians would correspond to its share of working-class voters. The graph highlights that the Social Democratic Party has by far the largest share of working-class parliamentarians but also the largest share of missing workers. Figure 6 also documents the decline of social democracy and the rise of the radical right Sweden Democrats in the most recent elections. This party now accounts for a growing share of existing and missing workers, while the Social Democrats' share of both has sharply declined.

WHY ARE WORKERS LESS LIKELY TO ENTER POLITICS AND ADVANCE?

Preference Votes

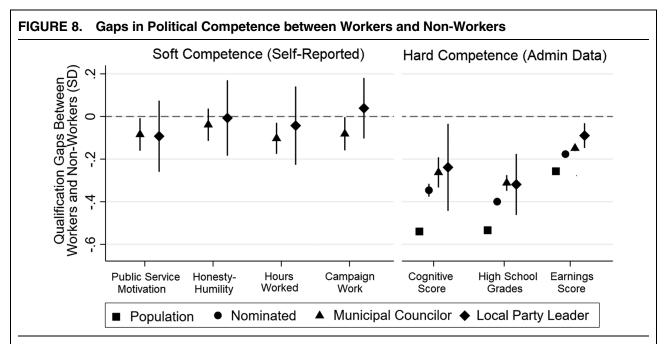
An electoral reform in 2002 allowed Swedish voters to cast one optional preference vote by checking a box next to the candidate's name on the party's ballot. While few politicians amass enough votes to win a seat in this way, parties use these vote counts to guide future promotions (Folke, Persson, and Rickne 2016). Parties are free to print information on their ballots, and most ballots include candidates' job titles (data collected by the authors).

Our analysis proceeds in two steps. The first step obtains a measurement of preference votes that isolates voter preferences from parties' list-rank decisions and the mechanical tendency to vote for highly ranked candidates. We regress votes on dummy variables for each list rank, predict the residuals at the individual level, and transform these residuals into a z-score. The second step regresses this measurement on a dummy variable for being a worker and fixed effects for all combinations of municipality, party, and election. The analysis returns a coefficient on the worker dummy close to zero: smaller than 0.05 standard deviations when running the regression for either all local politicians or elected councilors only (details in Supplementary Table W6). Workers do not underperform (or overperform) compared to nonworkers in terms of how their votes deviate from the typical preference vote result for a politician on their list-rank. Including sociodemographic controls does not change this finding. In sum, we find no evidence that voters prefer nonworkers to workers when casting their preference votes.

Individual-Level Resources

We use survey data to test whether workers have lower political ambitions than nonworkers. The Western Sweden SOM survey (SOM Institute 2022b) asks about nascent ambition with the question "Would you consider taking on a political appointment in the municipality for the party you sympathize with?" We create a dummy variable that takes the value 1 for affirmative responses and 0 for negative ones. The 2012 KOLFU

¹³ In Swedish: Skulle du kunna tänka dig att åta dig ett politiskt uppdrag i kommunen för det parti som du sympatiserar med?



Note: The figure shows estimated coefficients from a regression of competence measurements (listed on the X-axis) on a dummy variable for being a worker. See the note of Figure 7 for the list of demographic controls. Full regression results available in dataverse log-files (Folke and Rickne 2024). Population: municipality-year; nominated and councilors: municipality-year-party; local party leaders in administrative data: municipality, party, and year; local party leaders in survey data: party. High school grades are standardized within-cohort percentiles for graduates in 1973–2018; leadership scores from military draft tests taken by male cohorts in 1953–1979; the Earnings Score is an earnings-based competence measure calculated using data for the entire Swedish workforce. Data on attitudes and personality traits are from the 2017 KOLFU survey (Karlsson 2017) and details on all measurements are presented in Section W3 of the Supplementary Material. N(KOLFU local councilors) = 4,638; N(KOLFU local party leader) = 1,009.

survey asks local councilors how long they want to remain in office. Strong seniority principles make this a good proxy for politicians' progressive political ambition, that is, their aspirations to seek a higher political position. The note of Figure 7 provides details on variable creation and sample sizes. We lack data on ambitions for the final career step to national office.

We estimate the gap between workers and non-workers by regressing each variable for ambition on a dummy variable for being a worker. Figure 7 plots these gaps with 95% confidence intervals. One regression specification includes fixed effects to narrow the comparison by geographic region, time point, and party, and the other adds controls for age, global region of birth, sex at birth, and a dummy for being a full-time student (details in figure note).

Workers in the population have a lower average level of nascent political ambition than nonworkers. They are 5–7 percentage points less likely to state a willingness to become a local politician, which corresponds to 24–33% of the population average on this measure. This result contrasts with those for progressive political ambition, where workers have, if anything, a higher level among both local councilors and local party leaders.

Figure 8 shows estimated gaps for four measures of attitudes and personality traits (summarized below with details in Section W3 of the Supplementary Material). The first is self-reported *public service motivation* measured using an index based on a battery of questions about private versus altruistic motives (the Perry Score). The second measure is an *index of morality* contained within the HEXACO personality inventory developed by social psychologists (the Honesty–Humility Score).

The third and fourth measurements are based on self-reported levels of effort in their current political position. We use survey data to calculate politicians' hours of political work per week conditional on the number of formally remunerated hours by virtue of their political position(s) in the local government structure. We measure campaign work as their self-reported share of the local party's political campaigns in which they participated during the last year. Both measurements are standardized to z-scores.

For each competence measurement, we compare workers and non-workers at different career levels. We find no substantively meaningful gaps in attitudes and personality traits. The sample of municipal councilors contains some negative coefficients that indicate a gap to workers' disadvantage, but their small sizes (less than 0.1 standard deviations) classify them as substantively unimportant according to the standard *Cohen's d* categorization (Cohen 1988).

¹⁴ Additional comparisons indicate that workers are about 40% less likely to self-report a serious interest in politics and 40% less likely to report being friends or acquaintances with at least one local politician (estimates in Supplementary Figure W11).

The results for cognitive skills exhibit medium-sized gaps to workers' disadvantage. Looking at the population of men born in 1959–1979 for whom we have cognitive test scores, workers have a 0.3–0.2 lower average score at all three lower career levels. We find a similar-sized disadvantage of 0.3 standard deviations for high school grades, which we measure as standardized within-cohort percentiles of the GPA distribution.

The third competence measure is derived from the assumption that ability is priced in the labor market. We use an earnings regression for all employed permanent residents to benchmark yearly deviations in each person's annual earnings relative to their peers of the same sex, age, municipality of residence, education level, and industrial sector (Besley, Persson, and Rickne 2017, further details in Section W3 of the Supplementary Material). We call the standardized residual from this equation the Earnings Score. Workers' disadvantage in this variable is relatively small, ranging from 0.25 standard deviations in the population to 0.1 for local party leaders.

For all three measurements of cognitive skills, the gaps between workers and nonworkers are half as large among politicians as they are for the entire Swedish voting-age population. This suggests that the selection of workers into politics is more positive than for nonworkers, which replicates Dal Bó et al.'s (2017) results for parental social class. The remaining gaps offer a potential explanation of why political parties are less likely to promote workers to higher positions, which we formally test in the next section.

We use nationally representative survey data to create four binary indicators for inflexible work conditions (details in Section W3.3 of the Supplementary Material and Supplementary Table W3). In the average worker's occupation, 60% report having no schedule flexibility compared to 25% of nonworkers; 34% vs. 12% report having non-daytime work, 11% vs. 3% report split-shift work, 15 and 91% vs. 63% report having no opportunities to work from home. Workers have a 1.44-standard-deviation lower value on a combined inflexibility index based on these four variables. This large gap comes with the empirical challenge of multicollinearity: the correlation coefficient between the flexibility index and the worker dummy is 0.7.

Political Parties

We test whether workers have a lower average probability of promotion from one career step to the next by estimating:

$$Y_{it} = \alpha_{pmt} + \beta W_i + D_{it} + E_{it} + Q_{it} + e_{it}, \qquad (1)$$

where Y_{it} is a dummy variable for promotion to a higher career level in election t. It takes a value of 1 if a politician advances in t, and 0 otherwise (including

candidates who do not appear on the ballot in *t*, subject to sensitivity results below). We run regression separately for entry as a nominated politician, promotion to councilor, local party leader, and parliamentarian. In each case, the sample includes everyone who held the lower adjacent level in the previous election (for parliamentarians, this includes local elected councilors and local party leaders, Figure 1). We cluster the standard errors at the individual level.

The main variable of interest in Equation 1 is the dummy variable for being a worker, W_i . Its estimated coefficient β captures workers' relative probability of being promoted in percentage points. We do not report this metric but instead divide the estimated coefficient by the average of the outcome variable. The resulting number represents the gap in promotion probability measured as a percent: -0.5 equates to a 50% smaller likelihood of promotion among workers than non-workers.

We always include fixed effects for combinations party-municipality-election when estimating Equation 1. These dummies restrict the statistical comparisons of workers and nonworkers, which are averaged in the coefficient β , to politicians running for the same party, in the same municipality, and in the same election. Adding a vector of dummies for sociodemographic traits D_{it} further nets out promotion gaps between social classes stemming from the potentially correlated identities and inequalities associated with age, sex at birth, global birth region, or being a full-time student. To make the promotion ladder meaningful, we restrict the sample to municipal-level parties with at least five elected councilors.

We add dummy variables E_{it} to denote the politician's number of previous election periods as a municipal councilor to hold constant political seniority in the estimations of promotions to the two highest career rungs. The strong seniority principles in Swedish parties make seniority a basic qualification for promotion, comparable to job or sector tenure in analysis of private sector careers.

The variable vector \mathbf{Q}_{it} contains the three competence variables. A lack of data overlap prevents us from adding all three at once. Table 1 starts with a specification including the fixed effects for sociodemographics only in column 1, adds dummies for seniority in column 2, and then adds the Earnings Score variable in column 3. The next specification reestimates the basic specification in the data sample with non-missing high school grades in column 4 and adds the two variables for grades and Earnings score in column 5. Columns 6 and 7 do the same for the cognitive score. Estimating a version of Equation 1 without the worker dummy shows that all three measurements correlate positively and strongly with the likelihood for political promotion (Supplementary Table W7).

All estimated promotion gaps are large, negative, and statistically significant at conventional levels. The estimates in column 1 of Table 1 indicate that workers are 50% less likely to enter politics as a local candidate, 40% less likely to move to the level of councilor, 30% less likely to become a local party leader, and 60% less

 $^{^{\}rm 15}$ Multiple working periods on the same day separated by a long unpaid break.

	1	2	3	4	5	6	7
	<u> </u>		ა	4	5	0	
DV: Entry from population	n to nominated	= 1					
Worker = 1	-0.543		-0.563***	-0.414***	-0.380***	-0.647***	-0.510***
	(0.005)		(0.005)	(0.009)	(0.010)	(0.014)	(0.015)
No. of obs.	44,630,774		43,178,534	17,045,663	16,812,712	8,159,313	8,143,817
DV: Promotion from nom	inated to electe	ed = 1					
Worker = 1	-0.393***		-0.342***	-0.322***	-0.223***	-0.426***	-0.288***
	(0.020)		(0.021)	(0.041)	(0.041)	(0.047)	(0.047)
No. of obs.	131,679		131,283	39,593	39,437	27,896	27,861
DV: Promotion from elec	ted to local par	ty loador – 1					
Worker = 1	-0.355***	-0.329***	-0.305***	-0.524***	-0.478***	-0.516***	-0.459***
	(0.032)	(0.031)	(0.031)	(0.088)	(0.088)	(0.116)	(0.117)
	(0.002)	(0.001)	(0.001)	(0.000)	(0.000)	(0.1.0)	(0.117)
No. of obs.	53,464	53,464	53,308	12,887	12,840	7,971	7,954
DV: Promotion from mun	icipal councilor	to parliame	ntarian = 1				
Worker = 1	-0.689***	-0.587***	-0.555***	-1.148***	-1.031***	-1.137***	-1.044***
	(0.094)	(0.093)	(0.092)	(0.283)	(0.282)	(0.372)	(0.370)
No. of obs.	62,762	62,762	62,586	15,625	15,569	10,035	10,010
FEs for party-muni-	,	,	,	•		,	,
year	х	Х	х	x	x	x	х
FEs for socio-	^	^	^	^	^	^	^
demographic traits	Х	х	Х	X	X	X	Х
Seniority	••	X	X	X	X	X	X
Earnings Score			X		X		X
Grade sample				x	X		
Grades					X		
Cognitive score sample						X	X
Cognitive score							x

Note: The table reports gaps in promotion probabilities between workers and nonworkers across adjacent rungs on the political career ladder. OLS squares estimates in percentage points are rescaled by the mean of the outcome variable so that -0.5 in the table equals a 50% lower promotion probability. FEs for sociodemographic traits include a dummy variable for female sex at birth, dummies for five age categories, two dummies for being born in Europe (excluding Sweden) and outside of Europe, and a dummy for being a full-time student. Supplementary Tables W8A–D reproduces the table with control variable estimates. Standard errors clustered at the individual level in parentheses. ***p < 0.01, **p < 0.05, *p < 0.1.

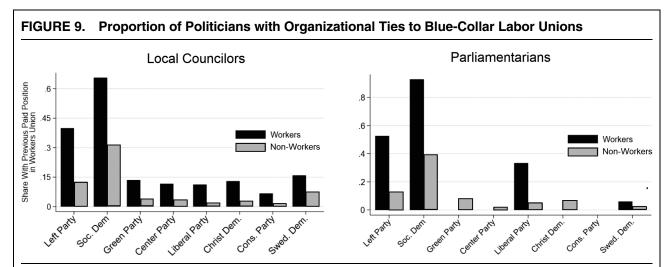
likely to go from elected municipal office to parliament. Holding politicians' seniority at the local level constant in column 2 reduces the disadvantage in party leadership somewhat and shrinks the disadvantage in parliamentary promotions by 15% (from 60% to 50%).

Comparing the estimates in columns 2 and 3 of Table 1 illustrates that the Earnings Score measure of competence explains very little of the workers' promotion disadvantages. The same is true for combining the Earnings Score and high school grades (comparing columns 4 and 5); together, these explain one-third of the disadvantage of becoming a party leader. It explains less of the other gaps, however, and even after including these controls, workers' disadvantage in that promotion remains large at 30%.

We add the index of inflexible work conditions to the career regression to see if this variable explains workers lower chances of promotion (results in Supplementary Table W9). Perhaps surprisingly, the regression coefficient on the index is near zero for lower-level

promotions and small for higher levels. Including the control nevertheless reduces the estimated promotion disadvantage by about a quarter for the three higher promotions. Time constraints imposed by the occupation appear to partly explain the promotion gap, although the strong correlation between the worker dummy and the inflexibility index inflates standard error and prevents us from drawing clear conclusions about the exact importance of this variable.

The results in Table 1 persist for alternative operationalizations of the career ladder. Workers have a large disadvantage in directly entering politics at each of the three highest career levels (Supplementary Table W10) as well as a large disadvantage in entering parliament from being nominated on a parliamentary ballot (Supplementary Table W11). Defining people who leave politics as *not promoted* does not affect our results, because workers do not drop out at a higher rate than nonworkers (Supplementary Table W12). The results persist when we use Carnes and Lupu's



Note: An organizational tie is defined as having held a paid position (>10 USD) in a blue-collar union at any time since 1985. Pooled data for elected politicians in 2002-2018. N(local councilors) = 60,217; N(Parliamentarians) = 1,557.

(2023c) alternative definition of the working class (Supplementary Table W13).

A potential concern about our analysis is that tertiary education or working in specific white-collar occupations delivers key competencies for political office. Supplementary Table W14 runs two variants of the basic promotion regression in column 2 of Table 1 to address this point. One adds dummy variables for seven levels of education, and the other excludes individuals with a college or university degree. Of the eight estimated promotion gaps across these two variants, the largest reduction in the size of workers' promotion disadvantage compared to the main analysis is 30%. Supplementary Table W15 shows that large promotion gaps persist after holding constant the number of tasks that occupations share with being a legislator according to the O*NET database (measurement details in Section W3.6 of the Supplementary Material). These results contradict the idea that a lack of skills learned in tertiary education or white-collar jobs constitutes the main explanation for workers' promotion disadvantage.

Labor Unions

We identify people with union ties in a taxation register with detailed information about all labor income payments that sum to more than 10 USD in each calendar year (1985–2018). We define a person as having a union tie if they received such a payment from a blue-collar labor union before the election in which we observe them (Section W3.7 of the Supplementary Material provides more measurement details). About 5% of the population aged 18 or over has a union tie according to this measure. Only 3% of people with such ties are fully employed by a union (i.e., receive a relatively large sum of annual labor income from this main employer). The remaining 97% receive smaller payments, presumably for being a union representative in a

workplace. Supplementary Table W16 demonstrates a large socioeconomic similarity between these (presumed) union representatives and *members* of blue-collar unions. Because union ties become observable in 1985 and we cannot observe social class in the 1990s, we analyze union links from 2002 onward.

The share of politicians with union ties differs strongly between political parties and by the politician's social class (see Figure 9). Ties are most common in the Social Democrats, especially among workers in parliament. Ties are also relatively common in the Left Party, which lacks official collaborations with specific unions but actively encourages union-party collaborations and union influence over candidate nominations (Left Party 2022). The near-total absence of union ties among Sweden Democrat politicians is unsurprising given this party's antagonistic relationship with organized labor.

We want to compare the promotion probabilities for workers with vs. without union ties and to compare both of these groups with nonworkers. This amounts to splitting the worker dummy in regression in Equation 1 into two dummies, one for workers who have a tie to a blue-collar labor union and one for workers who do not. The large disparities in organizational ties across parties motivate us to run this analysis separately for left-leaning parties and other parties. Because we are mainly interested in testing whether organizational ties help workers overcome the class ceiling, we include controls for seniority and cognitive skills (the Earnings Score variable) in these specifications.

Organizational ties to blue-collar labor unions help workers overcome their promotion disadvantage in politics, but only to lower-level political positions in

¹⁶ For this calculation, we use a threshold of 3.5 price base amounts, a time-varying economic standard used in Sweden's social security system. Here, 3.5 price base amounts equal approximately 17,000 USD in 2024.

TABLE 2. Gaps in Promotion Probabilities by Politicians' Organizational Ties to Labor Unions Sample: Social Democrats and Left Party Sample: The other parties 2 DV: Entry from population to nominated = 1 -0.740***-0.537***Worker without union tie = 1 (0.014)(0.007)-0.463*^{*}** Worker with union tie = 1 4.162*** (0.032)(0.016)No. of obs. 28,014,994 28,014,994 DV: Promotion from nominated to elected = 1 Worker without union tie = 1 -0.476***-0.418***(0.054)(0.041)-0.303*^{*}** Worker with union tie = 1-0.050(0.043)(0.091)No. of obs. 27,226 31,697 DV: Promotion from elected to local party leader = 1 Worker without union tie = 1 -0.267***-0.287*** (0.079)(0.110)Worker with union tie = 1 -0.204*** -0.563** (0.066)(0.271)No. of obs. 12,989 10,669 DV: Promotion from municipal councilor to parliamentarian = 1 -1.069*** Worker without union tie = 1 -0.416*(0.236)(0.329)Worker with union tie = 1 -0.321-1.808*(0.201)(0.829)12,683 No. of obs. 14,691 FEs for party-municipality-year Х Х FEs for sociodemographic traits Х Х Seniority Х Х **Earnings Score** Х Х

Note: The table reports estimates for Equation 1 after splitting the working-class dummy variable into two dummies for workers with vs. without organizational ties to labor unions. Standard errors clustered at the individual level in parentheses. See the note of Table 1 for the recalculation of the estimates to values in percent and the specification of control variables. Supplementary Table W17 reproduces the table with control variable estimates. ***p < 0.01, **p < 0.05, *p < 0.1.

left-leaning parties. In these parties, workers with union ties are *more* likely than nonworkers to enter politics and equally likely as nonworkers to become an elected local councilor (column 1 of Table 2, full list of estimates in Supplementary Table W17). Workers without union ties have familiar disadvantages in both steps. The advantage of having a union tie disappears for the two higher career rungs in left-leaning parties: we instead see similar-sized disadvantages for workers with or without union ties. While the two estimates have similar magnitudes for promotion to parliament, low statistical precision warrants some caution in this interpretation. In the other parties, union ties do not improve workers' promotion prospects at the two lower career levels; if anything, they are associated with a larger promotion disadvantage at the two higher rungs.

DISCUSSION AND CONCLUSION

Our article traces the careers of almost eighty thousand politicians over a 50-year period to document how the

working class leaks out of the political career pipeline. Our results point to bias against workers in parties' internal promotion processes—a *class ceiling*—as a key explanation for this pattern. Organizational ties to blue-collar labor unions help workers overcome this bias, but only to obtain lower-level career positions in left-ideological parties. The results indicate that lower time–space flexibility in working-class occupations may contribute to workers' slower career progress.

Other explanations for workers' political exclusion find less support. Voters do not prefer nonworkers, and workers do not lack progressive political ambition or the types of attitudes and work ethics believed to constitute "soft" competence for political office. While workers score lower on "hard" competence measures like high school grades or cognitive tests taken at a young age, these differences explain only a small fraction of their lower chances of promotion. Sensitivity tests indicate that skills learned in tertiary education or white-collar jobs also fail to account for the promotion gap.

Prior research links workers' numerical underrepresentation in politics to lower levels of substantive

representation and democratic legitimacy, which highlights the importance of addressing workers' political exclusion. Our results indicate that policy efforts to boost workers' numerical representation need to be multifaceted and target both lower and upper rungs on the career ladder. A one-sided focus on encouraging workers to *enter* politics will likely fall short due to disadvantages further up the career ladder, just as a one-sided focus on promotion to parliament will likely prove inadequate because disadvantages at lower levels restrict the candidate pool at the top.

The results strongly suggest that political parties should be front and center in efforts to improve representation. These efforts are particularly urgent in parties with large working-class electorates. In Sweden, the Social Democratic Party contributes a large share of the "missing" workers in parliament; center-right parties are less problematic because, although they promote few workers to parliament, workers do not vote for these parties in any significant numbers. Political parties could target the division of career-relevant resources between politicians during the election period and make political work more compatible with inflexible jobs. Empowering blue-collar labor unions in parties' nomination processes would likely improve workers' career progress, while also potentially affecting the composition of policy priorities among workingclass politicians (Micozzi 2018).

How do our results extend beyond Sweden? A particularly useful insight might concern the role of the party system. Sweden's relatively high level of worker representation in parliament (Carnes and Lupu 2023a) appears to be explained in large part by its large labor party being strongly embedded in the labor movement. Over the past 50 years, this party has contributed the lion's share of the country's working-class parliamentarians. The rise of the radical right in the last decade offers a dramatic and interesting shift—the rapid growth of a party with a strong working-class presence among voters and politicians despite an antagonistic relationship with organized labor. Future studies should explore whether the changing economic background among politicians in left-leaning parties contributed to this development and whether the growth and normalization of the radical right might cause high-SES politicians to gradually replace workers in this party (as predicted by Art 2011).

Studies of workers' career paths in other countries need to adapt the operationalization of the career ladder to the relevant structure in those contexts. While local-to-national careers are common in many countries, subnational and national careers sometimes represent "different worlds" (Stolz 2003). Pure national-level career paths might represent a greater relative challenge for workers in other contexts, especially if universities play a more important role in such "careerist" pathways (Durose et al. 2011; O'Grady 2019). Studies in other countries might also need to adapt the set of individual resources analyzed, for example, focusing more on economic resources in contexts with expensive and self-financed campaigns.

Adding four types of new data would allow future research to extend the scope of this study. First, new individual-level data for occupational and other information printed on electoral ballots would permit an analysis of whether offering more information to voters can help workers' electoral chances and political careers. Second, including data on party members and parties' internal primaries would enable more insights into how members influence nomination processes and how this influence might relate to workers' political inclusion. Third, extending the analysis of unions to cover union members would further our understanding of workers' political careers and policy priorities. Fourth, future work might target occupation-level factors by adding data on occupational-level differences in the security of economic resources or opportunities to switch back and forth between the political and private sectors over longer time horizons (Goldthorpe and McKnight 2006; Iversen and Rosenbluth 2010).

Lingering doubts regarding our conclusion about the class ceiling might stem from workers' decisions to leave politics or our ability to quantify all relevant qualifications that might differ between the two groups. Two results are worth highlighting in this regard. Our analysis showed small or zero gaps in reelection and renomination, which suggests that a failure to advance in political parties, rather than voluntary exits, accounts for workers' promotion disadvantage. Second, we found a large promotion disadvantage for workers even after dropping everyone with a tertiary degree from the analysis. This strongly contradicts the assumption that a lack of skills or qualifications learned in tertiary education explains why workers are absent from parliaments in Sweden and elsewhere.

SUPPLEMENTARY MATERIAL

To view supplementary material for this article, please visit https://doi.org/10.1017/S0003055424001011.

DATA AVAILABILITY STATEMENT

Research documentation and instructions for how to gain access to administrative and restricted use proprietary data are available at the American Political Science Dataverse: https://doi.org/10.7910/DVN/VMC1GO.

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CONFLICT OF INTEREST

The authors declare no ethical issues or conflicts of interest in this research.

ETHICAL STANDARDS

The authors declare that the human subjects research in this article was reviewed and approved by the Swedish Ethics Review Agency (application number 2020-06365) and by Statistics Sweden (SCB) as part of our application for the microdata used in the analysis. The authors affirm that this article adheres to the principles concerning research with human participants laid out in APSA's Principles and Guidance on Human Subject Research (2020).

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