All the Single Ladies: Job Promotions and the Durability of Marriage

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This paper shows that promotion to top jobs dramatically reduce the durability of women's marriages, but not men's. For two political jobs – mayor and parliamentarian – we can follow successful and unsuccessful job contenders over time, both before and after the promotion. With this data, we can ascertain common trends in divorce and earnings before the promotion, and use a difference in difference approach to estimate the causal effect of promotion on divorce. To further control for unobservables, we also define a subsample close elections where the promotion winners, but an event study that compares promoted men and women gives strong supports to our baseline findings. Looking into possible mechanisms, we can rule out that promoted women are differentially "tempted" by new partners after promotion. Instead, it appears that norms and behavior in the marriage market may hinder the closure of the gender gap in the labor market. Divorces do not occur in couples that are more equally matched in terms of age, parental leave, or earnings. Instead they occur in couples where behaviors are more traditional, which is still the case for most relationships.

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1. Introduction

The economic and social roles of men and women have been converging in recent decades. Women in Western democracies have largely caught up with men in terms of labor force participation, tertiary education, and career expectations (Goldin 2006). What lags behind is women's *realization* of those career goals. In 2015, men accounted for 95% of CEOs in Forbes 500 firms and more than 75% of the world's parliamentarians (www.fortune.org, www.ipu.org). Men's continued dominance at the top of organizational hierarchies translates into gender inequalities of status, voice, and earnings (e.g. Albrecht, Bjorklund, and Vroman 2003; Arulampalam, Booth, and Bryan 2007).

One potential reason for women's slower career progressions is that a job promotion for a woman causes more stress and strain on the household than the job promotion of a man. This could be why in surveys, women who "have it all" report lower levels of life satisfaction and emotional wellbeing than women who "only" have a family (Bertrand 2013). It is a long-standing result in labor economics that divorce is positively correlated with women's entry into paid labor and women's higher earnings.¹ Recent research has added the insight that labor market events may have asymmetric impact on relationship satisfaction by enforcing or contradicting gender norms. Bertrand, Kamenica, and Pan (2015) find that women hold back their careers to comply with the norm that the husband should "earn more". In a dating experiment, Fisman et al. (2006) find that men avoid women who were more ambitious than themselves and – correspondingly – Pallais et al. (2016) find that women self-censor their career ambitions in groups with more single men. Women's success is off-putting to men, but not vice-versa.

In this paper, we offer the first empirical analysis of how the promotion to a top job in the economy affects the marriage durability of men and women. We find that a promotion to a top job leads to an increased rate of divorce among women, but not among men. The second half the paper evaluates possible mechanisms for this finding. We characterize the household formations of male and female candidates for top jobs, and evaluate which of these characteristics are related to an increased probability of divorce. We also rule out some explanations, mainly that a promotion improves women's outside options more than men's – tempting promoted women into new relationships (e.g. McKinnish 2004).

¹ See, e.g., Becker, Landes, and Michael 1977; Johnson and Skinner 1986; Weiss and Willis 1997; Oppenheimer 1997; Heckert, Nowak, and Snyder 1998; Jalovaara 2003; Liu and Vikat 2004; Kesselring and Bremmer 2010, but c.f. Rogers 2004; Newman and Olivetti 2015. Conversely, papers have also linked the negative economic shock of unemployment to an increased divorce risk when the unemployment hits the husband, but not when it hits the wife (Rege, Telle, and Votruba 2007; Charles and Stephens 2004; Eliasson 2012; Doiron and Mendolia 2012).

Our analysis is carried out using Swedish register data and targets promotions to three types of top jobs. Two of these jobs are at the pinnacle of power in the public sector – local mayors and national parliamentarians. The third type of job is in the private sector: CEOs of companies with more than 100 employees. These three positions typify "top jobs" in the economy by having high status, long work hours, and average earnings in the top 5 percentile of the income distribution (authors' calculations, see Web Appendix Figure W1).

Our analysis of these promotions complements previous work on the link between labor market performance and marriage durability. Whereas previous work has examined increases in earnings and labor market participation, we target the event of the promotion itself. We can also disentangle the causal direction of the relationship. In our data, women who occupy the three jobs that we analyze are about twice as likely to be divorced than their male peers.² For the two political jobs we use a difference in difference estimation to establish the causal direction. In these cases, we can observe both the person who won each promotion and the "top contender" – another person who sought the job but did not get it. Both persons can be observed over a number of years before and after the year in which the promotion did – or did not – occur. This allows the difference in difference where we can verify the absence of the pre-trends in divorce, and other observables, between the treated (promoted) and non-treated (non-promoted).

To further bolster the analysis, we also select a sub-sample of elections with narrow electoral wins. Close elections, arguably, provides quasi-random assignment of the promotion and lets us rule out that differences in unobservable variables explain the difference in difference results. Finally, for promotions to CEO where we lack data for un-successful job candidates, but a comparison of the divorce probabilities of promoted men and women reveal strong corroboration of the results in the political sector.

There are many benefits of the administrative register data to carry out this analysis. Contrary to previous work, we know the precise year of every divorce and every promotion, and are not forced to rely on recall data for relationship or economic histories. We also have register data for a large number of socioeconomic variables both for the job candidate and for his or her spouse. Nevertheless, there are some data limitations. There is no register variable for which spouse initiated the divorce, and lack a good annual measure of the division of household work, meaning that we cannot examine spousal responses to the promotion along this dimension. Moreover, while Sweden diligently records

² Among parliamentarians (1991-2010), 18% of the women and 10% of the men are divorced. Among mayors (1991-2010), 22% of the women and 12% of the men are divorced, and among CEOs (2002-2012), 15% of the women and 8% of the men are divorced (authors' own data, see Figure W6 in the Web Appendix). For discussions of reverse causality between divorce, earnings, and labor market participation, see e.g. Greene and Quester 1982; Johnson and Skinner 1986; Stevenson 2007.

all marriages, cohabitation is not measured accurately. For this reason, we focus on the two thirds of the job candidates who are married prior to the promotion.³

In the second half of our paper, where we examine the socioeconomic characteristics that are correlated with divorce upon promotion, we uncover a tension between the development of gender equality in the labor and marriage markets. While the labor market has grown more equal with more women candidates for top jobs, these women have largely traditional family formations. Most are younger than their husbands and take the vast majority of parental leave. It is also in these couples – with the largest age-gap and the largest gender equality in parental investments – that we find the most divorces. Among women with more gender equal relationships, there is no increased probability of divorce. A theoretical interpretation of this pattern is that divorce follows when the promotion of the wife contrasts more with the expectations of future behavior at the time of couple formation (e.g. Becker, Landes, and Michael 1977).⁴ Another interpretation is that the promotion caused the most stressful re-negotiation of economic and social roles in these households (e.g. Coverman 1989).

Another, and less clear-cut, finding in the second half of the paper comes from our comparison of divorce probabilities across household divisions of paid labor. We define households as "traditional" if the husband make more than 60% of total earnings, "reverse traditional" if the wife makes more than 60%, and "dual-earner" if neither spouse earns more than 60 or less than 40%. The results show a slightly higher probability of divorce when the promotion makes the woman the dominant earner. Among women who go from dual- to dominant earners, more than 15% are divorced within three years after the promotion.⁵ Among men who make the same transition, only 3% are divorced. Both numbers stand out against the benchmark divorce rate over time among non-promoted men and women, which is 6% among both genders. These results follow in the spirit of Bertrand, Kamenica, and Pan (2015) by suggesting that social norms on relative earnings between the spouses are important for marriage utility.

Our study contributes to several research literatures in economics, political science, and sociology. In economics, we contribute to the growing discussion of the causes and consequences of

³ Contrary to popular belief, the institution of marriage continues to be prevalent in Sweden: it currently has the highest marriage rate in the European Union (Statistics Sweden 2015).

⁴ This interpretation is consistent with recent evidence that marriage durability is undercut by a (forced) shift in the division of parental investments away from the social norm of gender specialization (Avdic and Karimi 2016).

⁵ The size of the promoted woman's increase in earnings – as a proportion of either her pre-promotion earnings level or total household income – is unlikely to be an underlying cause of this finding. Split-sample analysis shows no systematic variation between the probability of divorce and these two variables. To some extent, these findings contradict previous theory and evidence on women's labor market entry, which is of course a different margin of labor market performance than the one studied here (e.g. Oppenheimer 1994; Becker, Landes, and Michael 1977; Edlund 2006).

career inequality by gender (e.g. Lazear and Rosen 1990; Bertrand, Goldin, and Katz 2010; Bjerk 2008; Booth, Francesconi, and Frank 2003; Smith, Smith, and Verner 2013). We also contribute to the subfield of political economics with the (to our knowledge) first analysis of the non-monetary costs of holding political office.⁶ In the political science literature, descriptive evidence abounds that female policy makers are more likely to be divorced or single than their male colleagues (e.g. Carroll and Sanbonmatsu 2013). We add a causal direction to this correlation. Our findings also suggest the theoretical point that gender differences in household formation, and norms related to that formation, could be an important supply factor and/or institution that shapes gender representation in politics (Norris and Lovenduski 1995; Krook and McKay 2011). For sociologists, our causal study of the impact of promotion contributes to the large literature on the drivers of marriage dissolution (see e.g. footnote 1; Amato and Previti 2003; Schwarz and Han 2014).

Finally, is the finding that job promotion causes divorce among women a good thing or a bad thing? We will argue that, although a divorce may well improve an individual woman's welfare, the implications for society are largely negative. Little gains in individual welfare are found when we follow divorced men's and women's development on the labor and marriage market. Promoted and divorced women have slightly larger increases in post-promotion earnings, but they are highly unsuccessful in forming new relationships, a result that also contradicts that a "temptation effect" is behind out main finding. For society, on the other hand, there could be substantial and negative demonstration effects on women's career ambitions. Younger women get the signal that a successful career is disruptive for personal relationships, leading perhaps to the self-censorship in ambitions and effort observed in recent studies (B+P!). In sum, as long as both men and women rank "family" as the top life priority⁷, but promotions force women (but not men) to give it up, the most suitable individuals are not likely to be channeled to society's top jobs.

Given that our analysis targets Sweden, an outlier in some measures of gender equality, external validity deserves some commentary. Sweden is known to have strong ideational support for gender equality, both in population surveys (World and European Value Surveys, various waves) and in government policies in the areas of taxation and public services. If a divorce effect exists in this context of small trade-offs between career and family (e.g. Boschini et al. 2011; Bertrand et al. 2016) the effect could be even larger in countries with less favorable conditions. A contrary interpretation is that Sweden's generous policies of parental leave and part-time work drive up the share of households that

⁶ A number of papers have examined monetary costs either empirically (e.g. Eggers and Hainmueller 2009; Lundqvist 2015; Fisman, Schulz, and Vig 2014) or theoretically (e.g. Diermeier, Keane, and Merlo 2005; Mattozzi and Merlo 2008).

⁷ Even in secularized countries like Sweden, more than 98% of women and men in the 2010 World Value Survey reported that "Family" is "important" or "very important" in their lives (WVS 2010).

are more sensitive to her career success. Parenthood is usually followed by a large time investment by the mother, rather than hiring a nanny, even among households in the top of the income distribution.

The paper is organized as follows. We start by describing the data sources and three steps of sample selection: defining close contenders for the two political promotions, defining close elections, and choosing a time window around the promotion event(s). We then move to descriptive statistics for pre-promotion characteristics of individuals and households which may be related to the probability of divorce, and use both register data and self-collected survey data to describe the promotions. This is followed by our main results, which is that the promotion greatly increases the divorce probability among women – a result that we also see in the graphical event study that compares men and women who were promoted to CEO.

The final sections of the paper study mechanisms by splitting the sample based on theoretically relevant background variables of job candidate's households, in order to determine whether the promotion effect on divorce is more salient in some circumstances than others. Focus is placed on split sample analysis based on i) the division of paid labor in the household, ii) the division of parental leave, and iii) the spousal age-gap. Due to sample size constraints, this is only done for the political promotions. Before concluding, we also make some brief comments on the normative implications of our findings by describing the labor and marriage market performance of divorced and non-divorced politicians in the post-promotion period.

2. Data and Sample Selection

Our dataset combines several administrative records kept by the Swedish government and recorded based on mandatory personal ID numbers. It covers the country's entire working-age population with yearly observations that span 21 years, 1991–2012. We use the Marriage Register to link spouses to each other and to determine whether they divorced. Sweden has no-fault divorce, and couples are not required to undergo mediation or a period of living separately. In most cases, divorce proceedings can be processed as quickly as within one month. If at least one spouse demands it, or if the couple has children below 16 years of age, the divorce law specifies a 6-month cooling-off period between filing for and finalizing a divorce. About 40% of the couples in our data have children under 18, meaning that some non-negligible proportion of the divorces in a specific year were initiated in the year before. After a divorce, the couple's assets are divided equally, but apart from child custody payments there is no alimony (maintenance/spousal support) to retroactively compensate spouses for labor market decisions within the household.

Co-habitation is not perfectly measured in Swedish registers. Joint family ID codes are assigned if the couple has a child together or lives together in a private home. Couples without children or who

live in apartments are thus excluded. Our study does not extend to cohabitation for this reason, and also because a large share of individuals in our sample – 60% of women and 70% of men – are married prior to their promotion.

Our socioeconomic variables are taken from the longitudinal integration database for health insurance and labor market studies (LISA, according to its Swedish acronym). This database includes data from tax records on wage income, income from business ownership, and parental leave (variable definitions are discussed further in Section 5). Additional background variables taken from LISA are sex, birth year, birth region, education type and length, industry code, and occupation code.

For CEOs, we can only observe people who are promoted, and not people who applied but did not get the job. A variable that identifies all CEOs is available in 2002 to 2012. The two political positions are also identified by register variables. All Swedish political parties must report all candidates (including their personal ID code) to the electoral authority. This gives us a complete dataset for all contenders for parliamentary seats, that is, everyone who appeared on a parliamentary ballot between 1991 and 2010. We also know their rank order on the ballot, their political party, and whether or not they were elected. The data for mayors comes from the same time period. A mayor is approximated in the data as the top-ranked politician on the electoral ballot of the political party that appointed the mayor (following Folke et al. 2016).

2.1. Sample selection: contenders for political promotion

For the two political jobs we can observe two top contenders for each promotion: one who lost the promotion and one who won it. For position of *parliamentarian*, Sweden uses list-based Proportional Representation, i.e. PR, electoral system in which political parties control the rank order of the electoral ballot(s), which represents the hierarchy of power within the party. Over time, a person climbs their way upward through the ranks, which is similar to climbing the career ladder of a private firm. The seats that the party wins in an election are then allocated starting at the top of this list. On each ballot in the 29 electoral districts we get the pair of contenders by honing in on the last elected person (i.e. the lowest-ranked candidate who got elected) and the first unelected person (the highest-ranked person who did <u>not</u> get elected).⁸ We only omit the extremely small proportion of electoral ballots from which preference votes alone resulted in the election of at least one parliamentarian.⁹ For

⁸ Since 1998, Swedish voters can cast one voluntary preference vote for any candidate on the ballot of the party that they vote for. There are three reasons that this system does not impact on whom of the marginal candidates is elected and, therefore, unimportant for our analysis. First, only one third of the voters utilize their voluntary vote. Second, the vast majority of those who do, vote for top candidates on the ballot rather than marginal candidates. Third, the threshold of votes needed to win a seat is prohibitively high (see Folke, Person and Rickne 2016 for a detailed description).

⁹ Only 1% of parliamentarians are elected via preference votes.

the vast majority of parliamentarians, getting elected represents a rise in income and status. Lundqvist (2015) shows that getting elected raises an individuals' average lifetime disposable income by 20%.

In the case of promotion to *mayor*, another important characteristic of the political system comes into plays. Each of Sweden's 290 municipalities has a mayor who is not directly elected by popular vote but is instead appointed by a specific political party according to the basic principles of parliamentary democracy with multiple parties. After the election, political parties come together to form a governing coalition, the largest of which appoints the mayor. Swedish political coalitions are usually formed by parties that belong to the same political bloc (i.e. left or right bloc) (Alesina, Roubini, and Cohen 1997). This means that there are two rivals for the position of mayor: the top politician from the largest party in the left bloc and the top politician from the largest party in the right bloc. The person whose bloc wins, becomes mayor, and the person whose bloc loses usually becomes the opposition leader, a position with substantially less influence, work hours, and responsibilities. On average over our sample period, a promotion from vice mayor to mayor causes an immediate increase in annual earnings of 25%.¹⁰

Just as the process of climbing upward through the ranks of an electoral ballot over time is similar to upward career moves in a private company, the selection of the top name, the party leader, is comparable to the selection of a manager. As noted above, the person who is appointed mayor is the first-ranked person on the electoral ballot of the largest political party in the governing coalition.¹¹ We delete the small number of cases (2% of the sample) when a political party offers more than one ballot in a municipality.

Parties' electoral fortunes can shift over time to allow politicians to first win, then lose, and then recapture their positions. To correct for this, we only include persons in the estimation sample who have never held either of the two political jobs in the past. We allow losers to appear in the dataset more than once, but cluster the standard errors at the level of the individual. A robustness check shows that the main result is not sensitive to excluding these "repeating losers," but the analysis in which we split the main estimation sample based on background characteristics quickly suffers from small-sample issues. We therefore keep the repeating losers throughout to avoid going back and forth between different estimation samples.

¹⁰ In-depth descriptions of the positions of mayor and vice mayor can be found in Nilsson 2001; Jonsson 2003; and Montin 2007

¹¹ Using data from 1991–2010, we know which party appointed the mayor and can verify that when either bloc obtained more than 50% of the seats, the largest party in that bloc had a 90% probability of appointing the mayor. For 2006 and 2010 we also have the exact identity of the mayor and can also verify that this person was the top-ranked individual on the electoral ballot of the largest governing party in nine cases out of ten.

2.2. Sample selection: close elections

We construct two binary variables that indicate if an election is close, one for parliamentary elections and one for municipal elections. For municipalities, the variable captures how similar the two political blocs are in size. A close election is defined as when the winning bloc's win margin (that is, its share of the total vote) is below 5%. The details of how we calculate these variables are described in Section W1 of the Web Appendix. Calculating the margin of victory for parliamentary elections is a bit more complex. Parliamentary seats are allocated in two rounds, at the district and national levels, and the seat allocation is proportional to the national vote share. Another complication is that the win margin measured in vote share constitutes as a closer win margin in a large party than in a small party. We follow Freier and Odendahl (2015) and adopt a pure simulation approach to calculate the margin and, in turn, set a delimitation value for our binary indicator. A close election is defined as a party losing its last (marginal) seat in at least 30% of the simulations. A detailed description of this approach is, again, available in Section W1 of the Web Appendix.

2.3. Sample selection: time window around the promotion

We select a time window of observations around each promotion event (illustrated in Figure 1). For CEOs, year 0 is the year in which the promotion happened. In politics, promotions always happen in popular elections, held in September every fourth year. The starting point of the window(s) is set to four years prior to the promotion event (t-4). Because we are interested in the impact of divorce on the durability of marriages, we restrict the estimation sample to persons who were married in (t-4) (robustness checks show that the results are not driven by the choice of starting years). For politicians, this is true for 75% of the men and 65% of the women. For CEOs, it is true for 68% of the men and 65 % of the women. In our mechanism section, which analyzes politicians only, we instead take (t-1) as the starting year in order to maximize the number of observations.

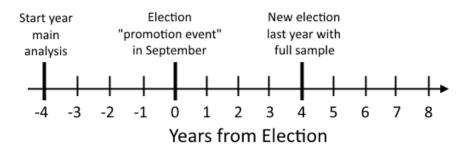


Figure 1. Timing of events

We make one last sample restriction. Politicians do not have a formal retirement age, but many retire at Sweden's formal retirement age of 65. We drop politicians and CEOs who reach this age before the end of the election period (before t = 3), or three years after the promotion for CEOS, to avoid confounding the estimated effect with impacts on marriage durability from labor market exit. The non-retirement restriction removes an additional 10% of women and men, respectively. The final sample size is 642 women and 1,293 men.

3. Descriptive statistics

This section presents two types of descriptive statistics and for politicians only (descriptive statistics for the CEO sample is placed in the Appendix to save space). First, we compare the means of socioeconomic variables both at the individual and at the couple level. These variables are measured in the year(s) before the promotion, and the sample is split by gender and by (subsequent) promotion. We also show means in the sub-sample of close election (described in Section 2.2). Three of the socioeconomic variables are of particular interest since they form the starting points of our mechanism section (6). For that reason, we report both means and entire distributions of the variables, divided by gender. In the second set of descriptive we compare the types of promotions that men and women receive by plotting the distribution of increases in earnings and discussing survey results on work hours and influence.

We start by comparing the socioeconomic characteristics prior to the promotion event. Relevant variables are derived from previous research on labor market and marriage durability and from sociological research on the drivers of divorce (see e.g. Becker, Landes, and Michael 1977; Weiss and Willis 1997; Amato and Previti 2003). Individual-level variables include age, age at marriage, earnings, and a dummy variable for having completed tertiary education. At the household level, we measure we include a dummy for whether the politician's earnings are higher than the spouse's earnings, marriage length, a dummy for whether the marriage is not the politician's first one, a dummy for whether both spouses were born in Sweden, and two dummies for whether the household has children, one including at least one child aged 0-17 and the other for having at least one child aged 0–6. Because none of the other variables can be affected by the election/campaign work, they are measured in the election year (t = 0).

Earnings are measured as the sum of deflated annual earnings from jobs and business ownership. For each person, we then take the average of these sums over the three years prior to the election (t = -3, t =-2, and t = -1). Using this average rather than a single year provides a more stable

measure of earnings, which balances out year-to-year variability from temporary labor market absences or from events such as temporary unemployment, sickness, or parental leave.

The division of parental leave is computed based on insurance payments, available for the full period, and cross-checked against data for days of leave, available from 1993. Payments are summed for the three first years of each child's life and, if the couple has more than one child, averaged out across all children. We only consider joint children with the current (pre-promotion) spouse, and not children from previous relationships. Section W2 of the Web Appendix shows that the measurement of the division of leave based on payments is highly correlated with the division of leave measured in days. Given the weak correlations in previous studies of men's parental leave and other household tasks (reviewed by Dearing 2015), the division of parental leave should not be thought of as an indicator of the division of overall unpaid work. Because the people in our data are mostly around 45-50 years of age, the variable should perhaps be better thought of as specialization behaviors in the earlier phase of the relationship.

Table 1 compares the means of the pre-promotion traits within genders and between persons who were (subsequently) promoted and those who were (subsequently) not. A simple regression is used to detect statistically significant differences at the 5% level.¹² The comparison is shown for the full count of elections (left-hand side) and for the sample of close elections (right-hand side).

The comparison of means shows that many traits are similar between men and women who are (subsequently) promoted or not. Only a handful of traits are unbalanced in the full sample, and the differences are not large in absolute terms. In the close elections sample, only two traits remain unbalanced in the female sample (in practice, only one trait since the politician's share of household earnings is a function of her own earnings). We return to this variable in the difference-in-difference analysis below, namely to verify that the difference in means is an imbalance in levels and not in trends.

If we compare men and women to each other, the sub-samples have several similarities, but also some important differences. Women and men have similar age at promotion, age at marriage, order of marriage, marriage length, level of earnings before the promotion, probability of having children, and probability of being in a marriage where the spouses are born in different regions of the world. We can also note that the proportion of childless politicians is very small. But men and women are different in terms of the division of paid and unpaid labor, and in the age-gap vis-à-vis- their spouse.

¹² We run a regression instead of a t-test so that we can cluster the standard errors at the level of the individual politician.

Table 1. Comparison	n of pre-promotion traits
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		Full sa	ample		Close elections (<5% win margin)			
	Women		Men		Women		Men	
Subsequently promoted	Yes	No	Yes	No	Yes	No	Yes	No
Couple characteristics								
*Politician's share of earnings (%)		0.54	0.68	0.66	0.59	0.55	0.69	0.66
*Politician's share of parental leave (%)	0.83	0.81	0.14	0.15	0.82	0.81	0.14	0.15
*Age difference (politician-spouse)		-4.01	1.70	1.85	-4.19	-4.13	1.62	2.05
Politician out-earns spouse (%)	0.66	0.53	0.90	0.87	0.67	0.58	0.91	0.89
Marriage length (years)	20.76	21.01	20.91	20.78	20.63	20.32	20.34	20.47
Second marriage (%)	0.03	0.04	0.01	0.01	0.02	0.03	0.02	0.02
Same birth region (%)	0.89	0.92	0.94	0.93	0.90	0.91	0.94	0.94
Has children (0–17)	0.37	0.36	0.48	0.42	0.37	0.41	0.48	0.41
Has children (0–6)	0.10	0.09	0.11	0.10	0.09	0.13	0.12	0.10
Individual characteristics								
Politician's age	48.60	48.94	49.81	50.89	48.40	48.44	49.64	50.48
Politician's age at marriage (1)	28.10	28.14	29.02	30.17	28.29	28.12	29.54	30.13
Politician's earnings (2)	335.4	290.6	370.4	344.3	355.3	310.2	375.3	367.3
Politician's tertiary education (%)	0.65	0.67	0.52	0.53	0.66	0.72	0.54	0.54
Spouse's age	52.60	53.15	48.24	49.08	53.13	52.56	48.27	48.55
Spouse's earnings	282.8	289.8	174.6	179.5	295.1	283.1	174.8	188.6
Spouse's tertiary education (%)	0.42	0.46	0.54	0.52	0.45	0.46	0.54	0.57
Observations	215	374	478	720	122	151	255	298

Notes: Bold letters represent differences between promoted and non-promoted individuals of the same sex at the 5% level or lower, using ordinary least squares (OLS) regressions with standard errors clustered at the individual level.

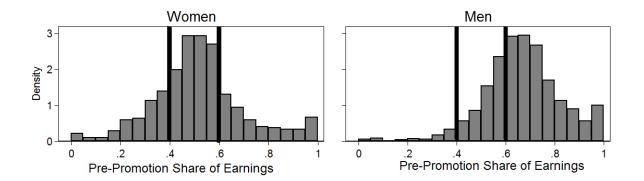
(1) The variable takes the value 1 if the two spouses are from different birth regions, and zero otherwise. The categorization of birth regions consists of: Sweden, Other Nordic countries, EU27 excluding Nordic countries, Asia (including the Middle East), Europe excluding Nordic countries and EU27, South America, Africa, North America, Soviet Union and Oceania.

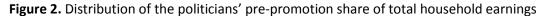
(2) We only know the exact year of marriage for persons who married after 1979. For those married before 1979 we define the year of marriage as the year that the couple's first child was born. For couples already married in 1979 and with no children born before that year, we count 1979 as the year of marriage. This approximation was previously used by e.g. Ginther and Sundström (2010).

(3) All measures of earnings are in units of 1,000s SEK (1 SEK \approx 0.12 USD).

For the three household variables of interest (marked with a "*" in Table 1) full distributions by gender are shown in Figures 2, 3 and 4. The politician's earnings as a share of total household earnings is shown in Figure 2. To clarify gender differences, we introduce stylized division of household types based on the degree of gender-based specialization (following e.g. Becker, Landes, and Michael 1977; Becker 1981; Lundberg and Pollak 2007). When the husband makes more than 60% of total household income we label the household "traditional" (e.g. Fortin 2005; Bertrand, Kamenica, and Pan 2015); when the woman earns more than 60% we label it "reverse traditional"; and everything in between is labeled "dual earner". These types are indicated with vertical black lines in Figure 2.

The distributions of men's and women's divisions of earnings shows that about half of the female politicians are in dual-earner households, 25% are in traditional households, and 25% in reverse traditional households. Of the men, nearly 75% are in traditional households, 20% in dual-earner households, and 5% are in reverse traditional households. In sum, the women who become candidates for top jobs have relatively progressive divisions of paid labor in their households, while most male candidates have traditional divisions of paid labor.





Notes: the black lines represent divisions of household types. If the woman makes less than 40% of total earnings, the household is defined as "traditional"; if neither spouse earns more or less than 40-60% of earnings, the household is defined as "dual earner"; and if the wife makes more than 60% of total earnings, the household is defined as "reverse traditional".

The distributions of parental leave divisions is shown in Figure 3. It shows a high prevalence of gender-based specialization in both men's and women's marriages. The vast majority of the women have taken more than 80% of the family's parental leave, and the vast majority of the men have taken less than 20%. This should be interpreted as large time investments, since Swedish parental insurance covers 480 days of paid leave per child; and the vast majority of couples utilize at least 12 months of leave (Statistics Sweden 2016).¹³ Figure W5 in the Web Appendix sub-divides the sample by the household division of earnings (traditional, dual earner, or reverse traditional). It shows that the degree of gender-based specialization in parental leave is highly similar in families with more traditional and progressive divisions of paid labor. As shown in other context, women with high

¹³ The first days 390 have a wage-replacement rate of 80%, and the remaining 180 days at a fixed payment rate of 20 euro. In 2005, the average mother had used 342 days (71% of the total) by the time that the child had turned two years old, and the average father had used 53 days (11% of the total) (Statistics Sweden 2016).

earnings conform to gender norms on the division of household duties (e.g. Bittman et al. 2003, Kleven, Landais, and Sogaard 2015).

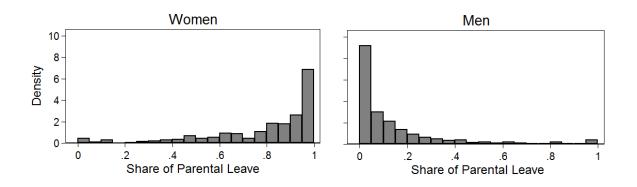


Figure 3. The political job candidate's share of total parental leave

Figure 4 shows the distributions of spousal age gaps. A larger age gap may indicate that the family is organized around gains from specialization, that is, an economic organization where the spouses specialize in the roles of homemaker and provider (Becker 1981). In the case that the wife is younger, that specialization also conforms to social norms about the wife being the homemaker and the husband the provider (Eagly 1987).¹⁴ The distribution in Figure 4 show that our sample of job candidates is matched in a traditional fashion. More than 80% of the women are married to a man who is older than them (persons born in the same year are considered to be the same age). Of the men in the sample, 65% are married to someone younger.

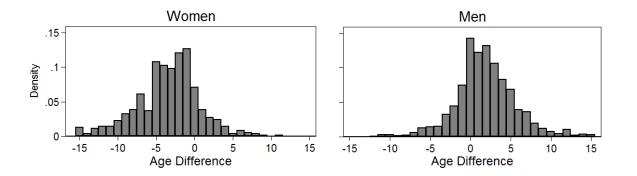


Figure 4. Age difference between the political job candidate and his or her spouse

¹⁴ In terms of social exchange theory, the couple is organized to benefit from social exchanges that transfer economic resources from the husband to the wife and resources such as sex and children from the wife to the husband (following Thibaut and Kelley 1959). Note also that a larger age gap -- in either direction -- could be an indicator of match quality (Becker 1973, 1974).

A final set of descriptive statistics compares some characteristics of men's and women's promotions. For each promoted person, we compute the pre-promotion earnings as the average earnings in the three years prior to the promotion, and the post-promotion earnings as the average of the first three years on the job. In Figure 5 we plot the differences between these two measurements for women and men separately. The two distributions are highly similar to each other, showing that women and men receive largely similar distributions of pay raises from their job promotions.

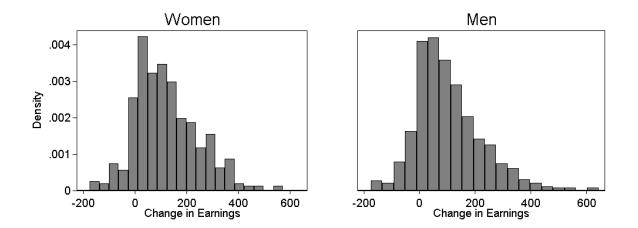


Figure 5. Distribution of changes in earnings before and after promotion (1,000 SEK)

Notes: Pre-promotion earnings are measured as the average of annual earnings during the election period prior to the promotion, and post-promotion earnings are measured as the average of annual earnings in the election period after the promotion. The figure plots the difference between these two measures.

Another aspect of the promotions is the workload of the new job. For municipal politicians, we surveyed mayors to assess their workloads. The distribution of self-reported weekly work hours was highly similar between female and male mayors (Figure 6). Using data from the 2012 survey of Swedish local politicians (Kommun- och Landstingsfullmäktigeundersökningen, KOLFU, Karlsson and Gilljam 2014), we can also verify that the distributions of male and female mayor's self-perceived political influence are highly similar (Figure 7).

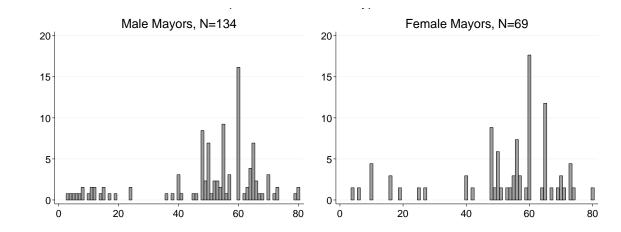


Figure 6. Self-reported work hours in a typical week by male and female mayors Notes: Data from the authors' own survey of mayors, conducted in 2013 and with a response rate of 70%, 203/290.

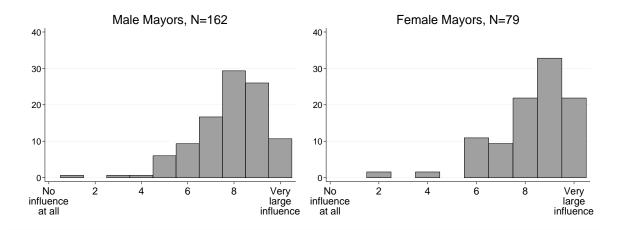


Figure 7. Comparison of male and female mayors' self-perceived political influence

Notes: Data from the 2012 KOLFU survey (Karlsson and Gilljam 2014) sent to all municipal politicians. Response rate among mayors is 83%, 241/290.

Our analysis of mechanisms for gender differences in the impact of promotions on divorce will focus on household characteristics. However, for the interpretation of the gender differences in estimates it is important that men and women receive the same type of promotions, which we have shown in this section that they do.

4. Baseline results for political promotions

We estimate the effects of promotion on men and women separately by estimating

$$Y_{i,e}^t = \beta_1 P_{i,e} + S_{i,e} + \tau_e + \varepsilon_{i,e} \tag{1}$$

where sub-index *i* denotes individuals and sub-index *e* the election period in which a candidate is either promoted or not, which is captured by the binary variable *P*. The outcome variable is a binary indicator that takes a value of 1 for persons who remained married to their spouse at time t, and 0 for those that have divorced that person.

Recall from Figure 1 that we start with those married at (t-4). We then estimate on version of Equation (1), for each gender and for each end-year in (t-3) to (t+8). Each time, the estimate of interest is (β_1) which captures the difference in the proportion of promotion winners (P=1) and losers (P=0) who remained married to their spouse from (t-4). All these estimations include a control for belonging to the parliamentary sample, $S_{i,e}$, as well as fixed effects for each election, τ_t , to flexibly capture the aggregate-level time trend in marriage durability. Standard errors are clustered at the level of the individual.

The results are presented graphically by plotting the estimates of β_1 together with 95% confidence intervals in the top part of Figure 8. The gray points and lines show the estimated promotion effect for men, and the black dots and lines show the estimates for women. The plot on the left shows the results for the full sample and the plot on the right restricts the sample to the elections defined as "close". Underneath the plots of the estimates we also show the shares of men and women that remain married as a function of time to/from the promotion and promotion status. This makes it easier to evaluate the magnitude of the estimate effects.

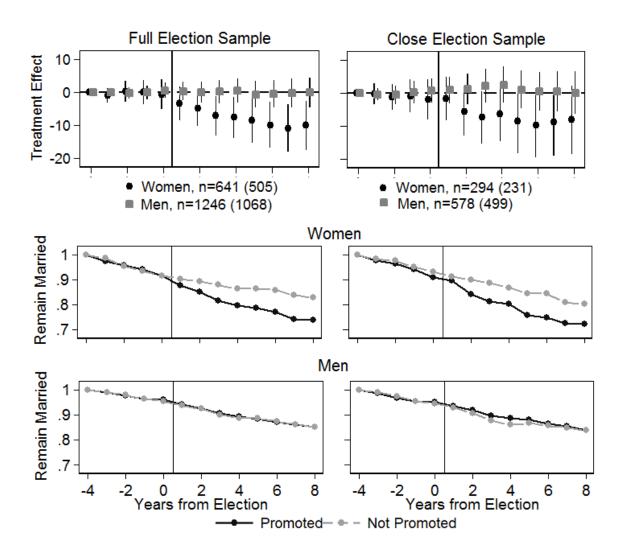


Figure 8. Estimated effect of a political promotion on probability to remain married.

Notes: The top panel plots estimated treatment-control differences in the probability to remain married in each time period. Every regression starts with the sample of married politicians in (t-4). We then run separate regressions (Equation 1) for men and women and for each end year in (t-3) to (t+8). The outcome variable takes the value 1 for those who remain married in that year, and otherwise 0. The gray dots represent the difference in the probability to remain married between promoted men and non-promoted men, and the black dots give the corresponding estimates for women. 95% confidence intervals are given by vertical lines. The legend gives the number of observations for the full set of election years and, in parenthesis the number of observations when the 2010 election is excluded (i.e. estimates for t=5 to t=8).

The key identifying assumption of our design is that there is no difference in divorce rates between the treatment and control group prior to the election. This is also what the estimates in Figure 8 show us. The pre-promotions estimates are close to zero, and lack statistical significance, for both men and women, and in both samples of elections. Also, we do not see any trends leading up to the promotion. Turning the post promotion estimates results we see that there is no indication of an effect for men, neither in the full sample, nor in the close election sample. The descriptive evidence also supports this story. For women, the full sample results show a clear trend break in the estimated effect already in the first year after the election. Three years into the election period, promoted women are 8 percentage points less likely to remain married than their non-promoted counterparts. Looking at the descriptive evidence we see that this corresponds to a doubling of the baseline probability of divorce in the control group. Looking at the long-term effects we can see that the effect of the promotion continues to grow over time, suggesting that this is not merely a short-term effect, but that the effect is a lasting one.

The results from our close election sample corroborates the findings from the full sample and the estimated effects are more or less identical, but with one exception: the treatment effect is postponed with one year. This is logical given that fact that the promotions in this sample should come more as a surprise. Although the treatment effect is postponed with one year in this sample, the size of the estimated effect is still the same at the end of the election period (t=3). As in the full sample, the descriptive evidence suggests that the promotion doubles the probability of getting divorced during the three years following the election. But compared to the full sample results, the effect is not as precisely estimated due to the smaller sample.

An important aspect of our empirical approach is that although the estimated promotion effect with each gender is a causal estimate, the difference between women and men is not. To phrase this differently, we do not expect that gender mediates the effect of promotion on divorce, so that the gender difference is an impact of sex per se. Instead, the women and men who become candidates for top jobs may have, for example, different divisions of paid and unpaid labor at the household level, and which can explain why the promotion has a differential impact. This is precisely the type of mechanisms that we target when we split the sample by background characteristics in the latter half of the paper.

4.1 Sensitivity analysis and robustness checks

Having established that there is an effect we will run a set of robustness checks. First, we will run several sets of sensitive checks to examine the stability of our main results. Secondly, we will examine how some key variables develop before and after the promotion event.

Our first sensitivity test adds controls for all the predetermined characteristics and traits that were examined in Table 1 (with the exception of the division of parental leave, which is missing for the 45% of the sample that does not have joint children born after 1980). The results are available in Figure

W6 of the Web Appendix. The point estimates for all of the close election specifications are highly robust to this addition of a wide range of relevant controls. The estimates for the full sample are marginally reduced, which is not surprising given that we did not have balance for the full set of control variables in this sample.

A second sensitivity test consists of excluding all persons who have previously competed for one of the political positions but lost, that is, the "repeating losers." The results can be found in Figure W7 of the Web Appendix. The sizes of the point estimates are not affected by this change in estimation sample, which provides further evidence of the robustness of our baseline estimates. But as we lose about a fourth of the sample in this estimation, standard errors increase and are estimated effects are not as precise.

The third sensitivity test consists of yet another change of estimation sample and allow the starting year of our analysis to vary. In Figure 9 we will show the results for those that were married in the election year (t=-1). The results are more or less identical to the results in Figure 8 with the exception that the estimate effects are more precisely estimated. Since we have to rely on smaller samples when examining the mechanisms we will use this sample in the mechanisms section We show the results for a larger share of alternative starting years in the appendix In Figure W8. Here we use six different start year of our analysis ranging from t=-7 to t=-2. As a reference point the figure includes the t=-4, which is what we use in our main analysis. This means that we lose persons who got married in the election year, but gain persons who divorced during the election year. The basic pattern in this figure is that the precision of the estimates goes down the earlier we start, while the size of the estimated treatment effect remains basically the same.

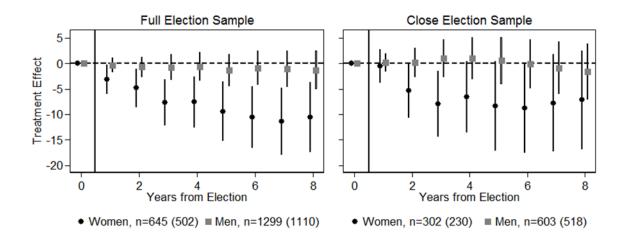


Figure 9. Estimated effect of a political promotion on probability to remain married.

Notes:

As a final robustness check we examine the development of wage income, for both the politicians and its partner, over time. In this analysis, we simply redo our main analysis but replace the outcome variable. We examine the wages in two different ways, the level of wages and the difference in wage compared to the starting year (t-4). The results are presented in Figure 10.

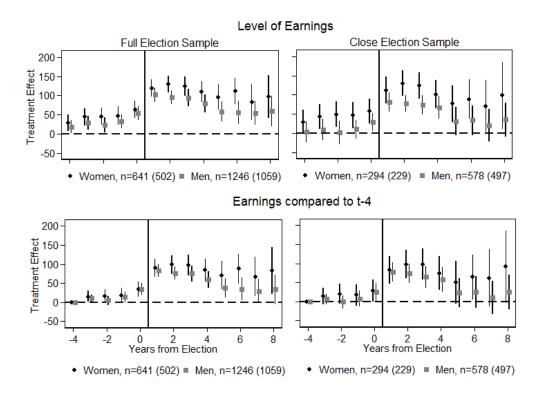


Figure 10 Estimated effect of a political promotion on earnings.

The Figure shows the same imbalance in the level of starting earnings between the women that are promoted and those that are not that we could see in the descriptive statistics of Table 1. However, we do not see any differential development in earnings, neither for men or for women, in neither the full sample or the close election sample. Something to note in the figure is that ther, is a small jump in the relative earnings in the election year for those that are promoted. The reason for this is that the promotion takes place in October of the election year, which means that those promoted will enjoy higher earnings for a part of the election year.

We also examine the development of the partner's earnings. We present the results of this analysis in the appendix Figure W9 of the appendix. For the partner's earnings, we do not see any differential pre-trends between the treatment and control group in neither of the groups, giving further support for our identifying assumption. The post promotion estimates show a striking absence of spousal adjustments. To some extent, this is a research finding in itself. It shows that we can rule out (gender differences in) spousal responses, or the lack thereof, as a major mechanism behind our baseline findings. It also means that families do not respond to promotions by large shifts in labor market specialization (future studies could get examine this question in greater depth by also studying shifts in home production, which is not permitted by our data). The lack of spousal responses implies that in the majority of cases, the rise in earnings that comes with the promotion gives both male and female politicians a higher share of household earnings.

5. Graphical results for CEO promotions

For the job of CEO we do not have information about unsuccessful job applicants. The analysis is therefore restricted to a description of marriage durability among promoted men and women. Within any firm, the position of CEO is clearly the most prestigious, and is typically the pinnacle of a career within that organization. Our data include information on all CEO appointments in all Swedish firms between 2002 and 2012. We limit the sample to firms with more than 100 employees to make sure that we capture top positions in the economic structure of Swedish society. To make sure that we capture actual promotions we also limit the sample to internal promotions to CEOs (i.e. those that were employed in the firm also prior to the promotion. The average annual earnings of these CEOs lie well above the 99th percentile of the distribution of earnings in the working-age population of employed persons (authors' own calculations, see Web Appendix Figure W1). Pre-promotion descriptive statistics for those who were promoted to CEO show strong similarities to the political job candidates in terms of the average divisions of paid labor, spousal age gap, and division of parental leave (the full set of descriptive statistics can be found in Table W6 in the Web Appendix).

We select a time window of -4 years to +4 years around each CEO promotion. The smaller post promotion window compared to the sample of politicians is chosen to accommodate the shorter sample period (10 years instead of 19). As previously, we exclude people who reach the age of 65 within this window. Of the remaining persons, we chose those who are married in the first year of the time window, 68% of the men and 65% of the women. The final sample includes 105 women and 715 men.

Figure 11 plots the proportions of men and women that remain married to their spouse in each year. As a reference, and to ensure readers that the shorter time window is not affecting our results, we also show the corresponding plot for political promotions. The two sets of results are strikingly similar. Promoted female CEOs are more than twice as likely to have gotten divorced three years after their promotion compared to the promoted men.

Although the descriptive event study of CEO promotions does not permit causal inference, the similarity to the political promotions suggests that the baseline finding does indeed extend to the

private sector. Running a simple regression for the CEO sample shows that the gender difference in the divorce rate four years after the promotion is statistically significant at the 1% level.

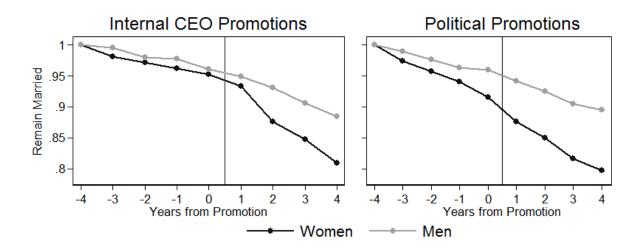


Figure 11. Event study of promotions and marriage durability for politicians (left) and CEOs (right)

Extending the analysis to more sectors is difficult because promotions are not readily measurable in register data. We attempted to generalize the findings by performing a cross-occupational comparison of the development over time of the divorce probability in cohorts of graduates from large education programs. We then compared the proportion of divorced people in these cohorts by gender and by career success 20 years after graduation. Because this method differs considerably from our main approach, it is relegated to the Web Appendix (see Section W3). The description shows higher divorce rates among high-performing women compared to low-performing women in the professions of medical doctors, priests, and police professionals, but not among pharmacists. Among the high-performing men, whose earnings were above the median in their cohort after 20 years in the labor market, had a lower rate of divorce than the low-performing men across all four professions.

6. Mechanisms

This section discusses possible mechanisms for why a promotion is destabilizing in women's marriages but not in men's. To maximize the number of observations, we use the full sample of political promotions and use the year of the election as the starting year of the analysis. We focus on the three household-level variables presented in the descriptive statistics: household type in terms of the division of paid labor, division of parental leave, and spousal age gap. We also discuss various other heterogeneity results in relation to these findings. This includes split-sample analysis based on whether the couple has small children in the household, the promoted person's age at marriage, and if a large change in the exposure to men/women in the workplace could drive the results.

Our sample size unfortunately makes it uninformative to split the sample by more than one variable at a time. Nevertheless, pair-wise correlation coefficients between these three household variables are all below 0.10 (the matrices of coefficients for each gender are available in Tables W7 and W8 in the Web Appendix).

6.1. Division of paid labor

The descriptive analysis in Section 3 showed that the women and men in our sample came from households with different divisions of paid labor between the spouses prior to the promotion. Promoted women were over-represented in dual-earner households and men in traditional households. In this section, we consider whether divorce is more common in some divisions of earnings than others.

Family economics suggests that households derive utility from different sources. Under specialization, spouses gain from production complementarities as each of them becomes an expert in his or her own domain (Becker 1974, 1981; Parsons 1949). In dual-earner households, spouses derive gains from consumption and leisure complementarities, that is, spending leisure time together and consuming things that they both like (Lam 1988; Stevenson and Wolfers 2007). When the promotion takes time away from joint activities, it would plausibly reduce the gains from marriage more in dual-earner families.¹⁵

The promotion itself may also move the division of earnings in the household in a more or less specialized direction and, in turn, affect the utility from the marriage. Related to such moves, recent work on identity economics has argued that individuals receive utility by complying with norms and lose utility when they break norms (Akerlof and Kranton 2000; Bertrand, Kamenica, and Pan 2015). Because the norm in the marriage market is to have a traditional division of earnings, moves in this direction could make the marriage more durable, and moves in the reverse traditional direction could make it less durable. Yet another expectation is that any promotion that increases the degree of specialization in paid and unpaid labor would make a marriage more durable, simply because specialized marriages are more durable than unspecialized ones (e.g. Becker 1973, 1974, 1981).

A first empirical test is devised to examine whether divorces are more common in dual-earner than in specialized households. We divide the sample by the three household types – traditional, dual

¹⁵ But note that an increase in household income from the promotion would be expected to raise utility more in dual-earner families, as it expands the scope for the consumption complementarities (Lam 1998; Lundberg 2012).

earner, and reverse traditional – and run the graphical split sample for each sub-sample. The results are shown in Figure 12. Focusing on the dual-earner graphs in the middle column of plots, we can see that the results for men and women appear to differ. Women in dual-earner households divorce more often after they are promoted, while men in dual-earner are, if anything, *less* likely to divorce after they are promoted. In addition, women's divorces are not concentrated in the dual-earner category but seem about as common (at least in the short term) in reverse traditional families, in which she is the dominant earner.¹⁶ In sum, we find little support that the baseline finding stems from a particular sensitivity of dual-earner families to the promotion of one of the spouses.

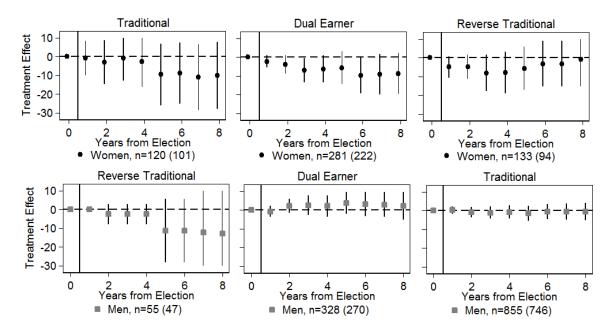


Figure 12. Marriage durability effect by pre-promotion household type

Next, we examine the transitions in the balance of household earnings that are triggered by male and female politicians' promotions, and relate these to the proportion of divorces. Table 2 analyzes data for promoted persons only, and shows descriptive statistics for how the promotion shifted the division of household earnings in the sample. The columns show the pre-promotion type and rows indicate the post-promotion type. For women, transitions between groups are typically from traditional to dual earner and, more commonly, from dual earner to reverse traditional. There are far fewer transitions for men, as most maintain a traditional division of earnings, but there are instances of men moving from a dual-earner to a traditional division.

¹⁶ The figure also shows what appears to be a divorce effect among male politicians who are in reverse traditional households prior to their promotion. The small number of men in this category (N = 55) and large standard errors of the regression estimate (Table W9) indicate, however, that this heterogeneity should be interpreted with some caution.

		Promote	ed female p	oliticians		Promoted male politicians				
		Pre-promotion type				Pre-	Pre-promotion type			
		Т	DE	RT		т	DE	RT		
	Т	-	-	-	Т	7% N = 335	3% N = 72	-		
Post- promotion type	DE	5% N = 20	6% N = 53	-	DE	6% N = 17	6% N = 47	-		
.,	RT	-	15% N = 54	10% N = 50	RT	-	-	-		

Table 2. Divorce rates and transitions between household types

Notes: "T" stands for a traditional division of household earnings, where the husband makes more than 60%. "DE" stands for a dual-earner division in which neither spouse makes more than 60% or less than 40%, and "RT" stands for reverse traditional households in which the wife makes more than 60% of the earnings. Blank cells indicate n < 10.

The cells in Table 2 contain the proportion of promoted politicians that divorced in the first three years after getting promoted. This reveals a pattern in which some transitions are associated with more divorces than others. Women who start out in dual-earner households are more likely to divorce when they move into reverse traditional territory (15%) than if they remain in a dual-earner household (6%). For men, it is the opposite: those who transition from a dual-earner household to a traditional household have a lower divorce rate (3%) than those who remain in the dual-earner category (6%).¹⁷ The finding that a move toward being the family's dominant earner is associated with more divorces for women and less divorces for men suggests two things. First, it tentatively implies that increased specialization is not a universally positive factor for marriage durability. Second, it suggests that shifting household earnings *in accordance* with the norm of male-dominated household earnings may be positive for marriage durability, while shifting the division *against* the norm is a source of reduced marriage utility.

There is a potential caveat that applies to the interpretation of norms. The probability to make a shift between household types is correlated with the size of the politician's salary increase from the promotion, which could in turn be independently related to the probability of divorce. This could be true for both the politician's earnings increase relative to his or her pre-promotion earnings, and relative to the household's total pre-promotion earnings. But both these factors are – arguably – less

¹⁷ We also analyzed the margin of whether the promoted person edges by their spouse and starts making more money, that is, testing if breaking the norm that "the husband should earn more" serves as a trigger point of divorce, following Bertrand, Kamenica, and Pan (2015). In our data, we do not find any apparent shift in the probability of divorce when the promotion is associated with passing this particular point.

important when we examine promotions to jobs at the top of the earnings distribution.¹⁸ We can conduct further split-sample analyses to produce rudimentary evidence to support this alternative explanation. We compute the rate of new divorces three years after the promotion based on the two variables of interest: (1) the politician's post-promotion earnings as a proportion of his or her earnings before the promotion and (2) the politician's post-promotion earnings as a proportion of total household earnings before the promotion. Perhaps surprisingly, the divorce rates do not differ when we split the sample based on these variables. One possible explanation for this is that the increase in the wife's economic independence, or the decrease in the husband's exit costs (Edlund 2006) – both of which should be associated with higher divorce rates – is counteracted by lower stress levels and more consumption resulting from the higher income. Moreover, economic independence is perhaps a less relevant theoretical concept when people are promoted to society's top jobs, since they were likely already making enough money to be economically independent before the promotion.

6.2. Traditional at home, progressive at work: A recipe for divorce

The women in our dataset have attained jobs in the top 5% of the earnings distribution, which demonstrates their progressive behaviors in the labor market. Yet in the descriptive statistics on household types (Section 5) we also saw that these women displayed quite traditional behaviors in terms of the spousal age gap and division of parental leave. Several theories speak to the possible impacts on marriage stability of the (possibly toxic) mix of a marriage market match of gender specialization and a (subsequent) successful female career.

According to key works in family economics, labor market events that change the performance of spouses in relation to what was expected at the time of couple formation may shift the balance of utility from the marriage vs. the utility of being single. One interpretation of the mix of traditional and progressive behaviors in women's households is therefore that the wife's successful career achievements are more likely to contradict initial expectations than men's achievements. For men, a successful career would confirm, while a woman's career would contradict, the gender specialization

¹⁸ The early literature on the impact of (unexpected) increases in earnings for men and women found a positive impact on marriage stability from increases in the earnings of men, and a negative impact from increases for women (Becker, Landes, and Michael 1977; Weiss and Willis 1997). These findings were interpreted against the low level of earnings of women in these datasets. Because of women's low pre-promotion salary, the same percentage increase in their earnings implied a smaller surplus for the household relative to the same percentage increase for the husband. Women's low pre-promotion salaries were also important for the interpretation of divorce as the result of an "economic independence effect" for the wife (e.g. Oppenheimer 1997). Later papers have related the probability of divorce to various measurements of changes in the absolute and relative earnings of men and women. Such studies have largely found greater sensitivity to women's economic outcomes than to those of men (Heckert, Nowak, and Snyder 1998; Jalovaara 2003; Liu and Vikat 2004; Kesselring and Bremmer 2010; c.f. Rogers 2004). An in-depth review of the sociological literature can be found in Rogers (2004).

at the outset, as indicated by the age gap and the division of parental leave (e.g. Becker, Landeis, and Michael 1977; Weiss and Willis 1997). This predicts, of course, that we should see more divorces in families in which women have a larger spousal age gap and take a larger share of the parental leave.

Sociological research on the stress and strain of the interactions between work environments and intimate relationships predicts the same pattern. This literature has claimed that critical transition points in a person's career (i.e. promotions or demotions) can cause particularly high levels of stress and strain if a promotion triggers a renegotiation of the spouses' roles in the household and on the paid labor market (e.g. Coverman 1989). Such renegotiation, or "role cycling," could be more common in promoted women's relationships than in men's, since the women initially took on a greater share of household responsibilities.

We divide the sample into three groups based on the spousal age gap: (1) the politician is younger, (2) the age gap is relatively small (three years or less),¹⁹ and (2) the politician is older (Figure 13). We also divide the sample according to the wife's share of parental leave (Figure 14). The sample cut-off is set to the median share of the wife's parental leave in our sample of women, 90%.

Figures 13 and 14 show that divorce is more likely to occur in couples in which the promoted woman (1) is younger by her spouse by a larger margin and (2) took a relatively larger share of the parental leave. Strikingly, we find no divorce effect for couples that are closer in age, or where the husband took out relatively more parental leave. The sample size is smaller for the division of parental leave, and estimates lack statistical significance at conventional levels.

The finding that divorce is more common where female politicians experience more gender inequality in the age-gap vis-a-vis their partner and in their parenting responsibilities aligns with the two theoretical frameworks outlined above. In these relationships, women's advancement to the top job could be more contrary to their husband's (and their own) expectations at the time of household formation. To the extent that the age gap and parental leave division can be seen as an approximation of the role orientations of the husband and wife, these couples would also be the ones for which the stress of role negotiation at promotion is the most intense. An interesting finding that lends further credibility to these interpretations of the mechanism behind the baseline results is the analysis of promoted *men* who are younger than their spouses. In this sub-sample, promotion has a positive effect on divorce, which is nearly the same size as for women and is even statistically significant at the 10% level.

¹⁹ The empirical findings remain the same if we change the cut-off points by one year in either direction.

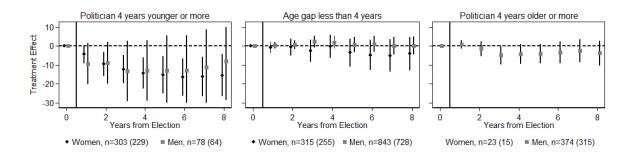
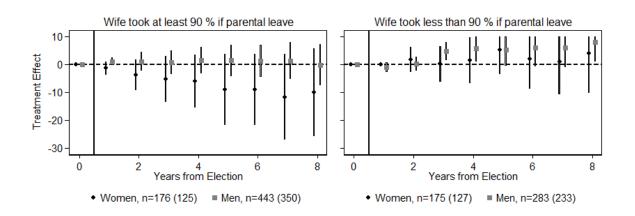


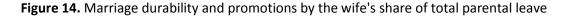
Figure 13. Marriage durability and promotions by the marriage age gap

Notes: The results for women that are 4 years older than their husband is left out due to the small sample size

It is, however, difficult to fully interpret the results without commenting (again) on social norms. Why are most women married to older spouses, and why do they take the majority of parental leave in the first place? Norms on "who marries who" and women's responsibilities for care work underpin the results in this section. Because couples tend to follow these norms, women's advancement to the top of organizational hierarchies is more likely than men's advancements to contradict initial expectations and to introduce higher levels of role cycling.

There are alternative ways of interpreting the results in this sub-section. One is that a larger spousal age gap indicates a worse match quality, i.e. that the spouses were not able to be very picky in their partner choice, making the union more sensitive to changes in outside conditions. This interpretation is not supported, however, by the lack of an increase in divorce for couples in which the promoted husband is substantially older than his wife. Another possible (but also unlikely) explanation is that the average man is less productive in household work than the average woman (along the lines of Mincer 1962). According to this mechanism, a promotion that shifts household work from the wife to the husband decreases the productivity of household work and crowds out leisure time. But given modern household technologies and the opportunities to outsource various household services, substantial levels of efficiency loss would seem unlikely.





6.3. Children, age at marriage and temptation effect

Two variables that are theoretically relevant as potential mechanisms are (1) the presence of children in the household and (2) the politician's age at marriage. But in neither case does a split-sample analysis reveal variation that forwards our understanding of the link between promotion and divorce. Most people in our dataset are parents, but most of these parents have children over 18, with less intense parenting responsibilities than for younger children. Only a small number of people in the data have children under the age of six, which reduces the relevance and statistical precision of a split-sample analysis based on this variable. Web Appendix Figure W11 splits the sample by whether the couple has joint children under 18; it does not reveal more (or fewer) divorces in families with children. One interpretation could be that older children are less relevant as a measure of total household and care work in a family. Another interpretation is that forces related to the presence of children are pulling on marriage durability in opposite directions. Children imply a larger workload, accentuating the impact of the promotion on total work, but families with children also strive to avoid divorce.

Age at marriage is sometimes used to approximate the amount of information that spouses have about each other when they get married. At a younger age, information is less informative for predicting a person's future earnings trajectory. Information may also be of lower quality and thereby result in a worse-quality match. We split the sample by the median age at marriage for our sample of women job candidates: 29 years of age. Figure W12 in the Web Appendix shows that if anything, promotions lead to more divorces when a couple married at an older age. Moreover, only including people's first marriages does not alter this picture. Given the small substantive size, the lack of statistical significance, and the counter-theoretical direction of these estimates, they are not pursued further.

To examine the so called "temptation effect" as an explanation to our findings we divide the sample by the pre-promotion share of people of the opposite sex in the politicians' workplaces. The basic idea is that women who assume political office after a job in a male-scarce environment will be more tempted by infidelity (McKinnish 2006). We compute the proportion co-workers of the opposite sex at the workplace level in the year before the promotion event. Using the workplace level (Cfar) rather than at the organization level for this calculation ensures that we capture colleagues who were physically close to the politician. To reduce noise, we drop workplaces with less than 10 employees, which account for less than 10% of the data. We also exclude the politician him or herself from the calculation. The sample is split by the median share of colleagues from the opposite sex and grouped together in one sample of "Low temptation effects" – politicians from an environment where opposite

sex colleagues were common, and a sample of "High temptation effects" – a previous work environment with a scarcity of colleagues from the opposite sex. The results, shown in the appendix Figure W13, refute the explanation of a temptation effect for women's divorces: the promotion effect is larger for women who enter politics from relatively male-heavy environments, and not the other way around (although there could exist a small temptation effects for men, which will not be further explored here).

7. A brief comment on divorce and future well-being

To better understand the consequences of divorce, we collect some descriptive statistics in Table 4 in order to describe what happens after a divorce in the labor and marriage markets of those who divorce and those who do not. We examine three outcomes: (1) future political success (defined as being re-elected as MP or re-appointed as mayor in the next election period (at t = 4), (2) future earnings (measured as the average of the annual earnings in the following election period (average of t = 5, 6, and 7), and (3) whether divorced politicians or their former spouses have remarried six years after the promotion (at t = 6).

The first thing that stands out in Table 3 is that divorced women have better future career outcomes than those who remain married. Our finding that women who divorce do not, on average, suffer a career penalty further supports the existence of a trade-off between marriage and career for women. For men, we see the opposite: those who stay married have better career outcomes than those who divorce. Viewed jointly, these descriptive statistics suggest that marriages provide men with an important career function, such as functional and emotional support, while this is not the case for women.

	Women				Men				
	Not promoted		Promoted		Not promoted		Promoted		
Divorced	no	yes	no	yes	no	yes	no	yes	
Future top job (1)	0.13	0.30	0.50	0.62	0.17	0.11	0.50	0.4	
Future earnings (2)	334.9	415.7	419.5	463.6	344.8	365.8	406.0	382.7	
Remarried		0.20		0.19		0.33		0.24	
Spouse remarried		0.33		0.12		0.09		0.08	

Table 3. Future career and marriage market developments by gender, promotion, and divorce

Notes: (1) Future top job is a dummy variable for being elected to parliament or appointed mayor in the next election after the promotion event, i.e. in t = 4. (2) Future earnings are defined as the average of annual earnings in the next election period after the one that follows the promotion event (i.e. in t = 5, t = 6, and t = 7). Remarriage is measured at six years after the promotion event.

Turning to the marriage market, the description shows that women who divorce after their promotion do not have either better or worse chances of having remarried six years after the promotion. Their likelihood of remarrying is lower than among promoted and divorced men, but the size of the difference is not striking (19% for women and 24% for men). This description suggests that gender differences in the improved outside options in the marriage market, i.e. the temptation effect, is not a likely mechanism behind our baseline findings. But they do not provide clues as to which spouse initiated the divorce in women's dissolved relationships. Their former spouses are neither more nor less likely to have found a new spouse than they are.

8. Conclusions

We study women's and men's mobility to top jobs from the perspective of the household. We find that such promotions destabilize women's marriages but do not affect men's marriage durability. One reason for this, we argue, is that the marriage market and behavior in the early phases of relationships continue to be highly traditional, even in families in which the wife advances to one of the top jobs in the economy. In our dataset of candidates for top jobs, women are usually younger than their spouses, while men are older, and women take the vast majority of parental leave. Both of these factors, which are likely shaped by norms on couple formation and household obligations, mean that a man's promotion aligns with the expectations and roles assumed by the spouses at couple formation. For women, the promotion instead creates a mismatch between expectations and outcomes, and triggers more stress when roles need to be renegotiated. This argument about mechanisms is supported by the over-representation of divorce among women in couples with a larger spousal age gap in which the wife took the bulk of the parental leave.

Another important mechanism is the impact of the promotion on the balance of household earnings, and how this impact shifts the division away from social norms. We find that divorce is more common in households in which the wife's promotion shifted the division of earnings (further) away from the norm of male dominance. Further supporting this interpretation is the fact that we found the lowest proportion of divorces of any sub-sample analysis for couples in which a man's promotion moved them from a dual-earner to a traditional household.

Neither women's nor men's marriages are destabilized when households are more egalitarian in terms of having a small spousal age gap and a more gender-equal split of the parental leave. This contributes to the discussion on the roots of (and remedies for) the persistent gender divide in career performance (Goldin 2014; Esping-Andersen 2016). It also suggests that social norms on specialization in the marriage market are not permitting women to form the types of marriages that are the most supportive of a top career. Recent surveys of graduates from top management schools in the United States suggest that this situation is not likely to change soon (Ely, Stone, and Ammerman 2014). Even in recent generations of graduates, extremely few students of both sexes expect the woman's career to take precedence in their (future) household. Until social norms permit reversed gender specialization with a female dominant earner, our results suggest that a gender-equal match in terms of age gap, earnings division, and parental responsibilities is the best way for women to avoid conflicts around their progressive career choices.

Our paper also speaks to the research on people's cost-benefit analysis in deciding whether to apply for a top job (e.g. Diermeier, Keane, and Merlo 2005; Matozzi and Merlo 2008). Our findings suggest that marriage durability may enter differentially into women's and men's cost-benefit analyses regarding whether to seek a top job. For men, the family may be a source of career support, while for women it may be a source of work-family tension. When we examine the future career developments of women and men in our data who divorce after a job promotion, women's careers develop in a positive direction while those of men tend to be negatively affected. This descriptive evidence also suggests that a divorce can be a positive life development for a "career woman" who is struggling to combine family demands and household obligations. But for the majority of women in society who are planning ahead for their careers, the prospect of this trade-off would likely be far less attractive.

Our conclusions about the trade-offs that women face between marriage and a career somewhat contradict recent arguments that this trade-off has been minimized in Scandinavian countries. For all three of our top jobs, the women who hold them are nearly twice as likely to be divorced than the men who do. We also find that a woman's promotion to a top job nearly doubles the rate of divorce in the three years following the promotion, compared to women who sought but did not get the job. One reason for these discrepancies is that we measure the occurrence of divorce, while others have assessed the marriage–career trade-off according to whether women *ever* marry (Bertrand et al. 2016). Another reason could be that trade-offs linger in the very top jobs, while having been reduced at lower career levels. For future studies, it would be of interest to trace women's and men's marriage durability and career paths over a longer span of their careers. This would be particularly relevant for assessing how the presence of young children in the household is related to this trade-off, which is less relevant for the age group studied in this paper, i.e. persons in the latter stages of their careers.

Future research could also delve deeper into the components of job promotions for affecting marriage durability, such as the salary raise, as well as increases in status, workload, or travel. Tentative probing of our data on parliamentarians (not reported in the paper) suggests that MPs who live closer

to Stockholm are more likely to have small children than those who live further away. Another avenue for future work could be to examine heterogeneity based on individuals' specific working conditions, moving in the direction of recent arguments that flexible work conditions can alleviate work–life tensions and close gender gaps in wages and career achievements (Goldin 2014).

Finally, the fact that our results come from Sweden is relevant for their external validity. The Swedish welfare state and gender egalitarian norms should provide an ideal environment for equal career opportunities. Household labor is more equally divided than in most other countries, and affordable universal child and elder care relieves career-oriented families of substantial demands on their time. Our finding that the family is a source of tension for women who look to combine a career and family in this context suggests that this situation applies to women with this ambition in other contexts with less generous policy conditions or (even) more traditional norms on couple formation.

References

- Akerlof, George A., and Rachel E. Kranton. 2000. Economics and Identity. *Quarterly Journal of Economics* 115: 715–53.
- Albrecht, James, Anders Bjorklund, and Susan Vroman. 2003. Is There a Glass Ceiling in Sweden? Journal of Labor Economics 21(1): 145–77.
- Alesina, Alberto, Nouriel Roubini, and Gerald Cohen. 1997. *Political Cycles and the Macroeconomy*. Cambridge, MA: MIT Press.
- Amato, Paul R., and Denise Previti. 2003. People's Reasons for Divorcing: Gender, Social Class, the Life Course, and Adjustment. *Journal of Family Issues* 24(5): 602–26
- Andersson, Fredrik W., and Jan Andersson. 2009. Företagsledarna i Sverige En algoritm för att peka ut företagens operativa ledare i näringslivet (Firm Managers in Sweden – An Algoritm to Determine Firms' Operational Leaders in Private Firms). Statistics Sweden Background Paper.
- Arulampalam, Wiji, Alison L. Booth, and Mark L. Bryan. 2007. Is There a Glass Ceiling over Europe? Exploring the Gender Pay Gap across the Wage Distribution. *Industrial and Labor Relations Review* 60(2): 163–86.
- Avdic, Daniel, and Arizo Karimi. 2016. Modern Family? Paternity Leave and Marital Stability. Mimeo. Uppsala University.
- Becker, Gary S. 1973. A Theory of Marriage: Part I. Journal of Political Economy 81(4): 813–46.
- Becker, Gary S. 1974. A Theory of Marriage: Part II. Journal of Political Economy 82(2): S11–S26.
- Becker, Gary S. 1981. A Treatise on the Family. Cambridge, MA: Harvard University Press.
- Becker Gary S., Elisabeth M. Landes, and Robert T. Michael. 1977. An Economic Analysis of Marital Instability. *Journal of Political Economy* 85: 1141–87.
- Bertrand, Marianne. 2013. Career, Family, and the Well-Being of College-Educated Women. American Economic Review: Papers & Proceedings 103(3): 244–50.
- Bertrand, Marianne, Patricia Cortés, Claudia Olivetti, and Jessica Pan. 2016. Social Norms, Labor
 Market Opportunities, and the Marriage Gap for Skilled Women. Working Paper 22015.
 Cambridge, MA: National Bureau of Economic Research.
- Bertrand, Marianne, Claudia Goldin, and Lawrence Katz. 2010. Dynamics of the Gender Gap for Young Professionals in the Financial and Corporate Sectors. *American Economic Journal: Applied Economics* 2: 228–55.
- Bertrand, Marianne, Emir Kamenica, and Jessica Pan. 2015. Gender Identity and Relative Income within Households. *Quarterly Journal of Economics* 130(2): 571–614.
- Bittman, Michael, Paula England, Liana Sayer, Nancy Folbre, and George Matheson. 2003. When Does Gender Trump Money? Bargaining and Time in Household Work. *American Journal* of Sociology 109: 186–214.
- Bjerk, David. 2008. Glass Ceilings or Sticky Floors? Statistical Discrimination in a Dynamic Model of Hiring and Promotion. *The Economic Journal* 118(530): 961–82.

- Blau, Francine, and Lawrence Kahn. 2007. Changes in the Labor Supply Behavior of Married Women: 1980–2000. *Journal of Labor Economics* 25: 393–48.
- Booth, Alison L., Marco Francesconi, and Jeff Frank. 2003. A Sticky Floors Model of Promotion, Pay, and Gender. *European Economic Review* 47(2): 295–322.
- Boschini, Anne, Christina Håkanson, Åsa Rosén, and Anna Sjögren. 2011. Trading Off or Having it All? Completed Fertility and Mid-career Earnings of Swedish Men and Women. Working paper 2011:15. Uppsala: Institute for Evaluation of Labour Market and Education Policy.
- Bursztyn, Leonardo, Fujuwara, Thomas, and Amanda Pallais. 2017. 'Acting Wife': Marriage Market Incentives and Labor Market Investments. NBER NBER Working Paper No. 23043
- Carroll, Susan J., and Kira Sanbonmatsu. 2013. *More Women Can Run: Gender and Pathways to the State Legislature.* Oxford: Oxford University Press.
- Charles, Kerwin Kofi, and Melvin Stephens, Jr. 2004. Job Displacement, Disability, and Divorce. Journal of Labor Economics 22(2): 489–522
- Connelly, Rachel, and Jean Kimmel. 2009. Spousal Influences on Parents' Non-market Time Choices. *Review of Economics of the Household* 7(4): 361–94.
- Coverman, Shelley. 1989. Role Overload, Role Conflict, and Stress: Addressing Consequences of Multiple Role Demands. *Social Forces* 67(4): 965–82.
- Dearing, Helene. 2015. Does Parental Leave Influence the Gender Division of Labour? Recent Empirical Findings from Europe. Working Paper No 1/2015. Vienna: Institute for Social Policy.
- Devereux, Paul J. 2004. Changes in Relative Wages and Family Labor Supply. *Journal of Human Resources* 39: 696–722.
- Diermeier, Daniel, Michael Keane, and Antonio Merlo. 2005. A Political Economy Model of Congressional Careers. *American Economic Review* 95: 347–73.
- Doiron, Denise, and Silvia Mendolia. 2012. The Impact of Job Loss on Family Dissolution. *Journal* of Population Economics 25: 367–98.
- Eagly, Alice H. 1987. *Sex differences in social behavior: A social role interpretation*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Edlund, Lena. 2006. "Marriage: Past, Present, Future?" CESifo Economic Studies 52(4): 621–39.
- Eggers, Andy, and Jens Hainmueller. 2009. MPs for Sale? Returns to Office in Postwar British Politics. *American Political Science Review* 103: 513–33.
- Eliasson, Marcus. 2012. Lost Jobs, Broken Marriages. *Journal of Population Economics* 25(4): 1365–97.
- Ely, Robin J., Pamela Stone, and Colleen Ammerman. 2014. Rethink What You "Know" About High-Achieving Women. *Harvard Business Review* 92(12): 101–9.
- Esping-Andersen, Gösta. 2016. Families in the 21st Century. Stockholm: SNS Förlag.
- Fisman, Raymond, Florian Schulz, and Vikrant Vig. 2014. The Private Returns to Public Office. Journal of Political Economy 122(4): 806–59.

- Fisman, Raymond J. Sethi, Sheena, Iyengar; Kamenica, Emir, and Itamar Simonson. 2006. Gender Differences in Mate Selection: Evidence from a Speed Dating Experiment. The Quarterly Journal of Economics 121(2): 693 – 697.
- Folke, Olle, Torsten Persson, and Johanna Rickne. 2016. The primary effect: Preference votes and political promotions. *American Political Science Review* 110(3): 559-578
- Fortin, Nicole. 2005. Gender Role Attitudes and Women's Labour Market Outcomes across OECD Countries. *Oxford Review of Economic Policy* 21(3): 416–38.
- Freier, Ronny, and Christian Odendahl. 2015. Do Parties Matter? Estimating the Effect of Political Power in Multi-party Systems. *European Economic Review* 80: 310–28.
- Ginther, Donna, and Marianne Sundström. 2010. Does Marriage Lead to Specialization? An Evaluation of Swedish Trends in Adult Earnings Before and After Marriage. Working paper 1/2010. Stockholm: Swedish Institute for Social Research.
- Goldin, Claudia, 2006. The Quiet Revolution that Transformed Women's Employment, Education, and Family. *American Economic Review* 96 (2): 1–21.
- Goldin, Claudia. 2014. A Grand Gender Convergence: Its Last Chapter. *The American Economic Review* 104(4): 1091–1119.
- Greene, William, and Aline Quester. 1982. Divorce Risk and Wives' Labor Supply Behavior. Social Science Quarterly 63(1): 16–27.
- Gustafsson, Siv, and Roger Jacobsson. 1985. Trends in Female Labor Force Participation in Sweden. *Journal of Labor Economics* 31: 256–74.
- Heckert, D. Alex, Thomas C. Nowak, and Kay A. Snyder. 1998. The Impact of Husbands' and Wives' Relative Earnings on Marital Disruption. *Journal of Marriage and the Family* 60(3): 690–703.
- Hochschild, Arlie. 1989. The Second Shift. New York: Avon Books.
- Jalovaara, Marika. 2003. The Joint Effects of Marriage Partners' Socioeconomic Positions on the Risk of Divorce. *Demography* 40: 67–81.
- Johnson, William H., and Jonathan Skinner. 1986. Labor Supply and Marital Separation. *American Economic Review* 76(3): 455–69.
- Jonsson, Leif. 2003. *Kommunstyrelseordförande: Kommunledare med politisk förankring* (Municipal Council Board Chair: Municipal Leader with a Political Mandate). Västra Frölunda: Nya Doxa.
- Karlsson, David, and Mikael Gilljam (eds). 2014. *Svenska politiker: Om de folkvalda i riksdag, landsting och kommuner* (Swedish Politicians: Elected Representatives in Parliament, Counties, and Municipalities). Stockholm: Santérus Förlag.
- Kesselring, Randall, and Dale Bremmer. 2010. Female Income and the Divorce Decision: Evidence from Micro Data. *Applied Economics* 38(14): 1605–16.
- Klevmarken, Anders, and Daniel Hallberg. 2003. Time for Children: A Study of Parent's Time Allocation. *Journal of Population Economics* 16(2): 205–26.
- Kleven, Henrik, J., Camille Landais, and Jacob E. Sogaard. 2015. Children and Gender Inequality: Evidence from Denmark. Mimeo. London School of Economics.

- Krook, Mona Lena, and Fiona McKay (eds). 2011. Gender, Politics and Institutions: Towards a Feminist Institutionalism. Basingstoke: Palgrave MacMillan.
- Lam, David. 1988. Marriage Markets and Assortative Mating with Household Public Goods: Theoretical Results and Empirical Implications. *Journal of Human Resources* 23(4): 462– 87.
- Lazear, Edward P., and Sherwin Rosen. 1990. Male–Female Wage Differentials in Job Ladders. Journal of Labor Economics 8(1): 106–23.
- Liu, Guiping, and Andres Vikat. 2004. Does Divorce Risk Depend on Spouses' Relative Income? A Register-based Study of First Marriages in Sweden in 1981–1998. Working paper 2004-010. Rostock: Max Planck Institute for Demographic Research.
- Lundberg, Shelly. 2012. Personality and Marital Surplus. IZA Journal of Labor Economics 1(3): 1–21.
- Lundberg, Shelly, and Robert A. Pollak. 2007. The American Family and Family Economics. *The Journal of Economic Perspectives* 21(2): 3–26.

Lundqvist, Heléne. 2015. Politicians' Payments in a Proportional Party System. Mimeo, Stockholm University.

- Mattozzi, Andrea, and Antonio Merlo. 2008. Political Careers or Career Politicians? *Journal of Public Economics* 92(3-4): 597–608.
- McKinnish, Terra G. 2004. Occupation, Sex-Integration, and Divorce. American Economic Review 94(2): 322-325.
- Mincer, Jacob. 1962. Labor Force Participation of Married Women: A Study of Labor Supply. In H. Gregg Lewis (ed.), *Aspects of Labor Economics*, 63–97. Cambridge, MA: National Bureau of Economic Research.
- Montin, Stig. 2007. Moderna Kommuner (Modern Municipalities). Malmö: Liber.
- Newman, Andrew F., and Claudia Olivetti. 2015. Career Women and the Durability of Marriage. Mimeo: http://people.bu.edu/afnewman/papers/irony.pdf.
- Nilsson, Thorbjörn. 2001. *Den lokalpolitiska karriären: En socialpsykologisk studie av 20 kommunalråd* (The Local Political Career: A Social Psychology Study of 20 Full-time Local Politicians). PhD. Thesis, Växjö University.
- Norris, Pippa, and Lovenduski, Joni. 1995. *Political Recruitment: Gender, Race and Class in the British Parliament*. Cambridge University Press: Cambridge
- Oppenheimer, Valerie Kincade. 1994. Women's Rising Employment and the Future of the Family in Industrial Societies. *Population and Development Review* 20(2): 293–342.
- Oppenheimer, Valerie Kincade. 1997. Women's Employment and the Gain to Marriage: The Specialization and Trading Model. *Annual Review of Sociology* 23: 431–53.
- Parsons, Talcott. 1949. The Social Structure of the Family. In Ruth N. Anshen (ed.), *The Family: Its Function and Destiny*, 173–201. New York: Harper.
- Rege, Mari, Kjetil Telle, and Mark Votruba. 2007. Plant Closure and Marital Dissolution. Discussion Paper No. 514. Statistics Norway.

- Rogers, Stacy J. 2004. Dollars, Dependency, and Divorce: Four Perspectives on the Role of Wives' Income. *Journal of Marriage and Family* 66: 59–74.
- Silbermann, Rachel. 2015. Gender Roles, Work-Life Balance, and Running for Office. *Quarterly Journal* of Political Science 10(2): 123–53.
- Schwartz, Christine, and Hongyun Han. 2014. The Reversal of the Gender Gap in Education and Trends in Marital Dissolution. *American Sociological Review* 79(4): 605–29.
- Smith, Nina, Valdemar Smith, and Mette Verner. 2013. Why Are So Few Females Promoted into CEO and Vice President Positions? Danish Empirical Evidence, 1997-2007. *International Labor Relations Review* 66(2): 380–408.
- Statistics Sweden. 2016. Women and Men in Sweden 2016: Facts and Figures.
- Statistics Sweden. 2015. Marriage Now more Common in Sweden. http://www.scb.se/en_/Finding-statistics/Articles/Marriage-now-more-common-in-Sweden/
- Stevenson, Betsy. 2007. The Impact of Divorce Laws on Investment in Marriage-Specific Capital. *Journal of Labor Economics* 25(1): 75–94.
- Stevenson, Betsey, and Justin Wolfers. 2007. Marriage and Divorce: Changes and their Driving Forces. Journal of Economic Perspectives 21(2): 27–52.
- Thibaut, John. W. and Harold Kelley. 1959. The social psychology of groups. New York: Wiley.
- Weiss, Yoram, and Robert J. Willis. 1997. Match Quality, New Information, and Marital Dissolution. *Journal of Labor Economics* 15(1): S293–329.

Web Appendix

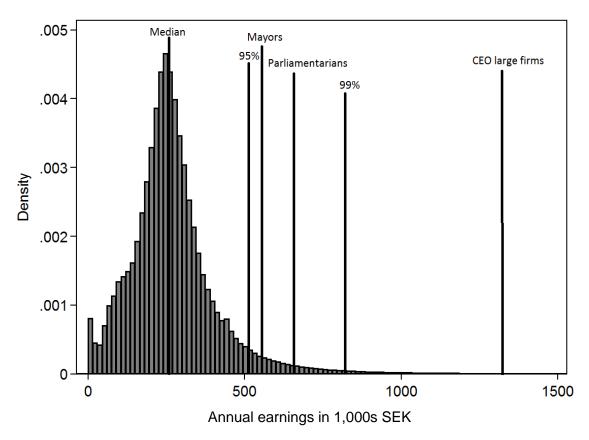


Figure W1. Placement of jobs in the distribution of annual earnings, 2011

Note: Data for the full Swedish working-age population (20–65) that was employed in the year 2011.

Section W1. Defining close elections in PR systems

There are complexities to measuring close elections in a proportional representation (PR) system. One challenge is that the seat share of a single party, or bloc of parties, is not a deterministic function of the vote share. The seat share of a party or bloc is instead jointly determined by the allocation of votes among parties. To measure the closeness of elections, we therefore rely on two different methods: one for municipal elections and another for parliamentary elections.

Municipal elections

To measure electoral closeness at the municipal level, we use a simulation-based approach that builds on Fiva et al. (2016). The approach and code developed in this paper has also been applied in Folke et al. (2016). This approach constructs a forcing variable, which is continuous (rather than discrete, as the seat share), and which does not give sorting or a low density of observations close to the threshold of winning more than 50% of the seats. This simulated forcing variable takes two important features of the electoral system into account. The first feature is that a municipality may contain multiple electoral districts of different sizes. The second is that shifting a vote to (or from) one bloc to the remaining parties has a different impact on the seat share of the bloc winning (or losing) the vote, depending on which party within the winning and losing bloc won or lost it, respectively.

Our simulation departs from data on electoral outcomes. We want to measure how close the election is by capturing which shift of votes to or from a political bloc would have caused (1) a winning bloc to lose its seat majority or (2) a losing bloc to gain a majority of seats. In each election, we will thus have two forcing variable values, one for each bloc. When we measure closeness for a certain bloc, the other bloc always includes local parties.²⁰ The two closeness variables are measured in percentage terms, answering the question "which percentage of votes was needed, in a specific election, to give (or take) the seat majority from each of the two political blocs?"

For a bloc that won a seat majority, we start from the electoral result in the relevant election and move successively in the negative direction, incrementally *removing* 0.01 percentage points of the bloc's votes, starting from 0.01, 0.02, etc. For a losing bloc, we do the opposite, adding small increments of votes. The goal is to find out, for each bloc at the time, how large a percentage of votes we need to move in order to shift the seat majority to the other bloc.

How does our simulated shift in votes affect the distribution of seats? The impact will of course differ between countries depending on the electoral system. In the Swedish case, seats are distributed based on the Highest Averages Method, using a modified St. Lagué formula. After shifting a small proportion of votes either to or from a bloc, we use this formula to compute the new seat distribution. For each shift of votes, we randomly simulate 1,000 alternatives for how that specific percentage of votes, for example 0.02%, shifted in terms of receiving and losing (1) parties and (2) districts. Each time, we also compute the new allocation of seats. In this simulation, we assume that large parties have a greater variance in their vote shares than small parties, but that the variance is not 100% proportional. The simulations also abstract from the fact that votes can shift between parties within a bloc.²¹ Having computed the new seat allocation in each of the 1,000 shifts of the vote distribution, we

²⁰ In the Swedish case, local parties – defined as not having representation in parliament – hold, on average, 2% of the municipal assembly seats.

²¹ In detail, the simulations are carried out as follows. First, we take a random number between 0 and 1 for each party in the giving and receiving blocs. We then multiply this random proportion by the party's vote share plus a constant of 0.1. For a party with a random shock of 0.4 and a 20% vote share, we thus calculate 0.4*(0.2 + 0.1). We call this variable *q*. Within each bloc, we then normalize the parties' *q* values so that they sum to 1, calculating $q_w = \frac{q_p}{\sum_{i=1}^{n} q_p}$ where q_p are the initially computed party shocks and q_w are the normalized shocks. The next stage is to subtract fractions of the vote shift, for example 0.01 percentage points of the total votes, from one bloc and reward it in fractions to the other parties in a way that corresponds to the randomly drawn shocks. Finally, a new vote allocation is used to calculate the seat allocation, using the Swedish election formula.

tally the number of times that the bloc either lost (for winning blocs) or won (for losing blocs) the seat majority under the new distribution. Out of all the simulations for each shift in the vote share, we then set the value of the forcing variable to the size of the smallest vote shift that caused a shift in the bloc's majority status in at least 50% of the 1,000 vote shifts.

Figure W2 illustrates the process of creating the forcing variable for a specific municipality and election, the municipality of Upplands Väsby in 2006. In this municipality, the center-right bloc won the governing majority, receiving 52.7% of the votes and 54.9% of the seats. The left bloc won 42.9% of the votes and 43.1% of the seats. Suppose that we want the value of the forcing variable for the left bloc, i.e. the minimum proportion of votes that the bloc would need to win to gain a majority of seats. The *x*-axis in the figure shows the proportion of votes shifted, and the *y*-axis shows the proportion of times, out of our 1,000 simulated vote shifts, that caused the left bloc to win 50% of the seats or more. The upward slope of the line indicates that the larger the proportion of votes shifted to the bloc, the greater the probability of a 50% seat shift. As illustrated by the vertical line, the left bloc gains a seat majority in about half of the simulations when we give it an additional 5.0 percentage points of the votes. This assigns the value of the forcing variable to 5.0% for the left bloc in this election.

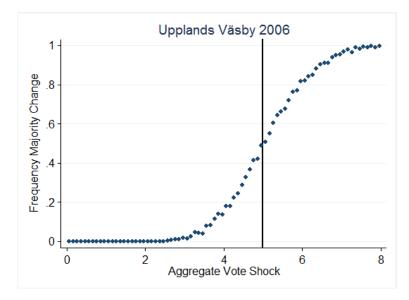


Figure W2. Proportion of seat majority shifts to the left bloc in Upplands Väsby municipality in the 2006 election (y-axis) depending on 1,000 simulations of shifting a certain proportion of votes (x-axis) from the center-right to the left bloc

A general concern with regression discontinuity designs is that the density of the forcing variable is not smooth across the threshold. A higher density of observations on either side of the seat threshold indicates that the treatment is not random, or that the forcing variable is wrongly

specified in some way. In Figure W3, we show that this is not the case for our analysis. For both forcing variables, the frequency of observations is smooth as we cross the seat-majority threshold.

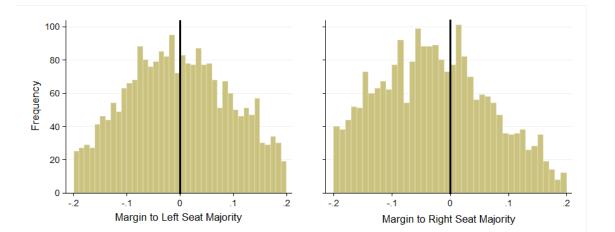
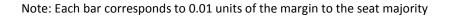


Figure W3. Frequency of observations, as a function of the margin to a seat majority for the left bloc (left-hand graph) and the right bloc (right-hand graph)



Parliamentary elections

To define close elections for parliamentary seats we follow the simulation approach suggested by Freier and Odendahl (2015) and use simulations to define close elections. There are two reasons for not using the same approach as at the municipal level. First, the seats are allocated in two rounds at two different levels, which makes it very technically complicated to implement our municipal-level approach. Second, using the vote share to define close elections would also mean that we would have to adjust the interval to define close elections for the smallest parties.

This approach is similar to the method we use at the municipal level. We start with the actual seat and vote allocation. We then simulate a large number (10,000) of likely vote changes, which allows for vote changes at both the national and local levels.²² For each new vote allocation, we calculate the

²² In detail, the simulations are carried out as follows. First, we start with the actual vote share of a party at the national level. We then add a vote shock at the national level. This shock is normally distributed with a mean of zero and a standard deviation that is defined as the vote share of the party times 0.2 a constant of 2%. For a party with a 10% vote share, the standard deviation of the vote shock will thus be 4 percentage points.

In the next step, we allocate this vote shock to the districts by multiplying the districts' share of the parties' vote share multiplied by a random number that has a uniform distribution between 0 and 1. This gives us the variable q. For each party, we then normalize the q values across districts so that they sum up to 1. These normalized q values decide how large a share of the national vote shock goes to a district.

We then add a shock at the district level. This shock is also normally distributed with a mean of zero and a standard deviation that is defined as the vote share of the party times 0.2 a constant of 2%. For a party with a

seat allocation. The closeness of the election is measured by the frequency of seat changes. If a party loses a seat in at least 30% of the simulations, we define that party as being close to losing a seat, and if it loses a seat in 40% of the simulations we define it as being very close to losing a seat. See Freier and Odendahl (2015) for a more detailed description of this approach.

Section W2. Measuring the division of parental leave

Ideally, we would like to measure the division of parental leave in terms of the division of time away from work. But because our dataset only includes this variable from 1993, we approximate the division of leave using the parent's share of total payments from the parental leave insurance program. Figure W4 shows the correlation between these two variables for the time period for which we have access to both (after 1993). The figure shows a clear positive correlation, with most observations clustered close to the 45-degree line. The correlation between the two measurements is 0.815.

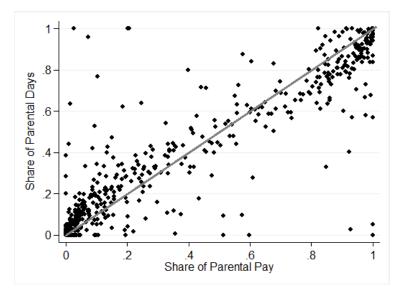


Figure W4. The politician's share of total payments to the household from the parental leave program (x-axis) and the politician's share of the household's total days of parental leave (y-axis)

Notes: N = 677. The number of days is the "net days;" half days are merged into full days by the Swedish Insurance Agency.

^{10%} vote share, the standard deviation of the vote shock will thus be 4%. Within each district, we normalize the shocks across parties so that the total vote change in the district is zero.

We then add the national vote shock and the district-level vote shock to the initial votes. Finally, we distribute the seats according to the new vote distribution, using the Swedish election formula, and calculate how often the party gains or loses a seat.

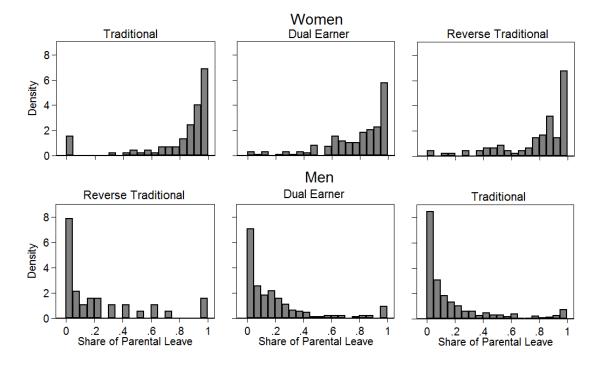


Figure W5. Politician's proportion of total parental leave by the division of paid labor

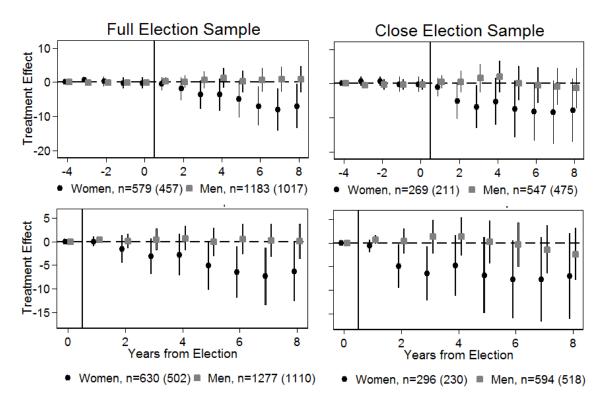


Figure W6 Estimated effect of a political promotion on probability to remain married, includes control variables

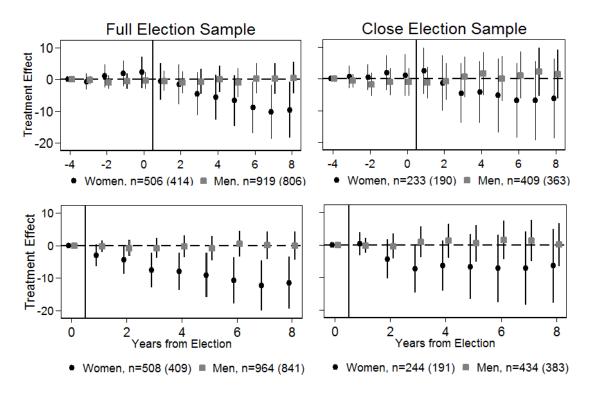


Figure W7 Estimated effect of a political promotion on probability to remain married, restriction to those running for the first time.

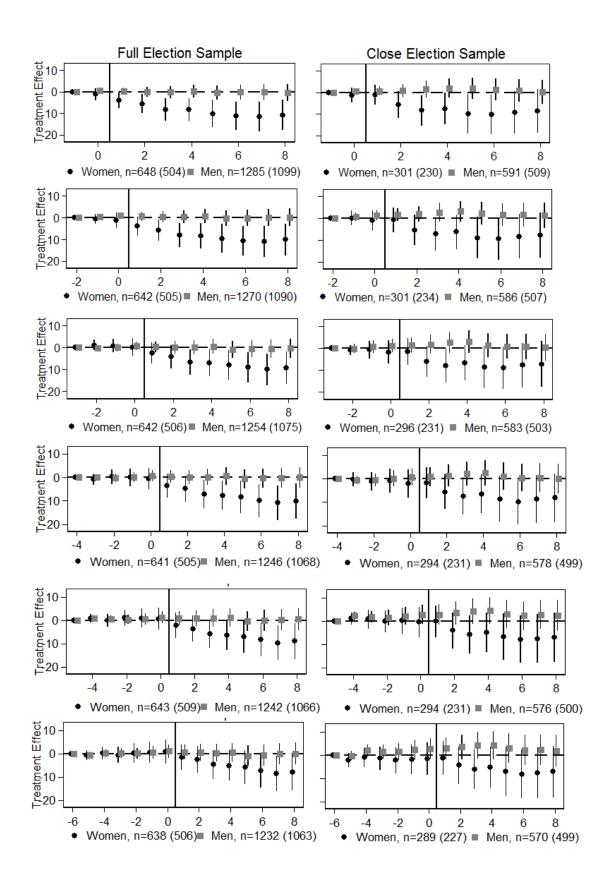


Figure W8 Estimated effect of a political promotion on probability to remain married, different start years

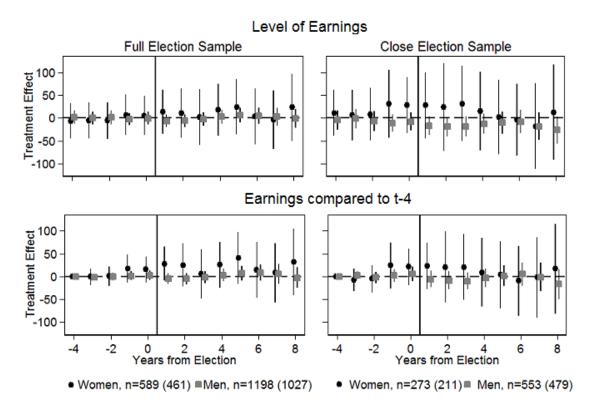


Figure W9 Estimated effect of a political promotion on spousal earnings

	Women	Men
Subsequently promoted:	Yes	Yes
Couple characteristics		
*Politician's share of earnings (%)	0.58	0.78
*Politician's share of parental leave (%)	0.78	0.09
*Age difference (politician-spouse)	-3.05	1.78
Politician out-earns spouse (%)	0.62	0.95
Marriage length (years)	13.37	13.5
Second marriage (%)	0.11	0.07
Same birth region (%)	0.89	0.90
Has children (0–17)	0.74	0.71
Has children (0–6)	0.31	0.33
Individual characteristics		
Politician's age	43.76	45.5
Politician's age at marriage (1)	30.99	31.98
Politician's earnings (2)	624.2	796.1
Politician's tertiary education (%)	0.82	0.73
Spouse's age	46.82	43.75
Spouse's earnings	527.5	209.4
Spouse's tertiary education (%)	0.67	0.64
Observations	228	1,208

Table W6. Comparison of pre-promotion traits among CEO candidates

Notes: See Table W1.

Section W3. Career success and divorce in four occupations

To examine the external validity of our finding that women with successful careers are more likely to divorce than men with successful careers, we turn to four additional occupations in which, arguably, persons with the same education type have comparable career paths that occur within the same types of organizations: medical doctors, police, priests, and pharmacists.²³ Although we cannot measure the exact timing of promotion events for these occupations, we can use income to measure who has had a successful career or not. As a comparison, we also report the proportions of divorced men and women in the occupations analyzed above: CEOs, mayors, and parliamentarians.

From our dataset that covers the full Swedish working population, we select all individuals who graduated from the relevant education programs between 1989 and 1993. In order to only compare the career trajectories of persons who remained in the occupation, we drop those who earned a degree in another field at any point until the year 2012. We also remove individuals who retired before 2012.

Divorce rates and career outcomes are measured within occupation-gender groups 20–23 years after graduation. Within each occupation, we compute the median of annual earnings in 2010–2012. We then benchmark each individual's average annual earnings to those of his or her peers. We denote persons who have reached a level of annual earnings above the median as having had a "high" career performance, and those below the median as having had a "low" performance. We compute the proportion of divorced persons by gender and occupation, divided by their career performance (high or low) and report these proportions in Figure W11.

²³ We use industry codes for the post-graduation period to check if this is the case. The data show that for medical doctors, 92% of the year-individual observations have industry codes within medical care (2-digit SNI92 of 85). For the Police Academy, 93% of the observations are found in the police force industry code (4-digit SNI92 of 7425). Priests are found in religious organizations, as 75% of the observations occur in the 4-digit code of 9131. Finally, for pharmacists, 57% of the data is found in the 3-digit code 244 (medical companies) or the 5-digit code of 52310 (pharmacies).

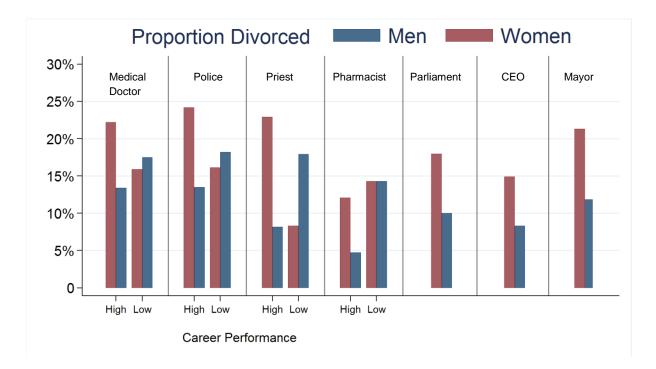


Figure W10. Proportion of divorced individuals by gender, occupation, and career performance

Notes: For the first four occupations, career performance and divorce are measured in the 20–23rd year of the individual's career. Parliamentarians and mayors form a pooled sample of the 1991–2010 election periods. CEOs in firms with more than 100 employees represent a pooled sample for 2002–2012.

The descriptive statistics indicate that our baseline findings reach beyond the political sector. Among all the professions, women are more likely to be divorced. But there is a striking gender difference between persons who have reached high and low levels of earnings. For men, the divorce rate is consistently higher among those with below-median earnings and across all four occupations. For women, divorce is instead more common among high earners than low earners within the same profession. The only profession that does not show this pattern for women is pharmacists.

	PE %	AD	PPL %	PPE	SPE	PEC %	HEC %	Child
Politician's earnings (%)	1							
Age difference	-0.02	1						
Politician's parental leave (%)	-0.01	0.00	1					
Politician's previous earnings	0.45	0.07	-0.01	1				
Spouse's previous earnings	-0.65	0.07	0.06	0.17	1			
Politician's earnings change (%)	-0.29	-0.11	-0.24	-0.25	0.01	1		
Household's earnings change (%)	-0.13	-0.09	-0.21	-0.47	-0.21	0.63	1	
Has children (0-17)	-0.15	-0.08	0.14	-0.08	0.04	0.10	0.14	1

Table W7. Correlation matrix for household heterogeneity variables in the sample of women

Table W8. Correlation matrix for household heterogeneity variables in the sample of men

	PE %	AD	PPL %	PPE	SPE	PEC %	HEC %	Child
Politician's earnings (%)	1							
Age difference	0.03	1						
Politician's parental leave (%)	-0.07	-0.04	1					
Politician's previous earnings	0.39	0.02	-0.07	1				
Spouse's previous earnings	-0.65	-0.02	0.05	0.24	1			
Politician's earnings change (%)	-0.39	0.01	-0.02	-0.42	0.02	1		
Household's earnings change (%)	-0.18	-0.04	0.00	-0.45	-0.15	0.69	1	
Has children (0-17)	0.03	0.08	-0.22	-0.01	-0.07	0.09	0.08	1

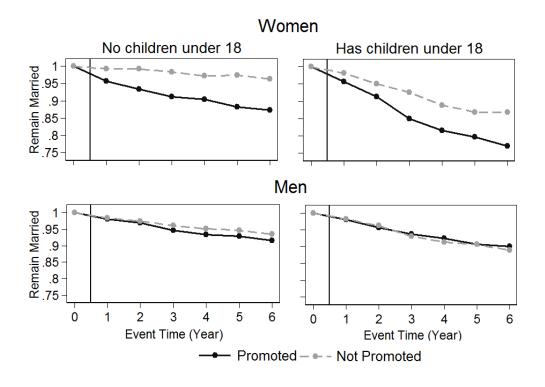


Figure W11. Marriage durability and promotions by having children or not.

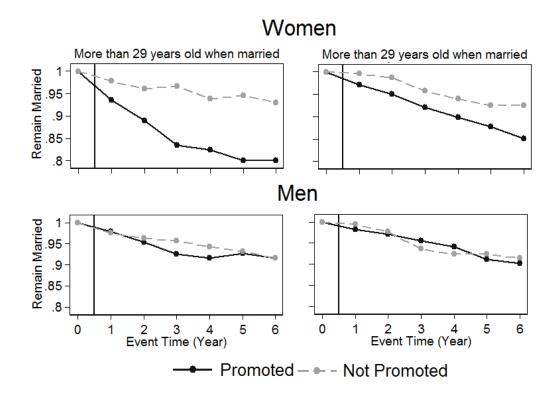


Figure W12. Marriage durability and promotions by the politician's age at marriage.

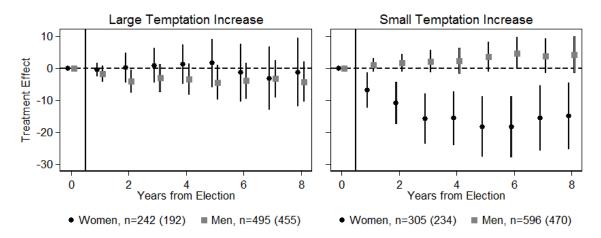


Figure W13 Estimated effect of a political promotion on probability to remain married, heterogenous effect based on increase in opposite gender co-workes.

References

- Freier, Ronny, and Christian Odendahl. 2015. Do parties matter? Estimating the effect of political power in multi-party systems. *European Economic Review* 80: 310-328.
- Fiva, Jon, Olle Folke and Rune Sørensen. 2016 "The Power of Parties: Evidence From Close Municipal Elections in Norway", Scandinavian Journal of Economics, forthcoming
- Folke, Olle, Torsten Persson, and Johanna Rickne. 2016. Dynastic Political Rents. *Economic Journal*, forthcoming.