Labor Supply of Politicians

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Abstract

We examine the labor supply of politicians using data on Members of the European Parliament (MEPs). We exploit the introduction of a law that equalized MEPs' salaries, which had previously differed by as much as a factor of ten. Doubling an MEP's salary increases the probability that she runs for reelection by 21 percentage points and increases the logarithm of the number of parties that field a candidate by 36 percent of a standard deviation. A salary increase, however, lowers the quality of elected MEPs, measured by the selectivity of their undergraduate institutions. Higher pay does not affect effort, measured by legislative sessions attended while in office. In contrast, non-pecuniary motives, proxied by home-country corruption, have a large effect on legislative attendance but little impact on the willingness to run for office. In short, pecuniary incentives impact the extensive margin, while non-pecuniary incentives impact the intensive margin, of MEPs' labor supply. We rationalize this pattern with a simple model of politician behavior.

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1 Introduction

The labor market for politicians is unlike that of most occupations: salaries are determined through legislation rather than market forces, and politicians vie for a fixed number of positions through public competition, facing the possibility of dismissal only once each electoral cycle. Since politicians' salaries are a policy variable, it is particularly important to identify the the role that financial compensation plays in their labor supply. Moreover, given the visible nature of their duties, the lack of direct supervision, and the public goods aspect of their jobs, it also seems vital to understand how social norms affect politicians' behavior while they are in office.

In this paper, we analyze the impact of salary and social norms on the labor supply of the Members of the European Parliament (MEPs). We examine both their willingness to run for office and the effort they exert while in office.

There is a relative paucity of empirical work on the labor market for elected officials, owing in large part to the difficulty in credibly identifying a relationship between pay and the supply of politicians. Outside of politics, one can often use exogenous shocks to labor demand to identify the elasticity of labor supply. But, given the (exogenously) fixed allocation of political positions, this approach is not feasible in our context. Moreover, since salaries are typically set by those currently in office, it is usually difficult to rule out the possibility that politicians' skill affects their salaries rather than vice versa.

We overcome these identification challenges by utilizing a recent change in the way that MEP salaries are determined. The European Parliament is the directly elected legislative chamber of the European Union. It is currently composed of 736 MEPs from 27 constituent countries. MEPs are elected for 5-year terms by voters from their home countries. Prior to 2009, MEPs received the same salary as members of the lower house of home-country national parliaments. This induced great variation in MEPs' remuneration. For example, in 2007, the highest paid MEPs (those from Italy) were paid an annual salary of €134,291 while the lowest paid ones (those from Bulgaria) earned €9,276 per year. Even MEPs from similar countries received very different salaries. For example, Spanish MEPs were paid €40,861 per year, roughly 70% less than Italian MEPs, despite the countries' near-identical levels of GDP per capita. However, in 2005 the two legislative chambers of the European Union agreed that salaries of MEPs should be equalized. Hence, as of the first

day of the parliamentary term starting in 2009, almost[1] all MEPs receive an identical salary of roughly €84,000. For some MEPs (e.g., those from Italy) this change induced a large reduction in salary, while for others (e.g., those from Bulgaria and Spain), it meant a big raise. At the same time, MEPs are drawn from a heterogeneous mix of nations, which allows us to examine the supply of politicians as a function of home-country norms and thus compare the effects of pecuniary and non-pecuniary motivations.

Our econometric approach relies on the assumption that the timing of this salary reform was uncorrelated with other factors that would lead politicians from low-salary countries to increase their willingness to be an MEP relative to politicians from from high-salary countries. We address our identifying restriction at greater length in Section 4.

We measure the extensive margin of labor supply in three different ways. First, we look at whether incumbent MEPs seek reelection. Second, we look at the number of parties that field a candidate.[2] Third, we examine MEPs' quality, as proxied by the selectivity of their undergraduate institutions. We measure the intensive margin of labor supply by attendance at plenary sessions during the parliament, and we also construct a proxy for shirking based on the fraction of days that a politician signs the attendance register (thus collecting a daily stipend) but fails to cast a single vote.

Doubling an MEP's salary increases the probability she runs for reelection by 21 percentage points and increases the logarithm of the number of parties that field a candidate by 36 percent of a standard deviation. Both of these estimates suggest that monetary remuneration plays an important role in politicians' willingness to stand for office. At the same time, however, a higher salary lowers the quality of MEPs: doubling the salary lowers the probability that an elected MEP attended a college ranked among the top 500 in the world by 4.9 percentage points, or 16 percent. We do not find a significant impact of salary change on the effort MEPs exert while in office.

We find starkly different results when we examine the role of non-pecuniary factors. We use cross-sectional variation in corruption as a proxy for the strength of home-country social capital and find no correlation between corruption and the willingness to run for office. However, MEPs

[1] As we will explain in greater detail later, there is a small fraction (4.5%) of MEPs for whom this salary change did not apply.

[2] Use of closed-list voting systems in many countries prevents us from identifying the number of candidates willing to run for office.

from more corrupt countries are more likely to be absent from all votes on a given day. As well as indulging in more absences, MEPs from more corrupt countries also exhibit a more explicit form of shirking. Each day they are present at the parliament, MEPs are meant to sign a register to prove their attendance, entitling them to a daily allowance of roughly €300.[3] MEPs sometimes abuse this system and show up only to sign the register.[4] Such behavior has been a source of scandal. In 2004, for example, Austrian MEP Hans-Peter Martin filmed other MEPs signing the register shortly after 7am and then immediately leaving the building. His footage was widely broadcast and caused a public uproar.[5] Combining data from the daily register with roll-call voting data, we identify for each MEP any days on which she signed the register but was then absent from all votes that day. We find that a one standard deviation increase in corruption in an MEP's place of origin is associated with a 23 percent increase in this form of shirking.

In summary, our results suggest that pecuniary incentives primarily impact the extensive margin, while non-pecuniary incentives primarily affect the intensive margin of MEPs' labor supply. We present a simple model that rationalizes this pattern – raising politicians' wages expands the pool of candidates (both incumbents and challengers), whereas higher social capital increases the cost of shirking (either by raising its psychic costs or the social pressure to behave appropriately).

A large literature examines the theoretical relationship between politicians' wages on one hand, and their quality, their performance, and their willingness to run for office on the other. Caselli and Morelli (2004) consider a setting where market skill is correlated with political skill, so higher wages attract more politically skilled candidates. Besley (2004) develops a model where higher wages compel politicians to care more about reelection; an increase in wages thus induces politicians to cater more to voters' preferences while in office.

Higher wages, however, might also create negative selection effects. New Hampshire, for example, has deliberately kept the salary of its legislators at $100 for their 45 days in session each year (with no per diem), reasoning that this system attracts a more committed "citizen" legislature. Directly in line with this rhetoric, Besley (2004) discusses how the existence of non-pecuniary incentives for "public spirited" candidates might cause higher wages to attract less attractive candi-

[3]The size of the daily allowance changes somewhat over time.

[4]If MEPs are absent from more than half of the votes, they receive only half of the stipend.

[5]See, for example, "European Elections: Martin's Travels," *The Economist*, June 3, 2004.

dates. Poutvaara and Takalo (2007), Mattozzi and Merlo (2008), and Gagliarducci, Nannicini, and Naticchioni (2010) consider models where high-ability people self-select into politics; consequently, higher wages lower the ability threshold at which potential candidates decide to seek office.[6]

A number of papers also empirically examine labor supply of politicians. Ferraz and Finan (2009) and Gagliarducci and Nannicini (forthcoming) identify the impact of wages on labor supply and performance of Brazilian municipal legislators and Italian mayors, respectively, by exploiting a discontinuity of wages in population size. Both analyses find that higher wages attract more candidates and higher quality candidates. Ferraz and Finan (2009) also find evidence that higher wages induce higher effort, while Gagliarducci and Nannicini (forthcoming) find this channel to be unimportant. Kotakorpi and Poutvaara (2011) study the effect of a wage increase in the Finnish National Parliament. Using candidates in municipal elections as a control group, they report that the wage increase led to more educated female candidates but had no effect on the composition of male candidates. Di Tella and Fisman (2004) present evidence that better economic performance of their state allows U.S. governors to push up their own salaries, while Besley (2004) finds that U.S. governors' salaries increase when their policies are congruent with voter preferences. Groseclose and Krehbiel (1994) and Hall and van Houweling (1995) report that U.S. congressmen respond to changes in the financial incentives for retirement. Similarly, the structural estimation exercise of Keane and Merlo (2010) (building on the model in Diermeier, Keane, and Merlo 2005) suggests that a reduction in congressional salaries in the U.S. would substantially reduce the incumbents' willingness to run for reelection.

Closest to our paper is the concurrent work by Mocan and Altindag (2011). They also explore the impact of the change in European Parliament salary rules on the behavior of MEPs. They, however, examine the impact of the salary change only on whether the MEPs sign the daily register, while we focus on a broader set of outcomes (the willingness to run for reelection, quality of MEPs, number of parties that field a candidate, absence from roll-call votes, and so forth). Moreover, in contrast to their findings, we do not find that the salary change has a significant impact on the tendency to sign the daily register. We replicate their point estimate, which is quite small,

[6]Messner and Polborn (2004) study a model where candidates are motivated to run in part because they care about the political office being done well. In this setting, higher wages can decrease the quality of elected officials since higher wages allow skilled individuals to more easily free-ride on participation of others.

and when we cluster our standard errors at the country level,[7] the effect is far from statistically significant.

Our paper contributes to the existing literature by providing a more complete view of politicians' labor supply – we establish the impact of both pecuniary and non-pecuniary factors on both the extensive and the intensive margin of labor supply. Most prior work has focused solely on pecuniary motivations, and only one margin of supply. Furthermore, in contrast to most earlier work, the European Parliament wage equalization provides us with a credible source of identification of the impact of salary changes.

The remainder of the paper is structured as follows. The next section presents a simple model of political labor supply. Section 3 describes the data and the institutional background. Section 4 presents the results. The last section concludes.

2 Model

In this section, we present a model of a politician's decision of whether to stand for office and whether to exert effort while in office. The model is primarily meant as a simple way to organize our empirical results. Hence, preferences and electoral institutions have been drastically simplified.

A potential candidate chooses whether or not to run for office. Running for office is costless. If the candidate runs, she is elected with some exogenous probability $p \in (0, 1)$. If she is elected, she chooses whether to shirk ($e = -1$) or exert effort ($e = 1$) while in office.

The agent is described by the triplet (y, θ, ϵ): y is the salary she receives if elected, θ are the social norms of her community, and ϵ is a stochastic taste for being in office. Parameter θ is assumed to be higher for individuals from high social capital countries. The random variable ϵ is assumed to be atomless and to have full support on $\mathbb{R}$. The agent's utility if she does not hold office is normalized to zero. If she is elected and exerts effort e, her utility is

$$u = y + \theta e + \epsilon.$$

The key feature of these preferences is that effort is complementary with social norms, i.e., $\frac{\partial^2 u}{\partial \theta \partial e} > 0$.

[7] Mocan and Altindag (2011) cluster their standard errors at the MEP level.

In other words, all else being equal, individuals from high social capital countries prefer to exert more effort. This could be either because they feel more guilt and receive more opprobrium if they shirk, or because they experience more self-satisfaction and get more social approval when they behave appropriately.

This simple model generates two straightforward predictions. First, the likelihood that the agent runs for office is increasing in the salary she is offered: $Pr\left(y + \theta e + \epsilon > 0\right)$ is strictly increasing in y. Second, the agent exerts effort while in office only if her social capital is sufficiently high, i.e., if $\theta \geq 0$. That is, pecuniary incentives impact the extensive margin while non-pecuniary incentives impact the intensive margin of a politician's labor supply. These two predictions echo our two main empirical findings.

Recall that we also find that pecuniary incentives do not significantly impact the extent of shirking and that non-pecuniary incentives do not impact the willingness to run for office. When the agent's utility is separable in y and e, as in the model, salary does not impact the intensive margin of the labor supply. Moreover, the model is silent on whether social capital increases or decreases willingness to run for office; depending on the range of θ, $\frac{\partial u}{\partial \theta}$ can be positive, negative, or zero.

One natural way to extend the model would be to assume that agents face reelection after the first period with the probability of being reelected increasing in the first period effort. In such a model, salaries would also impact the intensive margin of labor supply. Also, if it were costly to run for office and a higher salary increased competition, then some agents' willingness to run for office might decrease as salary increases. Our empirical results suggest that this force, if present, is dominated by the direct effect emphasized in our model.

3 Data and institutional background

The European Parliament is the lower legislative chamber of the European Union. Since 1979, Members of the European Parliament (MEPs) have been elected every 5 years. The present paper focuses on the 5th, 6th, and 7th parliaments, elected in 1999, 2004, and 2009 and consisting of 626,

732, and 736 MEPs, respectively.[8] Throughout the paper, we will refer to the n^{th} parliament as EPn for brevity.

Each EU member country elects its own MEPs in nationally held elections. The exact electoral rules differ by country. Importantly for our purposes, many countries utilize closed-list electoral systems where voters can effectively only vote for political parties as a whole, rather than for particular candidates. In such countries, competition takes place at the party-level rather than at the individual-level. Consequently, when we analyze the extensive margin of labor supply, we focus on incumbents' willingness to run for reelection and the number of parties that field at least one candidate.[9]

The work of the European Parliament is centered around the plenary sessions held once or twice a month. These sessions consist of several daily "sittings" of debate and voting. MEPs sign attendance registers on each day of a plenary session. The registers are subsequently published in conjunction with the minutes of the sittings. Similarly, for those votes that are held as roll-call votes, individual voting is registered and published.

MEPs are remunerated through allowances as well as a monthly salary. Along with reimbursement for travel, staff, and other expenses, MEP allowances include a stipend that is awarded for each day of a session that the MEP signs the attendance register. This daily stipend is reduced by a half if the MEP votes on fewer than half of the roll-call votes that day. Signing the register and then immediately leaving is frowned upon, as evidenced by the scandal discussed in the introduction.

Prior to EP7, MEPs were paid by the member states and earned the same salary as members of the lower chamber of their respective national parliaments. This system was originally put in place in 1979 as a placeholder until the European Parliament could decide on a uniform system and level of salaries. Difficulties in agreeing on a uniform salary and its implementation, however, resulted in the national parliament salaries remaining in place for a long time. A new system was finally agreed and voted upon on June 23, 2005 and became effective in EP7. The new system established a uniform salary for all MEPs, paid from the European budget and equal to 38.5% of the salary

[8] When Romania and Bulgaria joined the EU in 2007, the total number of MEPs temporarily increased to 785 until the 2009 election.

[9] An alternative would be to restrict our attention to countries with open-list electoral systems and utilize the overall number of candidates on the ballot. There are only nine such countries in EP7 (Hix and Hagemann 2009), however, which is insufficient for this approach.

of a judge at the European Court of Justice. The statute was passed with two provisos: (i) if any member state wished all of its MEPs to continue to receive the old, national salary, this would be permitted for a maximum of two parliamentary terms and would be paid for by the member state, and (ii) any individual MEP who was already in office before the new statute was passed could elect to continue to receive the old, national salary (paid by her own member state) for as long as she continued in office. In practice, these provisos had little impact on the implementation of a uniform salary because: (i) no member state elected to continue to pay the old salaries for its MEPs, and (ii) only 33 MEPs exercised the option to retain the old national salaries.[10] We have been able to identify only 5 of these 33 MEPs, so we cannot exclude all MEPs with unchanged salaries from our analyses. That said, they comprise less than 5 percent of the sample, so their effect on our estimates is likely to be small. Moreover, since their salaries did not actually change, they are likely to bias our estimates toward zero.

The data employed in this paper are derived from a number of sources. We obtained data on salaries from Corbett, Jacobs, and Shackleton (2007). We use the salaries as of January 2007 as the measure of the salary level in the 6th parliament. Our key independent variable $\Delta lnSalary_c$ is defined as the logarithm of 84,000 (the post-change uniform salary level) minus the logarithm of the salary for MEPs from country c as of January 2007.

The measures of the extensive margin of labor supply are constructed using data available on the web pages of the European Parliament.[11] For EP6 and EP7, for each MEP who served in the previous parliament, we define a variable $ReRun_{ip}$ that indicates whether she ran for reelection (i indexes the MEP and p indexes the parliament). For EP5 and EP6, for each MEP who served in that parliament, we define an indicator variable $PostVoteQuit_{ip}$ which equals 1 if MEP i quit her job before completing her term at some point after June 23rd of the second calendar year of parliament p (i.e., before she even had a chance to run for reelection in the subsequent parliament).

[10] At first glance it might seem surprising that MEPs who received a pay cut would not elect to keep their old salary. Doing so, however, would require transferring the burden of payment from the European Parliament to the taxpayers of one's own country, which might not be popular with their electorate. More broadly, many legislative bodies have the legal power to raise their own salaries and yet seldom choose to do so.

[11] Data on whether incumbent MEPs ran for reelection in 2004 was taken in July 2009 from http://www.europarl.europa.eu/parliament/archive/staticDisplay.do?language=EN&id=75. Information on whether MEPs ran for reelection in 2009 was downloaded during the election in June 2009. Data on when MEPs left the parliament was collected in August 2009 from the individual MEP pages on the EP website, http://www.europarl.europa.eu/members/archive/alphaOrder.do?language=EN.

For $p = 6$, this indicates that the MEP quit the parliament at some point after the vote on the salary change. For $p = 5$, this indicates she quit the parliament during the same segment of the electoral cycle but before the salary change had been introduced. Finally, for EP6 and EP7, for each member country, we collected data on the number of parties that fielded a candidate, taken from the European Parliament's website.[12] The available data only include parties that received at least 0.5% of the vote. Accordingly, we define $lnNumParties_{cp}$ as the logarithm of the number of parties in country c that received at least 0.5% of the vote for candidacy to parliament p. These three variables, $ReRun_{ip}$, $PostVoteQuit_{ip}$, and $lnNumParties_{cp}$, will be our three measures of the extensive margin of labor supply.

We are also interested in the impact of salary change on the selection of politicians. We use selectivity of colleges attended by MEPs as a measure of MEP quality. From MEPs' individual websites, we identified where each attended college. We were able to obtain this information for nearly 90 percent of the sample. We merged these data with the 2010 Academic Ranking of World Universities, which provides a rank for top 500 universities across the world.[13] Variable $FractionRankedCollege_{cp}$, is the fraction of MEPs from country c in parliament p who attended a school ranked in the top 500.[14] Most MEPs attend college in their home-country and countries vary widely in how represented their universities are in the ranking. Consequently, $FractionRankedCollege_{cp}$ is not particularly useful for identifying cross-sectional variation in quality of MEPs across countries, but it does capture the changes in quality of MEPs from a given country over time. We could have also defined similar variables with a different cutoff, e.g., a fraction of MEPs who attended a school ranked in the top 200, but since only about 28 percent of MEPs with available education data attended a ranked school at all, $FractionRankedCollege_{cp}$ captures most of the relevant variation.

Building on a previous data collection effort by Hix, Noury, and Roland (2007), we also put

[12] http://www.europarl.europa.eu/parliament/archive/elections2009/en/new_parliament_en.html and http://www.europarl.europa.eu/parliament/archive/elections2009/en/hist_results_be_en.html accessed in July 2009.

[13] Since rankings might change somewhat over time, it would have been more suitable to utilize the rank of a school at the time when the MEP attended it, but the available data only go back to 2003 and many MEPs have been out of college for more than seven years.

[14] For our main specification, we simply drop the 10 percent of MEPs without education data and treat the information as missing randomly. Including all MEPs in the analysis and coding those with missing data as having gone to an unranked school strengthens our results.

together comprehensive data on attendance and roll-call voting in the daily sittings of EP5, EP6, and the first 14 months of EP7.[15] As mentioned previously a sitting is a day-long meeting of the parliament during which roll-call voting takes place. For each sitting, our data contain information about whether each serving MEP signed the attendance register and how she voted (if at all) on all the issues that day.[16] Since our independent variables vary only by year, we aggregate these data to the annual level. We let t index years and define year t as beginning on July 1, $1999 + t$ and ending on June 30, $2000 + t$ to match the annual sessions of the parliament (e.g., year 4 began on July 1, 2003 and ended on June 30, 2004).[17] Variable $FractionAbsent_{it}$ captures the fraction of sittings in year t during which MEP i did not participate in any of the votes during the day.[18] Variable $FractionSignedIn_{it}$ reflects the fraction of sittings in year t during which MEP i signed the daily register. Finally, motivated by the scandals mentioned in the introduction, variable $FractionSignedInAbsent_{it}$ is defined as the fraction of those sittings in year t when MEP i signed the register but cast zero votes. There are legitimate reasons an MEP might sign the register but fail to participate in votes; for example, she might spend the entire day in meetings. That said, we are primarily be interested in salary and corruption as predictors of $FractionSignedInAbsent_{it}$, and there are no obvious reasons why these variables would be correlated with such alternative uses of an MEP's time. $FractionAbsent_{it}$, $FractionSignedIn_{it}$, and $FractionSignedInAbsent_{it}$ are our measures of the intensive margin of labor supply.

MEPs' individual websites provided us with data on each MEP's age and periods in office, on the basis of which we define self-explanatory variables Age_{it}, $AgeSq_{it}$, and $lnTenure_{it}$. We gathered country-by-year data on GDP per capita in constant 2000 U.S. Dollars ($lnGDPPC_{ct}$) from the World Development Indicators. Finally, as our measure of corruption ($Corruption_{ct}$) we use country-by-year data from Kaufmann, Kraay, and Mastruzzi (2010). These data consist

[15] Data on voting and attendance in the plenaries of EP6 and EP7 was collected from the published daily minutes on the European Parliament website, http://www.europarl.europa.eu/activities/plenary/home.do?language=EN, between February 2007 and October 2010. We also collected data on attendance in EP5 which we combined with voting information from the Hix, Noury, and Roland (2007) data (downloaded in November 2007).

[16] The published minutes of the meetings also contain information on so-called vote corrections where an MEP asks to have her registered vote changed in the minutes (without affecting the actual outcome). In our empirical work we focus on the pre-correction voting outcome but results are robust to considering corrected votes instead. There are also some instances of secret ballot votes in the data, where each MEP's vote is not made public. For these it is still recorded whether each MEP did vote.

[17] We completed our data collection in October 2010, so the final year in our sample only includes the period from July to October.

[18] An abstention counts as participation.

of a composite corruption index that is essentially the first principal component of a number of other commonly used corruption indices, which are usually subjective measures based on surveys of country experts and investors. For ease of interpretation, we reverse the sign of the original measure so that higher values indicate greater corruption. By construction, the mean value of this measure across all countries in the global sample is zero with standard deviation one; for our sample of European countries it ranges from -2.5 to 0.2. Table 1 reports summary statistics for the variables used in our analysis.

4 Impact of salary and social norms on labor supply of MEPs

As we mentioned earlier, in the past MEPs received the same salary as members of the lower house of their own national parliament. Table 2 reports MEPs' salaries by country as of January 2007, during the 6th parliament. Starting with EP7, which began in July 2009, salaries were equalized to roughly €84,000 for all MEPs. Our empirical strategy for estimating the impact of salary change on labor supply is based on the assumption that the timing of this salary change is uncorrelated with a change in omitted variables that would differentially influence labor supply of MEPs from countries that initially had low and high salaries.

To identify the impact of social capital on labor supply, we rely on the cross-sectional variation in corruption across countries. We take a broad interpretation of this country-level measure as reflecting values of public service over private gain.

4.1 Extensive margin of labor supply

Our first specification examines the impact of the salary change on the willingness of incumbent MEPs to seek reelection. We consider a linear probability model:[19]

$$ReRun_{ip} = \beta_0 + \beta_1 \times \Delta lnSalary_c + \beta_2 \times EP7_p + \beta_3 \times EP7_p \times \Delta lnSalary_c + \varepsilon_{ip} \qquad (1)$$

where $p \in \{6, 7\}$ and $EP7_p$ is an indicator variable for whether $p = 7$. $ReRun_{ip}$ denotes whether MEP i ran for reelection for parliament p, and $\Delta lnSalary_c$ is the salary change instituted at the

[19]Throughout the paper we use a linear probability model when the outcome variable is binary. We obtain very similar results if we use logit or probit specifications instead.

beginning of EP7, defined above. In this specification, as in all others, robust standard errors are clustered by country. We exclude any MEPs who joined the 6th parliament only after the salary harmonization vote. Consequently, all of the MEPs in the sample we use for this regression had already taken office prior to the announcement of the salary change.

Coefficient β_1 captures the cross-sectional relationship between the salary in EP6 and the willingness of MEPs who served in EP5 to run for reelection for EP6. Since $\Delta lnSalary_c$ is defined as a constant ($ln\,(84000)$) *minus* log of salary in EP6, a negative β_1 indicates a positive relationship between salary and the extensive margin of labor supply. Coefficient β_2 tells us whether, in the absence of a salary change, MEPs are overall more likely to run for reelection for EP7 or for EP6. The main coefficient of interest is β_3, which identifies the impact of the salary change on willingness to run for reelection.

Column (1) of Table 3 reports the results. Coefficient β_1 on $\Delta lnSalary_c$ is equal to -0.18 ($p < 0.01$) suggesting that MEPs from high-salary countries were more likely to run for reelection for EP6. Note, however, that all of the MEPs in the sample had already expressed their willingness to hold the office at the salary level offered by their country. Consequently, β_1 should be interpreted with caution. Coefficient β_2 on $EP7_p$ is -0.089 ($p < 0.01$) which means that, in the absence of a salary change, MEPs were about 9 percentage points less likely to run for reelection for EP7 than for EP6. Coefficient β_3 is 0.31 ($p < 0.01$). This coefficient implies that doubling an MEPs salary (a magnitude of change well within the range of salary changes observed in the data) increases the likelihood that she runs for reelection by 21 percentage points ($ln\,(2) \times \beta_3 = 0.21$). Given that on average 57 percent of MEPs seek reelection (Table 1), this constitutes a 37 percent increase in labor supply. This magnitude is sufficiently large for $\beta_1 + \beta_3 = 0.13$ to be significantly higher than zero ($p < 0.01$). This suggests that, even though all MEPs receive the same salary in EP7, those MEPs who had previously received a higher salary in EP6 are less willing to run for office in EP7. This could be caused either by selection (MEPs from higher salary countries have a higher reservation wage), or by preferences that depend on salary changes as well as salary levels (Kahneman and Tversky 1979).

In Figure 1, we plot the change in the fraction of MEPs who run for reelection against $\Delta lnSalary_c$. As the Figure shows, the positive relationship between the two variables is not driven by extreme

observations.

Column (2) of Table 3 adds country by EP controls ($lnGDPPC_{cp}$ and $Corruption_{cp}$) to Equation 1. These variables are measured in the last year of parliament $p-1$, i.e., at the time when the MEP was likely making the decision whether to run for reelection. Column (3) adds MEP by EP controls (Age_{ip}, $AgeSq_{ip}$, and $lnTenure_{ip}$), also measured in the last year of parliament $p-1$. Column (4) adds country fixed effects. Our key coefficient of interest, β_3, is stable across these four specifications.

The coefficient on corruption is not statistically significant in any specification. This suggests that social capital plays a lesser role in MEPs willingness to run for reelection but note that, unlike the estimate of the impact of salary change, the effect of social capital is identified solely off cross-sectional variation.

A somewhat stronger way to express diminished interest in serving as an MEP is to quit before the term expires. In Table 4, we consider a linear probability model:

$$PostVoteQuit_{ip} = \beta_0 + \beta_1 \times \Delta lnSalary_c + \beta_2 \times EP6_p + \beta_3 \times EP6_p \times \Delta lnSalary_c + \varepsilon_{ip} \qquad (2)$$

where $p \in \{5, 6\}$ and $EP6_p$ is an indicator variable for whether $p = 6$. Recall that $PostVoteQuit_{ip}$ equals 1 if MEP i quit her job before completing her term at some point after June 23rd of the second calendar year of parliament p. For $p = 6$, this indicates quitting the parliament after the vote on the salary change. For $p = 5$, this indicates quitting the parliament during the same segment of the electoral cycle but before the salary change had been introduced. As in Table 3, Column (1) reports the baseline results, Column (2) adds country by EP controls, Column (3) adds MEP by EP controls, and Column (4) adds country fixed effects. Our key coefficient of interest, β_3, is always negative and statistically significant: an increase in salary reduces the likelihood of quitting early. Moreover, the effect is of a very large magnitude – given that around 13 percent of MEPs quit early (Table 1), even the lowest of the four point estimates (Column 1) implies that doubling a salary reduces the tendency to quit early by more than 75 percent. Finally, the coefficient on corruption is consistently positive and significant. MEPs from more corrupt countries are overall less likely to finish their terms, a pattern that holds even when we include country fixed effects.

Results in Tables 3 and 4 focus on on the willingness of incumbent politicians to continue to hold their office. More directly relevant for the welfare of the electorate is the overall supply of potential candidates and platforms. It is not feasible to identify the overall number of potential candidates because MEPs are elected based on the electoral rules specific to their country, and only nine member countries have open-list systems that allow the electorate to cast votes directly for particular candidates.[20] We therefore focus on the number of political parties that field candidates. This measure applies equally well to countries that use closed-list and open-list electoral systems, since even in countries with open-list systems almost all candidates are associated with some political party.[21] In Table 5, we consider OLS specifications of the form:

$$lnNumParties_{cp} = \beta_0 + \beta_1 \times \Delta lnSalary_c + \beta_2 \times EP7_p + \beta_3 \times EP7_p \times \Delta lnSalary_c + \varepsilon_{cp} \quad (3)$$

where $p \in \{6, 7\}$. As Column (1) shows, $\beta_1 = -0.25$ ($p < 0.05$), which indicates that, in the cross-section, countries that paid higher salaries to their MEPs in EP6 had more parties field candidates for those positions. Coefficient β_2 is very close to zero, suggesting that in the absence of a salary change, there would have been no temporal trend in the number of parties fielding candidates to the European Parliament. Coefficient β_3 equals 0.194 ($p < 0.01$). Since the standard deviation of $lnNumParties$ in EP6 is 0.37,[22] β_3 implies that doubling the salary would increase log number of parties by about 36% of a standard deviation.

In Figure 2, we plot the change in $lnNumParties_c$ against $\Delta lnSalary_c$. As the Figure shows, there are two substantial outliers (Czech Republic and Italy), but excluding them does not substantially affect our estimates.

In Column (2) of Table 5 we add country by EP controls, and in Column (3) we add country fixed effects. The estimate of β_3 is very stable across the three specifications, though it is not statistical significant at conventional levels when we include country fixed effects ($p = 0.067$). Finally, we note

[20] The remainder is split between closed-list systems where citizens vote for parties and ordered structures where voters can either vote for party or for an individual on a party list, but a high proportion of votes is required to undo the party-mandated ordering of candidates.

[21] Readers familiar primarily with the political system of the United States should note that most European countries have a large number of politically active parties and some of those parties are at the margin where they might focus exclusively on national politics or might spend some of their resources vying for a greater role in European politics.

[22] Note that this is slightly different from the reported standard deviation in Table 1 for this variable , which includes observations from both EP6 and EP7.

that the coefficient on corruption is insignificant and unstable across the specifications.

The impact of salary on the number of parties that field a candidate suggests that increasing politicians' salaries provides the electorate with a broader choice of political platforms. As emphasized by the literature on the valuation of new goods (Bresnahan and Gordon 1997), this broader choice set is likely to increase welfare.[23] Since voters do not express their willingness to pay to have one candidate over another, we obviously cannot compute the increase in welfare in monetary terms. Using the data on vote shares, however, we can estimate the fraction of the electorate whose preferred choice is a new party whose participation was induced by higher salaries.[24] Specifically, for each country let $VoteShareGained_c$ be the overall vote share obtained by the parties present in elections for EP7 but absent in elections for EP6. Let $VoteShareLost_c$ be the overall vote share obtained by the parties present in elections for EP6 but absent in elections for EP7. We define $ShareElectorateImproved_c$ as $VoteShareGained_c$ minus $VoteShareLost_c$. If all parties that field a candidate in EP6 also do so in EP7, then $ShareElectorateImproved_c$ is a precise measure of the fraction of the electorate that prefers the change: $ShareElectorateImproved_c$ equals the vote share obtained by the newly introduced parties. However, when the set of parties in EP7 is not a superset of those in EP6 (as is the case in our data), $ShareElectorateImproved_c$ provides only a noisy measure of the fraction of the electorate that prefers the change. In the extreme case where the set of parties in EP6 is disjoint from the set of parties in EP7, $ShareElectorateImproved_c$ is zero even if the number of parties in EP7 is vastly greater than the number of parties in EP6. When we regress $ShareElectorateImproved_c$ on $\Delta lnSalary_c$, controlling for log GDP per capita and corruption, the coefficient on $\Delta lnSalary_c$ is small (1.88) and we can reject with 95% confidence that it is greater than 9.27.[25] This implies that doubling MEPs' salaries would provide a better candidate for at most 6 percent of the electorate. Subject to the aforementioned caveat about the interpretation of $ShareElectorateImproved_c$, this result suggests that raising salaries may have a limited effect on voter welfare through the channel of providing the electorate with new platforms they prefer over the existing ones. That said, it may be the case that the increase in the number of parties has other indirect beneficial effects. For instance, it could be that the presence of competing

[23] For a caveat, however, see Kamenica (2008).

[24] An alternative to using vote shares would be to focus on the number of seats captured by the parties whose participation was induced by higher salaries.

[25] Table with these results is available from the authors.

parties leads the existing parties to become less corrupt or more responsive to voter preferences.[26] Our data does not provide us with a way to explore these indirect effects.

Overall, our three measures of the extensive margin of labor supply, $ReRun_{ip}$, $PostVoteQuite_{ip}$, and $lnNumParties_{cp}$, suggest that the salary associated with a political office has a substantial impact on the number of candidates who are willing to hold that office. We next turn to the impact of salary on the type of individuals who end up holding office.

4.2 Quality of MEPs

The fact that higher wages induce more individuals to seek a political office does not by itself imply that the quality of elected officials will increase. In fact, as discussed in the introduction, there are several theoretical models that suggest a higher salary may lower the quality of candidates and elected politicians. In this subsection, we analyze the impact of the salary change on the quality of elected MEPs, proxied by the selectivity of the undergraduate institutions they attended. Many studies have found that students who attend more selective colleges have greater permanent income. For example, Kane (1998) shows that, in the United States, attending a college with a 100 point higher average SAT is associated with 3 to 7 percent higher earnings later in life.[27] Hence, MEPs who attended a more selective college are likely to be more productive workers, and as long as market skill is positively correlated with political skill, this would also mean they are more likely to be more effective politicians.

In Section 3, we describe the construction of the variable $FractionRankedCollege_{cp}$. This variable is meant to capture how the qualifications of MEPs from a given country change over time, rather than how qualifications of MEPs vary across countries in the European Union. In Table 6, we consider OLS specifications of the form:

$$FractionRankedCollege_{cp} = \beta_0 + \beta_1 \times \Delta lnSalary_c + \beta_2 \times EP7_p + \beta_3 \times EP7_p \times \Delta lnSalary_c + \varepsilon_{cp}. \quad (4)$$

In Columns (1) through (3), we simply drop the 10% of MEPs whose undergraduate institution we

[26] This is analogous to standard arguments in industrial organization. Even if few consumers buy products from a new entrant, the entry can increase consumer welfare by lowering the prices of incumbent firms.

[27] Most of the literature on this topic strives to disentangle the causal impact of college selectivity on future earnings from selection effects (e.g., Dale and Krueger 2002). For our purposes, however, it does not matter whether college selectivity causes or simply predicts high permanent income.

could not identify. In Column (1), coefficient β_1 is imprecisely estimated. Coefficient β_2 is positive and significant ($p < 0.01$) which means that, net of the impact of salary change, the quality of MEPs in EP7 was greater than in EP6. Our main coefficient of interest, β_3, equals -0.07. This estimate implies that doubling an MEPs salary reduces the likelihood than an elected MEP attended a top university by 4.9 percentage points. Given that just under 30% of MEPs overall attend a top university, this is a reduction of about 16 percent. In Column (2) we include country by EP controls. The coefficient β_3 is unaffected. Column (3) includes country fixed effects. This makes the coefficient less precisely estimated, and thus only marginally significant$(p = 0.055)$.

Finally, in Columns (4) through (6) we redefine our outcome variable $FractionRankedCollege_{cp}$ by including all MEPs and coding those with missing education data as having gone to an unranked school. This alternative specification slightly strengthens our results.

Overall, the evidence based on the changes of the selectivity of colleges attended by elected MEPs suggests that increasing salaries has an adverse selection effect on politicians' quality. While we cannot pinpoint the mechanism behind this negative selection effect in our data, our results are consistent with the theoretical results that higher wages may lower candidate quality. Thus, in the context of the European Parliament, this negative selection needs to be weighed against the benefits of increased competition suggested by the results in the earlier subsection.[28]

4.3 Intensive margin of labor supply

In this subsection, we study the effect of pecuniary and non-pecuniary incentives on the intensive margin of labor supply. Our three measures, $FractionAbsent_{it}$, $FractionSignedIn_{it}$, and $FractionSignedInAbsent_{it}$, are defined in Section 3. We begin with our primary measure of the intensive margin of labor supply, $FractionAbsent_{it}$, the fraction of sittings in year t during which an MEP cast no votes (abstentions are included as votes cast). In Table 7, we consider OLS

[28]Since our education measures capture only the change in MEP quality over time, we cannot credibly assess its correlation with corruption, given that most of the relevant variation in corruption is cross-sectional. The coefficients on corruption in Columns (3) and (6), which capture how changes in corruption impact changes in MEP quality within a country, suggest a small and imprecisely measured impact of corruption on MEP quality.

specifications of the form:

$$\begin{aligned} FractionAbsent_{it} &= \beta_0 + \beta_1 \times \Delta lnSalary_c + \beta_2 \times EP6Post_t \times \Delta lnSalary_c \\ &\quad + \beta_3 \times EP7_p \times \Delta lnSalary_c + I_t + \varepsilon_{it} \end{aligned} \tag{5}$$

where $EP6Post_t$ is an indicator variable equal to 1 if year t is during EP6 and begins after the salary-harmonization vote in June 2005.[29] Term I_t designates year fixed effects. The omitted indicator variable for time regimes is $EP6Pre_t$ which is equal to 1 for the first year of EP6, before the salary vote took place. Coefficient β_1 captures any cross-sectional relationship between pre-harmonization salaries and the tendency of MEPs to be absent. All of the estimates of β_1 are negative, but in each case, the coefficient is imprecisely estimated and thus statistically insignificant. Coefficient β_2 is negative and stable across the specifications. It is significant at the 1% level, except when we include country-fixed effects in which case it falls shy of conventional significance. A negative of value of β_2 implies that, after the salary change was voted on but before it went into effect, MEPs who were scheduled to get a raise (conditional on being reelected) began attending the voting sessions more frequently. While this might suggest that financial concerns impact reelection motives, we find that this pattern is driven by MEPs who choose not to stand for reelection, which is inconsistent with such an interpretation.

Moreover, there is no evidence that the actual salary change affected absenteeism. The point estimates of coefficient β_3 are positive and imprecisely estimated. We can reject the null that doubling an MEPs salary reduces absenteeism by more than 1 percent. Hence, raising salaries does not seem effective in increasing the effort of politicians while in office.

We now turn to the impact of salary on $FractionSignedIn_{it}$, the fraction of days an MEP signed the daily register in year t. We include this specification primarily so we can relate our analysis to the existing literature; as we mentioned earlier, this outcome measure is difficult to interpret since it conflates effort (showing up to work) and greed (signing the register even if you

[29] Recall that t indexes "parliament years" that begin on July 1st and end on June 30th.

are not going to work). In Table 8, we consider OLS specifications of the form:

$$\begin{aligned} FractionSignedIn_{it} &= \beta_0 + \beta_1 \times \Delta lnSalary_c + \beta_2 \times EP6Post_p \times \Delta lnSalary_c \\ &\quad + \beta_3 \times EP7_p \times \Delta lnSalary_c + I_t + \varepsilon_{it}. \end{aligned} \tag{6}$$

In Column (1), we report the coefficients from the regression in Equation (6). Column (2) adds country by time period controls. Column (3) adds MEP by time period controls. Column (4) adds country fixed effects. In a concurrent paper, Mocan and Altindag (2011) also explore how salary changes induced by the reform in the European Parliament affected the tendency of MEPs to sign the register. Our specification is somewhat different from theirs, but it reveals roughly the same pattern. Like Mocan and Altindag (2011), we find a small negative point estimate on β_3, consistent with the salary increase reducing the likelihood that an MEP signs the register. However, we find that our estimates are not significant at conventional levels ($p = 0.13$, for example, Column (2)). This may seem puzzling since we are utilizing roughly the same data and the same source of variation in salaries. We suspect that the primary reason for this difference lies in the computation of standard errors. Since the salary change was implemented at a country level, throughout the paper we cluster our standard errors by country. Mocan and Altindag (2011) run their regressions at a daily level and cluster the standard errors by MEP. If we cluster our standard errors by MEP, our estimates also become statistically significant ($p < 0.01$).

Finally, we examine the behavior that was at the root of the scandals we discussed in the introduction: the tendency of MEPs to sign the register and then immediately leave the building. Recall that $FractionSignedInAbsent_{it}$ is defined as fraction of those sittings in year t when MEP i signed the register but cast zero votes. In Table 9, we consider an OLS specification of the form

$$\begin{aligned} FractionSignedInAbsent_{it} &= \beta_0 + \beta_1 \times \Delta lnSalary_c + \beta_2 \times EP6Post_p \times \Delta lnSalary_c \\ &\quad + \beta_3 \times EP7_p \times \Delta lnSalary_c + I_t + \varepsilon_{it}. \end{aligned} \tag{7}$$

As seen in Table 9, none of the coefficients of interest, β_1 through β_3, are significant in any specification. From the estimate of β_3 in Column (1), we can reject the null that doubling an MEP's

salary reduces absenteeism conditional on signing the register by more than 7.4 percent.

Politicians' motivations to exert effort while in office may be dominated by non-pecuniary considerations. In particular, the desire to perform one's public duty combined with the fear of social sanction may prevent shirking. We follow the approach of Fisman and Miguel (2007) and use corruption as a proxy for a country's social norms. Looking back at Tables 7-9, we observe that home-country corruption is consistently associated with lower attendance: MEPs from more corrupt countries are more likely to be absent from roll-call votes; less likely to sign the daily register; and conditional on signing the register, more likely to be absent. The estimates are large in magnitude. For example, the point estimate on corruption in Table 9 (Column 2) implies that a one standard deviation increase in the corruption level of an MEP's home-country increases $FractionSignedInAbsent_{it}$ by more than 20 percent.

It is worth noting that our results on corruption are identified from cross-sectional variation; unsurprisingly, when we include country fixed effects, the impact of corruption is less consistent in magnitude and significance. In contrast, we take advantage of a plausibly exogenous salary change to identify the sensitivity of MEP behavior to financial incentives. Hence, our evidence on the effects of social norms may be more vulnerable to the omitted variable bias. That said, the coefficient on corruption remains very stable as we include additional covariates. This implies that, if the observable characteristics in our data are representative of the unobservables, the omitted variable bias is unlikely to drive our results (Altonji, Elder, and Taber 2005).

4.4 Intensive margin of labor supply and election outcomes

In our final set of results, we turn to the relationship between absenteeism and the likelihood that an MEP gets reelected conditional on running for reelection. In Table 10, we consider a linear probability model:

$$ReElected_{ip} = \beta_0 + \beta_1 \times AttendanceRecord_{p-1} + \varepsilon_{ip} \tag{8}$$

The sample is the set of all MEPs who served in EP5 and ran for reelection for EP6 and MEPs who served in EP6 and ran for reelection for EP7. Variable $ReElected_{ip}$ is an indicator variable

equal to 1 if the MEP was elected to parliament p. We consider the same three measures of $AttendanceRecord_{p-1}$ as in the previous subsection: $FractionAbsent_{ip-1}$, $FractionSignedIn_{ip-1}$, and $FractionSignedInAbsent_{ip-1}$. These three variables are simply the averages of $FractionAbsent_{it}$, $FractionSignedIn_{it}$, and $FractionSignedInAbsent_{it}$, respectively, over all days in parliament $p-1$. In Columns (1), (3), and (5), we report the coefficients from the regressions in Equation (8). In Columns (2), (4), and (6), we add controls for $EP7$, MEP by EP controls, and country fixed effects. Across all specifications, we find that MEPs with better attendance records are significantly more likely to be reelected. The only exception is the estimate in Column (4) where the point estimate on $FractionSignedIn_{ip-1}$ is not statistically significant. Of course, the results in Table 10 should be interpreted with considerable caution since we are looking at the reelection results conditional on the fact that the MEP chose to run for reelection. With that caveat in mind, these results provide suggestive evidence that voters prefer MEPs who exert more effort while in office.

If this relationship is assumed to be causal, it becomes more difficult to reconcile our two earlier findings: higher salaries make the office of MEP more desirable but do not decrease shirking. It may be, however, that the increased electoral incentive is insufficient to induce higher effort or that MEPs are myopic in their behavior between elections.

4.5 Endogeneity concerns

The validity of the analysis in the preceding subsections rests on the assumption that the timing of the change in salary regime is uncorrelated with a change in other factors that differentially affect MEPs from low-salary and high-salary countries. One concern would be that the salary equalization proposal got passed precisely when the MEPs from low-salary countries were more likely to run for reelection and thus particularly motivated to raise future salaries. There are two sets of facts that alleviate this concern. First, this explanation could not account for the increased number of parties that field a candidate when salaries increase. If anything, facing more motivated incumbents would be a deterrent that would lead to fewer challengers. Second, as we report in Table 11, whether an MEP voted for or against salary harmonization is uncorrelated with whether the regime change would raise or lower her salary. Specifically, we let $VoteForSalaryChange_i$ be an indicator variable for whether MEP i voted for salary harmonization and we consider a linear

probability model:

$$VotedForSalaryChange_i = \beta_0 + \beta_1 \times \Delta lnSalary_c + \varepsilon_i. \quad (9)$$

Whether we consider this baseline specification (Column 1), add MEP-level controls (Column 2), or also country-level controls (Column 3), the estimate of β_1 is small and insignificant. Similarly, if we add $VoteForSalaryChange_i$ as a control to any of the regressions considered above, the results are unchanged.

5 Conclusion

We provide evidence on the impact of pecuniary and non-pecuniary incentives on both the extensive and the intensive margin of politicians' labor supply. We take advantage of a unique set of circumstances – a salary reform in the European Parliament that allows for a credible identification of financial motives, and the cross-country nature of the parliament itself, which provides variation in the norms of politicians' home communities. We also introduce an innovative measure of politicians' shirking, based on signing the attendance register to collect a daily allowance, but not participating in session votes.

Collectively, our results imply that pecuniary motives matter primarily for the decision to run for office (the extensive margin of labor supply), while non-pecuniary motives loom larger for effort exerted while in office (the intensive margin of labor supply). We also find that increasing salaries lowers the quality of elected politicians, as measured by the selectivity of their undergraduate institutions.

There are many questions raised by these results. Most obviously, it would be important to know the extent to which our set of findings would carry over to politicians in other places or other levels of government. Furthermore, while we find that home-country social norms influence the intensive margin of labor supply, we are unable to distinguish whether these norms operate through politicians' internal motivations or through the social pressure from the electorate. By carefully considering how the media coverage of scandals affects MEPs' behavior, one might better understand the role of these two channels. Finally, it would be important to understand whether po-

litical institutions such as term limits and electoral rules interact with pecuniary and non-pecuniary motives in influencing politicians' behavior.

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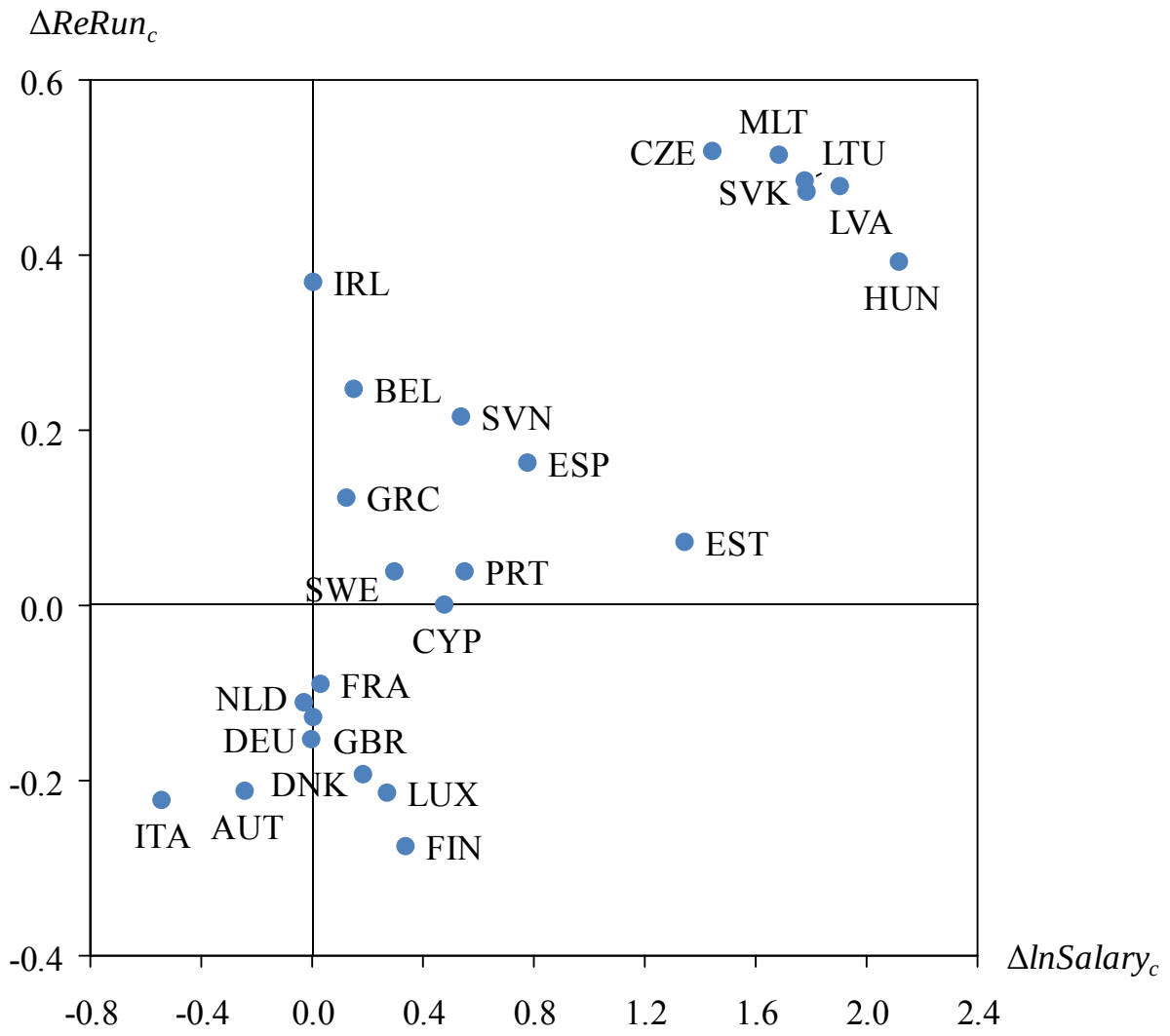
Figures and Tables

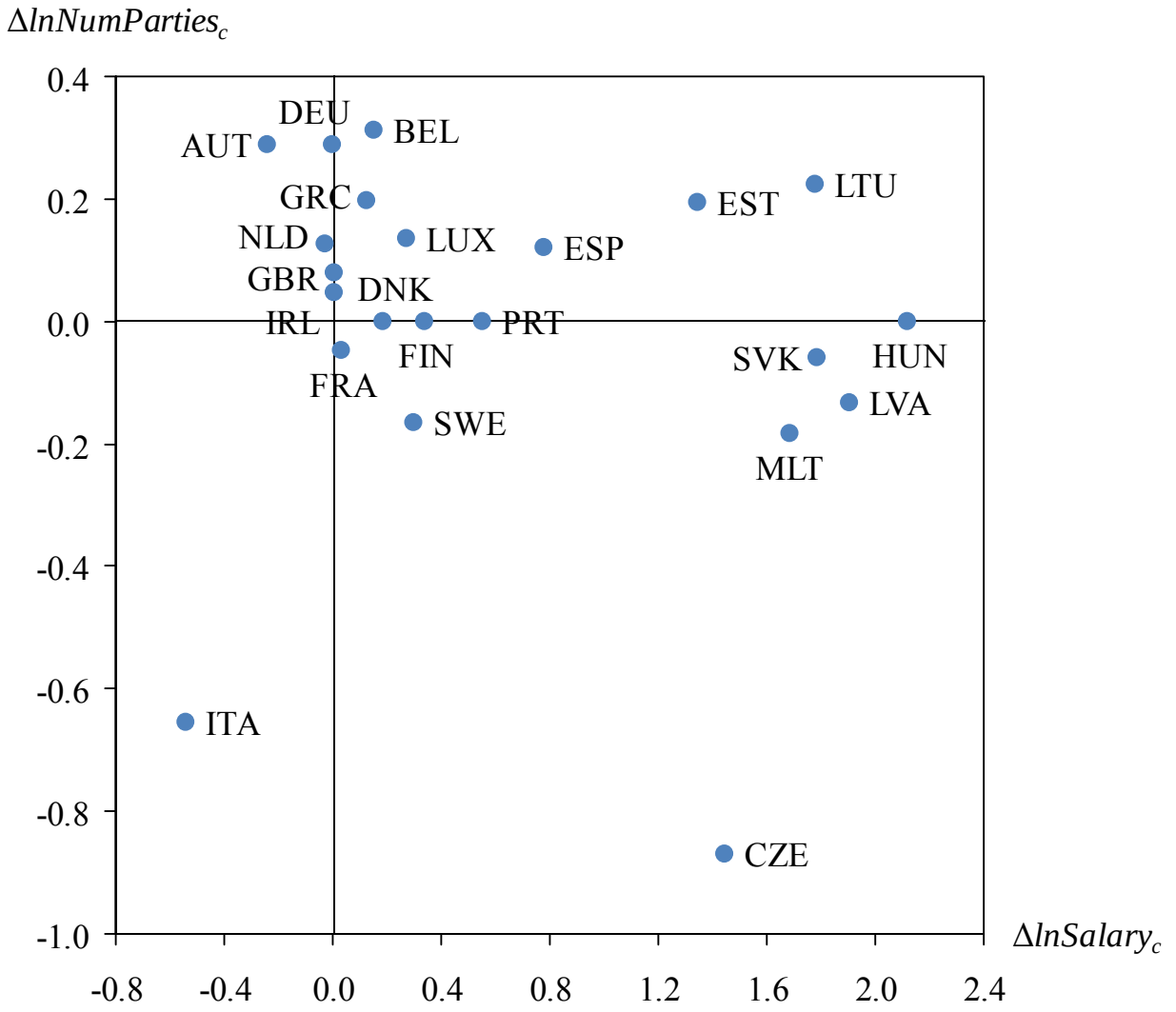
FIGURE I
Change in Fraction of MEPs Who Ran for Reelection vs. Change in Salary



This figure plots $\Delta ReRun_c$ vs. $\Delta lnSalary_c$ for each country. $ReRun_{ip}$ is an indicator variable for whether MEP i served in parliament $p-1$ and ran for reelection for parliament p. $ReRun_{cp}$ is the fraction of MEPs who ran for reelection for parliament p, which is calculated as the mean of $ReRun_{ip}$ over all MEPs from country c. $\Delta ReRun_c$ is defined as $ReRun_{cp}$ for $p = 7$ minus $ReRun_{cp}$ for $p = 6$. $\Delta lnSalary_c$ is defined as the logarithm of 84,000 (the post-change uniform salary level) minus the logarithm of the salary for MEPs from country c as of January 2007.

Countries are labeled with their ISO codes: Austria (AUT), Belgium (BEL), Cyprus (CYP), Czech Republic (CZE), Denmark (DNK), Estonia (EST), Finland (FIN), France (FRA), Germany (DEU), Greece (GRC), Hungary (HUN), Ireland (IRL), Italy (ITA), Latvia (LVA), Lithuania (LTU), Luxembourg (LUX), Malta (MLT), Netherlands (NLD), Portugal (PRT), Slovakia (SVK), Slovenia (SVN), Spain (ESP), Sweden (SWE), and United Kingdom (GBR).

FIGURE II
Change in Number of Parties Fielding Candidates vs. Change in Salary



This figure plots $\Delta lnNumParties_c$ vs. $\Delta lnSalary_c$ for each country. $lnNumParties_{cp}$ is defined as the logarithm of the number of parties in country c that received at least 0.5% of the vote for candidacy to parliament p. $\Delta lnNumParties_c$ is defined as $lnNumParties_{cp}$ for $p = 7$ minus $lnNumParties_{cp}$ for $p = 6$. $\Delta lnSalary_c$ is defined as the logarithm of 84,000 (the post-change uniform salary level) minus the logarithm of the salary for MEPs from country c as of January 2007.

Countries are labeled with their ISO codes: Austria (AUT), Belgium (BEL), Czech Republic (CZE), Denmark (DNK), Estonia (EST), Finland (FIN), France (FRA), Germany (DEU), Greece (GRC), Hungary (HUN), Ireland (IRL), Italy (ITA), Latvia (LVA), Lithuania (LTU), Luxembourg (LUX), Malta (MLT), Netherlands (NLD), Portugal (PRT), Slovakia (SVK), Spain (ESP), Sweden (SWE), and United Kingdom (GBR).

TABLE I
Summary Statistics

	Mean	Std. Dev.	Min	Max	Obs.
A. MEP-Year Variables					
Age_{it}	52.61	10.09	21	99	9,335
$AgeSq_{it}/100$	28.70	10.58	4.41	98.01	9,335
$Tenure_{it}$	5.583	5.877	0	31	9,335
$FractionAbsent_{it}$	0.266	0.265	0	1	9,335
$FractionSignedIn_{it}$	0.797	0.265	0	1	9,335
$FractionSignedInAbsent_{it}$	0.087	0.116	0	1	8,751
B. Country-Year Variables					
$lnGDPPC_{ct}$	9.672	0.686	7.724	10.944	315
$Corruption_{ct}$	–1.324	0.719	–2.467	0.205	315
C. MEP-Parliament Variables					
$ReRun_{ip}$	0.572	0.495	0	1	1,592
$ReElected_{ip}$	0.723	0.448	0	1	910
$PostVoteQuit_{ip}$	0.130	0.337	0	1	730
D. Country-Parliament Variables					
$lnNumParties_{cp}$	2.120	0.348	1.099	2.996	49
$FractionRankedCollege_{cp}$	0.333	0.252	0	1	49
E. Country Variables					
$\Delta lnSalary_{c}$	0.645	0.767	–0.540	2.120	25

Year t is defined as beginning on July 1, 1999 + t and ending on June 30, 2000 + t to match the annual sessions of the parliament. The 5th, 6th, and 7th parliaments were elected in 1999, 2004, and 2009, respectively. EPn will be used to refer to the n^{th} parliament.

A. MEP-Year Variables. Age_{it} and $AgeSq_{it}/100$ are based on the age of MEP i in year t. $AgeSq_{it}/100$ is the square of Age_{it} divided by 100. $Tenure_{it}$ is the number of years MEP i has been in office in year t; $lnTenure_{it}$, used in later tables, is the logarithm of ($Tenure_{it}$ + 1). $FractionAbsent_{it}$ is the fraction of plenary session days in year t during which MEP i did not participate in any of the roll-call votes (abstentions are coded as participation in votes). $FractionSignedIn_{it}$ is the fraction of plenary session days in year t during which MEP i signed the daily register. $FractionSignedInAbsent_{it}$ is the fraction of plenary session days in year t during which MEP i signed the register but did not participate in any of the roll-call votes.

B. Country-Year Variables. $lnGDPPC_{ct}$ is the logarithm of the GDP per capita in constant 2000 U.S. dollars in country *c* and year *t* from the World Development Indicators. $Corruption_{ct}$ is the measure of corruption in country *c* and year *t* from Kaufmann, Kraay, and Mastruzzi (2010), a composite corruption index with a mean value of zero and a standard deviation of one in the global sample. The sign of the original measure is reversed so that a higher value indicates greater corruption.

C. MEP-Parliament Variables. For EP6 and EP7, $ReRun_{ip}$ is an indicator variable that equals 1 if MEP *i* served in parliament $p - 1$ and ran for reelection for parliament *p*. For EP6 and EP7, $ReElected_{ip}$ is an indicator variable for whether MEP *i* served in parliament $p - 1$ and was reelected to parliament *p*. For EP5 and EP6, $PostVoteQuit_{ip}$ is an indicator variable that equals 1 if MEP *i* served in parliament *p* and quit before completing the parliamentary term at some point after June 23rd of the second calendar year of parliament *p*. For $p = 6$, the variable indicates whether the MEP quit the parliament at some point after the vote on the salary change. For $p = 5$, the variable indicates whether MEP *i* quit the parliament during the same segment of the electoral cycle but before the salary change had been introduced.

D. Country-Parliament Variables. For EP6 and EP7, $lnNumParties_{cp}$ is defined as the logarithm of the number of parties in country *c* that fielded a candidate and received at least 0.5% of the vote for candidacy to parliament *p*. For EP6 and EP7, $FractionRankedCollege_{cp}$ is the fraction of MEPs from country *c* in parliament *p* who attended a college ranked in the top 500 by the 2010 Academic Ranking of World Universities.

E. Country Variables. $\Delta lnSalary_c$ is defined as the logarithm of 84,000 (the post-change uniform salary level) minus the logarithm of the salary for MEPs from country *c* as of January 2007 (as reported in Table II).

TABLE II
Gross Annual Salaries of MEPs by Country

Country	Yearly Salary (€)	Country	Yearly Salary (€)
Austria	110,670	Latvia	15,572
Belgium	84,298	Lithuania	14,604
Bulgaria	9,276	Luxembourg	72,832
Cyprus	77,173	Malta	15,534
Czech Republic	26,923	Netherlands	90,348
Denmark	72,412	Poland	32,420
Estonia	26,659	Portugal	49,439
Finland	64,800	Romania	20,952
France	82,704	Slovakia	10,512
Germany	84,108	Slovenia	52,615
Greece	76,941	Spain	40,861
Hungary	10,512	Sweden	62,088
Ireland	93,493	United Kingdom	87,358
Italy	134,291		

Yearly salary, in € before tax, from Corbett, Jacobs, and Shakleton (2007). Figures are from January 2007, except for Cyprus (2004) and Germany, France, Latvia, Slovenia, and Sweden (2006).

TABLE III
Effect of Salary Change on Willingness of Incumbent MEPs to Seek Reelection
Dependent variable: $ReRun_{ip}$

	(1)	(2)	(3)	(4)
$\Delta lnSalary_c$	–0.1793**	–0.1447*	–0.1530*	
	(0.0403)	(0.0635)	(0.0608)	
$EP7_p$	–0.0893**	–0.0866**	–0.0715**	–0.0822**
	(0.0219)	(0.0239)	(0.0224)	(0.0244)
$EP7_p \times \Delta lnSalary_c$	0.3046**	0.3194**	0.3351**	0.3248**
	(0.0275)	(0.0338)	(0.0331)	(0.0413)
$lnGDPPC_{cp}$		0.0028	0.0505	0.1257
		(0.0890)	(0.0898)	(0.2953)
$Corruption_{cp}$		–0.1052	–0.0801	0.1938
		(0.0541)	(0.0524)	(0.0998)
Age_{ip}			0.0416**	0.0431**
			(0.0108)	(0.0110)
$AgeSq_{ip}/100$			–0.0455**	–0.0464**
			(0.0109)	(0.0111)
$lnTenure_{ip}$			–0.0227	–0.0409
			(0.0207)	(0.0269)
Country Fixed Effects	No	No	No	Yes
Observations	1,538	1,538	1,538	1,538
R^2	0.043	0.058	0.093	0.128

Linear probability model; robust standard errors clustered by country in parentheses. The level of observation is MEP-Parliament for EP6 and EP7. The sample consists of MEPs who joined EP6 before the vote on salary change in 2005. The dependent variable in all regressions is $ReRun_{ip}$, an indicator variable that equals 1 if MEP i served in parliament $p-1$ and ran for reelection for parliament p. $\Delta lnSalary_c$ is defined as the logarithm of 84,000 (the post-change uniform salary level) minus the logarithm of the salary for MEPs from country c as of January 2007. $EP7_p$ is an indicator variable for whether $p = 7$. $lnGDPPC_{cp}$, $Corruption_{cp}$, Age_{ip}, $AgeSq_{ip}/100$, and $lnTenure_{ip}$ are measured in the last year of parliament $p-1$ and are as defined in Table I. * significant at 5 percent; ** significant at 1 percent.

TABLE IV
Effect of Salary Change on MEPs Quitting Before Completing Term After Vote
Dependent variable: $PostVoteQuit_{ip}$

	(1)	(2)	(3)	(4)
$\Delta lnSalary_c$	0.0778*	0.1260**	0.1317**	
	(0.0346)	(0.0385)	(0.0381)	
$EP6_p$	0.0658*	0.0602**	0.0606**	0.0299
	(0.0280)	(0.0206)	(0.0210)	(0.0354)
$EP6_p \times \Delta lnSalary_c$	–0.1423**	–0.2080**	–0.2143**	–0.1761**
	(0.0189)	(0.0432)	(0.0418)	(0.0350)
$lnGDPPC_{cp}$		0.0428	0.0513	0.7375
		(0.0565)	(0.0573)	(0.6436)
$Corruption_{cp}$		0.1003**	0.1105**	0.4124**
		(0.0315)	(0.0307)	(0.0952)
Age_{ip}			–0.0135	–0.0124
			(0.0093)	(0.0092)
$AgeSq_{ip}/100$			0.0099	0.0088
			(0.0087)	(0.0086)
$lnTenure_{ip}$			0.0175	0.0316
			(0.0138)	(0.0174)
Country Fixed Effects	No	No	No	Yes
Observations	1,376	1,376	1,376	1,376
R^2	0.017	0.039	0.047	0.075

Linear probability model; robust standard errors clustered by country in parentheses. The level of observation is MEP-Parliament for EP5 and EP6. The dependent variable in all regressions is $PostVoteQuit_{ip}$, an indicator variable that equals 1 if MEP i quit her job before completing the parliamentary term at some point after June 23rd of the second calendar year of parliament p. For $p = 6$, the variable indicates whether the MEP quit the parliament at some point after the vote on the salary change. For $p = 5$, the variable indicates whether MEP i quit the parliament during the same segment of the electoral cycle but before the salary change had been introduced. $\Delta lnSalary_c$ is defined as the logarithm of 84,000 (the post-change uniform salary level) minus the logarithm of the salary for MEPs from country c as of January 2007. $EP6_p$ is an indicator variable for whether $p = 6$. $lnGDPPC_{cp}$, $Corruption_{cp}$, Age_{ip}, $AgeSq_{ip}/100$, and $lnTenure_{ip}$ are measured in the last year of parliament $p - 1$ and are as defined in Table I. * significant at 5 percent; ** significant at 1 percent.

TABLE V
Effect of Salary Change on Number of Parties Fielding Candidates
Dependent variable: $lnNumParties_{cp}$

	(1)	(2)	(3)
$\Delta lnSalary_c$	–0.2528*	–0.2527	
	(0.0997)	(0.2026)	
$EP7_p$	–0.0053	–0.0331	0.0389
	(0.0537)	(0.0708)	(0.1157)
$EP7_p \times \Delta lnSalary_c$	0.1936**	0.1932**	0.1987
	(0.0593)	(0.0666)	(0.1037)
$lnGDPPC_{cp}$		0.0600	–0.2114
		(0.3030)	(1.0281)
$Corruption_{cp}$		0.1095	–0.1452
		(0.1463)	(0.3904)
Country Fixed Effects	No	No	Yes
Observations	49	49	49
R^2	0.167	0.195	0.931

OLS specification; robust standard errors clustered by country in parentheses. The level of observation is Country-Parliament for EP6 and EP7. The dependent variable in all regressions is $lnNumParties_{cp}$, the logarithm of the number of parties in country c that fielded a candidate and received at least 0.5% of the vote for candidacy to parliament p. $\Delta lnSalary_c$ is defined as the logarithm of 84,000 (the post-change uniform salary level) minus the logarithm of the salary for MEPs from country c as of January 2007. $EP7_p$ is an indicator variable for whether $p = 7$. $lnGDPPC_{cp}$ and $Corruption_{cp}$ are measured in the last year of parliament $p - 1$ and are as defined in Table I. * significant at 5 percent; ** significant at 1 percent.

TABLE VI
Effect of Salary Change on MEP Selection as Measured By College Selectivity
Dependent variable: $FractionRankedCollege_{cp}$

MEPs Missing College Data:	Dropped			Coded as Unranked		
	(1)	(2)	(3)	(4)	(5)	(6)
$\Delta lnSalary_c$	–0.0243	0.0113		–0.0075	0.0221	
	(0.0567)	(0.0845)		(0.0512)	(0.0750)	
$EP7_p$	0.1255**	0.1422**	0.1242	0.1533**	0.1705**	0.1496*
	(0.0216)	(0.0282)	(0.0638)	(0.0223)	(0.0255)	(0.0707)
$EP7_p \times \Delta lnSalary_c$	–0.0701**	–0.0708**	–0.0918	–0.0847**	–0.0855**	–0.1101*
	(0.0230)	(0.0208)	(0.0455)	(0.0207)	(0.0189)	(0.0445)
$lnGDPPC_{cp}$		0.0022	0.3526		–0.0082	0.3737
		(0.1506)	(0.4061)		(0.1356)	(0.3988)
$Corruption_{cp}$		–0.0929	–0.0446		–0.0956	–0.0393
		(0.0972)	(0.2338)		(0.0844)	(0.2487)
Country Fixed Effects	No	No	Yes	No	No	Yes
Observations	49	49	49	49	49	49
R^2	0.114	0.180	0.946	0.159	0.231	0.941

OLS specifications; robust standard errors clustered by country in parentheses. The level of observation is Country-Parliament for EP6 and EP7. The dependent variable in all regressions is $FractionRankedCollege_{cp}$, the fraction of MEPs from country c in parliament p who attended a school ranked in the top 500 by the 2010 Academic Ranking of World Universities. In Columns (1)-(3), MEPs that are missing college information are dropped from the sample. In Columns (4)-(6), MEPs that are missing college information are assumed to not have attended ranked schools, and therefore, are coded as unranked. $\Delta lnSalary_c$ is defined as the logarithm of 84,000 (the post-change uniform salary level) minus the logarithm of the salary for MEPs from country c as of January 2007. $EP7_p$ is an indicator variable for whether $p = 7$. $lnGDPPC_{cp}$ and $Corruption_{cp}$ are measured in the last year of parliament $p - 1$ and are as defined in Table I. * significant at 5 percent; ** significant at 1 percent.

TABLE VII
Effect of Salary Change on Fraction of Sessions an MEP is Absent
Dependent variable: $FractionAbsent_{it}$

	(1)	(2)	(3)	(4)
$\Delta lnSalary_c$	–0.0379	–0.0252	–0.0252	
	(0.0298)	(0.0323)	(0.0320)	
$EP6Post_t \times \Delta lnSalary_c$	–0.0218*	–0.0276**	–0.0286**	–0.0300
	(0.0093)	(0.0090)	(0.0084)	(0.0151)
$EP7_p \times \Delta lnSalary_c$	0.0477	0.0480	0.0472	0.0332
	(0.0266)	(0.0306)	(0.0311)	(0.0228)
$lnGDPPC_{ct}$		0.0564	0.0570	0.1511
		(0.0426)	(0.0433)	(0.1474)
$Corruption_{ct}$		0.0804**	0.0835**	–0.0450
		(0.0236)	(0.0231)	(0.0588)
Age_{it}			–0.0087	–0.0069
			(0.0047)	(0.0045)
$AgeSq_{it}/100$			0.0074	0.0056
			(0.0045)	(0.0043)
$lnTenure_{it}$			0.0077	0.0118*
			(0.0042)	(0.0043)
Year Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	No	No	No	Yes
Observations	5,027	5,027	5,027	5,027
R^2	0.084	0.111	0.115	0.142

OLS specification; robust standard errors clustered by country in parentheses. The level of observation is MEP-Year for EP6 and EP7. The dependent variable in all regressions is $FractionAbsent_{it}$, the fraction of plenary session days in year t during which MEP i did not participate in any of the roll-call votes. $\Delta lnSalary_c$ is defined as the logarithm of 84,000 (the post-change uniform salary level) minus the logarithm of the salary for MEPs from country c as of January 2007. $EP6Post_t$ is an indicator variable that equals 1 if year t is during EP6 and begins after the vote on the salary change in June 2005. $EP7_p$ is an indicator variable for whether $p = 7$. The omitted indicator variable for time regimes is $EP6Pre_t$, which equals 1 for the first year of EP6, before the vote on the salary change. $lnGDPPC_{ct}$, $Corruption_{ct}$, Age_{it}, $AgeSq_{it}/100$, and $lnTenure_{it}$ are as defined in Table I. * significant at 5 percent; ** significant at 1 percent.

TABLE VIII
Effect of Salary Change on Fraction of Sessions an MEP Signs Daily Register
Dependent variable: $FractionSignedIn_{it}$

	(1)	(2)	(3)	(4)
$\Delta lnSalary_c$	0.0350	0.0183	0.0190	
	(0.0227)	(0.0283)	(0.0272)	
$EP6Post_t \times \Delta lnSalary_c$	0.0278	0.0333*	0.0338*	0.0340
	(0.0138)	(0.0133)	(0.0129)	(0.0183)
$EP7_p \times \Delta lnSalary_c$	–0.0343	–0.0340	–0.0344	–0.0259
	(0.0185)	(0.0216)	(0.0219)	(0.0178)
$lnGDPPC_{ct}$		–0.0570	–0.0587	–0.0980
		(0.0365)	(0.0368)	(0.1491)
$Corruption_{ct}$		–0.0700**	–0.0731**	0.0049
		(0.0227)	(0.0218)	(0.0537)
Age_{it}			0.0104*	0.0083
			(0.0044)	(0.0042)
$AgeSq_{it}/100$			–0.0089*	–0.0070
			(0.0043)	(0.0041)
$lnTenure_{it}$			–0.0056	–0.0094*
			(0.0036)	(0.0041)
Year Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	No	No	No	Yes
Observations	5,027	5,027	5,027	5,027
R^2	0.083	0.101	0.107	0.129

OLS specification; robust standard errors clustered by country in parentheses. The level of observation is MEP-Year for EP6 and EP7. The dependent variable in all regressions is $FractionSignedIn_{it}$, the fraction of plenary session days in year t during which MEP i signed the daily register. $\Delta lnSalary_c$ is defined as the logarithm of 84,000 (the post-change uniform salary level) minus the logarithm of the salary for MEPs from country c as of January 2007. $EP6Post_t$ is an indicator variable that equals 1 if year t is during EP6 and begins after the vote on the salary change in June 2005. $EP7_p$ is an indicator variable for whether $p = 7$. The omitted indicator variable for time regimes is $EP6Pre_t$, which equals 1 for the first year of EP6, before the vote on the salary change. $lnGDPPC_{ct}$, $Corruption_{ct}$, Age_{it}, $AgeSq_{it}/100$, and $lnTenure_{it}$ are as defined in Table I. * significant at 5 percent; ** significant at 1 percent.

TABLE IX
Effect of Salary Change on Fraction of Sessions an MEP Signs Daily Register and is Absent
Dependent variable: $FractionSignedInAbsent_{it}$

	(1)	(2)	(3)	(4)
$\Delta lnSalary_c$	–0.0090	–0.0120	–0.0117	
	(0.0133)	(0.0132)	(0.0133)	
$EP6Post_t \times \Delta lnSalary_c$	0.00193	–0.00057	–0.00105	–0.00249
	(0.00397)	(0.00424)	(0.00438)	(0.00505)
$EP7_p \times \Delta lnSalary_c$	0.0211	0.0220	0.0207	0.0125
	(0.0145)	(0.0160)	(0.0161)	(0.0124)
$lnGDPPC_{ct}$		0.0096	0.0076	0.0805
		(0.0174)	(0.0172)	(0.0711)
$Corruption_{ct}$		0.0280**	0.0280**	–0.0450
		(0.0073)	(0.0072)	(0.0232)
Age_{it}			–0.00037	–0.00035
			(0.00168)	(0.00169)
$AgeSq_{it}/100$			0.00043	0.00031
			(0.00161)	(0.00164)
$lnTenure_{it}$			0.00331	0.00420
			(0.00245)	(0.00226)
Year Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	No	No	No	Yes
Observations	4,844	4,844	4,844	4,844
R^2	0.048	0.076	0.078	0.113

OLS specification; robust standard errors clustered by country in parentheses. The level of observation is MEP-Year for EP6 and EP7. The dependent variable in all regressions is $FractionSignedInAbsent_{it}$, the fraction of plenary session days in year t during which MEP i signed the register but did not participate in any of the roll-call votes. $\Delta lnSalary_c$ is defined as the logarithm of 84,000 (the post-change uniform salary level) minus the logarithm of the salary for MEPs from country c as of January 2007. $EP6Post_t$ is an indicator variable that equals 1 if year t is during EP6 and begins after the vote on the salary change in June 2005. $EP7_p$ is an indicator variable for whether $p = 7$. The omitted indicator variable for time regimes is $EP6Pre_t$, which equals 1 for the first year of EP6, before the vote on the salary change. $lnGDPPC_{ct}$, $Corruption_{ct}$, Age_{it}, $AgeSq_{it}/100$, and $lnTenure_{it}$ are as defined in Table I. * significant at 5 percent; ** significant at 1 percent.

TABLE X
Effect of Absenteeism on Likelihood MEP Is Reelected
Dependent variable: $ReElected_{ip}$

	(1)	(2)	(3)	(4)	(5)	(6)
$FractionAbsent_{ip-1}$	–0.3727**	–0.2394*				
	(0.1193)	(0.1099)				
$FractionSignedIn_{ip-1}$			0.3713**	0.2124		
			(0.1310)	(0.1286)		
$FractionSignedInAbsent_{ip-1}$					–0.4995*	–0.3562*
					(0.2195)	(0.1618)
$EP7_p$		0.0498		0.0517		0.0592
		(0.0432)		(0.0420)		(0.0455)
$lnGDPPC_{cp}$		–1.8709**		–1.8694**		–1.9762**
		(0.3462)		(0.3234)		(0.3732)
$Corruption_{cp}$		–0.4927		–0.5105		–0.4823
		(0.4113)		(0.4016)		(0.4202)
Age_{ip}		0.0090		0.0102		0.0120
		(0.0146)		(0.0148)		(0.0146)
$AgeSq_{ip}/100$		–0.0139		–0.0150		–0.0167
		(0.0137)		(0.0139)		(0.0138)
$lnTenure_{ip}$		0.0972*		0.0979*		0.0920*
		(0.0399)		(0.0410)		(0.0392)
Observations	942	942	942	942	940	940
R^2	0.021	0.135	0.016	0.133	0.011	0.133

Linear probability model; robust standard errors clustered by country in parentheses. The level of observation is MEP-Parliament for EP6 and EP7. The sample consists of all MEPs who served in EP5 and ran for reelection for EP6 and all MEPs who served in EP6 and ran for reelection for EP7. The dependent variable in all regressions is $ReElected_{ip}$, an indicator variable for whether MEP i served in parliament $p-1$ and was reelected to parliament p. $EP7_p$ is an indicator variable for whether $p = 7$. $lnGDPPC_{cp}$, $Corruption_{cp}$, Age_{ip}, $AgeSq_{ip}/100$, and $lnTenure_{ip}$ are measured in the last year of parliament $p-1$ and are as defined in Table I. $FractionAbsent_{ip-1}$, $FractionSignedIn_{ip-1}$, and $FractionSignedInAbsent_{ip-1}$ are the means of $FractionAbsent_{it}$, $FractionSignedIn_{it}$, and $FractionSignedInAbsent_{it}$, respectively, over all days in parliament $p-1$ as defined in Table I. * significant at 5 percent; ** significant at 1 percent.

TABLE XI
MEP Country's Salary Change and Whether MEP Voted for Salary Change
Dependent variable: $VoteForSalaryChange_i$

	(1)	(2)	(3)
$\Delta lnSalary_c$	0.0016	–0.0044	0.1165
	(0.0569)	(0.0572)	(0.1217)
Age_i		0.0068	0.0073
		(0.0103)	(0.0098)
$AgeSq_i/100$		–0.0078	–0.0081
		(0.0094)	(0.0089)
$lnTenure_i$		–0.0080	–0.0174
		(0.0282)	(0.0247)
$lnGDPPC_c$			0.2001
			(0.1909)
$Corruption_c$			0.0552
			(0.1353)
Observations	764	764	764
R^2	0.0000	0.0016	0.0089

Linear probability model; robust standard errors clustered by country in parentheses. The level of observation is MEP. The dependent variable in all regressions is $VoteForSalaryChange_i$, an indicator variable for whether MEP *i* voted for the salary change. $\Delta lnSalary_c$ is defined as the logarithm of 84,000 (the post-change uniform salary level) minus the logarithm of the salary for MEPs from country *c* as of January 2007. Age_i, $AgeSq_i/100$, $Tenure_i$, $lnGDPPC_c$, and $Corruption_c$ are measured in the parliament year of the vote on salary change (July 1, 2004 to June 30, 2005) and are as defined in Table I. * significant at 5 percent; ** significant at 1 percent.