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EU minimum wages: To what extent does ideology matter?**Salarios mínimos de la UE: ¿Hasta qué punto importa la ideología?*

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Abstract

This paper estimates the importance of the political and ideological position of the ruling party in determining the minimum wage in the European Union Member States. To this end, a database that establishes the position of each government in each country and year is built. Using the panel data methodology, we conclude that the center-right governments tend to have lower relative minimum wages. The same result is found when the Chapel Hill Expert Survey policy indexes are used. Ideology does not discriminate between conservative or liberal governments due to both of them setting minimum wages at similar levels, though lower than governments of social ideology.

Key words: *Politics, ideology, minimum wage, statutory wages.*

JEL Classification: *D78, E64, J38, J88, O52.*

Resumen

En este trabajo se estima la importancia de la posición política e ideológica del partido gobernante en la determinación del salario mínimo en los países de la Unión Europea. Para ello, se construye una base de datos que refleja la posición de cada gobierno en cada país y año. Utilizando la metodología de datos de panel, se concluye que los gobiernos de centro-derecha tienden a tener un salario mínimo inferior. El mismo resultado se encuentra si se utilizan los índices de política contruidos por la Chapel Hill Expert Survey. La ideología no discrimina entre gobiernos conservadores o liberales, ya que ambos tienden

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a tener un salario mínimo similar aunque inferior a los gobiernos de ideología social.

Palabras clave: *Política, ideología, salario mínimo, salario legal.*

Clasificación JEL: *D78, E64, J38, J88, O52.*

1. INTRODUCTION

The level at which statutory minimum wages have to be set, or the suitability or not of raising them is one of the most discussed economic issues. The debate arises frequently in academia, in journalism, but also in the political arena. For instance, the rise in minimum wages proposed by US President Barack Obama in early 2014 led to many academic and popular articles being written, as many from those who are in favor as from those who are against such measures.

It is not uncommon that the rise of statutory minimum wages, which are established in many economies, is integrated into electoral programs of some political parties as an electoral “promise”. As well, it is frequent to discuss the level of minimum wages in electoral debates between candidates from different parties. The positions of each other respond to largely ideological components, sometimes without any empirical support, but conditioned by the existence of this legal entity in many economies.

Consequently, it is not surprising at all to see how social-democratic or radical politicians defend raising minimum wages as a necessary step in the struggle against existing income inequalities in our societies. To the same extent, liberals¹ and conservatives tend to hold positions that, while not embracing in full the free labor market, are more prone to it.

For sure, both sides will have to manage a statutory minimum wages policy if they are elected to govern, and how to do so can be considered conditioned by ideological or political positions of political parties, essentially when it comes to European economies. Based on this hypothesis we wonder, to what extent does the ideology of ruling political parties in European Union determine decisions on statutory minimum wages?

It is important to find out the determinants of the minimum wage and to study the influence of politics and ideology, because if they are not significant and, on

¹ Since our work focuses on the member states of the European Union it is important to underline that liberalism has a different consideration in the different countries of the world; for while in the United States the political position that advocates a mixed economy, social justice, and approaches to socialist or leftist ideas is considered liberal; in Europe, those parties that focus their programs in defence of individual liberties and the non-intervention of the State in the economy as well as in the decisions of individuals are considered liberal (see appendix).

the contrary, the economic factors or the influence of lobbyists are the relevant determinants, political debate on the minimum wage will have no real content.

From an academic point of view, the majority of the literature on minimum wage setting focuses on explaining the effects that these may have on different economic variables. Thus, negative and positive effects on unemployment have been found (Brown *et al.* (1982), Stiglitz & López Casasnovas (1993), Card & Krueger (1995), Dolado *et al.* (1996), Neumark & Wascher (2000), Manning (2005), Stewart (2004), Portugal & Cardoso (2006), Dube, Lester, & Reich (2010), Burkhauser & Hansen (2012), Boeri & Van Ours (2013) Rivera (2013), Krugman, Graddy & Wells (2013), Hoffman (2015)). Furthermore, the effect of minimum wages on income distribution inequality has also been studied, and the conclusions are that a reduction in minimum wages would widen the wage dispersion among those who are working, increasing inequality (Dube *et al.* (2010), Neumark, Salas & Wascher (2014), Addison, Blackburn & Cotti (2015), Autor, Manning & Smith (2016)) and that specifically, paying attention to the gender perspective, the increase in the minimum wage leads to a decrease in the gender pay gap as a consequence of the over-representation of women among low-wage workers (Amadzarif *et al.*, 2020; Robinson, 2005; Blau, 2003).

Finally, the impact minimum wages have on poverty and collective welfare has been studied as well (Dube (2018), Card & Krueger (1995), Neumark & Wascher (2002; 2005; 2010)).

Nevertheless, the literature that studies the determinants of minimum wages is much less abundant than that dedicated to studying the effects of them. In addition to the effects of other economic variables that are used as control variables, the published works find out two fundamental factors that explain the differences in minimum wages: 1) The existence of interest groups, such as trade unions or representative employers' organizations; 2) The political position of the ruling party.

Among the former, Boeri (2012) shows the causal relationship between the minimum wage fixing system and the level of this, concluding that when the system is based on collective bargaining, statutory minimum wages are higher than when they are established by law. A positive effect of the quantity of unionized workers on the minimum wage is found in Silberman and Durden (1976), Bloch (1993) and Seltzer (1995) in the US labour market. Sobel (1999), also for the USA, discovers an effect not only on the trade unions but also of the employers' organizations.

Additionally, there are other works on the determinants in the exercise of political power such as those of Belcher M. (2010) or Pontusson et al (2002) that study how the institutional context, wage inequality and union density affect the decision-making process of voters in terms of mobilization and of the ruling party.

In the second group, much more focused on our subject of study, Wursten (2017) suggests that political determinants are the missing variable in the traditional employment/minimum wage regressions, suggesting that political orientation implies a set of policies which affect both the level of employment and the minimum wage. Kau and Rubin (1978), Besley and Case (1995), Levin

and Waldman (1998), Waltman and Pittman (2002), Green and Harrison (2006) and Ford, Minor and Owens (2012), find that politics plays an important role in determining the minimum wage in the United States. Xing and Xu (2016) also concluded the influence of certain political factors for the case of China. In Canada, Blais *et al.* (1989) and Dickson and Myatt (2002) found that the behavior of the relative minimum wage is much in line with that one of the real minimum wage, and also that the relative minimum wage is higher when the government is left-wing and tends to be lower when the government is right-wing or liberal, with no differences between the two of them.

However, as far as we know, there is no work that explains the determinants of minimum wages at EU level and therefore the aim of this article is to solve this scarcity. Thus, in this paper we research whether ideology or the political position of the ruling party have influence on the management of relative minimum wages and what is the sign of its relation in the EU area.

It is considered that using the EU area to explain the effects of politics on the minimum wage is particularly interesting because there is sufficient diversity of political positions, but with homogeneity among Member states, which allows control of the absence of other effects, such as monetary policy or migration restrictions between countries.

In the European Union, there is a great diversity in minimum wage fixing systems, but most of them are established by law. Only 11 out of the 28 Member States have a method of establishing minimum wages based on collective bargaining and there are four of them that maintain the possibility of the government fixing the universal wage in the event of failure to reach an agreement (Schulten, 2014); which means that practically they have a method of fixing very close to determining the national minimum wage by law. In this paper, the scope of analysis only takes into account the EU Member States that set the minimum wage by law, as it is in these countries that the influence of politics and ideology can be studied.

To carry out the objective of the work, we built a database where the political position and ideology of the ruling party is classified for each State and moment of time². In a complementary way and to compare the results of our analysis, we use the database of the Chapel Hill Expert Survey (CHES) (Bakker, Edwards *et al.*, 2015) on political and/or economic ideology and the position of parties in the EU Member States.

In order to analyze the importance of the government's ideological component in setting the relative minimum wages, we estimate different regression models with panel data methodology. This estimating method helps us to reach conclusions based on a larger amount of data, with more degrees of freedom and getting more consistent results than those that would be provided with a

² The countries that we consider in our study are Spain, France, United Kingdom, Portugal, Slovenia, Greece, Ireland, Luxembourg, Netherlands, Poland, Czech Rep., Romania, Lithuania, Latvia, Bulgaria, Hungary, Malta, Belgium, Slovakia, Estonia, Croatia.

temporal or a cross-sectional analysis. Additionally, it allows the inclusion of the cross-section fixed effects for different countries in order to capture specific factors from Member States that influence the relative minimum wage levels.

The results, beyond the multiple economic and social factors studied in the empirical literature on the issue, highlight the importance of considering both the political position and the ideology of the ruling party as determinants of the management of relative minimum wages. Thus, according to estimates there is a negative effect on the relative minimum wage if the government is center-right. Regarding ideology, it is found that the minimum wage tends to be higher if the government has a social ideology. This result shows that minimum wages policy is partially determined by society and that, similarly to what Korpi (1985) suggests, wage-earners can change their situation through the choice of governments that advocate decisions that can influence the distribution of wages.

A similar result is found when the variable that measures political position is not qualitative. In this case, for each point that political position built from the CHES index increases or moves to the right, the relative minimum wage is reduced by 0.4%.

The rest of the paper is organized as follows. In section 2, the positioning of political parties regarding legal minimum wages is explained; also, the theoretical arguments are presented so that these minimum wage policies may not be implemented once the parties reach the government. In section 3, we explain the data and criteria used in building the database of the political and ideological component of ruling parties. In section 4, the empirical model and the econometric results are shown. Finally, in section 5, we display the main conclusions.

2. POLITICAL PARTIES: POSITION REGARDING MINIMUM WAGE AND CAUSES OF ITS POSSIBLE NON-APPLICATION

Although political parties take clear positions in relation to various policies, they do not always carry them out once they reach the government. In this section the fundamentals of these positions on the minimum wage and the theoretical arguments that may explain its non-implementation once they become the ruling party are exposed.

The political position of the parties regarding statutory minimum wage is diverse and it is explained by the effects minimum wage has on other economic variables. Among the positive effects can be highlighted those on economic inequality, gender pay gap and poverty. Among the negative effects, the most important are the increase in unemployment or the increase in wage costs.

Thus, social parties usually propose the increase of the legal minimum wage, since they consider that the positive effects are greater than the possible negative effects, such as the increase over unemployment. On the contrary, liberal parties maintain that negative effects are preponderant and, therefore, are in favor of the market regulating wages. Finally, among the different conservative parties there is more dispersion regarding the policy on the minimum wage, although

in general, they do not propose reductions in the minimum wage and are not reluctant to modest increases.

As is known by all, political parties set out their approach to various economic and social issues in their founding statutes (manifestos), however in the literature we can find a wide range of theoretical causes that explain why an economic policy is not put into practice, both in government and opposition parties.

In this regard, the aim of maximizing the number of voters, the probability of winning or the expected plurality may lead political parties to set up policies that represent not so much their political ideology but the median voter ideology, which is optimal to win the elections.

Similarly, myopia of voters can have the same effect on effective politics. As a matter of principle, voters make their decisions based on past information, “retrospective voting”, information on future policies, “prospective or strategic voting”, information on their personal circumstances, “pocketbook voting” or the effects on the economy general “sociotropic voting” (Van Winden, 1988). However, if voters do not consider the previous information when voting, political parties can alter their policies without expecting any effect on the electoral results.

In addition, Bawn et al (2012) propose a theory according to which voters can not be certain of policies prompted by politicians and, therefore, political parties can carry out policies other than those included in their programs without suffering any electoral cost (“electoral blind spot”).

Another reason for the programmatic failure of ruling parties is explained by the role of bureaucrats. Nevertheless, the controversy of this cause is important as there are studies that focus on explaining the effects of bureaucrats on government decisions (Huber and Shipan, 2002, Gailmard and Patty, 2007), while others show evidences that public workers work according to the rules, based on their loyalty to the organization, to the public service and to the needs and interests of citizens (Pierre, 2017).

Another argument for political parties do not carry out certain policies is the role played by pressure groups. These groups try to influence politicians in one direction or another to achieve their interests. A theoretical paper of the role of these groups can be found in Potters and Van Winden (1996) and an empirical research can be found in Potters and Sloof (1996). In the case of the minimum wage, the role of trade unions is especially important, Boeri (2012).

Economic conditions can also alter the programmatic position of political parties and the economic policy to be promoted to influence the economic cycle and thereby influence the predisposition of citizens’ votes (Haupt, 2010).

However, as explained above, there is a wide range of additional factors that can change the political position in parties’ programs, both government and opposition (Fagerholm, 2016). In addition to those already mentioned, the most relevant ones are summarized below:

- The way in which political parties are internally organized can affect the actual policy they intend. That is, within political parties might be incentives not to perform, or to refine, the policy that party’s ideology would set. In some

cases, it is the candidate of a party the one who takes position between the median of the party and that of the electorate, Aldrich (2011); in others, the adjustments respond to the balance of power between leaders and militants (Schumacher et al, 2013).

- The loss of votes can induce changes on the policy proposed by parties; In fact, political parties react to electoral results, especially if there has been an electoral defeat (Ezrow, 2011, Somer-Topcu and Williams, 2013).
- According to the “market party model” (Laver, 2005; Fowler and Laver, 2008) program shifts made by political rivals, are also the reason for changes of the political position of the parties.
- Ruling parties are more likely to shift their political position than opposition parties, since their change is more visible in society (Schumacher et al, 2013).
- Political parties react to changes in public opinion but only when the latter moves away from the party (Adams et al, 2004). Among the non-radical parties, the social-democratic parties react less than the center or right parties. (Adams and Somer-Topcu, 2009); Meanwhile, political parties with strong militants and relatively weak leaders (usually leftist parties) tend to respond to their militants and not so much to the median voter, who would represent public opinion (Schumacher et al, 2013).

In a way, it can be said that it is not certain that the minimum wage management carried out by the ruling parties will be the expected one accordingly to their ideology or political position, since we have verified that there are many studies that explain the changes in the political positions of the parties, both from the theoretical and empirical point of view.

3. DATA AND INFORMATION SOURCES

In order to carry out the analysis that we have proposed, a database has been built in which, for each year from 1990 to 2015, the dominant ideology and political position of the respective governments of the Member States is determined. The source used is the available information at www.parties-and-elections.eu (Nordsieck, 2015), which consists of a complete database of legislative elections in Europe since 1945 and provides a comprehensive information and data about political parties, elections and governments.

We are not going into the debate about what ideology is, which is beyond the scope we have proposed for this work. However, in order to give objective consistency to this article, we highlight that we share Baradat’s (2015) view that ideology is a “political expression”. Therefore, we understand that it is a synthetic way of summarizing the social, economic and political objectives that different political parties could have and how they intend to achieve them. In this way, political parties seek electors’ mobilization in Western democratic systems. A more detailed description of each ideology and its characteristics can be found in the appendix (table A1).

In general, the ideological self-definition of political parties and how they are grouped in the European Union provide an aprioristic idea of the political spectrum of the political parties that have assumed at some point the government of their country between 1990 and 2015 (see figure 1).

FIGURE 1
POLITICAL SPECTRUM OF RULING PARTIES IN THE EU 1990-2015



As can be observed, parties of practically the entire political spectrum have ruled, with the exception of parties of reactionary ideology, which are not contemplated in the previous figure. Following Baradat (2015), reactionary parties are understood as those who reject current institutions and the achievements of society, and consider more appropriate the policies of the times prior to those they propose to return. This type of party would be at the right end of the spectrum showed in Figure 1.

Positions on both the left and the right of the political spectrum are rooted on philosophical foundations, while the central positions could be described as moderate, albeit intending to tackle improvements and social changes gradually.

When it comes to ideology and position in the political spectrum, a certain caution must be observed because there are factors that could condition the possible classification of ruling parties in the spectrum and because of that the results of the analysis:

- First, ideological classification of a party is conditioned by the one who performs it. That is to say, it is conditioned by the position of parties in the mind of every citizen, and we are no exception to this rule.
- In addition, the evolution of history has led many political parties to be the result of coalitions of parties, usually close to each other ideologically speaking, to have the opportunity to reach the government.
- Finally, although ideology places parties within the political spectrum, this position evolves over time and is conditioned by the political, economic and social environment of society; so you cannot say categorically that one political party always maintains the same position.

We avoid these drawbacks by using the dominant ideology in the governments of each state, and considering as such the one that ruling parties or the prime minister party in the case of coalition define themselves. This means that we consider the ideology and position of the party of the prime minister or chancellor in most countries, but that of the president of the republic or president of the government in others. The choice depends on who holds the executive power,

because we are analyzing a set of countries that have democratic systems, but with different institutional organization and political power distribution. And given that our field of study is the European Union, the fundamental reference to decide who to consider is provided by who is representing the country in the maximum institutional bodies of the EU.

In the case of a ruling coalition that ran for elections, we take into account the position from the most important party in that coalition. If the coalition is subsequent to the electoral process, even when the decision-making of the government is the result of the agreement of the entire cabinet (Martin and Vangerg, 2014), the position of the prime minister’s party is considered, in the same terms that we had indicated above.

Political position means the relative position of the ruling party on the left-to-right axis of political spectrum: left, center-left, center, center-right, right.

Ideology is understood as the preponderant ideological orientation in the political party of the prime minister, because sometimes the political inspiration is so broad that there may be some controversy in the standings. In our case we have used the following categories: Communist, Socialist, Social-Democrat, Social-Liberal, Demochristian, Liberal, Liberal-Conservative, Conservative, Nationalist and Independents. The annex provides a brief description of the characteristics of each of these classes.

From a methodological point of view, when a political party has disappeared, we assign to it the corresponding values of the party in which it or most of its leaders have been integrated.

In order to work with these variables in empirical analysis and to study the influence they can have on changes in relative minimum wages, two alternative groups on the political position have been used. The first alternative corresponds to the starting definition, where all variables are dichotomous qualitative variables that take the value 0 or 1, indicating respectively absence or presence of that political position in the ruling party. Meanwhile alternative 2 is the result of the breakdown of the political left and right into two groups respectively, one more centered and the other more radical.

TABLE 1
ALTERNATIVE GROUPS OF POLITICAL POSITIONS FOR RULING PARTIES

Group 1	Group 2
Left	Left Center Left
Center Right	Center Center Right Right

From the ideological position, three qualitative variables have also been generated, taking values 1 or 0 depending on whether or not the ideology of the

ruling political party is in that class. In this case, we have grouped the variables taking into account the ideological proximity and fundamental differences in terms of economic policy ideology as shown in table 2.

TABLE 2
VARIABLES OF POLITICAL IDEOLOGY OF RULING PARTIES

Variables	Classes
Social	Communist Socialist Social democrat
Liberal	Liberal Liberal-Conservative Socio-liberal
Other	Conservative Christian Democrat Nationalist Independentist

Because the above variables are not free from a certain subjective character, we have also worked with variables of political and economic position in the political spectrum from the five waves of Chapel Hill Expert Survey (CHES) (Bakker, De Vries *et al.*, 2015), which go from 1999 to 2014 and are the result of the judgment of experts who place the ideology of each party on a scale of 0 to 10, with 0 being the extreme left, 5 the center and 10 the far right. As the position of political parties may change over time, we use the register provided by CHES at each time point. When in some year there are no values for the ruling party, we take the nearest available register as proxy of the ideological score.

To study the behavior of minimum wages with respect to average wages in the different European economies we will use the Kaitz Index. This is a method of linking the absolute level of minimum wages to the general distribution of wages, since it relates minimum wages to central tendency measures (in our case the average). The data published by the OECD Labor Force Statistics and the Eurostat data for Bulgaria, Malta and Croatia are used as an indicator of relative minimum wages with respect to the average salary distribution of each EU Member State.

The use of this index helps to avoid problems of comparisons in absolute terms, which are conditioned by differences in purchasing power and productivity among different State Members.

Low levels of the index point to a noticeable gap between the minimum and average wages, which means that any variation of it may have a potentially low impact on the rest of the wages. However, if the index is high in relative terms, the impact of any variation in statutory minimum wages could be very

significant, since in this case the distributions of wages are less dispersed and, as a result of it, a larger number of workers could be affected.

There will be positive changes in relative minimum wages when statutory minimum wages grow more or decrease less than average wages and negative changes when statutory minimum wages increases are lower or the setbacks higher than those registered in the average wage.

Consequently, it can be concluded that changes in relative minimum wages will also be conditioned by its level. Changes will be less likely if they present high levels than if they present a relatively low ratio.

To test if lobbyists have influence in determining the minimum wage, we included the ratio of union membership obtained from ICTWSS³ in the analysis.

Finally, the empirical study also considers some control variables used in the minimum wage literature. These variables allow the statistical control of the effects of the remaining variables. Thus, the unemployment and the participation rates, published by Eurostat (EU Labour Force Survey), are included. Increases in real output per person, the percentage of social benefits in GDP, inflation rate, the percentage of temporary employment and of part-time employment, all of them published by Eurostat, are also included.

Although the database is not complete, the above data are available from 1990 until 2013 for all EU countries that set minimum wages by law (Table A2).

4. EMPIRICAL MODEL AND ECONOMETRIC RESULTS

The estimation of the influence the political and ideological position of the EU governments has in determining the statutory minimum wage is carried out using the panel data methodology under the assumption of fixed effects. This methodology is suitable because the analysis includes all countries that determine the minimum wage by law.

When estimating with fixed effects, we avoid the econometric problems deriving from the social or economic differences among different Member States.

First, we consider a model in which there are no ideological or political variables to determine which economic variables are relevant when explaining the differences in relative minimum wages among countries. Next, we estimate the effects of politics and ideology.

The estimation process for all the considered models is the following: First, the model is estimated by the fixed effects method. Then, we run the contrast of Wooldrige (2002) to check the presence of residual autocorrelation. Once we confirm that the disturbances have good properties, an inference process is carried out, eliminating all non-significant variables one by one and re-estimating the model at each iteration. Ultimately, the final model is robustly estimated

³ Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts with data for 51 countries from 1960 to 2014

and, if there are no differences in the results, we conclude that the estimators are acceptable.

The variables that could explain the differences in the relative minimum wage (SMR) are: union affiliation ratio (AFS), unemployment rate (TDES), activity rate (TA), inflation (INFL), productivity increase (INCPROD), social benefits expenditure to GDP ratio (PRESTSOC), percentage of partial employment (PTFT) and percentage of temporary employment (EMPTTEM).

Before estimating, it is convenient to contrast the stationarity of variables included in the analysis. Therefore, Table 3 presents the usual hypothesis contrasts in the panel data literature. These contrasts determine that PRESTSOC, PTFT and EMPTTEM are I (1) and, in consequence, the growth rate of these variables will be included in the model.

TABLE3
CONTRASTS OF UNITARY ROOT

Unitary Root Contrast	Common	Individual	Individual	Individual
Variable	Levin, Lin & Chu t*	Im, Pesaran and Shin W-stat	ADF - Fisher Chi-square	PP - Fisher Chi-square
SMR	0.002	0.000	0.000	0.009
AFS	0.000	0.000	0.000	0.000
TDES	0.000	0.000	0.000	0.545
TA	0.000	0.019	0.001	0.000
INFL	0.000	0.000	0.000	0.000
INCPROD	0.000	0.000	0.000	0.000
PRESTSOC	0.206	0.562	0.275	0.091
PTFT	0.013	0.982	0.673	0.737
EMPTTEM	0.208	0.946	0.662	0.928
D_PRESTSOC	0.000	0.000	0.000	0.000
D_PTFT	0.000	0.000	0.000	0.000
D_EMPTTEM	0.000	0.000	0.000	0.000

In each case, there appears the P-value of contrast H0: “Presence of Unitary Root”.

Model results, estimated by fixed effects, without policy or ideology variables are presented in equation (1) (standard deviations are presented in parentheses)

(1)
$$SMR_{i,t} = 0.44 - 0.28 AFS_{i,t} + 0.16 INCPROD_{i,t} + U_{i,t}$$

(0.02)

(0.07)

(0.07)

First, the only two economic variables that explain the differences in the relative minimum wage are the union affiliation ratio and increases in productivity.

In order to correctly interpret the results obtained, it should be considered that, while it is true that collective bargaining may be an appropriate mean for

setting minimum wages, there are only few countries that rely exclusively on collective bargaining to set minimum wages. These are countries where collective agreements apply to the vast majority of workers (Denmark, Sweden, Finland, Iceland and Norway). However, in most countries, the coverage of collective bargaining is insufficient, which means that governments of many countries have adopted minimum wages through legislation (ILO). Precisely the countries that are the object of our study.

Specifically, it can be observed that the relative minimum wage depends negatively on the union affiliation ratio⁴. This result indicates that an increase in union affiliation ratio tends to increase wages in the economy to a greater extent than to influence legal minimum wages, which may or may not reflect collectively bargained minimum levels. The consequence of this is that it tends to reduce the relative minimum wages in countries that set them by legislation, revealing that the level of these minimum wages is secondary in collective bargaining.

In spite of the fact that beforehand this result seems to contradict Boeri (2012) results, it actually complements them. This paper does not compare minimum wages among countries with different minimum wage determination mechanisms as is done in Boeri (2012); we simply conclude that, in those countries in which the decision lies with the government, when union membership increases, relative minimum wages decline.

On the other hand, the relative minimum wage depends positively on the increase in productivity, which indicates that increases in productivity are more related to the minimum wage than to the average wage.

Next, we estimate the effects of the government's political position on the determination of the statutory minimum wage. For this, we use the dichotomous variables explained in section 3. Model I classifies the policy in three cases (Left, Center and Right), while Model II classify it in five cases (adding Center-Right and Center-Left to The previous classification).

As can be seen in Table 4, Model I indicates that the relative minimum wage is significantly lower in those countries ruled by a right-wing party, in particular 1.4% lower. When we detail the political position more, as shown in Model II, it is observed that the only variable that is significant is the Center-Right, indicating that governments with that political position are those who establish a lower relative minimum wage.

⁴ Robust estimations were made for the presence of autocorrelation and the result was maintained, resulting even in the effect being more significant. The possibility that the result was given by a possible instantaneous correlation of AFS variable with the rest, generating multicollinearity, was also explored. The instantaneous correlations are not very large and the level of significance of the variable was maintained in all the model specifications (incorporating variables one by one, two by two, etc.). Therefore, the result is quite robust.

TABLE 4
ESTIMATION - POLICY EFFECTS ON RELATIVE MINIMUM WAGES

Model I			Model II	
Variable	Estimation	SD	Estimation	SD
constant	0.458	0.010	0.458	0.010
Right	-0.014	0.004	—	
Center-right			-0.015	0.004
Center	—		—	
Center-left			—	
Left	—		—	
AFS	-0.292	0.039	-0.293	0.039
INCPROD	0.118	0.067	0.129	0.067
R2	0.852		0.852	

Generally speaking, it is considered that all center-right positioned governments are related with more liberal positions, but that is not entirely accurate. Governments that are in principle more on the right may have more liberal economic policies, whereas the Christian Democratic governments, which are closer to the center, tend to be more interventionist. Therefore, it seems reasonable that ideology of the ruling party also has influence on the minimum wage determination.

As can be deduced from Table 5, liberal ideology governments have a relative minimum wage lower than governments of social ideology. In addition, governments shown as “other ideology “ have a relative minimum wage lower than social ideology governments but equivalent to that of liberal ideology. In this sense, it can be concluded that social ideology tends to have a relative minimum wage between 1.3% and 1.4% higher.

TABLE 5
ESTIMATION - IDEOLOGY INFLUENCE ON RELATIVE MINIMUM WAGES

Model III		
Variable	Estimation	SD
constant	0.454	0.010
Social	—	
Liberal	-0.013	0.005
Other	-0.014	0.005
AFS	-0.274	0.039
INCPROD	0.127	0.068
R2	0.850	

Therefore, there are no differences among the remaining ideologies. So the result shown in Table 5 would indicate that, among the governments without social ideology, it is not so much the ideological position the one that determines the minimum wage, but its political position.

Although the results of Tables 4 and 5 indicate that the political position, but also the ideological position of the governments, are significant variables in determining relative minimum wages, a final experiment is carried out to confirm the results. Thus, variables LRGEN and LRCON are included in the original model. These variables measure the general policy and economic policy government positions, respectively. These variables constructed from CHES take values on a scale of 0 to 10.

TABLE 6
ESTIMATION - EFFECTS OF GENERAL POLICY AND ECONOMIC POLICY (CHES)

Model IV			Model V	
Variable	Estimation	SD	Estimation	SD
constant	0.470	0.012	0.469	0.012
LRGEN	-0.004	0.001		
LRCON			-0.004	0.001
AFS	-0.287	0.039	-0.279	0.039
INCPROD	0.124	0.067	0.126	0.067
R2	0.850		0.851	

As Table 6 shows, again the political position of the ruling party is relevant in determining the relative minimum wage. For each point in the index that a government leans to the right, the SMR is reduced by 0.4%. The same result is obtained when we consider the economic policy position, in which, for each point that a government leans to the right, the minimum wage is reduced by the same amount, 0.4%.

5. CONCLUSIONS

Literature has focused on explaining the effects that minimum wages have on economic or social issues (employment, poverty or inequality), but has paid less attention to the factors that determine these statutory minimum wages.

Despite the fact that in most countries, minimum wage determination is carried out by law, it is not clear what the determining factors are. In this paper we study the effects on minimum wages of the political and the ideological position of the ruling party. This is important because if only economic factors or the influence of pressure groups are those that endogenously determine the

minimum wage, the whole political debate about minimum wages would be empty of real content.

This topic has been addressed in studies on other countries, fundamentally the United States and Canada, and a significant influence of politics has been found in minimum wage determination. In this paper we focus on the European Union since, in addition to presenting an important novelty, it constitutes an ideal framework for the study of the issue. The European Union displays a greater diversity among policies and ideologies than other studies focused on a single country, but also enough homogeneity for other external factors such as migration or monetary policy not affect the results.

The outcomes suggest that, as an economic control variable, the increase in productivity has a significant effect on relative minimum wages. In addition, as in the literature, we have found out that pressure groups also influence the minimum wage, since the union affiliation ratio is significant. However, in contrast to previous works, it is found that the sign of this effect is negative in the case of countries that establish the minimum wage by legislative means.

Additionally, it is estimated that there is a significant effect of both politics and ideology in determining the statutory minimum wage. There is a negative effect on relative minimum wages if the government is center-right. As for ideology, it is found that the relative minimum wage tends to be higher if the government has a social ideology. When we repeat the research with the political position index obtained from the Chapel Hill Expert Survey, it is found that an increase in the index, that is to say a rightward shift, leads to a reduction in the minimum wage in relative terms.

To sum up, the above results show that in the EU, the minimum wage policy is partially determined by society through the political and ideological position of parties elected to govern.

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APPENDIX

TABLE A1
CHARACTERISTICS OF THE POLITICAL IDEOLOGIES CONSIDERED
IN THE EU MEMBER STATES

Ideology	Basic general characteristics
Communist	Communist parties primarily adhere to Marxism developed by Karl Marx and Friedrich Engels in the 19th century. Their aim is the free and classless society based on common ownership of the means of production. These parties intend to overthrow the present capitalist system through revolutionary action of the working class. Recent political developments in European states would classify them as radicals and populists.
Socialist	Advocate a strong welfare state. Propose a reorganization of the current socio-economic order through a greater weight of the public sector, workers' control over the work process and redistributive tax policies. In general, they emphasize values such as equality, solidarity and social justice.
Social democratic	They are center-left parties in the political spectrum. They advocate a democratic welfare state and a mixed economy that contains privately-owned and state-owned enterprises. These parties adhere to values as freedom, equality, solidarity and social justice. Since the 1990s, most of them incorporated economically liberal topics such as limited social welfare, privatizations, deregulations and lower company taxes (Third Way).
Social liberal	With a thought of liberal base, they have an ideology centered on civil rights and promote an economic system that combines the needs of economic freedom with social justice, equal opportunities and solidarity.
Christian democratic	Inspired by Christian social doctrine, have as its basic principle human dignity. They are very supportive of family values, advocate Christian ethical and adhere to principles as freedom and solidarity. These parties oppose any form of secularism and, in general, advocate a social market economy (just like social liberals).
Liberal	Originating in the tradition of political liberalism (18th century movement). The doctrine of liberalism considers personal freedom to be the most important goal. In particular it favours free markets, free trade, limited governments, low taxes and private property (economic liberalism) as well as equality for all citizens under the law, civil rights, secularism and freedom of speech, press and religion.
Liberal conservative	It is a moderate version of political liberalism. It combines conservative policies with more liberal positions such as non-regulation of economic activity. It is a somewhat eclectic mix of liberal and conservative ideologies.

Ideology	Basic general characteristics
Conservative	These are usually middle-class organizations that seek to preserve established traditions and the current <i>status quo</i> of a society. They normally advocate traditional values such as authority, nation, religion, family, stability and continuity. They promote some liberal values, especially on economic issues (free market policies).
Nationalist	Nationalist parties believe that the nation and its sovereignty are of primary importance. This involves a strong identification with the nation state and its symbols. It usually also includes negative views of other nations and are against further European integration. On occasions it is combined with conservative ideology.
Independentist	Advocates a complete political secession of a particular region with its ethnic, linguistic or cultural identity and the formation of a new state. They emerge fundamentally in Eastern European countries and the former republics of the Soviet Union.

Source: Own elaboration based on the classification of www.parties-and-elections.eu

TABLE A2
AVERAGE DATA OF THE MOST RELEVANT VARIABLES ANALYZED.
EU MEMBER STATES CONSIDERED (1990-2015)

Country	Relative Minimum Wage (SMR)	General Policy government position (LRGEN) Rango 0-10 ⁵	Economic Policy government position (LRECON) Rango 0-10 ³	Union affiliation ratio (AFS)	Productivity increase (INCPROD)
Belgium	45,4%	5,7	6,0	53,8%	0,9%
Bulgaria	38,8%	5,6	5,7	27,2%	3,1%
Croatia	38,0%	5,8	4,4	34,7%	0,6%
Slovakia	35,0%	5,1	4,9	30,4%	3,3%
Slovenia	44,7%	5,2	5,7	41,2%	2,5%
Spain	30,7%	5,3	5,6	16,5%	0,6%
Estonia	31,6%	6,5	6,6	20,1%	4,3%
France	50,4%	5,9	5,3	8,2%	1,0%
Greece	36,4%	5,4	5,9	27,4%	0,9%
Hungary	34,8%	5,4	4,9	24,5%	1,8%
Ireland	42,3%	6,4	6,0	38,5%	2,3%
Latvia	32,4%	6,5	6,6	19,7%	4,4%
Lithuania	38,2%	5,1	5,2	13,1%	4,9%
Luxembourg	45,4%	6,4	4,7	41,1%	-0,2%
Malta	48,5%	6,3	6,1	59,4%	0,7%
Netherlands	44,5%	5,6	5,8	21,9%	0,9%
Poland	36,0%	5,9	6,3	19,9%	3,0%
Portugal	34,0%	4,8	5,3	22,7%	1,1%
UK	37,1%	5,9	6,2	30,5%	1,2%
Czech Rep.	31,7%	5,8	6,0	26,6%	2,3%
Romania	28,6%	4,7	4,6	43,6%	4,4%

⁵ 0 = extreme left : 5 = center : 10 = extreme right.